Euro-limpacs



Project no. **GOCE-CT-2003-505540**Project acronym: **Euro-limpacs**

Project full name:

Integrated Project to evaluate the Impacts of Global Change on European Freshwater Ecosystems

Instrument type: Integrated Project

Priority name: Sustainable Development

Start date of project: 1 February 2004 Duration: 5 Years

Task 4 Institution names:

UDE, BOKU, ALTERRA, CEH, CNR, MasUniv, NERI, SLU, UGR, CNRS-UPS

Deliverable No. 269 Summary of Ephemeroptera database

Due date of deliverable: **Month 42** Actual submission date: **31/07/2007**

Compiled by: Armanini D.G., Cazzola M., Buffagni A. (CNR-IRSA)

Other contributors to this deliverable:

BOKU - Schmidt-Kloiber A.

CEH – Murphy J., Davies C.

CNR-IRSA - Erba S.

SLU – Lücke S., Sandin L,

UGR – Alba-Tercedor J., López Rodríguez M.J.

UniEssen – Rolauffs P., Hering D.

Index	Page
1 Introduction	3
2 Methods used to derive the information from literature sources and species list	3
3 Overview of the information retrieved	4
4 Procedure for summarizing the information available from the literature	4
5 General remarks on literature review	8
6 Preliminary remarks on potential climate change effects	19
7 Structure and functioning of the online database	22
8 Further activities	22
- Acknowledgments	23
9 References	23
Annex I	24
Annex II	54

1 Introduction

The present report on the European Ephemeroptera database is an outcome of the Eurolimpacs project, Work Package 7 'Indicators of Ecosystem Health'. It is an update of the activities presented in the deliverable 189: 'Indicator value database for Ephemeroptera – Phase I Report' (Armanini et al., 2007) and deals with the compilation of an autoecological matrix for mayflies from literature data. In the Phase I report, the approach and methods to derive the autoecological information from the literature were described in details and here we present an overview of the full results of the activity, in terms of amount of information gained.

The main result of the activity is the compilation of an autoecological matrix for European Ephemeroptera species, which will be presented, in the form of a database, on the web site www.freshwaterecology.info.

More specifically, aims of the work were to:

- compile the autoecological matrix on European Ephemeroptera species, which is being provided as an Excel file in order to be published on the database available on the dedicated website;
- briefly illustrate the results of the bibliographic review process, in terms of amount of information gained;
- describe how the autoecological information was extracted from the literature and summarized;
- present an overview of the kind and amount of information obtained, including a summary fact sheet for each European mayfly species for which information was found in the literature;
- very briefly describe the usage of the database;
- concisely present current and next activities on the subject.

It is not the aim of the report to illustrate the ecology of individual Ephemeroptera species. Such information is reported in the autoecological matrix and will be the subject of a further project Deliverable 'Manuscript on evaluation of the Ephemeroptera database'.

A contribution to the compilation of the autoecological matrix was provided by various partners in order to guarantee that the different European zones were adequately covered. Geographic areas considered with particularly emphasis were Italy (CNR-IRSA), the Iberian Peninsula (University of Granada), Scandinavia (SLU), Germany and Austria (University of Essen), Great Britain (CEH). An overall review at the European scale was also performed (CNR-IRSA).

2 Methods used to derive the information from literature sources and species list

The approach and methods used for bibliographic search and to extract ecological information for individual mayfly species has been illustrated in details in the project Deliverable 189. Here, only few summary lines are reported within each paragraph to refresh the methods and/or to add further information.

The Ephemeroptera taxonomic list adopted here is the one provided by the Fauna Europaea project (Thomas & Belfiore, 2004).

3 Overview of the information retrieved

A total of ca. 2800 papers were identified as potentially useful and, out of those, more than 1400 were available and were thus reviewed. Finally, more than 670 papers contained useful information. The list of these papers is provided in Annex I, where each reference entry and its database code are associated to the family(ies) for which the paper provides information. Because the reference list is an output of an Access database, the original cell formatting is not kept in the list i.e. genus/species names are not reported in italic.

In the autoecological matrix, for each Ephemeroptera species, the final result of the literature review is a 'species row', where all the relevant information retrieved is summed up. Potentially, for each species information concerning all the 35 considered ecological categories can be included in the species row, varying from e.g. Ecoregion distribution, Microhabitat preference to Flight periods (for further details see Deliverable 189 and Table 3).

To obtain the 'species row' in the autoecological matrix for each Ephemeroptera species, individual 'paper rows' were compiled and then summarized to derive the 'species row'. The intermediate phase of the paper rows compilation was adopted with the aims of: a) supporting an objective check of the information retrieved; b) simplifying the summing up procedure for information obtained from different sources; c) facilitating future updates.

A total of 4931 paper rows containing autoecological information on individual mayfly species were obtained. In total, 9862 individual information were extracted from the literature sources. Most information (ca. 8800) were obtained at CNR-IRSA that coordinates the task, jointly with the University of Granada, and carried out both a dedicated search on Italian Ephemeroptera and an overall review at the European scale. Nevertheless, the information provided by other partners who contributed to the task (ca. 1000) are very important because they often covered the review of papers either not centrally available or written in problematic languages. In particular, the contribution from the University of Granada, which has been very recently concluded and is highly relevant with about 200 papers reviewed and about 90 containing useful information, will further increase the amount of information summarized, as soon as it is integrated in the autoecological matrix file.

4 Procedure for summarizing the information available from the literature

Once the information from the literature was made available and included in the autoecological matrix file, a summary of all individual entries into the species row had to be performed, for each mayfly species. While summarizing the information, a potential difficulty is conflicting information from differences sources/authors. With the aim of solving potential disagreements, a simple bibliographic relevance index was developed in order to rank the paper information. This index was developed giving importance to two general criteria (Table 1):

- authors' relevancy in terms of number of information provided (see Table 3);
- publication type i.e. specific or general paper, separately for each major group of autoecological information (see Table 3).

Table 1. Scoring system used to weight individual information and to perform the final summary of autoecological information for each species.

	Category	Description	Comment	Score
A	authors'	author's overall expertise i.e. total number	major expert	2
	relevancy	of ecological information provided,	other authors	1
В	suitability of	specificity of the paper, separately for each	specific	3
	paper	major group of autoecological information	generic	1

A) The value to select 'major experts' from the pool of authors who provided autoecological knowledge of Ephemeroptera was set up at 300 (Figure 2), ca. corresponding to the 3% of the total available information.

The authors who provided more than 300 individual autoecological information were considered major experts and got score 2 (Table 1), while other authors got score 1. For papers with more than one author, the score assigned to the paper was the score of the most expert author. Altogether, 33 authors were classified as major experts of mayfly autoecology, out of a total of ca. 250.

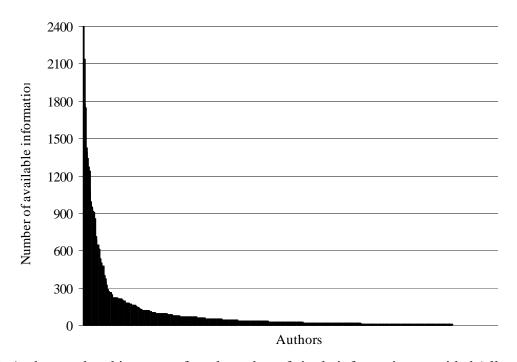


Figure 2. Authors ordered in terms of total number of single information provided (all categories, all species).

The 10 authors who contributed most are listed in Table 2, alphabetically ordered. This list of expert is an indication of the authors that provided the largest amount of information in terms of mayfly ecology, thus excluding authors that might have mainly contributed on taxonomical knowledge. Furthermore, it should be noted that Italian and Spanish authors might have resulted over-weighted compared to the overall number of paper published around Europe because of the full availability of their papers. At the contrary, authors who published many works in e.g. Russian or in other languages for which was not possible to retrieve information, can result under-weighted.

Table 2. List of the ten authors most contributing ecological information on European mayflies (alphabetically ordered).

Author	Institute (actual or last one)	Country
Alba-Tercedor J.	University of Granada	Spain
Bauernfeind E.	Naturhistorisches Museum Wien	Austria
Belfiore C.	DECOS Tuscia University, Viterbo	Italy
Buffagni A.	CNR-IRSA, Brugherio (MI)	Italy
Haybach A.	HBio - Büro für Hydrobiologie,	Germany
Humpesch U.H.	Limnological Institute of the Austrian Academy of Sciences	Austria
Landa V.	Institute of Entomology, Czechoslovak Academy of Sciences	Czech Republic
Sartori M.	Museum of Zoology, Lausanne	Switzerland
Soldán T.	Institute of Entomology, Czechoslovak Academy of Sciences	Czech Republic

B) Concerning the suitability of papers, the parameter considered was the specificity to each of the 4 major groups of autoecological information, for which it was evaluated separately. The major categories (Table 3) were Distribution (e.g. zonation), Habitat (e.g. Microhabitat and Current preference), Life cycle – Temperature (e.g. Voltinism, life duration) and Rarity – Occurrence (e.g. presence in Red list, indicator species). In order to assess the specificity of the paper, the title of the paper and the amount of information contained in the article were considered, for each of the 4 major groups on information. Also, this judgment was expressed separately for each mayfly family (Figure 3). The idea behind this scoring is that a paper dedicated to a certain argument is expected to contain more accurate information than a general paper.

By applying the criteria given in Table 1 and explained in A) and B), 5 scores can be hypothetically attributed for each paper row (if autoecological information for all 4 major groups is available in the paper):

- 1 or 2 for the author
- 1 or 3 for Distribution
- 1 or 3 for Habitat
- 1 or 3 for Life cycle Temperature
- 1 or 3 for Rarity Occurrence.

Thus, the scores are assigned by giving relatively more importance to the specificity of the paper rather than to the expertise of the author.

These values were then used to calculate a weighted score for each ecological feature to summarize in a standard way the information retrieved. For instance, if two papers contained information on current preference and e.g. the first one stated that species X is rheophilic and the second one attests that it is rheo-limnophilic, how the information should be summarized? By means of the relevancy index it is possible to combine expertise of the author(s) and the specificity of the papers in terms of Habitat preference. Thus, it is possible to weight the two information: e.g. paper one is a general paper compiled by a non-expert author (thus scoring 1*1=1), while the second paper is a specific paper on habitat preference written by an expert author (thus scoring 2*3=6). Consequently, the species X can be considered mostly rheo-limnophilic.

Table 3. Autoecological major groups of information, related categories and short codes used in the present study.

Major group	Category	Short code
Distribution	stream zonation preference	Zonation
	distribution according to Illies	Ecoregion distr.
	altitude	Altitude
	altitude WFD	WFD altitude
Habitat	preference for a certain microhabitat	Microhabitat
	habitat specialist	Habitat specialist
	preference for a certain current	1
	situation	Current
	feeding types	Feeding type
	locomotion type	Locomotion
	hydrologic preference	General lentic/lotic
	hydrological preference II	Temporary streams
	salinity	Salinity
	ph preference	pH
Life cycle -	temperature preference I	Temperature I
Temperature	temperature preference II	Temperature II
r	reproductive cycles per year	Voltinism
	life duration	Life duration
	aquatic stage	Life stage
	resistance/resilience to droughts	Droughts resistance
	reproduction	Reproduction
	dissemination strategy	Dissemination
	resistance form	Resistance form
	respiration	Respiration
	flight (emergence)-period I	Flight period I
	flight (emergence)-period II	Flight period II
	larval development cycle	Larval cycle
	r-, K-strategy	r-, K- strategy
	dispersal capacity	Dispersal capacity
Rarity - Occurrence	rare species (ecoregion)	Rarity
J	Red list species (national/regional)	Red list
	FFH species	FFH species
	endemism	Endemism I
	endemism	Endemism II
	disjunct isolated populations	Disjunct pop
	sensitive species	Sensitive
	invasive (alien) species	Invasive
	occurrence in large quantities	Large quantities
	indicator species in terms of	Indicator species

	А	В	C D	К	L	M	N	0
								t
								ŀ
								(
								F
								5
1								<u> t</u>
								2
2								<u> [</u>
3			Part Line		B1 F			
4		ODEOLEO MUDODEOLEO	Bibliographic source	0.45		ic relevancy		D-itt-
	Ameletidae	SPECIES/SUBSPECIES Ameletus inopinatus Eaton, 1887	code reference	Author	Distribution	Habitat	Life cycle	Rarity etc.
7	Ameletidae Ameletidae	Ameletus inopinatus Eaton, 1887 Ameletus inopinatus Eaton, 1887	Aagaard K, Solem JO, Bongard T, Hanssen O.	- 1	- 1	- 1	- 1	- 1
8	Ameletidae	Ameletus inopinatus Eaton, 1887	2 Aagaard K., Solem J.O., Nøst T., Hanssen O.1	- 1	4	1	4	41
9	Ameletidae	Ameletus inopinatus Eaton, 1887	5412 Arnekleiv J.V. 1996. Life cycle and seasonal d			1	,	- 41
10	Ameletidae	Ameletus inopinatus Eaton, 1887	5415 Arnekleiv J.V., Storset L. 1994. Downstream e		4	1	1	- 1
11	Ameletidae	Ameletus inopinatus Eaton, 1887	311 Bauernfeind E, Humpesch UH. 2001. Die Eintag		3	. a	3	- 1
	Ameletidae	Ameletus inopinatus Eaton, 1887	312 Bauernfeind E, Moog O. 2000. Mayflies (Insect			1	1	- 1
	Ameletidae	Ameletus inopinatus Eaton, 1887	319 Bauernfeind E. 1990. Einige für Österreich neu		3	1	3	1
14	Ameletidae	Ameletus inopinatus Eaton, 1887	653 Bracken J.J., Kelly-Quinn M., Tierney D. 1998.	1	1	3	1	1
15	Ameletidae	Ameletus inopinatus Eaton, 1887	6058 Bratton J.H. 1990. A review of the scarcer Epl	1	1	3	3	3
16	Ameletidae	Ameletus inopinatus Eaton, 1887	772 Bulánková E., Halgoš J., Krno I., Bitušík P., Illéš	. 1	1	1	3	1
	Ameletidae	Ameletus inopinatus Eaton, 1887	894 Chadd R., Extence C. 2004. The conservation		1	1	1	3
	Ameletidae	Ameletus inopinatus Eaton, 1887	6076 Crisp D.T., Nelson J.M. 1965. The Ephemeropte		1	1	1	1
	Ameletidae	Ameletus inopinatus Eaton, 1887	1499 Elliott J.M., Humpesch U.H. & Macan T.T, 1988.	2	3	3	3	1
	Ameletidae	Ameletus inopinatus Eaton, 1887	1554 Extende CA, Balbi DM, Chadd RP, 1999, River t		1	3	1	1
	Ameletidae	Ameletus inopinatus Eaton, 1887	1596 Fjellheim A., Raddum G.G. 1995. Benthic anima		1	3	1	1
	Ameletidae	Ameletus inopinatus Eaton, 1887	1597 Fjellheim A., Raddum G.G. 1996. Weir building i		1	3	1	1
	Ameletidae	Ameletus inopinatus Eaton, 1887	1855 Gledhill T. 1959. The life history of Ameletus in			1	3	1
	Ameletidae	Ameletus inopinatus Eaton, 1887	1856 Gledhill T. 1960. The Ephemeroptera, Plecopter		1	1	3	1
	Ameletidae	Ameletus inopinatus Eaton, 1887	7038 Gueorguiev V., Beshovski V. L., Russev B. K.		1	1	1	3
	Ameletidae	Ameletus inopinatus Eaton, 1887	5410 Guerold F., Vein D., Jaquemin G. 1991. Les pe		1	1	1	
	Ameletidae Ameletidae	Ameletus inopinatus Eaton, 1887	1977 Guerold F., Boudot JP., Jacquemin G., Vein D	1	1	1		11-
		Ameletus inopinatus Eaton, 1887	1978 Guerold F., Vein D., Jacquernin G., Pihan J.C. 1	1	1	3	1	1
	Ameletidae	Ameletus inopinatus Eaton, 1887	2110 Haybach A, Malzacher P. 2003. Verzeichnis d	. 2	1			11-
30	Ameletidae	Ameletus inopinatus Eaton, 1887	2118 Haybach A. 1998. Die Eintagsfliegen (Insecta:		- 3	1	1	- 1

Figure 3. Example of bibliographic relevancy scores for *Ameletus inopinatus*.

This approach was preferred to the one simply based on expert opinion and should guarantee a reduction of subjectivity in the evaluation of literature information. Furthermore, it allows a constant implementation of the work based on the same review approach, as if new papers are reviewed they can be simply added to the autoecological matrix to obtain new summary information.

5 General remarks on literature review

The completeness of the information retrieved for the 339 species of mayfly was analyzed in terms of share of classified species per category.

An overview of the completeness of the information available for the 4 autoecological groups with details on single features is shown in Figure 4. Values range from 0.3% to 100%. For the parameters FFH species and Respiration a classification was obtained for all species. This was possible because no Ephemeroptera species are included in the Flora and Fauna Directive and because the respiration pattern of mayflies was derived from general texts. High share of classified taxa was achieved for the parameters Ecoregion distribution (85%), General lentic/lotic (78.8%) and Salinity (78.8%). Those parameters were contained in nearly all papers found, being related with geographic distribution, preference for i.e. river or lake and for i.e. freshwater or brackish water. With the aim of analyzing the amount of information available, this information doesn't seem of much interest as it is present for almost all species and it is basically related with the amount of papers available. Excluding those very common features, some features showing high share of classified species were observed in all the four major autoecological groups (Figure 4).

Distribution: all the features considered showed high share of classified species. The highest was WFD altitude with 67% of species classified.

Habitat: excluding General lentic/lotic and Salinity, higher shares of classified species were observed for Microhabitat and Current preference (52.8% and 44.5% respectively). At the opposite low shares were observed for Habitat specialist (13.6%), Locomotion (3.2%) and Temporary streams (2.9%).

Life cycle – Temperature: The features that showed higher share of classified species were Flight period I e II (60.5% and 64.3% respectively), Life Duration (46.9%) and Voltinism (48.4%). At the opposite low percentages were observed for general traits as Dissemination (2.1), r-, K- strategy (1.2%) and Dispersal capacity (0.6%).

Rarity-Occurrence: Rarity (50.1%) and Endemism (42.2%) were the features with higher shares of classified species. Disjunct population (2.4%), Sensitive (4.4%) and Invasive (0.3%) were at the opposite the less reported ones.

In Annex II, a detailed fact sheet for almost all European Ephemeroptera species is reported, which contains information on data availability and potential disagreement among European geographical areas and authors' opinion. These fact sheets provide thus a quantification of the availability of information for the considered autoecological features. Furthermore, it provides an overview of the degree of agreement among geographical areas and authors in order to give an idea of difficulties encountered in summarizing the information. In the description of the information retrieved, comments to the most reported categories (i.e. Salinity, General lentic/lotic preference and Ecoregion distribution) and to the characters related to general traits (i.e. Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.) are usually omitted, because they are common to almost all species and thus not very informative.

Concerning distribution of species across Ecoregions, even if a large amount of data were collected, the definition of species geographic distribution is not a priority aim of the present work. Thus, to get updated information on Ephemeroptera distribution in Europe reference to the Fauna Europaea project (Thomas & Belfiore, 2004) should be done.

Some considerations can be outlined on the amount of information retrieved for the different species. The information obtained ranged from a minimum of 0, observed for 40 species, and a maximum of 880 for the Baetidae *Baetis rhodani* (Figure 5). It should be taken into account that these results can vary once the latest contributions will be integrated in the autoecological matrix.

For only the 3% ca. of mayfly species (i.e. > 400 individual information per species), the autoecological preferences can be considered well known. For those species, it will be relatively easy to evaluate the potential effects of climate changes. For about the 6% of species (i.e. number of information per species included between 200 and 400) the amount of autoecological information available is considered quite good. Nonetheless, for this species it might appear helpful to look for further information to deepen the analysis on the possible effects of climate change e.g. on selected ecological features. For ca. 22% of the species (i.e. number of information per species between 50 and 200) the amount of data retrieved is considered low but, in some cases, it seems anyhow enough to start the study of the relationship between climate changes and their distribution and occurrence. For ca. the 55% of species (i.e. number of information per species between 2 and 50) the amount of information retrieved is considered critically low. For those species an increase of research efforts should be done in order to raise the actual knowledge on their ecology. For ca. the 14 % of species the amount of information retrieved is considered super-critical (i.e. number of

information per species included between 0 and 1). Those species should be targeted of special research activities in order to cover this major lack of knowledge.

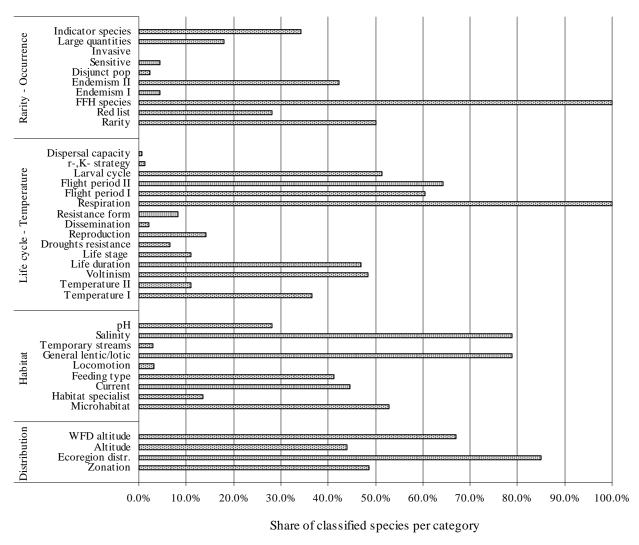
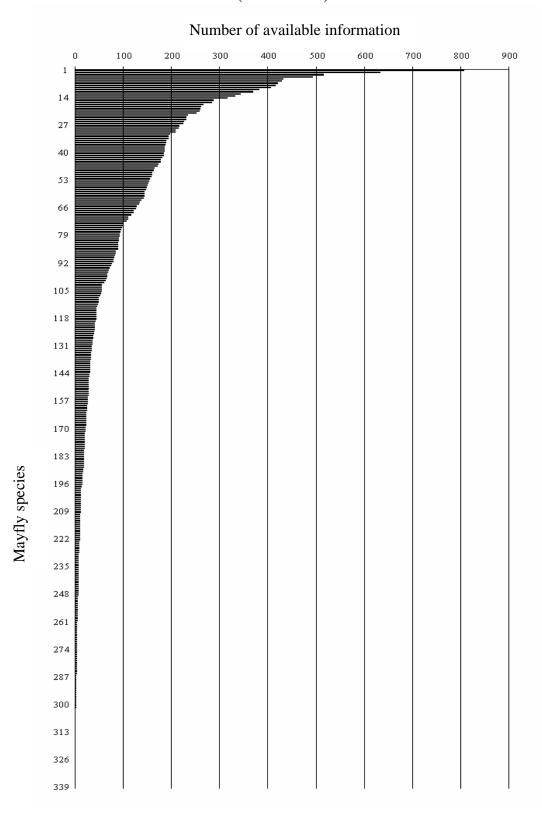


Figure 4. Share of classified Ephemeroptera species per category of ecological information.

In general terms, for the species belonging to the last three classes outlined above it seems extremely important and urgent to increase the autoecological knowledge in order to have the possibility to evaluate if they will be potentially affected by climate change.

The more detailed outlook provided in Annex II can support the derivation of a better picture of the actual knowledge on individual mayfly species.

Figure 5. Overview of the total amount of reviewed information for the European mayfly species (rank ordered).



In general terms, it seems interesting to present here an overview of the total amount of information retrieved for each species. The classes previously listed give indications of major knowledge gaps and potential research needs for mayfly species. In the following graphs (Figure 6-12), the amount of information retrieved for 50 mayfly species per graphs is showed. Thus, it will be possible to know for which species a critical lack of knowledge was observed, or vice versa.

Figure 6. Top 50 mayfly species ranking in terms of amount of available information.

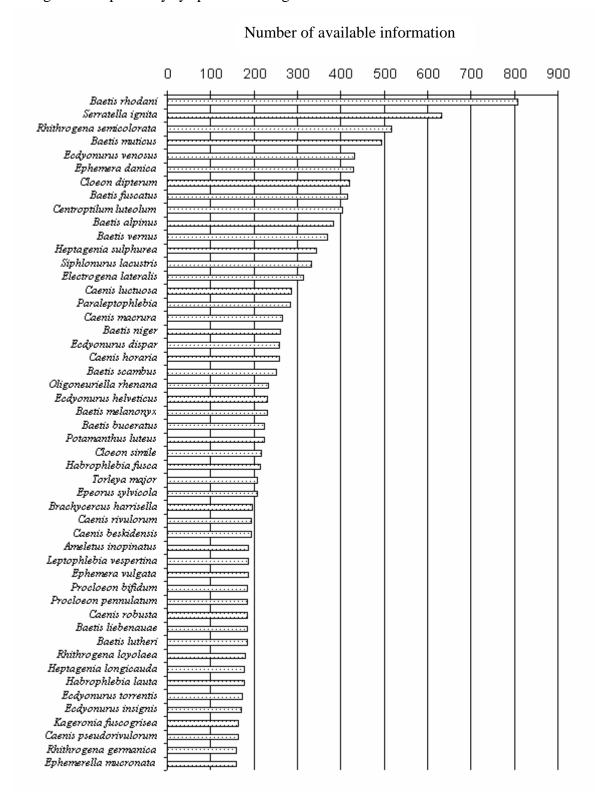


Figure 7. Mayfly species ranking 50 to 100 in terms of amount of available information.

Number of available information

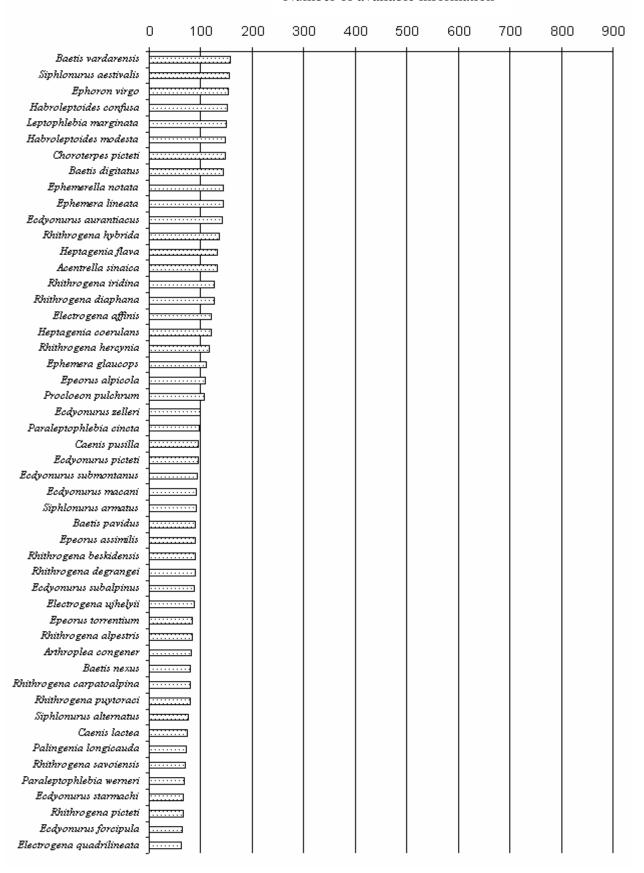


Figure 8. Mayfly species ranking 100 to 150 in terms of amount of available information.

Number of available information

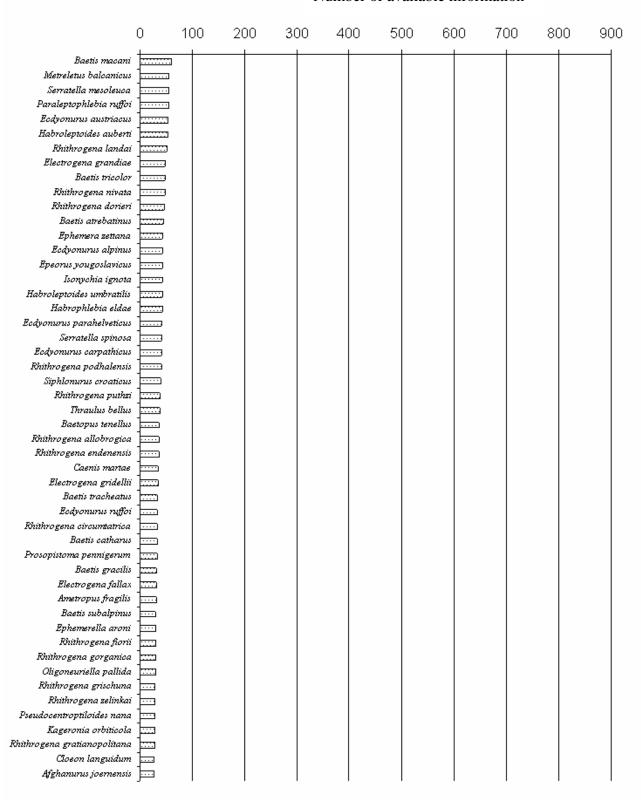


Figure 9. Mayfly species ranking 150 to 200 in terms of amount of available information.

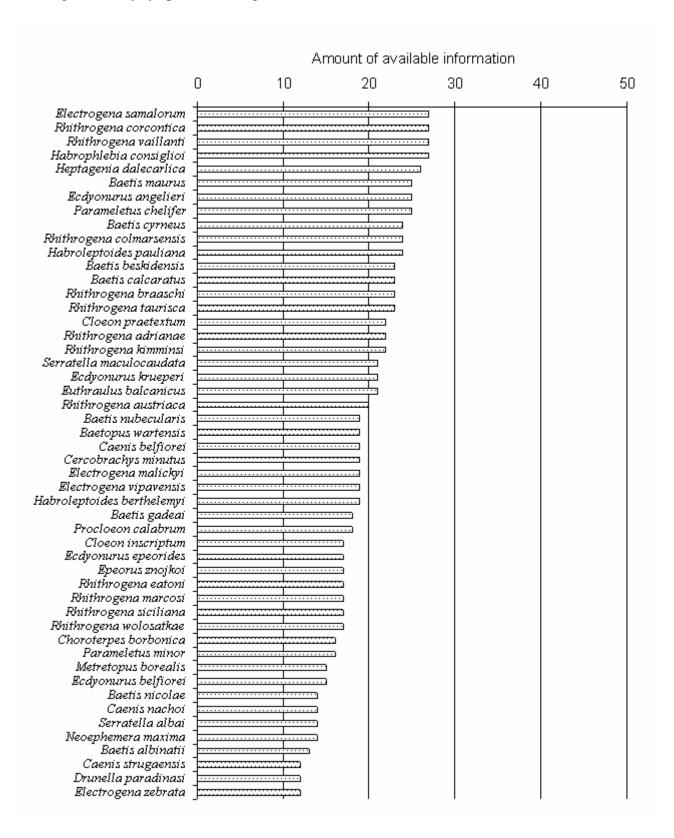


Figure 10. Mayfly species ranking 200 to 250 in terms of amount of available information.

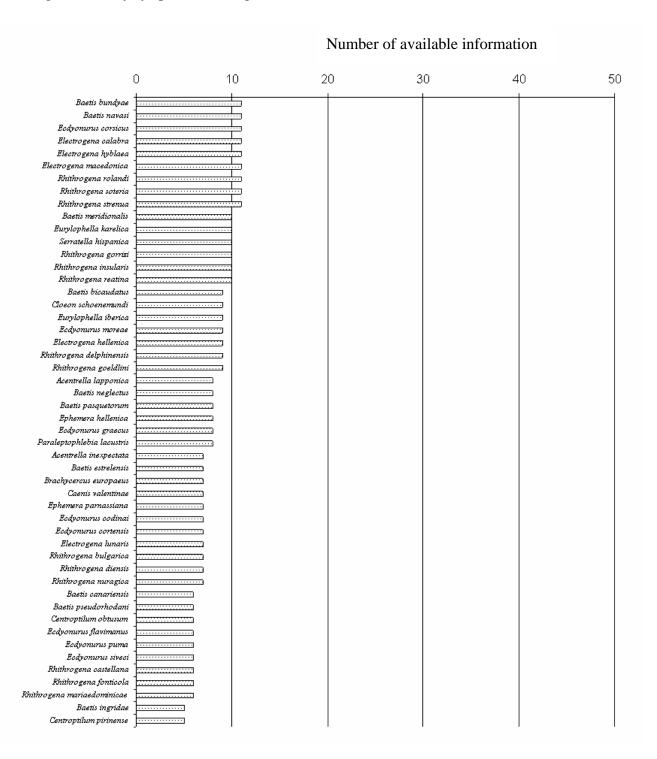


Figure 11. Mayfly species ranking 250 to 300 in terms of amount of available information.

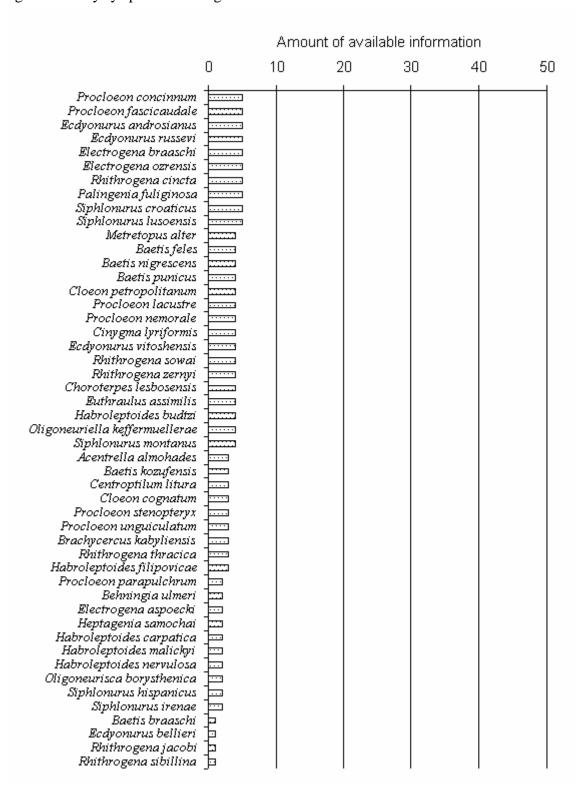
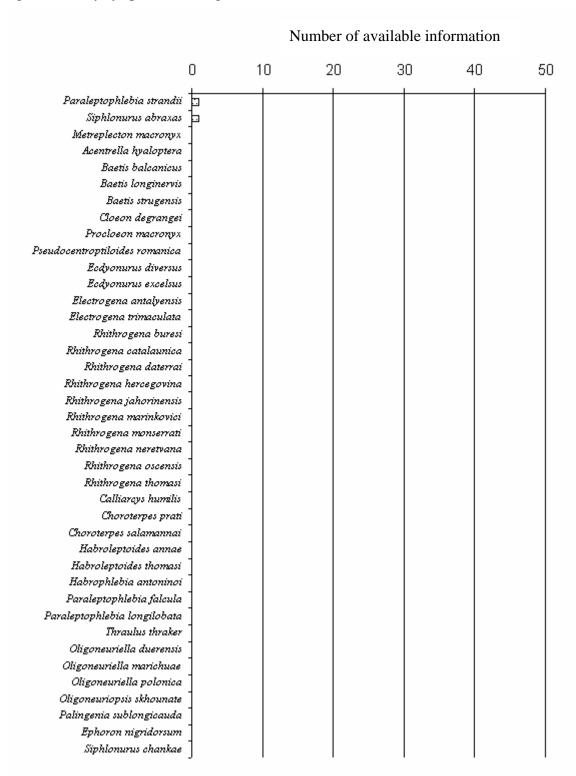


Figure 12. Mayfly species ranking 300 to 339 in terms of amount of available information.



The species that presented the highest amount of information were generally species considered ubiquist, widely distributed and which often occur in large quantities e.g. *Baetis rhodani* and *Serratella ignita* (see e.g. Cao et al., 2006; Soldán et al., 1998). On the contrary, the species for which a limited knowledge was observed are often species with a restricted geographic distribution and/or belongs to European areas where historically the ecological studies were less common than elsewhere. For instance, as was observed by e.g. Buffagni and Belfiore, 1994; Buffagni *et al.*, 2001,

some areas of Southern Europe present general lack of ecological and taxonomical studies on Ephemeroptera.

In general terms for the species that show a small amount of information available some actions should be taken to cover the observed lacks.

6 Preliminary remarks on potential climate change effects

As observed by Hering et al. (2007), even if an increasing number of studies on the effects of climate changes on biota were undertaken some important lacks were observed in freshwater organisms. In this context, the activities of Eurolimpacs WP7 are focused in identifying potential indicators of climate changes in different freshwater groups.

The species that are potentially more affected by climate changes are those more specialized or, in other words, with a smaller ecological niche.

Also, as a preliminary remark on the effects of climate changes on mayfly species, those species which present a restricted geographic distribution can be taken into account. The Endemic species classified in the present work are 40 (Table 4). This list is not exhaustive as other endemic species will be added after experts' checking and suggestions. A preliminary analysis of the geographic distribution of these species shows an apparent dominance of endemic species in the South European areas. The Iberian Peninsula, Italy and the Mediterranean islands (e.g. Sardinia and Corsica), the Pyrenees and the Alps present more than 90% of the species classified as endemic (Figure 13). In Figure below, the Mediterranean basin and the Alps are also displayed together as 3 species presented a distribution limited to Ecoregion 3 and 4 (Italy and the Alps respectively).

Others

8%

Pyrenees
15%

Mediterranean
basin plus Alps
8%

Mediterranean
basin
69%

Ecoregion distribution of the classified mayfly endemic species

Figure 13. Geographic distribution of the classified Ephemeroptera endemic species.

Most of these 'sensitive' species inhabit the part of Europe that will be probably more affected by climate changes. Also for the Trichoptera, for instance, it was recognized a clear North-South gradient with more sensitive taxa in the Southern part of Europe rather than in the Northern one (Hering et al., 2007).

Table 4. List of Ephemeroptera endemic species as classified in the autoecological matrix and total amount of information available. Warning - The list is not exhaustive: other endemic species will be added after experts' checking and suggestions.

Family	Species	Authorship	Information
Baetidae	Acentrella inexpectata	(Tshernova, 1928)	7
Baetidae	Baetis canariensis	Müller-Liebenau, 1971	6
Baetidae	Baetis catharus	Thomas, 1986	33
Baetidae	Baetis cyrneus	Thomas & Gazagnes, 1984	24
Baetidae	Baetis gadeai	Thomas, 1999	18
Baetidae	Baetis ingridae	Thomas & Soldán, 1987	5
Baetidae	Baetis nicolae	Thomas, 1983	14
Baetidae	Cloeon languidum	Grandi, 1959	27
Baetidae	Procloeon calabrum	(Belfiore & D'Antonio, 1990)	18
Caenidae	Caenis martae	Belfiore, 1984	35
Caenidae	Caenis nachoi	Alba-Tercedor & Zamora Muñoz, 1993	14
Caenidae	Caenis valentinae	Grandi, 1951	7
Ephemerellidae	Drunella paradinasi	Gónzález Del Tánago & García De Jalón, 1983	12
Ephemerellidae	Eurylophella iberica	Keffermüller & Terra, 1978	9
Ephemerellidae	Serratella albai	Gonzalez Del Tánago & García De Jalón, 1983	14
Ephemerellidae	Serratella hispanica	(Eaton, 1887)	10
Heptageniidae	Ecdyonurus cortensis	Belfiore, 1988	7
Heptageniidae	Electrogena fallax	(Hagen, 1864)	32
Heptageniidae	Electrogena grandiae	(Belfiore, 1981)	49
Heptageniidae	Rhithrogena degrangei	Sowa, 1969	89
Heptageniidae	Rhithrogena dorieri	Sowa, 1971	46
Heptageniidae	Rhithrogena gorganica	Klapalek, 1907	30
Heptageniidae	Rhithrogena kimminsi	Thomas, 1970	22
Heptageniidae	Rhithrogena nuragica	Belfiore, 1987	7
Heptageniidae	Rhithrogena strenua	Thomas, 1982	11
Leptophlebiidae	Choroterpes borbonica	Belfiore, 1988	16
Leptophlebiidae	Choroterpes lesbosensis	Gaino & Sowa, 1985	4
Leptophlebiidae	Euthraulus assimilis	(Gaino & Sowa, 1985)	4
Leptophlebiidae	Habroleptoides auberti	(Biancheri, 1954)	53
Leptophlebiidae	Habroleptoides berthelemyi	Thomas, 1968	19
Leptophlebiidae	Habroleptoides pauliana	(Grandi, 1959)	24
Leptophlebiidae	Habroleptoides umbratilis	(Eaton, 1884)	44
Leptophlebiidae	Habrophlebia consiglioi	Biancheri, 1959	27
Leptophlebiidae	Paraleptophlebia lacustris	Ikonomov, 1962	8
Leptophlebiidae	Paraleptophlebia ruffoi	Biancheri, 1956	55
Siphlonuridae	Siphlonurus croaticus	Ulmer, 1920	5
Siphlonuridae	Siphlonurus hispanicus	Demoulin, 1958	2
Siphlonuridae	Siphlonurus irenae	Alba-Tercedor, 1990	2
Siphlonuridae	Siphlonurus lusoensis	Puthz, 1977	5
Siphlonuridae	Siphlonurus montanus	Studemann, 1992	4

At the same time, species that present major lacks of autoecological knowledge will be probably highly affected by climate change. Infact, many of the more recently described species, for which few papers are presently available, will presumably show a quite localized distribution, thus potentially being affected strongly by climatic variations. Neither one species ot of the pool of endemic species presented a quantity of information considered sufficient (see previous paragraph) i.e. > 200 individual information. While some of the results will be certainly improved when all the missing data are integrated, it can anyhow be clearly stated that a poor knowledge on the ecology of Endemic species have been observed.

It has thus to be confirmed the need for more research on the ecology of Sothern European species of Ephemeroptera in order to be able to predict the effects of climate changes on their presence and distribution in Europe.

7 Structure and functioning of the online database

The indicator value database for Ephemeroptera will be implemented in the website www.freshwaterecology.info (Eurolimpacs Consortium, 2006). The database contains autoecological characteristics and distribution patterns of more than 12.000 European freshwater organisms belonging to macro-invertebrates, fish, diatoms and macrophytes.

As the ecological data collected for the database are not yet scientifically published, the Ephemeroptera database will be restricted to registered users only. Access may be granted to Eurolimpacs participants after sending an email to Daniel Hering (daniel.hering@uni-essen.de) and/or Astrid Schmidt-Kloiber (astrid.schmidt-kloiber@boku.ac.at).

Details of the structure and functioning of the online database can be found elsewhere (see Deliverable 31, Schmidt-Kloiber et al., 2005).

The information available in the autoecological matrix will be published on the online database. The database will improve the user-friendliness of the data contained in the autoecological matrix by means of query of the available data. The database offers the possibility to realize query of selected ecological parameters and of selected species. Single or multiple ecological parameters can be selected for the query and displayed in the result pages. This query of autoecological parameters can be also performed selecting single species or otherwise selecting ecological parameters (e.g. rheophily) to find out which are the species that shows that ecological preference.

The database it will also provide the possibility to generate maps of e.g. distribution or of shares of sensitive or red list species.

Further details on the database structure and functioning will be published in the next Eurolimpacs WP7 Ephemeroptera deliverable.

8 Further activities

Some contributions (i.e. from the Spanish partner) were not received on time to be included in the summary activities and thus they are not included at the moment in the autoecological matrix. The contribution is considered extremely relevant as it can fulfil some lack in the autoecological matrix concerning e.g. endemic Iberian species or other species with restricted geographical distribution.

Additionally, as stated in the previous deliverable, a contribution from the expert should be integrated in the final database. At present, not all the expected contributions are available. The experts who have already provided at least part of their contribution are here ordered alphabetically:

- J. Alba-Tercedor (University of Granada, Spain),
- C. Belfiore (Tuscia University and CNR-IRSA, Italy),
- A. Buffagni (CNR-IRSA, Italy),
- T. Derka (Comenius University, Slovak Republic).

A special acknowledgment goes to the authors not taking part in the Eurolimpacs project who provided their important contribution to the task. All the gathered contribution will be finally integrated in the autoecological matrix. In the near future, an update including the Spanish and the experts' contributions will be provided.

Finally, during the literature review, information were retrieved also for the following parameters: Ecoregion distribution, Stream zonation, Locomotion and Feeding Types. For those categories information were already collected for the AQEM and STAR projects. It will be discussed with project partners how to integrate the new information collected.

- Acknowledgments

We would like to acknowledge all colleagues who contributed to perform the activities here presented: T. Derka (Comenius University, Slovak Republic) and Belfiore C. (Tuscia University and CNR-IRSA) for the comments provided on the autoecological matrix. We would also like to acknowledge all the project partners and the CNR-IRSA colleagues who contributed to the task.

9 References

- Armanini DG, Buffagni A, Cazzola M. 2007. Deliverable No. 189. Indicator value database for Ephemeroptera –Phase I. Report. Eurolimpacs project, pp. 148.
- Buffagni A. (2004) Classificazione ecologica e carattere lentico-lotico in fiumi mediterranei (Ed A. Buffagni). Quad. Ist. Ric. Acque, 122 Roma (IRSA).
- Buffagni A., Belfiore C. 1994. Recenti sviluppi delle ricerche tassonomiche e faunistiche sugli Efemerotteri italiani (Ephemeroptera). Atti XVII Congr. naz. ital. Entomol., Udine: 175-178.
- Buffagni A., Kemp J.L., Erba S., Belfiore C., Hering D., Moog O. 2001. A Europe-wide system for assessing the quality of rivers using macroinvertebrates: the AQEM Project and its importance for southern Europe (with special emphasis on Italy). Ravera O. (Ed.) Scientific and legal aspects of biological monitoring in freshwater. Journal of Limnolnology 60 (Suppl. 1): 39-48.
- Cao Y., Bark A.W., Williams W.P. 1996. Measuring the response of macroinvertebrate communities to water pollution: a comparison of multivariate approaches, biotic and diversity indices. Hydrobiologia 341: 1-19.
- Coimbra C.N., Graça M.A.S., Cortes R.M. 1996. The effects of a basic effluent on macroinvertebrate community structure in a temporary mediterranean river. Environmental Pollution 94(3):301-307.
- Schmidt-Kloiber A., Vogl R., Graf W., Lorenz A., Hering D. 2005. Deliverable No. 31. Design and Population of an Indicator Database for European Freshwater Species. Eurolimpacs project, pp. 29.
- Euro-Limpacs consortium (2006): Freshwaterecology.info The Taxa and Autecology Database for Freshwater Organisms. Available from www.freshwaterecology.info (version 3.0, 26/11/2006)
- Soldán T., Zahradkova S., Helesic J., Dusek L., Landa V. 1998. Distributional and quantitative patterns of Ephemeroptera and Plecoptera in the Czech Republic: A possibility of detection of long-term changes of aquatic biotopes. Folia Fac. Sci. Natur. Univ. Masaryk. Brun., Brno, 305 pp.
- Thomas A., Belfiore C. 2004. Fauna Europaea: Ephemeroptera. Fauna Europaea version 1.1, Available online at http://www.faunaeur.org.

Annex I.

The present Annex provides the reference list of the papers reviewed that contained useful information. Associated to each entries there is a code and a column containing a list of families for which information were retrieved from the associated paper. For the families a short code is used corresponding to the first 4 letters of the family name, excluding Ephemerellidae (ephl) and Ephemeridae (ephr) which were slightly modified to avoid confusion.

- Code Reference Family
- 1 Aagaard K., Solem J.O., Bongard T., Hanssen O. 2004. Studies of aquatic insects in the Atna River baet,ephl,hept,siph 1987-2002. Hydrobiologia 521(1):87-105.
- 2 Aagaard K., Solem J.O., Nøst T., Hanssen O. 1997. The macrobenthos of the pristine stream, amel,amet,baet,ep Skiftesåa, Høylandet, Norway. Hydrobiologia 348(1 3):81-94. hl,hept,siph
- Aanes K.J. 1981. A preliminary report from a study on the environmental impact of pyrite mining hept and dressing in a mountain stream in Norway. In: J. F. Flannagan & K. E. Marshall, eds. Advances in Ephemeroptera Biology. Plenum, New York, p. 419-442.
- 7002 Adam G. 1991. Baetis liebenauae Keffermuller und Baetis pentaphlebodes Ujhelyi in baet Nordostbayern (Insecta, Ephemeroptera). Lauterbornia 8: 77-80.
- Aguayo-Corraliza M.T., Ferreras-Romero M., Puig-García M.A. 1991. Life history of Ephemera ephr danica Müller (Ephemeroptera) in the Sierra Morena of South-West Spain. In: Alba-Tercedor J. & Sánchez-Ortega, A. (eds.). Overview and strategies of Ephemeroptera and Plecoptera. Sandhill Crane Press, Gainesville, Florida.
- 888936 Alba-Tercedor J. 1981. Life cycle and ecology of mayflies from Sierra Nevada (Spain), IV. caen Limnetica 6: 23-34.
- 42 Alba-Tercedor J. 1982. Descripción de la ninfa de una nueva subespecie de Efemeropteros: Baetis baet muticus intermedius nov. spp. (Ephemeroptera, Baetidae). Eos 58:9-16.
- 47 Alba-Tercedor J. 1983. Ecología, distribución y ciclos de desarrollo de efemerópteros de Sierra baet Nevada. I: Baetis maurus Kimmins, 1938 (Ephemeroptera, Baeti-dae). In: Actas del I Congr. Español de Limnología. (N. Prat, ed.), Bar-celona, pp. 179-188, appendix.
- 57 Alba-Tercedor J. 1990. Life cycles and ecology of mayflies from Sierra Nevada (Spain). IV. ephr,hept Limnetica 6:23-34.
- Alba-Tercedor J. 1991. Primera cita de Baetis catharus Thomas, 1986 en la Península Ibérica baet (Ephemeroptera: Baetidae). Bol. Asoc. esp. Ent. 15:344.
- Alba-Tercedor J. 1998. Description of the imagines of Rhithrogena goeldlini Sartori and Sowa, hept 1988, and keys for the identification of imagines of the European species of of the R. diaphana-subgroup (Ephemeroptera: Heptageniidae). Aquatic Insects 20:125-130.
- Alba-Tercedor J., Baez M., Soldán T. 1987. New records of mayflies of the Canary Islands caen (Insecta, Ephemeroptera). EOS 63:7-13.
- Alba-Tercedor J., Derka T. 2004. The Status of Knowledge of the Genus Ecdyonurus in the Iberian ephr Peninsula, with Description of Two New Species of the E. venosus Group from Spain (Ephemeroptera: Heptageniidae). Aquatic Insects. Vol. 26, No. 3/4 (2004), pp. 227-242.
- Alba-Tercedor J., El-Alami M. 1999. Description of the nymphs and eggs of Acentrella almohades baet sp. n. from Morocco and southern Spain (Ephemeroptera: Baetidae). Aquatic Insects 21:241-247.
- Alba-Tercedor J., Jáimez-Cuéllar P. 2001. Primera cita de Caenis pseudorivulorum Keffermüller, caen 1960 (Ephemeroptera, Caenidae) en la Península Ibérica. First record of Caenis pseudorivulorum Keffermüller, 1960 (Ephemeroptera, Caenidae) in the Iberian Peninsula. Boln. Asoc. esp. Ent. 25:132.
- Alba-Tercedor J., Jáimez-Cuéllar P. 2003. Checklist and historical evolution of the knowledge of baet, caen Ephemeroptera in the Iberian Peninsula, Balearic and Canary Islands. Pages 91-97 in Gaino E. (ed). Research update on Ephemeroptera & Plecoptera. Università di Perugia. Perugia, Italy.
- Alba-Tercedor J., Jiménez-Millán F. 1978. Larvas de Efemerópteros de las estribaciones de Sierra caen,ephr Nevada: Factores que intervienen en su distribución. Bol. Asoc. esp. Entomol. 2:91-103.
- Alba-Tercedor J., Peters W.L. 1985. Types and Additional Specimens of Ephemeroptera Studied by baet Navas, Longinos in the "Museo-De-Zoologia-Del-Ayuntamiento, Barcelona, Spain. Aquatic Insects 7(4):215-227.

Alba-Tercedor J., Picazo-Muñoz J., Jáimez-Cuéllar P. 2000. Presencia de Labiobaetis neglectus baet (Navás, 1913) (Ephemeroptera, Baetidae) en el sur de la Península Ibérica. Boln. Asoc. esp. Ent. 24:221-222

- Alba-Tercedor J., Sowa R. 1987. New Representatives of the Rhithrogena diaphana group from hept Continental Europe, with a Redescription of Rhithrogena diaphana Navas, 1917 (Ephemeroptera, Heptageniidae). Aquatic Insects 9(2):65-83.
- 40 Alba-Tercedor J., Zamora-Muñoz C. 1993. Description of Caenis nachoi Sp-N, with Keys for the caen Identification of the European Species of the Caenis macrura group (Ephemeroptera, Caenidae). Aquatic Insects 15(4):239-247.
- 39 Alba-Tercedor J., Zamora-Muñoz C., Sánchez-Ortega A., Guisasola I. 1991. Mayflies and baet,caen,hept Stoneflies from the Río Monachil (Sierra Nevada, Spain). pp.: 529-538. In: Overview and Strategies of Ephemeroptera and Plecoptera. 1991. The Sandhill Crane Press. Florida. [I.S.B.N.: 1-877743-08-01.
- Allen K.R., Gambles R.M. 1932. Preliminary account of the Ephemeroptera of Wicken Fen. Pages caen,ephr 580-582 in: The Natural History of Wicken Fen, ed. by J.S. Gardiner. Cambridge, Bowes & Bowes.
- Ambühl H. 1959. Die Bedeutung der Strömung als ökologischer Faktor. Schweizerische Zeitschrift baet,ephl,hept für Hydrologie 21:133-264.
- Ambühl H. 1961. Die Strömung als physiologischer und ökologischer Faktor. Experimentelle ephl Untersuchungen an Bachtieren, Verh. Int. Ver. Limnol. 14:390-395.
- 889029 Andrikovics S. 1989. Faunistical investigation on Ephemeroptera and Plecoptera along the Apatkut caen, ephl, lept Stream, Visegrad Mountains, Hungary. Folia Entomologica Hungarica XLIX: 5-11.
- Andrikovics S. 1991. Taxonomic and ecological investigations of the Hungarian Rhithrogena hept semicolorata species-group. In: Overview and Strategies of Ephemeroptera and Plecoptera. 1991. The Sandhill Crane Press. Florida. [I.S.B.N.: 1-877743-08-0]: 247-252.
- Armitage P.D., Furse M.T., Wright J.F. 1985. Further characters for distinguishing nymphs of baet,ephl,hept Baetis vernus/tenax group from B. buceratus Eaton (Ephem., Baetidae). Entomologists Monthly Magazine 121:235-7.
- Arnekleiv J.V. 1996. Life cycle and seasonal distribution of mayflies (Ephemeroptera) in small amel,baet,ephl,hep stream in Central Norway. -Fauna norv. Ser. B 43: 19-30 t,lept,siph
- Arnekleiv J.V., Storset L. 1994. Downstream effects of mine drainage on benthos and fish in a amel,ephl Norwegian river: a comparison of the situation before and after river reabilitation. Journal of Geochemical Exploration 52 (1195) 35-43
- Atkinson D. 1995. Effects of temperature on the size of aquatic ectotherms: exceptions to the siph general rule. Journal of Thermal Biology 20(1-2):61-74.
- Austin D.A., Baker J.H. 1988. Fate of bacteria ingested by larvae of the freshwater mayfly, ephr Ephemera danica. Microbial Ecology 15(3):323-332.
- Balduzzi A., Gaino E., Spanò S. 1976. Il sistema Arroscia-Centa (Liguria Occidentale) in relazione ephl,ephr,lept,pota al suo popolamento zoobentonico, con maggior dettagli su Efemerotteri e Plecotteri. Boll. Mus. Ist. biol. Univ. Genova 44:25-54.
- Bass J.A.B. 1976. Studies on Ephemerella ignita (Poda) in a chalk stream in S. England. ephl Hydrobiologia 49:117-21.
- Bauernfeind E. 1990. Der derzeitige Stand der Eintagsfliegen-Faunistik in Österreich (Insecta: baet,caen,ephl,eph Ephemeroptera).- Verh. zool.-bot.Ges.Österr. 127:61-82. r,hept,ison,lept,oli g,poly,pota,siph
- Bauernfeind E. 1990. Einige für Österreich neue oder wenig bekannte Eintagsfliegen (Insecta: amel,baet,hept,lept Ephemeroptera).- Linzer biol. Beitr. 22, 2:341-347.
- Bauernfeind E. 1990. Eintagsfliegen-Nachweise aus Oberösterreich (Insecta: Ephemeroptera), die baet,caen,ephl,hep Sammlung Adlmannseder am OÖLM Linz.- Linzer biol. Beitr. 22, 2:349-356. t,lept,olig,siph
- Bauernfeind E. 1991. Rhithrogena zernyi sp.n. -ein neuer Vertreter der diaphana-Gruppe aus hept Jugoslawien (Insecta: Ephemeroptera).- Annl. Naturhistor. Mus. Wien 92, Ser. B:135-138.
- Bauernfeind E. 2003. Rhithrogena lisettae sp. n. A new representative of the R. diaphana species hept group from Greece (Insecta: Ephemeroptera). Pages 109-112 in Gaino E. (ed). Research update on Ephemeroptera & Plecoptera. Università di Perugia. Perugia, Italy.
- Bauernfeind E. 2003. The mayflies of Greece (Insecta: Ephemeroptera) A provisional check-list. baet,caen,ephl,eph Pages 99-107 in Gaino E. (ed). Research update on Ephemeroptera & Plecoptera. Università di r,hept,ison,lept,oli Perugia. Perugia, Italy.

- Code Reference Family
- Bauernfeind E., Humpesch U.H. 2001. Die Eintagsfliegen Zentraleuropas Bestimmung und amel,amet,arth,bae Ökologie.- Verlag NMW, 1-240, 579 Abb. Wien.

 t,caen,ephl,ephr,he pt,ison,lept,neoe,ol ig,pali,poly,pota,pr os.siph
- Bauernfeind E., Moog O. 2000. Mayflies (Insecta: Ephemeroptera) and the assessment of amel,amet,baet,be ecological integrity: a methodological approach. Hydrobiologia 422-423(0):71-83. hn,caen,ephl,ephr, hept,lept,olig,pali, pros,siph
- Bauernfeind E., Weichselbaumer P. 1991. Eintagsfliegen Nachweise aus Österreich (Insecta: baet,caen,ephl,eph Ephemeroptera).- Verh. zool.-bot. Ges. Österr. 128:47-66.
- Baümer C., Pirow R., Paul R.J. 2000. Respiratory adaptations to running-water microhabitats in baet,hept mayfly larvae Epeorus sylvicola and Ecdyonurus torrentis, Ephemeroptera. Physiological and Biochemical Zoology 73:77-85.
- Beer-Stiller A., Zwick P. 1995. Biometric studies of some stoneflies and a mayfly (Plecoptera and baet Ephemeroptera). Hydrobiologia 299(2):169-178.
- Beketov M.A. 2004. Comparative Sensitivity to the Insecticides Deltamethrin and Esfenvalerate of baet Some Aquatic Insect Larvae (Ephemeroptera and Odonata) and Daphnia magna. Russian Journal of Ecology 35(3):200-204.
- Beketov M.A. 2004. Different sensitivity of mayflies (Insecta, Ephemeroptera) to ammonia, nitrite baet,hept and nitrate: linkage between experimental and observational data. Hydrobiologia 528(1):209-216.
- Beketov M.A. 2004. Novye svedeniya o podenkakh (Ephemeroptera) YUgo-Zapadnoi Sibiri. New baet,ephr,hept data on mayflies (Ephemeroptera) of South-West Siberia [in Russian]. Evraziatskii Entomol. Zhurnal [Euroasian Entomological Journal] 3(1):25-27.
- Beketov M.A., Kluge NYu, 2003. 2003. Mayflies of Southwestern Siberia, Russia baet,caen (Ephemeroptera). Opuscula zoologica fluminensia 211:1-6.
- Beketov M.A., Liess M. 2005. Acute contamination with esfenvalerate and food limitation: chronic baet effects on the mayfly, Cloeon dipterum. Environmental Toxicology and Chemistry 24:1281-1286.
- Belfiore C. 1978. Efemerotteri dell'Umbria (Insecta, Ephemeroptera). Riv. Idrobiol. 17:323-331. baet,ephl,ephr,hept ,lept,olig.siph
- Belfiore C. 1979. Segnalazione di Baetis digitatus Bengtsson in Italia (Ephemeroptera, Baetidae). baet Boll. Ass. Romana Entomol. 34:23-25.
- Belfiore C. 1981. On the Italian species of the Ecdyonurus lateralis group (Ephemeroptera, hept Baetidae). Aquatic Insects 3(3):171-178.
- 400 Belfiore C. 1981. Segnalazione di Baetis liebenauae Keffermuller, 1974 (Ephemeroptera, Baetidae) baet in Italia. Baetis liebenauae Keffermuller 1974, found in Italy (Ephemeroptera, Baetidae). Gortania -Atti Mus. Friul. Stor. Nat. 3:229-230.
- 401 Belfiore C. 1982. Note faunistiche, tassonomiche ed ecologiche su alcuni Efemerotteri nuovi per baet,ephl,hept l'Italia (Ephemeroptera). Boll. Ass. Romana Entomol. 35:1-8.
- 402 Belfiore C. 1982. The nymphs of Italian species of the Ecdyonurus lateralis group, with a hept description of the nymph of E. gridellii (Grandi, 1953) (Ephemeroptera, Heptageniidae). Fragmenta Entomologica 16:125-131.
- Belfiore C. 1983. Efemerotteri (Ephemeroptera). Guide per il riconoscimento delle specie animali baet,caen,ephl,eph delle acque interne italiane, C.N.R., Progetto finalizzato "Promozione della qualita' dell'ambiente", r,hept,lept,olig,pol 24: 106 pp. y,pota,siph
- Belfiore C. 1983. Note su alcune specie del genere Habroleptoides schoenemundi, con segnalazione lept per l'Italia di H. auberti (Biancheri, 1954) (Ephemeroptera). Boll. Soc. Entomol. Ital. 115:5-6.
- Belfiore C. 1983. Notes on Italian Heptageniidae (Ephemeroptera). Rhithrogena fiorii Grandi, 1953 hept and R. adrianae sp. n. Aquatic Insects 5:69-76.
- 407 Belfiore C. 1984. Note su alcune specie italiane del genere Caenis Stephens, 1835, con descrizione caen di C. martae n. sp. (Ephemeroptera, Caenidae). Fragm. Entomol., Roma, 17:215-219.
- Belfiore C. 1986. Contribution to the knowledge of the Heptageniidae of Greece, with a description hept of Ecdyonurus moreae n. sp. (Ephemeroptera). Aquatic Insects, 8(4): 191-195.
- 409 Belfiore C. 1987. A new species of Heptageniidae from Corsica: Ecdyonurus cortensis n. sp. hept (Ephemeroptera). Bollettino del Museo Regionale di Scienze Naturali, Torino 5:625-630.
- 410 Belfiore C. 1987. Heptageniidae from Corsica and Sardinia. Rhithrogena nuragica n. sp., R. eatoni hept Esben-Petersen 1912, and R. insularis Esben-Petersen 1913 (Ephemeroptera). Annals de Limnologie 23:87-94.

- 411 Belfiore C. 1987. Taxonomy of Ecdyonurus corsicus Esben-Petersen, 1912, with some remarks on hept diagnostic features of the nymphs of the genus Ecdyonurus (Ephemeroptera, Heptageniidae). Fragm. Entomol. 19:293-299
- Belfiore C. 1988. A new species of Leptophlebiidae from southern Italy: Choroterpes borbonica n. lept sp. (Ephemeroptera). Fragm. Entomol. 21:61-65.
- Belfiore C. 1988. Esperimenti sull fecondità tra specie del genere Electrogena (Ephemeroptera, hept Heptageniidae). Atti XV Congr. Naz. Ital. Entomol., L'Aquila pp. 115-119.
- 414 Belfiore C. 1988. Progressi nella conoscenza degli Efemerotteri italiani (1980-1987). Atti XV baet,caen,ephr Congr. Naz. Ital. Entomol., L'Aquila pp. 107-114.
- Belfiore C. 1990. A new species Of Heptageniidae from Sicily: Rhithrogena johannis sp. n. Fragm. hept Entomol., Roma, 22(1):11-17.
- 416 Belfiore C. 1990. Efemerotteri delle isole dell'Egeo (Ephemeroptera). Fragmenta Entomologica hept 22(2): 265-270
- 417 Belfiore C. 1994. Biogeografia degli Efemerotteri dell'Italia centrale:analisi dei popolamenti ed baet,hept emergenze faunistiche nella rilevazione delle discontinuità (Insecta, Ephemeroptera). Biogeographia, 17 (1993): 165-172.
- 418 Belfiore C. 1994. Ephemeroptera. In: Minelli A., Ruffo S. & La Posta S. (eds.) Checklist delle baet specie della fauna italiana, 34. Calderini, Bologna: 5 pp.
- 419 Belfiore C. 1994. Gli Efemerotteri dell'Appennino marchigiano (Insecta, Ephemeroptera). baet,caen,ephl,eph Biogeographia XVII: 173-181 r,hept,lept,siph
- 420 Belfiore C. 1994. Taxonomic Characters for Species Identification in the Genus Electrogena hept Zurwerra &Tomka, with a Description of Electrogena hyblaea sp. n. from Sicily (Ephemeroptera, Heptageniidae). Aquatic Insects 16(4):193-199.
- 421 Belfiore C. 1995. Description of Electrogena calabra n. sp., a new species from Southern Italy hept (Ephemeroptera, Heptageniidae). Annls Limnol. 31(1):29-34.
- Belfiore C., Buffagni A. 1994. Revision of the Italian species of Ecdyonurus helveticus group: hept taxonomy of nymphs (Ephemeroptera, Heptageniidae). Mitt. Schweiz. Entomol. Ges., 67: 143-149.
- Belfiore C., Campaioli S., De Marco N., Martin M. 1989. Ephemerella mucronata (Bengtsson, ephl 1909), nuova per l'Italia, in Friuli (Ephemeroptera, Ephemerillidae). Gortania. Atti del Museo Friulano di Storia Naturale 11: 177-182.
- Belfiore C., D'Antonio C. 1990. Pseudocentroptilum calabrum Sp-N (Ephemeroptera, Baetidae), a baet New Species of mayfly from Southern Italy. Acta Entomologica Bohemoslovaca 87(2):117-121.
- Belfiore C., D'Antonio C. 1991. Faunistic, taxonomic and biogeographical studies of baet,caen,ephl,hep Ephemeroptera from Southern Italy. In: J. Alba Tercedor & J. Sanchez Ortega: "Overview and t,lept,olig,siph Strategies of Ephemeroptera and Plecoptera". Sandhill-Crane Press: 253-262.
- Belfiore C., D'Antonio C., Audisio P, Scillitani G. 1991. Analisi faunistiche e biogeografiche sugli baet,caen,ephl,hep Efemerotteri della Sicilia. Animalia 18: 31-36 t,lept
- Belfiore C., Desio F. 1995. Taxonomy and distribution of Electrogena ujhelyii (Sowa, 1981) hept (insecta: Ephemeroptera: Heptageniidae). Ann. Naturhist. Mus. Wien, 97 B: 151-154.
- Belfiore C., Desio F. 1996. Choroterpes (Euthraulus) balcanicus (Ikonomov, 1961) in Italia lept (Ephemeroptera, Leptophlebiidae). Gortania, 17 (1995): 141-144.
- Belfiore C., Gaino E. 1984. Le specie italiane del genere Habrophlebia Eaton, 1881 lept (Ephemeroptera, Leptophlebiidae). Boll. Ass. Romana Entomol. 39:11-18.
- Belfiore C., Giangrande A. 1979. Descrizione della ninfa de Paraleptophlebia ruffoi Biancheri, lept 1956 (Ephemeroptera, Leptophlebiidae). Fragmenta Entomologica 15:53-58.
- Belfiore C., Haybach A., Klonowska-Olejnik M. 1999. Taxonomy and phenetic relationships of hept Electrogena affinis (Eaton, 1883) (Ephemeroptera: Heptageniidae). Annales De Limnologie-International Journal of Limnology 35(4):245-256.
- Belfiore C., Scillitani G., Picariello O., Cataudo A. 1997. Morphological and electrophoretic hept evidence for a new species of Electrogena from central Italy: Description of E-lunaris sp. n. (Ephemeroptera: Heptageniidae). Aquatic Insects 19(3):129-140.
- Belfiore C., Stella E. 1996. Ephemeroptera, Caenidae. Brachycercus harrisella Curtis, 1834. caen Bollettino dell'Associazione Romana di Entomologia, 50 (1-4) (1995): 83-87.
- Belfiore C., Thomas A. 1987. Description de l'imago mâle de Baetis cyrneus Thomas et Gazagnes, baet 1984 (Ephemeroptera). Annales de la S.S.N.A.T.V. 39:163-164.
- Benech V. 1972. Etude expérimentale de l'incubation des oeufs de Baetis rhodani Pictet. Freshwater baet Biology 2: 243-252.

- Code Reference Family
 444 Bengtsson S. 1912. Neue Ephemeriden aus Schweden. Entomologisk Tidskrift 33:107-117.
- Berthélemy C., Thomas A. 1967. Note taxonomique sur Epeorus torrentium Eaton, 1881 et E. hept assimilis Eaton, 1885 [Ephemeroptera, Heptageniidae]. Annales de Limnologie 3:65-74.
- Berthold E., Egge C., Schuller I. 2001. First find of Metreletus balcanicus (Insecta, Ephemeroptera, amel Ameletidae) in Bavaria. Lauterbornia 40: 93-97. (In German; English abstract)
- Bertrand H., Verrier M.-L. 1949. Contribution a la biogéographie des Ephéméroptères des baet,caen,hept,lept Pyrénées. Bulletin Biologique de la France et de la Belgique 83:1-24. ,pota,siph
- Bertrand H., Verrier M.-L. 1950. Contribution a l'étude de la faune des eaux douces de la Région baet,caen,ephl,lept Orientale des Pyrénées. Ephéméroptères (Deuxième partie). Vie et Milieu 1(4):449-459. ,siph
- 524 Biancheri E. 1953. Note sugli Efemerotteri italiani I. Bollettino della Società Entomologica ephr,hept,lept,siph Italiana LXXXIII(3-4): 42-45.
- 525 Biancheri E. 1953. Note sugli Efemerotteri italiani- II Nuovi reperti in Liguria e Piemonte. ephr,hept,lept,siph Bollettino della Società Entomologica Italiana LXXXIII: 42-45
- Biancheri E. 1955. Una nuova specie di Habrophlebia e ridescrizione di H. umbratilis Eaton, 1883 lept (Ephemeroptera). Mem. Soc. entomol. ital. 33: 155-166.
- 526 Biancheri E. 1956. Efemerotteri dei Monti Sibillini (Note sugli Efemerotteri italiani VI). Mem. hept Mus. Civ. Stor. Nat. Verona 5:301-314.
- 528 Biancheri E. 1958. Note sugli Efemerotteri italiani. VII. Descrizione della ninfa e dell'immagine lept femmina di Habrophlebia (Habroleptoides) Umbratilis Eaton. 157-160
- 529 Biancheri E. 1958. Note sugli Efemerotteri italiani. VIII. Nuovi reperti italiani del genere ephr Ephemera. Bollettino della Società Entomologica Italiana: 91-94
- Biancheri E. 1959. Note sugli Efemerotteri İtaliani X. Reperti del Dr C. Consiglio in Sardegna, ephl,hept,lept Corsica, Lazio e Abruzzo. Bollettino della Società Entomologica Italiana 89(5-6), 89-91.
- 531 Biancheri E. 1959. Note sugli Efemerotteri italiani. IX descrizione di una nuova specie della lept Sardegna; Habrophlebia consiglioi sp. n. 35-38
- Biancheri E. 1964. Note sugli Efemerotteri italiani XII. Osservazioni sulla variabilità hept intraspecifica dei maschi di Ecdyonurus helveticus (Eaton) 1887. Boll. Soc. Entomol. Ital. 94:19-27.
- 888898 Biancheri E. 1964. Note sugli Efemerotteri italiani. XIII. Reperti di Epeorus assimilis Eaton 1885 e hept di Rhithrogena semicolorata Curtis 1834. Boll. Soc. entomol. ital. 94: 83-85.
- 6500 Bickerton M.A. 1995. Long-term changes of macroinvertebrate communities in relation to flow ephl,lept variations: the River Glen, Lincolnshire, England, Regulated Rivers: Research and Management, 10, 81-92.
- 888899 Bielli E., Cotta Ramusino M., Rossaro B., Segrada F. 1978. Inquinamento e variazioni del bentos in baet,hept un torrente subalpino (torrente Acqualba, Prov. di Novara). Istituto Lombardo (Rend. Sc.) B 112: 17-61.
- Bisogni G.L. 1983. Rinvenimento nel fiume Po di Brachycercus harrisella Curtis, genere e specie caen nuovi per l'Italia. Bollettino della Società Entomologica Italiana 115(1-3): 7-8.
- 888940 Bisogni G.L., Ceppil L. 1999. Crostacei Molluschi Efemerotteri Plecotteri Tricotteri. In: Atlante caen,ephl,ephr,olig della biodiversità nel Parco Ticino. Consorzio Parco Ticino.
- 6055 Blackburn J.H., Gunn R.J.M., Hammett M.J. 1998. Electrogena affinis (Eaton, 1885) hept (Ephemeroptera, Heptageniidae), a mayfly new to Britain . Entomologist's Monthly Magazine, 134, 257-263
- Bohle H.W. 1969. Untersuchungen über die Embryonalentwicklung und die embryonale Diapause baet bei Baetis vernus Curtis und Baetis rhodani Pictet (Baetidae, Ephemeroptera). Zoologische Jahrbücher. Anatomie und Ontogenie der Tiere 86:493-575.
- Bohle H.W. 1972. Die Temperaturabhängigkeit der Embryogenese und der embryonalen Diapause ephl von Ephemerella ignita (Poda) (Insecta, Ephemeroptera). Oecologia 10:253-268.
- 888937 Bournaud M., Tachet H., Roux A.L., Auda Y. 1987. The effects of seasonal and hydrological caen influences on the macroinvertebrates of the Rhone River, France 1. Methodological aspects. Arch. Hydrobiol. 109 (2): 287-304
- 888900 Braasch D. 1980. Iron yougoslavicus Samal neu für Italien und Bulgarien (Insecta, Ephemeroptera, hept Heptageniidae) Faun. Abh. Mus. Tierk. Dresden 8: 81.
- Braasch D. 1981. Eintagsfliegen aus Anatolien und Iran (Insecta, Ephemeroptera). Faun. Abh. ephr,hept Mus. Tierk. Dresden 8 n. 6: 75-79

- Braasch D. 1983. Ecdyonurus aurantiacus androsianus n. subsp. von der griechischen Insel Andros hept (Ephemeroptera, Heptageniidae). Reichenbachia 18:117-120.
- Braasch D. 1983. Zwei neue Heptageniidae von den griechischen Inseln (Ephemeroptera). hept Reichenbachia, Mus. Tierk. Dresden, 21:69-74.
- Braasch D. 1984. Ecdyonurus graecus n. sp. aus Griechenland (Ephemeroptera, Heptageniidae). hept Entomologische Nachrichten und Berichte 28:11-12.
- Braasch D., Jacob U. 1984. Faunistische Kurzmitteilungen. Faun. Abh. Museum fur Tierkunde caen Dresden 12(8):81-83.
- 7052 Braasch D., Russev B.K.. 1986. Zur Kenntnis der Heptageniidae-Fauna (Ephemeroptera) hept Bulgariens. I. Acta Zoologica Bulgarica 32: 48-51.
- Braasch D., Soldán T. 1984. Ecdyonurus aspoecki n.sp. von der griechischen Insel Chíos hept (Ephemeroptera, Heptageniidae). Reichenbachia 22:193-194.
- Braasch D., Soldán T. 1985. Ein neuer Ecdyonurus der ruffi-Gruppe aus Bulgarien (Heptageniidae, hept Ephemeroptera). Entomologische Nachrichten und Berichte 29:67-68.
- Braasch D., Soldán T. 1988. Rhithrogena jacobi n. sp. aus Bulgarien (Insecta, Ephemeroptera, hept Heptageniidae). Reichenbachia 25:117-118.
- Bracken J.J., Kelly-Quinn M., Tierney D. 1998. The faunal communities of upland streams in the amel,baet,siph eastern region of Ireland with reference to afforestation impacts. Hydrobiologia 389(1):115-130.
- 6178 Bracken J.J., Murray D.A. 1973. Insect emergence data from four small lakes in the south and south baet of Ireland. Irish Fisheries Investigations Series A 11 3-17
- 6057 Bradbeer P.A., Savage A.A. 1980. Some observations on the distribution and life history of Caenis caen robusta Eaton (Ephemeroptera) in Cheshire and North Shropshire, England. Hydrobiologia 68:87-90
- Bradley D.C., Ormerod S.J. 2002. Long-term effects of catchment liming on invertebrates in upland baet,lept streams. Freshwater Biology 47(1):161-171.
- 7031 Braioni M.G. 1982. La fauna macrobentonica dell'Adige. Atti e Memorie dell'Accademia di baet,hept Agricoltura Scienze e Lettere di Verona. 1982-1983. Serie 6, 34(157): 51-64.
- Braioni M.G., Lorenzet T. 1984. Gli Efemerotteri del fiume Brenta (Italia settentrionale). Bollettino baet,caen,ephl,eph del Museo Civico di Storia Naturale 11: 83-98.
- Bratton J.H. 1990. A review of the scarcer Ephemeroptera and Plecoptera of Great Britain. amel,arth,baet,cae Research & survey in nature conservation. Nature Conservancy council 1990, 29: 40 n,ephl,ephr,hept,le pt,pota,siph
- Breitenmoserwursten C., Sartori M. 1995. Distribution, Diversity, Life-Cycle and Growth of a baet,hept,lept mayfly Community in a Prealpine Stream System (Insecta, Ephemeroptera). Hydrobiologia 308(2):85-101.
- 888975 Bretschko G. 1985. Experimental analysis of the development of overwintering larvae of siph Siphlonurus aestivalis Eaton (Ephemeroptera) from a karstic lake. Arch. Hydrobiol. 104: 111-128.
- 6179 Bretschko G. 1990: A flexible larval development strategy in Siphlonurus aestivalis Eaton. siph exploiting an unstable biotope. pp. 17-25. In: Campbell IC (ed.): Mayflies and Stoneflies Life histories and Biology. Kluwer Academic Publishers (Series Entomologica, Dr. W. Junk, vol. 14). Dordrecht, Boston & London. [I.S.B.N.: 0-7923-0289-3].
- 889045 Brittain J.E. 1972. Brachycercus harrisella Curtis (Ephemeroptera) new to Norway. Norsk Entomol. caen Tidsskr. 19:171.
- Brittain J.E. 1972. The life cycles of Leptophlebia vespertina (L.) and L. marginata (L.) lept (Ephemeroptera) in Llyn Dinas, North Wales. Freshwater Biology 2:271-277.
- 7010 Brittain J.E. 1980. Mayflies Strategies in a Norwegian Subalpine Lake. In: J. F. Flannagan & K. E. baet,siph Marshall, eds. Advances in Ephemeroptera Biology. Plenum, New York, p. 179-186.
- Brittain J.E. 1982. Biology of mayflies. Annual Review of Entomology 27:119-147. baet,ephl,ephr,hept
- 889046 Brittain JE. 1974. Studies on the lentic Ephemeroptera and Plecoptera of southern Norway. Norsk caen Entomol. Tidsskr. 21:135-154.
- Production Brodersen K.P., Dall P.C., Lindegaard C. 1998. The fauna in the upper stony littoral of Danish baet, caen, ephr, lept lakes: macroinvertebrates as trophic indicators. Freshwater Biology 39(3):577-592.
- 6013 Bronmark C., Herrmann J., Malmqvist B., Otto C-J., Sjostrom P. 1984. Animal community baet structure as a function of stream size. Hydrobiologia 112:73-79.
- Brooker M.P. 1980. Potamanthus luteus (Linnaeus) (Ephemeroptera: Potamanthidae) in the River pota Wye. Entomologist's Gazette 31 247-251

Production of two species of Ephemeroptera (Ephemerella ignita ephl,hept Poda and Rhithrogena semicolorata Curtis) in the upper reaches of the R. Wye, Wales. Verh. Int. Ver. Theor. Angew. Limnol. 20:2600-2604.

- 734 Brown D.S. 1961. The food of larvae of Chloeon dipterum L. and Baetis rhodani Pictet (Insecta, baet Ephemeroptera). Journal of Animal Ecology 30:55-75.
- 735 Brown D.S. 1961. The life cycle of Chloeon dipterum L. (Ephemeroptera: Baetidae). Entomologist baet 94:114-20.
- Brulin M., Masselot G., Stochich J.-J., Thomas A., Ferlin P. 1999. Les Éphémères de Normandie baet,caen,ephl,eph (France) 1. Premiers résultats faunistique (Ephemeroptera) 45-60 r,hept,lept
- 745 Brulin M., Thomas A., Masselot G., Coppa G. 1997. Additions à la Faune des Ephémères de france baet (2): Baetis liebenauae Keffermuller, 1974 et son écologie (Ephemeroptera, Baetidae)
- Brulin M., Thomas A., Nel A., Nel J. 1999. Additions à la Faune des Ephémères de France (4) hept Ecdyonurus zelleri (Eaton, 1885) [Ephemeroptera, Heptageniidae] 29-30
- 765 Buffagni A. 1992. Baetis liebenauae Keffermuller, 1974 (Ephemeroptera, Baetidae) in Pianura baet Padana. Bollettino del Museo Regionale di Storia Naturale Torino 10(2): 333-340.
- 888901 Buffagni A. 1994. La comunità degli Efemerotteri (Ephemeroptera) nei fontanili lombardi. Boll. baet,caen,ephl,eph Soc. entomol. ital. 126 (1): 40-50.
- Buffagni A. 1997. Mayfly community composition and the biological quality of streams.- In: baet,caen,pota Landolt P.&M. Sartori (Eds): Ephemeroptera &Plecoptera: Biology-Ecology-Systematics, MTL, Fribourg: 235-246.
- 767 Buffagni A. 1997. Taxonomic and faunistic notes on the Caenis pseudorivulorum-group caen (Ephemeroptera).- In: Landolt P.&M. Sartori (Eds). Ephemeroptera &Plecoptera: Biology-Ecology-Systematics, MTL, Fribourg: 434-438.
- 768 Buffagni A. 1998. Heptagenia longicauda, nuova per l'Italia, nel fiume Po (Ephemeroptera hept Heptageniidae). Bollettino della Società Entomologica Italiana 130:13-16.
- 888935 Buffagni A. 1999. Qualità ecologica, pregio naturalistico e integrità della comunità degli baet,caen,ephl,eph Efemerotteri. Un'indice per la classificazione dei fiumi italiani. Acqua & Aria: 99-107. r,lept,poly,pota
- Buffagni A. 1999. Tassonomia, faunistica ed ecologia di alcune specie italiane del genere Caenis caen (Ephemeroptera, Caenidae). Fragmenta Entomologica 31:1-13.
- Publication A. 2001. The use of benthic invertebrate production for the definition of Ecologically baet, hept Acceptable Flows in mountain rivers. Hydro-ecology: Linking Hydrology and aquatic ecology. IAHS Publ. 266:31-41.
- 888902 Buffagni A. 2002. Efemerotteri. 3. Uso degli Efemerotteri come indicatori ambientali nell'area del baet,caen,ephl,eph Parco del Ticino e considerazioni conclusive. In: Atlante della biodiversità del Parco del Ticino, r,lept,poly,pota Volume 2 Monografie. Parco del Ticino, Corbetta: 74-89.
- Buffagni A., Belfiore C. 1994. Recenti sviluppi delle ricerche tassonomiche e faunistiche sugli baet,caen,lept,pota Efemerotteri italiani (Ephemeroptera). Atti XVII Congr. naz. ital. Entomol., Udine: 175-178.
- Buffagni A., Belfiore C., Erba S., Kemp J.L., Cazzola M. 2003. A review of Ephemeroptera species baet,caen,ephl,eph distribution in Italy: Gains from recent studies and areas for future focus. Pages 279-280 in Gaino r,hept,lept,olig,pot E. (ed). Research update on Ephemeroptera & Plecoptera. Università di Perugia. Perugia, Italy. a,siph
- 756 Buffagni A., Comin E. 2000. Secondary production of benthic communities at the habitat scale as a baet,hept,lept tool to assess ecological integrity in mountain streams. Hydrobiologia 422-423(0):183-195.
- 758 Buffagni A., Crosa G., Harper D.M., Kemp J.L. 2000. Using macroinvertebrate species baet,ephl,hept assemblages to identify river channel habitat units: an application of the functional habitats concept to a large, unpolluted Italian river (River Ticino, northern Italy). Hydrobiologia 435(1 3):213-225.
- 757 Buffagni A., Crosa G., Marchetti R. 1995. Size related shifts in the physical habitat of two mayfly hept species (Ephemeroptera). Freshwater Biology 34: 297-302.
- 888903 Buffagni A., Crosa G., Occhipinti Ambrogi A. 1997. Caratterizzazione ecologica degli habitat baet,ephl funzionali del Fiume Ticino, primi risultati. Acqua&Aria 6/7: 83-88.
- Buffagni A., Desio F. 1994. Le specie del genere Baetis Leach (Ephemeroptera: Baetidae) baet nell'Italia settentrionale: sintesi ecologica. Atti Congresso Nazionale Itali. Entomol. 17: 413-416.

- Code Reference Family
- Buffagni A., Desio F. 1998. Ephemera zettana Kimmins, 1937, in northeastern Italy (Insecta: ephr Ephemeroptera: Ephemeridae). Gortania. Atti del Museo Friulano di Storia Naturale 20(0): 167-171. [in Italian]
- 888904 Buffagni A., Erba S. 2002. Efemerotteri. 1. Specie presenti e distribuzione negli habitat del Parco. baet,caen,ephl,eph In: Atlante della biodiversità del Parco del Ticino, Volume 2 Monografie. Parco del Ticino, r,hept,lept,olig,pol Corbetta: 45-59.
- Buffagni A., Erba S. 2004. Carattere lentico-lotico dei fiumi mediterranei e struttura delle comunità baet, caen, olig, pota macrobentoniche: un esempio di discontinuità biocenotica? In: Classificazione ecologica e carattere lentico-lotico in fiumi mediterranei. Quad. IRSA 122: 129-154.
- Huffagni A., Erba S., Cazzola M., Kemp J. 2004. The AQEM multimetric system for the southern baet, hept Italian Apennines: assessing the impact of water quality and habitat degradation on pool macroinvertebrates in Mediterranean rivers. Hydrobiologia 516(1 3):313-329.
- 7015 Buffagni A., Erba S., Melissano L. 2002. Instabilità idrologica e produzione secondaria di baet,hept invertebrati bentonici nello studio della funzionalità fluviale di un corso d'acqua montano (Torrente Pioverna, Italia settentrionale). Studi Trentini di Scienze Naturali Acta Biologica 78(1): 31-41.
- 888906 Buffagni A., Erba S., Origgi G. 2002. Efemerotteri. 2. Cicli biologici e sviluppo larvale. In: Atlante baet,caen,ephl,eph della biodiversità del Parco del Ticino, Volume 2 Monografie. Parco del Ticino, Corbetta: 60-73. r,hept,lept,olig,pol y,pota,siph
- 762 Buffagni A., Gomba T. 1996. Larval development and ecology of Baetis liebenauae Keffermüller baet (Ephemeroptera, Baetidae) in a north Italian lowland spring. Annales de Limnologie-International Journal of Limnology 32: 221-228.
- Buffagni A., Kemp J.L., Erba S., Belfiore C., Hering D., Moog O. 2001. A Europe-wide system for lept assessing the quality of rivers using macroinvertebrates: the AQEM Project and its importance for southern Europe (with special emphasis on Italy). Ravera O. (Ed.) Scientific and legal aspects of biological monitoring in freshwater. Journal of Limnolnology 60 (Suppl. 1): 39-48.
- 888908 Buffagni A., Pieri A., Bordin F., Galbiati L. 2000. Comunità macrobentoniche del Fiume Po (Parte baet,caen,ephl,eph I): taxa rinvenuti e integrità delle comunità di Efemerotteri. Quad. Ist. Ric. Acque 113: 175-225. r,hept,pota,siph
- Bulánková E., Halgoš J., Krno I., Bitušík P., Illéšová D., Lukáš J., Derka T., Šporka F. 2001. The amel,baet,hept influence of different thermal regime on the structure of coenoses of stenothermal hydrobionts in mountain streams. Acta Zoologica Universitatis Comenianae 44:95-102.
- Burgherr P., Ward J.V. 2001. Longitudinal and seasonal distribution patterns of the benthic fauna baet,hept of an alpine glacial stream (Val Roseg, Swiss Alps). Freshwater Biology 46(12):1705-1721.
- 889021 Camousseight A., Fontaine J. 1990. The biological cycle of Baetis pentaphlebodes, Ujhelyi 1966, in baet an old meander of the Rhone River, France phemeroptera: Baetidae). Pp. 27-34 in Campbell, I.C. (Ed.), Mayflies and Stoneflies: Life story and Biology. Kluwer Academic Publishers, Dordrecht.
- Canivet V., Chambon P., Gibert J. 2001. Toxicity and Bioaccumulation of Arsenic and Chromium hept in Epigean and Hypogean Freshwater Macroinvertebrates. Archives of Environmental Contamination and Toxicology 40(3):345-354.
- 7030 Cao Y., Bark A.W., Williams W.P. 1996. Measuring the response of macroinvertebrate baet,hept communities to water pollution: a comparison of multivariate approaches, biotic and diversity indices. Hydrobiologia 341: 1-19.
- 888909 Carchini G., Bambacigno F., Bazzanti M., Belfiore C., Fochetti R., Nicolai P., Rota E. 1988. baet,hept Composizione e struttura del macrobenthos del Fiume Mignone (Italia Centrale). Boll. Mus. St. Nat. Lunigiana 6/7: 407-414.
- Casas J.J., Zamora-Muñoz C., Archila F., Alba-Tercedor J. 2000. The effect of a headwater dam on baet the use of leaf bags by invertebrate communities. Regulated Rivers: Research & Management 16(6):577-591
- Cayrou J., Céréghino R. 2003. Life history, growth and secondary production of Caenis luctuosa baet, caen and Cloeon simile (Ephemeroptera) in a small pond, S.W. France. Aquatic Insects 25:191-201.
- Cayrou J., Céréghino R. 2005. Life-cycle phenology of some aquatic insects: implications for pond baet conservation. Aquatic Conservation: Marine and Freshwater Ecosystems 15(6):559-571.
- Cazaubon A., Giudicelli J. 1999. Impact of the residual flow on the physical characteristics and baet benthic community (algae, invertebrates) of a regulated Mediterranean river: the Durance, France. Regulated Rivers: Research & Management 15(5):441-461.

Céréghino R., Cugny P., Lavandier P. 2002. Influence of Intermittent Hydropeaking on the baet,hept Longitudinal Zonation Patterns of Benthic Invertebrates in a Mountain Stream. International Review of Hydrobiology 87(1):47-60.

- Céréghino R., Lavandier P. 1996. Influence of hydropeaking on the structure and dynamics of baet,ephl invertebrate pupolations in a mountains stream. Hydrobiologia 519(1):127-133.
- Céréghino R., Lavandier P. 1998. Influence of hypolimnetic hydropeaking on the distribution and baet,ephl,hept,lept population dynamics of Ephemeroptera in a mountain stream. Freshwater Biology 40(2):385-399.
- Chadd R., Extence C.A.A. 2004. The conservation of freshwater macroinvertebrate populations: a amel,arth,baet,cae community-based classification scheme. Aquatic Conservation: Marine and Freshwater Ecosystems n,ephl,hept,lept,po 14(6):597-624.
- Cianciara S. 1980. Stages and physiological periods in the development of Cloeon dipterum (L.) baet (Baetidae). in J. F. Flannagan & K. E. Marshall, eds. Advances in Ephemeroptera Biology. Plenum, New York, p. 265- 276.
- 889047 Clifford H.F. 1982. Life cycles of mayflies (Ephemeroptera), with special reference to voltinism. caen Quaestiones Entomologicae 18(1-4):15-90.
- 992 Coimbra C.N., Graça M.A.S., Cortes R.M. 1996. The effects of a basic effluent on caen,hept,poly macroinvertebrate community structure in a temporary mediterranean river. Environmental Pollution 94(3):301-307.
- 1004 Collins J.M. 1971. The Ephemeroptera of the River Bela, Westmorland. Freshwater Biology 1:405- baet,caen,ephl 409.
- 1040 Cotta Ramusino M. 1981. Primo contributo alla conoscenza degli Efemerotteri dei Fontanili baet,caen,ephl,eph Lombardi. Bollettino della Società Entomologica Italiana 113:77-80. r,hept,lept
- 7022 Cotta Ramusino M., Buffagni A., Crosa G. 1994. Habitat analysis in a subalpine river under baet,ephl,hept different conditions of current flow and depth. Verh. Internat. Verein. Limnol. 25: 1765-1767.
- Cotta Ramusino M., Crosa G., Buffagni A. 1991. Microhabitat preferences of benthic fauna ephl,hept,lept (Ephemeroptera) in plane-springs (fontanili). Verh. Internat. Verein. Limnol. 24: 1626-1628.
- 6076 Crisp D.T., Nelson J.M. 1965. The Ephemeroptera of the Moor House National Nature Reserve, amel,baet,ephl,hep Westmorland. Transactions of the Society for British Entomology. 16 181-187.
- 1061 Crosa G., Buffagni A. 2002. Spatial and temporal niche overlap of two mayfly species hept (Ephemeroptera): the role of substratum roughness and body size. Hydrobiologia 474(1 3):107-115
- 7021 Crosa G., Buffagni A., Cotta Ramusino M. 1992. Una metodologia di analisi per la definizione baet,ephl,lept delle condizioni ottimali e di tolleranza applicata alla macrofauna bentonica. S.It.E. Atti 15: 787-
- 888912 D'Antonio C. 1992. Primi dati sugli Efemerotteri dei fiumi Sele e Calore Lucano, Campania, Italia ephr meridionale (Ephemeroptera). Opusc. zool. flumin. 77: 1-9.
- Degrange C. 1959. L'ovolarviparité de Cloëon dipterum (L.) (Ephém. Baetidae). Bulletin de la baet Société Entomologique de France 64:94-100.
- Degrange C. 1960. Recherches sur la reproduction des Ephéméroptères. Thesis, Université de baet,hept Grenoble. 193 pp.
- Degrange C., Sowa R. 1988. Note complémentaire sur deux espèces de Rhithrogena du groupe hept alpestris (Ephemeroptera, Heptageniidae) des Alpes françaises. Polskie Pismo Entomologiczne 58:711-714
- 889043 Demoulin G. 1955. Mission E. Janssens et R. Tollet en Grece. Bull Ann. Soc. Roy. Ent. Belg. 91(I- ephr II): 38-44.
- 889030 Demoulin G. 1958. Mission E. Janssens en Grece, 1957. 3 note. Ephemeroptera. Bull Ann. Soc. ephr Roy Ent. Belg 94(VII-VIII): 226-228.
- 1283 Desio F. 1992. Distribuzione delle ninfe di Baetis liebenauae Keffermuller, 1974 (insecta, baet Ephemeroptera) nelle acque correnti del Friuli Venezia Giulia e prime segnalazioni per il Veneto orientale. Gortania. Atti del Museo Friulano di Storia Naturale 14: 185-193
- 888914 Desio F. 1995. Potamanthus luteus (L., 1767), nuovo per il Friuli-Venezia Giulia (Ephemeroptera, pota Potamanthidae). Gortania 16: 185-186.
- Desio F. 1997. Sommaria sintesi delle specie segnalate per il Friuli Venezia Giulia. Draft ephr unpublished paper in Italian
- Desio F. 1999. Atlante corologico dei macroinvertebrati dei corsi d'acqua del Friuli Venezia Giulia baet,caen,ephl,eph (Italia nord-orientale): Ephemeroptera. Gortania. Atti del Museo Friulano di Storia Naturale 21: r,hept,lept,pota,sip
- Despax R. 1927. Nouvelles stations françaises de Siphlonurus lacustris Eaton [Ephemeridae]. siph Bulletin de la Société Entomologique de France 32:151-152.
- Despax R. 1949. Addition à la faune des Ephéméroptères de France: Rhithrogena haarupi dan les hept Pyrénées. Bulletin de la Société d'Histoire Naturelle de Toulouse 84:145-146.

- Code Reference Family
- 9002 Di Giovanni M.V.V., Goretti E., Ceccagnoli D., La Porta G.A., Chiappafreddo U. 2003. baet,ephl,lept Ephemeroptera and Plecoptera in the Chiascio River (Central Italy) since a dam's building. Pages 293-298.in Gaino E. (ed). Research update on Ephemeroptera & Plecoptera. Università di Perugia. Perugia, Italy.
- 888915 Di Giovanni M.V.V., Taticchi M.I., Tiberi O. 1979. Il piano di Rascino (Rieti-Lazio): note baet idrobiologiche e biogeografiche. Lavori Soc. It. Biogeogr. 6: 569-582.
- 888938 Dolecec S. 1989. Seasonal dynamics of benthic macroinvertebrate communities in the Lower caen Ardeche River (France). Hydrobiologia 182: 73-89.
- Dolisy D., Dohet A. 2003. The use of Ephemeroptera to assess aquatic biodiversity in the rhithral baet part of the Luxembourgish rivers. In: Research Update on Ephemeroptera & Plecoptera:299-203.
- Dorier A., Degrange C. 1955. Stations nouvelles de Torleya, d'Oligoneuriella et de Siphlonurus ephl,olig,siph (Ephéméroptères) dans le quart Sud-Est de la France. Travaux du Laboratoire d'Hydrobiologie et de Pisciculture de Grenoble 42:47-51.
- Dorn A. 1999. Einige bemerkenswerte Heptageniidae aus Bayern (In-secta: Ephemeroptera) 37: 11- hept 18.
- Dorn A., Wittling T. 1999. Habroleptoides auberti (Insecta: Ephemeroptera), neu für Deutschland. lept Lauterbornia 37: 9-10.
- Elliott J.M. 1967. The life histories and drifting of the Plecoptera and Ephemeroptera in a Dartmoor baet,caen,ephl,hep stream. Journal of Animal Ecology 36:343-362.
- Elliott J.M. 1972. Effect of temperature on the time of hatching in Baetis rhodani (Ephemeroptera: baet Baetidae). Oecologia 9(1):47-51.
- Elliott J.M. 1978. Effect of temperature on the hatching time of eggs of Ephemerella ignita (Poda) ephl (Ephemeroptera: Ephemerellidae). Freshwater Biology 8:51-58.
- Elliott J.M. 2002. A quantitative study of day-night changes in the spatial distribution of insects in a baet stony stream. Journal of Animal Ecology 71(1):112-122.
- Elliott J.M., Humpesch U.H. 1980. Eggs of Ephemeroptera. Rep. Freshw. Biol. Assoc., 48:41-52. baet,ephl,hept,siph
- Elliott J.M., Humpesch U.H. 1983. A key to the adults of the British Ephemeroptera with notes on arth,baet,ephr,hept their ecology. Scientific Publications of the Freshwater Biological Association No.47. Freshwater Biological Association. 101pp.
- Elliott J.M., Humpesch U.H., Macan T.T. 1988. Larvae of the British Ephemeroptera: a key with amel,arth,baet,cae ecological notes. Scientific Publications of the Freshwater Biological Association No.49. n,ephl,ephr,hept,le Freshwater Biological Association. 145pp. pt,siph
- Engblom E., Lingdell P.E., Müller K. 1981. Occurrence and flight movements of mayflies (Ins. baet,caen,hept,lept Ephemeroptera) in the mouth of a coastal stream in the northern Bothnian Sea. Fauna Norrlandica ,siph 5:1-14.
- Engblom E., Lingdell P.E., Nilsson A.N., Savolainen E. 1993. The genus Metretopus amet,baet,siph (Ephemeroptera, Siphlonuridae) in Fennoscandia identification, faunistics and natural history. Entomol. Fennica 4:213-222.
- Erba S., Melissano L., Buffagni A. 2003. Life cycles of Baetidae (Insecta:Ephemeroptera) in a baet North Italian Prealpine stream. Research Update on Ephemeroptera & Plecoptera:177-186.
- Extence C.A., Balbi D.M., Chadd R. 1999. River flow indexing using British benthic amel,arth,baet,cae macroinvertebrates: a framework for setting hydroecological objectives. Regulated Rivers: n,ephl,ephr,hept,le Research & Management 15(6):545-574.
- Fahy E. 1973. Observations on the growth of Ephemeroptera in fluctuating and constant baet, caen temperature conditions. Proceedings of the Royal Irish Academy, B 73:133-49.
- Fahy E. 1975. Quantitative aspects of the distribution of invertebrates in the benthos of a small ephl,hept stream system in western Ireland. Freshwater Biology, 5, 167-182..
- Fall J. 1976. [Materials concerning ephemeride (Ephemeroptera) fauna of the Bystrzyca River of caen,ephl,ephr,lept the Lublin district.] (in Polish, Russian and English summaries) Ann. Univ. Mariae Curie-,siph Sklodowska, Sect. C., Biol., 31:211-220.
- Fenoglio S., Bo T., Battegazzore M., Morisi A. 2005. Growth of Oligoneuriella rhenana (Imhoff, olig 1852) (Ephemeroptera: Oligoneuriidae) in two rivers with contrasting temperatures in NW Italy.Zoological studies 44(2): 271-274
- Fialkowski W., Klonowska-Olejnik M., Smith B.D., Rainbowbet P.S. 2003. Mayfly larvae (Baetis baet rhodani and B. vernus) as biomonitors of trace metal pollution in streams of a catchment draining a zinc and lead mining area of Upper Silesia, Poland. Environmental Pollution 121 (2003) 253-267

Fink T., Andrikovics S. 1997. The presumed role of wing sensory structures in the unique mating pali behavior of the endangered European mayflies Palingenia longicauda (Olivier) and Palingenia fuliginosa (Georgi) (Insecta, Ephemeroptera). Landolt, P.; Sartori, M. Ephemeroptera and Plecoptera: Biology-ecology-systematics. 326-331.

- Fischer J., Haybach A. 1996. Rhithrogena taurasica Bauernfeind 1992 und Ecdyonurus zellerri hept (Eaton 1885) zwei fur deutschland neue Eintagsfliegen aus den Bechtesgadener Alpen (insecta, Ephemeroptera). Lautebornia H. 25: 53-56
- Fjellheim A. 1996. Distribution of benthic invertebrates in relation to stream flow characteristics in baet a Norwegian river. Regulated Rivers-Research & Management 12(2-3):263-271.
- Fjellheim A., Raddum G.G. 1995. Benthic animal response after liming of three South Norwegian amel,baet,caen,hep rivers. Water Air and Soil Pollution 85(2):931-936.
- Fjellheim A., Raddum G.G. 1996. Weir building in a regulated west Norwegian River: Long-term amel,baet,siph dynamics of invertebrates and fish. Regulated Rivers-Research & Management 12(4-5):501-508.
- Fleituch Jr T. 1985. Macroinvertebrate drift in the middle course of the River Dunjec (Southern caen,ephl,lept,olig Poland). Acta Hydrobiol. 27:49-61.
- Fontaine J. 1955. Les formes ailées de Prosopistoma foliaceum Fourcroy (Ephéméroptère). Bulletin pros Mensuel de la Société Linnéenne de Lyon 24:60-65, pl. 1.
- Fontaine J. 1964. Ecdyonurus wautieri sp. n., espèce nouvelle d'Heptageniidae rencontrée dans la hept region Lyonnaise (Ephéméroptère). Bulletin Mensuel de la Société Linnéenne de Lyon 33:84-91.
- Fontaine J., Castella E., Nelva A. 1990. Some aspects of the ecology of Leptophlebia vespertina lept (L.) (Ephemeroptera, Lebtophlediidae). pp. 275-280. in Campbell, I.C. (Ed.), Mayflies and Stoneflies: Life histories and Biology. Kluwer Academic Publishers, Dordrecht.
- Fontaine J., Wautier, J. 1953. Une nouvelle station française de Prosopistoma foliaceum Fourc. pros (Ephéméroptère). Actes du Congrès de Luxembourg, 72e Session de l'Association Française pour l'Avancement des Sciences. pp 455-456.
- 6035 Franz H. 1954. Die nordost-alpen im spiegel ihrer landtierwelt. Universitatsverlag Wagner, caen,ephl,lept,siph Innsbruck.653-664
- 7027 Fruget J.F. 1992. Ecology of the lower Rhone after 200 years of human influence: a review baet Regulated Rivers: Research and Management 7: 233-246.
- Gagneur G., Thomas A. 1988. Contribution to the knowledge of the Ephemeroptera of Algeria: I. ephr Distribution and ecology: 1. (Insecta, Ephemeroptera). Bull. Soc. Hist. Nat. Toulouse 124: 213-224.
- Gaino E. 1987. Aquatic stages in the development of Habrophlebia eldae Jacob & Sartori, 1984. lept Bull. Soc. Ent. Ital. 119:81-90.
- Gaino E., Belfiore C. 1987. On the type specimens of Electrogena zebrata (Hagen, 1864) and E. hept fallax (Hagen, 1864) (Ephemeroptera). Aquatic Insects 9:109-114.
- Gaino E., Belfiore C., Spanò S. 1984. Gli Efemerotteri delle Alpi Liguri. Lavori della Società baet,caen,ephl,eph Italiana di Biogeografia, N.S., 9:1-19.

 r,hept,lept,olig,pol y,pota,siph
- Gaino E., Puig M.A. 1996. Choroterpes (Choroterpes) salamannai, a new species of mayfly from ephr Central and South West Spain. Boll. Soc. ent. ital., 128(2): 99-104.
- Gaino E., Rebora M. 2005. Egg envelopes of Baetis rhodani and Cloeon dipterum (Ephemeroptera, baet Baetidae): a comparative analysis between an oviparous and an ovoviviparous species. Acta Zoologica 86(1):63-69.
- Gaino E., Sowa R. 1985. Nouvelles especes de Leptophlebiidae de Grèce et de Yougoslavie lept (Ephemeroptera). Boll. Soc. Entomol. Ital., Genova 117:8-17.
- Gaino E., Spanò S. 1973. Nuovi reperti di Efemeroidei in Liguria. Bollettino della Società baet,caen,hept Entomologica Italiana 105:111-116.
- Gaino E., Spanò S. 1974. Contributo alla conoscenza degli Efemerotteri della Lucania. Boll. Mus. baet,caen,ephl,hep Ist. Biol. Univ. Genova 42:71-76.
- Gaino E., Spanò S. 1974. Nuovi reperti di Efemeroidei in Piemonte. Bollettino della Società baet,caen,ephl,lept Entomologica Italiana 106:68-71. ,poly,pota
- 1730 Gaino E., Spanò S. 1975. Segnalazione di Thraulus bellus Eaton in Italia (Ephemeroidea). lept Bollettino della Società Entomologica Italiana 107:25-31.
- Gaino E., Spanò S. 1979. Sur la distribution des Ephemeropteres en Italie. Proc. 2nd Int. Conf. baet,pota Ephemeroptera, p. 17-30.

889027 Galdean N. 1981. Considerations sistematique et ecologiques sur les populations de Caenis robusta caen Eaton (Ephemeroptera, Caenidae) des lacs du delta du Danube. Trav. Mus. Hist. Nat. Grigor Antipa 23: 141-148

- Gauthier M. 1952. Stations d'Éphéméroptères dans les Alpes du Dauphiné. Travaux du Laboratoire baet,caen,ephl,eph d'Hydrobiologie et de Pisciculture de l'Université de Grenoble 53/54:9-22. r,hept,lept,olig,pro s,siph
- Ghetti P.F. 1986. I macroinvertebrati nell'analisi di qualità dei corsi d'acqua. Provincia autonoma di baet Trento, Trento, 105 pp.
- 889011 Ghetti P.F., Bonazzi G., Musi G., Ravanetti U. 1979. Cicli vitali di Efemerotteri e Plecotteri di un baet,hept,lept torrente sperimentale. Ateneo Parmense, Acta Nat: 149-157.
- Gillies M.T. 1990. Development of the mayfly Siphlonurus armatus in two southern English rivers siph (Siphlonuridae: Ephemeroptera). Entomologist 109:17-23.
- Glazaczow A. 1994. Mayflies (Ephemeroptera) from the rivers Gwda and Drawa (in the baet,caen,ephl,eph Pomeranian Lake District of North West Poland) and from some waters of their river basins. Pol. r,hept,lept,pota,sip Pismo Entomol., 63: 213-257.
- Glazaczow A. 1997. Observation on the psammophilous mayfly species Procloeon nanum in the baet North East of Poland. In: Landolt P.&M. Sartori (eds.) Ephemeroptera &Plecoptera: Biology-Ecology-Systematics [Proc.VIIIth Int.Conf.Ephem., Lausanne 1995]: 83-87. Fribourg.
- 1855 Gledhill T. 1959. The life history of Ameletus inopinatus (Siphlonuridae, Ephemeroptera). amel Hydrobiologia 14:85-9.
- 1856 Gledhill T. 1960. The Ephemeroptera, Plecoptera and Trichoptera caught by emergence traps in amel two streams during 1958. Hydrobiologia 15(1 2):179-188.
- Godunko R.J., Klonowska-Olejnik M., Soldán T. 2004. Ecdyonurus rizuni sp. nov. hept (Ephemeroptera: Heptageniidae) from the eastern Carpathians. Annales Zoologici (Warszawa 54:519-524.
- González J.M., Basaguren A., Pozo J. 2001. Life history and production of Caenis luctuosa caen (Burmeister) (Ephemeroptera, Caenidae) in two nearby reaches along a small stream. Hydrobiologia 452(1 3):209-215.
- Gonzalez-del-Tanago M. 1984. Contribution to the zoogeography of the Spanish Ephemeroptera. baet Proc. IVth Int. Conf. Ephemeroptera, p. 135-145.
- Goodyear K.L. 1998. Bioaccumulation of heavy metals by freshwater insect larvae. Rev. Environ. baet,ephr,hept Contam. Toxicol. 158: 129-146.
- 1887 Goodyear K.L.L., McNeill S. 1999. Bioaccumulation of heavy metals by aquatic macro-ephl,lept invertebrates of different feeding guilds: a review. The Science of the Total Environment 229(1-2):1-19.
- Grandi M. 1941. Contributi allo studio degli Efemerotteri italiani. II. Reperti su Choroterpes picteti lept (Eaton). Bollettino dell'Istituto di Entomologia della R. Università di Bologna 12:179-205.
- 1922 Grandi M. 1941. Contributi allo studio degli Efemerotteri italiani. III Cloeon dipterum L. Boll. baet Entom. Bologna XIII: 29-71.
- Grandi M. 1942. Contributi allo studio degli Efemerotteri italiani. IV. Caenis macrura Stephens. caen Bollettino dell'Istituto di Entomologia della R. Università di Bologna 13:137-171.
- 1926 Grandi M. 1947. Contributi allo studio degli "Efemeroidei" italiani. IX. Oligoneuriella rhenana olig Imh. Bollettino dell'Istituto di Entomologia della Università di Bologna 16:176-218.
- 1927 Grandi M. 1948. Contributi allo studio degli "Efemeroidei" italiani. X. Baetis atrebatinus Eaton. baet Bollettino dell'Istituto di Entomologia della Università di Bologna 17:62-75.
- 1931 Grandi M. 1949. Contributi allo studio degli "Efemeroidei" italiani. XIII. Baetis parva sp. n. e baet Baetis principii sp. n. Bollettino dell'Istituto di Entomologia della Università di Bologna 17:287-
- 1935 Grandi M. 1953. Contributi allo studio degli Efemeroidei italiani. XVII. Ecdyonuridae. Bollettino hept dell'Istituto di Entomologia della Università di Bologna 19:307-386.
- 889028 Grandi M. 1955. Contributi allo studio degli Efemeroidei italiani. XX Ephemera glaucops Pict. Ed ephr Ephemera paulae sp. n. Boll. Entom. Bologna XXI: 201-212.
- 1938 Grandi M. 1959. Contributi allo studio degli Efemeroidei italiani. XXII. Descrizione di due nuove baet specie di Betidi e di Leptoflebiidi. Bollettino dell'Istituto di Entomologia della Università di Bologna 23:227-238.
- 1940 Grandi M. 1960. Ephemeroidea. Fauna d'Italia 3:1-328.

baet,caen,ephr,hep

1943 Grandi M. 1962. Nota su alcuni Efemeroidei del Lago Trasimeno. Rivista di Idrobiologia 1:179- caen,ephl,lept,olig, 188.

1946 Grandi M. 1966. Contributi allo studio degli Efemerotteri italiani. XXVII. Efemerotteri del Lago di caen Mergozzo (Caenis nocturna Bgts., Cloëon similie Etn.). Bollettino dell'Istituto di Entomologia della Università di Bologna 28:13-27.

- 1947 Grandi M. 1966. Efemerotteri dell'Italia centro-meridionale e della Sicilia (Contricuti allo studio hept,lept,siph degli Efemerotteri italiani XXVIII). Memorie del Museo Civico di Storia Natuale, Verona 14:325-334
- 6026 Grimm R. 1987. Beitrang kenntnis der Eintagsfliegenfauna dei Iller (Ephemeroptera). baet,caen,ephl,eph Nachrichtenbl. Bayer. Entomol.,36(4): 95-102. r,hept,lept,siph
- 6034 Grimm R. 1988. Zur Eintagsfliegenfauna der Donauzuflusse rot und Rauglen (Baden-baet,caen,ephl,eph Wurttemberg). Nachrichtenbl. Bayer. Entomol.,37(3):73-83.
- Gueorguiev V., Beshovski V.L., Russev B.K., Kumanski K. P., Josifov M.V., Sakalian V. P. 1998. amel,amet,baet,cae Insects of Bulgaria. Part I: Odonata, Ephemeroptera, Homoptera (Auchenorrhyncha), Heteroptera, n,ephl,hept,lept,ne Coleoptera. (www.worldwildlife.org/bsp/publications/europe/bulgaria/bulgaria6.html) Bulgaria's oe Biological Diversity: Conservation Status and Needs Assessment, Biodiversity Support Program, Curt Meine, March 1998, Volumes I and II.
- Guerold F., Vein D., Jaquemin G. 1991. Les peuplements d'éphéméroptères de plécoptères et de amel,baet,ephl,lept tricoptères des ruisseaux acides et non acides du massif vosgien: première approche. 300-314.
- Guerold F., Boudot J.-P., Jacquemin G., Vein D., Merlet D., Rouiller J. 2000. Macroinvertebrate amel,baet,caen,hep community loss as a result of headwater stream acidification in the Vosges Mountains (N-E t France). Biodiversity and Conservation 9(6):767-783.
- 1978 Guerold F., Vein D., Jacquemin G., Pihan J.C. 1995. The macroinvertebrate communities of amel,baet,ephl,lept streams draining a small granitic catchment exposed to acidic precipitations (Vosges Mountains, ,siph northeastern France). Hydrobiologia 300-301(1):141-148.
- Gunn R.J.M., Blackburn J.H. 1997. Caenis pseudorivulorum Kieffermuller (Ephem., Caenidae), a caen mayfly new to Britain. Entomologist's Monthly Magazine, 133, 97-100.
- Gunn R.J.M., Wright J.F. 1994. Baetis digitatus Bengtsson (Ephemeroptera) new to Scotland with baet records from England and Wales. Entomologist's Monthly Magazine, 130, 197-199.
- Haas E.M., Kraak M.H.S., Koelmans A.A., Admiraal W. 2005. The impact of sediment reworking poly by opportunistic chironomids on specialised mayflies. Freshwater Biology 50(5):770-780.
- Hämäläinen H., Huttunen P. 1996. Inferring the minimum pH of streams from macroinvertebrates baet,ephl,ephr,hept using weighted averaging regression and calibration. Freshwater Biology 36(3):697-709.
- 2053 Hanquet D., Legalle M., Compin A., Céréghino R. 2005. Assessment of an artificial intelligence ephl,ephr,hept technique in investigating habitat partitioning by coexisting benthic invertebrates in gravel-bed rivers. River Research and Applications 21(6):629-639.
- Harker J.E. 1952. A study of the life cycles and growth rates of four species of mayflies. hept Proceedings of the Royal Entomological Society of London (A) 27:77-85.
- 2066 Harker J.E. 1986. The effect of the environment and copulatory movements on the taxonomy hept characters of three species of Ecdyonurus (Ephemeropters). 635-647
- Harker J. 1989. Naturalists' Handbook 13: Mayflies. Richmond Publishing Company Limited, amel,amet,arth,bae Slough, England. 56 pp.

 t,behn,caen,ephl,e phr,hept,ison,lept, neoe,olig,pali,poly ,pota,pros,siph
- Harker J.E. 1997. The role of parthenogenesis in the biology of two species of mayfly baet (Ephemeroptera). Freshwater Biology 37(2):287-297.
- Harthun M. 1999. Der Einfluß des Bibers (Castor fiber albicus) auf die Fauna (Odonata, Mollusca, lept Trichoptera, Ephemeroptera, Diptera) von Mittelgebirgsbächen in Hessen (Deutschland). The influence of the European beaver (Castor fiber albicus) on the biodiversity (Odonata, Mollusca, Trichoptera, Ephemeroptera, Diptera) of brooks in Hesse (Germany). Limnologica 29:449-464.

- Code Reference Family
- 2118 Haybach A. 1998. Die Eintagsfliegen (Insecta: Ephemeroptera) von Rheinland Pfalz amel, arth, baet, cae Zoogeographie, Faunistik, Ökologie, Taxonomie und Nomenklatur Unter besonderer n,ephl,ephr,hept, is Berücksichtigung der Familie Heptageniidae und unter Einbeziehung der übrigen aus Deutschland on,lept,olig,pali,po bekannten Arten.- Dissertation am Fachbereich Biologie der Johannes Gutenberg-Universität ly,pota,pros,siph Mainz. 417 pp. + 129 pp. App.
- Haybach A. 1999. First records of mayflies from Bas-Rhin (France) [Ephemeroptera]. Ephemera baet,caen,ephl,eph 1:41-43.
- Haybach A. 2002. Beitrag zur Kenntnis der Eintagsfliegenfauna des Echtersbachtales bei Brecht baet,ephl,ephr,hept (Eifel) (Insecta: Ephemeroptera). Dendrocopos 29:49-52.
- 2125 Haybach A. 2003. Zoogeographische Aspekte der Eintagsfliegenbesiedlung Deutschlands (Insecta, baet Ephemeroptera). Verh. Westd. Entom. Tag 2002:187-209.
- 6501 Haybach A. 2006. Life cycle and timing of emergence of Oligoneuriella rhenana (IMHOFF, 1852) olig in the Kyll River (SW-Germany) [Ephemeroptera: Oligoneuriidae]. Ephemera, 2005 (2006), Vol. 7 (1): 1-7
- 2108 Haybach A., Fischer J. 1994. Zur Kenntnis der Eintagsfliegenfauna (Insecta: Ephemeroptera) von amel Rheinland-Pfalz. Lauterbornia 19:173-189.
- 2109 Haybach A., Malzacher P. 2002. Verzeichnis der Eintagsliegen Deutschlands (Insecta: amel,arth,baet,cae Ephemeroptera). Entomologische Zeitschrift 112:34-45.

 Entomologische Zeitschrift 112:34-45.

 pt,olig,pali,poly,po ta,pros,siph
- Haybach A., Malzacher P. 2003. Verzeichnis der Eintagsfliegen (Ephemeroptera) Deutschlands (2. amel,arth,baet,cae aktualisierte Fassung: Stand November 2003). Entomofauna Germanica 6:33-46.

 n,ephl,ephr,hept,is on,lept,olig,pali,po ly,pota,pros,siph
- Haybach A., Müller J., Schleuter M. 2004. Flugzeit und Flugaktivität von Ephoron virgo (Olivier, poly 1791) (Insecta: Ephemeroptera) am Main. Lauterbornia 50:59-65.
- Haybach A., Schleuter M., Tittizer T. 2003. Current distribution of mayflies (Insecta: caen,ephl,hept,iso Ephemeroptera) in German Federal Waterways. Pages 313-315 in Gaino E. (ed). Research update n,lept,olig,poly on Ephemeroptera & Plecoptera. Università di Perugia. Perugia, Italy.
- 2114 Haybach A., Schmidt T. 1997. Ein Beitrag zur Kenntnisder Heptageniidae-Fauna im nördlichen hept Hessen mit einem Nachweis von Rhithrogena germanica Eaton (Ephemeroptera: Heptageniidae). Lauterbornia 31:41-48.
- 2115 Haybach A., Thomas A. 2000. Rediscovery of Ecdyonurus codinai Navás, 1924 in Portugal hept [Insecta: Ephemeroptera: Heptageniidae].- Ephemera (1999) 1:79-84.
- Haybach A., Thomas A. 2002. Ecdyonurus belfiorei nov. sp. from Italy, with a note on E. hept aurantiacus androsianus Braasch, 1983 (Ephemeroptera: Heptageniidae). Ephemera 2:79-91.
- 2143 Hefti D., Tomka I. 1986. Notes on two mayfly species belonging to the Ecdyonurus helveticus- hept group (Ephemeroptera, Heptageniidae). Mitteilungen der Schweizerischen Entomologischen Gesellschaft 59:379-387.
- 2144 Hefti D., Tomka I. 1988. Contribution to the taxonomy of Est-European [sic] species of the hept Ecdyonurus helveticus-group (Ephemeroptera, Heptageniidae). Mitteilungen der Schweizerischen Entomologischen Gesellschaft 61:329-337.
- 2148 Hefti D., Tomka I. 1989. Comparative Morphological and Electrophoretic Studies on Afronurus hept zebratus (Hagen, 1864) comb. n. and Other European Heptageniidae (Ephemeroptera), Including a Key to the European Genera of Heptageniidae. Aquatic Insects, Vol. 11 (1989), No. 2, pp. 115-124
- Hefti D., Tomka I., Zurwerra A. 1986. Ecdyonurus parahelveticus n. sp., a new species belonging hept to the Ecdyonurus helveticus-group (Ephemeroptera, Heptageniidae). Mitteilungen der Schweizerischen Entomologischen Gesellschaft 59:369-377.
- 2141 Hefti D., Tomka I., Zurwerra A. 1987. Notes on mayfly species belonging to the Ecdyonurus hept helveticus-group (Heptageniidae, Ephemeroptera) and the description of E. alpinus sp. nov. Mitteilungen der Schweizerischen Entomologischen Gesellschaft 60:167-179.
- Hefti D., Tomka I., Zurwerra A. 1989. Revision of morphological and biochemical characters of the hept European species of the Ecdyonurus helveticus-group (Ephemeroptera, Heptageniidae). Mitteilungen der Schweizerischen Entomologischen Gesellschaft 62:329-344.
- Heino J. 2005. Positive relationship between regional distribution and local abundance in stream baet insects: a consequence of niche breadth or niche position? Ecography 28(3):345-354.

2150 Heino J., Muotka T., Paavola R., Hamalainen H., Koskenniemi E. 2002. Correspondence between amel,ephl regional delineations and spatial patterns in macroinvertebrate assemblages of boreal headwater streams. Journal of the North American Benthological Society 21(3):397-413.

- 5472 Heymons R. 1896. Uber die Lebensweise und Entwicklung von Ephemera vulgata L. Sitz. ephr Gesellsch. Nat. Freude. Berlin: 82-96
- 2184 Hieber M., Robinson C.T., Uehlinger U., Ward J.V. 2005. A comparison of benthic baet macroinvertebrate assemblages among different types of alpine streams. Freshwater Biology 50(12):2087-2100.
- Hoffsten P.O., Malmqvist B. 2000. The macroinvertebrate fauna and hydrogeology of springs in arth,baet,lept,siph central Sweden. Hydrobiologia 436(1-3):91-104.
- Homes V., Hering D., Reich P. 1999. The distribution and macrofauna of ponds in stretches of an ephl,lept,siph alpine floodplain differently impacted by hydrological engineering. Regulated Rivers: Research & Management 15(5):405-417.
- 2230 Höxter W. 2003. Erstnachweis von Rhithrogena beskidensis Alba-Tercedor & Sowa, 1987 baet,ephl,hept (Ephemeroptera, Heptageniidae) für Niedersachen. Braunschweiger Naturkundliche Schriften 6:799-802.
- 7001 Huet M. 1949. La pollution des eaux. L'analyse biologique des eaux polluées. Bull. Du C.B.E.D.E. baet 5, 259 e 6, 346.
- 2303 Humpesch U.H. 1978. Preliminary notes on the effect of temperature and light-condition on the hept time of hatching in some Heptageniidae (Ephemeroptera). Verh. Int. Ver. Theor. Angew. Limnol. 20:2605-2611.
- Humpesch U.H. 1979. Life cycles and growth rates of Baetis spp. (Ephemeroptera: Baetidae) in the baet,ephr laboratory and in two stony streams in Austria. Freshwater Biology 9:467-479.
- Humpesch U.H. 1980. Effect of temperature on the hatching time of eggs of five Ecdyonurus spp. hept (Ephemeroptera) from Austrian streams and English streams, rivers and lakes. J. Anim. Ecol. 49:317-333.
- 2309 Humpesch U.H. 1981. Effect of temperature on larval growth of Ecdyonurus dispar hept (Ephemeroptera:Heptageniidae) from two English lakes. Freshwater Biology 11:441-457.
- 889025 Humpesch U.H. 1981. Effect of Temperature on the Hatching Time of Parthenogenetic Eggs of baet,hept Five Ecdyonurus Spp. and Two Rhithrogena Spp. (Ephemeroptera) from Austrian Streams and English Rivers and Lakes. The Journal of Animal Ecology, Vol. 49, No. 3. (Oct., 1980), pp. 927-937
- Humpesch U.H. 1982. Effect of fluctuating temperature on the duration of embryonic development hept in two Ecdyonurus spp. and Rhithrogena cf. hybrida (Ephemeroptera) from Austrian streams. Oecologia 55(3):285-288.
- Humpesch U.H. 1984. Egg development of non-diapausing exopterygote aquatic insects occuring ephl in Europe. Sitz.ber. Osterr. Akad. Wiss., Math.- nat.wiss. Kl., I(193):329-341.
- 2306 Humpesch U.H., Elliott J.M. 1980. Effect of temperature on the hatching time of eggs of three hept Rhithrogena spp. (Ephemeroptera) from Austrian streams and English stream and river. J. Anim. Ecol. 49:643-661.
- Hunt PC., Jones J.W. 1972. The littoral fauna of Llyn Celyn, North Wales. Journal of Fish Biology caen,lept,siph 4(2):321-331.
- 7000 Hynes H.B.N. 1959. the use of Invertebrates as indicators of river pollution. Proc. Linn. Soc. baet London 170. 165.
- 888974 Ibañez C., Escosa R., Muñoz I., Prat N. 1991. Life cycle and production of Ephoron virgo poly (Ephemeroptera, Polymitarcidae) in the lower river Ebro (NE Spain). Overwiew and strategies of Ephemeroptera and Plecoptera. Sandhill Crane Press Inc.,483-492.New York.
- 889035 Ikonomov P. 1960. Die Verbreitung der Ephemeroptera in Mazedonien. Acta 3(63): 41-73.

amel,caen,ephl,iso n,lept,neoe,olig,pal i,poly,pota,pros,sip

- 2334 'Ikonomov P. 1961. Eintagsfliegen (Ephemeroptera) Mazedoniens fam. Ephemerellidae. Acta Mus. ephl Mac. Sc. Nat.,8 (3): 53-74.
- 889032 Ikonomov P. 1961. Ednodnebkite (Ephemeroptera) na Jugoslavija Caenis strugaensis sp. n. caen (Caenidae). Fragmenta Balcanica 2(86): 11-18
- 888952 Ikonomov P. 1961. Eintagsfliegen (Ephemeroptera) Jugoslaviens, Euthraulus balcanicus n. sp. lept (Leptophlebiide). Fragmenta Balcanica, N.1, p 1-6.
- 2334 Ikonomov P. 1961. Eintagsfliegen (Ephemeroptera) Mazedoniens fam. Ephemerellidae. Acta Mus. ephl Mac. Sc. Nat.,8 (3): 53-74
- 2335 Illies J., Masteller E.C. 1977. A possible explanation of emergence patterns of Baetis vernus Curtis baet (Ins: Ephemeroptera) on the Breitenbach-Schlitz studies of productivity, Nr. 22-. Internationale Revue der gesamten Hydrobiologie 62:315-321.

Jacob U. 1993. Zur Systematik und Verbreitung der europäischen Ephemerellidae ephl (Ephemeroptera). Verh. Westd. Entomologen Tag 1992:101-110. Dusseldorf.

- 2365 Jacob U., Braasch D. 1986. Ecdyonurus puma sp. n. aus Montenegro (Jugoslawien) hept (Ephemeroptera, Heptageniidae). Reichenbachia 23:177-180.
- Jacob U., Dorn A., Haybach A. 1995. Systematik und Verbreitung der Gattung Heptagenia und hept nahestehender Taxa in Europa. Verh. Westd. Entom. Tag 1995:93-105.
- 2428 Jacquemin G. 2001. Les Ephéméroptères en Lorraine. Etat de l'inventaire. Utilisation comme bio- baet indicateurs. Préservation (Insecta, Ephemeroptera). Bulletin de l'Académie Lorraine des Sciences 40:11-22.
- Jacquemin G., Coppa G. 1996. Inventaire des Ephémères de lorraine et de Champagne-Ardenne baet,hept (N-E France): premiers résultats (Ephemeroptera). 69, 141-155
- 2430 Jáimez-Cuéllar P., Alba-Tercedor J. 2001. Catálogo de los efemerópteros de Aragón baet (Ephemeroptera. Cat. Entomologauna aragon. 25:3-9.
- 2432 Jáimez-Cuéllar P., Tierno de Figueroa J.M., Alba-Tercedor J. 1999. Nuevas citas de efemerópteros ephr,hept (Insecta: Ephemeroptera) de la Serranía de Ronda (Málaga, España). Zool. Baetica 10:223-226.
- Janeva I. 1979. Einige Vertreter der Gattung Baetis (Ephemeroptera) als limnosaprobe baet Bioindikatoren. Proc. 2nd Int. Conf. Ephemeroptra, p. 139-143, 1 table.
- Jann B., Cotti G., Barbieri A. 1993. Macroinvertebrati dei principali corsi d'acqua ticinesi. Mem. baet,ephl,ephr,hept Soc. Tic. Sci. Nat. Pp. 151-164.
- 5480 Jazdzewska T. 1971. Jetki (Ephemeroptera) rzeki Grabi. Polskie Pismo Entomologiczne 41: 243- ephr
- Jazdzewska T. 1973. Notes on the biology and ecology of the mayfly Ametropus eatoni Brodskij amet (Ephemeroptera). Polskie Pismo Entomologiczne 43:469-477.
- Jazdzewska T. 1997. Mayflies (Ephemeroptera) of the sandy bottom of the River. Grabia (Central baet,caen,ephr Poland).In: Landolt P.&M. Sartori (eds.) Ephemeroptera &Plecoptera: Biology-Ecology-Systematics [Proc.VIIIth Int.Conf.Ephem., Lausanne 1995]: 152-156. Fribourg.
- Jażdżewska T., Górczyński A. 1991. Les Ephéméropteres des rivieres qui franchissent la zone baet,caen,ephl,eph marginale du Roztocze Central. [In:] Alba-Tercedor J.& Sanchez-Ortega A. (eds.). Overview and r,hept,lept,siph strategies of Ephemeroptera and Plecoptera, . The Sandhill Crane Press, Inc. Gainesville, Florida, USA: 263-270.
- Jenkins R.A., Wade KR., Pugh E. 1984. Macroinvertebrate-habitat relationship in the River Teifi baet,hept catchment and the significance to conservation. Freshwater Biology 14: 23-42.
- Jezberová M. 2003. Distribution and density of Ephemeroptera and Plecoptera of the Radíkovský amel,baet,lept,siph brook (Czech Republic) in relation to selected environmental variables. Pages 327-331 in Gaino E.
 (ed). Research update on Ephemeroptera & Plecoptera. Università di Perugia. Perugia, Italy.
- Johansson A., Nilsson A. 1994. Insects of a small aestival stream in northern Sweden baet,hept,lept,siph Hydrobiologia 294(1):17-22.
- Johnson R.K., Goedkoop W. 2002. Littoral macroinvertebrate communities: spatial scale and caen,hept ecological relationships. Freshwater Biology 47(10):1840-1854
- Johnson R.K., Goedkoop W., Sandin L. 2004. Spatial scale and ecological relationships between baet the macroinvertebrate communities of stony habitats of streams and lakes. Freshwater Biology 49(9):1179-1194.
- 889022 Jop K. 1981. Ecology of the forest stream Lane Błoto in the Niepołomice Forest. 2. Community baet,caen,ephl,eph structure, life cycles, and production of Ephemeroptera. Acta Hydrobiol. 23: 125-141.
- 888981 Kamler E. 1965. Thermal conditions in mountain waters and their influence on the distribution of amel,baet,caen,eph Plecoptera and Ephemeroptera larvae. Ekologia Polska Seria A, XIII, 20, p 379-413. l,ephr,hept,lept,oli g,siph
- Kawecka B. 1977. The food of dominant species of bottom fauna larvae in the River Saba amel,baet,caen,eph (Southern Poland). 191-213.
- 2519 Kazanci N. 1985. Rhithrogena anatolica sp.n. (Ephemeroptera: Heptageniidae) from Turkey. Mitt. hept Scweiz. Entom. Ges. 58:311-313.
- 5494 Kazanci N. 1990. Drunella andaluciaca sp.n. (Ephemeroptera, Ephemerellidae) from Spain. ephr
- 2514 Kazanci N., Braasch D. 1988. On some Heptageniidae new for Anatolia (Turkey). 131-134 hept

2539 Keffermüller M. 1974. A new species of the Genus Baetis Leach (Ephemeroptera) from Western baet Poland. Bulletin de l'Academie Polonaise des Sciences XXII(3): 183-185.

- 2533 Keffermüller M. 1975. Les espèces du groupe Centroptilum pulchrum Eaton (Ephemeroptera, baet Baetidae) en Pologne. 30(45): 479-486.
- Keffermüller M., Whytton da Terra LS. 1978. The second european species of the subgenus ephr Eurylophella Tiensuu (Ephemeroptera, Ephemerellidae, Ephemerella). Bulletin de L'Academie Polonaise des Sciences. 26(1): 29-33.
- 2566 Kiel E., Matzke D. 2002. Vergleichende Untersuchungen zur Entwicklung von Leptophlebia lept vespertina (L., 1767) (Ephemeroptera, Leptoplebiidae) in Hochmoorregenerationsflächen. Telma 32:127-139.
- 6040 Kimmins D.E. 1930. A list of corsican Ephemeroptera and Neuroptera. Eos, 6: 185-190. ephl,lept
- Kimmins D.E. 1933. Ephemerella notata Etn. And Heptagenia flavipennis Duf. (Ephemeroptera) in ephl west Surrey. The Entomologist 66:165-166.
- 2582 Kimmins D.E. 1943. A species of Caenis (Ephemeroptera) new to Britain, with notes on the caen nymphs of some other species. Entomologist 76:123-125.
- Kimmins D.E. 1954. A revised key to the adults of the British species of Ephemeroptera. Freshw. hept Biol. Ass. Sci. Pub. 15.
- 2586 Kimmins D.E. 1957. A new lentic species of the genus Baetis (Ephemeroptera) from North Finland. baet Notulae Entomologicae 37: 27-29, Helsingfors.
- 2575 Kimmins D.E. 1957. The Ecdyonurus helveticus (Eaton) complex (Ephemeroptera). Ann. hept Naturhist, Mus. Wien, Bd. 62, 1958: 15-22
- Kimmins D.E., Frost W.E. 1943. Observations on the nymph and adult of Ephemerella notata Eaton ephl (Ephemeroptera). Proceedings of the Royal Entomological Society of London (A) 18 43-49.
- 2597 Klapalek F. 1907. Prispevek k znalosti zvireny chrostiku a jepic Vych. Karpat. Cas. Ces. Spol. Ent. hept 4: 24-35.
- 2604 Klonowska-Olejnik M. 1987. Rhtithrogena wolosatkae n. sp., a new species of the hybrida group hept from Southern Poland (Ephemeroptera, Heptageniidae). Polskie Pismo Entomologiczne 57: 251-256.
- 2605 Klonowska-Olejnik M. 1989. Supplementary description of Rhithrogena wolosatkae Klonowska hept (Ephemeroptera, Heptageniidae, hybrida group) from the type locality in the Bieszczady Mountains, Southern Poland. Annales de Limnologie 25(3): 231-235.
- Klonowska-Olejnik M. 1997. Ephemeroptera of the river Dujanec near Czorsztyn dam (Southern baet,caen,ephl,hep Poland). S. 282-287. In: Ephemeroptera & Plecoptera: Biology-Ecology-Systematics, Landolt, P. & t,lept,olig,pota,sip M. Sartori (Hrsg.) 569 S., Mauron+Tinguely & Lachat SA, Moncor, Fribourg/Switzerland.
- 2608 Klonowska-Olejnik M. 1997. The use of egg morphology in the taxonomy of some species of the hept genus Rhithrogena (Ephemeroptera, Heptageniidae). S. 372-381. In: Ephemeroptera & Plecoptera: Biology-Ecology-Systematics, Landolt, P. & M. Sartori (Hrsg.) 569 S., Mauron+Tinguely & Lachat SA, Moncor, Fribourg/Switzerland.
- 2609 Klonowska-Olejnik M. 2004. Redescription of Electrogena quadrilineata (Landa, 1969) from type hept material (Ephemeroptera, Heptageniidae). Aquatic Insects 26:85-95.
- 2606 Klonowska-Olejnik M., Godunko R.J. 2003. Contribution to the taxonomy of the Central European hept species of Rhithrogena loyolaea speciesgroup (Ephemeroptera: Heptageniidae). Pages 339-348 in Gaino E. (ed). Research update on Ephemeroptera & Plecoptera. Università di Perugia. Perugia, Italy
- Kluge N.Ju. 1997. Ephemeroptera. Pages 175-220. In: Narchuk, E. P, Tumanov, D. V, baet Tsalolikhin, S. Ya. (eds.). Key to freshwater invertebrates of Russia and adjacent lands. Vol. 3: Arachnoidea, lower insects. Zool. Inst. Rossiikoi Akad. Nauk, Sankt-Petersburg. 439 pp.
- 2664 Kluge N.Ju. 1997. Order mayflies Ephemeroptera. In: Key to frashwater invertebrates of Russia baet,hept and adjacent lands. Ed. S.J. Tsalolikhin. Vol.3. Arachnids and lower insects. Zool. Inst. Russ. Acad. Sci., S-Petersburg: 176-220 (in Russian).
- 2677 Knispel S., Castella E. 2003. Disruption of a longitudinal pattern in environmental factors and baet,hept benthic fauna by a glacial tributary. Freshwater Biology 48(4):604-618.
- 2729 Kovács T. 2001. Kérész lárvák a Mátrából (Ephemeroptera). Folia Historico Naturalia Musei amel,baet,caen,eph Matraensis 25:163-169.
- 2730 Kovacs T. 2001. Somogy megye kérészeinek katalógusa (Ephemeroptera). Natura Somogyiensis amel,amet,caen,le 1:87-92. pt,pali,siph

Kovács T., Ambrus A. 2001. Ephemeroptera, Odonata and Plecoptera larvae from the rivers of baet,caen,hept Rába and Lapines (Hungary). Folia Historico Naturalia Musei Matraensis 25:145-162.

- Kovács T., Ambrus A., Bánkuti, K. 1999. Data to the Hungarian mayfly (Ephemeroptera) fauna baet,hept arising from collectings of larvae. Folia Historico Naturalia Musei Matraensis 23:157-170.
- Kovács T., Ambrus A., Juhász P. 2001. New Hungarian mayfly (Ephemeroptera) species arising caen from collectings of larvae II. Miscnea zool. hung. 13(2000):81-83.
- 2722 Kovács T., Ambrus A., Juhász P. 2002. Ephemeroptera and Odonata larvae from River Iploy caen (Hungary). Folia Historico Naturalia Musei Matraensis 26:163-167.
- Kovács T., Ambrus A., Juhász P. 2002. Ephemeroptera, Odonata and Plecoptera larvae from the baet,hept River Tisza in the year of cyanid pollution (2000). Folia Historico-Naturalia Musei Matraensis 26:169-178.
- Kovács T., Ambrus A., Juhász P. 2003. Data to the Hungarian mayfly (Ephemeroptera) fauna baet,hept arising from collectings of larvae II. Folia Historico Naturalia Musei Matraensis 27:59-72.
- Kovács T., Juhász P., Turcsányi I. 2001. Ephemeroptera, Odonata and Plecoptera larvae from the baet River Tisza (1997-1999). Folia Historico Naturalia Musei Matraensis 25:135-143.
- Kowalik R.A., Ormerod S.J. 2006. Intensive sampling and transplantation experiments reveal baet,hept continued effects of episodic acidification on sensitive stream invertebrates. Freshwater Biology 51(1):180-191.
- 7011 Kownacki A. 1981. Taxocenes of Ephemeroptera in unpolluted and polluted Streams of the Tatra baet, hept Mountains. In: J. F. Flannagan & K. E. Marshall, eds. Advances in Ephemeroptera Biology. Plenum, New York, p. 405-418.
- Kownacki A. 1985. Stream ecosystems in mountain grassland (West Carpathians). Acta Hydrobiol. baet,caen,ephl,lept 24:375-390.
- Kownacki A., Kownacka M. 1985. The distribution of the bottom fauna in several streams of the baet,ephl,hept middle Balkan in the summer period. Acta Hydrobiol. 15:295-310.
- Kukula K. 1997. The life cycles of three species of Ephemeroptera in two streams in Poland. baet,hept Hydrobiologia 353(1):193-198.
- Küry D. 1997. Changes in Ephemeroptera and Plecoptera populations of a Swiss Jura stream ephl,lept (Röserenbach) between 1935 and 1990. In: Landolt P.& M. Sartori (Eds.), Ephemeroptera & Plecoptera Biology-Ecology-Systematics, Lausanne, 1995, pp. 296-301.
- Labat D., Delzons O., Thomas A., Brosse S. Marie V. 2004. Evolution sur 40 ans du peuplement en baet,caen,ephl,hep Ephémères d'une petite rivière des Prépyrénées, le Volp: résultats préliminaires [Ephemeroptera]. t,lept,olig,poly,pot Ephemera 4(1): 15-34.
- 2777 Ladle M., Radke R. 1990. Burrowing and feeding behaviour of the larva of Ephemera danica ephr Müller (Ephemeroptera: Ephemeridae). Entomologist's Gazette 41:113-118.
- 2795 Lancaster J. 1999. Small-scale movements of lotic macroinvertebrates with variations in flow. ephl Freshwater Biol. 41(3): 605-619.
- 2806 Landa V. 1957. A contribution to the distribution, systematics, development and ecology of lept Habrophlebia fusca (Curt.) Habrophlebia lauta McLachl. (Ephem.). Acta Societatis entomologicae Czechosloveniae 54:148-156.
- 2807 Landa V. 1968. Development cycles of Central European Ephemeroptera and their interactions. baet,caen,ephr Acta entomologica bohemoslovaca 65:276-284.
- 2808 Landa V. 1969. Jepice-Ephemeroptera. Fauna CSSR 18:1-352. baet
- 2809 Landa V. 1970. Ecdyonurus submontanus, Heptagenia quadrilineata, Rhithrogena hercynia new hept species of mayflies (Ephemeroptera) of the family Heptageniidae from Czechoslovakia. Acta entomologica bohemoslovaca 67:13-20.
- 2799 Landa V., Soldán T. 1982. Ecdyonurus samalorum sp. n. from Czechoslovakia (Ephemeroptera, hept Heptageniidae). Acta ent. bohemoslov., 79: 31-36.
- Landa V., Zahrádková S., Soldán T., Helesic J. 1997. The Morava and Elbe river basins, Czech amel,arth,caen,eph Republic: a comparison of long-term changes in mayfly (Ephemeroptera) biodiversity. In: l,ison,lept,olig,pali Ephemeroptera and Plecoptera: Biology ecology systematics. (Ed. Landolt, P., Sartori, M.). ,pros,siph Fribourg, Maron+Tinguely and Lachat SA. pp. 219-226.
- 2813 Landolt P., Dethier M., Malzacher P., Sartori M. 1991. A new Electrogena species from hept Switzerland (Ephemeroptera, Heptageniidae). Bull. Soc. Vaud. Sc. Nat. 80(4):459-470.

- 2815 Landolt P., Sartori M., Studemann D. 1997. Palingenia longicauda (Ephemeroptera, Palingeniidae): pali From mating to the larvulae stage. In: P. Landolt & M. Sartori (Eds): Ephemeroptera and Plecoptera: Biology, Ecology and Systematics, pp. 15-20, MTL, Fribourg.
- 2821 Langford T.E. 1971. The distribution, abundance and life-histories of stoneflies (Plecoptera) and baet, caen, hept mayflies (Ephemeroptera) in a British River, warmed by cooling-water from a power station. Hydrobiologia 38(2):339-377.
- 2823 Langford T.E. 1975. The emergence of insects from a British River, warmed by Power Station baet,caen,ephl,hep Cooling-Water. Part II The emergence patterns of some species of ephemeropta, trichoptera and t megaloptera in relation to water temperature and river flow, upstream and downstream of the cooling-water outfalls. Hydrobiologia 47(1):91-133.
- 6122 Langford T.E., Bray E.S. 1969. The distribution of Plecoptera and Ephemeroptera in a Lowland baet, caen Region of Britain (Lincolnshire). Hydrobiologia 34(2):243-271.
- 2822 Langford T.E., Daffern J.R. 1975. The emergence of insects from a British River warmed by power caen,ephl,lept station cooling-water Part I The use and performance of insect emergence traps in a large, spateriver and the effects of various factors on total catches, upstream and downstream of the cooling-water outfalls. Hydrobiologia 46 (1): 71-114.
- Langheinrich U., Böhme D., Wegener U., Lüderitz V. 2002. Streams in the Harz National Parks amel,ephl,lept,siph (Germany) a hydrochemical and hydrobiological evaluation. Limnologica 32(4):309-321.
- 889049 Larsen J., Birks H.J.B., Raddum G.G., Fjellheim A. 1996. Quantitative relationships of amel,baet,lept,siph invertebrates to pH in Norwegian river systems. Hydrobiologia 328: 57-74.
- 2837 Lavandier P. 1981. Cycle biologique, croissance et production de Rhithrogena loyolaea Navas hept (Ephemeroptera) dans un torrrent pyreneen de haute montagne. Annales de Limnologie 17:163-179
- 2839 Lavandier P. 1988. Semivoltinisme dans des populations de haute montagne de Baetis alpinus baet Pictet (Ephemeroptera). Bull. Soc. Hist. Nat. Toulouse 124:61-64.
- Lavandier P. 1991. Movements of Rhithrogena loyolaea Navas and Baetis alpinus Pictet in a high hept mountain stream in the Pyrenees. In: Overview and Strategies of Ephemeroptera and Plecoptera. 1991. The Sandhill Crane Press. Florida. [I.S.B.N.: 1-877743-08-0]: 367-376.
- Lepori F., Ormerod S.J. 2005. Effects of spring acid episodes on macroinvertebrates revealed by baet population data and in situ toxicity tests. Freshwater Biology 50(9):1568-1577.
- Leps J., Soldán T., Landa V. 1989. Multivariate analysis of compositional changes in communities amel,arth,baet,cae of Ephemeroptera (Insecta) in the Labe basin Czechoslovakia a comparison of methods. Coenoses n,ephl,ephr,hept,le 4:29-37.
- Leps J., Soldán T., Landa V. 1990. Prediction of changes in the Ephemeroptera communities a baet,caen,ephl,hep transition matrix approach. In: Campbell I.C. [eds.]: Mayflies and Stoneflies. Kluwer, Dordrecht. t,lept,pota pp. 281-287.
- Lestage J.-A. 1928. Les Ephemeropteres de la Belgique. Bull. Am. Soc. Ent. Belg., 68:251-264. ephr
- Lestage J.-A. 1928. Notes sur la geonemie, l'habitat et le regime de Prosopistoma foliaceum fourc pros (Epheme.). Bull. Am. Soc. Ent. Belg., 68:79-85
- 2920 Lewandowski K. 1989. Mayflies (Ephemeroptera) of running water units in the Olsztyn province. amel,baet,caen,eph Pol. Pismo Ent. 59:387-392.
- 7012 Lien L., Raddum G.G., Fjellheim A. 1992. Critical loads of acidity to freshwater fish and baet invertebrates. NIVA report N. 0-89185, 36 pp.
- 2942 Lingdell P.E., Engblom E. 1995. Liming restores the benthic invertebrate community to 'pristine' baet, caen state. Water, Air, & Soil Pollution 85(2):955-960.
- 5458 Lingdell P.E., Müller K. 1979. Dagslandor i brackvatten. [Mayflies (Ephemeroptera) in brackish caen water.] (in Swedish, English summary) Entomol. Tidskr., 100:13.
- 6126 Lowe H.J.B. 1967. Observations on Ephemeroptera in the east Midlands. Entomologist's Monthly ephr,hept Magazine 103 40-44p
- 2969 Lubini V., Knispel S., Landolt P., Sartori M. 1996. Geographical distribution of mayflies and baet,hept,lept stoneflies (Insecta, Ephemeroptera, Plecoptera) in Switzerland - preliminary results. Mitt. schweiz. ent. Ges. 69(1): 127-133.
- 2970 Lubini V., Sartori M. 1994. Current status, distribution, life cycle and ecology of Rhithrogena hept germanica Eaton, 1885 in Switzerland: Preliminary results (Ephemeroptera, Heptageniidae). Aquatic Sciences Research Across Boundaries 56(4):388-397.

Macan T.T. 1949. Descriptions of the nymphs of the British species of Cloeon, Procloeon and baet Centroptilum (Ephem., Baetidae). Entomologist's Monthly Magazine 85 222-228.

- Macan T.T. 1949. The taxonomy of the nymphs of the British species of the genus Ecdyonurus hept (Ephem.). Entomologist's Monthly Magazine 85 64-70.
- Macan T.T. 1951. The taxonomy of the British species of Siphlonuridae (Ephem.). Hydrobiologia 3 siph 84-92.
- Macan T.T. 1952. Taxonomy of the nymphs of the british species of leptophlebiidae (Ephem.). lept 363-377
- Macan T.T. 1957. A description of the nymph of Baetis Buceratus with notes on and a key to the baet other species in the genus. Transactions of the society for british entomology, Vol. 12, part 6, 157-166
- Macan T.T. 1957. The Ephemeroptera of a stony stream. Journal of Animal Ecology 26:317-342. amel,baet,ephl,hep t,lept,siph
- Macan T.T. 1957. The life histories and migrations of the Ephemeroptera in a stony stream. baet,ephl,hept,lept Transactions of the Society for British Entomology 12:129-156.
- Macan T.T. 1960. The effect of temperature on Rhithrogena semicolorata (Ephem.). Int. Revue ges. hept Hydrobiol. Hydrogr. 45:197-201.
- Macan T.T. 1960. The occurrence of Heptagenia lateralis (Ephem.) in streams in the English Lake hept District. Wetter und Leben 12 231-234.
- 6135 Macan T.T. 1962. Ephemeroptera in Britain. Verhandlungen XI. Internationale Kongress hept Entomologische Wien 3 258-262. 1960.
- Macan T.T. 1978. Life histories of four species of Ephemeroptera. Verh. Int. Ver. Theor. Angew baet Limnol. 20:2594-2498.
- Macan T.T. 1979. A key to the nymphs of the British. species of Ephemeroptera with notes on their ephr, hept ecology. Freshwater. Biological. Association 20
- Macan T.T. 1981. Life histories of some species of Ecdyonurus (Ephemeroptera) in The River hept Lune, North-Western England. Aquatic Insects, 3:225-232, 1 fig., 2 tables.
- Macan T.T., Macan Z. 1940. Preliminary note on the Ephemeroptera and Plecoptera of the lept Hampshire Avon and its tributaries. Journal of the Society for British Entomology 2 53-61.
- Mackey A.P. 1978. Emergence patterns of three species of Caenis Stephens (Ephemeroptera: caen Caenidae). Hydrobiologia 58 277-280.
- Maiolini B., Lencioni V. 2001. Longitudinal distribution of macroinvertebrate assemblages in a baet glacially influenced stream system in the Italian Alps. Freshwater Biology 46(12):1625-1639.
- Maitland P.S. 1965. The distribution, life cycle, and predators of Ephemerella ignita (Poda) in the ephl River Endrick, Scotland. Oikos 16:48-57.
- Maitland P.S. 1980. The habitats of British Ephemeroptera. in J. F. Flannagan & K. E. Marshall, arth,baet,caen,ephr eds. Advances in Ephemeroptera Biology. Plenum, New York, p. 123-139, 4 figs., 4 tables. ,hept
- Malmqvist B. 2000. How does winglength relate to distribution patterns of stoneflies (Plecoptera) amel,caen,ephl,lep and mayflies (Ephemeroptera). Biological Conservation 93: 271-276.
- Malmqvist B., Hoffsten P.O. 1999. Influence of drainage from old mine deposits on benthic amel,ephl macroinvertebrate communities in central Swedish streams. Water Research 33(10):2415-2423.
- 3085 Malmqvist B., Nilsson A.N., Baez M., Armitage P.D., Blackburn J. 1993. Stream baet Macroinvertebrate Communities In the Island Of Tenerife. Archiv Fur Hydrobiologie 128(2):209-235.
- 889036 Malzacher P. 1976. Nachtrag zur Eintagesfliefauna des Bodenseegebietes. Beschreibung einer ephr neunen Art der Gattung Caenis (Insecta, Ephemeroptera). Beitr. Naturk. Forsch. SudwDtl. 35: 129-136
- 3100 Malzacher P. 1986. Diagnostik, Verbreitung und Biologie der europäischen Caenis-Artenn caen (Ephemeroptera:Caenidae). Sttutgarter Beiträge zur Naturkunde Serie A (Biologie) 387:1-41.
- Malzacher P. 1996. Genitalmorphologische Merkmale zur Unterscheidung der in Baden-hept Württemberg vorkommenden Electrogena-Arten (Heptageniidae, Ephemeroptera) [Genitalmorphological features to distinguish the species of the genus Electrogena from Baden-Württemberg, Germany (Heptageniidae, Ephemeroptera)]. Lauterbornia 25:81-93.
- Malzacher P., Jacob U., Haybach A., Reusch H. 1998. Rote Liste der Eintagsfliegen amel,arth,baet,cae (Ephemeroptera) .- In: Bundesamt für Naturschutz (Hrsg.): Rote Liste gefährdeter Tiere in n,ephl,ephr,hept,is Deutschland. Bonn-Bad Godesberg. Schriftenreihe für Landschaftspflege und Naturschutz 55: 264- on,lept,olig,pali,po 267

Manach A., Thomas A., Brulin M. 2001. Prédation exercée en vol par des femelles du genre caen,ephl,lept Palpomya Meigen, 1818 Diptera, Ceratopogonidae) sur Serratella ignita et Habrophlebia lauta [Ephemeroptera: Ephemerellidae et Leptophlebiidae]. Ephemera, 3(2): 91-93.

- 888922 Marchetti R., Melone G.C., Cotta Ramusino M. 1967. Indagine sul Torrente Seveso. Nota n. 14. baet,caen,ephl,eph Inventario del carico biologico (Efemerotteri e Plecotteri). Acqua industriale 47: 11-28.
- Marten M. 1986. Drei fur deutschland neue und weitere, selten gefundene Eintagsfliegen aus der olig,poly fulda (Insecta, Ephemeroptera). Spixiana, 9(2): 169-173.
- Marten M. 1997. Ephemeroptera and Plecoptera of the river Danube in Baden-Wurttemberg amel,caen,ephl,he (Germany). In: Landolt P.& M. Sartori (eds.) Ephemeroptera & Plecoptera: Biology-Ecology-pt,lept,pota,siph Systematics [Proc.VIIIth Int.Conf.Ephem., Lausanne 1995]: 167-174. Fribourg.
- Marten M., Malzacher P., Reusch H., Otto C-J., Brinkmann R., Roos P., Hackbarth W., Gorka M. amel,caen,ephl,lep 1996. Ephemeroptera und Plecopter in Baden-Württemberg Stand der faunistischen Erforschung t,olig,poly,pota,pro [Ephemeroptera and Plecoptera in Baden-Württemberg / Germany state of faunal investigation]. s,siph Lauterbornia 27:69-79.
- 888923 Mastrantuono L. 1986. Community structure of the zoobenthos associated with submerged baet, caen macrophytes in the eutrophic Lake Nemi (Central Italy). Boll. Zool. 53: 41-47.
- 3371 McKee, D., Atkinson, D. 2000. The influence of climate change scenarios on populations of the baet mayfly Cloeon dipterum. Hydrobiologia 441: 55-62.
- Metzle M., Tomka I., Zurwerra A. 1985. Erstbeschreibung der Larve un Subimago von hept Rhithrogena puthzi Sowa, 1984, sowie Diskussion der morphlogischen Merkmale von R. puthzi und R. endensis Metzler, Tomka, & Zurwerra, 1985 (Ephemeroptera). Entomologische Berichte Luzern 13:105-106.
- 888960 Meyer E. 1989. The relationship between body length parameters and dry mass in running water ephl,lept invertebrates. Arch. Hydrobiol. 117: 191 203.
- 888996 Mielewczyk S. 1982. Density and biomass of Ephemeroptera larvae in Lake Zbęchy (the Poznań baet,caen region). Acta Hydrobiol., 24, 253-265
- Minshall G.W. 2003. Responses of stream benthic macroinvertebrates to fire. Forest Ecology and baet Management 178:155-161.
- Mobes-Hansen B., Waringer J.A. 1998. The influence of hydraulic stress on microdistribution baet,ephr,hept patterns of zoobenthos in a sandstone brook (Weidlingbach, Lower Austria). International Review of Hydrobiology 83(5-6):381-396.
- Modena P., Solbiati C 1984. 1984. La qualità del fiume Fibbio (Verona) con particolare riferimento baet,ephl agli Efemerotteri ed ai Molluschi. Bollettino del Museo Civico di Scienze Naturali di Verona 11: 403-425.
- Mol A.W.M. 1983. Caenis lactea (Burmeister) in the Netherlands (Ephemeroptera: Caenidae). caen Entomol. Ber. 43:119-123.
- Monaghan M.T., Robinson C.T., Spaak P., Ward J.V. 2005. Macroinvertebrate diversity in baet fragmented Alpine streams: implications for freshwater conservation. Aquatic Sciences 67(4):454-464
- Moog O., Bauernfeind E., Weichselbaumer P. 1997. The Use of Ephemeroptera as Saprobic baet,hept Indicators in Austria.- In.: Landolt P.&M. Sartori (eds.) Ephemeroptera &Plecoptera: Biology-Ecology-Systematics [= Proc.VIIIth Int.Conf.Ephem., Lausanne 1995]: 254-260. Fribourg.
- Moretti G.P., Cianficconi F., Peroni E., Ronca M. 1988. Considerazioni sulle comunità baet,hept macrobentoniche del sistema fluviale Paglia-Chiani. Boll. Mus. St. Nat. Lunigiana 6-7: 157-161.
- Morihara D.K., McCafferty W.P. 1979. Subspecies of the Transatlantic species, Baetis macani baet (Ephemeroptera, Baetidae). Proceedings of the Entomological Society of Washinton 81:34-37.
- Morisi A., Battegazzore M., Fenoglio S. 2003. Ecological considerations on the presence and hept distribution of the genus Epeorus Eaton in the district of Cuneo (NW Italy) (Ephemeroptera: Heptageniidae). Pages 373-376 in Gaino E. (ed). Research update on Ephemeroptera & Plecoptera. Università di Perugia. Perugia, Italy.
- Müller R., Schönfelder J. 2001. Fund von Baetis tracheatus (Insecta: Ephemeroptera) in baet,caen Brandenburg. Lauterbornia 39:99-100.
- Müller-Liebenau I. 1960. Einstagfliegen aus der Eifel (Insecta, Ephemeroptera). Gewäss. Abwäss baet,caen,ephl,eph 25:55-79.
- Müller-Liebenau I. 1969. Revision der europäischen Arten der Gattung Baetis Leach, 1815. baet (Insecta, Ephemeroptera). Gewässer und Abwasser 66/67:95-101.
- Müller-Liebenau I. 1974. Baetidae aus Sudfrankreich, Spanien und Portugal (insecta; baet Ephemeroptera). Gewasser un Abwasser 53/54:7-42.

- Code Reference Family
- 3635 Navás L. 1935. Insectos de Berbería. Serie 12. Boletín de la Sociedad Entomológica de España. ephr 18:77-100.
- Neumann M., Dudgeon D. 2002. The impact of agricultural runoff on stream benthos in Hong baet Kong, China. Water Research 36:3103-3109.
- Neveu A., Lapchin L., Vignes J.C. 1979. Le macrobenthos de la basse Nivelle, petit fleuve cotier baet,caen,ephl,hep des Pyrenees-Atlantiques. Ann. Zool. Ecol. Anim. 11:85-111.
- Nijboer R.C., Johnson R.K., Verdonschot P.F.M., Sommerhauser M., Buffagni A. 2004. baet,caen,hept Establishing reference conditions for European streams. Hydrobiologia 516(1 3):91-105.
- 888924 Nocentini A. 1991. Macrobenton litorale. In: Commissione internazionale per la protezione delle ephr acque italo-svizzere Ricerche sull'evoluzione del L. Maggiore. Aspetti limnologici. Programma quinquennale 1988-1992. Campagna 1990: 45-61.
- 7016 Nøst T., Aagaard K., Arnekleiv J.V., Jensen J.W., Koksvik J.I., Solem J.O. 1986 baet Vassdragsreguleringer og invertebrater. En oversikt over kunnskapsnivået. Økoforsk Utredning 1986: 1, 80.
- Novikova E.A., Kluge N.Ju. 1997. Mayflies (Ephemeroptera) of West Siberian Lowland and oil baet,hept pollution. Ephemeroptera & Plecoptera. Biology-Ecology-Systematics. (Proc. VIII Int. Conf. on Ephemeroptera and XII Int. Symposium on Plecoptera, August 1995, Losanne). Mauron+Tinguely & Lacht SA, Fribourg/Switzerland: 269-274.
- 889024 Olechowska M. 1981. Life cycle of Rhithrogena loyolaea (Navás) (Ehemeroptera, Heptageniidae) hept in the Stream Stršžyski in the Tatra Mts. Acta Hydrobiol., 23, 69-76.
- Olechowska M. 1981. Zonation of mayflies (Ehemeroptera) in several streams of the Tatra Mts and amel,baet,caen,eph the Podhale region. Acta Hydrobiol., 24, 63-71.
- Olsson T.I., Soderstrom O. 1978. Springtime migration and growth of Parameletus chelifer siph (Ephemeroptera) in a temporary stream in northern Sweden. Oikos 31:284-289.
- Ouahsine H., Céréghino R., Lavandier P. 1996. Influence of temperature and macrophytes hept development on the larval population dynamics of Epeorus sylvicola Pict (Ephemeroptera) in a torrential river of the << Haut-Atlas de Marrakech>> (Morocco). Annls Limnol. 32 (1) 1996 : 27-31
- 889013 Ouahsine H., Lavandier P. 1988. Développement larvaire de Baetis rhodani (Ephemeroptera) dans baet un torrent du Haut-Atlas de Marrakech (Maroc). Bull, Soc. Hist. Nat., Toulouse, 124 : 69-72.
- Ouahsine H., Lavandier P. 1988. Dynamique des populations larvaires de Baetis navasi M.-L. baet (Ephemeroptera) dans un torrent du Haut-Atlas de Marrakech, Maroc. Annales de Limnologie 24:167-171.
- Pardo I., Eiroa E., Novoa F. 1991. New records of mayflies from Galicia (Ephemeroptera). In: baet,ephr,hept Alba-Tercedor J. & Sánchez-Ortega, A. (eds.). Overview and strategies of Ephemeroptera and Plecoptera. Sandhill Crane Press, Gainesville, Florida.
- Parisi V., Magnetti P., Michelangeli M., Paoletti Di Chiara A., Smedile E., Tibaldi E., Zullini A. baet,ephl 1970. Osservazioni faunistiche preliminari, sul fiume Garigliano negli anni 1968 1969. Istituto lombardo 104, 146-169.
- Peissner T., Kappus B., Malzacher P. 1996. Bewertung der Eintagfliegenfauna der baden-wurttem- amel,caen,ephl,lep bergischen Donau und ausgewahlter Nebengewasser. Lauterbornia H. 27: 81-91 t,siph
- Perán A., Velasco J., Millán A. 1999. Life cycle and secondary production of Caenis luctuosa baet,caen (Ephemeroptera) in a semiarid stream (Southeast Spain). Hydrobiologia 400:187-194.
- Peru N., Thomas A. 2004. La Dourbie, une rivière polluée par des sources karstiques. 1. caen,ephl,hept,lept Bioindication préliminaire par les communautés d'Ephémères [Ephemeroptera]. Ephemera 4(1): 35- ,olig,pota,siph 54
- Peters W.L., Whytton da Terra LS. 1974. Description of the nymph and the phylogenetic ephr relationships of Calliarcys Eaton from Portugal (Ephemeroptera: Leptophlebiidae). Ciencia Biologica (Portugal), m 1, 3: 61-69.
- 6502 Pinet J.M. 1962. Observations sur la biologie et l'ecologie d'Oligoneuriella rhenana Imhoff olig (Ephemeroptera). Annales de la Station centrale d'Hydrobiologie appliquée, 9 : 303-332.
- Pleskot G. 1961. Die Periodizität Ephemeropteren-fauna einiger österreichischer Fliessgewässer. baet,ephl,lept Verhandlungen der Internationalen vereingung für theoretische und angewandte Limnologie
- 5478 Pleskot J. 1958. Die Periodizitat einiger Ephemeropteren der Schwechat. Wasser und Abwasser ephr 1958: 1-32.

- Code Reference Family
- 5479 Pleskot J. 1961. Die Periodizitat der Ephemeropteren-Fauna einger osterreichiscer Fliessgewasser. ephr Verhandlungen der Internationale Vereinigung für Theoretische und Angewandte Limnologie 14: 410-416
- Presa Y., Postigo M., Soto J., Luis E. 1991. Characterization of stoneflies (Plecoptera) and mayflies baet, caen, ephl, eph (Ephemeroptera) in the Orbigo Basin (Leon, NW Spain). [In:] Alba-Tercedor J.& Sanchez-Ortega r, hept, lept, olig, pot A. (eds.). Overview and strategies of Ephemeroptera and Plecoptera, . The Sandhill Crane Press, a, siph Inc. Gainesville, Florida, USA: 415-424.
- Provini A., Scola A., Battegazzore M. 1993. Le comunità macrobentoniche per la valutazione della baet,ephl,hept,olig qualità delle acque del fiume Crati. Acqua&Aria 5: 459-467.
- Puig M.A., Sabater F., Malo J. 1990. Benthic and hyporheic faunas of mayflies and stoneflies in baet,caen,ephl,lept the Ter river basin (NE Spain). pp. 255-258. In: Campbell IC (ed.): Mayflies and Stoneflies Life Histories and Biology. Kluwer Academic Publishers (Series Entomologica, Dr. W. Junk, vol. 14). Dordrecht, Boston & London. [I.S.B.N.: 0-7923-0289-3].
- Pupilli E., Puig M.A. 2003. Effects of a major flood on the mayfly and stonefly populations in a baet,caen Mediterranean stream (Matarranya Stream, Ebro River basin, North East of Spain). Pages 381-389 in Gaino E. (ed). Research update on Ephemeroptera & Plecoptera. Università di Perugia. Perugia, Italy
- Puthz V. 1978. Ephemeroptera, p. 256-263, I table, IN: Illies, J. (ed.), Limnofauna Europaea. 2nd baet,ephr ed. Gustav Fischer, Stuttgart.
- Puthz V. 1980. Ergebnisse der Albanien-Expedition 1961 des Deutschen Entomologischen amel,amet,baet,cae Institutes. 94. Beitrag: Ephemeroptera. Beitr. Entomol. Berlin 30:343-355.

 n,ephl,ephr,hept,is on,lept,neoe,olig,p ali,poly,pota,siph
- 3988 Querena E. 1981. Gli Efemerotteri nel medio Po a Caorso (Pc). Museo Civico di Storia Naturale di baet,caen,ephr,hep Verona 20: 195-204.
- 888926 Querena E., Solbiati, C. 1979. Distribuzione e frequenza degli Efemerotteri lungo il corso baet,ephl,hept,siph dell'Adige. Boll. Mus. civ. St. nat., Verona 6: 155-185.
- 889015 Raddum G.G., Fjellheim A. 1993. Life cycle and production of Baetis rhodani in a regulated river baet in Western Norway: comparison of re and post regulation conditions. Regul. Rivers: Res. Mgmt., 8: 49-61.
- 4002 Raddum G.G., Fjellheim A. 1995. Effects of liming and acid surface water on the mayfly lept Leptophlebia vespertina in Lake Hovvatn. Water, Air, & Soil Pollution 85(2):961-966.
- 4003 Raddum G.G., Fjellheim A. 2003. Liming of River Audna, southern Norway: A large-scale baet experiment of benthic invertebrate recovery. Ambio 32(3):230-234.
- Ratajczak E. 1976. Jetki (Ephemeroptera) rzeki Welny. Die Eintagsfliegen (Ephemeroptera) der caen,ephl,lept,pota Welna. (in Polish, German summary) Pol. Pismo Entomol. 46:749-756.
- 4039 Rawlinson R. 1939. Studies on life-history and breeding of Ecdyonurus venosus (Ephemeroptera). hept Proceedings of the Zoological Society of London, Series B 109:377-450.
- Riano P., Basaguren A., Pozo J. 1990. Diet variation of Ephemerella ignita (Poda) (Ephemeroptera: ephl Ephemerellidae) in relation to the developmental stage. In.: Landolt P.&M. Sartori (eds.) Ephemeroptera &Plecoptera: Biology-Ecology-Systematics [= Proc.VIIIth Int.Conf.Ephem., Lausanne 1995]: 60-64. Fribourg.
- 7004 Righetti B., Thomas A. 2000. Baetis catharus: description des imagos, comparativement aux baet espèces ouest-euromediterranéenes du groupe alpinus Pictet [Ephemeroptera, Baetidae]. Ephemera 2(2): 73-78.
- Righetti B., Thomas A. 2001. Contribution à l'étude des espèces de Baetis du groupe alpinus: Baetis baet pasquetorum n. sp. Des Alpes du Sud [Ephemeroptera, Baetidae]. Ephemera 3(1): 5-14
- 8003 Righetti B., Thomas A., Nel A. 1997. Additions à la faune des Ephémères de France (1): lept Habrophlebia eldae Jacob & Sartori, 1984 (Ephemeroptera, Leptophlebiidae). Bulletin de la Société d'Histoire naturelle de Toulouse. 133: 33-34.
- 7007 Ritter H. 1990. Ephemeroptera Emergence from a high Stream in Tyrol, Austria. In: Campbell, I.C. baet,hept (Ed.), Mayflies and Stoneflies: Life story and Biology. Kluwer Academic Publishers, Dordrecht, pp. 53-59.
- 4130 Ruffieux L., Sartori M., L'Eplattenier G. 1996. Palmen body: A reliable structure to estimate the siph number of instars in Siphlonurus aestivalis (Eaton) (Ephemeroptera: Siphlonuridae). International Journal of Insect Morphology and Embryology 25(3):341-344.

- Code Reference Family
- 4131 Ruffieux L., Sartori M., L'Eplattenier G. 1997. Number of instars in mayfly larvae: A Palmen Body siph Standard Method (PBSM) applied to Siphlonurus aestivalis (Siphlonuridae). In: P. Landolt &M. Sartori (Eds): Ephemeroptera and Plecoptera: Biology, Ecology and Systematics, pp. 389-394, MTL, Fribourg.
- Russev B.K.. 1979. Neue Eintagsfliegen für die fauna bulgariens (Ephemeroptera). Beitrage zur amel,baet,caen,eph Entomologie, 10, 7/8: 697-705.
- 889017 Russev B.K.. 1987. Ecology, life history and distribution of Palingenia longicauda (Olivier) pali (Ephemeroptera). Tijd. Ent. 130: 109-127.
- 4152 Saaristo M.I. 1966. Revision of the Finnish species of the genus Caenis Steph. (Ephemeroptera). caen Annales entomologica fennici 32(1):68-87.
- 4149 Saaristo M.I., Nilsson A.N., Savolainen E. 1993. Heptagenia orbiticola Kluge, a mayfly species hept new to Europe (Ephemeroptera, Heptageniidae).- Entomologisk tidskrift 114 (1-2):51-54,
- 4150 Saaristo M.I., Savolainen E. 1980. On the identity of Heptagenia sulphurea (Müller, 1776) and H. hept dalecarlica Bengtsson, 1912 (Ephemeroptera). Notulae Entomologicae 60:187-193.
- 4192 Samalovà M. 1931. Nymphy ceskoslovenskych jepic. The nymphs of Ephemeridae from hept czechoslovakia. 28:16-19
- 4201 Santoul F., Figuerola J., Mastrorillo S., Céréghino R. 2005. Patterns of rare fish and aquatic insects baet, caen in a southwestern French river catchment in relation to simple physical variables. Ecography 28(3):307-314.
- Sartori M. 1988. Quelques compléments à la faune des Ephéméroptères de Suisse (Insecta, amel,baet,caen,hep Ephemeroptera). Mitteilungen der Schweizerischen Entomologischen Gesellschaft 61:339-347.
- 4208 Sartori M., Dethier M. 1985. Faune aquatique du canton de Geneve: II. Ephemeropteres (Insecta, baet,caen,ephl,eph Ephemeroptera). Bulletin de la Société Entomologique Suisse 58:493-510. r,hept,lept,siph
- 4207 Sartori M., Dethier M., de Souza J. 1989. Faune aquatique de la région genevoise. III. baet,caen,ephl,eph Compléments aux Ephéméroptères (Insecta, Ephemeroptera). Mitteilungen der Schweizerischen r,hept,lept,siph Entomologischen Gesellschaft 62(1/2):113-118
- 4219 Sartori M., Keller L., Thomas A., Passera L. 1992. Flight Energetics in Relation to Sexual siph Differences in the Mating-Behavior of a mayfly, Siphlonurus-Aestivalis. Oecologia 92(2):172-176.
- 4220 Sartori M., Landolt P., Lubini V., Ruffieux L. 1995. Biological studies of Palingenia longicauda pali (Olivier) (Ephemeroptera, Palingeniidae) in one of its last European refuges. Abiotic characteristics and description of the habitat. In: L. Corkum & J. Ciborowski (eds), Current directions in research on Ephemeroptera: 263-272. Canadian Scholars' Press Inc., Toronto.
- 4223 Sartori M., Oswald R. 1988. Rhithrogena grischuna nov. sp., a new mayfly species from eastern hept Switzerland related to Rh. hercynia Landa, 1969 (Ephemeroptera, Heptageniidae). Annls. Limnol. 24:261-268.
- 4227 Sartori M., Sowa R. 1988. Compléments à la connaissance des espèces du groupe de Rhithrogena hept diaphana Navàs [sic], de la péninsule ibérique (Ephemeroptera, Heptageniidae). Mitteilungen der Schweizerischen Entomologischen Gesellschaft 61:349-360.
- 4229 Sartori M., Thomas A. 1984. Identite et redecouverte de Rhithrogena nivata (Eaton, 1871) hept (Ephemeroptera, Heptageniidae). Annales de Limnologie 20:203-208.
- Sartori M., Thomas A. 1989. Contribution à la connaissance du genre Baetis Leach, 1815 en Corse baet (Ephemeroptera, Baetidae). B. albinatii nov. sp. du groupe muticus. Annls Limnol. 25(2): 131-137.
- 4233 Sartori M., Thomas A. 1991. Contribution to the systematic of B. muticus (L.) and allied species baet from south western palearctic region (Ephemeroptera, Baetidae). In: J. Alba-Tercedor & A. Sanchez-Ortega (eds) Overview and strategies in Ephemeroptera and Plecoptera: 223-233. Sandhill Crane Press, Gainesville, Florida.
- 4234 Sartori M., Zabric D., Jann B. 1996. Trois espèces d'éphémères nouvelles pour la faune de Suisse baet,lept (Ephemeroptera: Baetidae, Leptophlebiidae). Mitt. schweiz. ent. Ges. 69(1): 135-139.
- Savolainen E., Saaristo M.I. 1981. Distribution of mayflies (Ephemeroptera) in the biological arth,baet,caen,ephl province of Kuusamo (Ks), Finland. Notulae Entomologicae 61:117-124. ,ephr,hept,lept
- Schalk P.H., van Soest R., McNicol K. 2005. European Network for Biodiversity Infromation. baet Experiences with the ENBI Pilot Studies. Deliverable D12.6a. 14 Dec 2005. circa.gbif.net

- Code Reference Family
- Schmidt-Kloiber A. 1997. Ephemeroptera of an artificial danube backwater irrigation system in baet,caen,ephl,hep Austria. In: Landolt P.&M. Sartori (eds.) Ephemeroptera &Plecoptera: Biology-Ecology- t,lept,olig,poly,pot Systematics [Proc.VIIIth Int.Conf.Ephem., Lausanne 1995]: 152-156. Fribourg.
- 4308 Scillitani G., Belfiore C., Picariello O., Cataudo A. 1996. Estimating genetic variation from larvae hept and adults of mayflies: an electrophoretic analysis of three species of Heptageniidae (Ephemeroptera). Ital. J. Entomol. 63:23-30.
- 5025 Seghetti C. 1993. Segnalazioni faunistiche italiane (n. 217-241). Bollettino della Società lept Entomologica Italiana 125(1): 71-76
- 888929 Sergenti S., Antonelli R., Giontella M., Pasquini, G. 1993. Monitoraggio dell'Aniene nel tratto caen,olig sublacense-tiburtino. Inquinamento 2: 62-66.
- Smith H., Wood P.J., Gunn J. 2003. The influence of habitat structure and flow permanence on baet,ephl invertebrate communities in karst spring systems. Hydrobiologia 510(1):53-66.
- Soderstrom O. 1991. Life cycles and nymphal growth of twelve coexisting mayfly species in a amet,arth,baet,ephl boreal river. En: Alba-Tercedor, J. & Sánchez-Ortega, A. [Eds]. Overview and strategies of ,hept,lept,siph Ephemeroptera and Plecoptera. Sandhill Crane Press, Inc., Gainesville, Florida. pp. 503-514.
- Soderstrom O., Nilsson A.N. 1987. Redescription of Parameletus chelifer Bengtsson and P. minor siph (Bengtsson), with keys to nymphal and adult stages of the Fennoscandian species of Siphlonuridae (Ephermeroptera).
- Solbiati C. 1986. I macroinvertebrati del bacino idrografico dell'Adige. IV Gli Efemerotteri. Mem. baet,caen,ephl,siph Mus. Civ. St. Nat. Verona (II Ser.), sez. biologica, 6: 171-184.
- Soldán T. 1979. The structure and development of the female internal reproductive system in six baet European species of Ephemeroptera. Acta Entomol. Bohemoslov., 76:353-365, Plates I-VII (30 figs.).
- Soldán T. 2000. Biodiversity of mayflies (Ephemeroptera) in the Krkonoše Mountains: a historical amel,ephl,hept,lept and present status overview. Biodiverzita jepic (Ephemeroptera) v Krkonoších: historický a ,siph soucasný prehled. Opera Corcontica 37:369-375.
- Soldán T., Landa V. 1999. A key to the Central European species of the genus Rhithrogena hept (Ephemeroptera: Heptageniidae). Klapalekiana 35:25-37.
- Soldán T., Zahradkova S., Helesic J., Dusek L., Landa V. 1998. Distributional and quantitative amel,arth,baet,cae patterns of Ephemeroptera and Plecoptera in the Czech Republic: A possibility of detection of longnephl,ephr,hept,is term changes of aquatic biotopes. Folia Fac. Sci. Natur. Univ. Masaryk. Brun., Brno, 305 pp. on,lept,olig,pali,po ly,pota,pros.siph
- 4492 Sowa R. 1961. Nowe stanowisko jetki ephemerella karelica (Tiensuu) (=Eurylophella karelica ephl (Tiensuu)-New stand of the Ephemerella (Tiensuu) (=Eurylophella karelica Tiensuu). Acta Hydrobiol. 3(1): 59-62
- 4493 Sowa R. 1961. Oligoneuriella mikulskii n. sp. (Ephemeroptera). Acta Hydrobiologica 3:287-294. olig
- Sowa R. 1962. Materialy do poznania Ephemeroptera i Plecoptera w Polsce- Material for the study arth,caen,ephl,olig of Ephemeroptera and Plecoptera in Poland. Acta Hydrobiol. 4(2): 205-224
- 4495 Sowa R. 1969. Rhithrogena degrangei: nouvelle espèce des Alpes françaises Bulletin de hept l'Académie Polonaise des Sciences Cl. II, Série des Sciences biologiques 17:563-567
- 4496 Sowa R. 1971. Ecdyonurus starmachi sp. n. et E. submontanus Landa des Carpates polonaises hept (Ephemeroptera: Heptageniidae). Bulletin de l'Academie Polonaise des Sciences, Série des sciences biologiques Cl. V. 19(6):407-412.
- 4497 Sowa R. 1971. Note sur les deux espècies de la famille (Ephemeroptera) des Carpathes polonaises hept Heptageniidae. Acta Hydrobiol. 12(1): 29-41.
- Sowa R. 1971. Note sur quelques Rhithrogena Eaton de la collection Esben-Petersen et la hept redescription de Rhithrogena germanica Eaton (Ephemeroptera, Heptageniidae). Bulletin de l'Académie Polonaise des Sciences Cl. II, Série des Sciences biologiques 19 (7-8): 485-492.
- 4499 Sowa R. 1971. Sur la taxonomie de Rhithrogena semicolorata (Curtis) et de quelques especes hept voisines d'europe continentale (Ephemeroptera Heptageniidae). Revue Suisse de Zoologie. 77(1970):895-920
- 4500 Sowa R. 1973. Taxonomie et ecologie de Caenis beskidensis sp. n. des Carpates polonaises caen (Ephemeroptera Caenidae) Bulletin de l'Académie Polonaise des Sciences Cl. II, Série des Sciences biologiques. 21(5):351-355
- Sowa R. 1973. Taxonomie et ecologie d'Ecdyonurus carpathicus sp. n. des Carpates polonaises hept Bulletin de l'Académie Polonaise des Sciences 21: 285-289

- Sowa R. 1974. Ecdyonurus fascioculatus sp.n., espèce voisine d'E. affinis Eaton du midi de la hept Pologne (Ephemeroptera, Heptageniidae). Bulletin de l'academie polonaise de sciences. Série de sciences Biologiques. CL II. Vol. XXII, No.5.
- Sowa R. 1975 Ecology and biogeography of mayflies (Ephemeroptera) of running waters in the Polish part of the Carpathians. 1. Distribution and quantitative analysis. Acta Hydrobiologica, 17: 223-247.

 amel,amet,arth,bae t,caen,ephl,ephr,he pt,ison,lept,olig,po ly,pota,siph
- Sowa R. 1975. Ecology and biogeography of mayflies (Ephemeroptera) of running waters in the amel,baet,caen,eph Polish part of the Carpathians. 2. Life Cycles. Acta Hydrobiologica 17:319-353. l,ephr,hept,lept,pol y,pota,siph
- Sowa R. 1975. Notes on the European species of Procloeon Bengtsson with particular reference to olig Procloeon bifidum (Bengtsson) and Procloeon ornatum Tshernova (Ephemerida:Baetidae). Entomologica Scandinavica 6:107-114.
- 4505 Sowa R. 1975. What is Cloeon dipterum (Linnaeus, 1761)? The nomenclatural and morphological baet analysis of a group of the European species of Cloeon Leach (Ephemerida, Baetidae). Entomologica Scandinavica 6:215-223.
- 4507 Sowa R. 1980. La zoogeographie, l'ecologie et la protection des Ephemeropteres en Pologne, et baet,caen,ephr,hep leur utilisation en tant qu'indicateurs de la purete des eaux courantes. in J. F. Flannagan & K. E. t Marshall, eds. Advances in Ephemeroptera Biology. Plenum, New York, p. 141-154.
- 4508 Sowa R. 1980. Taxonomy and ecology of European species of the Cloeon simile Eaton group baet (Ephemeroptera: Baetidae). Entomologica Scandinavica., 11:249-258, 33 figs.
- 4509 Sowa R. 1981. Taxonomy and ecology of Ecdyonurus ujhelyii sp. n. (Ephemeroptera: hept Heptageniidae) from the tributaries of Lake Balaton. Acta Hydrobiologica 23(4): 375-380
- 4512 Sowa R. 1984. Two new species of Ecdyonurus Eaton of lateralis (Curt.) group (Ephemeroptera, hept Heptageniidae) from the Crimea and Western Caucasus. Acta Hydrobiol. 25/26:181-188.
- 4513 Sowa R. 1985. Pseudocentroptilum fascicaudale n. sp. (Ephemeroptera, Baetidae) from Greece. baet Acta Hydrobiol. 27:75-80.
- Sowa R., Belfiore C. 1984. Rhithrogena reatina sp. n., a new species of the hybrida group from hept Central Italy (Ephemeroptera, Heptageniidae). Boll. Assoc. Rom. Entomol. 1983, 38:5-8.
- 4483 Sowa R., Degrange C. 1987. Rhithrogena du groupe hybrida (Ephemeroptera Heptageniidae) des hept Alpes françaises. Acta Hydrobiologica . 29:71-87
- Sowa R., Degrange C. 1987. Sur quelques espèces européennes de Rhithrogena du groupe hept semicolorata (Ephemeroptera, Heptageniidae). Acta Hydrobiologica. 29:523-534.
- Sowa R., Degrange C. 1987. Taxinomie et repartition des Rhithrogena Eaton du groupe alpestris hept (Ephemeroptera, Heptageniidae) des Alpes et des carpathes Polskie Pismo Entomologiczne. 57: 475-493
- 4486 Sowa R., Gaino E., Degrange C. 1985. Description de Rhithrogena hybrida Eaton, 1985 hept (Ephemeroptera, Heptageniidae) à partir d'exemplaires de l'une des stations types (Chalets de Joux-Plane, Haute Savoie, France). Polskie Pismo Entomologiczne. 53:135-137
- Sowa R., Soldán T. 1986. Three new species of the Rhithrogena hybrida group from Poland and hept Czechoslovakia with a supplementary description of R. hercynia Landa, 1969 (Ephemeroptera, Heptageniidae). Trzy nowe gatunki grupy Rhithrogena hybrida z Polski i Czechoslowacji z uzupelniajacym opisem R. hercynia Landa, 1969 (Ephemeroptera, Heptageniidae). Pol. Pismo Entomol. 56:557-572.
- 4529 Staniczek A. 2003. Eintagsfliegen. Manna der Flüsse. Stuttgarter Beiträge zur Naturkunde Serie C amel,amet,caen,iso Wissen für alle 53:1-79. n,pali,poly,pros,sip
- 4571 Stephens J.F. 1836. Family III. Ephemeridae, Leach. Illustrations of British Entomology, ephr Mandibulata 6:54-70, pl. 29.
- 4593 Studemann D., Landolt P., Sartori M., Hefti D., Tomka I. 1992. Ephemeroptera Insecta. Helvetica amel,baet,caen,eph Fauna 9: 175 pp. l,ephr,hept,lept,oli g,poly,pota,siph
- 4595 Studemann D., Landolt P., Tomka I. 1988. Morphology and taxonomy of imagines and eggs of amel,siph Central and Northern European Siphlonuridae (Ephemeroptera). Mitteilungen der Schweizerischen Entomologischen Gesellschaft 61:303-328.

4596 Studemann D., Landolt P., Tomka I. 1989. Contribution to the study of European Ephemerellidae ephl (Ephemeroptera). II. Description of the winged stages of Ephemerella ikonomovi Puthz, 1971, and Serratelle albai Gonzales del Tanago & Garcia De Jalton, 1983. Bulletin de la société entomologique suisse. 62: 119-127

- Studemann D., Landolt P.1997. A phylogenetic system for the European species of Siphlonurus siph (Ephemeroptera, Siphlonuridae). In: P. Landolt & M. Sartori (eds.). Ephemeroptera & Plecoptera. Biology-Ecology-Systematics (Proc. 8th Int. Conf. Ephemeroptera & 12th Int. Symp. Plecoptera 14-20 August 1995, Losanne, Switzerland). Mauron+ +Tinguely & Lacht SA, Fribourg / Switzerland: 554-560.
- 4599 Studemann D., Tomka I. 1987. Contribution to the study of European Ephemerellidae ephl (Ephemeroptera). I. Completion of description of three endemic Iberian species. Mitteilungen der Schweizerischen Entomologischen Gesellschaft 60:361-378.
- Studemann D., Tomka I. 1989. Contribution to the study of European Ephemerellidae ephl (Ephemeroptera). III. Synonymi of Ephemerella maculocaudata Ikonomov, 1961, syn. n. with ephemerella mesoleuca. 129-130.
- 4634 Svensson B. 1977. Life cycle, energy fluctuations and sexual differentiation in Ephemera danica ephr (Ephemeroptera), a stream living mayfly. Oikos 29:78-86.
- Tabacchi E., Décamps H., Thomas A. 1993. Substrate interstices as a habitat for larval Thraulus baet bellus (Ephemeroptera) in a temporary floodplain pond. Freshwater Biology 29:429-439.
- 4674 Tanasijevic M. 1975. Heptagenia ozrensis sp. n. und der Fund von fünf Ephemeroptera-Arten in ephr,hept Bosnien und der Hercegowina. Wiss Mitt Bosn-herzeg Landesmus 4-5: 243-246.
- 4680 Tanatmis M. 2002. The Ephemeroptera (Insecta) fauna of Lake Ulubat basin. Turkish Journal of baet Zoology 26:53-61.
- 4691 Taticchi M.I., Tiberi O. 1980. Fauna macrobentonica e fattori fisici e chimici in prossimità dello baet sbocco di una piccola fogna nel lago Trasimeno. Riv. Idrobiol, Vol. XIX, p 469-493
- Tesauro M., Bielli E., Cotta Ramusino M., Rossaro B. 1996. La fauna macrobentonica litorale del caen Lago d'Orta dopo il liming. Atti XI Congresso A.I.O.L., Sorrento, 1994: 541-549.
- 889016 Thibault M. 1971. Ecologie d'un ruisseau a truites des Pyrénées-Atlantiques, le Lissuraga II Les baet fluctuations thermiques de l'eau; ripercussion sur le periodes de sortie et la taille de quelques Ephemeropteres, Plecopteres, Trichopteres. Annales de Hydrobiologie 2:241-274.
- 4708 Thibault M. 1971. Le développement des Éphéméroptères d'un ruisseau a truites des Pyrénées-baet,caen,ephl,eph Atlantiques, le Lissuraga. Annales de Limnologie 7:53-120. r,hept,lept
- 888951 Thomas A. 1968. Habrophlebia (Habroleptoides) berthelemyi, n. sp. Des pyrenees [Ephemeroptera, lept Leptophlebiidae]. Annales de Limnologie, t. 4, fasc. 2, 1968: p. 219-224.
- 4740 Thomas A. 1968. Quelques Ecdyonurus et Rhithrogena européens de la collection Navás hept (Ephemeroptera).- Annales de Limnologie, 4(2): 209-218
- Thomas A. 1968. Sur la taxonomie de quelques espéces d'Ecdyonurus du Sud-Ouest de la France hept [Ephemeroptera]. Annales de Limnologie 4:51-71.
- Thomas A. 1975. Éphéméroptères du Sud-Ouest de la France. I. Migrations d'imagos a haute hept altitude. Annales de Limnologie 11:47-66.
- Thomas A. 1996. Ephéméroptères du Sud-Ouest de la France. V. Premier inventaire des espèces baet, caen, ephl, hep recensées depuis 1870 (Insecta, Ephemeroptera). Annales de Limnologie; 32(1): 19-26 t, lept, olig, poly, pot a, siph
- 4747 Thomas A. 1999. Corrections à la Faune des Ephémères d'Europe occidentale : 1. Baetis gemellus baet Eaton, 1885, sensu Müller-Liebenau, 1969 = B. gadeai n.sp. [Ephemeroptera, Baetidae]. Ephemera 1(1): 23-28.
- 4723 Thomas A., Gazagnes G. 1983. Ephéméroptères du Sud-Ouest de la France. III Baetis nicolae n. sp. baet Des Pyrénées. Bull Soc. Hist. Nat., Toulouse. 119:71-74.
- 4725 Thomas A., Gazagnes G. 1984. Ephéméroptére nouveau de Corse (Baetidae). Annls Limnol. 20(3): baet 199-202
- 4726 Thomas A., Lounaci A. 1989. Compléments et corrections à la faune des Ephéméroptères d'afrique baet du Nord. 4 Les stades ailés de Baetis punicus Thoasm, Boumaiza et Soldán, 1983 (Baetidae). Bull. Soc. Hist. Nat. Toulouse 125: 27-29.
- Thomas A., Prévot R., Vincon G. 1986. Deux Ephéméroptères nouveaux pour la Faune de France: baet,caen Baetis pentaphlebodes Ujhelyi, 1966 (Baetidae) et Caenis beskidensis Sowa, 1973 (Caenidae). Bull. Soc. Hist. Nat., Toulouse 122: 179

4732 Thomas A., Sartori M. 1985. Redecouverte de Baetis neglectus Navas 1913 a la localite typique baet (Ephemeroptera, Baetidae). Bulletin de la Société Entomologique Suisse 58:447.

- 4733 Thomas A., Sartori M. 1985. Rhithrogena gorrizi Navas, 1913 et Rh. castellana Navas, 1927: hept redescription des imagos (Ephemeroptera, Heptageniidae). Annales de Limnologie 21:65-70.
- 4735 Thomas A., Soldán T. 1987. Baetis ingridae n. sp., Ephéméroptère nouveau de Corse (Baetidae). baet Annls limnol. 23(1): 23-26
- 4737 Thomas A., Sowa R. 1970. Ecdyonurus Macani N. SP., espece europeenne voisine d'E. Torrentis hept kommins (Ephemeroptera, Heptageniidae). 75-85.
- 4738 Thomas A., Vitte B., Soldán T. 1987. Rhithrogena ryszardi n. sp., Ephéméroptère nouveau du hept Moyen Atlas (Maroc) et redescription de Rh. soteria Navás, 1917 (Heptageniidae). Annales de Limnologie 23:169-177.
- Thomas A.GB 1986. 1986. Ephéméropteres du Sud-Ouest de la France. IV Baetis catharus n. sp. baet Des Pyrénées (Baetidae). 122: 175-179.
- 889012 Thorup J. 1963. Growth and life-cycle of invertebrates from Danish springs. Hydrobiologia 22: baet 55-84.
- Thourp J., Iversen T.M., Absalonsen NO., Holm T., Jessen J., Olsen J. 1987. Life cycles of four baet species of baetis (Ephemeroptera) in three Danish streams. Arch. Hydrobiol. 109: 49-65
- 4758 Tiensuu L. 1939. A survey of the distribution of mayflies (Ephemerida) in Finland. Annales baet entomologica fennici 5(2):97-124,
- 4759 Tierney D., Kelly-Quinn M., Bracken J.J. 1998. The faunal communities of upland streams in the baet eastern region of Ireland with reference to afforestation impacts. Hydrobiologia 389(1 3):115-130.
- 4762 Tikkanen P., Muotka T., Huhta A. 1996. Fishless-stream mayflies express behavioural flexibility in baet response to predatory fish. Animal Behaviour 51:1391-1399.
- 7045 Timm H. 1997. Ephemeroptera and Plecoptera alrvae as environmental indicators in running waters baet,hept of Estonia. In: Landolt P.& M. Sartori (eds.) Ephemeroptera & Plecoptera: Biology-Ecology-Systematics [Proc.VIIIth Int.Conf.Ephem., Lausanne 1995]: 247-253. Fribourg.
- 4773 Tiunova T.M., Kluge N.Ju., Ishiwata S-I. 2004. Revision of the East Palaearctic genus Isonychia ison (Ephemeroptera: Isonychiidae). Canadian Journal of Entomology 136:1-41.
- 4794 Tokeshi M. 1985. Life-Cycle and Production of the Burrowing mayfly, Ephemera-Danica a New ephr Method for Estimating Degree-Days Required for Growth. Journal of Animal Ecology 54(3):919-930
- 4915 Turin P., Bilo M.F., Belfiore C. 1997. Primo rinvenimento in Italia di Ametropus fragilis Albarda amet 1878 (Ephemeroptera: Ametropodidae). Lavori Soc. Ven. Sci. Nat. 22:7-14.
- Tusa I. 1974. Mayfly larvae (Ephemeroptera) in current habitats of three trout streams with stony baet,ephl,hept,lept bottom (North-West Moravia, Czechoslovakia. Acta Hydrobiol., 16, 417-429.
- 4928 Újhelyi S. 1966. The mayflies of Hungary, with the description of a new species, Baëtis baet,hept pentaphlebodes sp. n. (Ephemeroptera). Acta Zoologica Academiae Scientiarum Hongaricae 12:203-210.
- 5461 Ulfstrand S. 1967. Microdistribution of benthic species (Ephemeroptera, Plecoptera, Trichoptera, baet Diptera: Simuliidae) in Lapland streams. Oikos 18: 293-310.
- Usseglio-Polatera P. 1991. Représentation graphique synthétique de la signification écologique d'un peuplement. Application aux macroinvertébrés du Rhône à Lyon. Bulletin d'Ecologie 22:195-202.
- Usseglio-Polatera P. 1997. Long-term changes in the Ephemeroptera of the River Rhône at Lyon, caen,lept,pota,pros France, assessed using the fuzzy coding approach. In.: Landolt P.&M. Sartori (eds.) Ephemeroptera &Plecoptera: Biology-Ecology-Systematics [= Proc.VIIIth Int.Conf.Ephem., Lausanne 1995]: 227-234. Fribourg.
- 4961 Usseglio-Polatera P., Bournaud M. 1989. Trichoptera and Ephemeroptera as indicators of ephr environmental changes of the Rhone River at Lyon over the last twenty-five years. Regul. Rivers Res. Manage. 4:249-262.
- 4965 Utzeri C., Belfiore C. 1979. Efemerotteri e Odonati delle valli del Farma e del Merse (Toscana) (*) caen,ephl,lept 117-120
- 5488 Vedú J.R., Galante E. 2006. Libro Rojo de los Invertebrados de España. Dirección General para la ephr Biodiversidad, Ministerio de Medio Ambiente, Madrid.

- Code Reference Family
- Verneaux J. 1972. Faune dulcaquicole de Franche-Comté. Le Bassin du Doubs (Massif du Jura). baet,caen,ephr,hep Quatrième partie : les Ephéméroptères.. Annales Scientifiques de l'Université de Besançon. 3-13 t
- 4999 Verneaux J., Verneaux V., Schmitt A., Prouteau C. 2004. Assessing Biological Orders of river sites ephr and biological structures of watercourses using ecological traits of aquatic insects. Hydrobiologia 519(1):39-47.
- Verrier M.L. 1945. Les potamanthus (Ephemeropteres) d'Auvergne et leurs variations. 70:111-116. pota
- Verrier M.L. 1949. Description d'un nouveau Procloeon. Bulletin de la Societe Zoologique de baet France LXXIV: 181-190.
- Verrier M.L. 1949. Epehemeropteres. Contribution a l'etude de la faune d'eau douce de corse. Vie baet,caen,ephl,hep et Miieu, 5:280:290 t,lept
- Verrier M.L. 1952. Note faunistique et ecologique sur les ephemeres des alpes-maritimes. Bulletin baet,caen,hept,lept biologique de la France et de la Belgique 77:44-50.
- 888941 Vidinova Y. 2003. Contribution to the study of mayfly fauna (Ephemeroptera) in Bulgaria. Pages caen,hept 159-163 in Gaino E. (ed). Research update on Ephemeroptera & Plecoptera. Università di Perugia. Perugia, Italy.
- Vidinova Y., Russev B.K. 1997. Distribution and ecology of the representatives of some ephl,ephr,hept,pol ephemeropteran families in Bulgaria. In: Ephemeroptera & Plecoptera: Biology-Ecology- y,pota Systematics, Landolt, P. & M. Sartori (Hrsg.) 569 S., Mauron+Tinguely & Lachat SA, Moncor, Fribourg/Switzerland: 139-146.
- Vincon G., Thomas A. 1987. Etude hydrobiologique del la Vallée d'Ossau (Pyrénées-Atlantiques). baet,caen,ephl,hep I. Répartition et écologie des Ephémeroptères. Annls Limnol 23(2): 95-113. t,lept
- Vrba J., Kopácek J., Fott J., Kohout L., Nedbalová L., Prazáková M., Soldán T., Schaumburg J. amel,lept,siph 2003. Long-term studies (1871-2000) on acidification and recovery of lakes in the Bohemian Forest (central Europe). The Science of the Total Environment 310:73-85.
- Wagner R. 1984. Effects of an artificially changed stream bottom on emerging insects. Verh. Int. baet Ver. Limnol. 27:2042-2047.
- Wagner R., Dapper T., Schmidt H.-H. 2000. The influence of environmental variables on the baet abundance of aquatic insects: a comparison of ordination and artificial neural networks. Hydrobiologia 422-423(0):143-152.
- Ward J.V., Garcia de Jalon D. 1991. Ephemeroptera of regulated mountain streams in Spain and baet,ephl,hept,olig Colorado. In: Overview and Strategies of Ephemeroptera and Plecoptera. 1991. The Sandhill Crane Press. Florida. [I.S.B.N.: 1-877743-08-0]: 567-578.
- 888962 Ward J.V., Stanford J.A. 1982. Thermal Responses in the Evolutionary Ecology of Aquatic Insects. baet Annual Review of Entomology 27(1), 97-117.
- Wegher M., Turin P. 1993. Sul rinvenimento in Veneto di Torleya major Klapalek ephl (Ephemeroptera). Studi Trentini di Scienze Naturali 68:233-237.
- Welton J.S., Ladle M., Bass J.A.B. 1982. Growth and production of five species of Ephemeroptera baet larvae from an experimental recirculating stream. Freshwater Biology 12 103-122.
- Wendling K., Haybach A. 2003. Notizen zu einigen Eintagsfliegen (Insecta: Ephemeroptera) aus amet,caen,ephr,he der Theiss in Ungarn nach dem Cyanid-Unfall in Baja Mare (Rumänien) im Jahre 2000. Notes on pt,pali,poly some mayflies (Insecta: Ephemeroptera) collected in the River Tisza (Hungary) after the cyanide spill at Baia Mare (Romania) in 2000. Lauterbornia 46:77-81.
- Werneke U., Zwick P. 1992. Mortality of the terrestrial adult and aquatic nymphal life stages of baet Baetis vernus and Baetis rhodani in the Breitenbach, Germany (Insecta, Ephemeroptera). Freshwater Biol. 28:249-255.
- Whelan KF. 1980. Some aspects of the biology of Ephemera danica Mull. (Ephemreidae, ephr Ephemeroptera) in Irish waters. Advances in Ephemeroptera biology, Flannagan JF & Marshall KE eds: 187-199. Plenum New York.
- Whitehead H. 1935. An ecological study of the invertebrate fauna of a chalk stream near Great ephl Driffield, Yorkshire. J. Anim. Ecol. 4: 58-78.
- Williams D.D., Williams N.E. 1998. Aquatic insects in an estuarine environment: densities, baet,hept distribution and salinity tolerance. Freshwater Biology 39:411-421.
- 5219 Willoughby L.G. 1988. The ecology of Baetis muticus and B. rhodani (Insecta, Ephemeroptera) baet with special emphasis on acid water backgrounds. Int. Rev. Ges. Hydrobiol. 73:259-273.
- Willoughby L.G., Mappin R.G. 1988. The distribution of Ephemerella ignita (Ephemeroptera) in ephl,siph streams: The role of pH and food resources. Freshwater Biol. 19:145-156.

- Code Reference Family
- Wise EJ. 1980. Seasonal distribution and life histories of Ephemeroptera in a Northumbrian river. baet,caen,ephl,hep Freshwater Biology 10:101-111.
- Wise EJ., O'Connor J.P. 1998. Observations on the distribution and relative abundance of the baet,caen,ephl,eph Ephemeroptera and Plecoptera in the Killarney Valley. Landolt, P and Sartori, M (eds), r,hept,lept Ephemeroptera and Plecoptera: Biology-Ecology-Systematics, 175-179. MTL, Fribourg
- Wood P.J., Agnew M.D., Petts G.E. 2000. Flow variations and macroinvertebrate community caen responses in a small groundwater-dominated stream in south-east England. Hydrological Processes 14(16-17):3133-3147.
- Worker H., Wuhrmann K. 1957. Die Reaktion der Bachfauna auf Gewasservergiftungen. Rev. baet,ephr Suisse de Zool. 6, 253.
- Wright J.F., Gunn R.J.M., Blackburn J.H., Grieve N.J., Winder J.M., Davy-Bowker J. 2000. lept Macroinvertebrate frequency data for the RIVPACS III sites in Northern Ireland and some comparisons with equivalent data for Great Britain. Aquatic Conservation: Marine and Freshwater Ecosystems 10(5):371-389.
- 5254 Wright J.F., Hiley P.D., Berrie A.D. 1981. A 9-Year Study Of the Life-Cycle Of Ephemera danica ephr Mull (Ephemeridae, Ephemeroptera) In the River Lambourn, England. Ecological Entomology 6(3):321-331.
- Wright J.F., Symes K.L. 1999. A nine-year study of the macroinvertebrate fauna of a chalk stream. ephr Hydrological Processes 13(3):371-385.
- Zacwilichowska K. 1968. Bottom fauna in the basin of the River Kamienica Nawojowska. Acta baet,caen,ephl,eph Hydrobiol. 10: 319-341. r,hept,lept,olig
- Zamora-Muñoz C., Alba-Tercedor J. 1996. Bioassessment of organically polluted Spanish rivers, baet, caen using a biotic index and multivariate methods. J.N.Am. Benthol. Soc. 15:332-352.
- 5337 Zamora-Muñoz C., Sánchez-Ortega A., Alba-Tercedor J. 1993. Physicochemical factors that baet determine the distribution of Mayflies and Stoneflies in a High-Mountain Stream in Southern Europe (Sierra-Nevada, Southern Spain). Aquatic Insects 15(1):11-20.
- 888982 Zelinka M., Marvan P. 1976. Notes to methods for estimating production of zoobenthos. Folia Fac. ephl Sci. Nat. Univ. Purkynianae Brunensis 17, Biol. 58(10): 1-53
- Zimmermann W. 1980. Baetis braaschi n. sp., ein bisher unbekannter Vertreter der rhodani-Gruppe baet von der Krim (UdSSR) (Ephemeroptera, Baetidae). Reichenbachia 18(1-8-):199-202.
- Zurwerra A., Tomka I. 1986. Drei neue Arten der Gattung Electrogena ZURWERRA et TOMKA, hept 1985, aus Südeuropa (Ephemeroptera, Heptageniidae). Bull. Soc. Frib. Sc. Nat. 75 (1/2), 216-230

Annex II

In the present Annex the summary fact sheets of the autoecological information available for the considered mayfly species are presented. These fact sheets were prepared for 276 mayfly species among a total of 339 present in Europe. The remaining species were not here considered because the amount the information available was considered to be too restricted (e.g. information available only for Ecoregion distribution). In table 1 are listed the species not here considered. The index of summary fact sheets for Ephemeroptera species is presented in table 2.

Table 1. List of species for which a summary fact sheet was not compiled due to a general lack of information (e.g. information available only for Ecoregion distribution).

Family	Genus	Species	Authorship
Ametropodidae	Metreplecton	macronyx	Kluge, 1996
	Acentrella	almohades	Alba-Tercedor & El Alami, 1999
	Acentrella	hyaloptera	(Bogoescu, 1951)
	Baetis	balcanicus	Müller-Liebenau & Soldán, 1981
	Baetis	braaschi	Zimmermann, 1980
	Baetis	feles	Kluge, 1980
	Baetis	kozufensis	Ikonomov, 1962
	Baetis	longinervis	Navás, 1917
	Baetis	pseudorhodani	Müller-Liebenau, 1971
	Baetis	strugensis	(Ikonomov, 1962)
Baetidae	Centroptilum	litura	(Pictet, 1843)
Daeildae	Centroptilum	obtusum	Navás, 1915
	Centroptilum	pirinense	Ikonomov, 1962
	Cloeon	degrangei	Sowa, 1980
	Cloeon	schoenemundi	Bengtsson, 1936
	Procloeon	fascicaudale	(Sowa, 1985)
	Procloeon	macronyx	(Kluge & Novikova, 1992)
	Procloeon	parapulchrum	(Keffermüller & Sowa, 1975)
	Procloeon	stenopteryx	(Eaton, 1871)
	Procloeon	unguiculatum	(Tshernova, 1941)
	Pseudocentroptiloides	romanica	(Bogoescu, 1949)
Caenidae	Brachycercus	kabyliensis	Soldán, 1986
	Ecdyonurus	diversus	Navás, 1923
	Ecdyonurus	excelsus	Navás, 1927
	Electrogena	antalyensis	(Kazanci & Braasch, 1986)
	Electrogena	trimaculata	(Ikonomov, 1963)
	Heptagenia	samochai	(Demoulin, 1973)
	Rhithrogena	buresi	Sowa, 1973
	Rhithrogena	catalaunica	Navás, 1916
Heptageniidae	Rhithrogena	daterrai	Sowa, 1984
Tieptageimaac	Rhithrogena	hercegovina	Tanasijevic, 1984
	Rhithrogena	jacobi	Braasch & Soldán, 1988
	Rhithrogena	jahorinensis	Tanasijevic, 1985
	Rhithrogena	marinkovici	Tanasijevic, 1985
	Rhithrogena	monserrati	Alba-Tercedor & Sowa, 1986
	Rhithrogena	neretvana	Tanasijevic, 1984
	Rhithrogena	oscensis	Navás, 1927
	Rhithrogena	thomasi	Alba-Tercedor & Sowa, 1986
			to be contin

to be continued

continues

Family	Genus	Species	Authorship
	Calliarcys	humilis	Eaton, 1881
	Choroterpes	prati	Gaino & Puig, 1996
	Choroterpes	salamannai	Gaino & Puig, 1996
	Habroleptoides	annae	Sartori, 1986
	Habroleptoides	carpatica	Bogoescu & Crasnaru, 1930
Leptophlebiidae	Habroleptoides	nervulosa	(Eaton, 1884)
	Habroleptoides	thomasi	Sartori, 1986
	Habrophlebia	antoninoi	Alba-Tercedor, 2000
	Paraleptophlebia	falcula	Traver, 1934
	Paraleptophlebia	longilobata	(Tshernova, 1928)
	Thraulus	thraker	Jacob, 1988
			González Del Tánago & García De Jalón,
	Oligoneuriella	duerensis	1983
Oligoneuriidae	Oligoneuriella	marichuae	Alba-Tercedor, 1983
	Oligoneuriella	polonica	Möl, 1984
	Oligoneuriopsis	skhounate	Dakki & Giudicelli, 1980
Palingeniidae	Palingenia	sublongicauda	Tshernova, 1949
Polymitarcyidae	Ephoron	nigridorsum	(Tshernova, 1934)
	Siphlonurus	abraxas	Jacob, 1986
	Siphlonurus	chankae	Tshernova, 1952
	Siphlonurus	croaticus	Ulmer, 1920
Siphlonuridae	Siphlonurus	hispanicus	Demoulin, 1958
	Siphlonurus	irenae	Alba-Tercedor, 1990
	Siphlonurus	lusoensis	Puthz, 1977
	Siphlonurus	montanus	Studemann, 1992

Table 2.Index of summary fact sheets present in the annex.

Species	Page	Species	Page	Species	Page
Ameletus inopinatus	58	Cloeon simile	176	Ecdyonurus cortensis	294
Metreletus balcanicus	60	Procloeon bifidum	178	Ecdyonurus dispar	296
Ametropus fragilis	62	Procloeon calabrum	180	Ecdyonurus epeorides	298
Metretopus alter	64	Procloeon concinnum	182	Ecdyonurus flavimanus	300
Metretopus borealis	66	Procloeon lacustre	184	Ecdyonurus forcipula	302
Arthroplea congener	68	Procloeon nemorale	186	Ecdyonurus graecus	304
Acentrella inexpectata	70	Procloeon pennulatum	188	Ecdyonurus helveticus	306
Acentrella lapponica	72	Procloeon pulchrum	190	Ecdyonurus insignis	308
Acentrella sinaica	74	Pseudocentroptiloides nana	192	Ecdyonurus krueperi	310
Baetis albinatii	76	Behningia ulmeri	194	Ecdyonurus macani	312
Baetis alpinus	78	Brachycercus europaeus	196	Ecdyonurus moreae	314
Baetis atrebatinus	80	Brachycercus harrisella	198	Ecdyonurus parahelveticus	316
Baetis beskidensis	82	Caenis belfiorei	200	Ecdyonurus picteti	318
Baetis bicaudatus	84	Caenis beskidensis	202	Ecdyonurus puma	320
Baetis buceratus	86	Caenis horaria	204	Ecdyonurus ruffoi	322
Baetis bundyae	88	Caenis lactea	206	Ecdyonurus russevi	324
Baetis calcaratus	90	Caenis luctuosa	208	Ecdyonurus siveci	326
Baetis canariensis	92	Caenis macrura	210	Ecdyonurus starmachi	328
Baetis catharus	94	Caenis martae	212	Ecdyonurus subalpinus	330
Baetis cyrneus	96	Caenis martae Caenis nachoi	214	Ecdyonurus submontanus	332
Baetis digitatus	98	Caenis nacnoi Caenis pseudorivulorum	216	Ecdyonurus torrentis	334
Baetis estrelensis	100	Caenis pusilla	218	Ecdyonurus venosus	336
Baetis fuscatus	100	Caenis pustita Caenis rivulorum	220	Ecdyonurus vitoshensis	338
Baetis gadeai	102	Caenis rivutorum Caenis robusta	222	Ecdyonurus zelleri	340
O .	104		224	•	340
Baetis gracilis		Caenis strugaensis		Electrogena affinis	
Baetis ingridae	108	Caenis valentinae	226	Electrogena aspoecki	344
Baetis liebenauae	110	Cercobrachys minutus	228	Electrogena braaschi	346
Baetis lutheri	112	Drunella paradinasi	230	Electrogena calabra	348
Baetis macani	114	Ephemerella aroni	232	Electrogena fallax	350
Baetis maurus	116	Ephemerella mucronata	234	Electrogena grandiae	352
Baetis melanonyx	118	Ephemerella notata	236	Electrogena gridellii	354
Baetis meridionalis	120	Eurylophella iberica	238	Electrogena hellenica	356
Baetis muticus	122	Eurylophella karelica	240	Electrogena hyblaea	358
Baetis navasi	124	Serratella albai	242	Electrogena lateralis	360
Baetis neglectus	126	Serratella hispanica	244	Electrogena lunaris	362
Baetis nexus	128	Serratella ignita	246	Electrogena macedonica	364
Baetis nicolae	130	Serratella maculocaudata	248	Electrogena malickyi	366
Baetis niger	132	Serratella mesoleuca	250	Electrogena ozrensis	368
Baetis nigrescens	134	Serratella spinosa	252	Electrogena quadrilineata	370
Baetis nubecularis	136	Torleya major	254	Electrogena samalorum	372
Baetis pasquetorum	138	Ephemera danica	256	Electrogena ujhelyii	374
Baetis pavidus	140	Ephemera glaucops	258	Electrogena vipavensis	376
Baetis punicus	142	Ephemera hellenica	260	Electrogena zebrata	378
Baetis rhodani	144	Ephemera lineata	262	Epeorus alpicola	380
Baetis scambus	146	Ephemera parnassiana	264	Epeorus assimilis	382
Baetis subalpinus	148	Ephemera vulgata	266	Epeorus sylvicola	384
Baetis tracheatus	150	Ephemera zettana	268	Epeorus torrentium	386
Baetis tricolor	152	Afghanurus joernensis	270	Epeorus yougoslavicus	388
Baetis vardarensis	154	Cinygma lyriformis	272	Epeorus znojkoi	390
Baetis vernus	156	Ecdyonurus alpinus	274	Heptagenia coerulans	392
Baetopus tenellus	158	Ecdyonurus androsianus	276	Heptagenia dalecarlica	394
Baetopus wartensis	160	Ecdyonurus angelieri	278	Heptagenia flava	396
Centroptilum luteolum	162	Ecdyonurus aurantiacus	280	Heptagenia longicauda	398
Cloeon cognatum	164	Ecdyonurus austriacus	282	Heptagenia sulphurea	400
Cloeon dipterum	166	Ecdyonurus belfiorei	284	Kageronia fuscogrisea	402
Cloeon inscriptum	168	Ecdyonurus bellieri	286	Kageronia orbiticola	404
Cloeon languidum	170	Ecdyonurus carpathicus	288	Rhithrogena adrianae	406
Cloeon petropolitanum	170	Ecdyonurus codinai	290	Rhithrogena allobrogica	408
		•		-	
Cloeon praetextum	174	Ecdyonurus corsicus	292	Rhithrogena alpestris	410

to be continued

Species	Page	Species	Page
Rhithrogena austriaca	412	Euthraulus assimilis	530
Rhithrogena beskidensis	414	Euthraulus balcanicus	532
Rhithrogena braaschi	416	Habroleptoides auberti	534
Rhithrogena bulgarica	418	Habroleptoides berthelemyi	536
Rhithrogena carpatoalpina	420	Habroleptoides budtzi	538
Rhithrogena castellana	422	Habroleptoides confusa	540
Rhithrogena cincta	424	Habroleptoides filipovicae	542
Rhithrogena circumtatrica	426	Habroleptoides malickyi	544
Rhithrogena colmarsensis	428	Habroleptoides modesta	546
Rhithrogena corcontica	430	Habroleptoides pauliana	548
Rhithrogena degrangei	432	Habroleptoides umbratilis	550
Rhithrogena delphinensis	434	Habrophlebia consiglioi	552
Rhithrogena diaphana	436	Habrophlebia eldae	554
Rhithrogena diensis	438	Habrophlebia fusca	556
Rhithrogena dorieri	440	Habrophlebia lauta	558
Rhithrogena eatoni	442	Leptophlebia marginata	560
Rhithrogena endenensis	444	Leptophlebia vespertina	562
Rhithrogena fiorii	446	Paraleptophlebia cincta	564
Rhithrogena fonticola	448	Paraleptophlebia lacustris	566
Rhithrogena germanica	450	Paraleptophlebia ruffoi	568
Rhithrogena goeldlini	452	Paraleptophlebia strandii	570
Rhithrogena gorganica	454	Paraleptophlebia submarginata	572
Rhithrogena gorrizi	456	Paraleptophlebia werneri	574
Rhithrogena gratianopolitana	458	Thraulus bellus	576
Rhithrogena grischuna	460	Neoephemera maxima	578
Rhithrogena hercynia	462	Oligoneuriella keffermuellerae	580
Rhithrogena hybrida	464	Oligoneuriella pallida	582
Rhithrogena insularis	466	Oligoneuriella rhenana	584
Rhithrogena iridina	468	Oligoneurisca borysthenica	586
Rhithrogena kimminsi	470	Palingenia fuliginosa	588
Rhithrogena landai	472	Palingenia longicauda	590 500
Rhithrogena loyolaea	474 476	Ephoron virgo	592 504
Rhithrogena marcosi	476 478	Programintous and annual	594 596
Rhithrogena mariaedominicae Rhithrogena nivata	480	Prosopistoma pennigerum Parameletus chelifer	598
Rhithrogena nuragica	482	Parametetus chettjer Parametetus minor	600
Rhithrogena picteti	484	Siphlonurus aestivalis	602
Rhithrogena podhalensis	486	Siphlonurus alternatus	604
Rhithrogena puthzi	488	Siphlonurus armatus	606
Rhithrogena puytoraci	490	Siphlonurus croaticus	608
Rhithrogena reatina	492	Siphlonurus lacustris	610
Rhithrogena rolandi	494	Sipitional as tacusi is	010
Rhithrogena savoiensis	496		
Rhithrogena semicolorata	498		
Rhithrogena sibillina	500		
Rhithrogena siciliana	502		
Rhithrogena soteria	504		
Rhithrogena sowai	506		
Rhithrogena strenua	508		
Rhithrogena taurisca	510		
Rhithrogena thracica	512		
Rhithrogena vaillanti	514		
Rhithrogena wolosatkae	516		
Rhithrogena zelinkai	518		
Rhithrogena zernyi	520		
Isonychia ignota	522		
Choroterpes borbonica	524		
Choroterpes lesbosensis	526		
Choroterpes picteti	528		

Family Name: Ameletidae

Species Name: Ameletus inopinatus Eaton, 1887

Number of papers containing useful information: 53

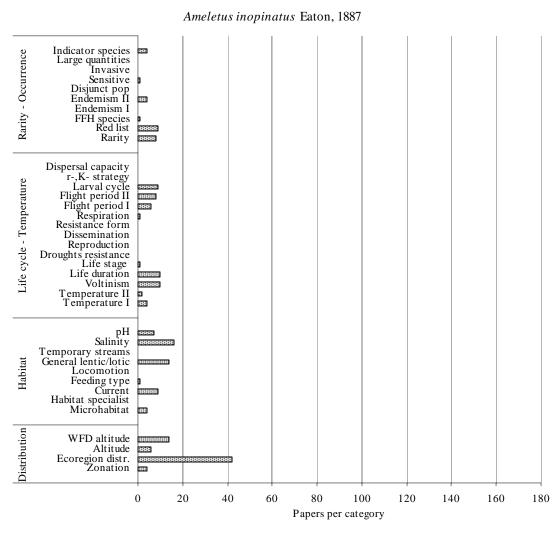


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: information were obtained for all categories, excluding Large quantities, Invasive and Disjunct population.

Life cycles – Temperature: a quite large amount of data was available for the group, i.e. for the features Larval cycle, Flight period, Life duration, Voltinism and Temperature preference.

Habitat: information were present for all autoecological traits, with the exception of Habitat specialist, Locomotion and Temporary streams.

Distribution: information were available for all features.

Autoecological categories for which a large amount of information was available are related to Voltinism, Life duration, Microhabitat and Currents, Altitudinal distribution, Rarity and Red list. As expected (see also Paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

Agreement on autoecologic			al features	
	do authors	is disagreement due to	is disagreement due to	
	generally agree?	differences among	differences among authors'	
Autoecological groups		geographical areas?	opinions?	
Rarity - Occurrence	Y	-	-	
Life cycle - Temperature	Y if no	-	-	
Habitat	Y	-	-	
Distribution	Y	-		

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Family Name: Ameletidae

Species Name: Metreletus balcanicus (Ulmer, 1920)

Number of papers containing useful information: 19

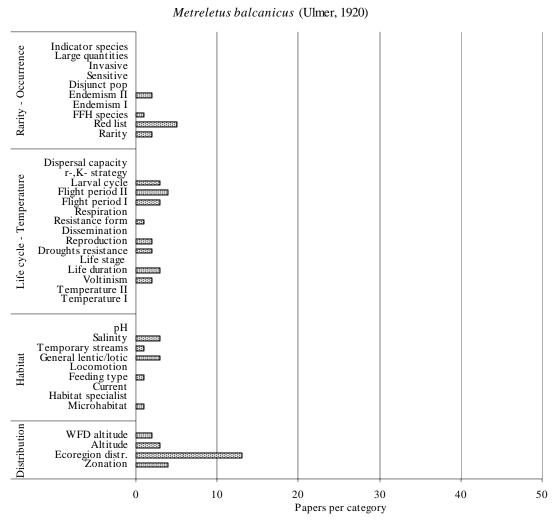


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see Paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: Rarity, Red list and Endemism were the only categories for which information were available.

Life cycles – Temperature: data were available for the group, excluding for Life stage and Temperature preference.

Habitat: information were present only for Microhabitat and Temporary streams.

Distribution: information were available for all features.

A large amount of information was available only for Altitudinal distribution, Zonation and Red list.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

Agreement on autoecological features			cal features
	do authors generally agree?	is disagreement due to differences among	is disagreement due to differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information. General agreement is thus recorded for all autoecological groups.

Family Name: Ametropodidae

Species Name: Ametropus fragilis Albarda, 1878

Number of papers containing useful information: 10

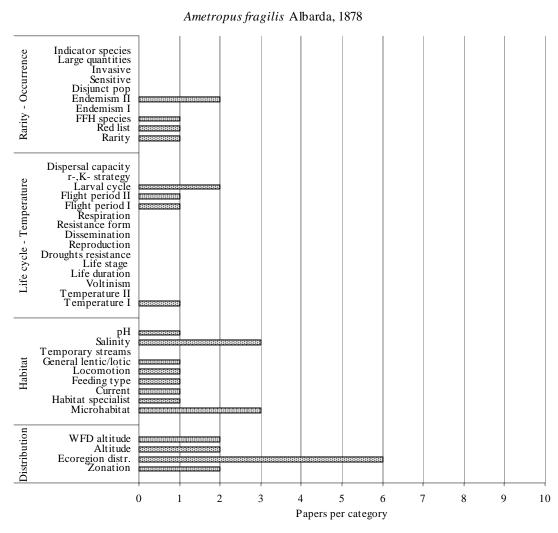


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: Rarity, Red list and Endemism were the only categories for which information were available.

Life cycles – Temperature: a general lack of information was observed for this group, excluding Larval cycle, Flight period and Temperature preference.

Habitat: information were present for all autoecological traits, with the exception of Temporary streams.

Distribution: information were available for all features.

The information available was restricted for all autoecological categories.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

Agreement on autoecological featu			cal features
	do authors generally agree?	is disagreement due to differences among geographical areas?	is disagreement due to differences among authors' opinions?
Autoecological groups		geograpinear areas:	opinions:
Rarity - Occurrence	Y	=	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information. General agreement is thus recorded for all autoecological groups.

Family Name: Ametropodidae

Species Name: Metretopus alter Bengtsson, 1930

Number of papers containing useful information: 1

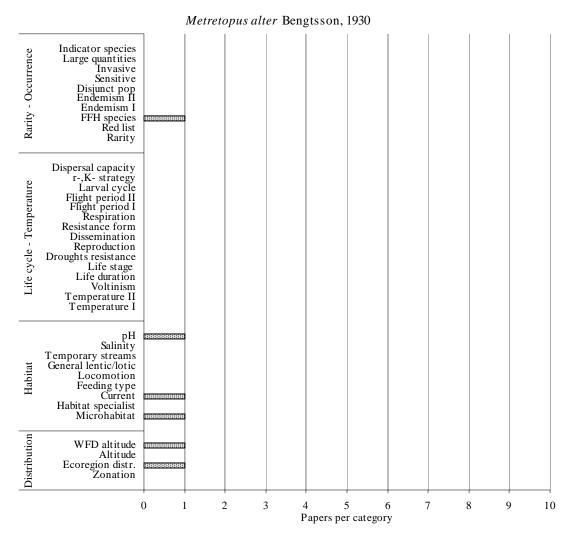


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: no information were available.

Life cycles – Temperature: no information were available.

Habitat: information were available only for pH, Microhabitat and Currents.

Distribution: information were available only for WFD altitude.

The information available was extremely restricted for all autoecological categories.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

Autoecological groups	do authors generally agree?	Agreement on autoecologic is disagreement due to differences among geographical areas?	is disagreement due to differences among authors' opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, as only one paper contained information on this species.

Family Name: Ametropodidae

Species Name: Metretopus borealis (Eaton, 1871)

Number of papers containing useful information: 3

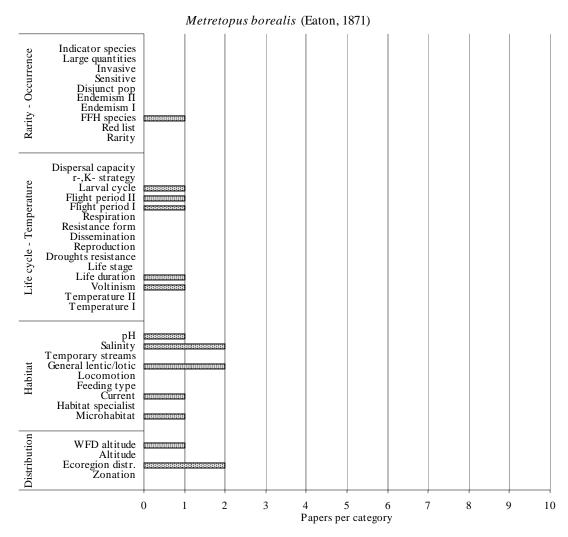


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: no information were available.

Life cycles – Temperature: information were available only for Voltinism, Life duration, Flight period and Larval cycle.

Habitat: information were available only for pH, Microhabitat and Currents.

Distribution: information were available only for WFD altitude.

The information available was restricted for all autoecological categories.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

Autoecological groups	do authors generally agree?	Agreement on autoecologi is disagreement due to differences among geographical areas?	ical features is disagreement due to differences among authors' opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information. General agreement is thus recorded for all autoecological groups.

Family Name: Arthropleidae

Species Name: Arthroplea congener Bengtsson, 1908

Number of papers containing useful information: 18

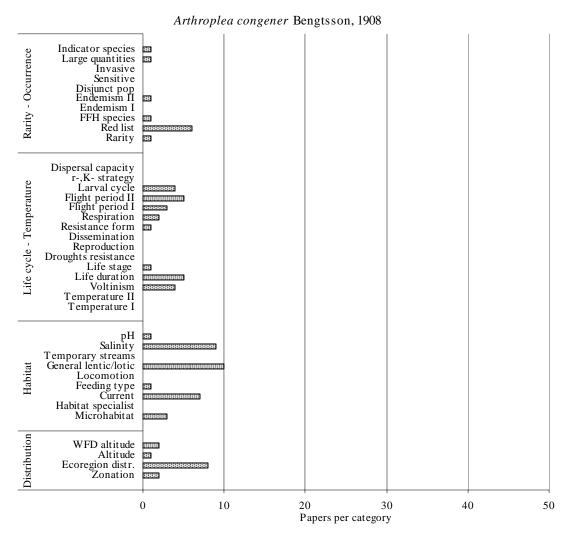


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: information were obtained for all categories, excluding Invasive, Sensitive and Disjunct population.

Life cycles – Temperature: data were available for the categories of the group, excluding Droughts resistance and Temperature preference.

Habitat: information were present for all autoecological traits, with the exception of Habitat specialist, Locomotion and Temporary streams.

Distribution: information were available for all features.

Autoecological categories for which a large amount of information was available are related to Currents, Flight period, Larval Cycle, Voltinism, Life duration and Red list.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

Agreement on autoecolo			ogical features	
	do authors	is disagreement due to	is disagreement due to	
	generally agree?	differences among	differences among authors'	
Autoecological groups		geographical areas?	opinions?	
Rarity - Occurrence	Y	-	-	
Life cycle - Temperature	Y if no	-	-	
Habitat	Y	=	-	
Distribution	Y	=		

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Family Name: Baetidae

Species Name: Acentrella inexpectata (Tshernova, 1928)

Number of papers containing useful information: 2

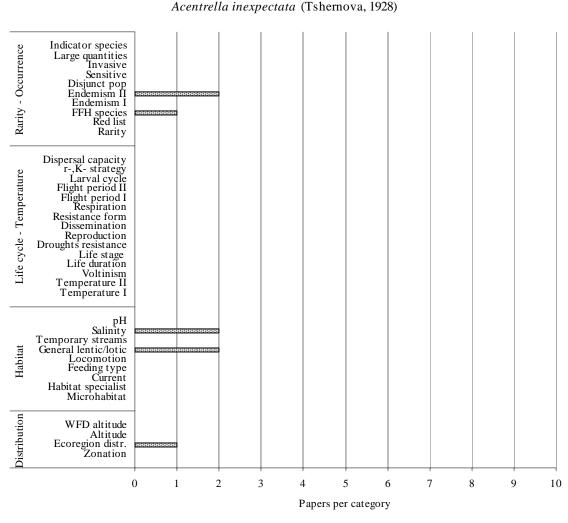


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: information were available for Endemism.

Life cycles – Temperature: no information were available.

Habitat: no information were available. **Distribution**: no information were available.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	features is disagreement due to differences among authors' opinions?	
Autoecological groups			areas?	admors opinions.
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		_	

No particular differences arose when summarizing the data, due to the low number of paper containing useful information. General agreement is thus recorded for all autoecological groups.

Family Name: Baetidae

Species Name: Acentrella lapponica Bengtsson, 1912

Number of papers containing useful information: 2

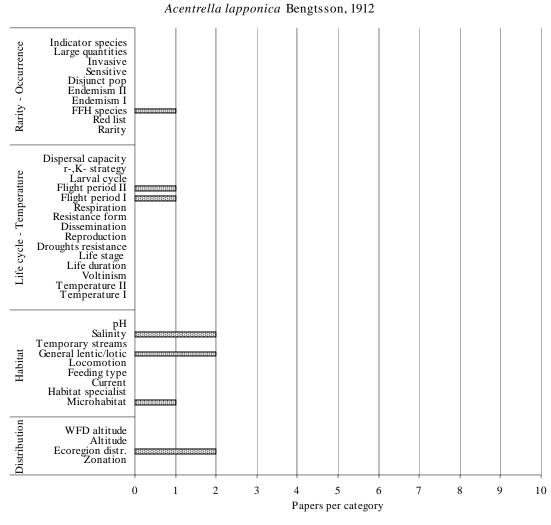


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: information were available only for Endemism.

Life cycles – Temperature: information were available for Flight period.

Habitat: information were available for Microhabitat.

Distribution: no information were available.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features				
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among	
			among geographical	authors' opinions?	
Autoecological groups			areas?		
Rarity - Occurrence	Y		-	-	
Life cycle - Temperature	Y	if no	=	-	
Habitat	Y	11 110	-	-	
Distribution	Y		-	-	

No particular differences arose when summarizing the data, due to the low number of paper containing useful information. General agreement is thus recorded for all autoecological groups.

Species Name: Acentrella sinaica Bogoescu, 1931

Number of papers containing useful information: 23

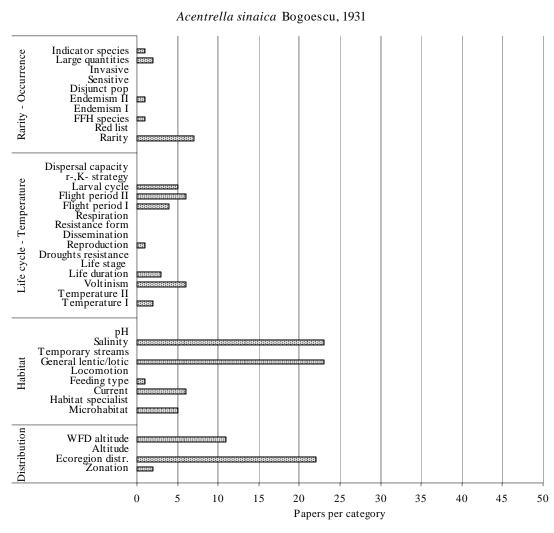


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been for all autoecological groups.

Rarity – **Occurrence**: information were available for Indicator species, Large quantities, Endemism and Rarity.

Life cycles – Temperature: information were available for the features Larval cycle, Flight period, Reproduction, Life duration, Voltinism and Temperature preference.

Habitat: information were available for Current and Microhabitat.

Distribution: information were available for all features, except for Altitude.

Autoecological categories for which quite large amount of information was available are related to Rarity, Flight period, Voltinism, Current and Altitude.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreer do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	1
Rarity - Occurrence	N		N	Y
Life cycle - Temperature	N	if no	N	Y
Habitat	Y	11 110	-	-
Distribution	Y		-	-

When summarizing the information, some differences arose in the reviewed literature. In particular some disagreements have been pointed out for Rarity – Occurrence and Life cycle – Temperature. This was due to small differences recorded among authors' opinion, not related to European zones.

Species Name: Baetis albinatii Sartori & Thomas, 1989

Number of papers containing useful information: 2

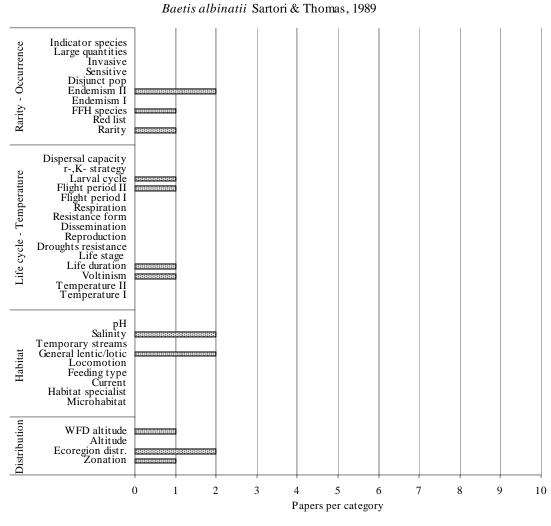


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all autoecological groups, except for Habitat.

Rarity – Occurrence: information were available for Rarity and Endemism.

Life cycles – Temperature: information were available for Life cycle, Flight period, Life duration and Voltinism.

Habitat: no information were available.

Distribution: information were available for WFD Altitude and Zonation.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	do authors generally agree?		ment on autoecological is disagreement due to differences	is disagreement due to differences among
Autoecological groups			among geographical areas?	authors' opinions?
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	

No particular differences arose when summarizing the data, due to the low number of paper containing useful information. General agreement is thus recorded for all autoecological groups.

Species Name: Baetis alpinus (Pictet, 1843)

Number of papers containing useful information: 73

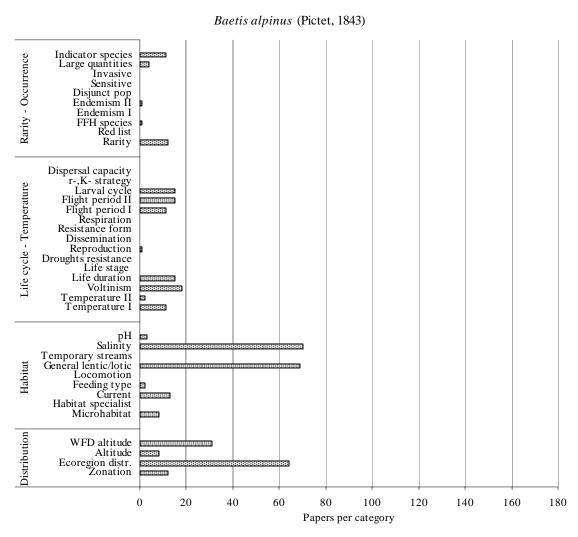


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all autoecological groups.

Rarity – **Occurrence**: information were available for Indicator species, Large quantities, Endemism and Rarity.

Life cycles – Temperature: information were available for the features Larval cycle, Flight period, Life duration, Voltinism and Temperature preference.

Habitat: information were available for all features, except for Temporary streams.

Distribution: information were available for all features.

Autoecological categories for which quite large amount of information was available are related to Rarity, Flight period, Voltinism, Current and Altitude.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features						
	do authors generally agree?	is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?				
Autoecological groups		areas?					
Rarity - Occurrence	N	Y	N				
Life cycle - Temperature	N	Y	N				
Habitat	Y	-	-				
Distribution	Y		-				

When summarizing the information, some differences arose in the reviewed literature. In particular some disagreements have been pointed out for Rarity – Occurrence and Life cycle – Temperature, due to differences observed among European zones.

Species Name: Baetis atrebatinus Eaton, 1870

Number of papers containing useful information: 9

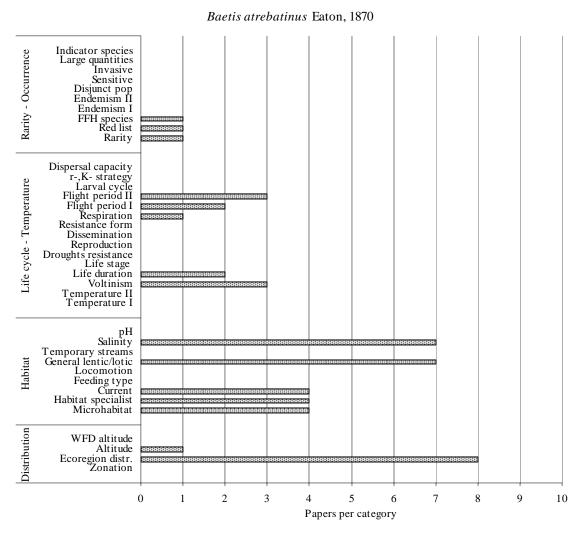


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been collected for all autoecological groups.

Rarity - Occurrence: Red list and Rarity were the categories for which information were available.

Life cycles – Temperature: information were available for Flight period, Respiration, Life duration and Voltinism.

Habitat: information were present for Current, Habitat specialist and Microhabitat.

Distribution: information were available only for Altitude.

Autoecological categories for which quite large amount of information was available are related to Rarity, Flight period, Voltinism, Current and Altitude.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreen do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	features is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	=
Habitat	N	11 110	N	Y
Distribution	Y		-	-

When summarizing the information, some differences arose in the reviewed literature. In particular some disagreements have been pointed out for Habitat. This was due to differences recorded among authors' opinion.

Species Name: Baetis beskidensis Sowa, 1972

Number of papers containing useful information: 4

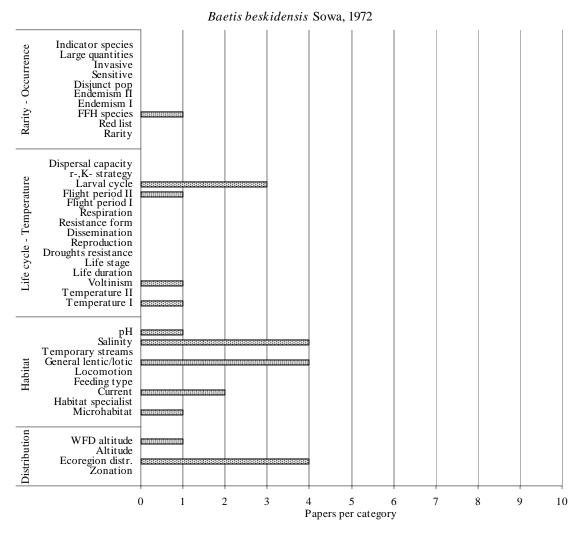


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: no information were available.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Voltinism and Temperature.

Habitat: information were available for pH, Current and Microhabitat.

Distribution: information were available for WFD Altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features				
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among	
			among geographical	authors' opinions?	
Autoecological groups			areas?		
Rarity - Occurrence	Y		-	-	
Life cycle - Temperature	Y	if no	=	-	
Habitat	Y	11 110	-	-	
Distribution	Y		-	-	

No particular differences arose when summarizing the data, due to the low number of paper containing useful information. General agreement is thus recorded for all autoecological groups.

Species Name: Baetis bicaudatus Dodds, 1923

Number of papers containing useful information: 2

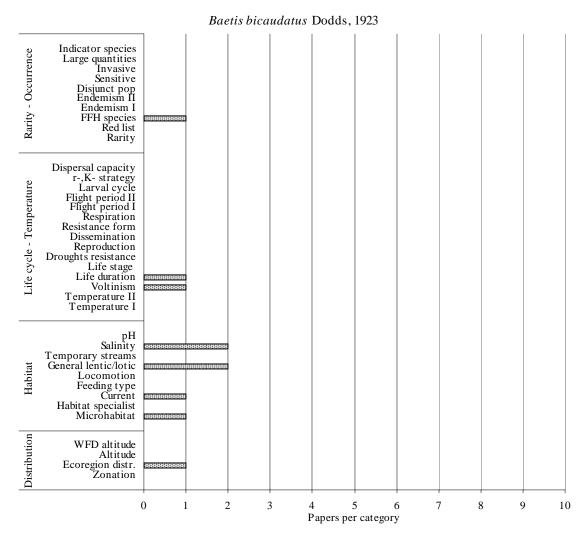


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: no information were available.

Life cycles – Temperature: information were available for Life duration and Voltinism.

Habitat: information were available for Current and Microhabitat.

Distribution: no information were available.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreer do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	uumors opimons.
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data, due to the low number of paper containing useful information. General agreement is thus recorded for all autoecological groups.

Species Name: Baetis buceratus Eaton, 1870

Number of papers containing useful information: 49

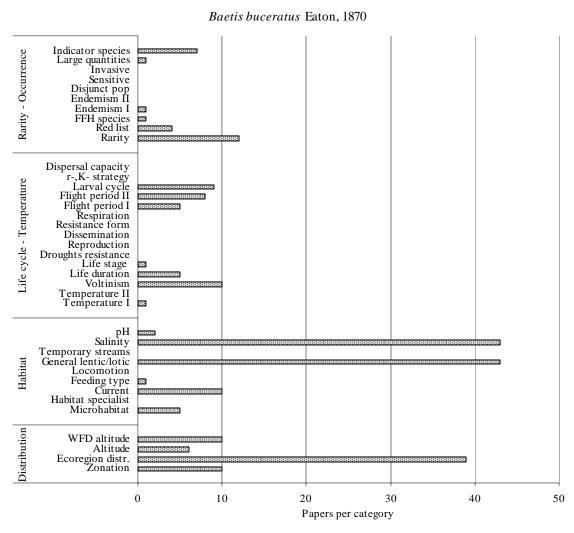


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all autoecological groups.

Rarity – **Occurrence**: Indicator species, Large quantities, Endemism, Red list and Rarity were the categories for which information were available.

Life cycles – Temperature: information available for the categories Larval cycle, Flight period, Life stage, Life duration, Voltinism and Temperature.

Habitat: information were available for all features, except for Temporary streams and Habitat specialist.

Distribution: information were available for all features.

Autoecological categories for which quite large amount of information was available are related to Rarity, Flight period, Voltinism, Current and Altitude.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features				
	do authors generally agree?		is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?	
Autoecological groups			areas?	admors opinions.	
Rarity - Occurrence	Y		-	-	
Life cycle - Temperature	Y	if no	-	-	
Habitat	N	11 110	N	Y	
Distribution	Y		-	-	

When summarizing the information, some differences arose in the reviewed literature. In particular some disagreements have been pointed out for Habitat, due to differences observed among authors' opinion.

Species Name: Baetis bundyae Lehmkhul, 1973

Number of papers containing useful information: 3

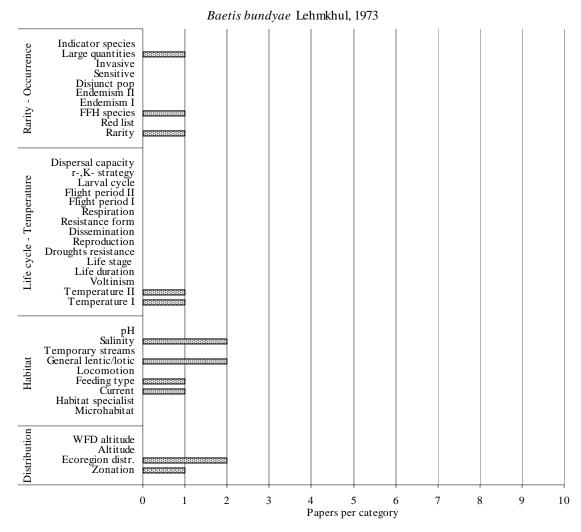


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – Occurrence: information were available for Large quantities and Rarity.

Life cycles – Temperature: information were available for Temperature preference.

Habitat: information were available for Current and Feeding type.

Distribution: information were available for Zonation.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreen do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	admors opinions.
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		_	

No particular differences arose when summarizing the data, due to the low number of paper containing useful information. General agreement is thus recorded for all autoecological groups.

Species Name: Baetis calcaratus Keffermüller, 1972

Number of papers containing useful information: 3

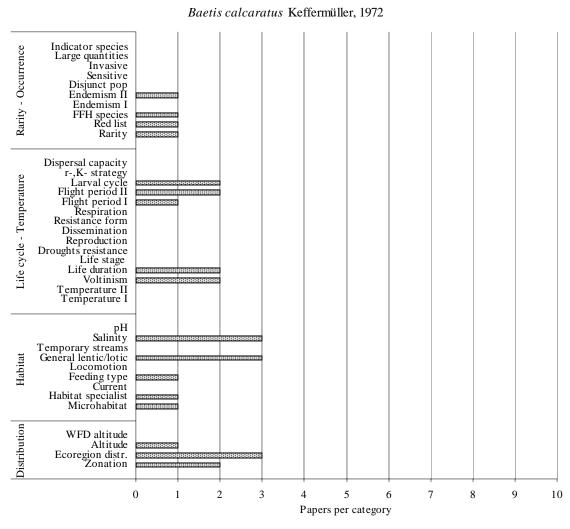


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were available for Endemism, Red list and Rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Life duration and Voltinism.

Habitat: information were available for Habitat specialist and Microhabitat.

Distribution: information were available for Altitude and Zonation.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreen do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data, due to the low number of paper containing useful information. General agreement is thus recorded for all autoecological groups.

Species Name: Baetis canariensis Müller-Liebenau, 1971

Number of papers containing useful information: 1

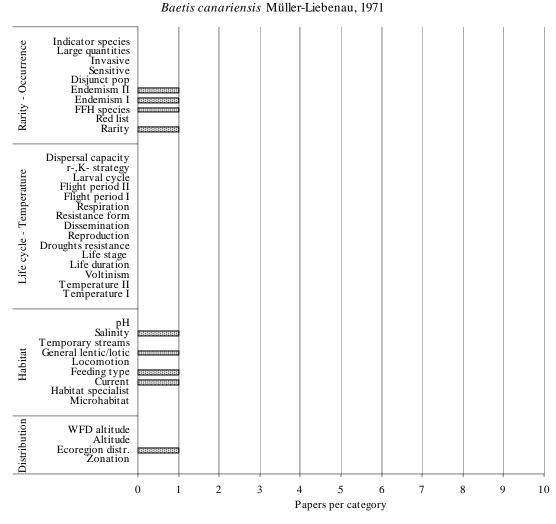


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – **Occurrence**: information were available for Endemism and Rarity.

Life cycles – Temperature: no information available.

Habitat: information were available for Current and Feeding type.

Distribution: no information available.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	do aut	hors	ment on autoecological is disagreement due	is disagreement due
Autoecological groups	generally	agree?	to differences among geographical areas?	to differences among authors' opinions?
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data, as only two papers contained information on this species. General agreement is thus recorded for all autoecological groups.

Species Name: Baetis catharus Thomas, 1986

Number of papers containing useful information: 6

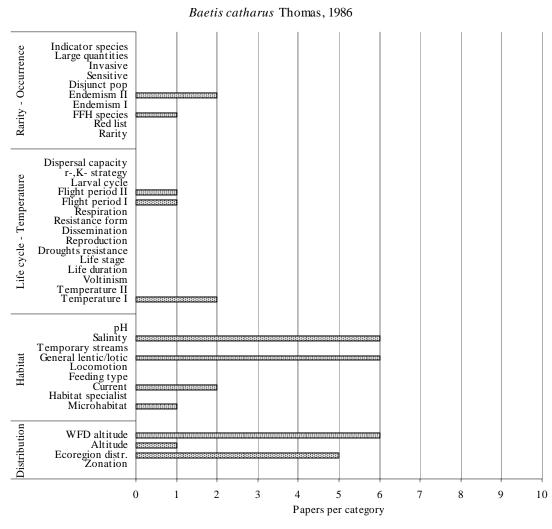


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – Occurrence: information were available for Endemism.

Life cycles – Temperature: information were available for Flight period and Temperature.

Habitat: information were available for Current and Microhabitat.

Distribution: information were available for all categories, except for Zonation.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreen do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	1
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		_	

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Baetis cyrneus Thomas & Gazagnes, 1984

Number of papers containing useful information: 5

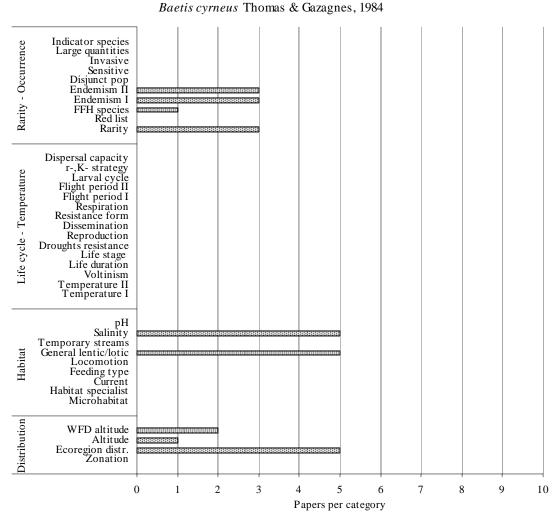


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – **Occurrence**: information were available for Endemism and Rarity.

Life cycles – Temperature: no information available.

Habitat: no information available.

Distribution: information were available for all categories, except for Zonation.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	do aut	hors	ment on autoecological is disagreement due	is disagreement due
Autoecological groups	generally	agree?	to differences among geographical areas?	to differences among authors' opinions?
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data, due to the low number of paper containing useful information. General agreement is thus recorded for all autoecological groups.

Species Name: Baetis digitatus Bengtsson, 1912

Number of papers containing useful information: 29

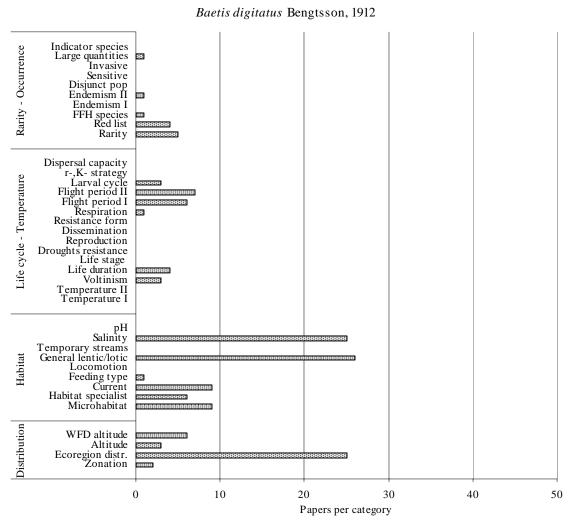


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all autoecological groups.

Rarity – **Occurrence**: Endemism, Large quantities, Red list and Rarity were the categories for which information are available.

Life cycles – Temperature: information available for the categories Larval cycle, Flight period, Respiration, Life duration, Voltinism.

Habitat: information were available for all features, except for Temporary streams and Habitat specialist.

Distribution: information were available for all features.

Autoecological categories for which quite large amount of information was available are related to Rarity, Flight period, Voltinism, Current and Altitude.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features				
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among	
			among geographical	authors' opinions?	
Autoecological groups			areas?		
Rarity - Occurrence	Y		-	-	
Life cycle - Temperature	N	if no	Y	N	
Habitat	N	11 110	Y	N	
Distribution	Y		-	-	

When summarizing the information, some differences arose in the reviewed literature. In particular some disagreements have been pointed out for Life cycle - Temperature and Habitat, due to differences observed among European zones.

Species Name: Baetis estrelensis Müller-Liebenau, 1974

Number of papers containing useful information: 2

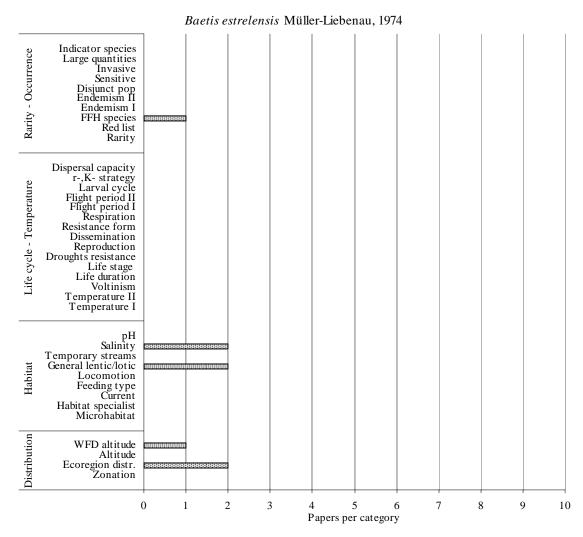


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories. **Rarity – Occurrence**: no information available.

Life cycles – Temperature: no information available.

Habitat: no information available.

Distribution: information were available for WFD Altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreer do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data, as only two papers contained information on this species. General agreement is thus recorded for all autoecological groups.

Species Name: *Baetis fuscatus* (Linnaeus, 1761)

Number of papers containing useful information: 49

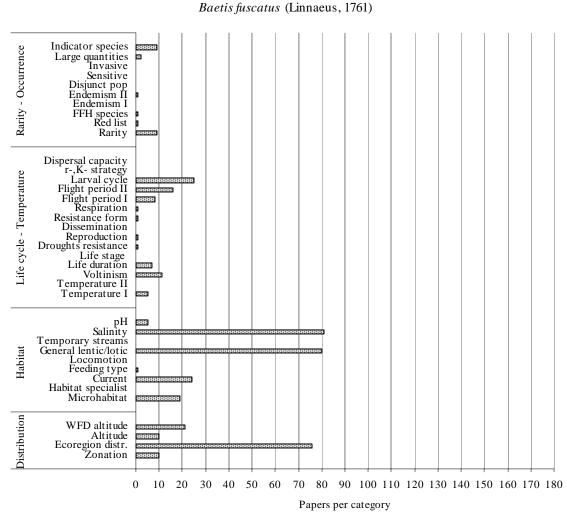


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all autoecological groups.

Rarity – **Occurrence**: Endemism, Indicator species, Large quantities, Red list and Rarity were the categories for which information were available.

Life cycles – Temperature: information available for Larval cycle, Flight period, Respiration, Resistance form, Reproduction, Droughts resistance, Life duration, Voltinism and temperature.

Habitat: information were available for all features, except for Temporary streams, Locomotion and Habitat specialist.

Distribution: information were available for all features.

Autoecological categories for which quite large amount of information was available are related to Rarity, Flight period, Voltinism, Current and Altitude.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features				
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among	
			among geographical	authors' opinions?	
Autoecological groups			areas?		
Rarity - Occurrence	Y		-	-	
Life cycle - Temperature	N	if no	N	Y	
Habitat	N	11 110	N	Y	
Distribution	Y		-	-	

When summarizing the information, some differences arose in the reviewed literature. In particular some disagreements have been pointed out for Life cycle – Temperature and Habitat, due to little differences in authors' opinion.

Species Name: Baetis gadeai Thomas, 1999

Number of papers containing useful information: 4

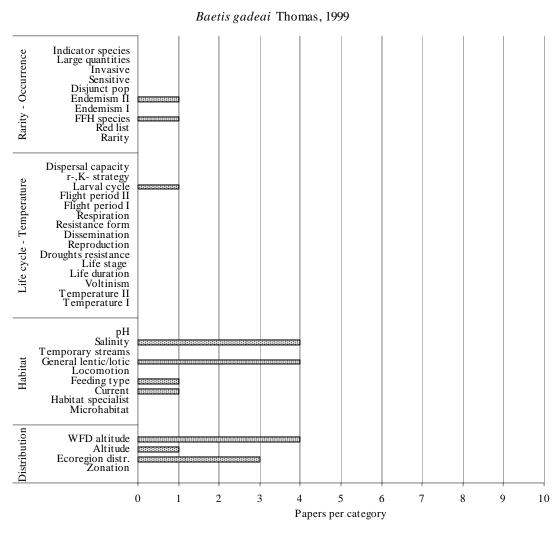


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – Occurrence: information were available for Endemism.

Life cycles – Temperature: information were available for Larval cycle.

Habitat: information were available for Feeding type and Current.

Distribution: information were available for all categories, except for Zonation.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreer do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			arreas?	authors opinions:
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		_	

No particular differences arose when summarizing the data, due to the low number of paper containing useful information. General agreement is thus recorded for all autoecological groups.

Species Name: Baetis gracilis Bogoescu & Tabacaru, 1957

Number of papers containing useful information: 7

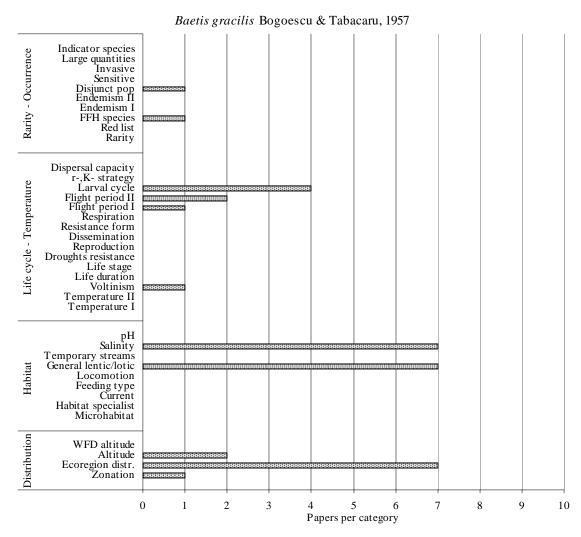


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – Occurrence: information were available for Disjunct population.

Life cycles – **Temperature**: information were available for Larval cycle, Flight period and Voltinism.

Habitat: no information available

Distribution: information were available for all categories, except for WFD Altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features				
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among	
			among geographical	authors' opinions?	
Autoecological groups			areas?		
Rarity - Occurrence	Y		-	-	
Life cycle - Temperature	Y	if no	=	-	
Habitat	Y	11 110	-	-	
Distribution	Y		-	-	

No particular differences arose when summarizing the data, due to the low number of paper containing useful information. General agreement is thus recorded for all autoecological groups.

Species Name: Baetis ingridae Thomas & Soldán, 1987

Number of papers containing useful information: 1

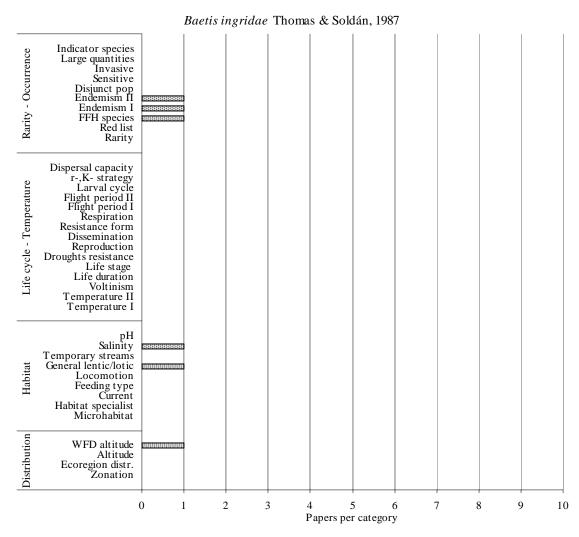


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – Occurrence: information were available for Endemism.

Life cycles – Temperature: no information available.

Habitat: no information available.

Distribution: information were available for WFD Altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	do authors generally agree?		ment on autoecological is disagreement due to differences	is disagreement due to differences among
Autoecological groups			among geographical areas?	authors' opinions?
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	

No particular differences arose when summarizing the data, as only one paper contained useful information on this species. General agreement is thus recorded for all autoecological groups.

Species Name: Baetis liebenauae Keffermüller, 1974

Number of papers containing useful information: 27

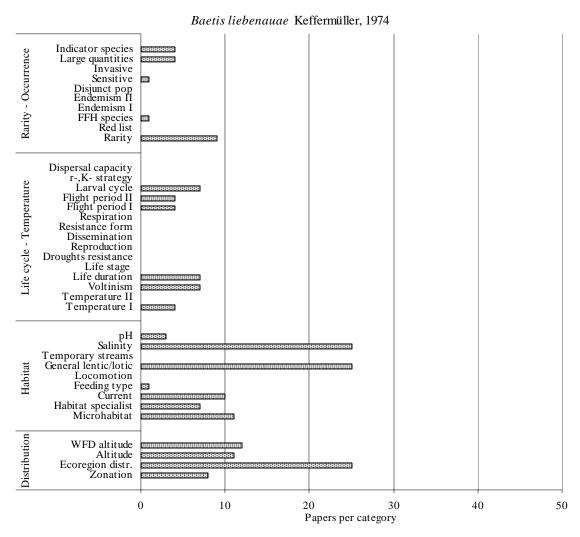


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all autoecological groups.

Rarity – **Occurrence**: information were available for Indicator species, Large quantities, Sensitive taxa and Rarity

Life cycles – Temperature: information available for the categories Larval cycle, Flight period, Life duration, Voltinism and Temperature.

Habitat: information were available for all features, except for Temporary streams and Locomotion.

Distribution: information were available for all features.

Autoecological categories for which quite large amount of information was available are related to Rarity, Flight period, Voltinism, Current and Altitude.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features					
	do authors generally agree?		is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?		
Autoecological groups			areas?			
Rarity - Occurrence	Y		-	-		
Life cycle - Temperature	N	if no	N	Y		
Habitat	Y	11 110	-	-		
Distribution	Y		-	-		

When summarizing the information, some differences arose in the reviewed literature. In particular some disagreements have been pointed out for Life cycle - Temperature, due to slight differences observed among authors' opinion.

Species Name: Baetis lutheri Müller-Liebenau, 1967

Number of papers containing useful information: 36

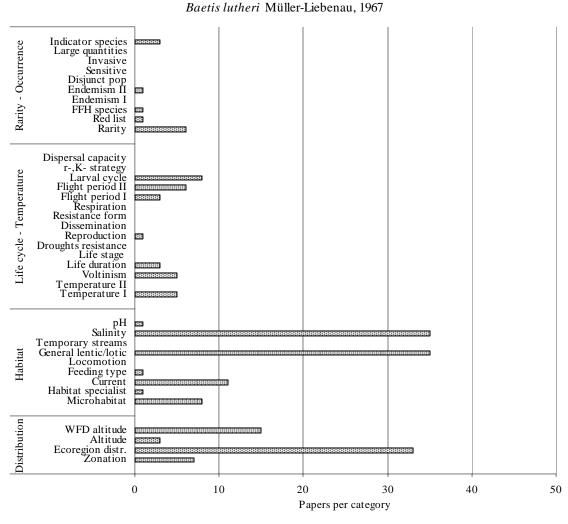


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all autoecological groups.

Rarity – **Occurrence**: Indicator species, Endemism, Red list and Rarity were the categories for which information were available.

Life cycles – Temperature: data were available for the categories Larval cycle, Flight period, Reproduction, Life duration, Voltinism and Temperature preference.

Habitat: information were available for all features, except for Temporary streams and Locomotion.

Distribution: information were available for all features.

Autoecological categories for which quite large amount of information was available are related to Rarity, Flight period, Voltinism, Current and Altitude.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features					
	do authors		is disagreement due	is disagreement due		
	generally agree?		to differences among geographical	to differences among authors' opinions?		
Autoecological groups			areas?	admors opinions.		
Rarity - Occurrence	Y		-	-		
Life cycle - Temperature	Y	if no	-	-		
Habitat	Y	11 110	-	-		
Distribution	Y		-	-		

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Baetis macani Kimmins, 1957

Number of papers containing useful information: 11

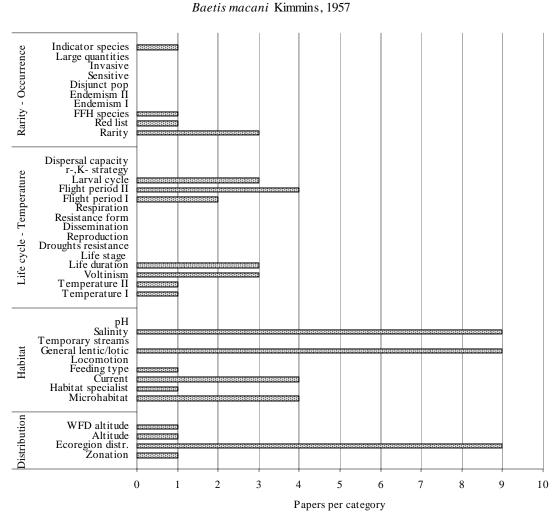


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were available for Indicator species, Red list and Rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Life duration, Voltinism and Temperature.

Habitat: information were available for all categories except for Temporary streams and Locomotion.

Distribution: information were available for all categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreen do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	N	11 110	Y	N
Distribution	Y		-	-

When summarizing the information, some differences arose in the reviewed literature. In particular some disagreements have been pointed out for Habitat and Life cycle - Temperature, due to differences observed among European zones.

Species Name: Baetis maurus Kimmins, 1938

Number of papers containing useful information: 4

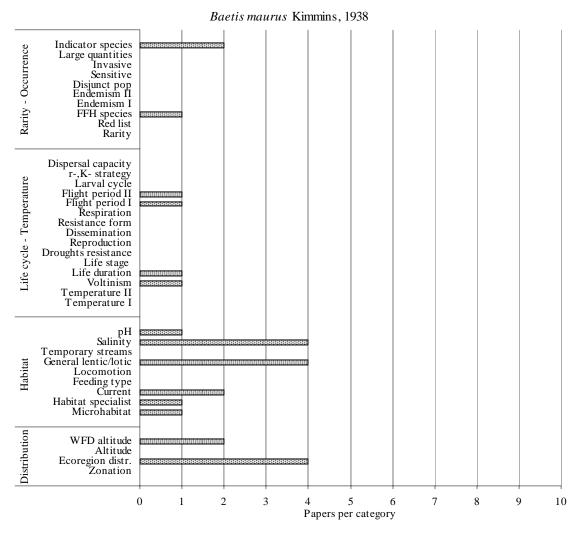


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – Occurrence: information were available for Indicator species only.

Life cycles – Temperature: information were available for Flight period, Life duration and Voltinism.

Habitat: information were available for pH, Current, Habitat specialist and Microhabitat.

Distribution: information were available for WFD altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreen do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	admors opinions.
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		_	

No particular differences arose when summarizing the data, due to the low number of paper containing useful information. General agreement is thus recorded for all autoecological groups.

Species Name: Baetis melanonyx (Pictet, 1843)

Number of papers containing useful information: 45

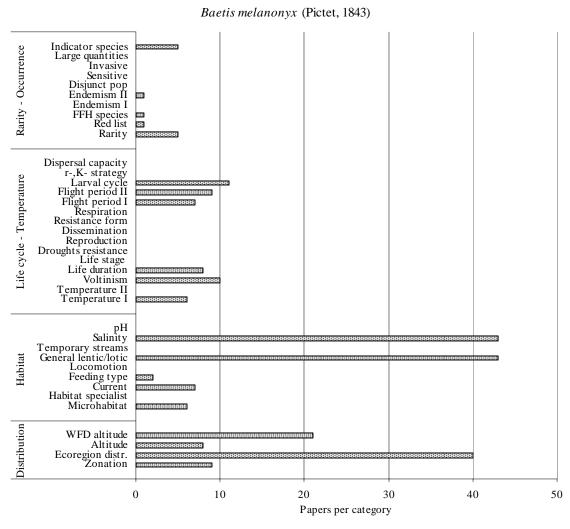


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all autoecological groups.

Rarity – **Occurrence**: Indicator species, Endemism, Red list and Rarity were the categories for which information were available.

Life cycles – Temperature: data were available for the categories Larval cycle, Flight period, Life duration, Voltinism and Temperature preference.

Habitat: information were available for all features, except for Temporary streams and Locomotion.

Distribution: information were available for all features.

Autoecological categories for which quite large amount of information was available are related to Rarity, Flight period, Voltinism, Current and Altitude.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features					
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among		
			among geographical	authors' opinions?		
Autoecological groups			areas?			
Rarity - Occurrence	Y		=	-		
Life cycle - Temperature	Y	if no	-	-		
Habitat	Y	11 110	-	-		
Distribution	Y		-	-		

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Baetis meridionalis Ikonomov, 1954

Number of papers containing useful information: 2

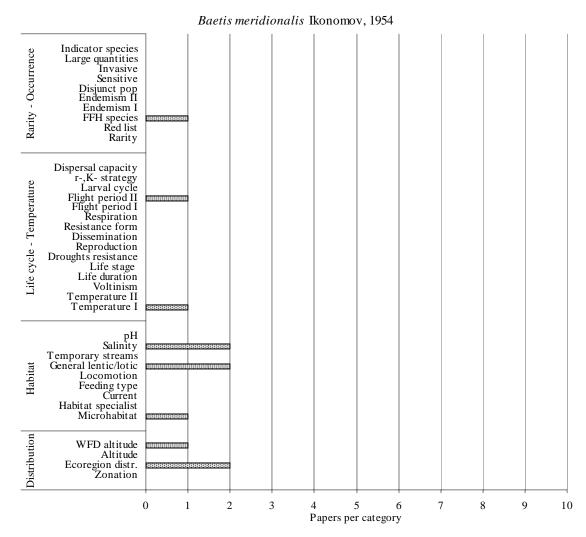


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: No information were available.

Life cycles – Temperature: information were available for Flight period and Temperature.

Habitat: information were available for Microhabitat.

Distribution: information were available for WFD altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreen do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			arreas?	authors opinions:
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		_	

No particular differences arose when summarizing the data, due to the low number of paper containing useful information. General agreement is thus recorded for all autoecological groups.

Species Name: *Baetis muticus* (Linnaeus, 1758)

Number of papers containing useful information: 101

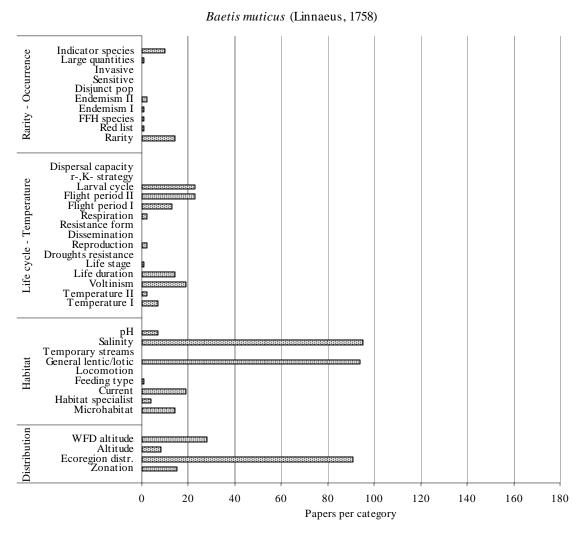


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all autoecological groups.

Rarity – **Occurrence**: Indicator species, Large quantities, Endemism, Red list and Rarity were the categories for which information were available.

Life cycles – Temperature: data were available for the categories Larval cycle, Flight period, Respiration, Reproduction, Life stage, Life duration, Voltinism and Temperature preference.

Habitat: information were available for all features, except for Temporary streams and Locomotion.

Distribution: information were available for all features.

Autoecological categories for which quite large amount of information was available are related to Rarity, Flight period, Voltinism, Current and Altitude.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features					
	do authors generally agree?		is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?		
Autoecological groups			areas?	authors opinions:		
Rarity - Occurrence	Y		-	-		
Life cycle - Temperature	N	if no	N	Y		
Habitat	N	11 110	Y	N		
Distribution	Y		-	-		

When summarizing the information, some differences arose in the reviewed literature. In particular some disagreements have been pointed out for Habitat, due to differences observed among European zones and for Life cycle – Temperature due to differences in authors' opinion.

Species Name: Baetis navasi Müller-Liebenau, 1974

Number of papers containing useful information: 2

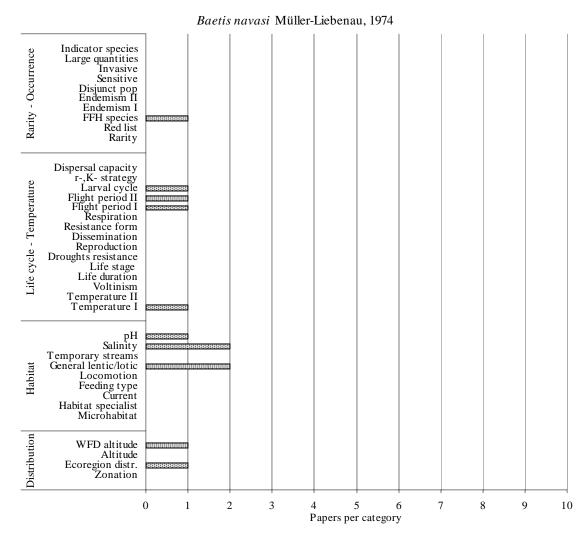


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: No information were available.

Life cycles – Temperature: information were available for Larval cycle, Flight period and Temperature.

Habitat: information were available for pH preference.

Distribution: information were available for WFD altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	do aut	hors	ment on autoecological is disagreement due	is disagreement due
Autoecological groups	generally	agree?	to differences among geographical areas?	to differences among authors' opinions?
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data, due to the low number of paper containing useful information. General agreement is thus recorded for all autoecological groups.

Species Name: Baetis neglectus Navás, 1913

Number of papers containing useful information: 2

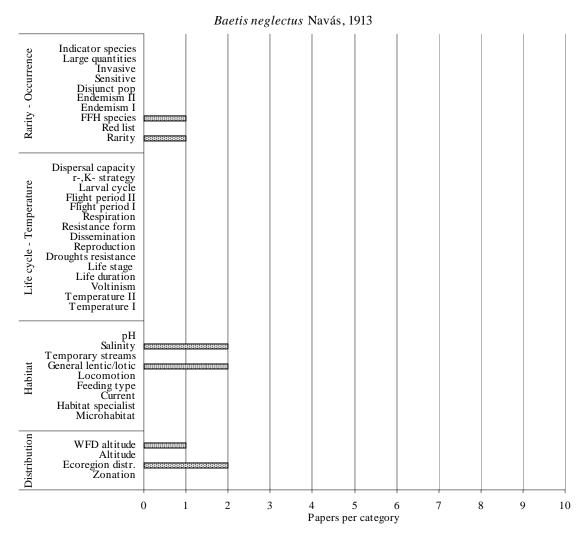


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: Information were available for Rarity.

Life cycles – Temperature: no information available.

Habitat: no information available.

Distribution: information were available for WFD altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	do aut	hors	ment on autoecological is disagreement due	is disagreement due
Autoecological groups	generally	agree?	to differences among geographical areas?	to differences among authors' opinions?
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data, due to the low number of paper containing useful information. General agreement is thus recorded for all autoecological groups.

Species Name: Baetis nexus Navás, 1918

Number of papers containing useful information: 14

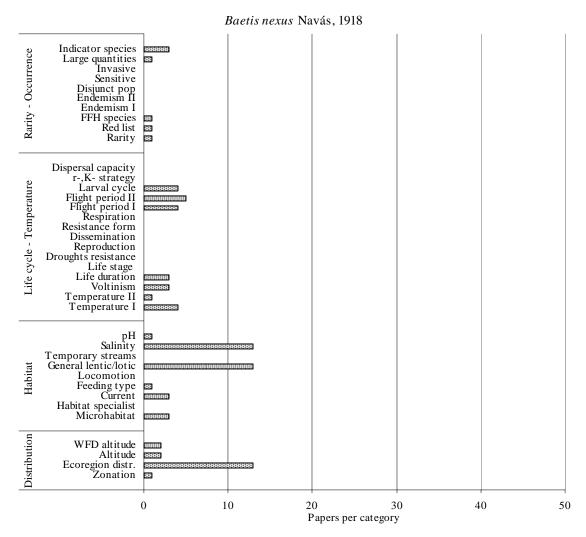


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: Information were available for Indicator species, Large quantity, Red list and Rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Life duration, Voltinism and Temperature.

Habitat: information were available for pH, Current and Microhabitat.

Distribution: information were available for all categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features					
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among		
			among geographical	authors' opinions?		
Autoecological groups			areas?			
Rarity - Occurrence	Y		-	-		
Life cycle - Temperature	Y	if no	=	-		
Habitat	Y	11 110	-	-		
Distribution	Y		-	-		

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Baetis nicolae Thomas, 1983

Number of papers containing useful information: 2

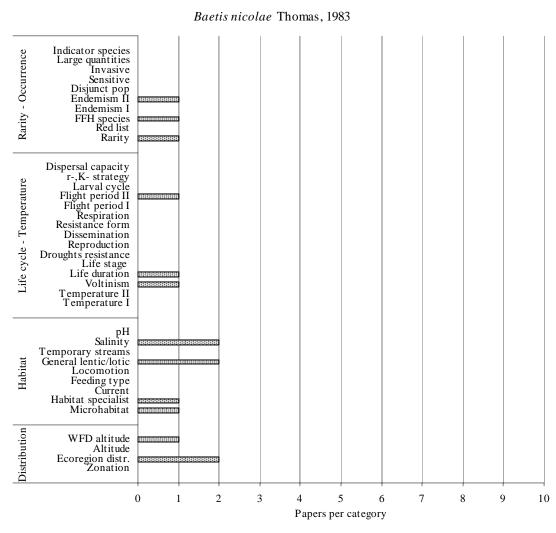


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – Occurrence: Information were available for Endemism and Rarity.

Life cycles – **Temperature**: information were available for Flight period, Life duration and Voltinism.

Habitat: information were available for Habitat specialist and Microhabitat.

Distribution: information were available for WFD altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreen do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	admors opinions.
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		_	

No particular differences arose when summarizing the data, due to the low number of paper containing useful information. General agreement is thus recorded for all autoecological groups.

Species Name: *Baetis niger* (Linnaeus, 1761)

Number of papers containing useful information: 50

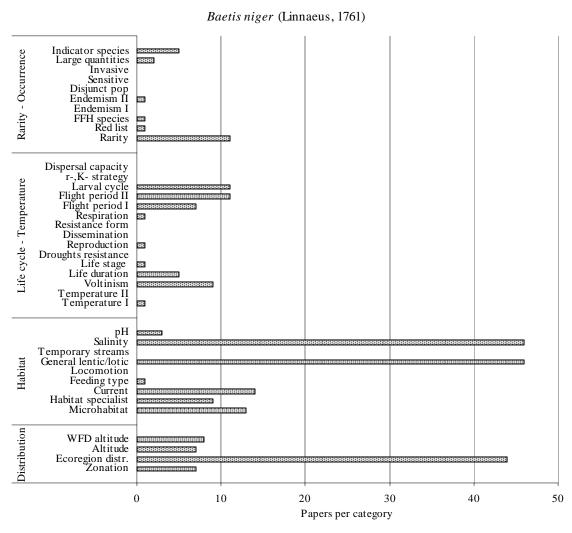


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: Information were available for Indicator species, Large quantity, Endemism, Red list and Rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Respiration, Reproduction, Life stage, Life duration, Voltinism and Temperature.

Habitat: information were available for pH, Current, Habitat specialist and Microhabitat.

Distribution: information were available for all categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreer do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	admors opinions.
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		_	

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Baetis nigrescens Navás, 1932

Number of papers containing useful information: 1

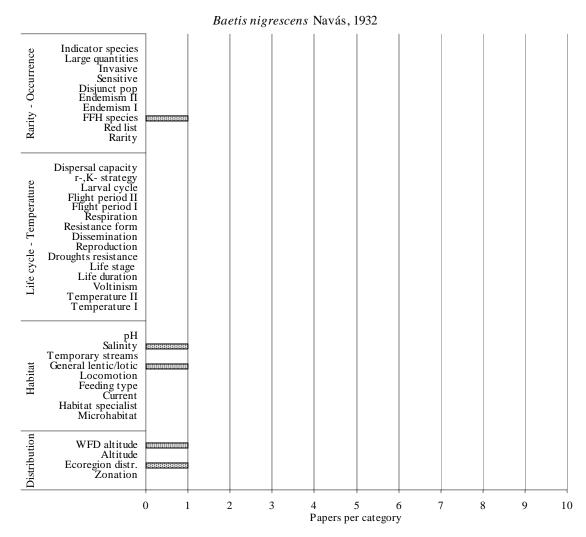


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: no information available.

Life cycles – Temperature: no information available.

Habitat: no information available.

Distribution: information were available for WFD altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features			
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among
			among geographical	authors' opinions?
Autoecological groups			areas?	
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	=	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data, since only one paper containing useful information were available. General agreement is thus recorded for all autoecological groups.

Species Name: Baetis nubecularis Eaton, 1898

Number of papers containing useful information: 3

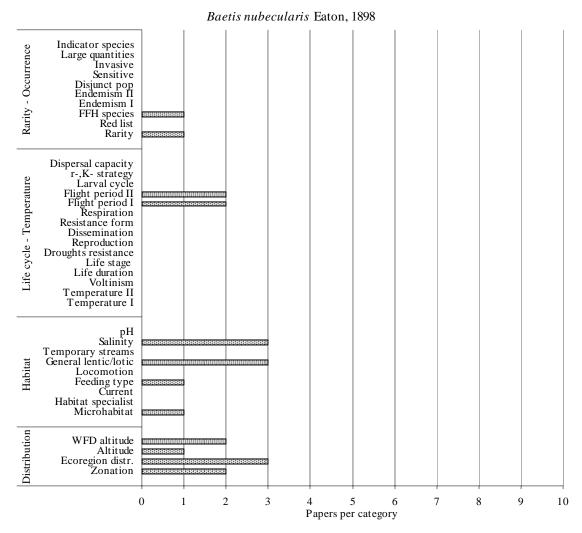


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – Occurrence: Information were available for Rarity.

Life cycles – Temperature: information were available for Flight period. **Habitat**: information were available for Feeding type and Microhabitat.

Distribution: information were available for all categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	do authors		ment on autoecological is disagreement due	is disagreement due
Autoecological groups	generally	agree?	to differences among geographical areas?	to differences among authors' opinions?
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data, due to the low number of paper containing useful information. General agreement is thus recorded for all autoecological groups.

Species Name: Baetis pasquetorum Righetti & Thomas, 2002

Number of papers containing useful information: 1

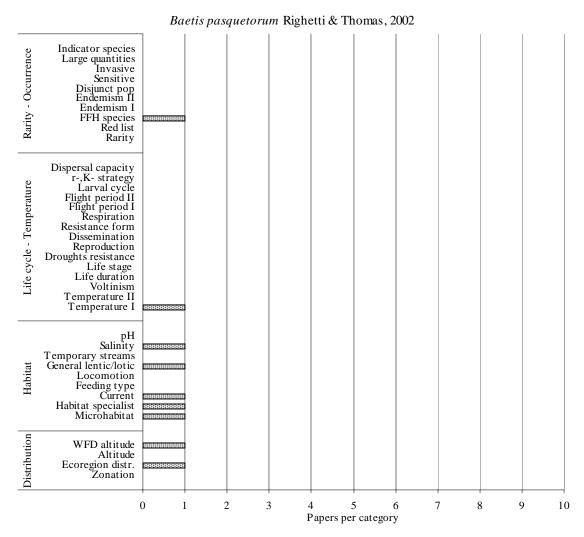


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: no information available.

Life cycles – Temperature: information were available for Temperature.

Habitat: information were available for Current, Habitat specialist and Microhabitat.

Distribution: information were available for WFD altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	do authors		ment on autoecological is disagreement due	is disagreement due
Autoecological groups	generally	agree?	to differences among geographical areas?	to differences among authors' opinions?
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data, since only one paper containing useful information were available. General agreement is thus recorded for all autoecological groups.

Species Name: Baetis pavidus Grandi, 1949

Number of papers containing useful information: 19

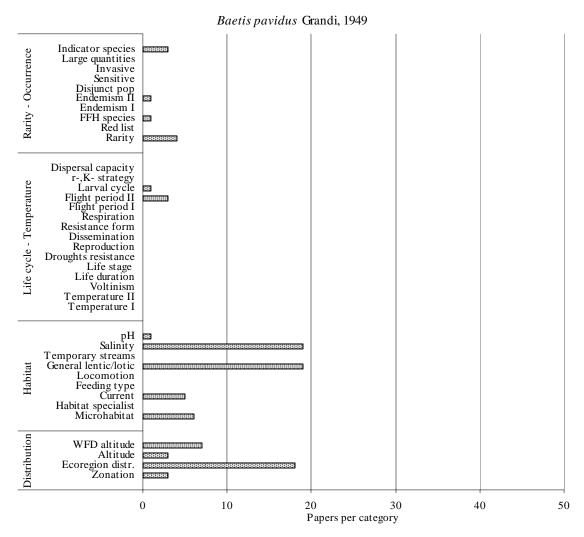


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: Information were available for Indicator species and Rarity.

Life cycles – Temperature: information were available for Larval cycle and Flight period.

Habitat: information were available for pH, Current and Microhabitat.

Distribution: information were available for all categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features			
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among
			among geographical	authors' opinions?
Autoecological groups			areas?	
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	=	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Baetis punicus Thomas, Boumaiza & Soldán, 1983

Number of papers containing useful information: 1

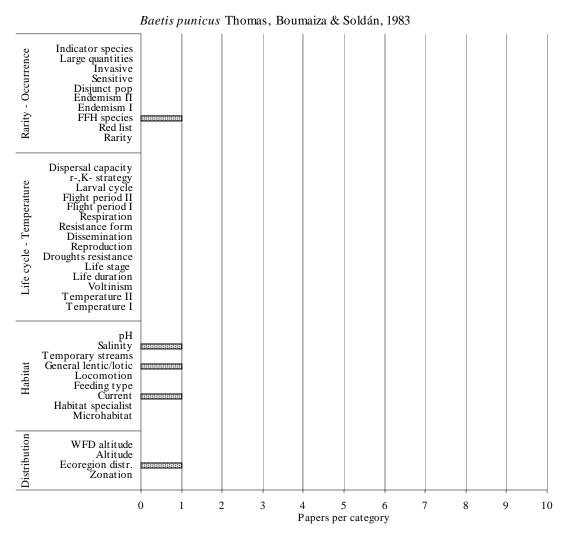


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: no information available.

Life cycles – Temperature: no data were available. **Habitat**: information were available only for Current.

Death of the Control of the Control

Distribution: no nformation were available.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreer do authors generally agree?		ment on autoecological is disagreement due to differences	is disagreement due to differences among
Autoecological groups			among geographical areas?	authors' opinions?
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data, since only one paper containing useful information were available. General agreement is thus recorded for all autoecological groups.

Species Name: Baetis rhodani (Pictet, 1843)

Number of papers containing useful information: 166

Baetis rhodani (Pictet, 1843)

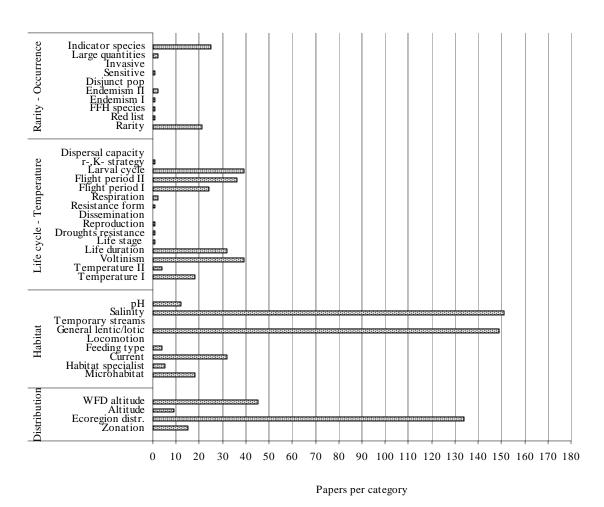


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: Information were available for all categories, except for Invasive species and Disjunct population.

Life cycles – Temperature: information were available for all categories, except for Dispersal capacity and Dissemination.

Habitat: information were available for all categories, except for Temporary streams and Locomotion.

Distribution: information were available for all categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features					
	do authors generally agree?		is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?		
Autoecological groups			areas?			
Rarity - Occurrence	Y		-	-		
Life cycle - Temperature	N	if no	Y	N		
Habitat	Y	11 110	-	-		
Distribution	Y		-	-		

When summarizing the information, some differences arose in the reviewed literature. In particular some disagreements have been pointed out for Life cycle – Temperature, mainly due to differences among European zones.

Species Name: Baetis scambus Eaton, 1870

Number of papers containing useful information: 51

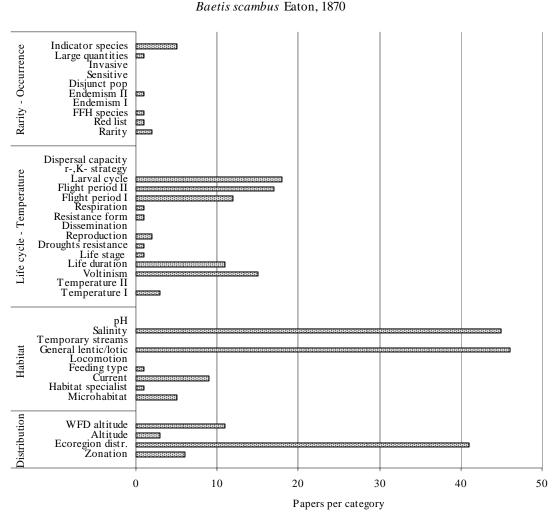


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: Information were available for Indicator species, Large quantities, Endemism, Red list and Rarity.

Life cycles – **Temperature**: information were available for Larval cycle, Flight period, Resistance form, Reproduction, Drought resistance, Life stage, Life duration, Voltinism and Temperature.

Habitat: information were available for all categories, except for Temporary streams and Locomotion.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features					
	do authors generally agree?		is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?		
Autoecological groups			areas?	1		
Rarity - Occurrence	Y		-	-		
Life cycle - Temperature	Y	if no	-	-		
Habitat	Y	11 110	-	-		
Distribution	Y		-	-		

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Baetis subalpinus Bengtsson, 1917

Number of papers containing useful information: 7

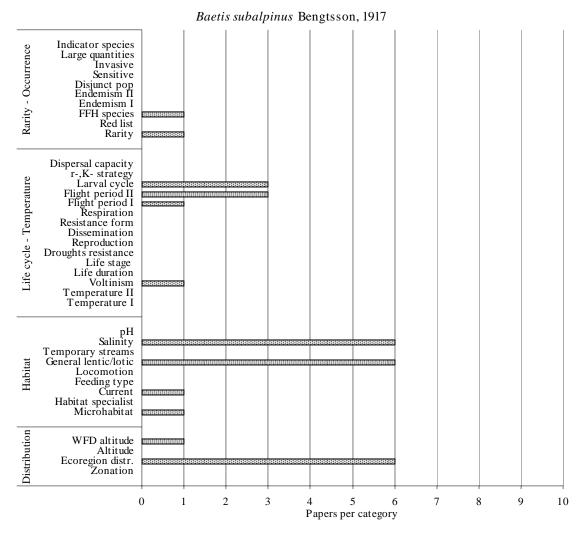


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – Occurrence: Information were available for Rarity.

Life cycles – **Temperature**: information were available for Larval cycle, Flight period and Voltinism.

Habitat: information were available Current and Microhabitat.

Distribution: information were available for WFD Altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features					
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among		
			among geographical	authors' opinions?		
Autoecological groups			areas?			
Rarity - Occurrence	Y		-	-		
Life cycle - Temperature	Y	if no	=	-		
Habitat	Y	11 110	-	-		
Distribution	Y		-	-		

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Baetis tracheatus Keffermüller & Machel, 1967

Number of papers containing useful information: 8

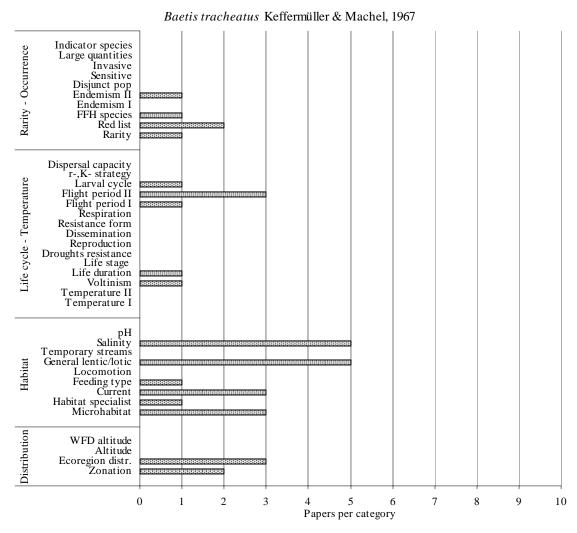


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – Occurrence: Information were available for Red list and Rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Life duration and Voltinism.

Habitat: information were available for Current, Habitat specialist and Microhabitat.

Distribution: information were available for Zonation.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreen do authors generally agree?		ment on autoecological is disagreement due to differences	is disagreement due to differences among
Autoecological groups			among geographical areas?	authors' opinions?
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Baetis tricolor Tshernova, 1928

Number of papers containing useful information: 13

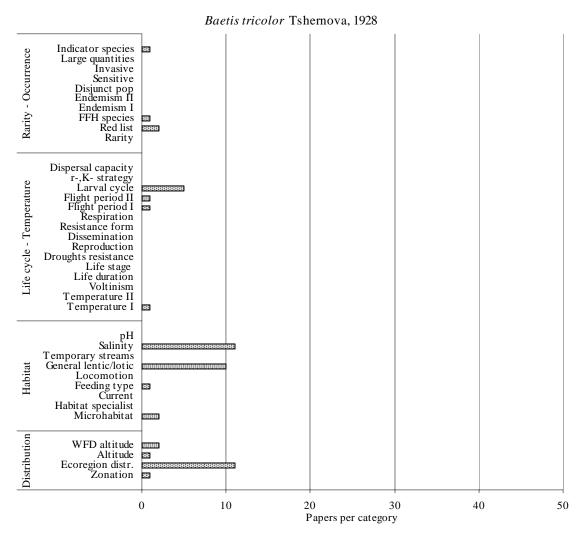


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – Occurrence: Information were available for Indicator species and Red list.

Life cycles – Temperature: information were available for Larval cycle, Flight period and Temperature.

Habitat: information were available for Feeding type and Microhabitat.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreen do authors generally agree?		ment on autoecological is disagreement due to differences	is disagreement due to differences among
Autoecological groups			among geographical areas?	authors' opinions?
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Baetis vardarensis Ikonomov, 1962

Number of papers containing useful information: 33

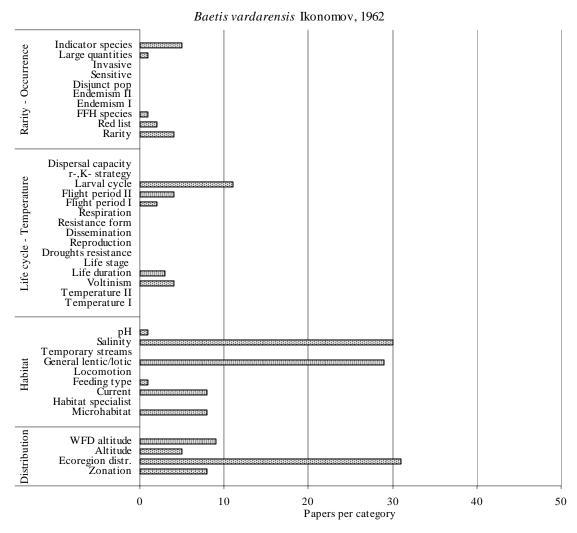


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: Information were available for Indicator species, Large quantities, Red list and Rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Life duration and Voltinism.

Habitat: information were available for pH, Current and Microhabitat.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features					
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among		
			among geographical	authors' opinions?		
Autoecological groups			areas?			
Rarity - Occurrence	Y		-	-		
Life cycle - Temperature	Y	if no	=	-		
Habitat	Y	11 110	-	-		
Distribution	Y		-	-		

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Baetis vernus Curtis, 1834

Number of papers containing useful information: 79

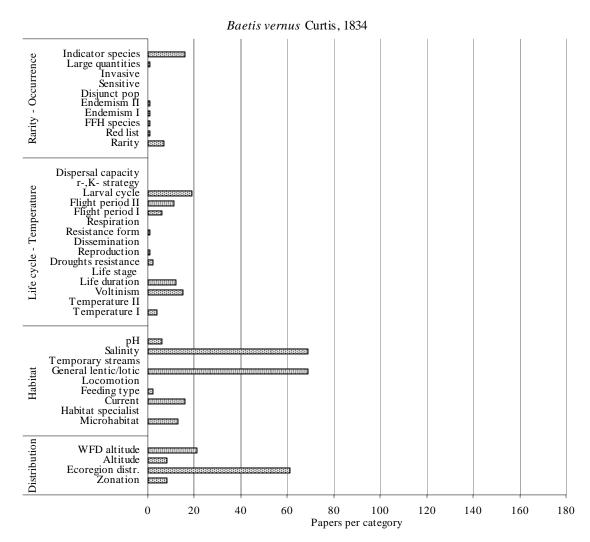


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: Information were available for Indicator species, Large quantities, Endemism, Red list and Rarity.

Life cycles – **Temperature**: information were available for Larval cycle, Flight period, resistance form, Reproduction, Drought resistance, Life duration, Voltinism and Temperature.

Habitat: information were available for pH, Current and Microhabitat.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features					
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among		
			among geographical	authors' opinions?		
Autoecological groups			areas?			
Rarity - Occurrence	Y		-	-		
Life cycle - Temperature	N	if no	Y	N		
Habitat	N	11 110	N	Y		
Distribution	Y		-	-		

When summarizing the information, some differences arose in the reviewed literature. In particular some disagreements have been pointed out for Habitat, due to differences in authors' opinion and for Life cycle – Temperature, due to differences observed among European zones.

Species Name: Baetopus tenellus (Albarda, 1878)

Number of papers containing useful information: 9

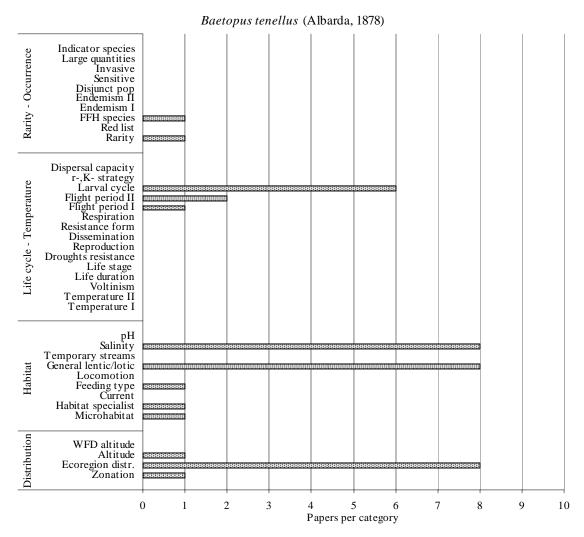


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – Occurrence: information were available for Rarity.

Life cycles – Temperature: information were available for Larval cycle and Flight period.

Habitat: information were available for Habitat specialist and Microhabitat.

Distribution: information were available for Altitude and Zonation.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreen do authors generally agree?		ment on autoecological is disagreement due to differences	is disagreement due to differences among
Autoecological groups			among geographical areas?	authors' opinions?
Rarity - Occurrence	Y		=	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Baetopus wartensis Keffermüller, 1960

Number of papers containing useful information: 4

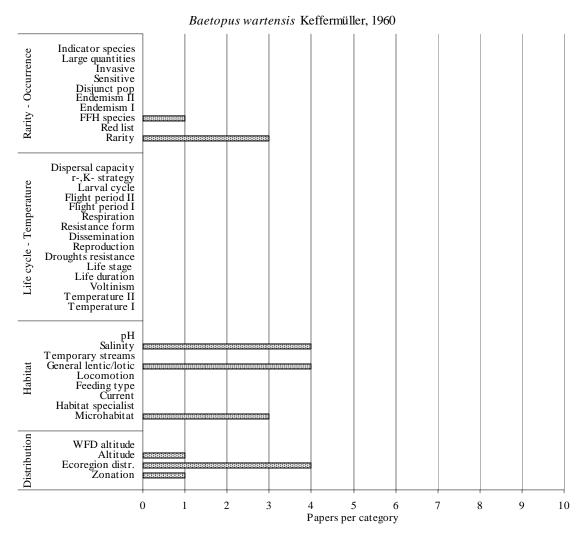


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – **Occurrence**: information were available for Rarity. **Life cycles** – **Temperature**: no Information were available.

Habitat: information were available for Microhabitat.

Distribution: information were available for Altitude and Zonation.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreen do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	admors opinions.
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		_	

No particular differences arose when summarizing the data, due to the low number of paper containing useful information. General agreement is thus recorded for all autoecological groups.

Species Name: Centroptilum luteolum (Müller, 1776)

Number of papers containing useful information: 90

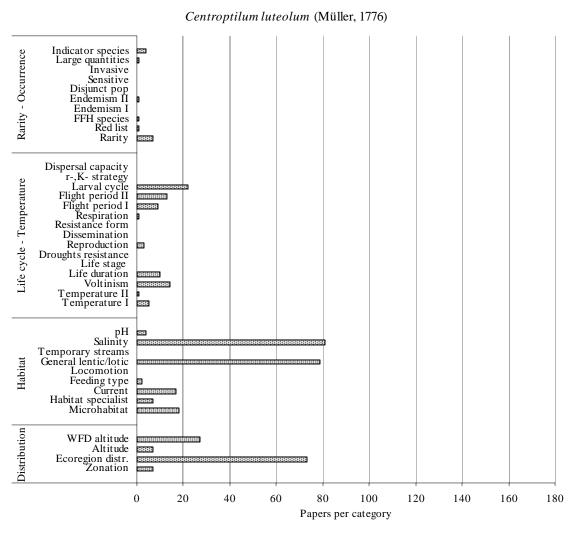


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were available for Indicator species, Large quantity, Endemism, Red list and Rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Respiration, Reproduction, Life duration, Voltinism and Temperature.

Habitat: information were available for pH, Current, Habitat specialist and Microhabitat.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features					
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among		
			among geographical	authors' opinions?		
Autoecological groups			areas?			
Rarity - Occurrence	Y		-	-		
Life cycle - Temperature	Y	if no	=	-		
Habitat	Y	11 110	-	-		
Distribution	Y		-	-		

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Cloeon cognatum Stephens, 1836

Number of papers containing useful information: 1

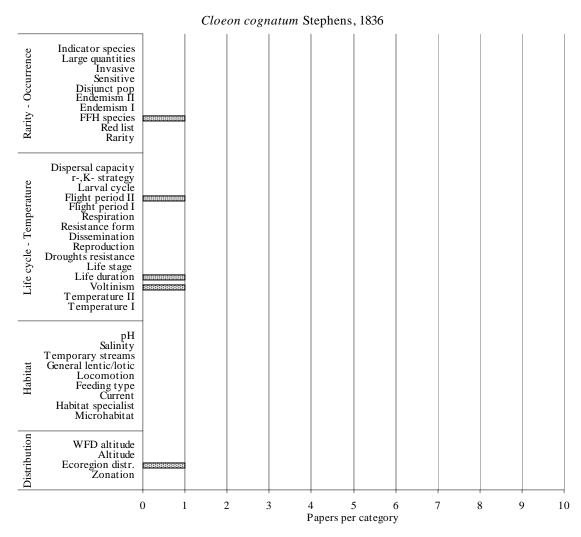


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: no information were available.

Life cycles – **Temperature**: information were available for Flight period, Life duration and Voltinism.

Habitat: no Information were available.

Distribution: no information were available.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreen do authors generally agree?		is disagreement due to differences	is disagreement due to differences among authors' opinions?
Autoecological groups			among geographical areas?	authors opinions:
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data, since only one paper contained useful information for the species. General agreement is thus recorded for all autoecological groups.

Species Name: Cloeon dipterum (Linnaeus, 1761)

Number of papers containing useful information: 89

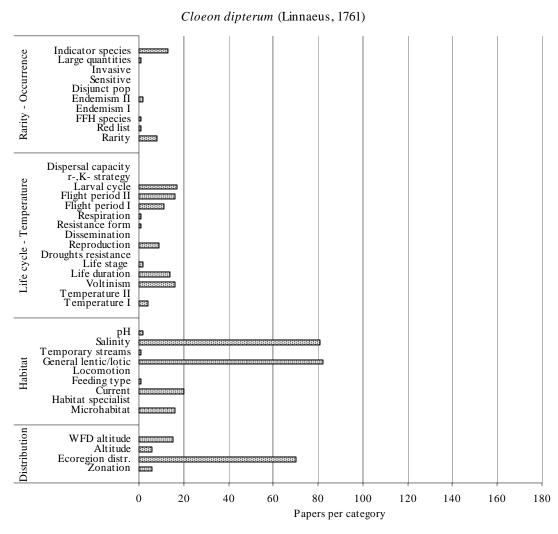


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were available for Indicator species, Large quantity, Endemism, Red list and Rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Respiration, Resistance form, Reproduction, Life duration, Life duration, Voltinism and Temperature.

Habitat: information were available for pH, Temporary streams, Current and Microhabitat.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features					
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among		
			among geographical	authors' opinions?		
Autoecological groups			areas?			
Rarity - Occurrence	Y		-	-		
Life cycle - Temperature	Y	if no	=	-		
Habitat	Y	11 110	-	-		
Distribution	Y		-	-		

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Cloeon inscriptum Bengtsson, 1914

Number of papers containing useful information: 4

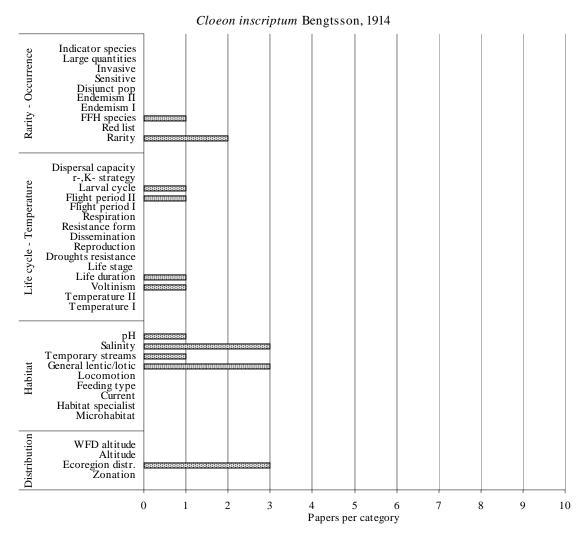


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: information were available for Rarity.

Life cycles – Temperature: information were available for Life cycle, Flight period, Life duration and Voltinism.

Habitat: information were available for pH and temporary streams.

Distribution: no information were available.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreen do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	authors opinions.
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information for the species. General agreement is thus recorded for all autoecological groups.

Species Name: Cloeon languidum Grandi, 1959

Number of papers containing useful information: 4

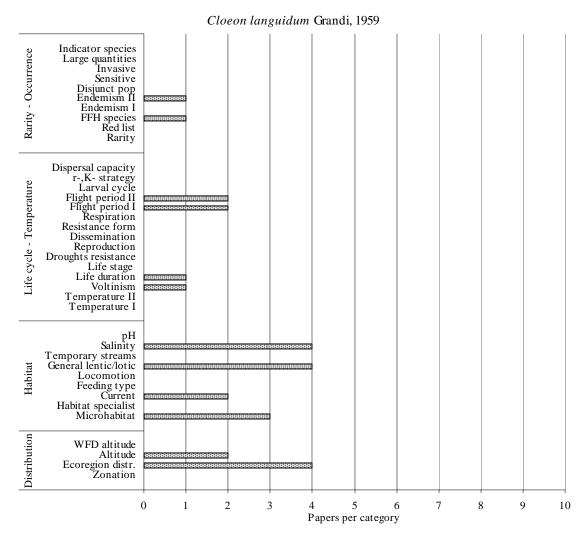


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – Occurrence: information were available for Endemism.

Life cycles – Temperature: information were available for Flight period, Life duration and Voltinism.

Habitat: information were available for Current and Microhabitat.

Distribution: information were available for Altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	do aut	_	ment on autoecological is disagreement due	features is disagreement due
	generally agree?		to differences among geographical	to differences among authors' opinions?
Autoecological groups			areas?	uumois opinions.
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information for the species. General agreement is thus recorded for all autoecological groups.

Species Name: Cloeon petropolitanum Kluge & Novikova, 1992

Number of papers containing useful information: 1

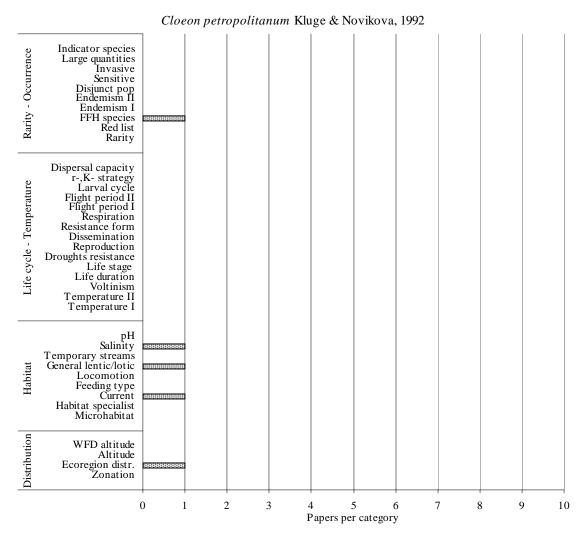


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories. **Rarity – Occurrence**: no information were available.

Life cycles – Temperature: no Information were available.

Habitat: information were available for Current. **Distribution**: no information were available.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreen do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	authors opinions.
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data, since only one paper contained useful information for the species. General agreement is thus recorded for all autoecological groups.

Species Name: Cloeon praetextum Bengtsson, 1914

Number of papers containing useful information: 5

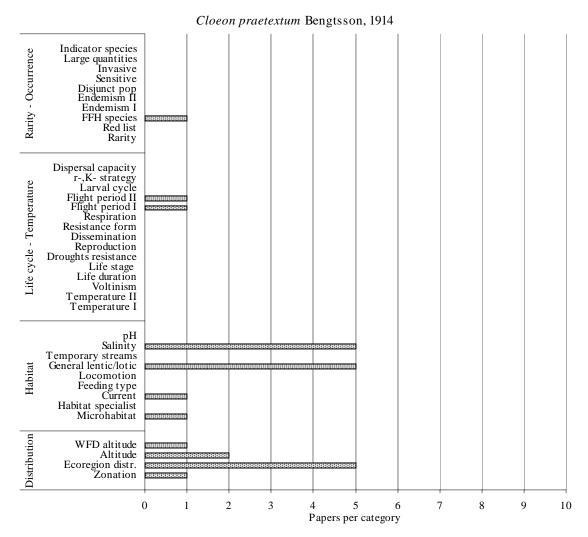


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: no information were available.

Life cycles – Temperature: information were available for Flight period.

Habitat: information were available for Current and Microhabitat.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	do aut	_	ment on autoecological is disagreement due	features is disagreement due
	generally agree?		to differences among geographical	to differences among authors' opinions?
Autoecological groups			areas?	uumois opinions.
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information for the species. General agreement is thus recorded for all autoecological groups.

Species Name: Cloeon simile Eaton, 1870

Number of papers containing useful information: 44

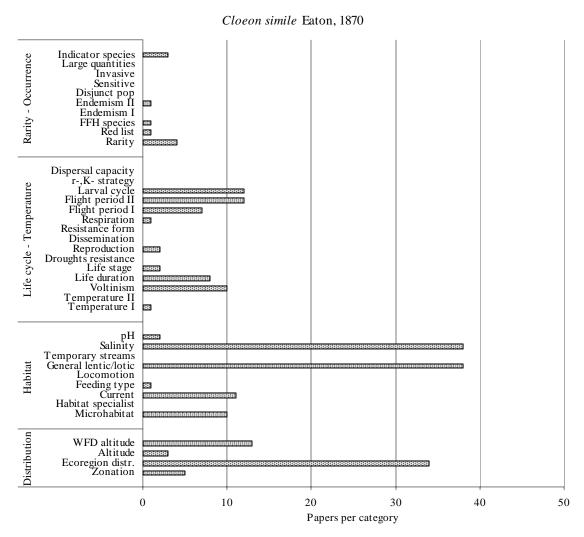


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were available for Indicator species, Endemism, Red list and Rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Respiration, Reproduction, Life stage, Life duration, Voltinism and Temperature.

Habitat: information were available for pH, Current and Microhabitat.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreer do authors generally agree?		ment on autoecological is disagreement due to differences	is disagreement due to differences among
Autoecological groups			among geographical areas?	authors' opinions?
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: *Procloeon bifidum* (Bengtsson, 1912)

Number of papers containing useful information: 37

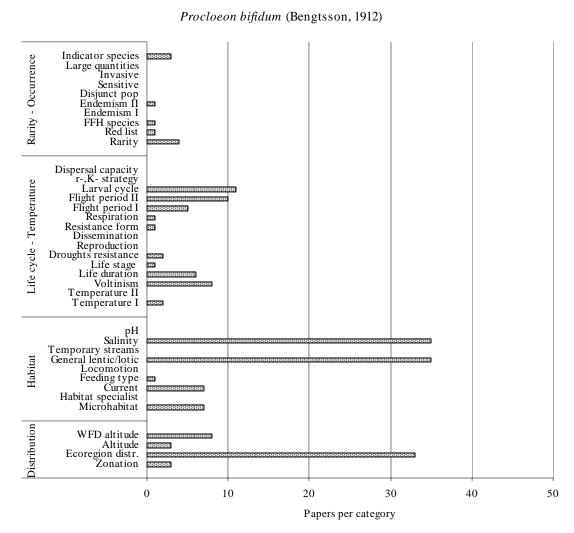


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were available for Indicator species, Endemism, Red list and Rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Respiration, Drought resistance, Life stage, Life duration, Voltinism and Temperature.

Habitat: information were available for Current and Microhabitat.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features			
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among
			among geographical	authors' opinions?
Autoecological groups			areas?	
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	N	11 110	N	Y
Distribution	Y		-	-

When summarizing the information, some differences arose in the reviewed literature. In particular some disagreements have been pointed out for Habitat, due to small differences in authors' opinion.

Species Name: *Procloeon calabrum* (Belfiore & D'Antonio, 1990)

Number of papers containing useful information: 3

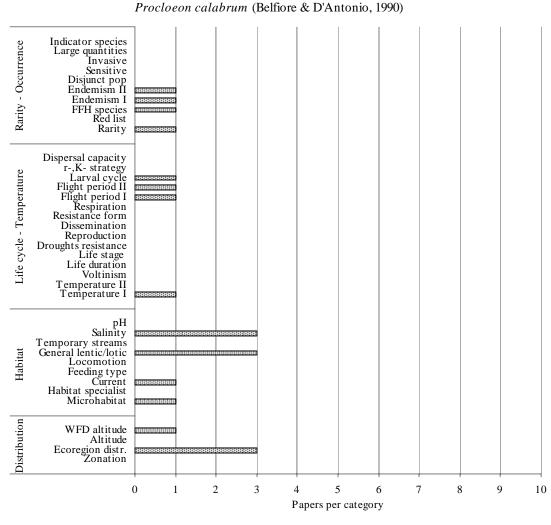


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were available for Endemism and Rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period and Temperature.

Habitat: information were available for Current and Microhabitat.

Distribution: information were available for WFD altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

Autoecological groups	do aut generally	hors	ment on autoecological is disagreement due to differences among geographical areas?	features is disagreement due to differences among authors' opinions?
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		_	

No particular differences arose when summarizing the data, due to the low number of papers containing useful information for the species. General agreement is thus recorded for all autoecological groups.

Species Name: Procloeon concinnum (Eaton, 1985)

Number of papers containing useful information: 1

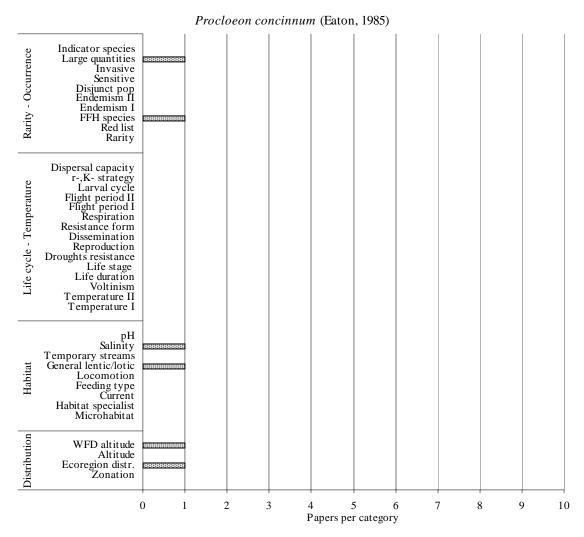


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: information were available for Large quantities.

Life cycles – Temperature: no Information were available.

Habitat: no Information were available.

Distribution: information were available for WFD altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

		Agree	ment on autoecological	features
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among
			among geographical	authors' opinions?
Autoecological groups			areas?	
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	=	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data, since only one paper contained useful information for the species. General agreement is thus recorded for all autoecological groups.

Species Name: *Procloeon lacustre* (Eaton, 1885)

Number of papers containing useful information: 1

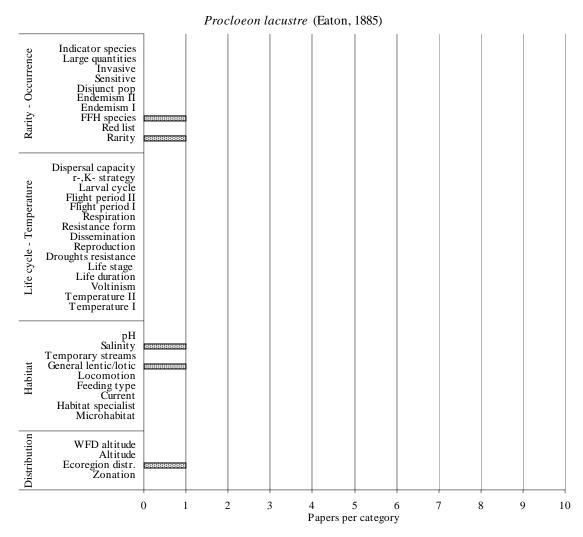


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – **Occurrence**: information were available for Rarity. **Life cycles** – **Temperature**: no information were available.

Habitat: no information were available. **Distribution**: no information were available.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreer do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	admors opinions.
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		_	

No particular differences arose when summarizing the data, since only one paper contained useful information for the species. General agreement is thus recorded for all autoecological groups.

Species Name: *Procloeon nemorale* (Eaton, 1885)

Number of papers containing useful information: 1

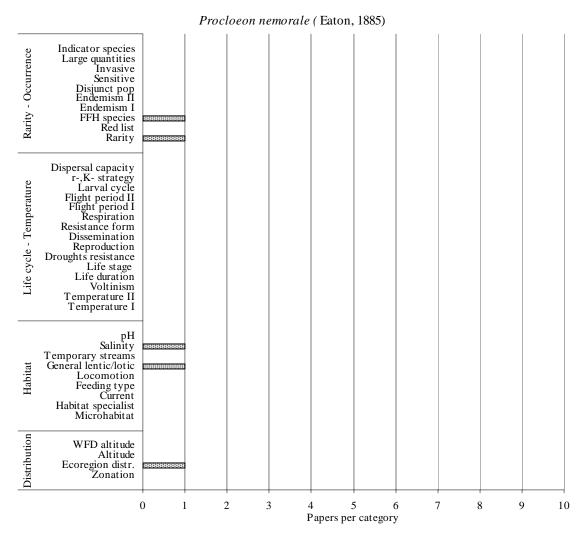


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – **Occurrence**: information were available for Rarity. **Life cycles** – **Temperature**: no information were available.

Habitat: no information were available. **Distribution**: no information were available.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreer do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			arreas?	authors opinions:
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		_	

No particular differences arose when summarizing the data, since only one paper contained useful information for the species. General agreement is thus recorded for all autoecological groups.

Species Name: Procloeon pennulatum (Eaton, 1870)

Number of papers containing useful information: 37

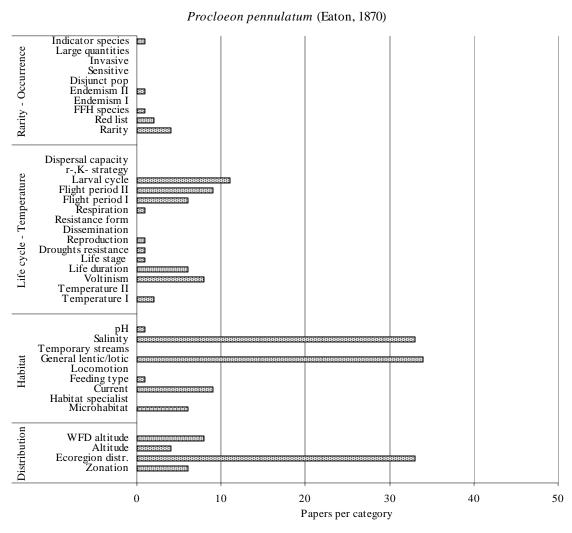


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were available for Indicator species, Endemism, Red list and Rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Respiration, Reproduction, Drought resistance, Life stage, Life duration, Voltinism and Temperature.

Habitat: information were available for pH, Current and Microhabitat.

Distribution: information were available for all categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features				
	do authors generally agree?		is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?	
Autoecological groups			areas?		
Rarity - Occurrence	Y		-	-	
Life cycle - Temperature	N	if no	N	Y	
Habitat	Y	11 110	-	-	
Distribution	Y		-	-	

When summarizing the information, some differences arose in the reviewed literature. In particular some disagreements have been pointed out for Life cycle - Temperature, due to differences in authors' opinion.

Species Name: *Procloeon pulchrum* (Eaton, 1885)

Number of papers containing useful information: 20

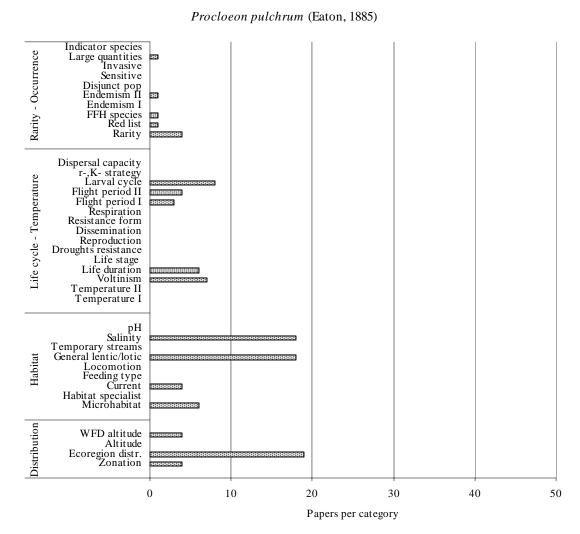


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were available for Large quantities, Red list and Rarity.

Life cycles – Temperature: information were available for Larval cycle, Endemism, Flight period, Life duration and Voltinism.

Habitat: information were available for Current and Microhabitat.

Distribution: information were available for WFD altitude and Zonation.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreer do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	features is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	N	if no	N	Y
Habitat	Y	11 110	-	-
Distribution	Y		-	-

When summarizing the information, some differences arose in the reviewed literature. In particular some disagreements have been pointed out for Life cycle - Temperature, due to differences in authors' opinion.

Species Name: Pseudocentroptiloides nana (Bogoescu, 1951)

Number of papers containing useful information: 6

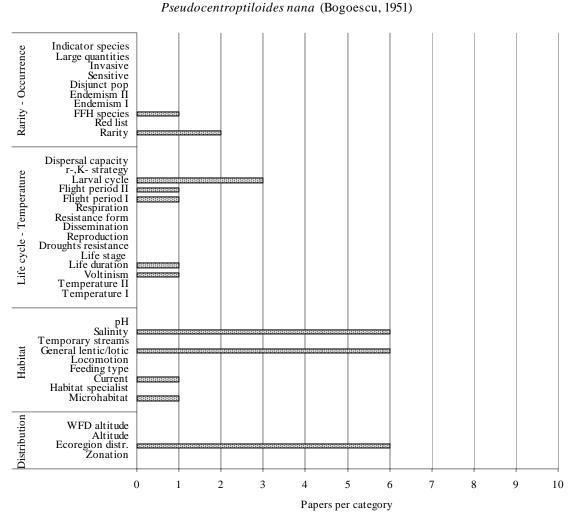


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: information were available for Rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Life duration and Voltinism.

Habitat: information were available for Current and Microhabitat.

Distribution: no information available.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreer do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information for the species. General agreement is thus recorded for all autoecological groups.

Family Name: Behningiidae

Species Name: Behningia ulmeri Lestage, 1930

Number of papers containing useful information: 1

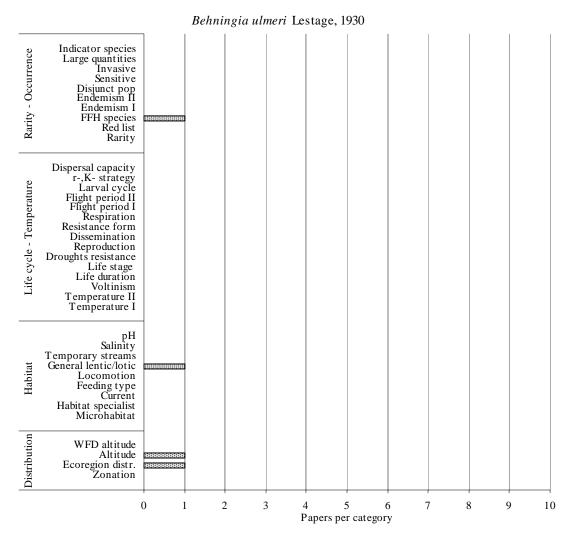


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: no information were available.

Life cycles – Temperature: no information were available.

Habitat: no information were available.

Distribution: information were available only for altitudinal distribution.

The information available was extremely restricted for all autoecological categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features				
	do authors generally agree?	is disagreement due to differences among geographical areas?	is disagreement due to differences among authors' opinions?		
Autoecological groups		geograpmear areas.	opinions.		
Rarity - Occurrence	Y	-	-		
Life cycle - Temperature	Y if no	-	-		
Habitat	Y	-	-		
Distribution	Y	-	-		

No particular differences arose when summarizing the data, as only one paper contained information on this species.

Species Name: Brachycercus europaeus Kluge, 1991

Number of papers containing useful information: 3

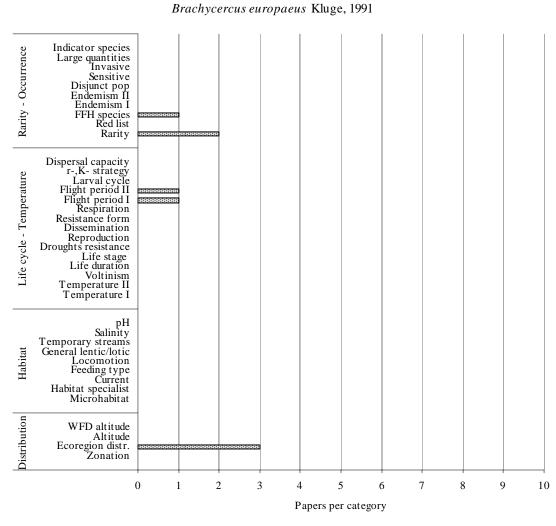


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: information were available only for Rarity.

Life cycles – Temperature: data were available only for Larval cycle and Flight period.

Habitat: no information were available. **Distribution**: no data were available.

The information available was extremely restricted for all autoecological categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features					
	do authors generally agree?	is disagreement due to differences among geographical areas?	is disagreement due to differences among authors' opinions?			
Autoecological groups		geograpmear areas:	opinions:			
Rarity - Occurrence	Y	=	-			
Life cycle - Temperature	Y if no	=	-			
Habitat	Y	-	-			
Distribution	Y	-	-			

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

Species Name: Brachycercus harrisella Curtis, 1834

Number of papers containing useful information: 50

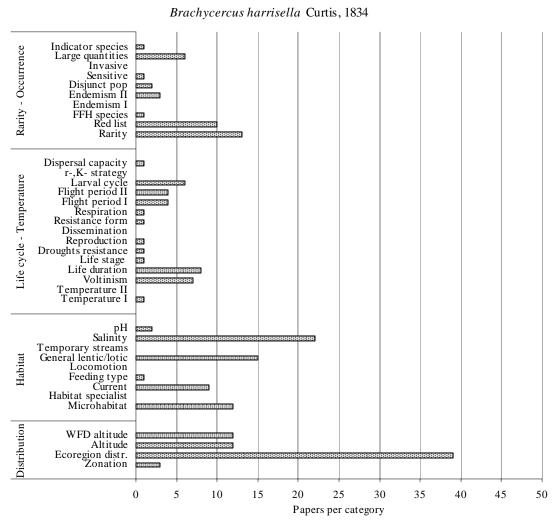


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: information were obtained for all categories, excluding Invasive category.

Life cycles – Temperature: data were available for all categories.

Habitat: information were present for all autoecological traits, with the exception of Habitat specialist, Locomotion and Temporary streams.

Distribution: information were available for all features.

Autoecological categories for which a large amount of information was available are related to Voltinism, Larval cycles, Microhabitat and Currents, Altitudinal distribution, Rarity and Red list. As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features					
	do authors	is disagreement due to	is disagreement due to			
	generally agree?	differences among	differences among authors'			
Autoecological groups		geographical areas?	opinions?			
Rarity - Occurrence	Y	-	-			
Life cycle - Temperature	Y if no	=	-			
Habitat	Y	-	-			
Distribution	Y	-	-			

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Caenis belfiorei Malzacher, 1986

Number of papers containing useful information: 5

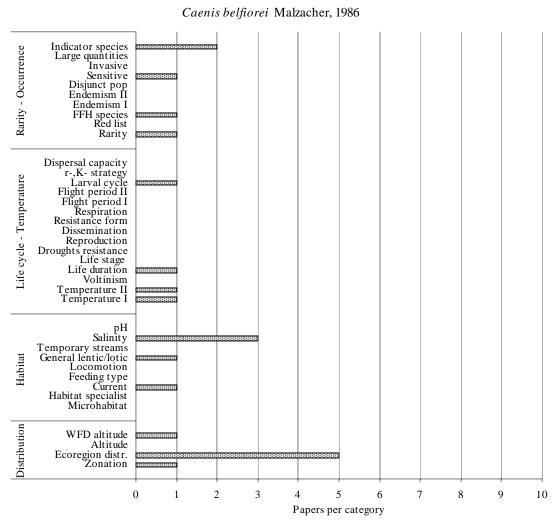


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: information were available only for Rarity, Sensitive and Indicator species. **Life cycles** – **Temperature**: data were available only for Temperature preference, Life duration and Larval cycle.

Habitat: data were available only for Current.

Distribution: information were available for all categories excluding Altitude.

The information available was extremely restricted for all autoecological categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

Autoecological groups	do authors generally agree?	Agreement on autoecologi is disagreement due to differences among geographical areas?	cal features is disagreement due to differences among authors' opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

Species Name: Caenis beskidensis Sowa, 1973

Number of papers containing useful information: 42

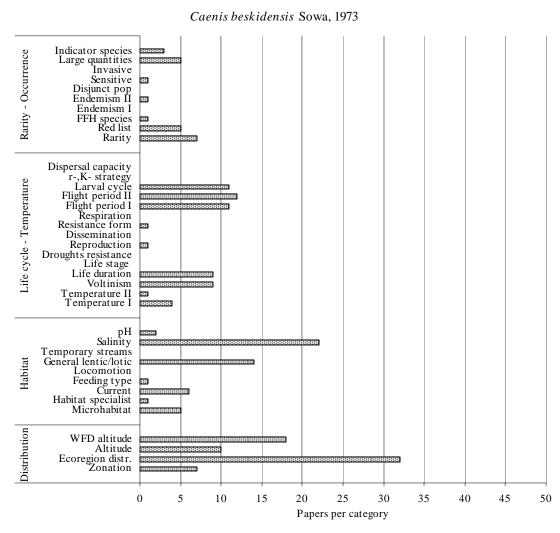


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: information were obtained for all categories, excluding Disjunct population and Invasive.

Life cycles – **Temperature**: data were available for all categories with the exception of Life stage and Droughts resistance.

Habitat: data were present for all autoecological traits, excluding Locomotion and Temporary streams.

Distribution: information were available for all features.

Autoecological categories for which a large amount of information was available are related to Rarity, Larval cycles, Flight period, Life duration, Voltinism and Altitudinal distribution. As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features					
	do authors	is disagreement due to	is disagreement due to			
	generally agree?	differences among	differences among authors'			
Autoecological groups		geographical areas?	opinions?			
Rarity - Occurrence	Y	-	-			
Life cycle - Temperature	Y if no	=	-			
Habitat	Y	-	-			
Distribution	Y	-	-			

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Caenis horaria (Linnaeus, 1758)

Number of papers containing useful information: 68

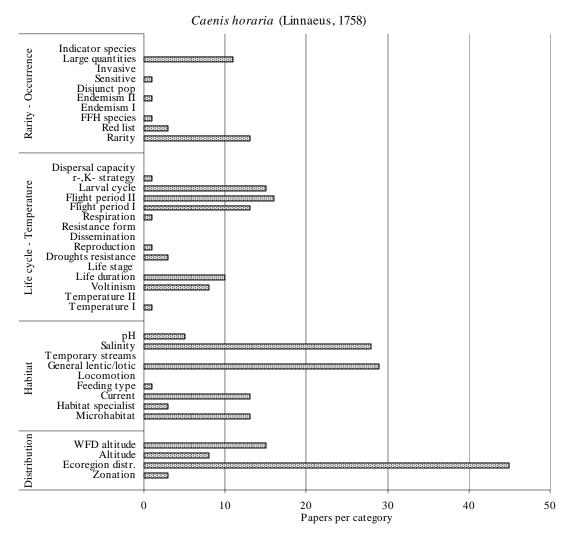


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: information were obtained for all categories, excluding Disjunct population Invasive and Indicator species.

Life cycles – **Temperature**: data were available for all categories with the exception of Life stage. **Habitat**: data were present for all autoecological traits, excluding Locomotion and Temporary streams.

Distribution: information were available for all features.

Autoecological categories for which a large amount of information was available are related to Rarity, Large Quantities, Larval cycles, Flight period, Life duration, Current and Microhabitats and Altitudinal distribution.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	Y	Y
Habitat	N	-	-
Distribution	Y	-	-

When summarizing the information, some differences arose in the reviewed literature. In particular some disagreements have been pointed out for Life cycle – Temperature due to differences observed among European zones and authors' opinions.

Species Name: Caenis lactea (Burmeister, 1839)

Number of papers containing useful information: 17

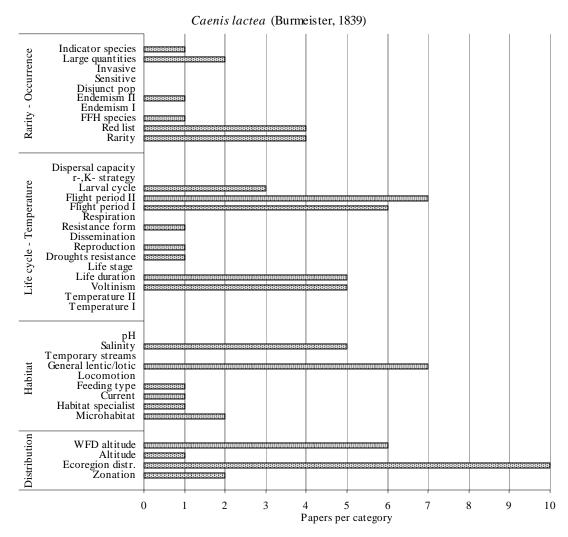


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: information were obtained for all categories, excluding Disjunct population, Sensitive and Invasive.

Life cycles – **Temperature**: data were available for all categories with the exception of Temperature preference and Life stage.

Habitat: data were present for all autoecological traits, excluding Locomotion and Temporary streams.

Distribution: information were available for all features.

Autoecological categories for which a large amount of information was available are related to Rarity, Red list, Larval cycles, Flight period, Life duration, Voltinism and Altitudinal distribution. As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	=	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Caenis luctuosa (Burmeister, 1839)

Number of papers containing useful information: 76

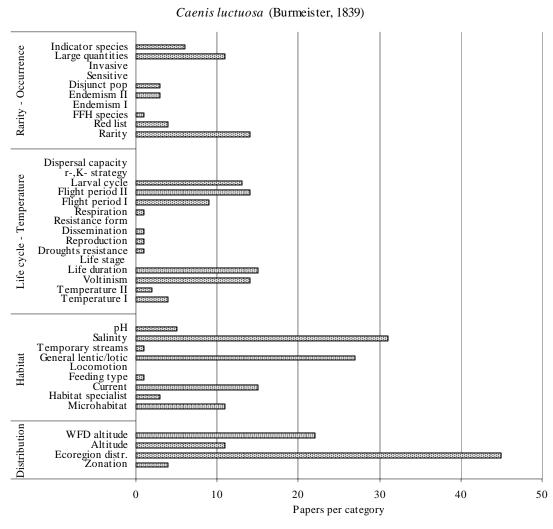


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – Occurrence: information were obtained for all categories, excluding Invasive and Sensitive.

Life cycles – Temperature: data were available for all categories with the exception of Life stage.

Habitat: data were present for all autoecological traits, excluding Locomotion.

Distribution: information were available for all features.

Autoecological categories for which a large amount of information was available are related to Large quantities, Rarity, Larval cycles, Flight period, Life duration, Voltinism and Altitudinal distribution.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	N if no	Y	N
Habitat	N	N	Y
Distribution	Y	-	-

When summarizing the information, some differences arose in the reviewed literature. In particular some disagreements have been pointed out for Life cycle – Temperature and Habitat. For the first category disagreements were due to differences observed among European zones, while for the second one to divergences among authors' opinions.

Species Name: Caenis macrura Stephens, 1835

Number of papers containing useful information: 64

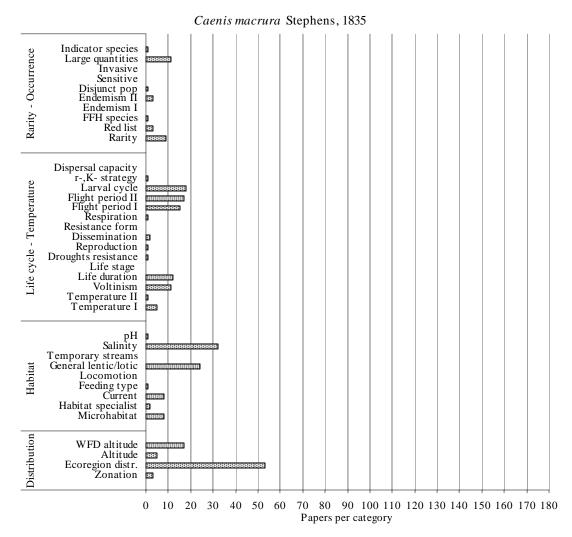


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: information were obtained for all categories, excluding Invasive and Sensitive.

Life cycles – **Temperature**: data were available for all categories with the exception of Life stage. **Habitat**: data were present for all autoecological traits, excluding Locomotion and Temporary streams.

Distribution: information were available for all features.

Autoecological categories for which a large amount of information was available are related to Large quantities, Larval cycles, Flight period, Life duration, Voltinism and Altitudinal distribution.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Caenis martae Belfiore, 1984

Number of papers containing useful information: 9

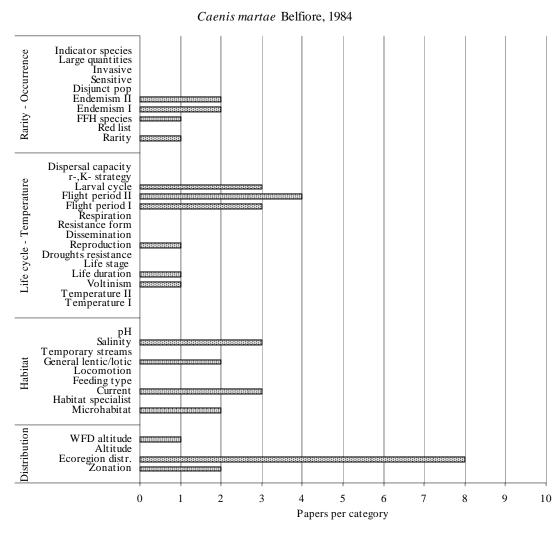


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – Occurrence: information were obtained only for Rarity and Endemism.

Life cycles – **Temperature**: data were available for all categories with the exception of Temperature preference, Life stage and Droughts resistance.

Habitat: data were present for all autoecological traits, excluding Habitat specialist, Locomotion, Temporary streams and pH.

Distribution: information were available for all features excluding Altitude.

The information available was restricted for all autoecological categories.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

Autoecological groups	do authors generally agree?	Agreement on autoecologi is disagreement due to differences among geographical areas?	cal features is disagreement due to differences among authors' opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

Species Name: Caenis nachoi Alba-Tercedor & Zamora Muñoz, 1993

Number of papers containing useful information: 2

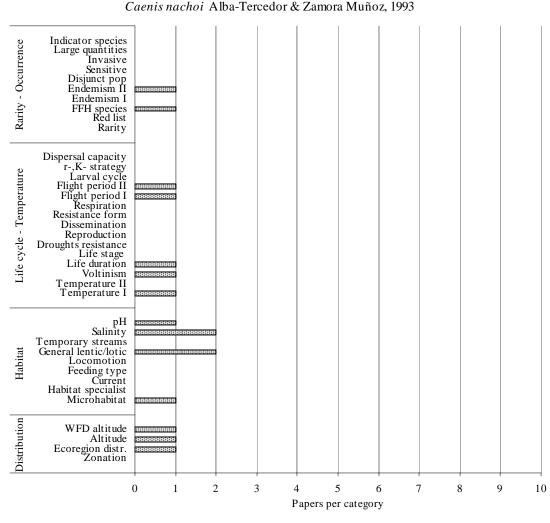


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: information were available only for Endemism.

Life cycles – Temperature: data were available only for Temperature, Voltinism, Life duration and Flight period.

Habitat: information were available only for Microhabitat and pH.

Distribution: no data were available only for Zonation.

The information available was extremely restricted for all autoecological categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

Species Name: Caenis pseudorivulorum Keffermüller, 1960

Number of papers containing useful information: 42

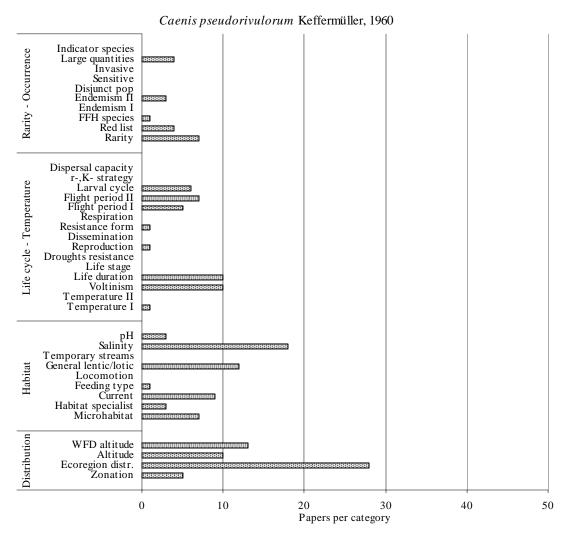


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: information were obtained for all categories, excluding Disjunct population, Sensitive, Invasive and Indicator species.

Life cycles – **Temperature**: data were available for all categories with the exception of Life stage and Droughts resistance.

Habitat: information were present for all autoecological traits, excluding Locomotion and Temporary streams.

Distribution: data were available for all features.

Autoecological categories for which a large amount of information was available are related to Life duration, Voltinism, Current and Altitudinal distribution.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	N	Y
Habitat	N	-	-
Distribution	Y	-	-

When summarizing the information, some differences arose in the reviewed literature. In particular some disagreements have been pointed out for Life cycle – Temperature due to differences observed among authors' opinions.

Family Name: Caenidae

Species Name: Caenis pusilla Navás, 1913

Number of papers containing useful information: 27

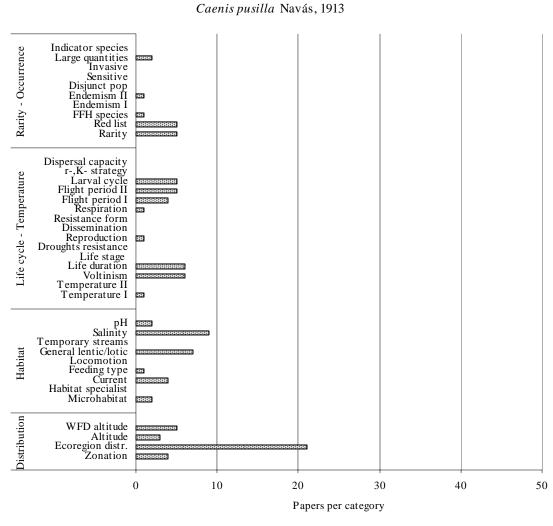


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: information were obtained for all categories, excluding Disjunct population, Sensitive, Invasive and Indicator species.

Life cycles – **Temperature**: data were available for all categories with the exception of Life stage and Droughts resistance.

Habitat: information were present for all autoecological traits, excluding Habitat specialist, Locomotion and Temporary streams.

Distribution: data were available for all features.

Autoecological categories for which a large amount of information was available are related to Life duration, Voltinism.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	Y	Y
Habitat	N	-	-
Distribution	Y	-	-

When summarizing the information, some differences arose in the reviewed literature. In particular some disagreements have been pointed out for Life cycle – Temperature due to differences observed among European zones and authors' opinions.

Family Name: Caenidae

Species Name: Caenis rivulorum Eaton, 1884

Number of papers containing useful information: 46

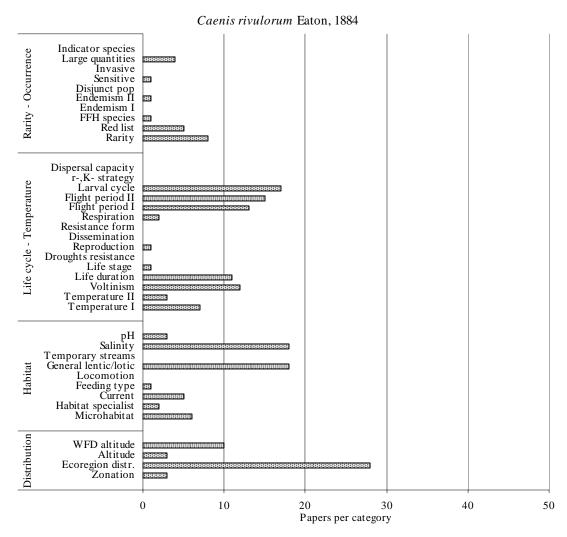


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: information were obtained for all categories, excluding Disjunct population, Invasive and Indicator species.

Life cycles – Temperature: data were available for all categories with the exception of Droughts resistance.

Habitat: information were present for all autoecological traits, excluding Locomotion and Temporary streams.

Distribution: data were available for all features.

Autoecological categories for which a large amount of information was available are related to Life duration, Voltinism, Flight period, Larval cycle and WFD altitude.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	N if no	N	Y
Habitat	N	N	Y
Distribution	Y	-	-

When summarizing the information, some differences arose in the reviewed literature. In particular some disagreements have been pointed out for Life cycle – Temperature and Habitat due to differences observed among authors' opinions.

Family Name: Caenidae

Species Name: Caenis robusta Eaton, 1884

Number of papers containing useful information: 45

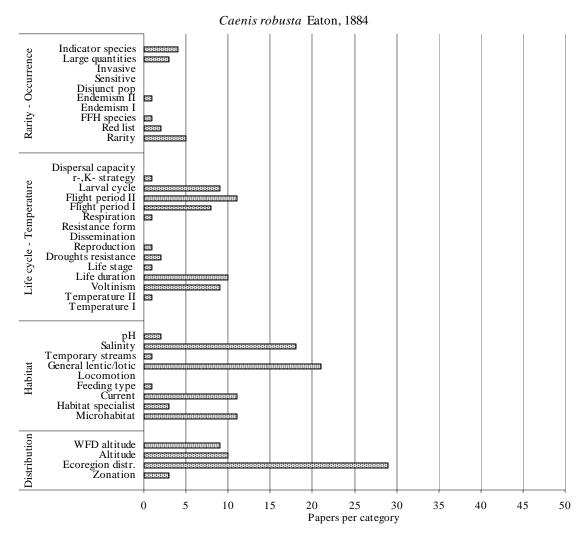


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: information were obtained for all categories, excluding Disjunct population, Sensitive and Invasive.

Life cycles – Temperature: data were available for all categories.

Habitat: information were present for all autoecological traits, excluding Locomotion.

Distribution: data were available for all features.

Autoecological categories for which a large amount of information was available are related to Life duration, Voltinism, Flight period, Larval cycle and altitudinal distribution.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	N if no	Y	Y
Habitat	Y	-	-
Distribution	Y	-	-

When summarizing the information, some differences arose in the reviewed literature. In particular some disagreements have been pointed out for Life cycle – Temperature due to differences observed among European zones and authors' opinions.

Family Name: Caenidae

Species Name: Caenis strugaensis Ikonomov, 1961

Number of papers containing useful information: 6

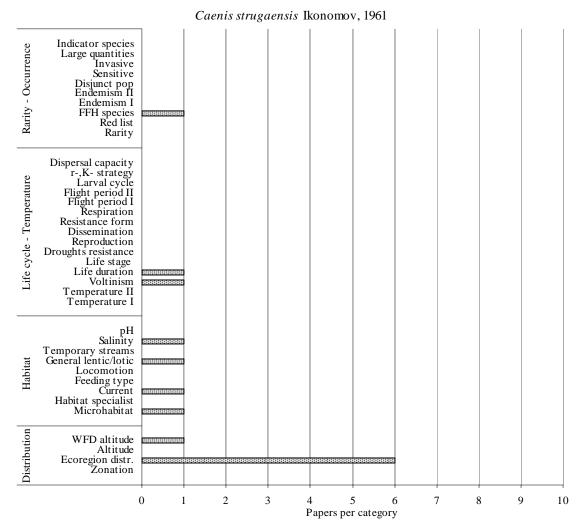


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: no data were available.

Life cycles – Temperature: data were available only for Voltinism and Life duration.

Habitat: information were available only for Microhabitat and Current.

Distribution: information were available only for WFD altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

Autoecological groups	do authors generally agree?	Agreement on autoecologi is disagreement due to differences among geographical areas?	is disagreement due to differences among authors' opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

Family Name: Caenidae

Species Name: Caenis valentinae Grandi, 1951

Number of papers containing useful information: 1

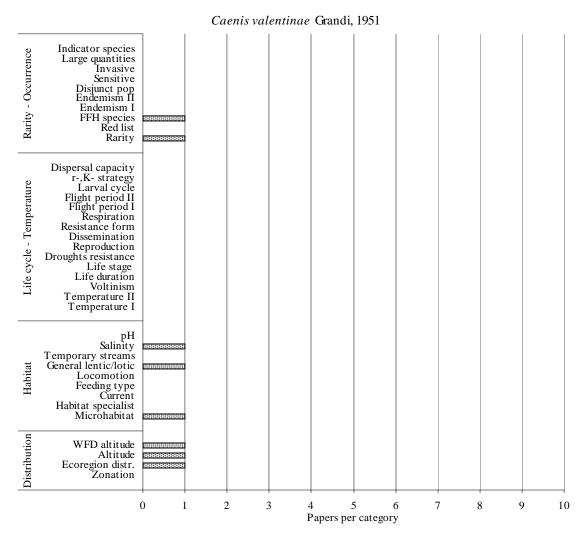


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – **Occurrence**: information were available only for Rarity.

Life cycles – Temperature: no information were available. **Habitat**: information were available only for Microhabitat.

Distribution: missing data for zonation.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors generally agree?	is disagreement due to differences among geographical areas?	is disagreement due to differences among authors' opinions?
Autoecological groups		geograpmen areas.	opinions.
Rarity - Occurrence	Y	=	-
Life cycle - Temperature	Y if no	=	-
Habitat	Y	-	-
Distribution	Y	-	-

No differences arose when summarizing the data as only one paper contained useful information.

Family Name: Caenidae

Species Name: Cercobrachys minutus (Tshernova, 1952)

Number of papers containing useful information: 7

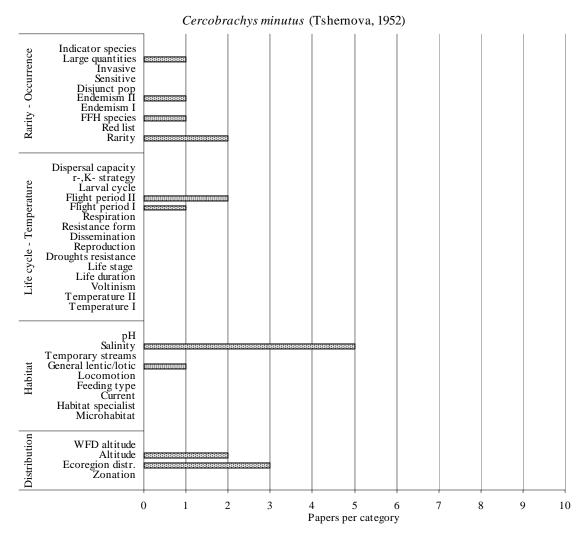


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: information were available only for Rarity, Endemism and Large quantities.

Life cycles – Temperature: data were available only for Flight period.

Habitat: no information were available.

Distribution: data were available only for Altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors generally agree?	is disagreement due to differences among geographical areas?	is disagreement due to differences among authors' opinions?
Autoecological groups		geograpmear areas.	opinions.
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

Species Name: Drunella paradinasi Gónzález Del Tánago & García De Jalón, 1983

Number of papers containing useful information: 2

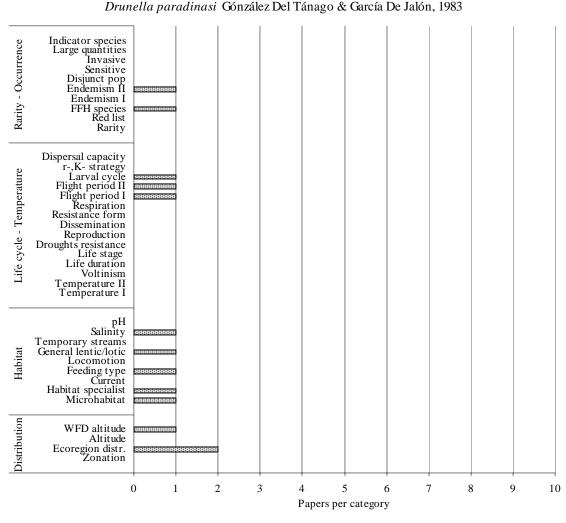


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: information were available only for Endemism category.

Life cycles – Temperature: data were available only for Larval cycle and Flight period.

Habitat: information were available only for Microhabitat and Habitat specialist.

Distribution: data were available only for WFD altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors generally agree?	is disagreement due to differences among geographical areas?	is disagreement due to differences among authors' opinions?
Autoecological groups		geograpmear areas:	opinions:
Rarity - Occurrence	Y	=	-
Life cycle - Temperature	Y if no	=	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

Species Name: Ephemerella aroni Eaton, 1908

Number of papers containing useful information: 7

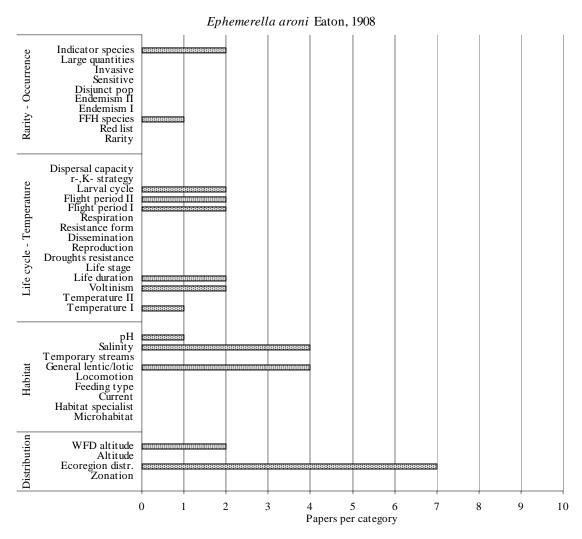


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: information were available only for Indicator species.

Life cycles – Temperature: data were available for Temperature preference, Voltinism, Life duration, Larval cycle and Flight period.

Habitat: information were available only for pH.

Distribution: data were available only for WFD altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

Autoecological groups	do authors generally agree?	Agreement on autoecologi is disagreement due to differences among geographical areas?	cal features is disagreement due to differences among authors' opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

Species Name: Ephemerella mucronata (Bengtsson, 1909)

Number of papers containing useful information: 41

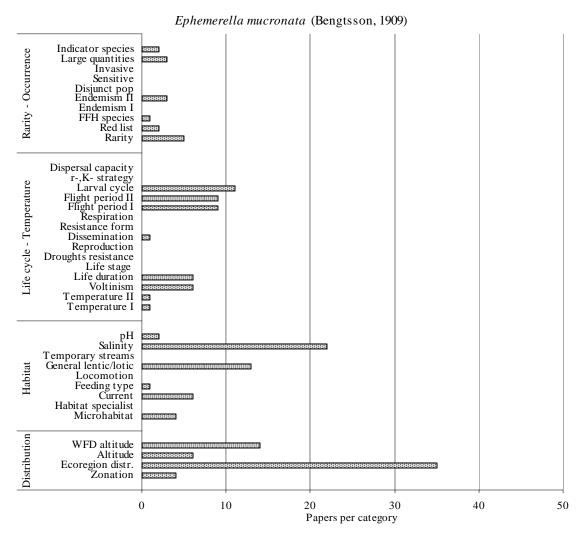


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: information were obtained for all categories, excluding Disjunct population, Sensitive and Invasive.

Life cycles – **Temperature**: data were available for all categories with the exception of Life stage and Droughts resistance.

Habitat: information were present for all autoecological traits, with the exception of Habitat specialist, Locomotion and Temporary streams.

Distribution: information were available for all features.

Autoecological categories for which a large amount of information was available are related to Larval cycles, Flight period and Altitudinal distribution.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors generally agree?	is disagreement due to differences among geographical areas?	is disagreement due to differences among authors' opinions?
Autoecological groups		geographical areas:	opinions:
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Ephemerella notata Eaton, 1887

Number of papers containing useful information: 32

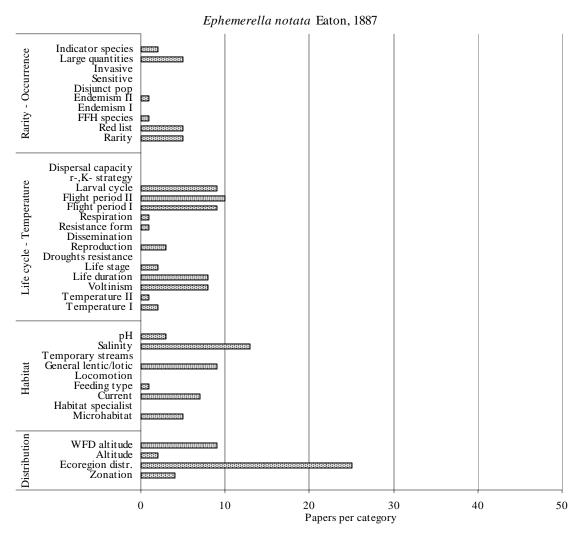


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: information were obtained for all categories, excluding Disjunct population, Sensitive and Invasive.

Life cycles – Temperature: data were available for all categories.

Habitat: information were present for all autoecological traits, with the exception of Habitat specialist, Locomotion and Temporary streams.

Distribution: information were available for all features.

Autoecological categories for which a large amount of information was available are related to Larval cycles, Flight period, Voltinism and Life duration.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Eurylophella iberica Keffermüller & Terra, 1978

Number of papers containing useful information: 1

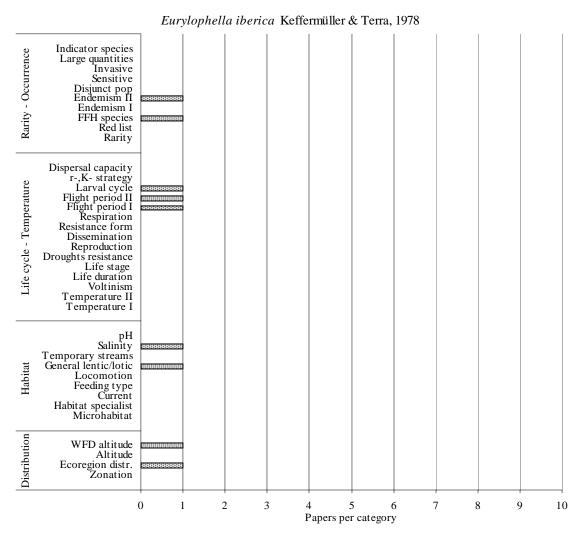


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: information were available only for Endemism category.

Life cycles – Temperature: data were available only for Larval cycle and Flight period.

Habitat: no data available.

Distribution: data were available only for WFD altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data as only one paper contained useful information.

Species Name: Eurylophella karelica Tiensuu, 1935

Number of papers containing useful information: 2

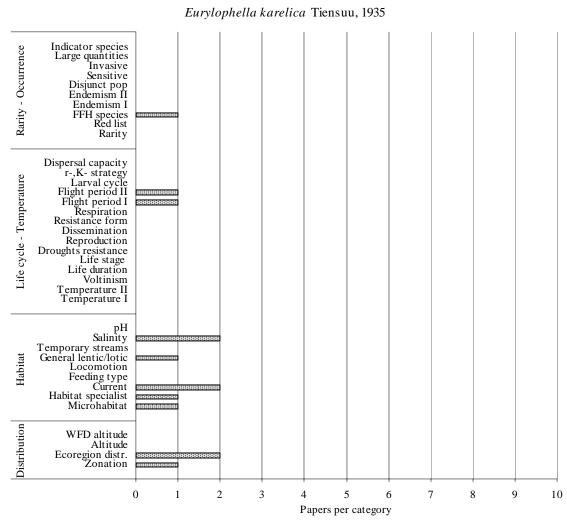


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: no information were available.

Life cycles – Temperature: data were available only for Flight period.

Habitat: information were available only for Microhabitat, Habitat specialist and Current.

Distribution: data were available only for zonation.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

Autoecological groups	do authors generally agree?	Agreement on autoecologi is disagreement due to differences among geographical areas?	is disagreement due to differences among authors' opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

Species Name: Serratella albai Gonzalez Del Tánago & García De Jalón, 1983

Number of papers containing useful information: 2

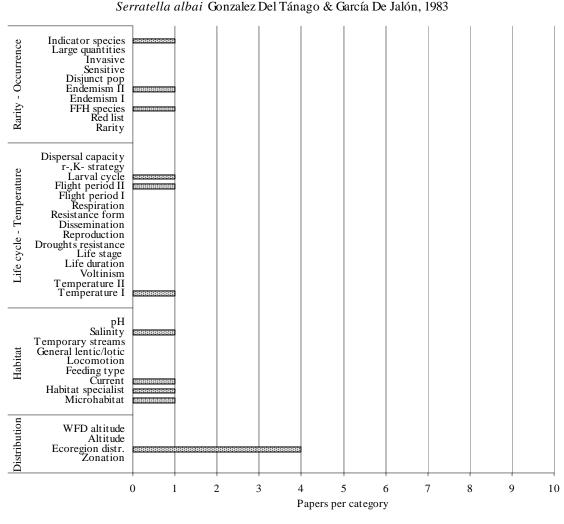


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: information were available only for Endemism and Indicator species.

Life cycles – Temperature: data were available only for Temperature preference, Flight period and Larval cycle.

Habitat: information were available only for Microhabitat, Habitat specialist and Current.

Distribution: no data were available.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	=	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

Species Name: Serratella hispanica (Eaton, 1887)

Number of papers containing useful information: 1

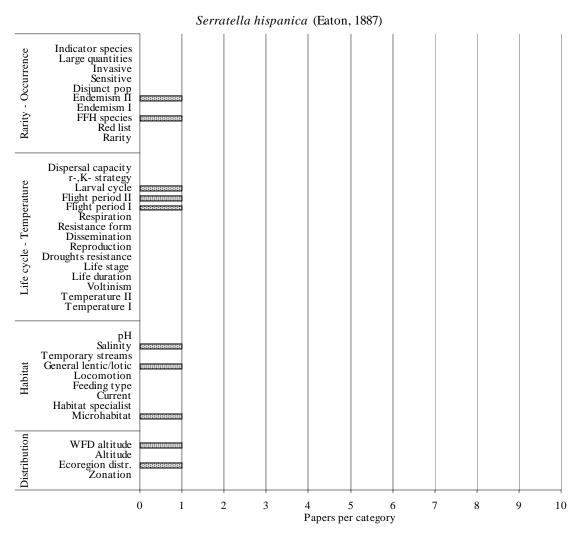


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: information were available only for Endemism.

Life cycles – Temperature: data were available only for Flight period and Larval cycle.

Habitat: no data were available.

Distribution: information were available only for WFD altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data as only one paper contained useful information.

Species Name: Serratella ignita (Poda, 1761)

Number of papers containing useful information: 138

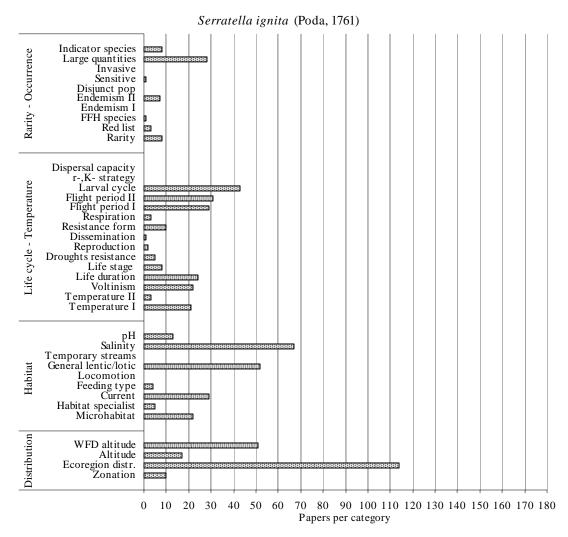


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: information were obtained for all categories, excluding Disjunct population and Invasive.

Life cycles – Temperature: data were available for all categories.

Habitat: information were present for all autoecological traits, with the exception of Locomotion and Temporary streams.

Distribution: information were available for all features.

Autoecological categories for which a large amount of information was available are related to Larval cycles, Flight period and WFD altitude.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors generally agree?	is disagreement due to differences among geographical areas?	is disagreement due to differences among authors' opinions?
Autoecological groups		geograpinear areas:	opinions:
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	N if no	N	Y
Habitat	N	N	Y
Distribution	Y	-	-

When summarizing the information, some differences arose in the reviewed literature. In particular some disagreements have been pointed out for Life cycle – Temperature and Habitat due to differences observed among authors' opinions.

Species Name: Serratella maculocaudata (Ikonomov, 1961)

Number of papers containing useful information: 6

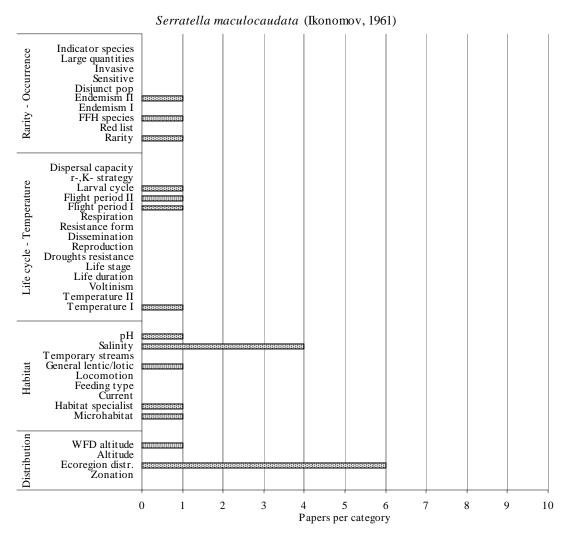


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – Occurrence: information were available only for Endemism and Rarity.

Life cycles – **Temperature**: data were available only for Larval cycle, Flight period and Temperature preference.

Habitat: information were available only for Microhabitat, Habitat specialist and pH.

Distribution: data were available only for WFD altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

Autoecological groups	do authors generally agree?	Agreement on autoecologic is disagreement due to differences among geographical areas?	is disagreement due to differences among authors' opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

Species Name: Serratella mesoleuca (Brauer, 1857)

Number of papers containing useful information: 17

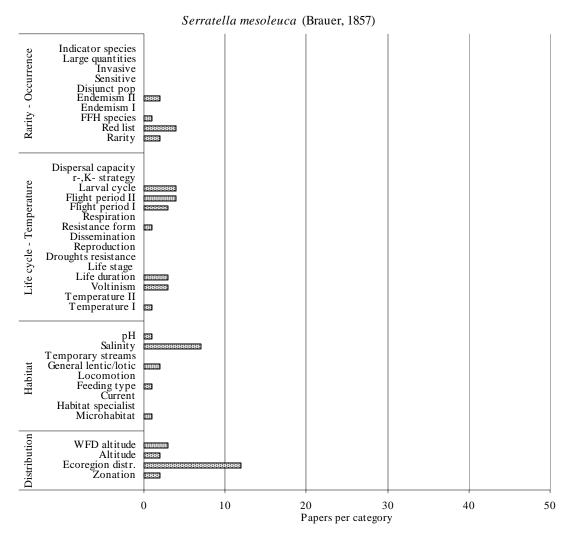


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – Occurrence: information were available only for Rarity, Red list and Endemism.

Life cycles – Temperature: data were available only for Larval cycle, Flight period, Life duration, Voltinism and Temperature preference.

Habitat: information were available only for Microhabitat and pH.

Distribution: information were available for all features.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	=	-
Habitat	Y	=	-
Distribution	Y	-	

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

Species Name: Serratella spinosa (Ikonomov, 1961)

Number of papers containing useful information: 9

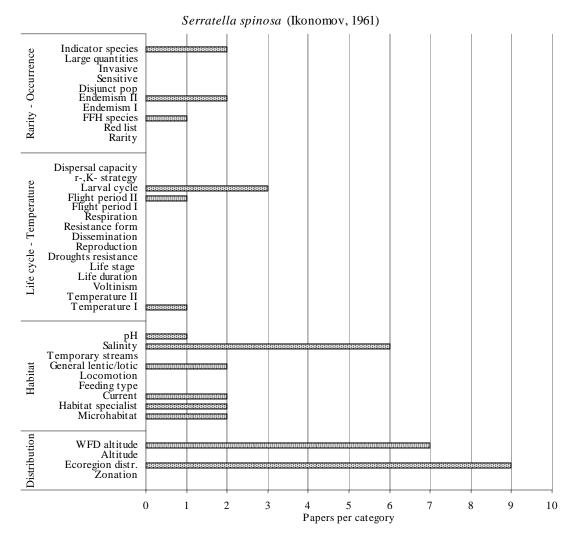


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – Occurrence: information were available only for Endemism and Indicator species.

Life cycles – **Temperature**: data were available only for Larval cycle, Flight period and Temperature preference.

Habitat: information were available for all features excluding Locomotion and Temporary streams.

Distribution: information were available only for WFD altitude.

The only autoecological category for which a large amount of information was available is WFD altitude.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors generally agree?	is disagreement due to differences among geographical areas?	is disagreement due to differences among authors' opinions?
Autoecological groups		geographical areas:	opinions:
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

Family Name: Ephemerellidae

Species Name: *Torleya major* (Klapalek, 1905)

Number of papers containing useful information: 51

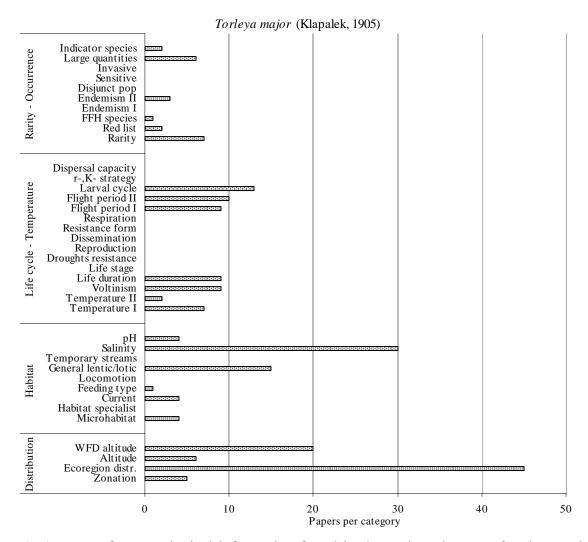


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: information were obtained for all categories, excluding Disjunct population, Sensitive and Invasive.

Life cycles – Temperature: data were available for all categories with the exception of Life stage amd Droughts resistance.

Habitat: information were present for all autoecological traits, with the exception of Habitat specialist, Locomotion and Temporary streams.

Distribution: information were available for all features.

Autoecological categories for which a large amount of information was available are related to Larval cycles, Flight period, Voltinism, Life duration and WFD altitude.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	=	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Family Name: Ephemeridae

Species Name: Ephemera danica Müller, 1764

Number of papers containing useful information: 86

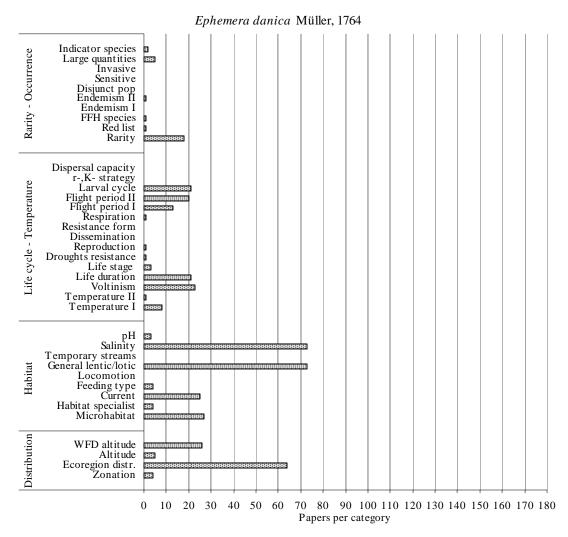


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: information were obtained for all categories, excluding Disjunct population, Sensitive and Invasive.

Life cycles – Temperature: data were available for all categories.

Habitat: information were present for all autoecological traits, with the exception of Locomotion and Temporary streams.

Distribution: information were available for all features.

Autoecological categories for which a large amount of information was available are related to Larval cycles, Flight period, Microhabitat, Current and WFD altitude.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	=	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Family Name: Ephemeridae

Species Name: Ephemera glaucops Pictet, 1843

Number of papers containing useful information: 24

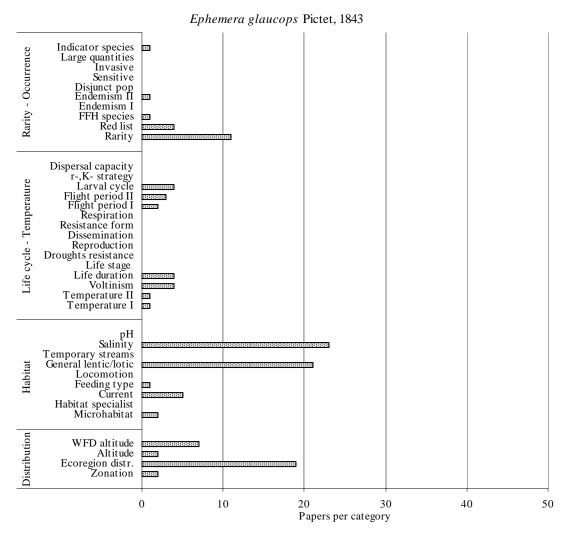


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: information were obtained for all categories, excluding Disjunct population, Sensitive, Invasive and Large quantities.

Life cycles – Temperature: data were available for Larval cycle, Flight period, Life duration, Voltinism and Teperature preference.

Habitat: information were present for all autoecological traits, with the exception of Habitat specialist, Locomotion and Temporary streams.

Distribution: information were available for all features.

Autoecological categories for which a large amount of information was available are related to Rarity and WFD altitude.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	=	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Family Name: Ephemeridae

Species Name: Ephemera hellenica Demoulin, 1955

Number of papers containing useful information: 2

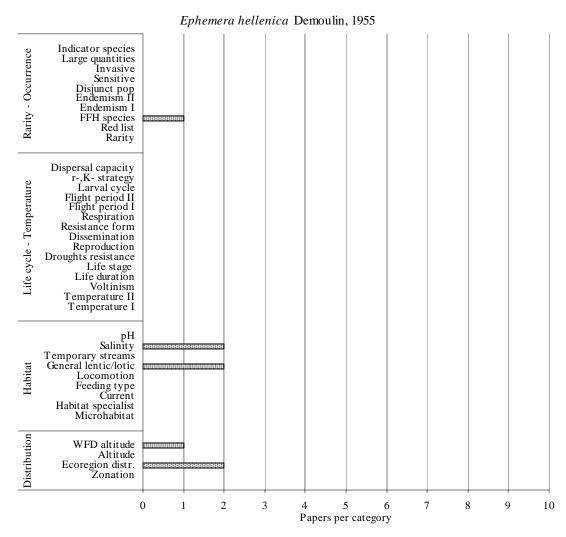


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories. **Rarity – Occurrence**: no nformation were available. **Life cycles – Temperature**: no data were available.

Habitat: no nformation were available.

Distribution: data were available only for WFD altitude.

The information available was extremely restricted for all autoecological categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors generally agree?	is disagreement due to differences among geographical areas?	is disagreement due to differences among authors' opinions?
Autoecological groups		geograpmear areas:	opinions:
Rarity - Occurrence	Y	=	-
Life cycle - Temperature	Y if no	=	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

Family Name: Ephemeridae

Species Name: Ephemera lineata Eaton, 1870

Number of papers containing useful information: 27

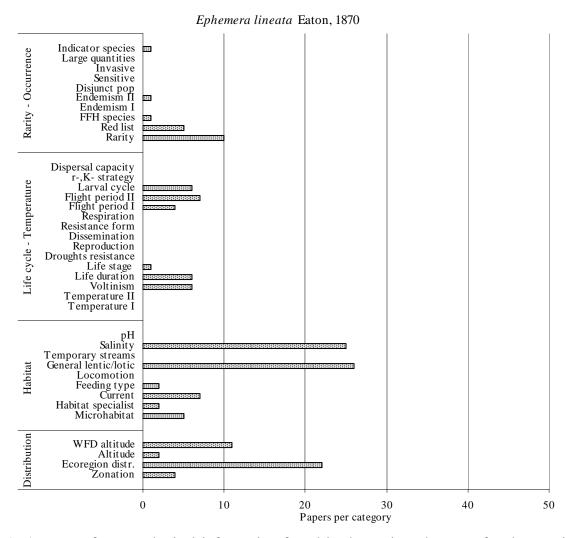


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: information were obtained for all categories, excluding Disjunct population, Sensitive, Invasive and Large quantities.

Life cycles – Temperature: data were available for Larval cycle, Flight period, Life stage, Life duration and Voltinism.

Habitat: information were present for all autoecological traits, with the exception of Locomotion and Temporary streams.

Distribution: information were available for all features.

Autoecological categories for which a large amount of information was available are related to Rarity and WFD altitude.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	=	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Family Name: Ephemeridae

Species Name: Ephemera parnassiana Demoulin, 1958

Number of papers containing useful information: 2

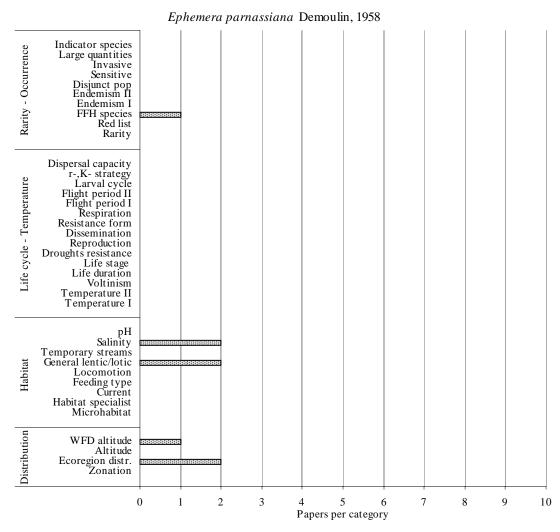


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories. Rarity – Occurrence: no nformation were available. Life cycles – Temperature: no data were available.

Habitat: no nformation were available.

Distribution: data were available only for WFD altitude.

The information available was extremely restricted for all autoecological categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors generally agree?	is disagreement due to differences among geographical areas?	is disagreement due to differences among authors' opinions?
Autoecological groups		geograpmear areas:	opinions:
Rarity - Occurrence	Y	=	-
Life cycle - Temperature	Y if no	=	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

Family Name: Ephemeridae

Species Name: Ephemera vulgata Linnaeus, 1758

Number of papers containing useful information: 41

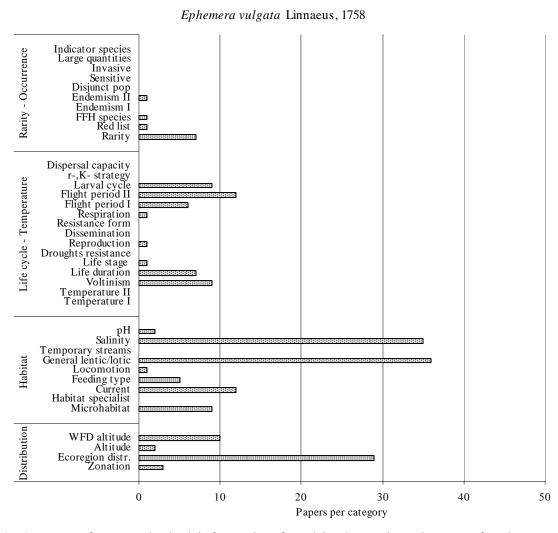


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: Rarity, Red list and Endemism were the only categories for which information were obtained.

Life cycles – **Temperature**: data were available for all categories excluding Temperature preference and Droughts resistance.

Habitat: information were present for all autoecological traits, with the exception of Habitat specialist and Temporary streams.

Distribution: information were available for all features.

Autoecological categories for which a large amount of information was available are related to Larval cycles, Flight period, Current and WFD altitude.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	=	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Family Name: Ephemeridae

Species Name: Ephemera zettana Kimmins, 1937

Number of papers containing useful information: 9

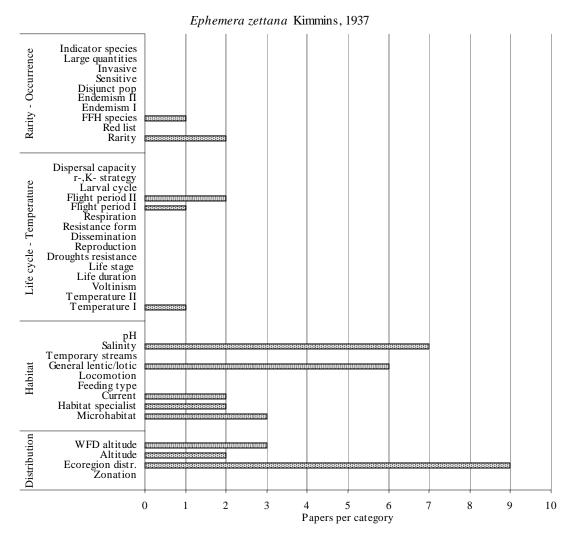


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: Rarity was the only category for which information were obtained.

Life cycles – **Temperature**: data were available only for Flight period and Temperature preference. **Habitat**: information were available for all features excluding Locomotion, Temporary streams and pH.

Distribution: information were available for all features.

The information available was restricted for all autoecological categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors generally agree?	is disagreement due to differences among geographical areas?	is disagreement due to differences among authors' opinions?
Autoecological groups		geograpmear areas:	opinions:
Rarity - Occurrence	Y	=	-
Life cycle - Temperature	Y if no	=	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

Species Name: Afghanurus joernensis (Bengtsson, 1909)

Number of papers containing useful information: 5

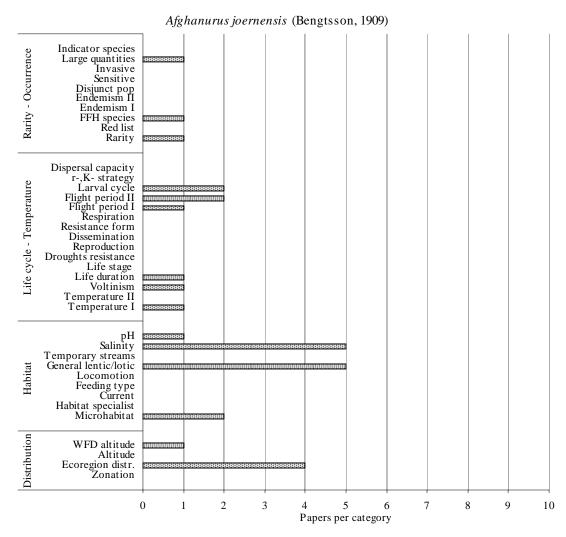


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – Occurrence: information were available only for Rarity and Large quantities.

Life cycles – Temperature: data were available only for Larval cycle, Flight period, Life duration, Voltinism and Temperature preference.

Habitat: information were available for all features excluding Habitat specialist, Locomotion and Temporary streams.

Distribution: information were available for all features.

The information available was restricted for all autoecological categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

Species Name: Cinygma lyriformis (McDunnough, 1924)

Number of papers containing useful information: 1

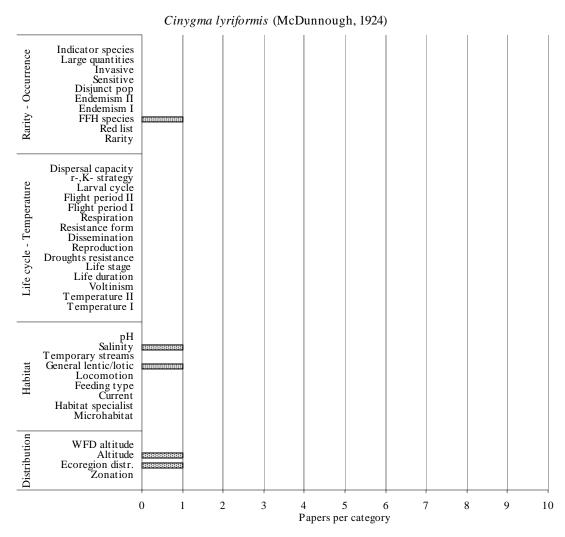


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories. **Rarity – Occurrence**: no information were available. **Life cycles – Temperature**: no data were available.

Habitat: no information were available.

Distribution: data were available only for Altitude.

The information available was extremely restricted for all autoecological categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors generally agree?	is disagreement due to differences among geographical areas?	is disagreement due to differences among authors' opinions?
Autoecological groups		geograpmear areas.	opinions.
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data as only one paper contained useful information.

Species Name: Ecdyonurus alpinus Hefti, Tomka & Zurwerra, 1987

Number of papers containing useful information: 7

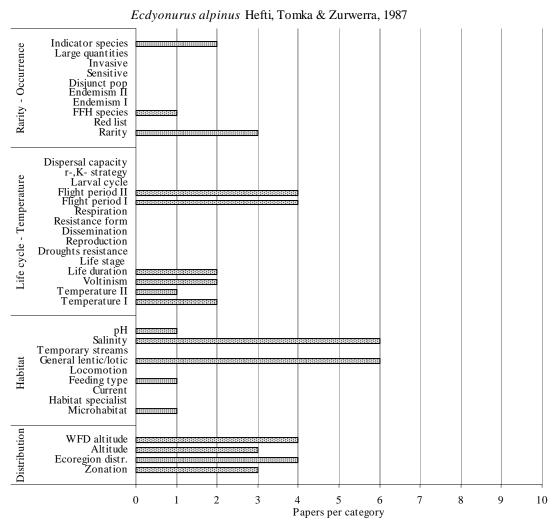


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – Occurrence: information were available only for Rarity and Indicator species.

Life cycles – **Temperature**: data were available only for Flight period, Life duration, Voltinism and Temperature preference.

Habitat: information were available for all features excluding Habitat specialist, Current, Locomotion and Temporary streams.

Distribution: information were available for all features.

Autoecological categories for which a large amount of information was available are related to Flight period and WFD altitude.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	do authors generally agree?	Agreement on autoecologi is disagreement due to differences among	is disagreement due to differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

Species Name: Ecdyonurus androsianus Braasch, 1983

Number of papers containing useful information: 1

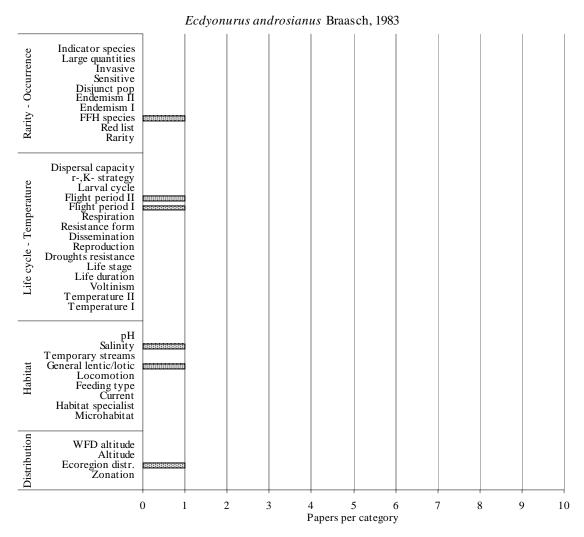


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories. **Rarity – Occurrence**: no information were available.

Life cycles – Temperature: information were available for Flight period

Habitat: no information were available. **Distribution**: no information were available.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	do aut	hors	ment on autoecological is disagreement due	is disagreement due
Autoecological groups	generally	agree?	to differences among geographical areas?	to differences among authors' opinions?
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data, since only one paper contained useful information on the species. General agreement is thus recorded for all autoecological groups.

Species Name: Ecdyonurus angelieri Thomas, 1968

Number of papers containing useful information: 5

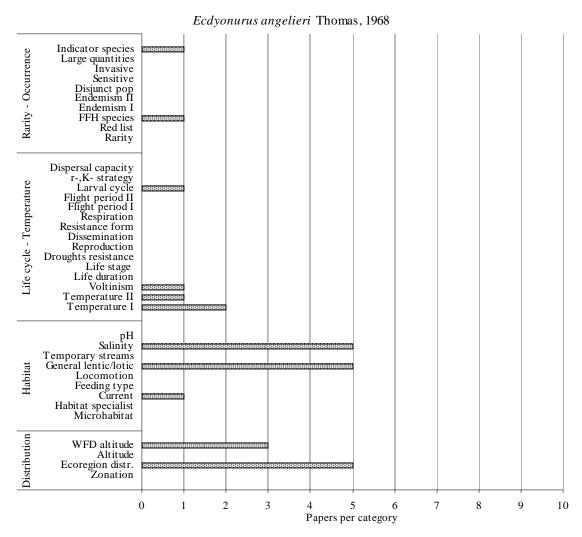


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – Occurrence: information were available for Indicator species.

Life cycles – **Temperature**: information were available for Larval cycle, Voltinism and Temperature.

Habitat: information were available for Current.

Distribution: information were available for WFD altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

Autoecological groups	Agreed do authors generally agree?		ment on autoecological is disagreement due to differences among geographical areas?	is disagreement due to differences among authors' opinions?
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y		-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information on the species. General agreement is thus recorded for all autoecological groups.

Species Name: Ecdyonurus aurantiacus (Burmeister, 1839)

Number of papers containing useful information: 32

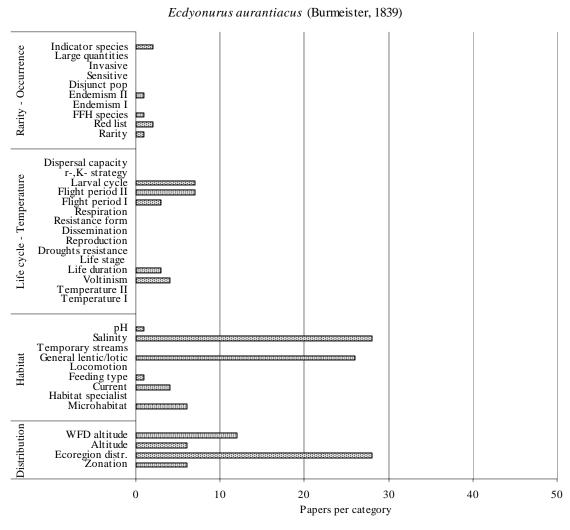


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were available for Indicator species, Endemism, Red list and Rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Life duration and Voltinism.

Habitat: information were available for pH, Current and Microhabitat.

Distribution: information were available for all categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features			
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among
			among geographical	authors' opinions?
Autoecological groups			areas?	
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	=	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Ecdyonurus austriacus Kimmins, 1958

Number of papers containing useful information: 11

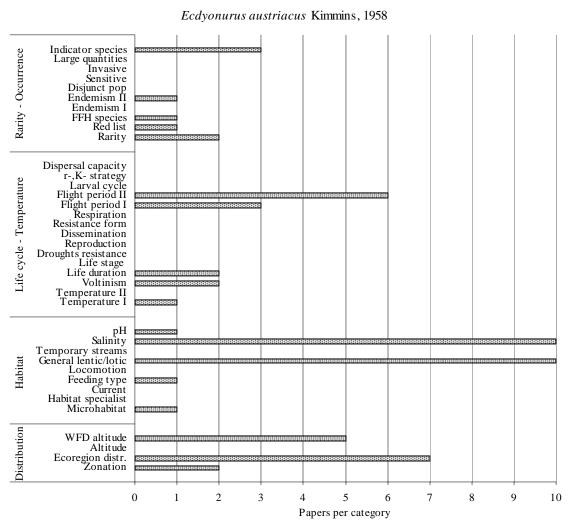


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were available for Indicator species, Endemism, Red list and Rarity.

Life cycles – Temperature: information were available for Flight period, Life duration, Voltinism and Temperature.

Habitat: information were available for pH, Feeding type and Microhabitat.

Distribution: information were available for WFD altitude and Zonation.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features			
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among
			among geographical	authors' opinions?
Autoecological groups			areas?	
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	=	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Ecdyonurus belfiorei Haybach & Thomas, 2001

Number of papers containing useful information: 3

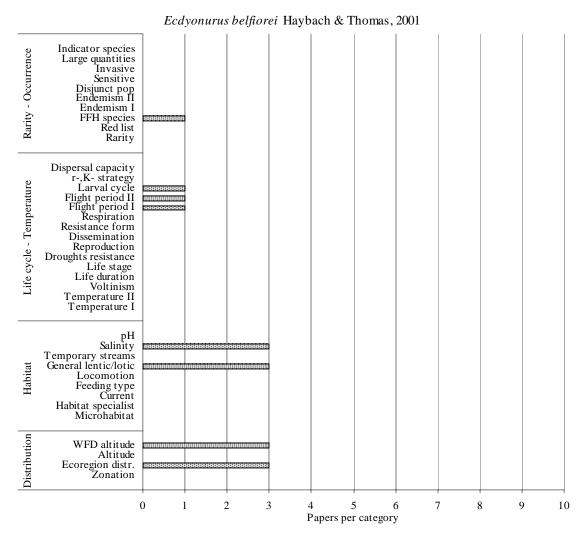


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: no information available.

Life cycles – Temperature: information were available for Larval cycle and Flight period.

Habitat: no information available.

Distribution: information were available for WFD altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreen do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	authors opinions.
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information on the species. General agreement is thus recorded for all autoecological groups.

Species Name: Ecdyonurus bellieri (Hagen, 1860)

Number of papers containing useful information: 1

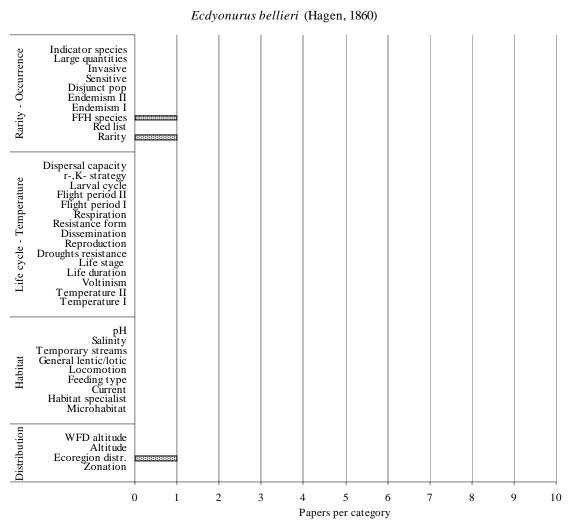


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – **Occurrence**: information were available for Rarity. **Life cycles** – **Temperature**: no information were available.

Habitat: no information were available. **Distribution**: no information were available.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features			
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among
			among geographical	authors' opinions?
Autoecological groups			areas?	
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	=	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data, since only one paper contained useful information on the species. General agreement is thus recorded for all autoecological groups.

Species Name: Ecdyonurus carpathicus Sowa, 1973

Number of papers containing useful information: 9

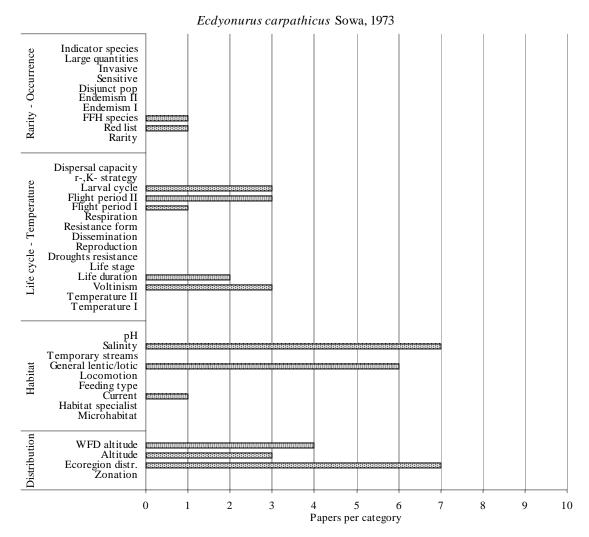


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – Occurrence: information were available for Rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Life duration and Voltinism.

Habitat: information were available for Current.

Distribution: information were available for Altitude and WFD altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features					
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among		
			among geographical	authors' opinions?		
Autoecological groups			areas?			
Rarity - Occurrence	Y		-	-		
Life cycle - Temperature	Y	if no	=	-		
Habitat	Y	11 110	-	-		
Distribution	Y		-	-		

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

-----End of the fact sheet -----

Species Name: Ecdyonurus codinai Navás, 1924

Number of papers containing useful information: 2

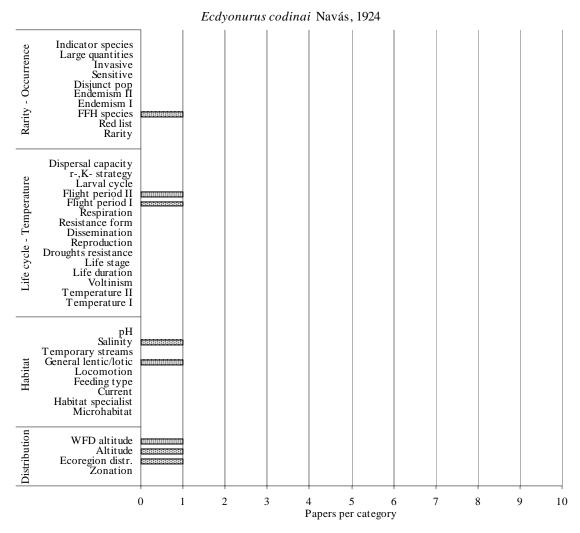


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: no information were available.

Life cycles – Temperature: information were available for Flight period.

Habitat: no information were available.

Distribution: information were available for WFD altitude and Altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreen do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	admors opinions.
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		_	

No particular differences arose when summarizing the data, since two only paper contained useful information on the species. General agreement is thus recorded for all autoecological groups.

------End of the fact sheet -----

Species Name: Ecdyonurus corsicus Esben-Petersen, 1912

Number of papers containing useful information: 3

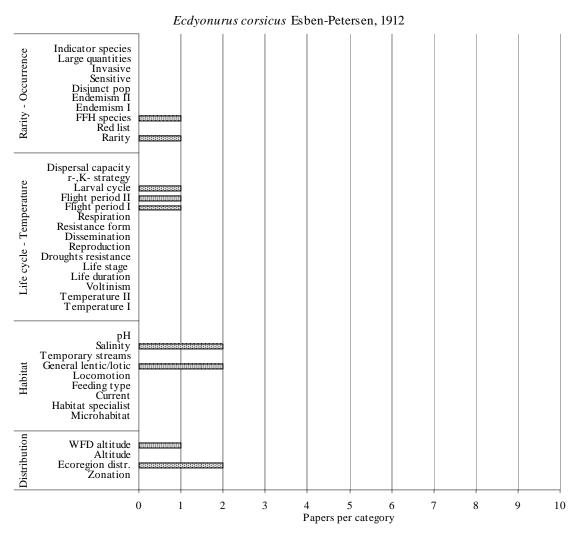


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: information were available for Rarity.

Life cycles – Temperature: information were available for Larval cycle and Flight period.

Habitat: no information were available.

Distribution: information were available for WFD altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreen do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			arreas?	authors opinions:
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		_	

No particular differences arose when summarizing the data, due to the low number of papers containing useful information on the species. General agreement is thus recorded for all autoecological groups.

-----End of the fact sheet ------

Species Name: Ecdyonurus cortensis Belfiore, 1988

Number of papers containing useful information: 1

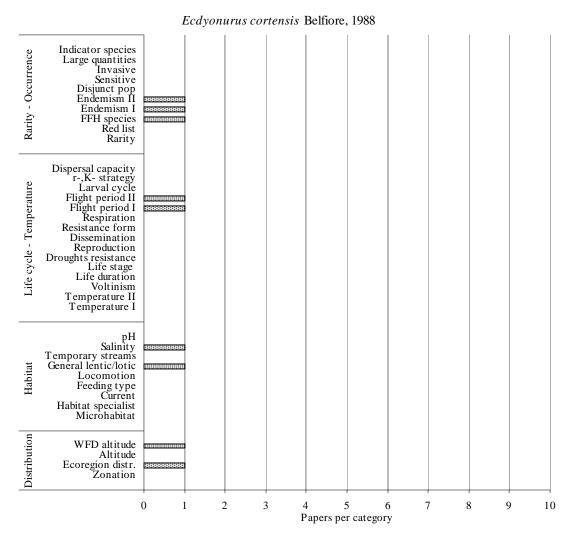


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: information were available for Endemism.

Life cycles – Temperature: information were available for Flight period.

Habitat: no information were available.

Distribution: information were available for WFD altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features					
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among		
			among geographical	authors' opinions?		
Autoecological groups			areas?			
Rarity - Occurrence	Y		-	-		
Life cycle - Temperature	Y	if no	=	-		
Habitat	Y	11 110	-	-		
Distribution	Y		-	-		

No particular differences arose when summarizing the data, since only one paper contained useful information on the species. General agreement is thus recorded for all autoecological groups.

------End of the fact sheet -----

Species Name: Ecdyonurus dispar (Curtis, 1834)

Number of papers containing useful information: 57

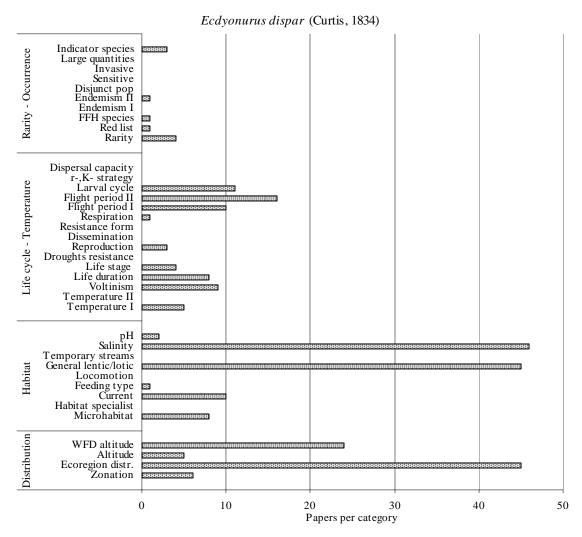


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were available for Indicator species, Endemism, Red list and Rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Respiration, Reproduction, Life stage, Life duration, Voltinism and Temperature.

Habitat: information were available for pH, Current and Microhabitat.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreer do authors generally agree?		is disagreement due to differences	is disagreement due to differences among authors' opinions?
Autoecological groups			among geographical areas?	authors opinions:
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

-----End of the fact sheet -----

Species Name: Ecdyonurus epeorides Demoulin, 1955

Number of papers containing useful information: 4

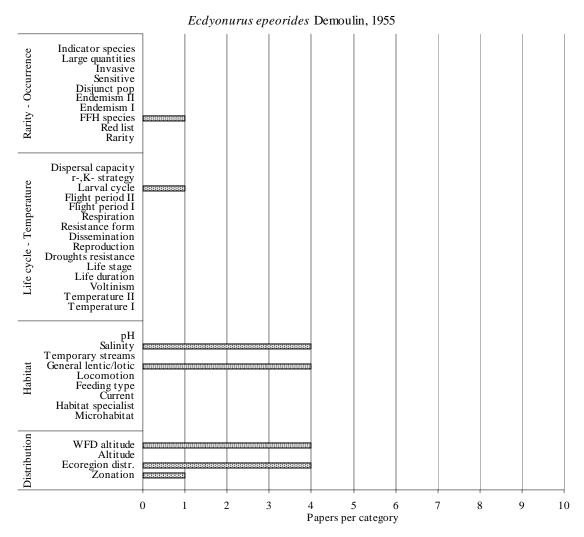


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: no information were available.

Life cycles – Temperature: information were available for Larval cycle.

Habitat: no information were available.

Distribution: information were available for WFD altitude and Zonation.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreen do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	authors opinions.
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information on the species. General agreement is thus recorded for all autoecological groups.

-----End of the fact sheet -----

Species Name: Ecdyonurus flavimanus Klapalek, 1905

Number of papers containing useful information: 1

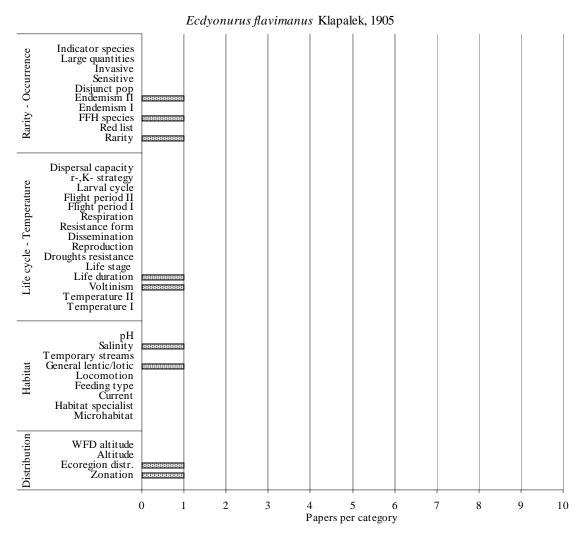


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – **Occurrence**: information were available for Endemism and Rarity.

Life cycles – Temperature: information were available for Life duration and Voltinism.

Habitat: no information were available.

Distribution: information were available for Zonation.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreen do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			arreas?	authors opinions:
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		_	

No particular differences arose when summarizing the data, since only one paper contained useful information on the species. General agreement is thus recorded for all autoecological groups.

-----End of the fact sheet ------

Species Name: Ecdyonurus forcipula (Pictet, 1843)

Number of papers containing useful information: 13

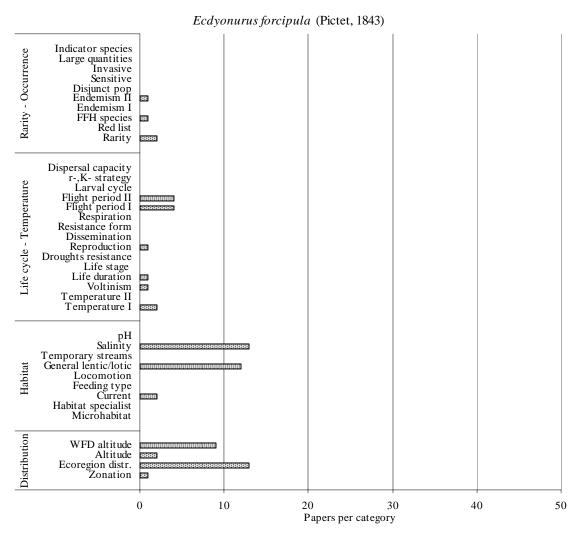


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were available for Endemism and Rarity.

Life cycles – Temperature: information were available for Flight period, Reproduction, Life duration, Voltinism and Temperature.

Habitat: information were available for Current.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreen do authors generally agree?		ment on autoecological is disagreement due to differences	is disagreement due to differences among
Autoecological groups			among geographical areas?	authors' opinions?
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

-----End of the fact sheet -----

Species Name: Ecdyonurus graecus Braasch, 1984

Number of papers containing useful information: 2

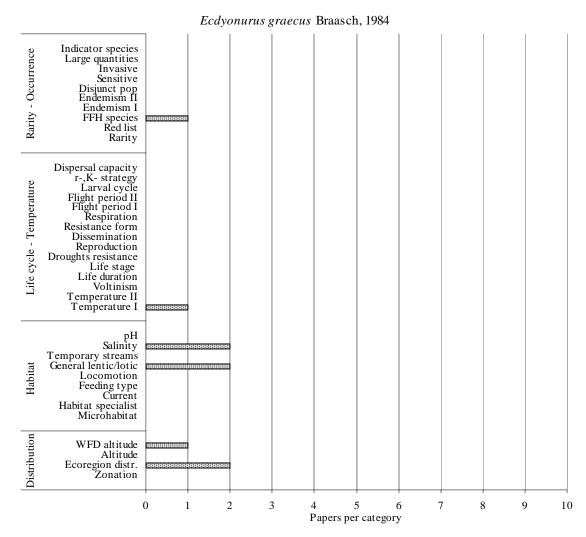


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: no information were available.

Life cycles – Temperature: information were available for Temperature.

Habitat: no information were available.

Distribution: information were available for WFD altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreen do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	features is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		_	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information on the species. General agreement is thus recorded for all autoecological groups.

------End of the fact sheet -----

Species Name: Ecdyonurus helveticus (Eaton, 1885)

Number of papers containing useful information: 42

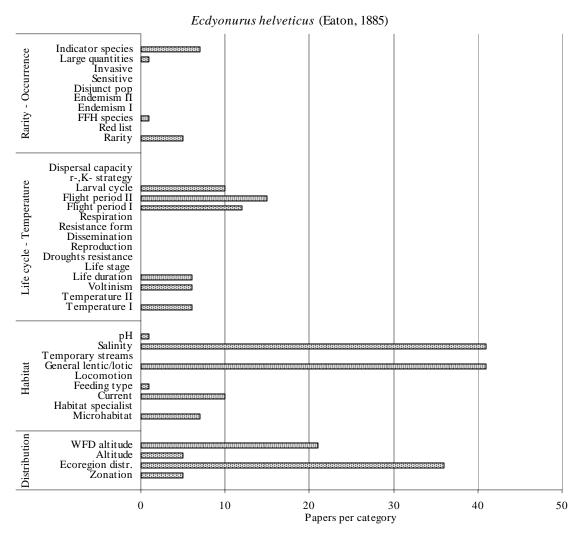


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were available for Indicator species, Large quantities and Rarity. **Life cycles** – **Temperature**: information were available for Larval cycle, Flight period, Life duration, Voltinism and Temperature.

Habitat: information were available for pH, Current and Microhabitat.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features					
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among		
			among geographical	authors' opinions?		
Autoecological groups			areas?			
Rarity - Occurrence	Y		-	-		
Life cycle - Temperature	Y	if no	=	-		
Habitat	Y	11 110	-	-		
Distribution	Y		-	-		

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

-----End of the fact sheet -----

Species Name: Ecdyonurus insignis (Eaton, 1870)

Number of papers containing useful information: 37

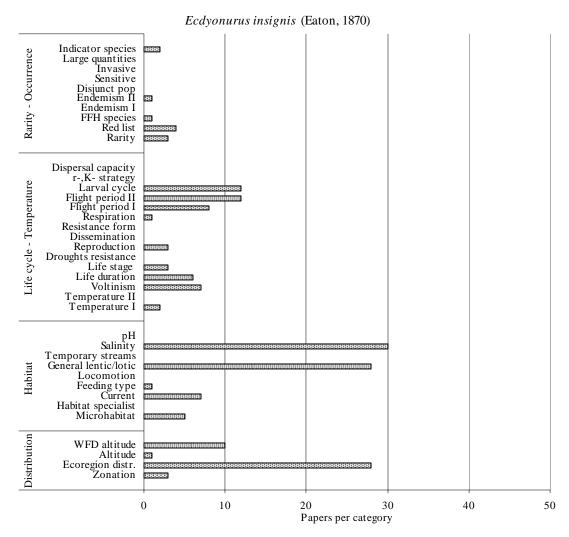


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were available for Indicator species, Endemism, Red list and Rarity.

Life cycles – **Temperature**: information were available for Larval cycle, Flight period, Reproduction, Life stage, Life duration, Voltinism and Temperature.

Habitat: information were available for Current and Microhabitat.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features					
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among		
			among geographical	authors' opinions?		
Autoecological groups			areas?			
Rarity - Occurrence	Y		-	-		
Life cycle - Temperature	Y	if no	=	-		
Habitat	Y	11 110	-	-		
Distribution	Y		-	-		

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

-----End of the fact sheet -----

Species Name: Ecdyonurus krueperi (Stein, 1863)

Number of papers containing useful information: 5

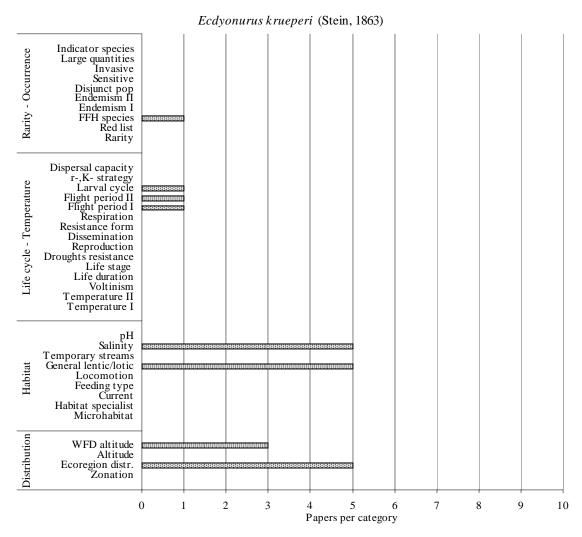


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: no information were available.

Life cycles – Temperature: information were available for Larval cycle and Flight period.

Habitat: no information were available.

Distribution: information were available for WFD altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreen do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			arreas?	authors opinions:
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		_	

No particular differences arose when summarizing the data, due to the low number of papers containing useful information on the species. General agreement is thus recorded for all autoecological groups.

-----End of the fact sheet ------

Species Name: Ecdyonurus macani Thomas & Sowa, 1970

Number of papers containing useful information: 20

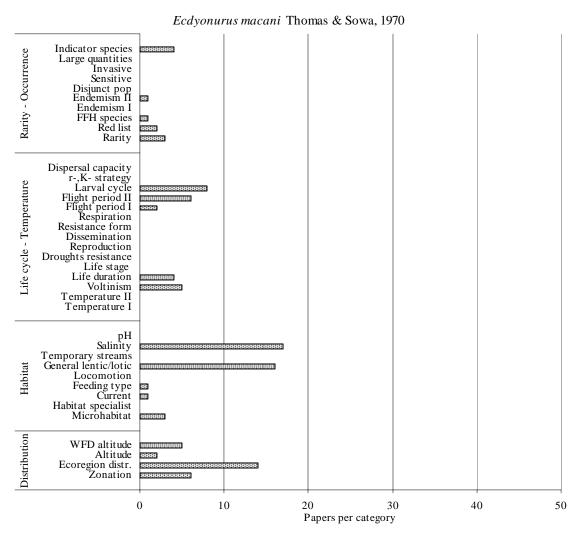


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were available for Indicator species, Endemism, Red list and Rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Life duration and Voltinism.

Habitat: information were available for Current and Microhabitat.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreer do authors generally agree?		ment on autoecological is disagreement due to differences	is disagreement due to differences among
Autoecological groups			among geographical areas?	authors' opinions?
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

-----End of the fact sheet -----

Species Name: Ecdyonurus moreae Belfiore & Braasch, 1986

Number of papers containing useful information: 2

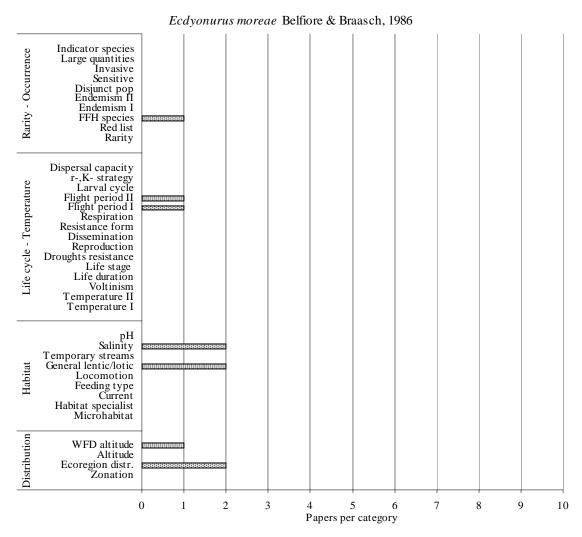


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: no information were available.

Life cycles – Temperature: information were available for Flight period.

Habitat: no information were available.

Distribution: information were available for WFD altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	do aut	_	ment on autoecological is disagreement due	features is disagreement due
	generally agree?		to differences among geographical	to differences among authors' opinions?
Autoecological groups			areas?	uumois opinions.
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information on the species. General agreement is thus recorded for all autoecological groups.

------End of the fact sheet -----

Species Name: Ecdyonurus parahelveticus Hefti, Tomka & Zurwerra, 1986

Number of papers containing useful information: 6

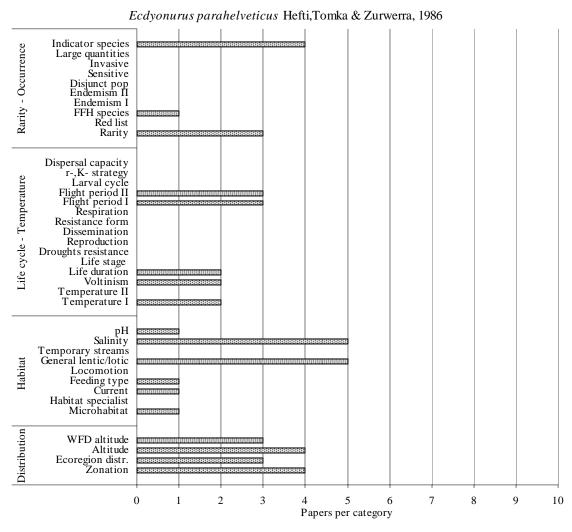


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – Occurrence: information were available for Indicator species and Rarity

Life cycles – Temperature: information were available for Flight period, Life duration, Voltinism and Temperature.

Habitat: information were available for pH, Current and Microhabitats.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreen do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	authors opinions.
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information on the species. General agreement is thus recorded for all autoecological groups.

------End of the fact sheet -----

Species Name: Ecdyonurus picteti (Meyer-Dur, 1864)

Number of papers containing useful information: 18

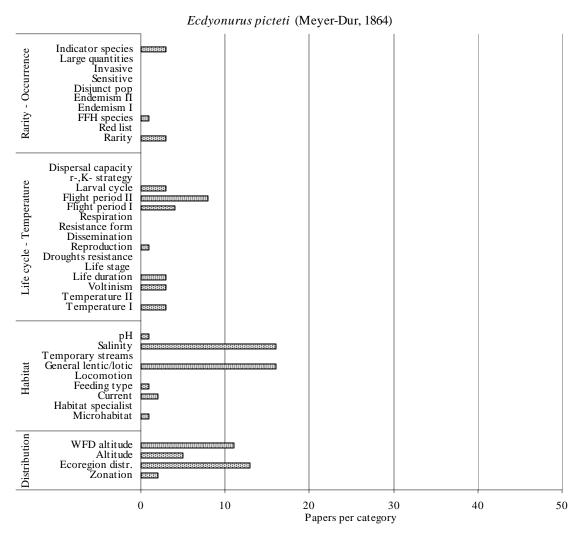


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – Occurrence: information were available for Indicator species and Rarity

Life cycles – **Temperature**: information were available for Larval cycle, Flight period, Reproduction, Life duration, Voltinism and Temperature.

Habitat: information were available for pH, Current and Microhabitats.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreer do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information on the species. General agreement is thus recorded for all autoecological groups.

------End of the fact sheet ------

Species Name: Ecdyonurus puma Jacob & Braasch, 1986

Number of papers containing useful information: 1

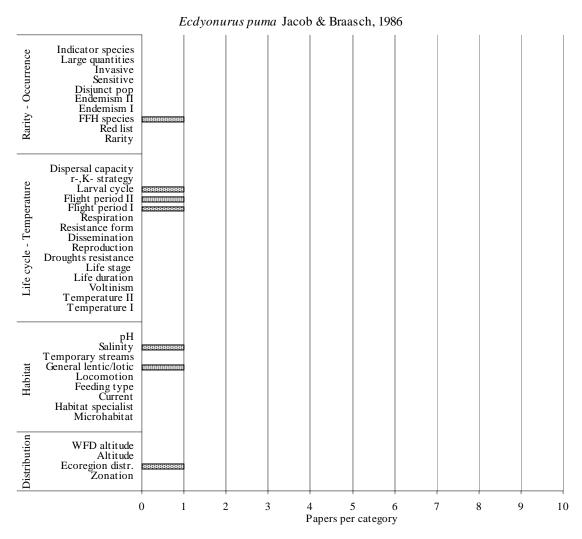


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: no information were available.

Life cycles – Temperature: information were available for Larval cycle and Flight period.

Habitat: no information were available. **Distribution**: no information were available.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features				
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among	
			among geographical	authors' opinions?	
Autoecological groups			areas?		
Rarity - Occurrence	Y		-	-	
Life cycle - Temperature	Y	if no	=	-	
Habitat	Y	11 110	-	-	
Distribution	Y		-	-	

No particular differences arose when summarizing the data, since only one paper contained useful information on the species. General agreement is thus recorded for all autoecological groups.

-----End of the fact sheet ------

Species Name: Ecdyonurus ruffoi Grandi, 1953

Number of papers containing useful information: 8

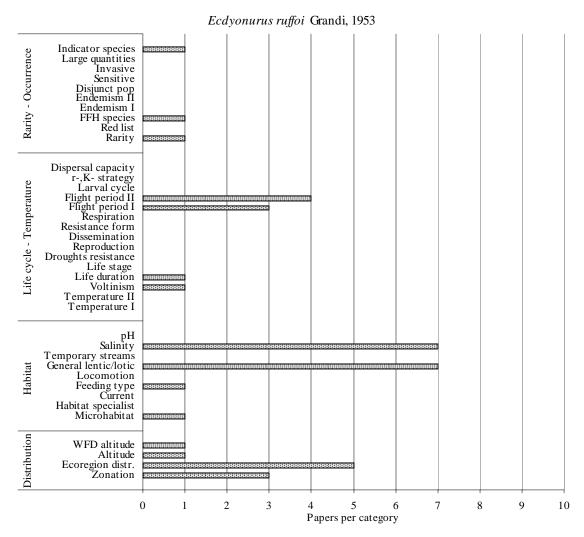


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – Occurrence: information were available for Indicator species and Rarity

Life cycles – Temperature: information were available for Flight period, Life duration and Voltinism.

Habitat: information were available for Feeding type and Microhabitats.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreer do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			arreas?	authors opinions:
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		_	

No particular differences arose when summarizing the data, due to the low number of papers containing useful information on the species. General agreement is thus recorded for all autoecological groups.

-----End of the fact sheet ------

Species Name: Ecdyonurus russevi Braasch & Soldán, 1985

Number of papers containing useful information: 1

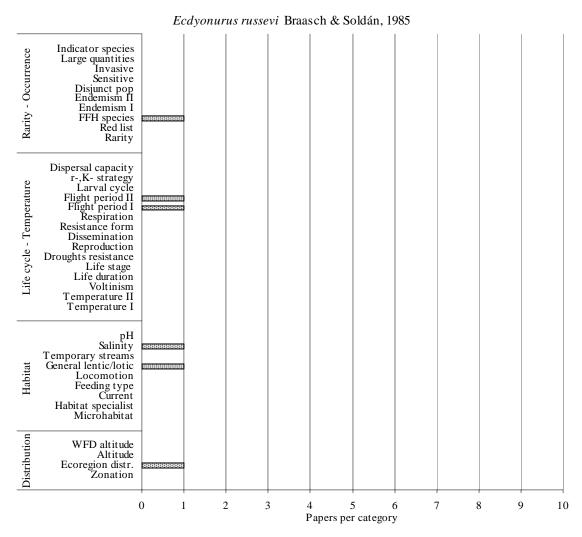


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: no information were available.

Life cycles – Temperature: information were available for Flight period.

Habitat: no information were available. **Distribution**: no information were available.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features			
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among
			among geographical	authors' opinions?
Autoecological groups			areas?	
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	=	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data, since only one paper contained useful information on the species. General agreement is thus recorded for all autoecological groups.

Species Name: Ecdyonurus siveci Hefti, Tomka & Zurwerra, 1986

Number of papers containing useful information: 2

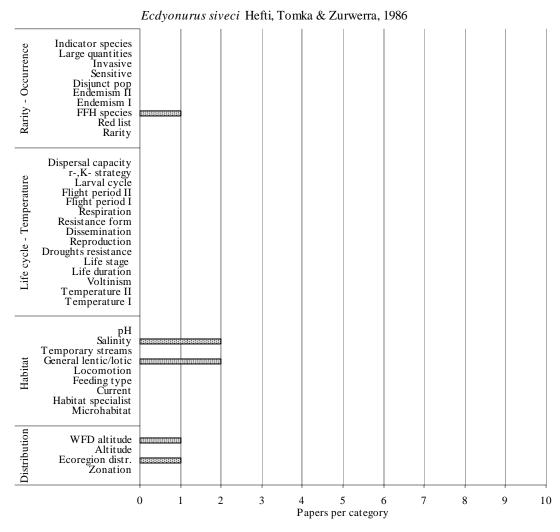


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories. **Rarity – Occurrence**: no information were available. **Life cycles – Temperature**: no data were available.

Habitat: no information were available.

Distribution: data were available only for WFD altitude.

The information available was extremely restricted for all autoecological categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features			
	do authors	is disagreement due to	is disagreement due to	
	generally agree?	differences among	differences among authors'	
Autoecological groups		geographical areas?	opinions?	
Rarity - Occurrence	Y	-	-	
Life cycle - Temperature	Y if no	-	-	
Habitat	Y	=	-	
Distribution	Y	-	-	

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

Species Name: Ecdyonurus starmachi Sowa, 1971

Number of papers containing useful information: 13

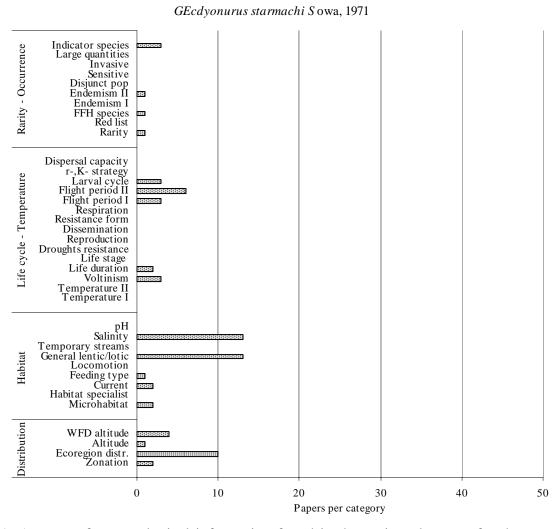


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: information were available only for Rarity, Endemism and Indicator species. **Life cycles** – **Temperature**: data were available only for Larval cycle, Flight period, Life duration and Voltinism.

Habitat: information were available for all features excluding Habitat specialist, Locomotion and Temporary streams.

Distribution: information were available for all features.

The information available was restricted for all autoecological categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features			
	do authors	is disagreement due to	is disagreement due to	
	generally agree?	differences among	differences among authors'	
Autoecological groups		geographical areas?	opinions?	
Rarity - Occurrence	Y	-	-	
Life cycle - Temperature	Y if no	-	-	
Habitat	Y	-	-	
Distribution	Y	-		

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

Species Name: Ecdyonurus subalpinus Klapalek, 1907

Number of papers containing useful information: 21

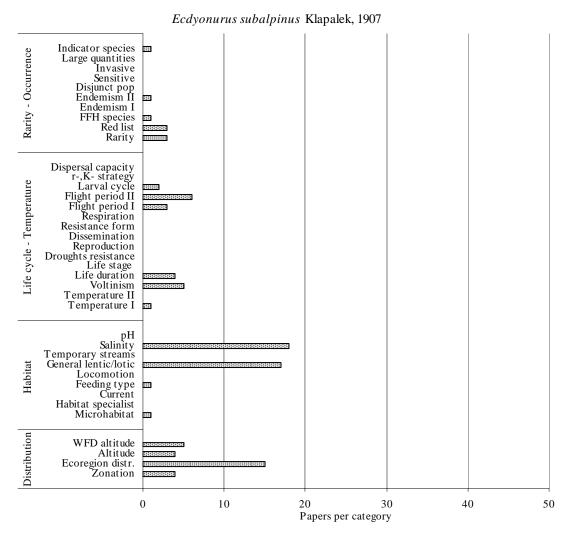


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: information were available for all features excluding Disjunct population, Sensitive, Invasive and Large quantities.

Life cycles – Temperature: data were available only for Larval cycle, Flight period, Life duration, Voltinism and Temperature preference.

Habitat: information were available only for Microhabitat.

Distribution: information were available for all features.

Autoecological categories for which a large amount of information was available are related to Flight period and Voltinism.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features			
	do authors	is disagreement due to	is disagreement due to	
	generally agree?	differences among	differences among authors'	
Autoecological groups		geographical areas?	opinions?	
Rarity - Occurrence	Y	-	-	
Life cycle - Temperature	Y if no	=	-	
Habitat	Y	-	-	
Distribution	Y	-	-	

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

Species Name: Ecdyonurus submontanus Landa, 1969

Number of papers containing useful information: 17

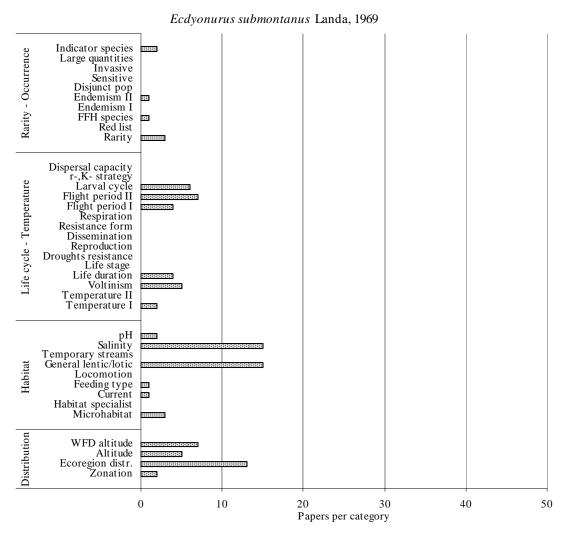


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: information were available only for Rarity, Endemism and Indicator species. **Life cycles** – **Temperature**: data were available only for Larval cycle, Flight period, Life duration, Voltinism and Temperature preference.

Habitat: information were available only for Microhabitat, Current and pH.

Distribution: information were available for all features.

Autoecological categories for which a large amount of information was available are related to Flight period, Voltinism and WFD altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

Autoecological groups	do authors generally agree?	Agreement on autoecologic is disagreement due to differences among geographical areas?	is disagreement due to differences among authors' opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

Species Name: Ecdyonurus torrentis Kimmins, 1942

Number of papers containing useful information: 37

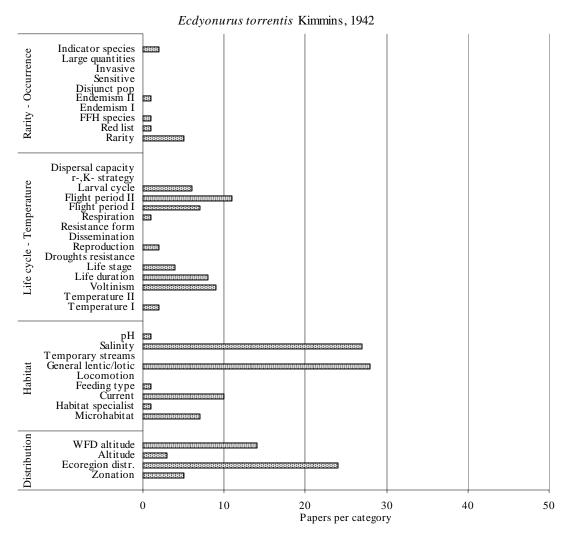


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: information were obtained for all categories, excluding Disjunct population, Sensitive, Invasive and Large quantities.

Life cycles – Temperature: data were available for all categories with the exception of Droughts resistance.

Habitat: information were present for all autoecological traits, with the exception of Locomotion and Temporary streams.

Distribution: information were available for all features.

Autoecological categories for which a large amount of information was available are related to Voltinism, Current and Altitudinal distribution.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features			
	do authors generally agree?	is disagreement due to differences among geographical areas?	is disagreement due to differences among authors' opinions?	
Autoecological groups		geograpmear areas.	opinions.	
Rarity - Occurrence	Y	=	-	
Life cycle - Temperature	N if no	Y	N	
Habitat	Y	=	-	
Distribution	Y	-	-	

When summarizing the information, some differences arose in the reviewed literature. In particular some disagreements have been pointed out for Life cycle – Temperature due to differences observed among European zones.

Species Name: Ecdyonurus venosus (Fabricius, 1775)

Number of papers containing useful information: 89

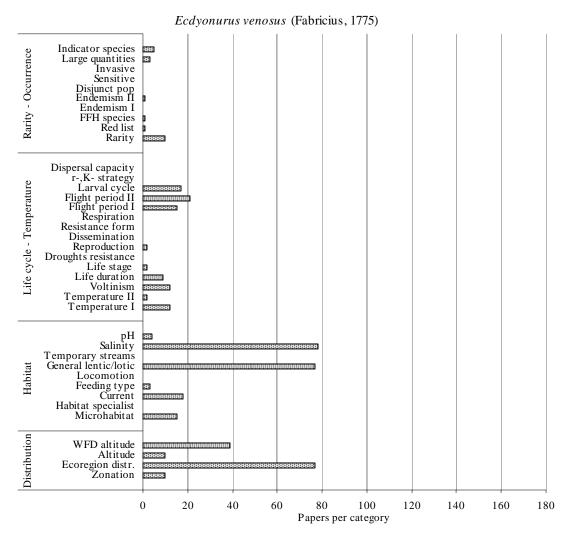


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: information were obtained for all categories, excluding Disjunct population, Sensitive and Invasive.

Life cycles – Temperature: data were available for all categories with the exception of Droughts resistance.

Habitat: information were present for all autoecological traits, excluding Habitat specialist, Locomotion and Temporary streams.

Distribution: information were available for all features.

Autoecological categories for which a large amount of information was available are related to Flight period and WFD altitude.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features			
	do authors	is disagreement due to	is disagreement due to	
	generally agree?	differences among	differences among authors'	
Autoecological groups		geographical areas?	opinions?	
Rarity - Occurrence	Y	-	-	
Life cycle - Temperature	N if no	Y	N	
Habitat	N	N	Y	
Distribution	Y	-	-	

When summarizing the information, some differences arose in the reviewed literature. In particular some disagreements have been pointed out for Life cycle – Temperature and Habitat due to differences observed among European zones and authors' opinions respectively.

Species Name: Ecdyonurus vitoshensis Jacob & Braasch, 1984

Number of papers containing useful information: 1

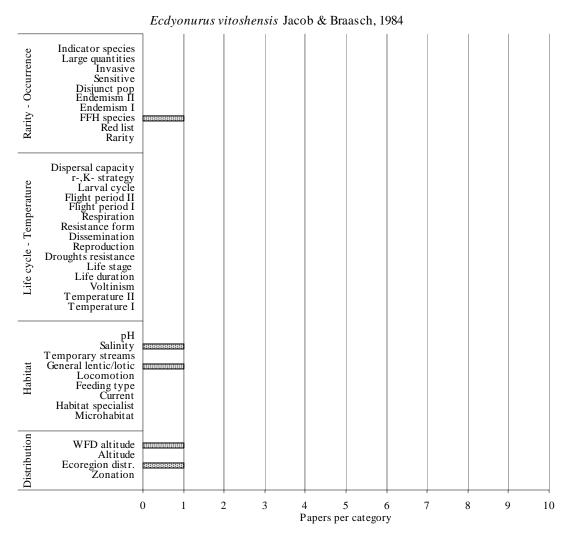


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories. **Rarity – Occurrence**: no information were available. **Life cycles – Temperature**: no data were available.

Habitat: no information were available.

Distribution: data were available only for WFD altitude.

The information available was extremely restricted for all autoecological categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

Autoecological groups	do authors generally agree?	Agreement on autoecologic is disagreement due to differences among geographical areas?	ical features is disagreement due to differences among authors' opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data as only one paper contained useful information.

Species Name: Ecdyonurus zelleri (Eaton, 1885)

Number of papers containing useful information: 18

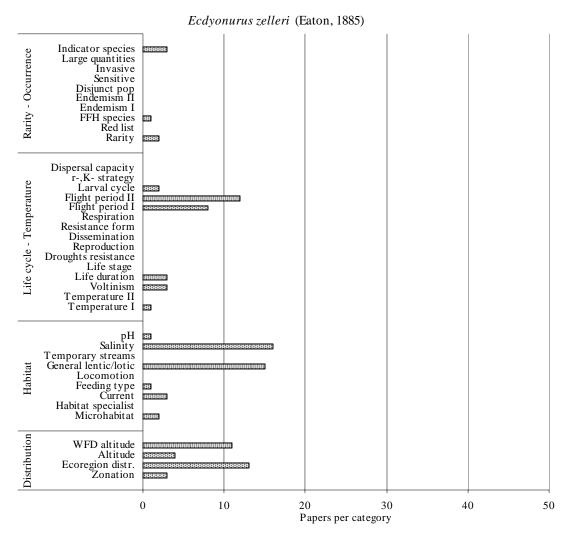


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – Occurrence: information were available only for Rarity and Indicator species.

Life cycles – Temperature: data were available only for Larval cycle, Flight period, Life duration, Voltinism and Temperature preference.

Habitat: information were available only for Microhabitat, Current and pH.

Distribution: information were available for all features.

Autoecological categories for which a large amount of information was available are related to Flight period and WFD altitude.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features			
	do authors	is disagreement due to	is disagreement due to	
	generally agree?	differences among	differences among authors'	
Autoecological groups		geographical areas?	opinions?	
Rarity - Occurrence	Y	-	-	
Life cycle - Temperature	Y if no	-	-	
Habitat	N	N	Y	
Distribution	Y	-	-	

When summarizing the information, some differences arose in the reviewed literature. In particular some disagreements have been pointed out for Habitat due to differences observed among authors' opinions.

Species Name: Electrogena affinis (Eaton, 1883)

Number of papers containing useful information: 26

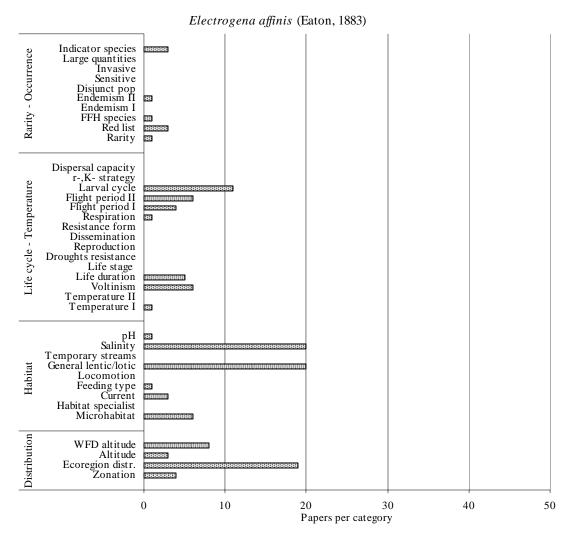


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: information were obtained for all categories, excluding Disjunct population, Sensitive, Invasive and Large quantities.

Life cycles – **Temperature**: data were available for all categories with the exception of Life stage and Droughts resistance.

Habitat: information were present for all autoecological traits, with the exception of Habitat specialist, Locomotion and Temporary streams.

Distribution: information were available for all features.

Autoecological categories for which a large amount of information was available are related to Larval cycle, Flight period, Voltinism, Microhabitat and Altitudinal distribution.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features			
	do authors	is disagreement due to	is disagreement due to	
	generally agree?	differences among	differences among authors'	
Autoecological groups		geographical areas?	opinions?	
	V			
Rarity - Occurrence	1	-	=	
Life cycle - Temperature	Y if no	-	-	
Habitat	Y	-	-	
Distribution	Y	-	-	

No particular differences arose when summarizing the data. General agreement was thus recorded for all autoecological groups.

Species Name: Electrogena aspoecki (Braasch, 1984)

Number of papers containing useful information: 1

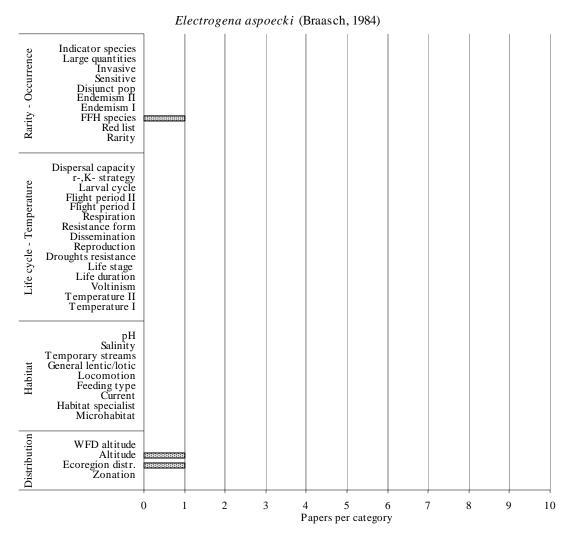


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories. **Rarity – Occurrence**: no information were available. **Life cycles – Temperature**: no data were available.

Habitat: no information were available.

Distribution: data were available only for Altitude.

The information available was extremely restricted for all autoecological categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	do authors	Agreement on autoecologi is disagreement due to differences among	is disagreement due to differences among authors'
Autoecological groups	generally agree?	geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data as only one paper contained useful information.

Species Name: Electrogena braaschi (Sowa, 1984)

Number of papers containing useful information: 1

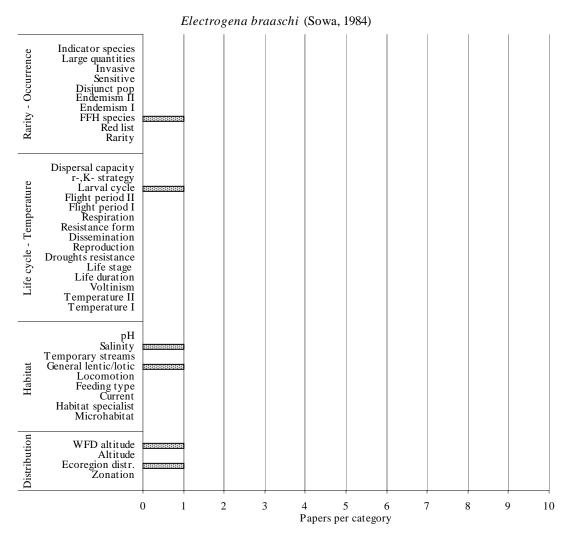


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: no information were available.

Life cycles – Temperature: data were available only for Larval cycle.

Habitat: no information were available.

Distribution: data were available only for WFD altitude.

The information available was extremely restricted for all autoecological categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features			
	do authors	is disagreement due to	is disagreement due to	
	generally agree?	differences among	differences among authors'	
Autoecological groups		geographical areas?	opinions?	
Rarity - Occurrence	Y	-	-	
Life cycle - Temperature	Y if no	-	-	
Habitat	Y	-	-	
Distribution	Y	-	-	

No particular differences arose when summarizing the data as only one paper contained useful information.

Species Name: Electrogena calabra Belfiore, 1995

Number of papers containing useful information: 2

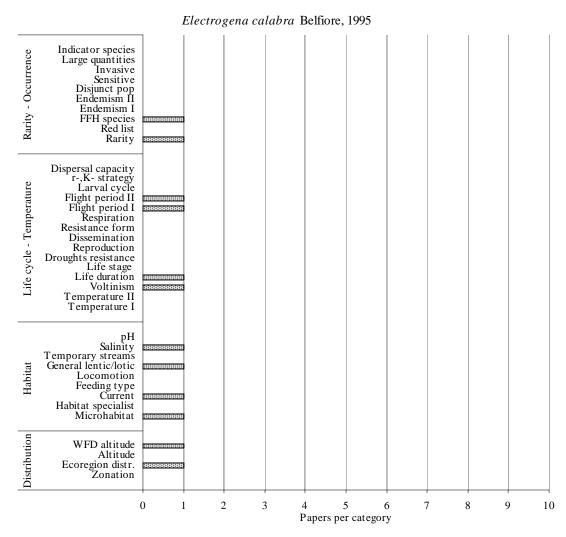


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – Occurrence: information were available for Rarity.

Life cycles – **Temperature**: data were available only for Flight period, Life duration and Voltinism.

Habitat: information were available only for Microhabitat and Current.

Distribution: data were available only for WFD altitude.

The information available was extremely restricted for all autoecological categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

Autoecological groups	do authors generally agree?	Agreement on autoecologic is disagreement due to differences among geographical areas?	is disagreement due to differences among authors' opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

Species Name: *Electrogena fallax* (Hagen, 1864)

Number of papers containing useful information: 8

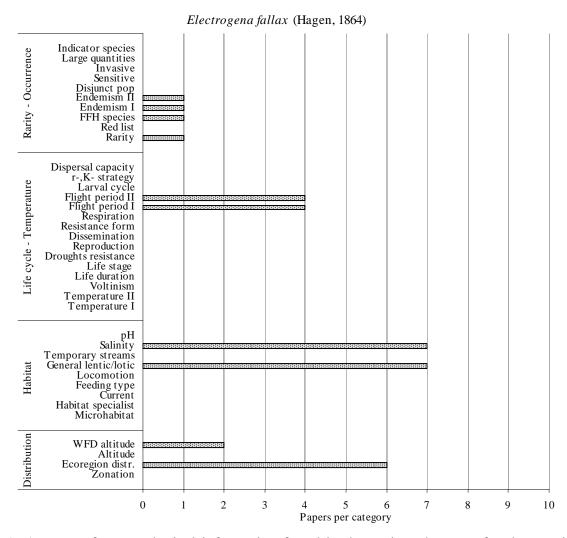


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: information were available only for Rarity and Endemism.

Life cycles – Temperature: data were available only for Flight period.

Habitat: no information were available.

Distribution: information were available only for WFD altitude.

The only autoecological category for which a large amount of information was available is Flight period.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

Autoecological groups	do authors generally agree?	Agreement on autoecologi is disagreement due to differences among geographical areas?	is disagreement due to differences among authors' opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data. General agreement was thus recorded for all autoecological groups.

Species Name: Electrogena grandiae (Belfiore, 1981)

Number of papers containing useful information: 10

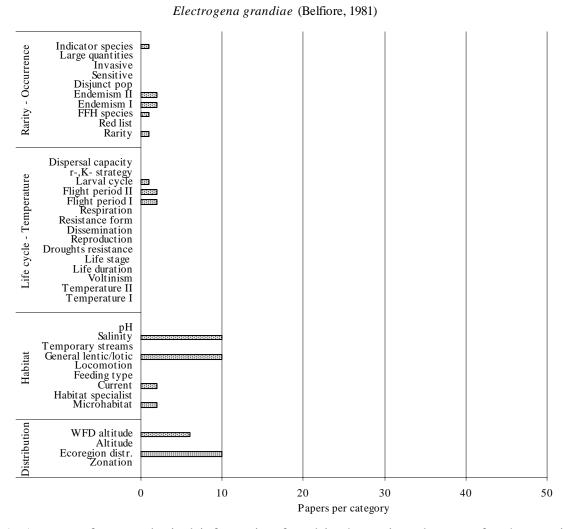


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: information were available only for Rarity, Endemism and Indicator species.

Life cycles – Temperature: data were available only for Larval cycle and Flight period.

Habitat: information were available only for Microhabitat and Current.

Distribution: information were available only for WFD altitude.

The only autoecological category for which a large amount of information was available is WFD altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data. General agreement was thus recorded for all autoecological groups.

Species Name: Electrogena gridellii (Grandi, 1953)

Number of papers containing useful information: 8

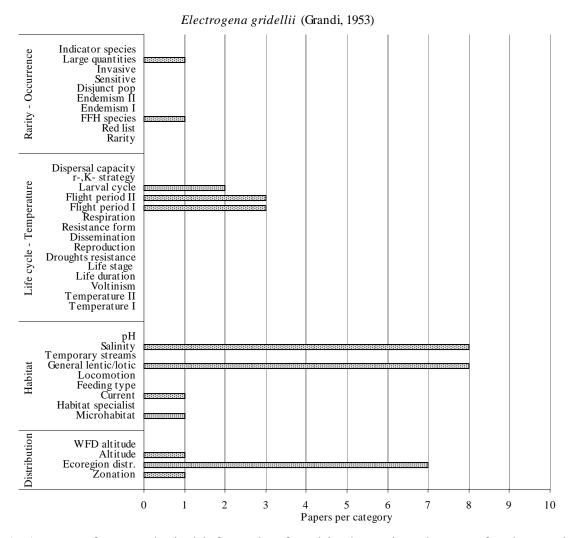


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – Occurrence: information were available only for Large quantities.

Life cycles – Temperature: data were available only for Larval cycle and Flight period.

Habitat: information were available only for Microhabitat and Current.

Distribution: information were available for all features excluding WFD altitude.

Autoecological categories for which a large amount of information was available are related to Larval cycle and Flight period.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	do authors	Agreement on autoecologi is disagreement due to differences among	cal features is disagreement due to differences among authors'
Autoecological groups	generally agree?	geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data. General agreement was thus recorded for all autoecological groups.

Species Name: Electrogena hellenica Zurwerra & Tomka, 1986

Number of papers containing useful information: 2

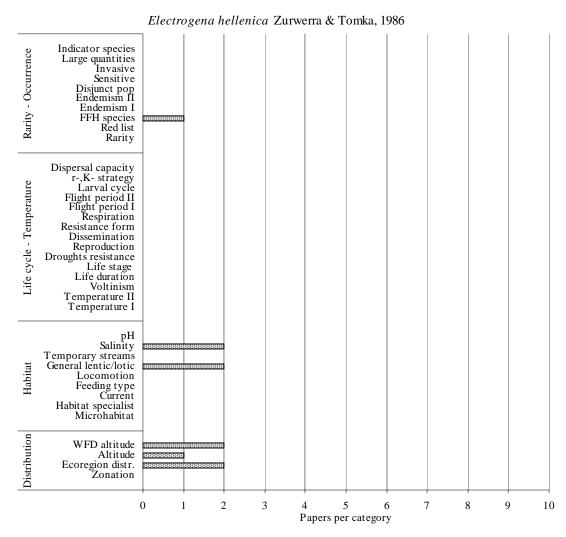


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories. **Rarity – Occurrence**: no information were available.

Life cycles – Temperature: no data were available.

Habitat: no information were available.

Distribution: data were available only for Altitudinal distribution.

The information available was extremely restricted for all autoecological categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

Autoecological groups	do authors generally agree?	Agreement on autoecologi is disagreement due to differences among geographical areas?	is disagreement due to differences among authors' opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

Species Name: Electrogena hyblaea Belfiore, 1994

Number of papers containing useful information: 2

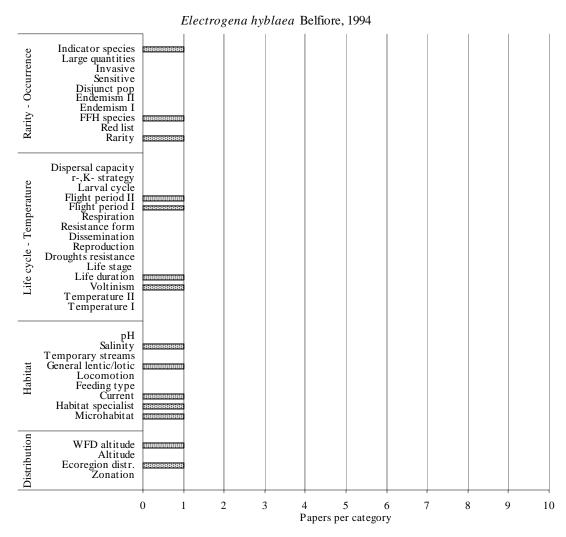


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – Occurrence: information were available for Rarity and Indicator species.

Life cycles – Temperature: data were available for Flight period, Life duration and Voltinism.

Habitat: information were available for Microhabitat, Habitat specialist and Current.

Distribution: data were available only for WFD altitude.

The information available was extremely restricted for all autoecological categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors generally agree?	is disagreement due to differences among geographical areas?	is disagreement due to differences among authors' opinions?
Autoecological groups		geograpmear areas.	opinions.
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

Species Name: *Electrogena lateralis* (Curtis, 1834)

Number of papers containing useful information: 63

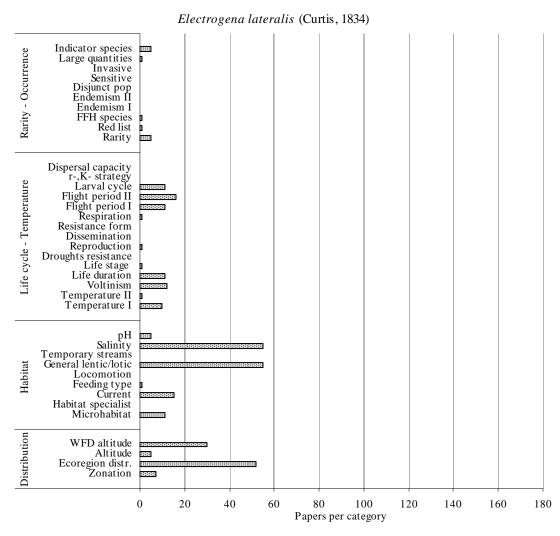


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: information were obtained for all categories, excluding Endemism, Disjunct population, Sensitive and Invasive.

Life cycles – Temperature: data were available for all categories with the exception of Droughts resistance.

Habitat: information were present for all autoecological traits, excluding Habitat specialist, Locomotion and Temporary streams.

Distribution: information were available for all features.

The only autoecological category for which a large amount of information was available is WFD altitude.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors generally agree?	is disagreement due to differences among	is disagreement due to differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	=	-
Life cycle - Temperature	Y if no	=	-
Habitat	N	N	Y
Distribution	Y	-	-

When summarizing the information, some differences arose in the reviewed literature. In particular some disagreements have been pointed out for Habitat due to differences observed among authors' opinions.

Species Name: Electrogena lunaris Belfiore & Scillitani, 1997

Number of papers containing useful information: 2

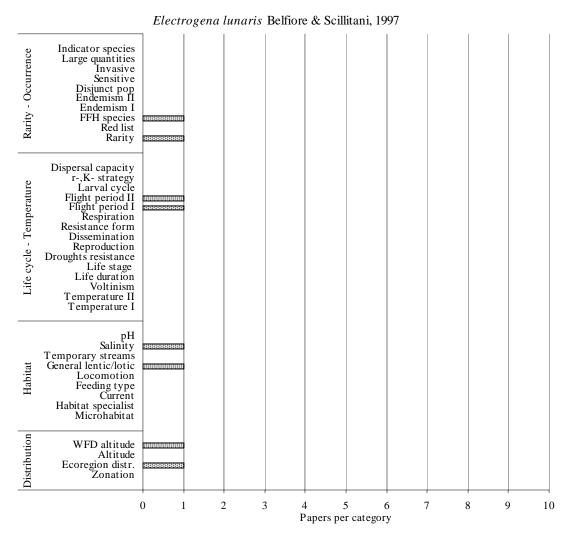


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – **Occurrence**: information were available for Rarity.

Life cycles – Temperature: data were available only for Flight period.

Habitat: no information were available.

Distribution: data were available only for WFD altitude.

The information available was extremely restricted for all autoecological categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

Species Name: Electrogena macedonica (Ikonomov, 1954)

Number of papers containing useful information: 3

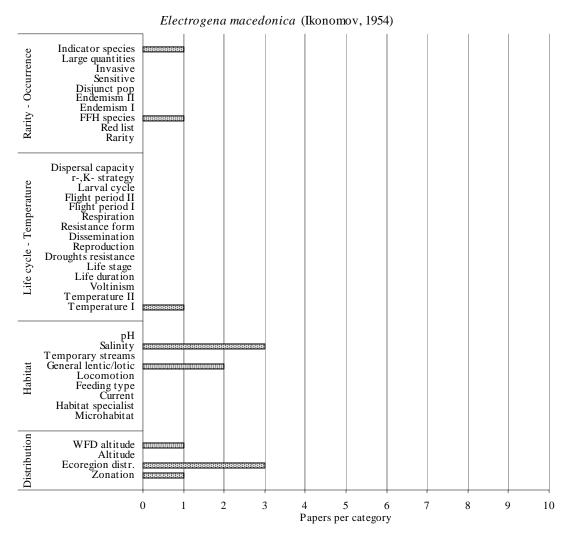


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: information were available only for Indicator species.

Life cycles – Temperature: data were available only for Temperature preference.

Habitat: no information were available.

Distribution: data were available only for Zonation and WFD altitude.

The information available was extremely restricted for all autoecological categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors generally agree?	is disagreement due to differences among geographical areas?	is disagreement due to differences among authors' opinions?
Autoecological groups		geograpmear areas.	opinions.
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

Species Name: Electrogena malickyi (Braasch, 1983)

Number of papers containing useful information: 3

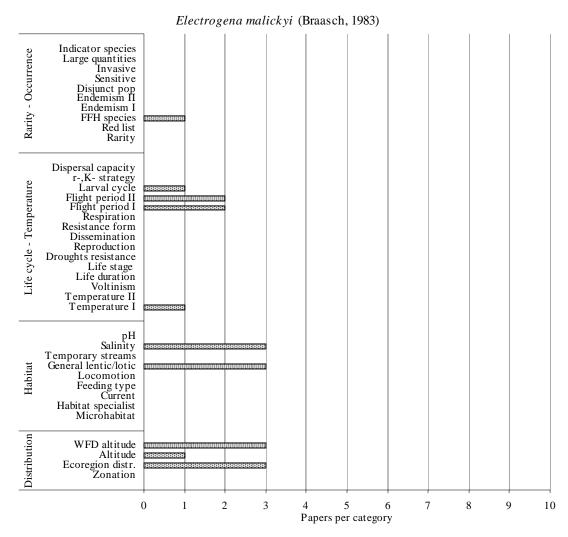


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: information were available only for Indicator species.

Life cycles – Temperature: data were available for Larval cycle, Flight period and Temperature preference.

Habitat: no information were available.

Distribution: data were available only for Altitudinal distribution.

The information available was restricted for all autoecological categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	<u> </u>

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

Species Name: *Electrogena ozrensis* (Tanasijevic, 1975)

Number of papers containing useful information: 1

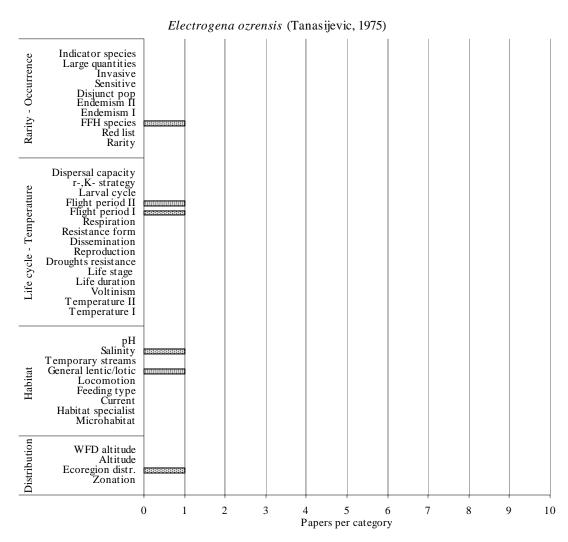


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: no nformation were available.

Life cycles – Temperature: data were available only for Flight period.

Habitat: no information were available. **Distribution**: no data were available.

The information available was extremely restricted for all autoecological categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data as only one paper contained useful information.

Species Name: Electrogena quadrilineata (Landa, 1969)

Number of papers containing useful information: 11

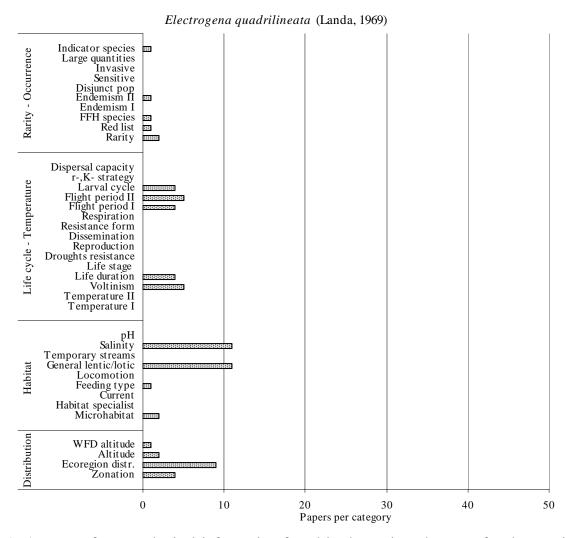


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: information were available for all features excluding Disjunct population, Sensitive, Invasive and Large quantities.

Life cycles – **Temperature**: data were available for Larval cycle, Flight period, Life duration and Voltinism.

Habitat: information were available only for Microhabitat.

Distribution: information were available for all features.

Autoecological categories for which a large amount of information was available are related to Larval cycle and Flight period.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors generally agree?	is disagreement due to differences among geographical areas?	is disagreement due to differences among authors' opinions?
Autoecological groups		geograpincai areas?	opinions:
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data. General agreement was thus recorded for all autoecological groups.

Species Name: Electrogena samalorum (Landa & Soldán, 1982)

Number of papers containing useful information: 3

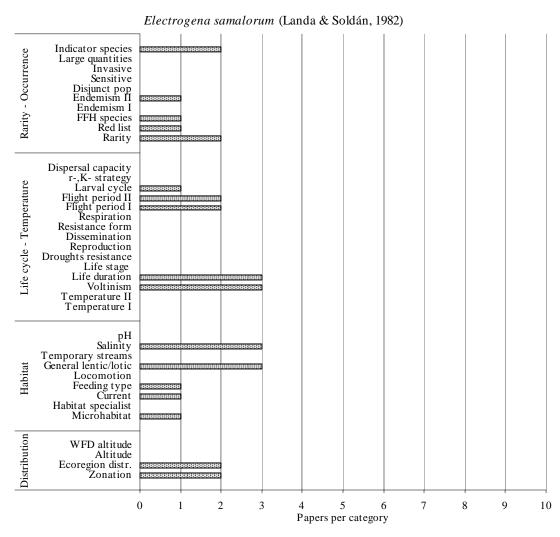


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: information were available for Rarity, Red list, Endemism and Indicator species.

Life cycles – Temperature: data were available for Larval cycle, Flight period, Life duration and Voltinism.

Habitat: information were available only for Microhabitat and Current.

Distribution: data were available only for Zonation.

The information available was restricted for all autoecological categories.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

Species Name: Electrogena ujhelyii (Sowa, 1981)

Number of papers containing useful information: 18

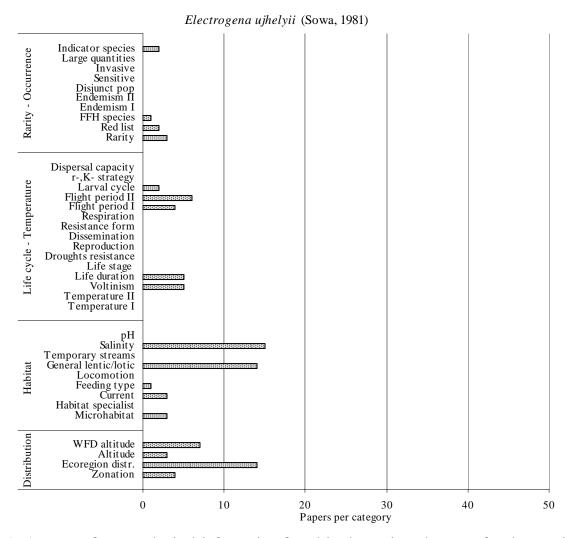


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: information were available only for Rarity, Red list and Indicator species. **Life cycles** – **Temperature**: data were available for Larval cycle, Flight period, Life duration and Voltinism.

Habitat: information were available only for Microhabitat and Current.

Distribution: information were available for all features.

Autoecological categories for which a large amount of information was available are related to Flight period and WFD altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors generally agree?	is disagreement due to differences among geographical areas?	is disagreement due to differences among authors' opinions?
Autoecological groups		geograpmear areas.	opinions.
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data. General agreement was thus recorded for all autoecological groups.

Species Name: Electrogena vipavensis Zurwerra & Tomka, 1986

Number of papers containing useful information: 5

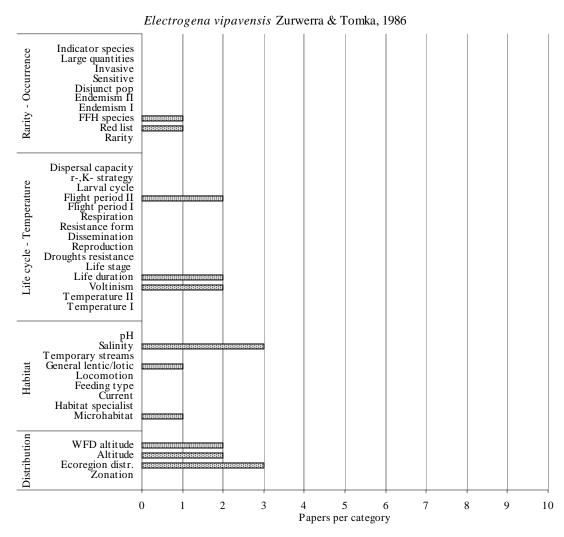


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – Occurrence: information were available only for Red list.

Life cycles – Temperature: data were available for Flight period, Life duration and Voltinism.

Habitat: information were available only for Microhabitat.

Distribution: data were available only for Altitudinal distribution.

The information available was restricted for all autoecological categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors generally agree?	is disagreement due to differences among geographical areas?	is disagreement due to differences among authors' opinions?
Autoecological groups		geograpmear areas.	opinions.
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

Species Name: Electrogena zebrata (Hagen, 1864)

Number of papers containing useful information: 3

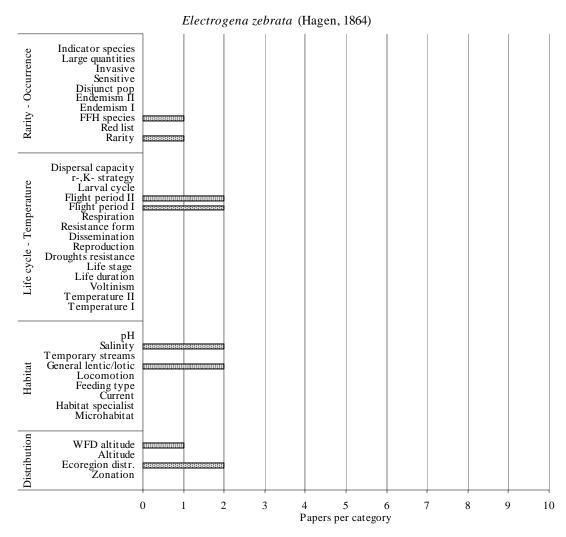


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – **Occurrence**: information were available only for Rarity.

Life cycles – Temperature: data were available only for Flight period.

Habitat: no information were available.

Distribution: data were available only for WFD altitude.

The information available was extremely restricted for all autoecological categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors generally agree?	is disagreement due to differences among geographical areas?	is disagreement due to differences among authors' opinions?
Autoecological groups		geograpmear areas.	opinions.
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

Species Name: *Epeorus alpicola* (Eaton, 1871)

Number of papers containing useful information: 21

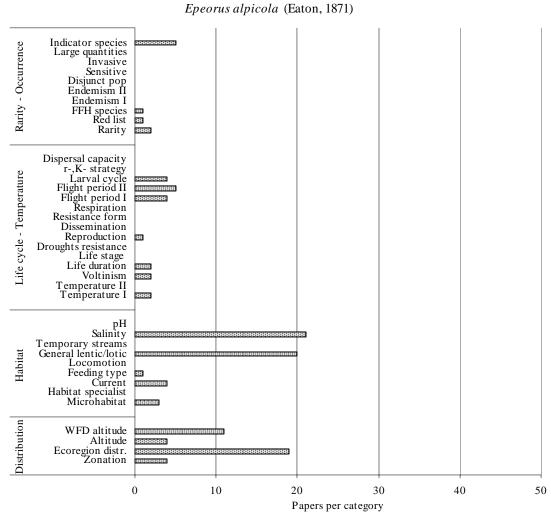


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: information were obtained only for Rarity, Red list and Indicator species.

Life cycles – Temperature: data were available for all features with the exception of Life stage and Droughts resistance.

Habitat: information were present only for Microhabitat and Current.

Distribution: data were available for all features.

The only autoecological category for which a large amount of information was available is related to WFD altitude.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	do authors	Agreement on autoecologi is disagreement due to	is disagreement due to
Autoecological groups	generally agree?	differences among geographical areas?	differences among authors' opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data. General agreement was thus recorded for all categories.

Species Name: Epeorus assimilis Eaton, 1885

Number of papers containing useful information: 19

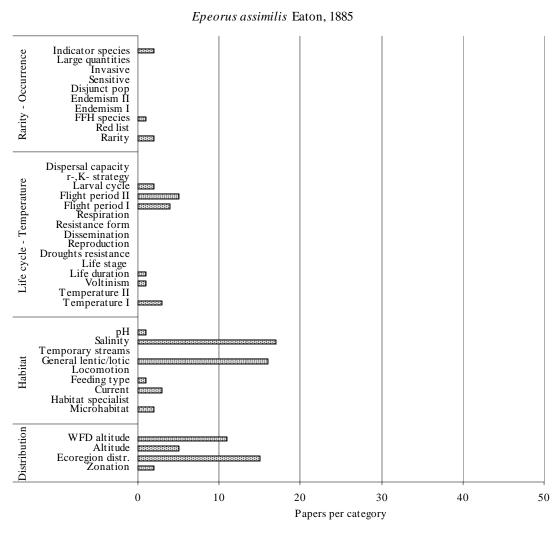


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – Occurrence: information were obtained only for Rarity and Indicator species.

Life cycles – Temperature: data were available for all features with the exception of Life stage and Droughts resistance.

Habitat: information were present only for Microhabitat, Current and pH.

Distribution: data were available for all features.

The only autoecological category for which a large amount of information was available is related to WFD altitude.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	=	

No particular differences arose when summarizing the data. General agreement was thus recorded for all categories.

Species Name: *Epeorus sylvicola* (Pictet, 1865)

Number of papers containing useful information: 40

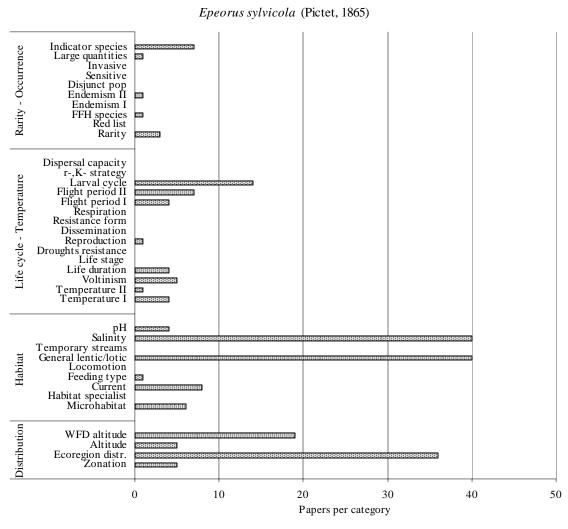


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were available for Indicator species, Endemism, Large quantities and Rarity.

Life cycles – **Temperature**: information were available for Larval cycle, Flight period, Reproduction, Life duration, Voltinism and temperature.

Habitat: information were available for pH, Current and Microhabitat.

Distribution: information were available for all categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreer do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	admors opinions.
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		_	

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Epeorus torrentium Eaton, 1881

Number of papers containing useful information: 15

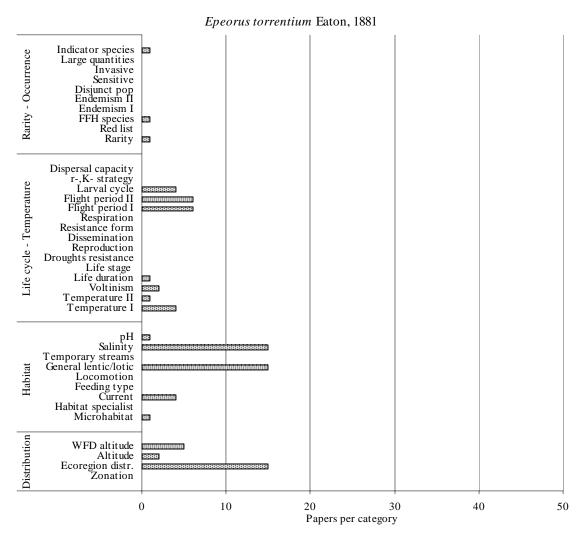


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were available for Indicator species and Rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Life duration, Voltinism and Temperature.

Habitat: information were available for pH, Current and Microhabitat.

Distribution: information were available for all categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features			
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among
			among geographical	authors' opinions?
Autoecological groups			areas?	
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	=	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Epeorus yougoslavicus (Samal, 1935)

Number of papers containing useful information: 10

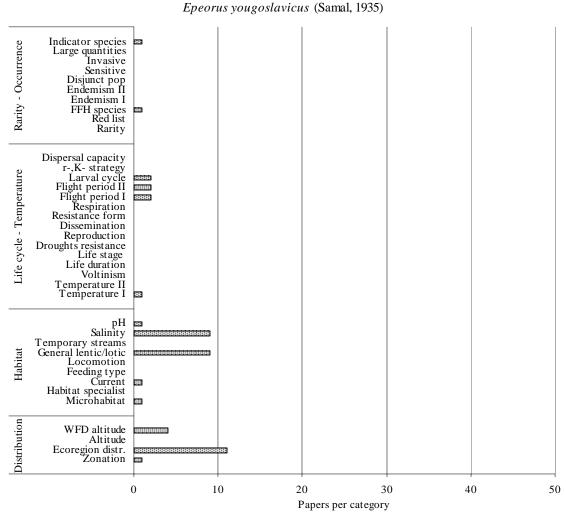


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – Occurrence: information were available for Indicator species.

Life cycles – Temperature: information were available for Larval cycle, Flight period and Temperature.

Habitat: information were available for pH, Current and Microhabitat.

Distribution: information were available for all categories except for Altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features			
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among
			among geographical	authors' opinions?
Autoecological groups			areas?	
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	=	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Epeorus znojkoi (Tshernova, 1938)

Number of papers containing useful information: 3

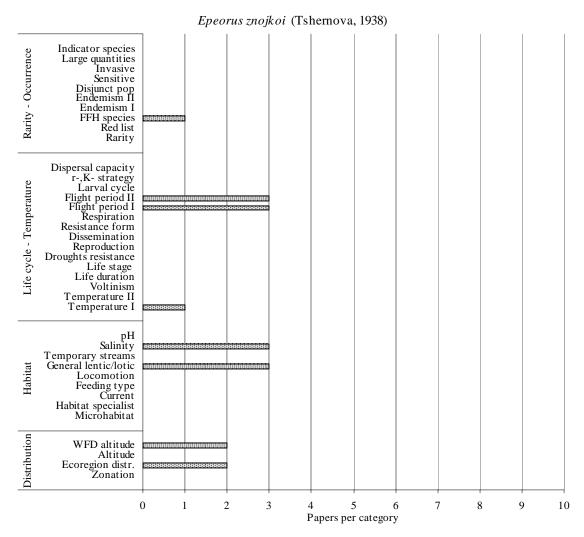


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: no information available.

Life cycles – Temperature: information were available for Flight period and Temperature.

Habitat: no information available.

Distribution: information were available for WFD altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreer do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	admors opinions.
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		_	

No particular differences arose when summarizing the data, due to the low number of papers containing useful information. General agreement is thus recorded for all autoecological groups.

Species Name: Heptagenia coerulans Rostock, 1878

Number of papers containing useful information: 24

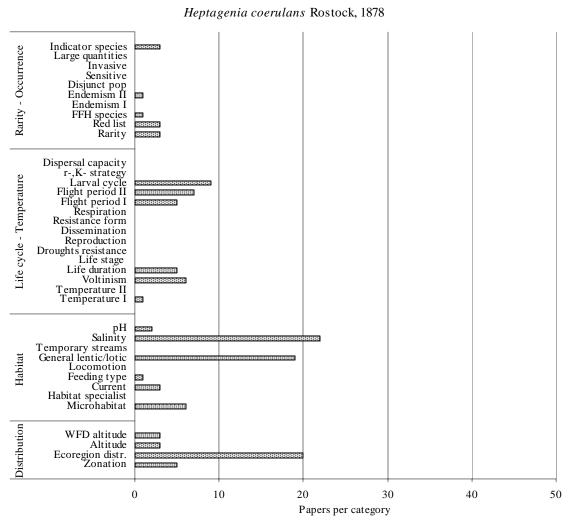


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were available for Indicator species, Endemism, Red list and Rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Life duration, Voltinism and Temperature.

Habitat: information available for pH value, Current and Microhabitat

Distribution: information were available for all categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features			
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among
			among geographical	authors' opinions?
Autoecological groups			areas?	
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	=	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Heptagenia dalecarlica Bengtsson, 1912

Number of papers containing useful information: 6

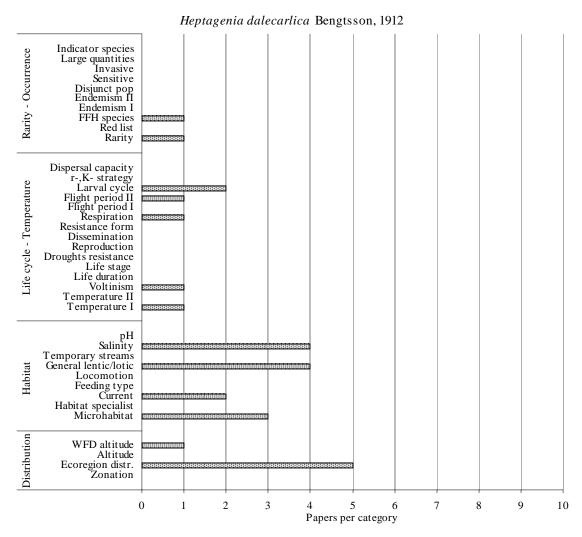


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – Occurrence: information were available for Rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Respiration, Voltinism and Temperature.

Habitat: information available for Current and Microhabitat **Distribution**: information were available for WFD altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features			
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among
			among geographical	authors' opinions?
Autoecological groups			areas?	
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	=	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Heptagenia flava Rostock, 1878

Number of papers containing useful information: 27

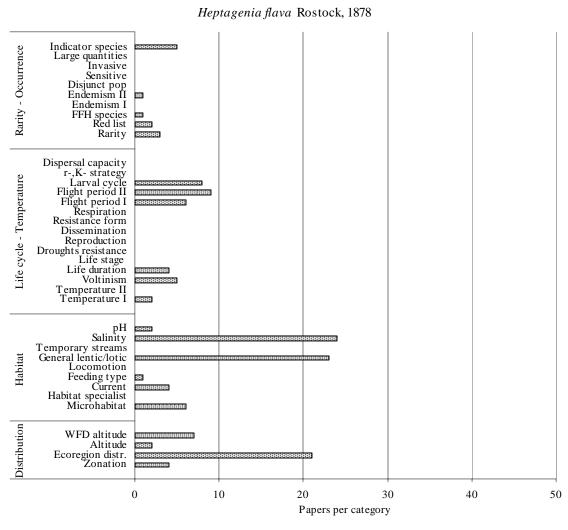


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were available for Indicator species, Endemism, Red list and Rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Respiration, Voltinism and Temperature.

Habitat: information available for pH, Current and Microhabitat.

Distribution: information were available for all categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features					
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among		
			among geographical	authors' opinions?		
Autoecological groups			areas?			
Rarity - Occurrence	Y		-	-		
Life cycle - Temperature	Y	if no	=	-		
Habitat	Y	11 110	-	-		
Distribution	Y		-	-		

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Heptagenia longicauda (Stephens, 1835)

Number of papers containing useful information: 36

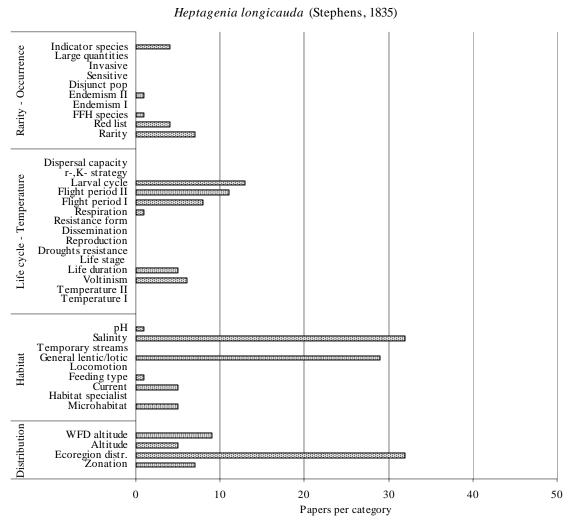


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were available for Indicator species, Endemism, Red list and Rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Respiration, Life duration and Voltinism.

Habitat: information available for pH, Current and Microhabitat.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features					
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among		
			among geographical	authors' opinions?		
Autoecological groups			areas?			
Rarity - Occurrence	Y		-	-		
Life cycle - Temperature	Y	if no	=	-		
Habitat	Y	11 110	-	-		
Distribution	Y		-	-		

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Heptagenia sulphurea (Müller, 1776)

Number of papers containing useful information: 69

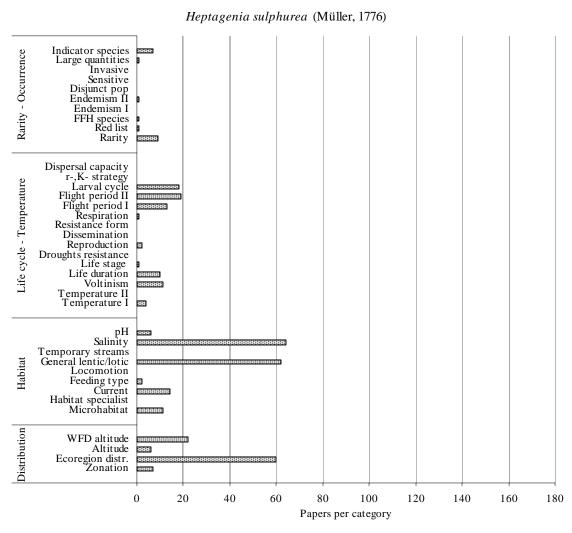


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were available for Indicator species, Large quantities, Endemism, Red list and Rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Respiration, Life stage, Life duration and Voltinism.

Habitat: information available for pH, Current and Microhabitat.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features					
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among		
			among geographical	authors' opinions?		
Autoecological groups			areas?			
Rarity - Occurrence	Y		-	-		
Life cycle - Temperature	Y	if no	=	-		
Habitat	Y	11 110	-	-		
Distribution	Y		-	-		

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Kageronia fuscogrisea (Retzius, 1783)

Number of papers containing useful information: 34

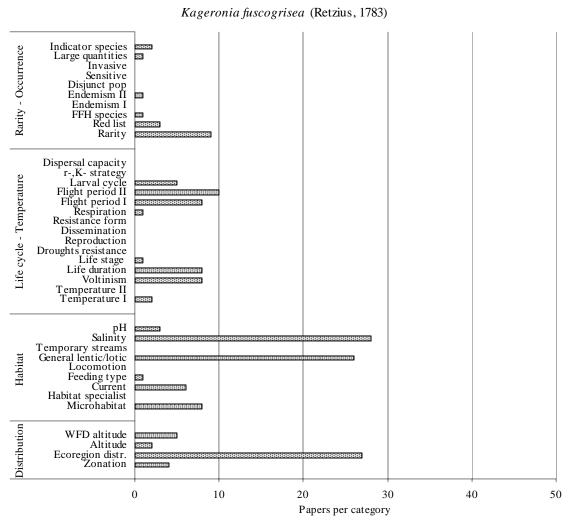


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were available for Indicator species, Large quantities, Endemism, Red list and Rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Respiration, Life stage, Life duration Voltinism and Temperature.

Habitat: information available for pH, Current and Microhabitat.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	do authors generally agree?		ment on autoecological is disagreement due to differences	is disagreement due to differences among
Autoecological groups			among geographical areas?	authors' opinions?
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Kageronia orbiticola (Kluge, 1986)

Number of papers containing useful information: 4

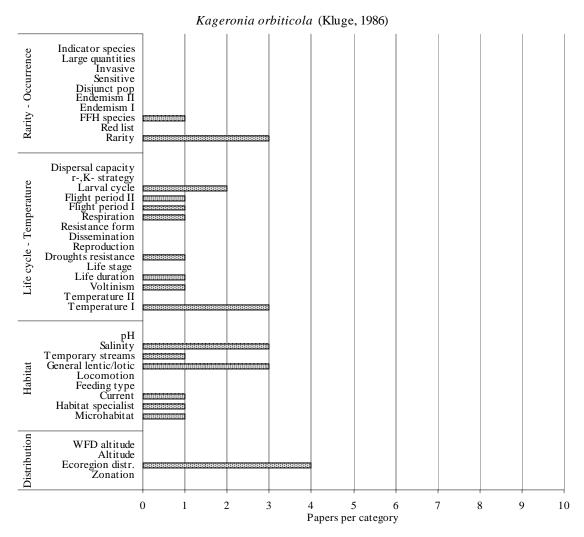


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: information were available for Rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Respiration, Drought resistance, Life duration Voltinism and Temperature.

Habitat: information available for Temporary streams, Current and Microhabitat.

Distribution: no information available.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features					
	do authors		is disagreement due	is disagreement due		
	generally agree?		to differences among geographical	to differences among authors' opinions?		
Autoecological groups			areas?	authors opinions.		
Rarity - Occurrence	Y		-	-		
Life cycle - Temperature	Y	if no	-	-		
Habitat	Y	11 110	-	-		
Distribution	N		N	Y		

No particular differences arose when summarizing the data, due to the low number of papers containing useful information. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena adrianae Belfiore, 1983

Number of papers containing useful information: 4

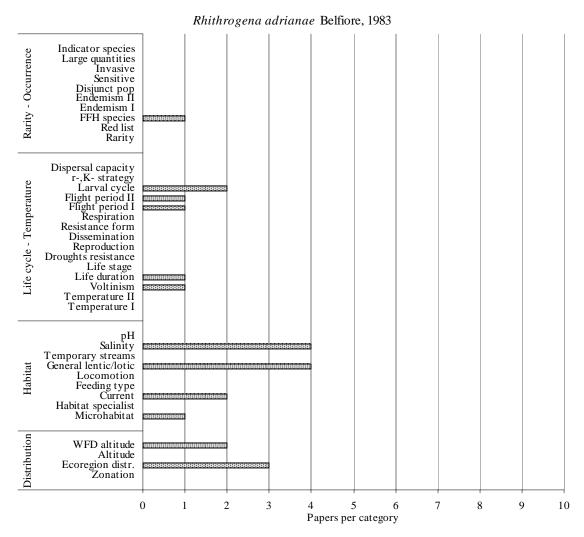


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: no information available.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Life duration and Voltinism.

Habitat: information available for Current and Microhabitats.

Distribution: information were available for WFD altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreen do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			arreas?	authors opinions:
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		_	

No particular differences arose when summarizing the data, due to the low number of papers containing useful information. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena allobrogica Sowa & Degrange, 1987

Number of papers containing useful information: 8

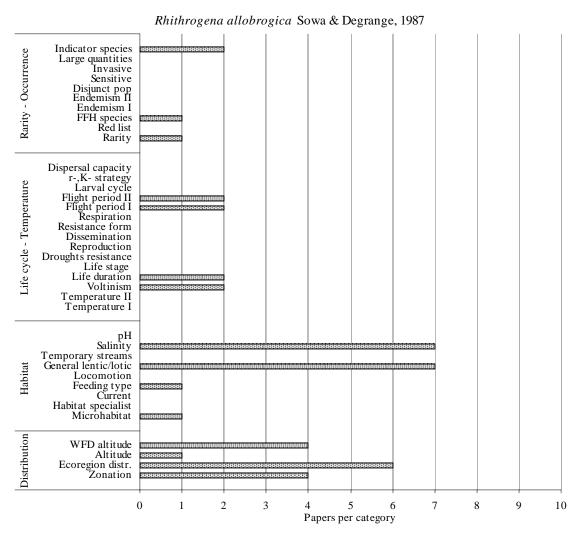


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were available for Indicator species and Rarity.

Life cycles – Temperature: information were available for Flight period, Life duration and Voltinism.

Habitat: information available for Feeding type and Microhabitats.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features					
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among		
			among geographical	authors' opinions?		
Autoecological groups			areas?			
Rarity - Occurrence	Y		-	-		
Life cycle - Temperature	Y	if no	=	-		
Habitat	Y	11 110	-	-		
Distribution	Y		-	-		

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena alpestris Eaton, 1885

Number of papers containing useful information: 17

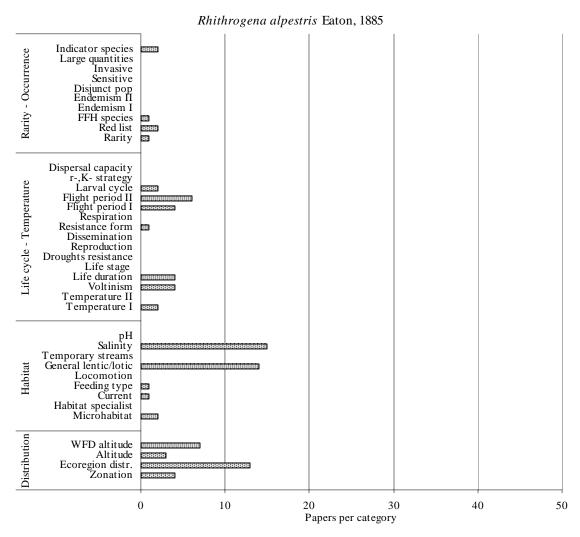


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were available for Indicator species Red list and Rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Resistance form, Life duration, Voltinism and Temperature.

Habitat: information available for Current and Microhabitats.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features					
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among		
			among geographical	authors' opinions?		
Autoecological groups			areas?			
Rarity - Occurrence	Y		-	-		
Life cycle - Temperature	Y	if no	=	-		
Habitat	Y	11 110	-	-		
Distribution	Y		-	-		

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena austriaca Sowa & Weichselbaumer, 1988

Number of papers containing useful information: 6

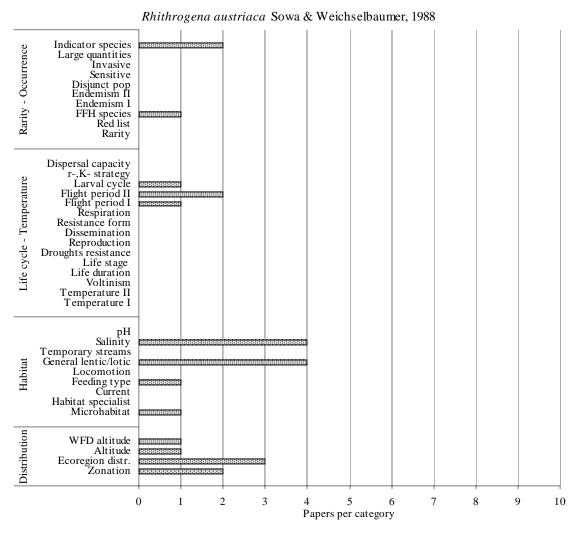


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – Occurrence: information were available for Indicator species.

Life cycles – Temperature: information were available for Larval cycle and Flight period.

Habitat: information available for Feeding type and Microhabitats.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features					
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among		
			among geographical	authors' opinions?		
Autoecological groups			areas?			
Rarity - Occurrence	Y		-	-		
Life cycle - Temperature	Y	if no	=	-		
Habitat	Y	11 110	-	-		
Distribution	Y		-	-		

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena beskidensis Alba-Tercedor & Sowa, 1987

Number of papers containing useful information: 19

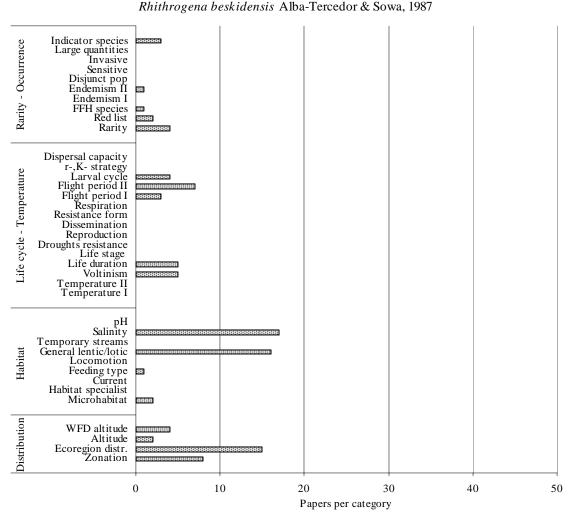


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were available for Indicator species, Endemism, Red list and Rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Life duration and Voltinism.

Habitat: information available for Feeding type and Microhabitats.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features					
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among		
			among geographical	authors' opinions?		
Autoecological groups			areas?			
Rarity - Occurrence	Y		-	-		
Life cycle - Temperature	Y	if no	=	-		
Habitat	Y	11 110	-	-		
Distribution	Y		-	-		

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena braaschi Jacob, 1974

Number of papers containing useful information: 5

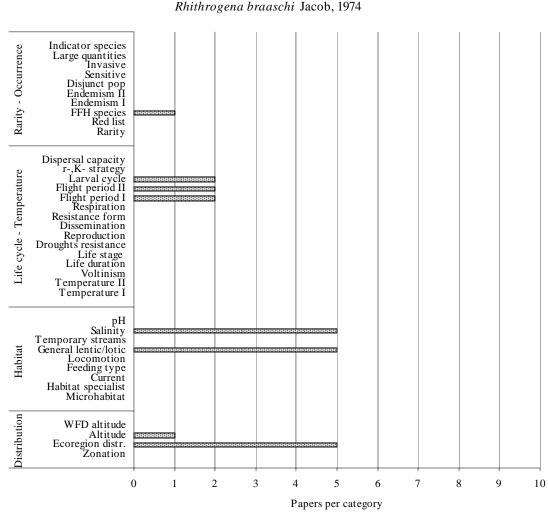


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: no information were available.

Life cycles – Temperature: information were available for Larval cycle and Flight period.

Habitat: no information available.

Distribution: information were available for Altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreen do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			arreas?	authors opinions:
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		_	

No particular differences arose when summarizing the data, due to the low number of papers containing useful information. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena bulgarica Braasch, Soldán & Sowa, 1985

Number of papers containing useful information: 2

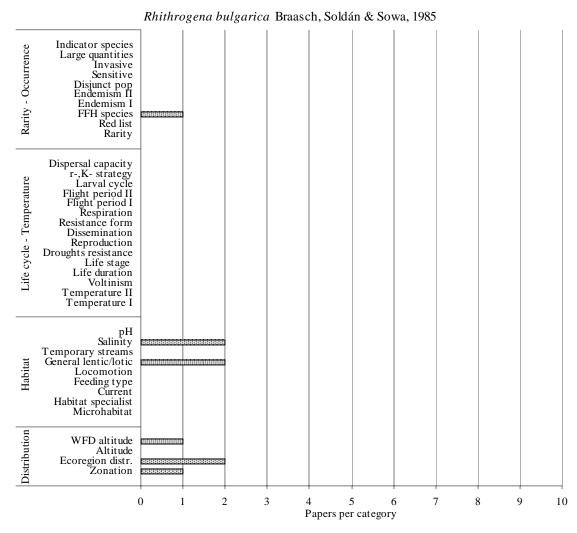


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: no information available.

Life cycles – Temperature: no information available.

Habitat: no information available.

Distribution: information were available for WFD altitude and Zonation.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreen do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	admors opinions.
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		_	

No particular differences arose when summarizing the data, due to the low number of papers containing useful information. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena carpatoalpina Klonowska, Olechowska, Sartori & Weichselbaumer,

1987

Number of papers containing useful information: 17

Rithrogena carpatoalpina Klonowska, Olechowska, Sartori & Weichselbaumer, 1987

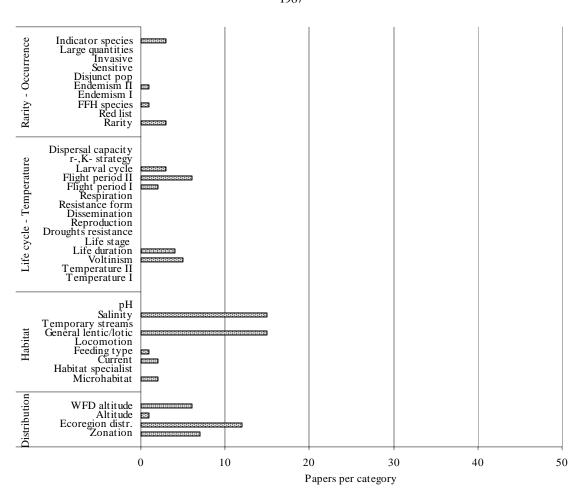


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were available for Indicator species, Endemism and Rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Life duration and Voltinism.

Habitat: information available for Current and Microhabitats.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features			
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among
			among geographical	authors' opinions?
Autoecological groups			areas?	
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	=	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena castellana Navás, 1927

Number of papers containing useful information: 1

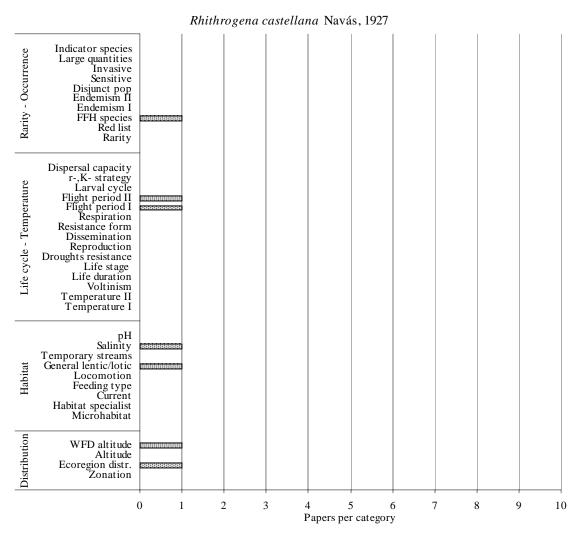


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: no information available.

Life cycles – Temperature: information were available for Flight period.

Habitat: no information available.

Distribution: information were available for WFD altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreer do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	admors opinions.
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		_	

No particular differences arose when summarizing the data, since only one paper contained useful information for the species. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena cincta Navás, 1921

Number of papers containing useful information: 1

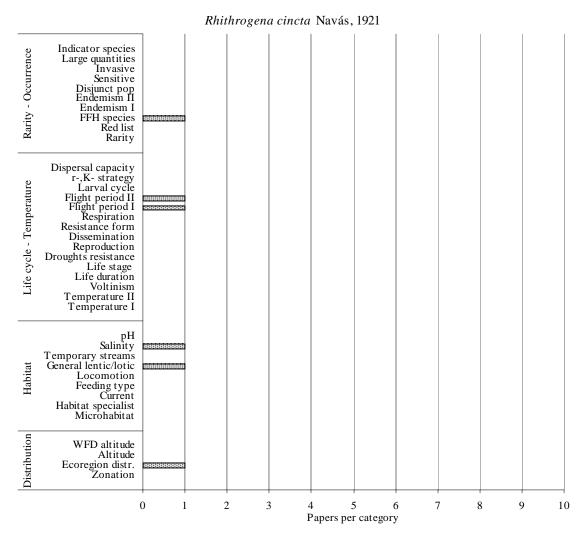


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: no information available.

Life cycles – Temperature: information were available fro Flight period.

Habitat: no information available. **Distribution**: no information available.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreen do authors generally agree?		is disagreement due to differences	is disagreement due to differences among authors' opinions?
Autoecological groups			among geographical areas?	authors opinions:
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data, since only one paper contained useful information for the species. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena circumtatrica Sowa & Soldán, 1986

Number of papers containing useful information: 8

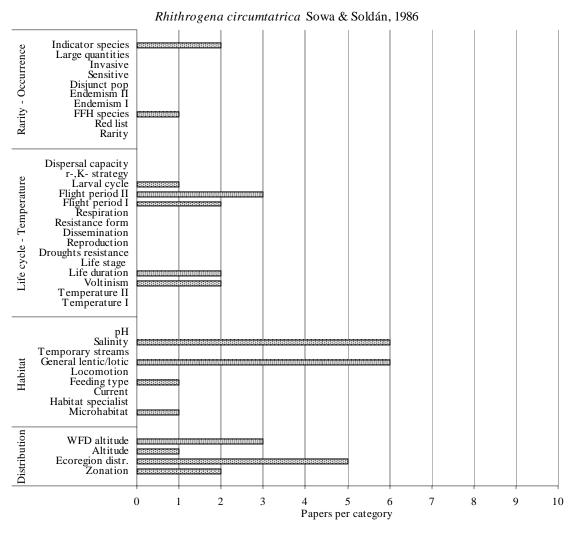


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – Occurrence: information were available for Indicator species.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Life duration and Voltinism.

Habitat: information available for Feeding type and Microhabitats.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features			
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among
			among geographical	authors' opinions?
Autoecological groups			areas?	
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	=	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena colmarsensis Sowa, 1984

Number of papers containing useful information: 4

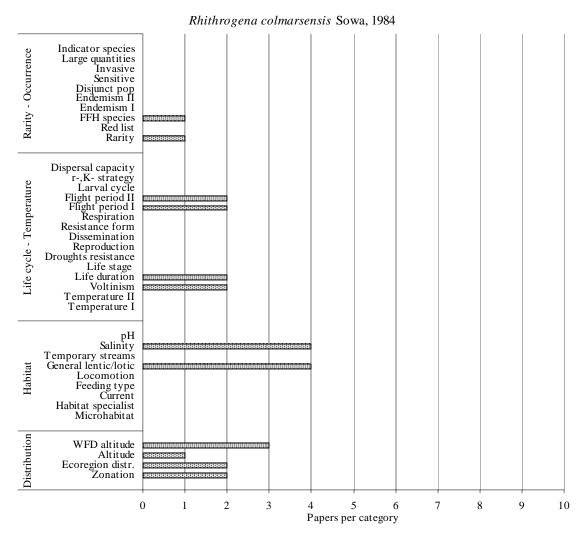


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: information were available for Rarity.

Life cycles – **Temperature**: information were available for Flight period, Life duration, Voltinism and Temperature.

Habitat: no information available.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features			
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among
			among geographical	authors' opinions?
Autoecological groups			areas?	
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	=	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena corcontica Sowa & Soldán, 1986

Number of papers containing useful information: 4

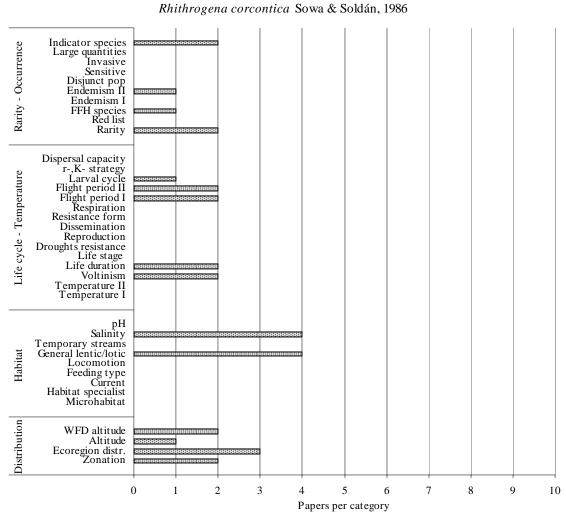


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – **Occurrence**: information were available for Indicator species, Endemism and Rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Life duration and Voltinism.

Habitat: no information available.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreer do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	admors opinions.
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		_	

No particular differences arose when summarizing the data, due to the low number of papers containing useful information. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena degrangei Sowa, 1969

Number of papers containing useful information: 16

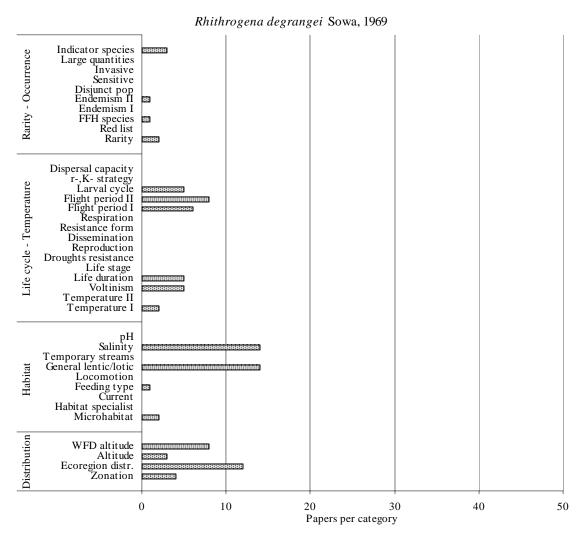


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were available for Indicator species, Endemism and Rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Life duration, Voltinism and Temperature.

Habitat: information available for Feeding type and Microhabitats.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreen do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	features is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	N		N	Y

When summarizing the information, some differences arose in the reviewed literature. In particular some disagreements have been pointed out for Distribution, due to small differences recorded among authors' opinion.

Species Name: Rhithrogena delphinensis Sowa & Degrange, 1987

Number of papers containing useful information: 2

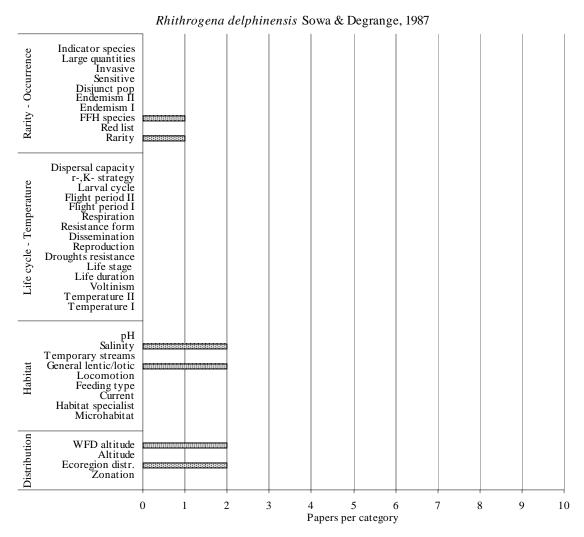


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: information were available for Rarity.

Life cycles – Temperature: no information available.

Habitat: no information available.

Distribution: information were available for WFD altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features					
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among		
			among geographical	authors' opinions?		
Autoecological groups			areas?			
Rarity - Occurrence	Y		-	-		
Life cycle - Temperature	Y	if no	=	-		
Habitat	Y	11 110	-	-		
Distribution	Y		-	-		

No particular differences arose when summarizing the data, due to the low number of papers containing useful information. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena diaphana Navás, 1917

Number of papers containing useful information: 26

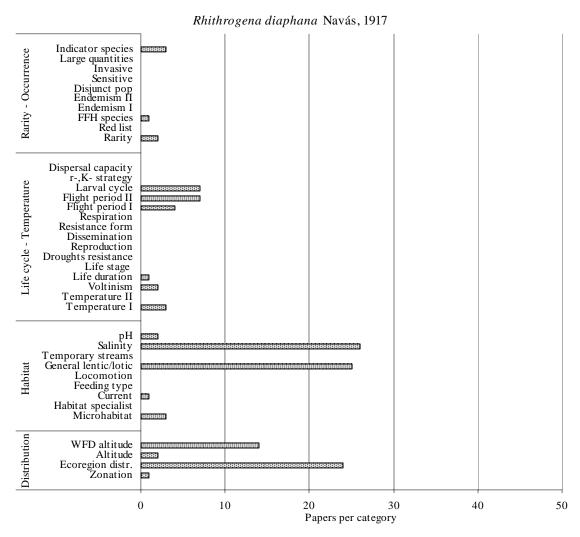


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were available for Indicator species and Rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Life duration, Voltinism and Temperature.

Habitat: information available for pH, Current and Microhabitats.

Distribution: information were available for all categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features					
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among		
			among geographical	authors' opinions?		
Autoecological groups			areas?			
Rarity - Occurrence	Y		-	-		
Life cycle - Temperature	Y	if no	=	-		
Habitat	Y	11 110	-	-		
Distribution	Y		-	-		

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena diensis Sowa & Degrange, 1987

Number of papers containing useful information: 1

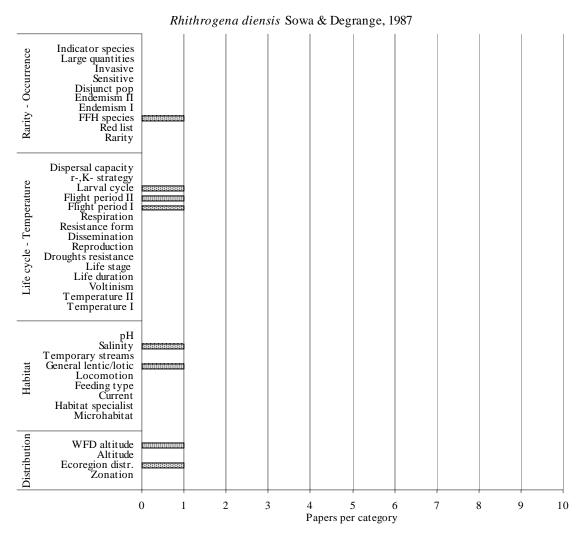


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: no information available.

Life cycles – Temperature: information were available for Larval cycle and Flight period.

Habitat: no information available.

Distribution: information were available for WFD altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features					
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among		
			among geographical	authors' opinions?		
Autoecological groups			areas?			
Rarity - Occurrence	Y		-	-		
Life cycle - Temperature	Y	if no	=	-		
Habitat	Y	11 110	-	-		
Distribution	Y		-	-		

No particular differences arose when summarizing the data, since only one paper contained useful information for the species. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena dorieri Sowa, 1971

Number of papers containing useful information: 9

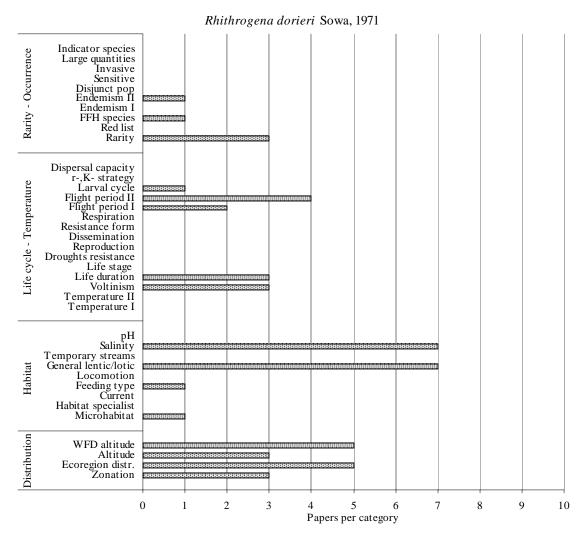


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were available for Endemism and Rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Life duration and Voltinism.

Habitat: information available for Feeding type and Microhabitats.

Distribution: information were available for all categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	do aut	hors	ment on autoecological is disagreement due	is disagreement due
Autoecological groups	generally	agree?	to differences among geographical areas?	to differences among authors' opinions?
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena eatoni Esben-Petersen, 1912

Number of papers containing useful information: 4

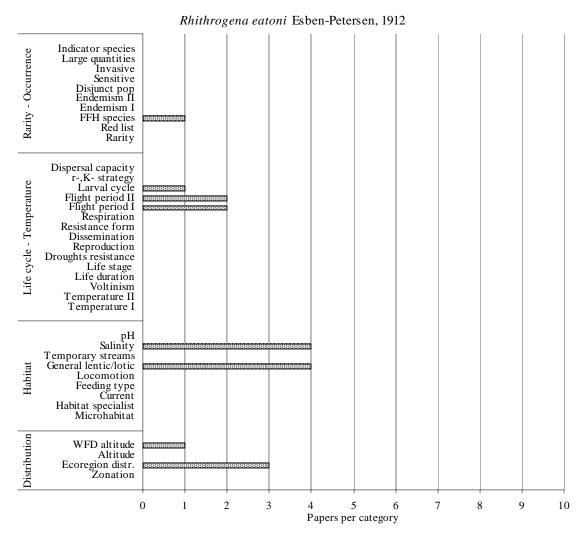


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: no information available.

Life cycles – Temperature: information were available for Larval cycle and Flight period.

Habitat: no information available.

Distribution: information were available for WFD altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features					
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among		
			among geographical	authors' opinions?		
Autoecological groups			areas?			
Rarity - Occurrence	Y		-	-		
Life cycle - Temperature	Y	if no	=	-		
Habitat	Y	11 110	-	-		
Distribution	Y		-	-		

No particular differences arose when summarizing the data, due to the low number of papers containing useful information. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena endenensis Metzler, Tomka & Zurwerra, 1985

Number of papers containing useful information: 7

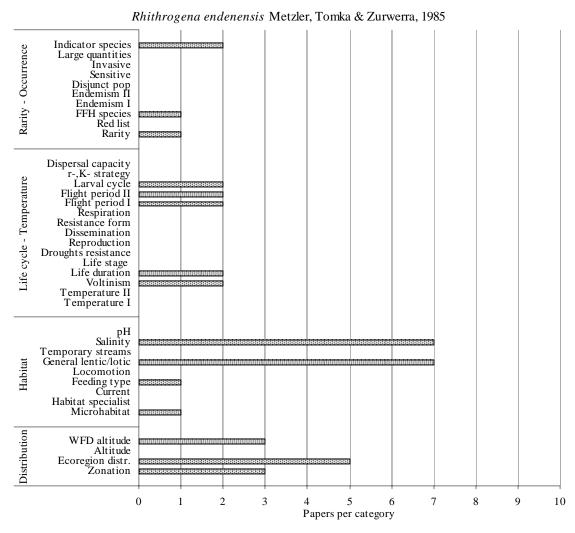


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were available for Indicator species and Rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Life duration and Voltinism.

Habitat: information available for Feeding type and Microhabitats.

Distribution: information were available for WFD altitude and Zonation.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	do aut	hors	ment on autoecological is disagreement due	is disagreement due
Autoecological groups	generally	agree?	to differences among geographical areas?	to differences among authors' opinions?
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena fiorii Grandi, 1953

Number of papers containing useful information: 5

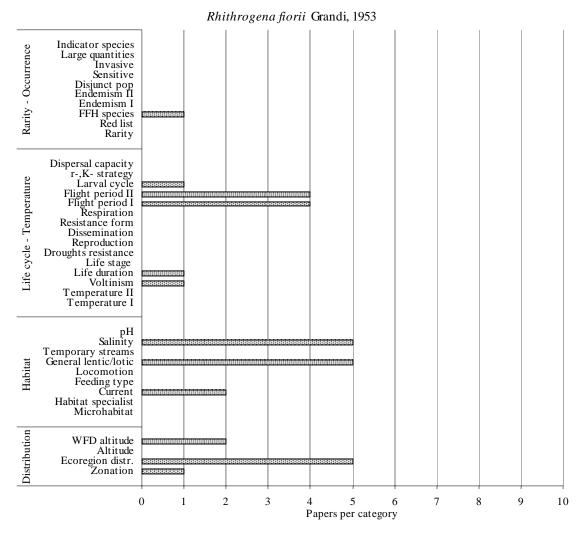


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: no information available.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Life duration and Voltinism.

Habitat: information available for Currents.

Distribution: information were available for WFD altitude and Zonation.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	do authors generally agree?		ment on autoecological is disagreement due to differences	is disagreement due to differences among
Autoecological groups			among geographical areas?	authors' opinions?
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	

No particular differences arose when summarizing the data, due to the low number of papers containing useful information. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena fonticola Sowa & Degrange, 1987

Number of papers containing useful information: 1

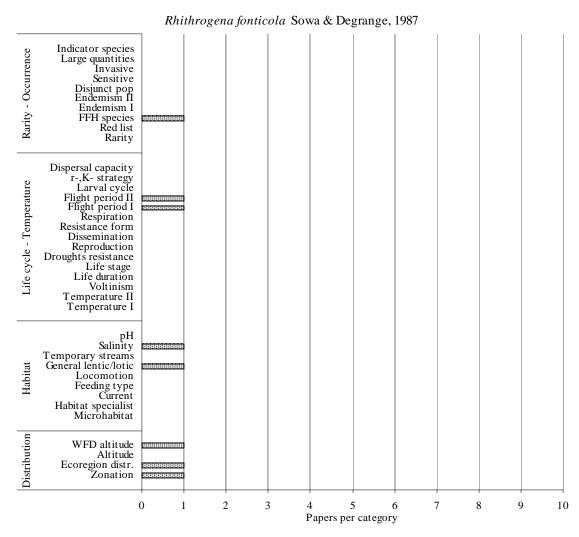


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: no information available.

Life cycles – Temperature: information were available for Flight period.

Habitat: no information available.

Distribution: information were available for WFD altitude and Zonation.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features					
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among		
			among geographical	authors' opinions?		
Autoecological groups			areas?			
Rarity - Occurrence	Y		-	-		
Life cycle - Temperature	Y	if no	=	-		
Habitat	Y	11 110	-	-		
Distribution	Y		-	-		

No particular differences arose when summarizing the data, since only one paper contained useful information for the species. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena germanica Eaton, 1885

Number of papers containing useful information: 31

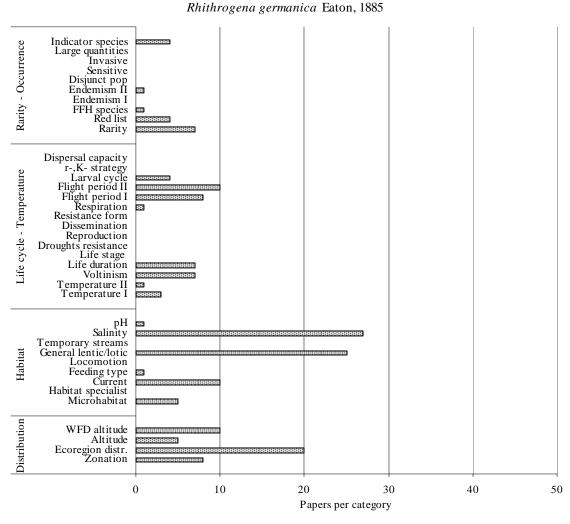


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were available for Indicator species, Endemism, Red list and Rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Respiration, Life duration, Voltinism and Temperature.

Habitat: information available for pH, Current and Microhabitats.

Distribution: information were available for all categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features					
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among		
			among geographical	authors' opinions?		
Autoecological groups			areas?			
Rarity - Occurrence	Y		-	-		
Life cycle - Temperature	Y	if no	=	-		
Habitat	Y	11 110	-	-		
Distribution	Y		-	-		

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena goeldlini Sartori & Sowa, 1988

Number of papers containing useful information: 2

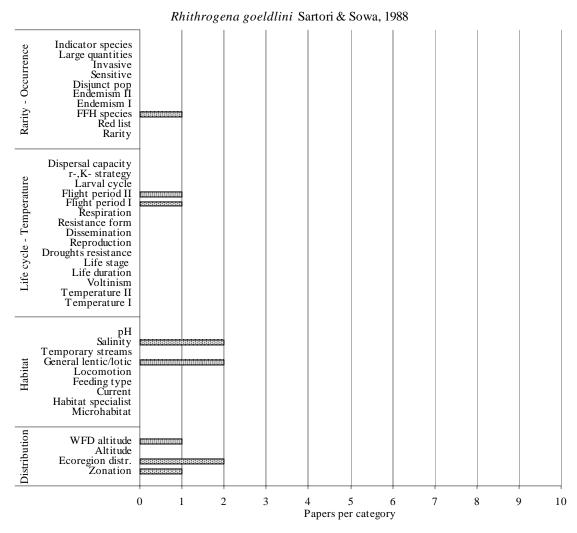


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: no information available.

Life cycles – Temperature: information were available for Flight period.

Habitat: no information available.

Distribution: information were available for WFD altitude and Zonation.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features					
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among		
			among geographical	authors' opinions?		
Autoecological groups			areas?			
Rarity - Occurrence	Y		-	-		
Life cycle - Temperature	Y	if no	=	-		
Habitat	Y	11 110	-	-		
Distribution	Y		-	-		

No particular differences arose when summarizing the data, due to the low number of papers containing useful information. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena gorganica Klapalek, 1907

Number of papers containing useful information: 6

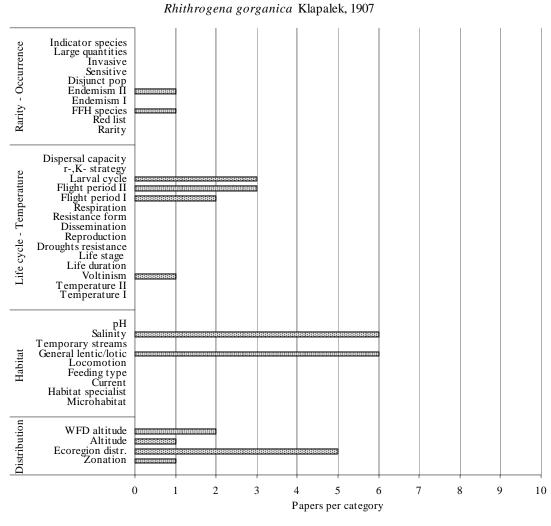


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: information were available for Endemism.

Life cycles – **Temperature**: information were available for Larval cycle, Flight period and Voltinism.

Habitat: no information available

Distribution: information were available for all categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreen do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	admors opinions.
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		_	

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena gorrizi Navás, 1913

Number of papers containing useful information: 2

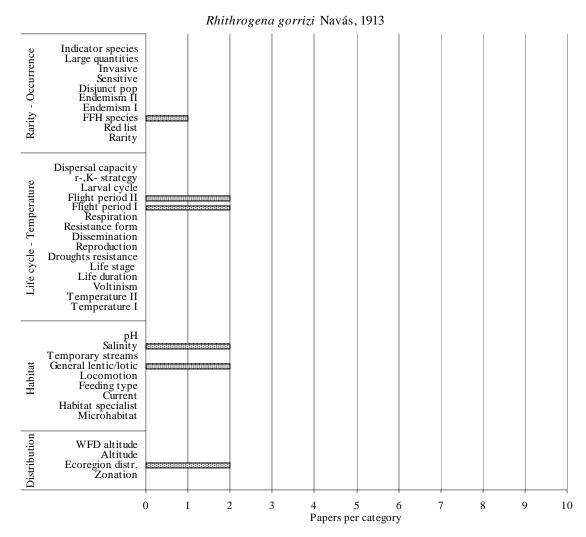


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: no information available.

Life cycles – Temperature: information were available for Flight period.

Habitat: no information available. **Distribution**: no information available.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreer do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	admors opinions.
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		_	

No particular differences arose when summarizing the data, due to the low number of papers containing useful information. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena gratianopolitana Sowa, Degrange & Sartori, 1986

Number of papers containing useful information: 7

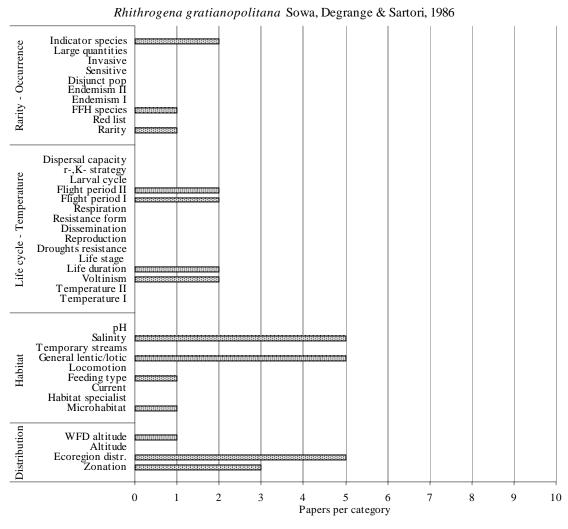


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were available for Indicator species and Rarity.

Life cycles – Temperature: information were available for Flight period, Life duration and Voltinism.

Habitat: information available for Feeding type and Microhabitat.

Distribution: information were available for WFD altitude and Zonation.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features			
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among
			among geographical	authors' opinions?
Autoecological groups			areas?	
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	=	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena grischuna Sartori & Oswald, 1988

Number of papers containing useful information: 3

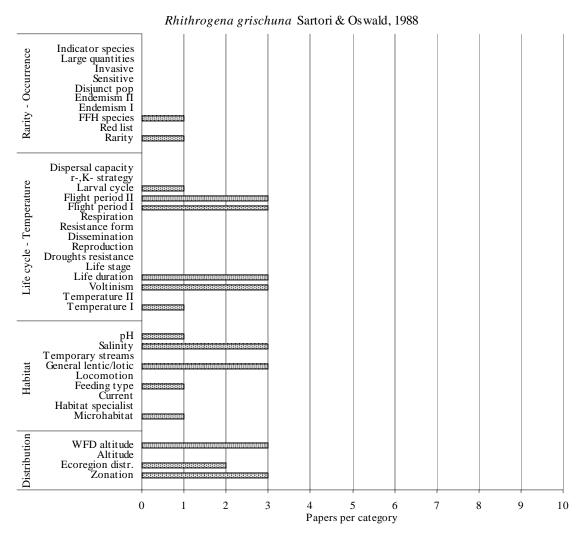


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – Occurrence: information were available for Rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Life duration, Voltinism and Temperature.

Habitat: information were available for pH, Feeding type and Microhabitat.

Distribution: information were available for WFD altitude and Zonation.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreer do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	admors opinions.
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		_	

No particular differences arose when summarizing the data, due to the low number of papers containing useful information. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena hercynia Landa, 1969

Number of papers containing useful information: 22

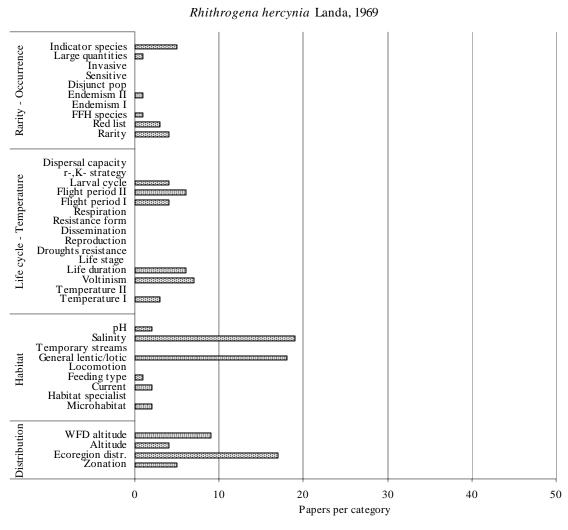


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were available for Indicator species, Large quantities, Endemism, Red list and Rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Life duration, Voltinism and Temperature.

Habitat: information available for pH, Current and Microhabitats.

Distribution: information were available for all categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features			
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among
			among geographical	authors' opinions?
Autoecological groups			areas?	
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	=	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena hybrida Eaton, 1885

Number of papers containing useful information: 27

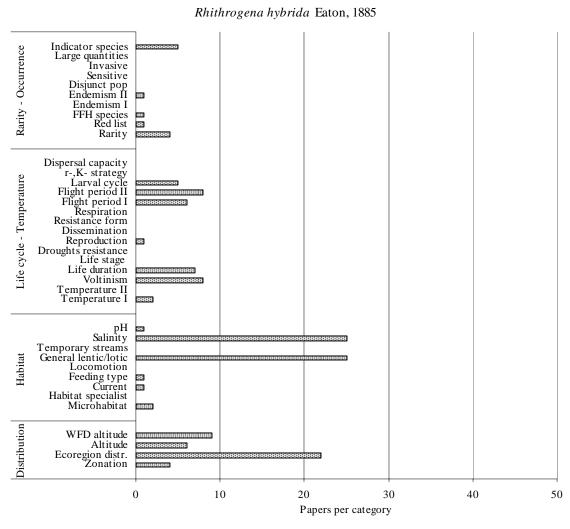


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were available for Indicator species, Endemism, Red list and Rarity.

Life cycles – **Temperature**: information were available for Larval cycle, Flight period, Reproduction, Life duration, Voltinism and Temperature.

Habitat: information available for pH, Current and Microhabitats.

Distribution: information were available for all categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features			
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among
			among geographical	authors' opinions?
Autoecological groups			areas?	
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	=	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena insularis Esben-Petersen, 1913

Number of papers containing useful information: 2

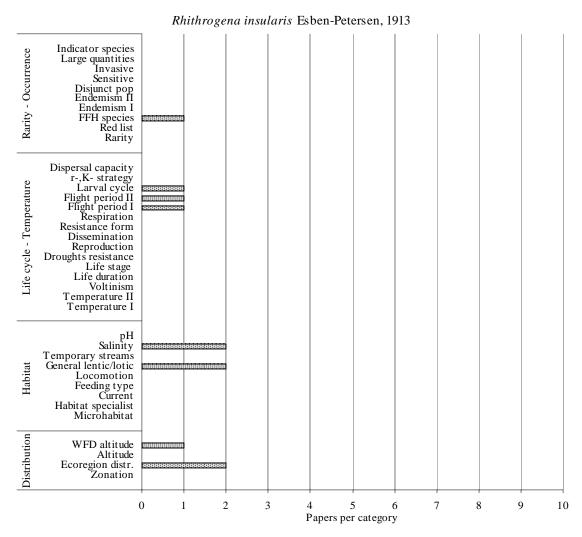


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: no information were available.

Life cycles – Temperature: information were available for Larval cycle and Flight period.

Habitat: no information were available.

Distribution: information were available for WFD altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreer do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	admors opinions.
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		_	

No particular differences arose when summarizing the data, due to the low number of papers containing useful information. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena iridina (Kolenati, 1839)

Number of papers containing useful information: 25

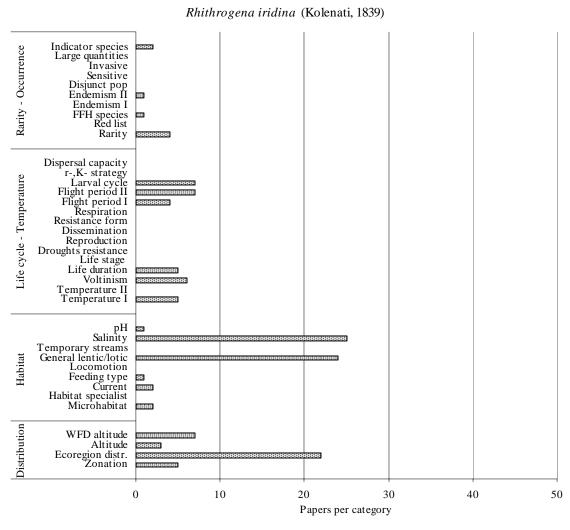


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – Occurrence: information were available for Indicator species, Endemism and Rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Life duration, Voltinism and Temperature.

Habitat: information available for pH, Current and Microhabitats.

Distribution: information were available for all categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	do authors generally agree?		ment on autoecological is disagreement due to differences	is disagreement due to differences among
Autoecological groups			among geographical areas?	authors' opinions?
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena kimminsi Thomas, 1970

Number of papers containing useful information: 4

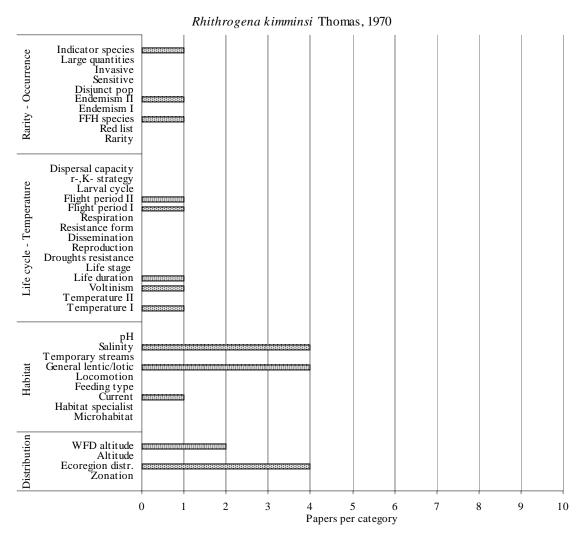


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: information were available for Indicator species and Endemism.

Life cycles – Temperature: information were available for Flight period, Life duration, Voltinism and Temperature.

Habitat: information were available for Current.

Distribution: information were available for WFD altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreen do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	admors opinions.
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		_	

No particular differences arose when summarizing the data, due to the low number of papers containing useful information. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena landai Sowa & Soldán, 1984

Number of papers containing useful information: 10

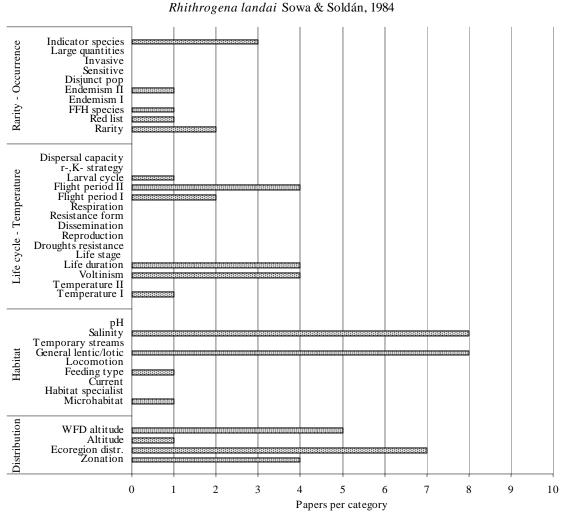


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were available for Indicator species, Endemism, Red list and Rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Life duration, Voltinism and Temperature.

Habitat: information available for Feeding type and Microhabitats.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	do authors generally agree?		ment on autoecological is disagreement due to differences	is disagreement due to differences among
Autoecological groups			among geographical areas?	authors' opinions?
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena loyolaea Navás, 1922

Number of papers containing useful information: 33

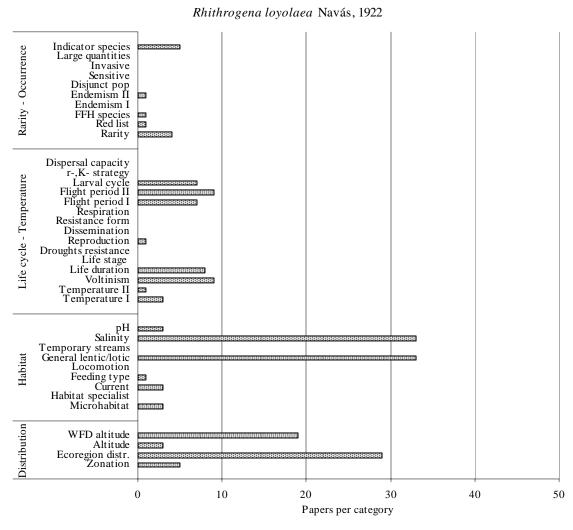


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were available for Indicator species, Endemism, Red list and Rarity.

Life cycles – **Temperature**: information were available for Larval cycle, Flight period, Reproduction, Life duration, Voltinism and Temperature.

Habitat: information available for pH, Current and Microhabitats.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreer do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	authors opinions:
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	N	if no	Y	N
Habitat	Y	11 110	-	-
Distribution	Y		-	-

When summarizing the information, some differences arose in the reviewed literature. In particular some disagreements have been pointed out for Life cycle - Temperature, due to differences recorded among European zones.

Species Name: Rhithrogena marcosi Alba-Tercedor & Sowa, 1987

Number of papers containing useful information: 4

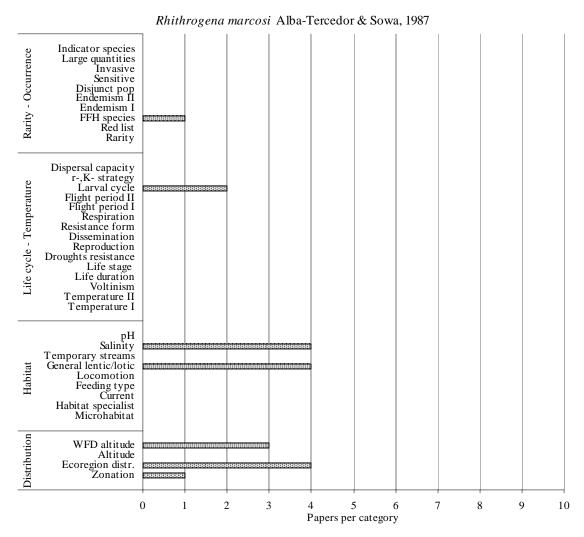


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – **Occurrence**: information were available for Indicator species, Red list and Rarity.

Life cycles – Temperature: information were available for Larval cycle.

Habitat: no information were available.

Distribution: information were available for WFD altitude and Zonation.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	do aut	hors	ment on autoecological is disagreement due	is disagreement due
Autoecological groups	generally	agree?	to differences among geographical areas?	to differences among authors' opinions?
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena mariaedominicae Sowa & Degrange, 1987

Number of papers containing useful information: 1

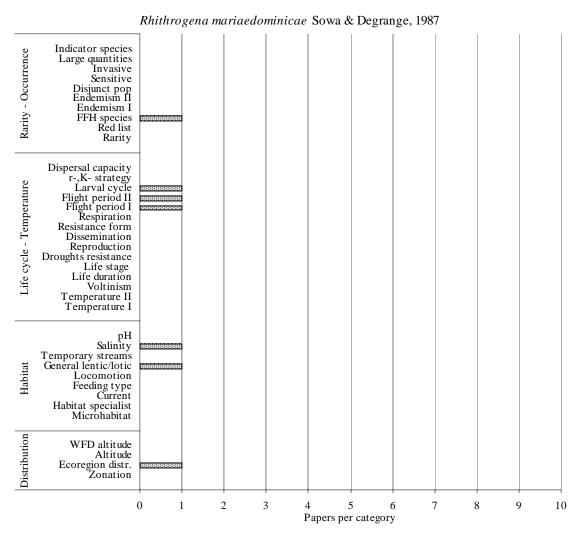


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: no information available.

Life cycles – Temperature: information were available for Larval cycle and Flight period.

Habitat: no information available. **Distribution**: no information available.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features					
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among		
			among geographical	authors' opinions?		
Autoecological groups			areas?			
Rarity - Occurrence	Y		-	-		
Life cycle - Temperature	Y	if no	=	-		
Habitat	Y	11 110	-	-		
Distribution	Y		-	-		

No particular differences arose when summarizing the data, since only one paper contained useful information for the species. General agreement is thus recorded for all autoecological groups.

Species Name: *Rhithrogena nivata* (Eaton, 1871)

Number of papers containing useful information: 9

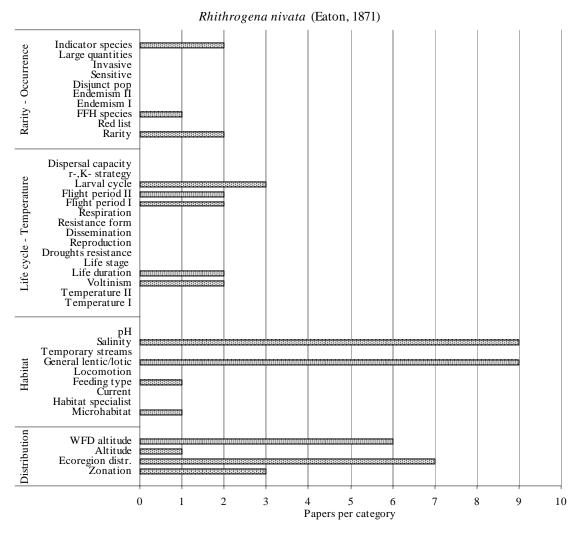


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were available for Indicator species and Rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Life duration, Voltinism and Temperature.

Habitat: information available for Feeding type and Microhabitats.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features					
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among		
			among geographical	authors' opinions?		
Autoecological groups			areas?			
Rarity - Occurrence	Y		-	-		
Life cycle - Temperature	Y	if no	=	-		
Habitat	Y	11 110	-	-		
Distribution	Y		-	-		

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena nuragica Belfiore, 1987

Number of papers containing useful information: 2

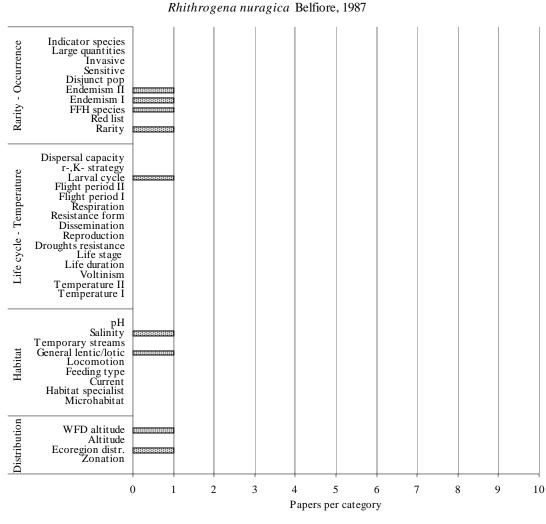


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – **Occurrence**: information were available for Endemism and Rarity.

Life cycles – Temperature: information were available for Larval cycle.

Habitat: no information were available.

Distribution: information were available for WFD altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features					
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among		
			among geographical	authors' opinions?		
Autoecological groups			areas?			
Rarity - Occurrence	Y		-	-		
Life cycle - Temperature	Y	if no	=	-		
Habitat	Y	11 110	-	-		
Distribution	Y		-	-		

No particular differences arose when summarizing the data, due to the low number of papers containing useful information. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena picteti Sowa, 1971

Number of papers containing useful information: 15

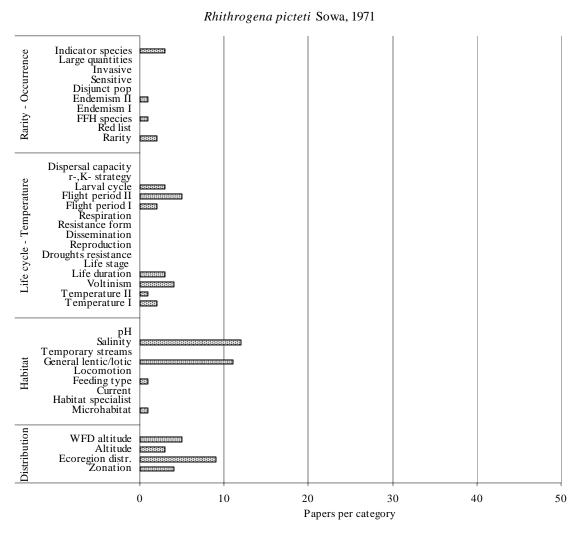


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – Occurrence: information were available for Indicator species, Endemism and Rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Life duration, Voltinism and Temperature.

Habitat: information available for Feeding type and Microhabitats.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features					
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among		
			among geographical	authors' opinions?		
Autoecological groups			areas?			
Rarity - Occurrence	Y		-	-		
Life cycle - Temperature	Y	if no	=	-		
Habitat	Y	11 110	-	-		
Distribution	Y		-	-		

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena podhalensis Sowa & Soldán, 1986

Number of papers containing useful information: 8

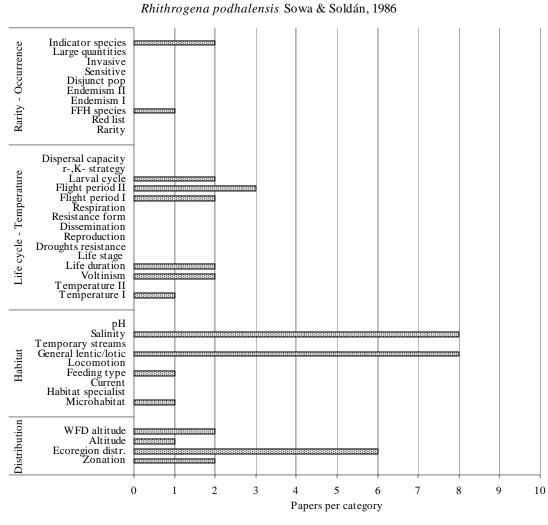


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – Occurrence: information were available only for Indicator species.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Life duration, Voltinism and Temperature.

Habitat: information available for Feeding type and Microhabitats.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreen do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	admors opinions.
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		_	

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena puthzi Sowa, 1984

Number of papers containing useful information: 8

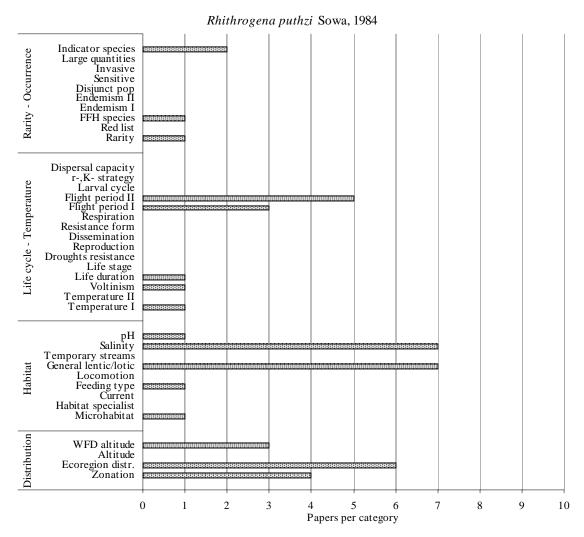


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – Occurrence: information were available for Indicator species and Endemism.

Life cycles – Temperature: information were available for Flight period, Life duration, Voltinism and Temperature.

Habitat: information available for pH, Feeding type and Microhabitats.

Distribution: information were available for WFD altitude and Zonation.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features					
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among		
			among geographical	authors' opinions?		
Autoecological groups			areas?			
Rarity - Occurrence	Y		-	-		
Life cycle - Temperature	Y	if no	=	-		
Habitat	Y	11 110	-	-		
Distribution	Y		-	-		

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena puytoraci Sowa & Degrange, 1987

Number of papers containing useful information: 15

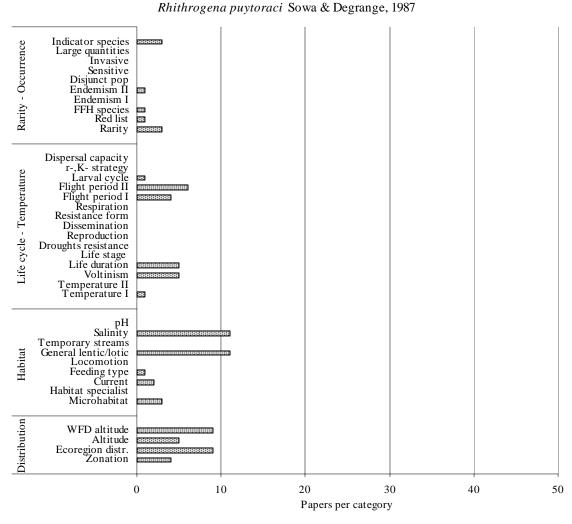


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were available for Indicator species, Endemism, Red list and Rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Life duration, Voltinism and Temperature.

Habitat: information available for Current and Microhabitats.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreen do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	admors opinions.
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		_	

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena reatina Sowa & Belfiore, 1984

Number of papers containing useful information: 3

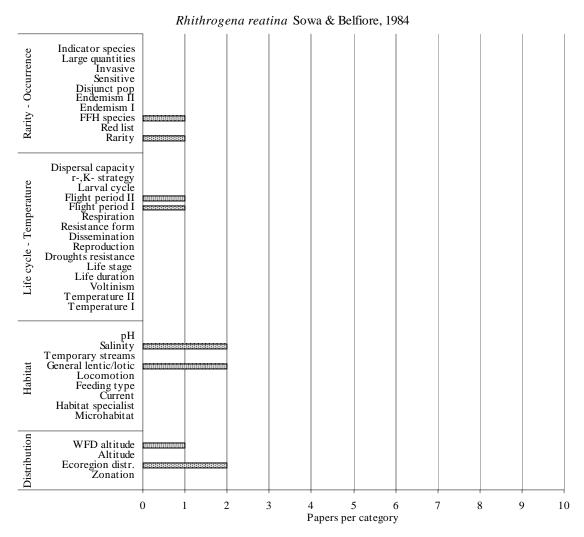


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – **Occurrence**: information were available for Rarity.

Life cycles – Temperature: information were available for Flight period.

Habitat: no information were available.

Distribution: information were available for WFD altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	do authors		ment on autoecological is disagreement due	is disagreement due
Autoecological groups	generally	agree?	to differences among geographical areas?	to differences among authors' opinions?
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena rolandi Weichselbaumer, 1995

Number of papers containing useful information: 3

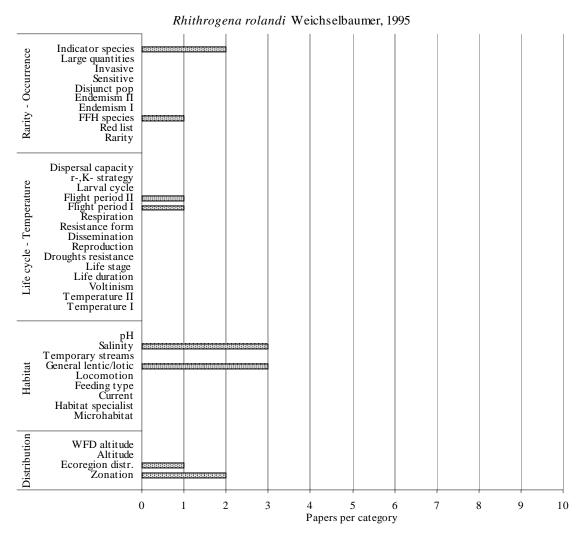


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: information were available for Indicator species.

Life cycles – Temperature: information were available for Flight period.

Habitat: no information were available.

Distribution: information were available for Zonation.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreer do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	admors opinions.
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		_	

No particular differences arose when summarizing the data, due to the low number of papers containing useful information. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena savoiensis Alba-Tercedor & Sowa, 1987

Number of papers containing useful information: 15

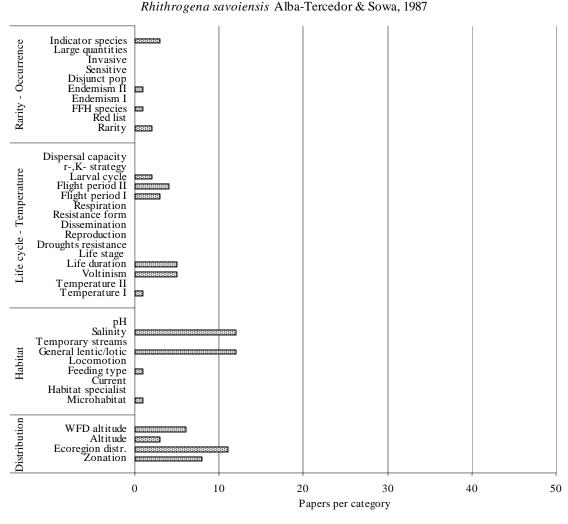


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – Occurrence: information were available for Indicator species, Endemism and Rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Life duration, Voltinism and Temperature.

Habitat: information available for Feeding type and Microhabitats.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreer do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	admors opinions.
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		_	

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena semicolorata (Curtis, 1834)

Number of papers containing useful information: 99

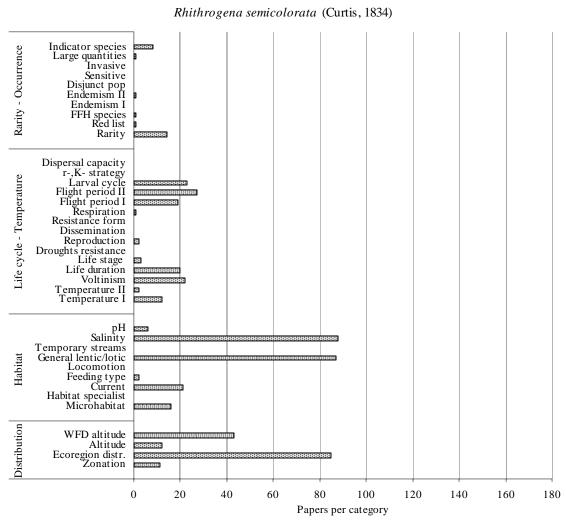


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were available for Indicator species, Endemism, Large quantity Red list and rarity.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Respiration, Reproduction, Life stage, Life duration, Voltinism and Temperature.

Habitat: information available for pH, Current and Microhabitats.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreed do authors generally agree?		ment on autoecological is disagreement due to differences	features is disagreement due to differences among authors' opinions?
Autoecological groups			among geographical areas?	authors opinions:
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	N	if no	Y	N
Habitat	Y	11 110	-	-
Distribution	Y		-	-

When summarizing the information, some differences arose in the reviewed literature. In particular some disagreements have been pointed out for Life cycle - Temperature, due to differences recorded among European zones.

Species Name: Rhithrogena sibillina Metzler, Tomka & Zurwerra, 1985

Number of papers containing useful information: 1

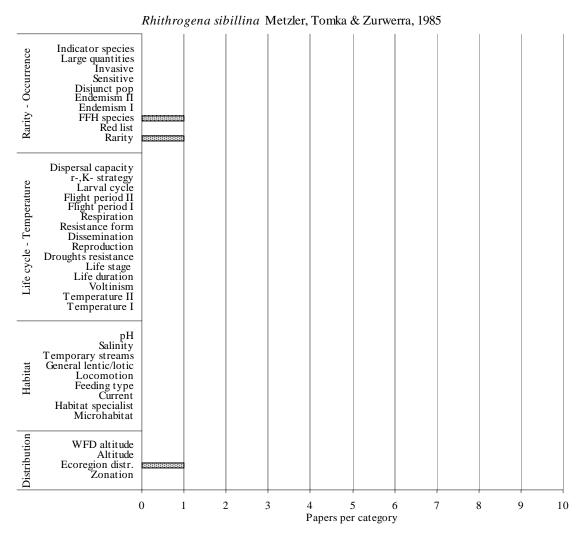


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: information were available for Rarity

Life cycles – Temperature: no information available.

Habitat: no information available. **Distribution**: no information available.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	do authors		ment on autoecological is disagreement due	is disagreement due
Autoecological groups	generally	agree?	to differences among geographical areas?	to differences among authors' opinions?
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data, since only one paper contained useful information for the species. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena siciliana Braasch, 1989

Number of papers containing useful information: 4

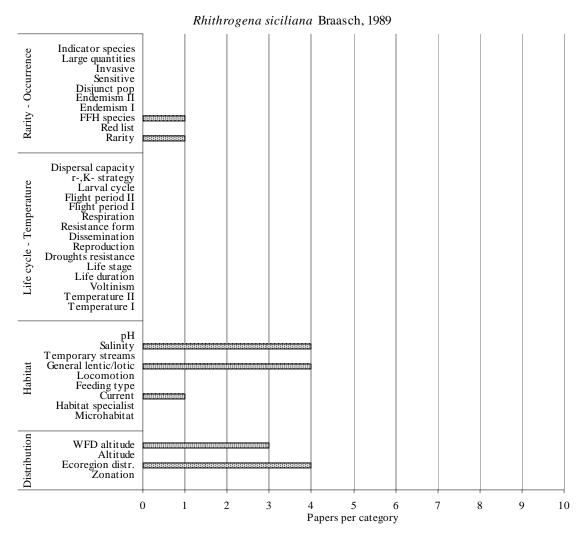


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: information were available for Rarity

Life cycles – Temperature: no information available.

Habitat: information were available for Currents.

Distribution: information were available for WFD altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	do authors		ment on autoecological is disagreement due	is disagreement due
Autoecological groups	generally	agree?	to differences among geographical areas?	to differences among authors' opinions?
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information. General agreement is thus recorded for all autoecological groups.

Species Name: Rhithrogena soteria Navás, 1917

Number of papers containing useful information: 2

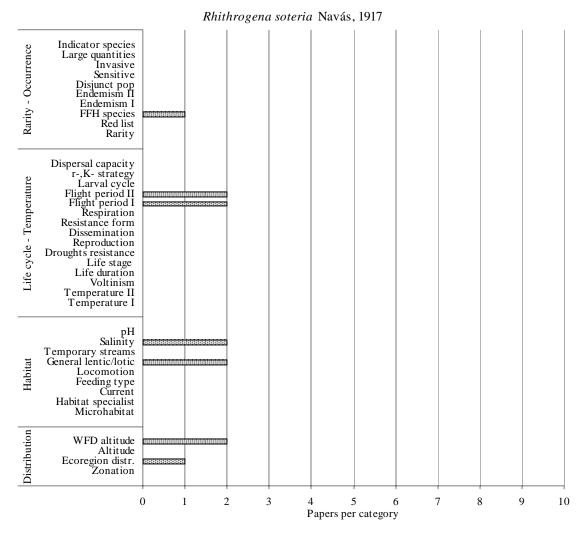


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: no information available.

Life cycles – Temperature: information were available for Flight period.

Habitat: no information available.

Distribution: information were available for WFD altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	do aut	hors	ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	admors opinions.
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		_	

No particular differences arose when summarizing the data, due to the low number of papers containing useful information. General agreement is thus recorded for all autoecological groups.

------End of the fact sheet -----

Family Name: Heptageniidae

Species Name: Rhithrogena sowai Puthz, 1972

Number of papers containing useful information: 1

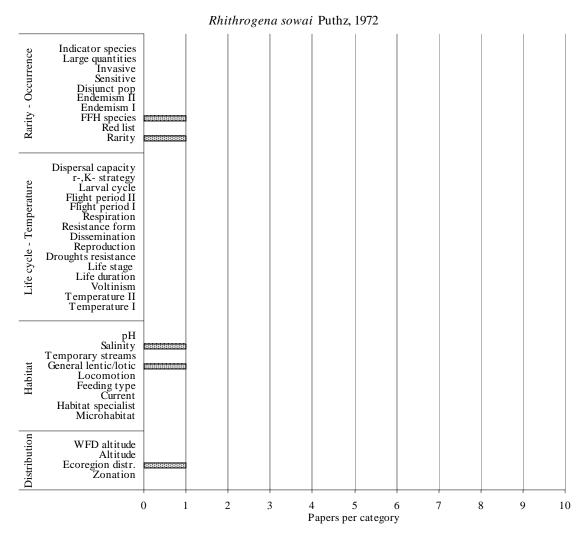


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: information were available for Rarity

Life cycles – Temperature: no information available.

Habitat: no information available. **Distribution**: no information available.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreer do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	authors opinions.
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data, since only one paper contained useful information for the species. General agreement is thus recorded for all autoecological groups.

------End of the fact sheet -----

Family Name: Heptageniidae

Species Name: Rhithrogena strenua Thomas, 1982

Number of papers containing useful information: 2

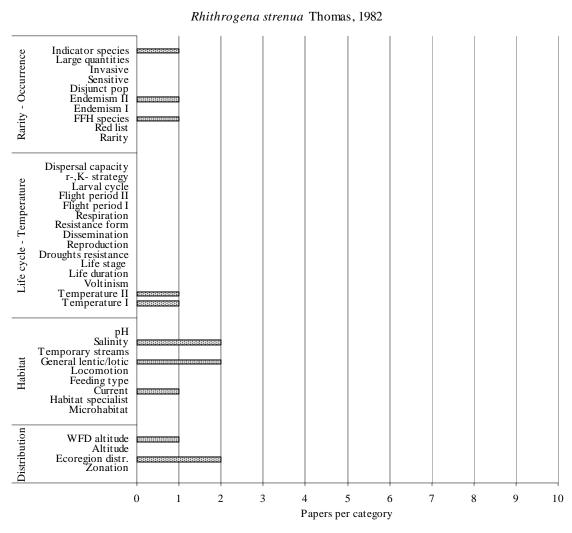


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – Occurrence: information were available for Indicator species and Endemism.

Life cycles – Temperature: information were available for Temperature.

Habitat: information were available for Currents.

Distribution: information were available for WFD altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features				
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among	
			among geographical	authors' opinions?	
Autoecological groups			areas?		
Rarity - Occurrence	Y		-	-	
Life cycle - Temperature	Y	if no	=	-	
Habitat	Y	11 110	-	-	
Distribution	Y		-	-	

No particular differences arose when summarizing the data, due to the low number of papers containing useful information. General agreement is thus recorded for all autoecological groups.

------End of the fact sheet -----

Family Name: Heptageniidae

Species Name: Rhithrogena taurisca Bauernfeind, 1992

Number of papers containing useful information: 6

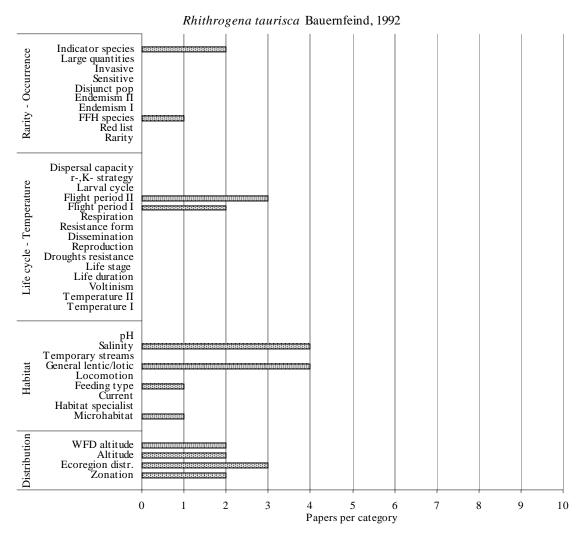


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – Occurrence: information were available for Indicator species. **Life cycles – Temperature**: information were available for Flight period.

Habitat: information were available for feeding type and Microhabitats.

Distribution: information were available for all categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	do aut	hors	ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	admors opinions.
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		_	

No particular differences arose when summarizing the data, agreement is thus recorded for all autoecological groups.

-----End of the fact sheet -----

Family Name: Heptageniidae

Species Name: Rhithrogena thracica Sowa, Soldán & Braasch, 1988

Number of papers containing useful information: 1

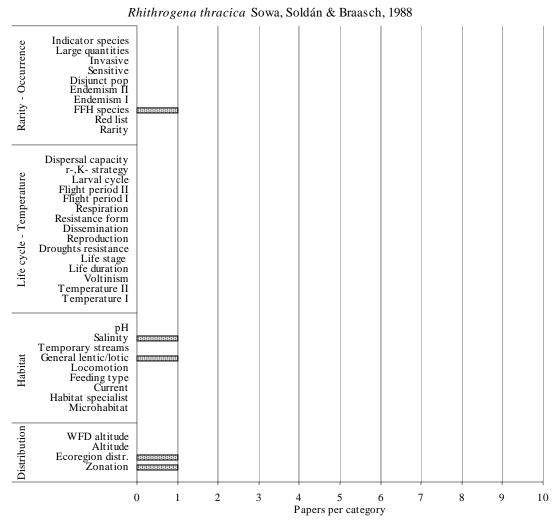


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories. **Rarity – Occurrence**: no information were available. **Life cycles – Temperature**: no data were available.

Habitat: no information were available.

Distribution: data were available only for Zonation.

The information available was extremely restricted for all autoecological categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features				
	do authors generally agree?	is disagreement due to differences among geographical areas?	is disagreement due to differences among authors' opinions?		
Autoecological groups		geograpmear areas.	opinions.		
Rarity - Occurrence	Y	-	-		
Life cycle - Temperature	Y if no	-	-		
Habitat	Y	-	-		
Distribution	Y	-	-		

No particular differences arose when summarizing the data as only one paper contained useful information.

-----End of the fact sheet -----

Family name: Heptageniidae

Species Name: Rhithrogena vaillanti Sowa & Degrange, 1987

Number of papers containing useful information: 7

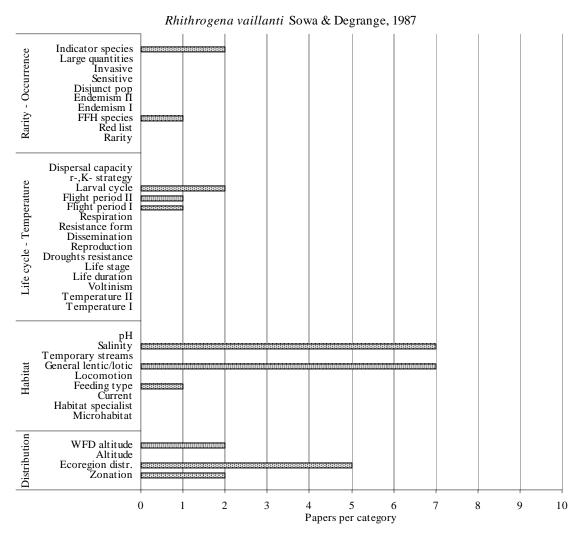


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – Occurrence: information were available for Indicator species.

Life cycles – Temperature: information were available for Larval cycle and Flight period.

Habitat: information were available for Feeding type.

Distribution: information were available for WFD altitude and Zonation.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreer do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			areas?	authors opinions.
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		-	-

No particular differences arose when summarizing the data, agreement is thus recorded for all autoecological groups.

-----End of the fact sheet -----

Family Name: Heptageniidae

Species Name: Rhithrogena wolosatkae Klonowska, 1986

Number of papers containing useful information: 3

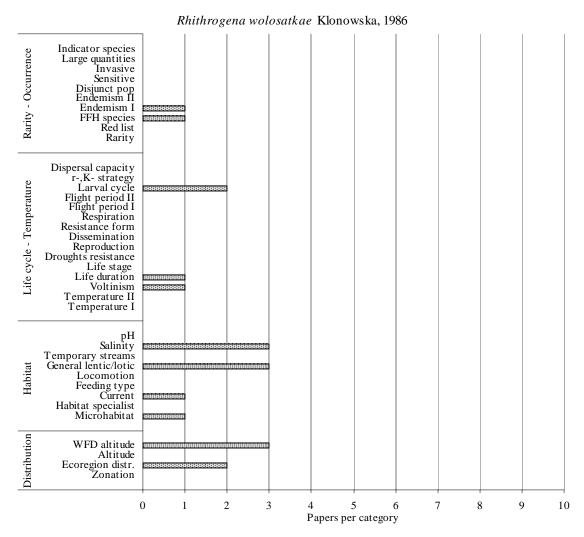


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – Occurrence: information were available for Endemism.

Life cycles – **Temperature**: information were available for Larval cycle, Life duration and Voltinism.

Habitat: information were available for Current and Microhabitats.

Distribution: information were available for WFD altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreer do authors generally agree?		ment on autoecological is disagreement due to differences among geographical	is disagreement due to differences among authors' opinions?
Autoecological groups			arreas?	authors opinions:
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		_	

No particular differences arose when summarizing the data, due to the low number of papers containing useful information. General agreement is thus recorded for all autoecological groups.

-----End of the fact sheet ------

Family Name: Heptageniidae

Species Name: Rhithrogena zelinkai Sowa & Soldán, 1984

Number of papers containing useful information: 7

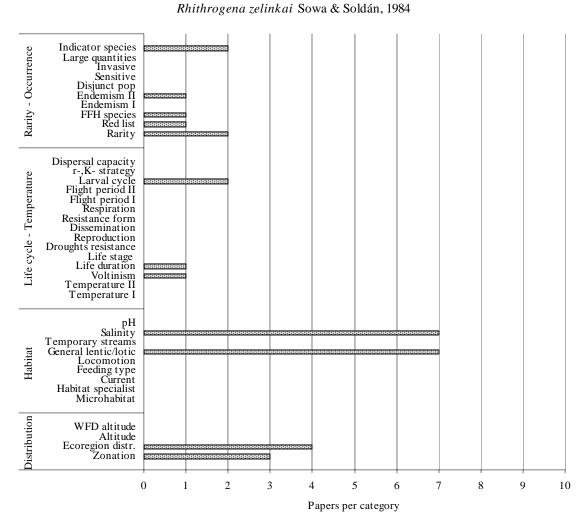


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – **Occurrence**: information were available for Indicator species, Endemism, Red list and Rarity.

Life cycles – **Temperature**: information were available for Larval cycle, Life duration and Voltinism.

Habitat: no information were available.

Distribution: information were available for Zonation.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features				
	do authors generally agree?		is disagreement due to differences	is disagreement due to differences among	
			among geographical	authors' opinions?	
Autoecological groups			areas?		
Rarity - Occurrence	Y		-	-	
Life cycle - Temperature	Y	if no	=	-	
Habitat	Y	11 110	-	-	
Distribution	Y		-	-	

No particular differences arose when summarizing the data, agreement is thus recorded for all autoecological groups.

-----End of the fact sheet -----

Family Name: Heptageniidae

Species Name: Rhithrogena zernyi Bauernfeind, 1991

Number of papers containing useful information: 1

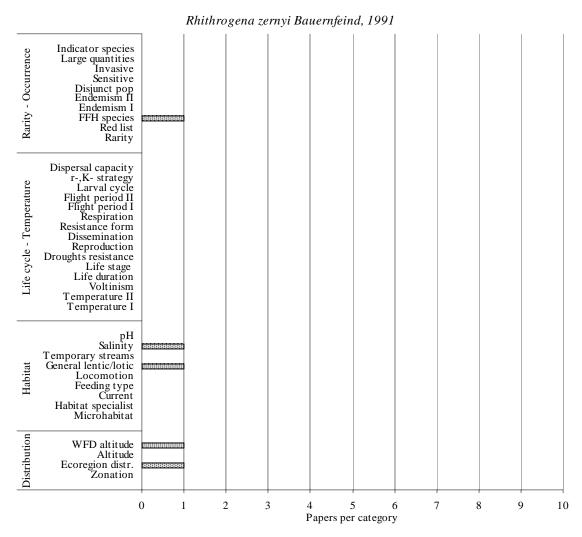


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: no information available.

Life cycles – Temperature: no information available.

Habitat: no information available.

Distribution: information were available for WFD altitude.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

Autoecological groups	do aut generally	hors	ment on autoecological is disagreement due to differences among geographical areas?	features is disagreement due to differences among authors' opinions?
Rarity - Occurrence	Y		-	-
Life cycle - Temperature	Y	if no	-	-
Habitat	Y	11 110	-	-
Distribution	Y		_	

No particular differences arose when summarizing the data, since only one paper contained useful information for the species. General agreement is thus recorded for all autoecological groups.

------End of the fact sheet -----

Family Name: Isonychiidae

Species Name: Isonychia ignota (Walker, 1853)

Number of papers containing useful information: 15

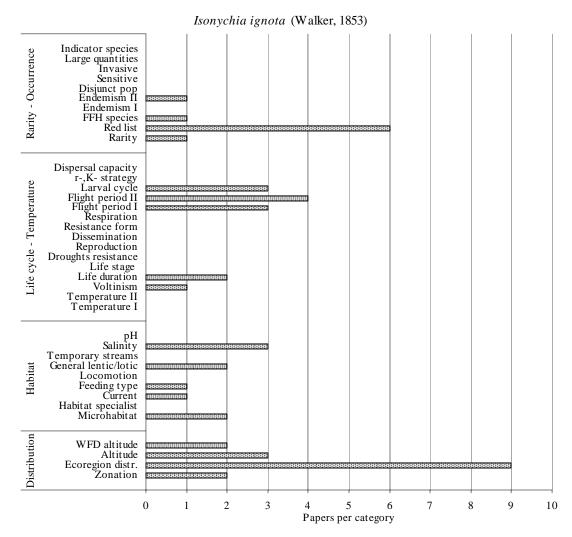


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: Rarity, Red list and Endemism were the only categories for which information were available.

Life cycles – Temperature: a general lack of information was observed for this group, excluding Larval cycle, Flight period, Life duration and Voltinism.

Habitat: information were present only for Microhabitat and Current.

Distribution: data were available for all features.

Autoecological categories for which a large amount of information was available are related to Red list, Larval cycles, Flight period and Altitudinal distribution.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features						
	do authors	is disagreement due to	is disagreement due to				
	generally agree?	differences among	differences among authors'				
Autoecological groups		geographical areas?	opinions?				
Rarity - Occurrence	Y	-	-				
Life cycle - Temperature	Y if no	=	-				
Habitat	Y	-	-				
Distribution	Y	-	-				

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

-----End of the fact sheet -----

Species Name: Choroterpes borbonica Belfiore, 1988

Number of papers containing useful information: 4

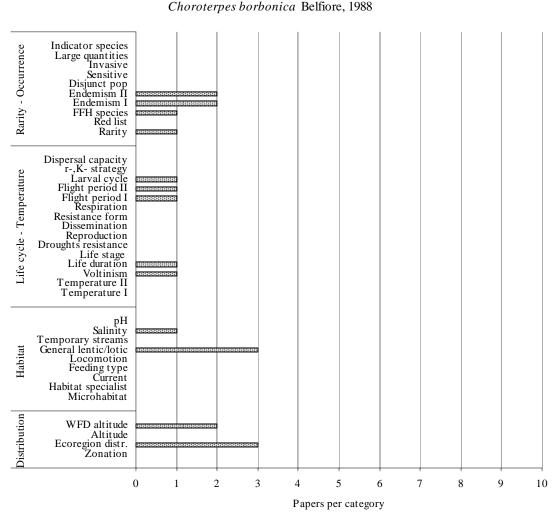


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all autoecological groups.

Rarity – **Occurrence**: Rarity and Endemism were the only categories for which information were available.

Life cycles – Temperature: a general lack of information was observed for this group, excluding Larval cycle, Flight period, Life duration and Voltinism.

Habitat: no information were available.

Distribution: data were available only for WFD altitude.

The information available was extremely restricted for all autoecological categories. As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

Autoecological groups	do authors generally agree?	Agreement on autoecologi is disagreement due to differences among geographical areas?	is disagreement due to differences among authors' opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

-----End of the fact sheet ------

Species Name: Choroterpes lesbosensis Gaino & Sowa, 1985

Number of papers containing useful information: 2

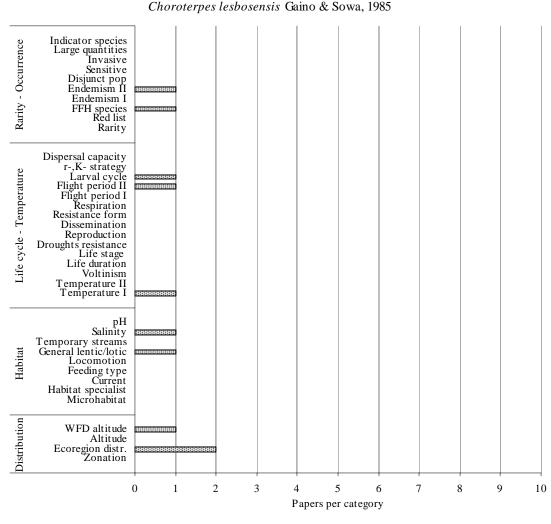


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all autoecological groups.

Rarity – Occurrence: information were available only for Endemism.

Life cycles – Temperature: a general lack of information was observed for this group, excluding Larval cycle, Flight period and Temperature preference.

Habitat: no information were available.

Distribution: data were available only for WFD altitude.

The information available was extremely restricted for all autoecological categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features					
	do authors generally agree?	is disagreement due to differences among geographical areas?	is disagreement due to differences among authors' opinions?			
Autoecological groups		geograpmear areas:	opinions:			
Rarity - Occurrence	Y	=	-			
Life cycle - Temperature	Y if no	=	-			
Habitat	Y	-	-			
Distribution	Y	-	-			

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

------End of the fact sheet ------

Species Name: Choroterpes picteti (Eaton, 1871)

Number of papers containing useful information: 35

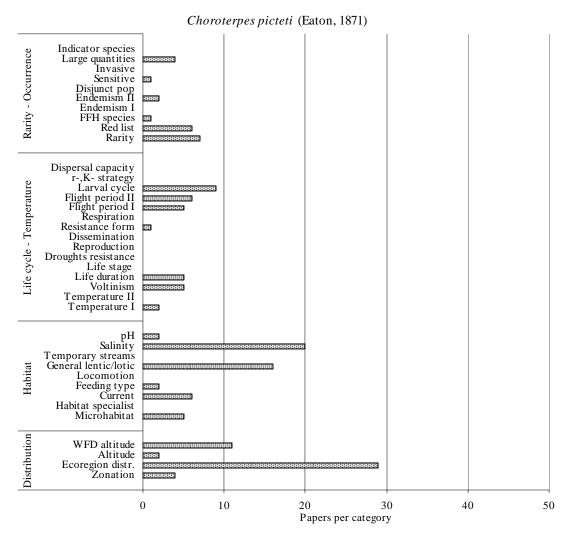


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: information were obtained for all categories, excluding Disjunct population, Invasive and Indicator species.

Life cycles – Temperature: information were available only for Larval cycle, Flight period, Life duration and Voltinism.

Habitat: information were present only for Microhabitat, Current and pH.

Distribution: data were available for all features.

Autoecological categories for which a large amount of information was available are related to Larval cycles and Altitudinal distribution.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors generally agree?	is disagreement due to differences among	is disagreement due to differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	N	N	Y
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

When summarizing the information, some differences arose in the reviewed literature. In particular some disagreements have been pointed out for Rarity - Occurrence due to differences observed among authors' opinions.

-----End of the fact sheet ------

Species Name: Euthraulus assimilis (Gaino & Sowa, 1985)

Number of papers containing useful information: 2

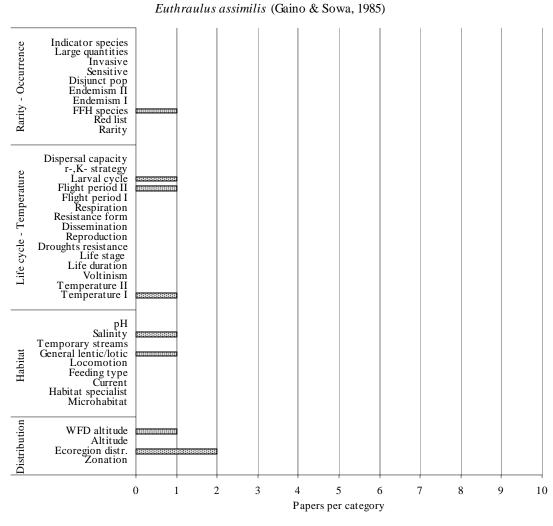


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all autoecological groups.

Rarity – Occurrence: no information were available.

Life cycles – Temperature: a general lack of information was observed for this group, excluding Larval cycle, Flight period and Temperature preference.

Habitat: no information were available.

Distribution: data were available only for WFD altitude.

The information available was extremely restricted for all autoecological categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors generally agree?	is disagreement due to differences among geographical areas?	is disagreement due to differences among authors' opinions?
Autoecological groups		geograpmear areas:	opinions:
Rarity - Occurrence	Y	=	-
Life cycle - Temperature	Y if no	=	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

-----End of the fact sheet -----

Species Name: Euthraulus balcanicus Ikonomov, 1961

Number of papers containing useful information: 6

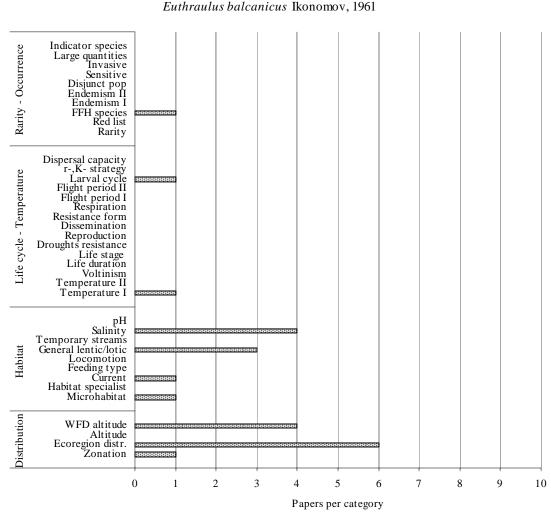


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all autoecological groups.

Rarity – Occurrence: no information were available.

Life cycles – Temperature: information were available only for Temperature preference and Larval cycle.

Habitat: information were available only for Microhabitat and Current.

Distribution: data were available for all features excluding Altitude.

The information available was restricted for all autoecological categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

------End of the fact sheet ------

Species Name: Habroleptoides auberti (Biancheri, 1954)

Number of papers containing useful information: 11

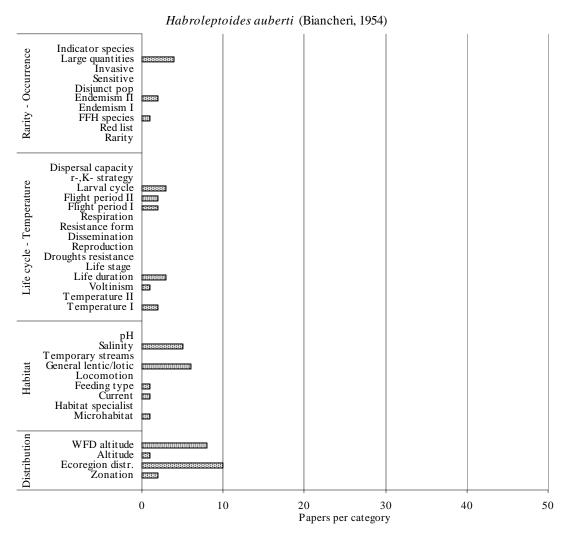


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: Endemism and Large quantities were the only categories for which information were available.

Life cycles – Temperature: data were available for Larval cycle, Flight period, Life duration, Voltinism and Temperature preference.

Habitat: information were present only for Microhabitat and Current.

Distribution: data were available for all features.

The only autoecological category for which a large amount of information was available is WFD altitude.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	=	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low namber of papers containing useful information. General agreement is thus recorded for all autoecological groups.

-----End of the fact sheet -----

Species Name: Habroleptoides berthelemyi Thomas, 1968

Number of papers containing useful information: 4

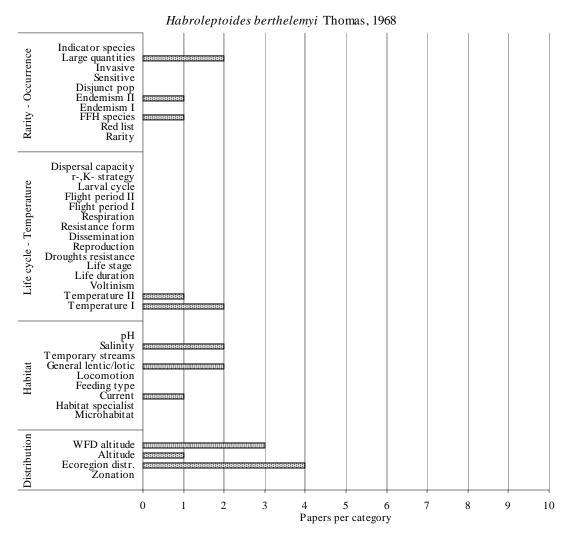


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – Occurrence: information were available only for Endemism and Large quantities.

Life cycles – Temperature: information were available only for Temperature preference.

Habitat: information were available only for Current.

Distribution: data were available for all features excluding Altitudinal distribution.

The information available was restricted for all autoecological categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors generally agree?	is disagreement due to differences among geographical areas?	is disagreement due to differences among authors' opinions?
Autoecological groups		geograpmear areas:	opinions:
Rarity - Occurrence	Y	=	-
Life cycle - Temperature	Y if no	=	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

------End of the fact sheet ------

Species Name: Habroleptoides budtzi (Esben-Petersen, 1912)

Number of papers containing useful information: 2

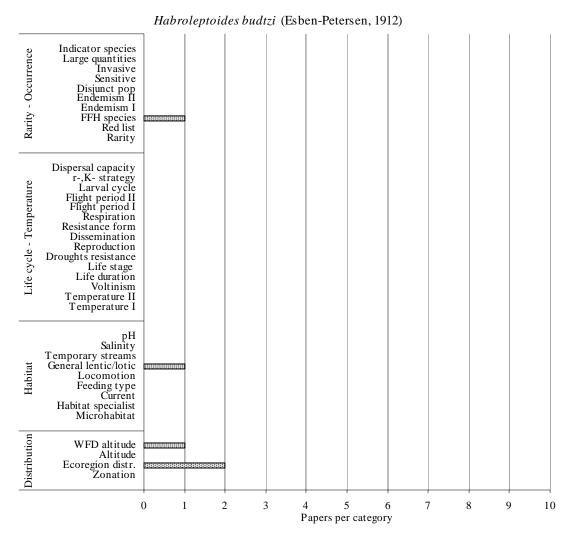


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all autoecological groups.

Rarity – Occurrence: no information were available.

Life cycles – Temperature: no data were available.

Habitat: no information were available.

Distribution: data were available only for WFD altitude.

The information available was extremely restricted for all autoecological categories.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors generally agree?	is disagreement due to differences among geographical areas?	is disagreement due to differences among authors' opinions?
Autoecological groups		geograpmear areas.	opinions.
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

------End of the fact sheet ------

Species Name: Habroleptoides confusa Sartori & Jacob, 1986

Number of papers containing useful information: 39

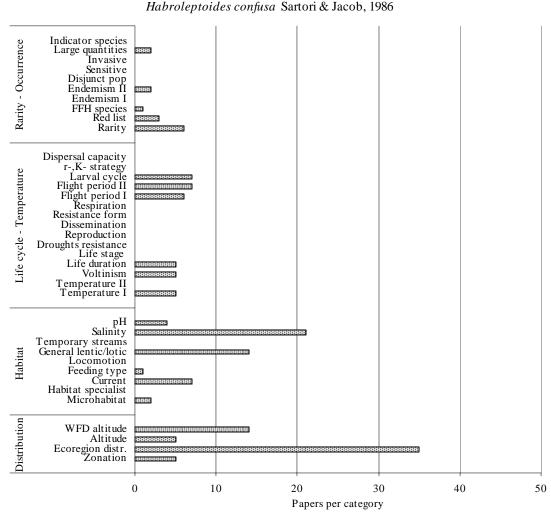


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: information were obtained for all categories, excluding Disjunct population, Sensitive, Invasive and Indicator species.

Life cycles – Temperature: information were available only for Larval cycle, Flight period, Life duration, Voltinism and Temperature preference.

Habitat: information were present only for Microhabitat, Current and pH.

Distribution: data were available for all features.

Autoecological categories for which a large amount of information was available are related to Larval cycles, Flight period, Current and Altitudinal distribution.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	=	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data. General agreement was thus recorded for all categories.

Species Name: Habroleptoides filipovicae Gaino & Sowa, 1985

Number of papers containing useful information: 2

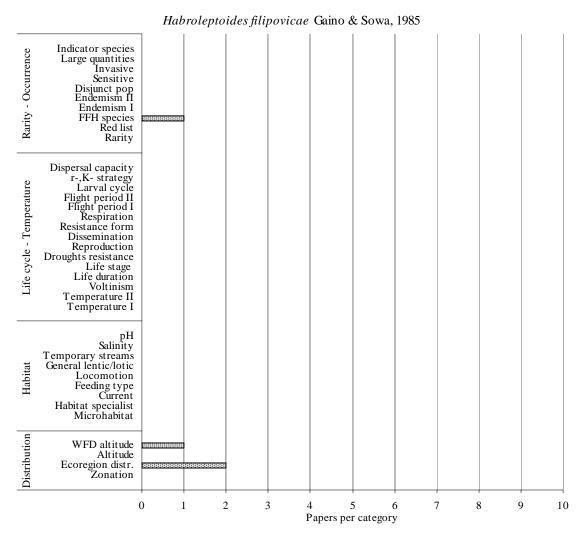


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all autoecological groups.

Rarity – Occurrence: no data were available.

Life cycles – Temperature: no information were available.

Habitat: no data were available.

Distribution: data were available only for WFD altitude.

The information available was extremely restricted for all autoecological categories.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	=	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

Species Name: Habroleptoides malickyi Gaino & Sowa, 1983

Number of papers containing useful information: 1

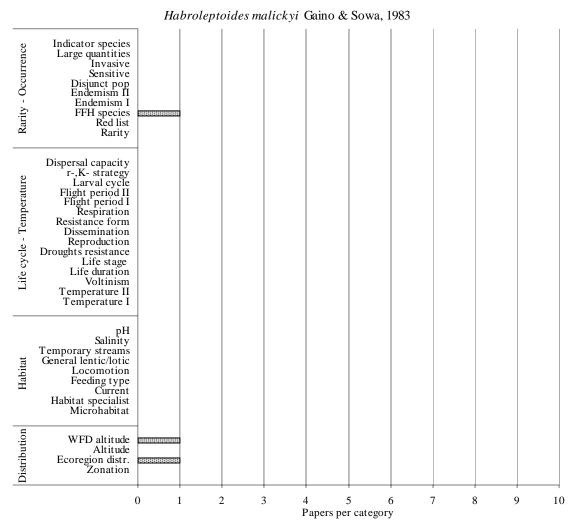


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all autoecological groups.

Rarity – Occurrence: no data were available.

Life cycles – Temperature: no information were available.

Habitat: no data were available.

Distribution: data were available only for WFD altitude.

The information available was extremely restricted for all autoecological categories.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data as only one paper contained useful information.

Species Name: Habroleptoides modesta (Hagen, 1864)

Number of papers containing useful information: 35

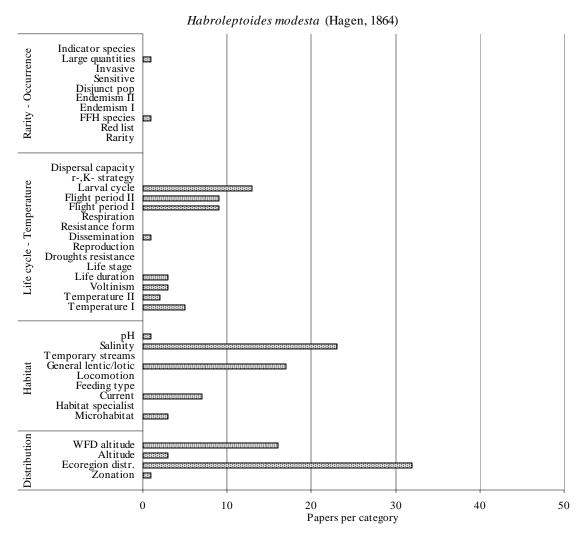


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – Occurrence: information were available only for Large quantities category.

Life cycles – Temperature: information were available only for Larval cycle, Flight period, Life duration, Voltinism and Temperature preference.

Habitat: information were present only for Microhabitat, Current and pH.

Autoecological categories for which a large amount of information was available are related to Larval cycles and Altitudinal distribution.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	=	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data. General agreement was thus recorded for all categories.

Species Name: Habroleptoides pauliana (Grandi, 1959)

Number of papers containing useful information: 5

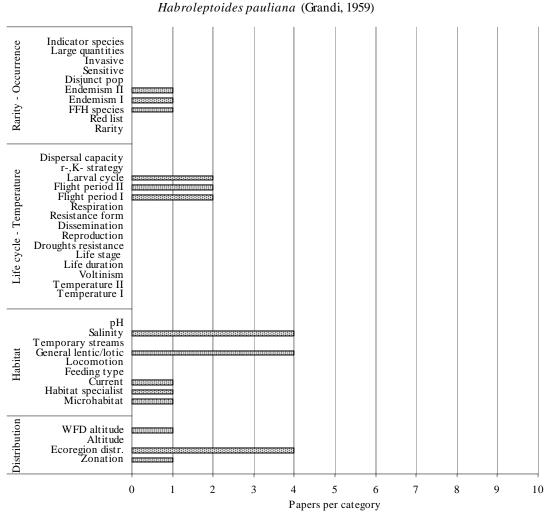


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – Occurrence: Endemism was the only category for which information were available.

Life cycles – Temperature: a general lack of information was observed for this group, excluding Larval cycle and Flight period.

Habitat: information were available only for Microhabitat, Habitat specialist and Current.

Distribution: data were available for all features excluding Altitude.

The information available was restricted for all autoecological categories.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

Autoecological groups	do authors generally agree?	Agreement on autoecologi is disagreement due to differences among geographical areas?	ical features is disagreement due to differences among authors' opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

Species Name: Habroleptoides umbratilis (Eaton, 1884)

Number of papers containing useful information: 9

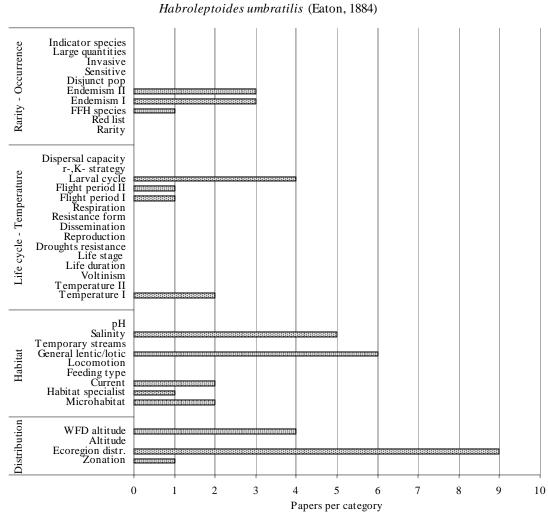


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – Occurrence: Endemism was the only category for which information were available.

Life cycles – Temperature: a general lack of information was observed for this group, excluding Larval cycle, Flight period and Temperature preference.

Habitat: information were available only for Microhabitat, Habitat specialist and Current.

Distribution: data were available for all features excluding Altitude.

The information available was restricted for all autoecological categories.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

Autoecological groups	do authors generally agree?	Agreement on autoecologic is disagreement due to differences among geographical areas?	is disagreement due to differences among authors' opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

Species Name: Habrophlebia consiglioi Biancheri, 1959

Number of papers containing useful information: 4

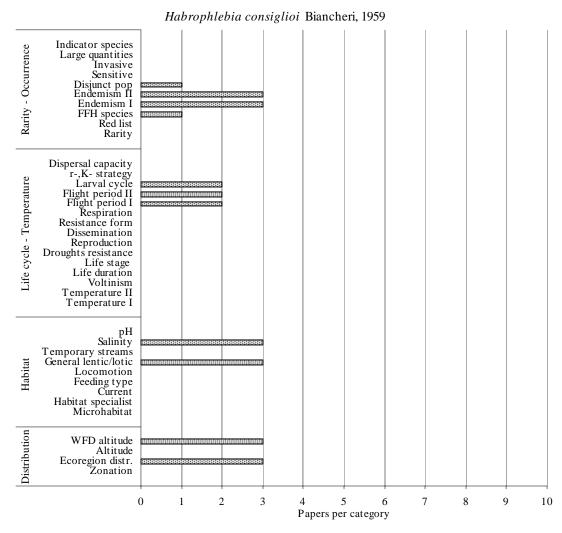


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all autoecological groups.

Rarity – **Occurrence**: Endemism and Disjunct population were the only categories for which information were available.

Life cycles – Temperature: a general lack of information was observed for this group, excluding Larval cycle and Flight period.

Habitat: no data were available.

Distribution: data were available only for WFD Altitude.

The information available was extremely restricted for all autoecological categories. As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

Autoecological groups	do authors generally agree?	Agreement on autoecologi is disagreement due to differences among geographical areas?	cal features is disagreement due to differences among authors' opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

Species Name: Habrophlebia eldae Jacob & Sartori, 1984

Number of papers containing useful information: 9

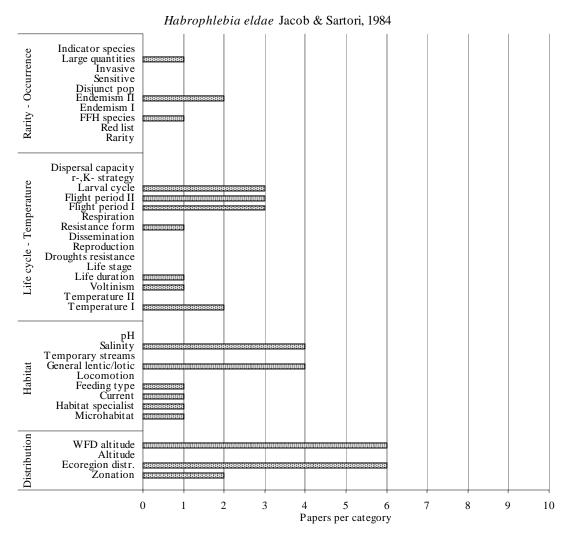


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: Endemism and Large quantities were the only categories for which information were available.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Life duration, Voltinism and Temperature preference.

Habitat: information were available only for Microhabitat, Habitat specialist and Current.

Distribution: data were available for all features excluding Altitude.

The information available was restricted for all autoecological categories.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

Autoecological groups	do authors generally agree?	Agreement on autoecologi is disagreement due to differences among geographical areas?	cal features is disagreement due to differences among authors' opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

Species Name: *Habrophlebia fusca* (Curtis, 1834)

Number of papers containing useful information: 52

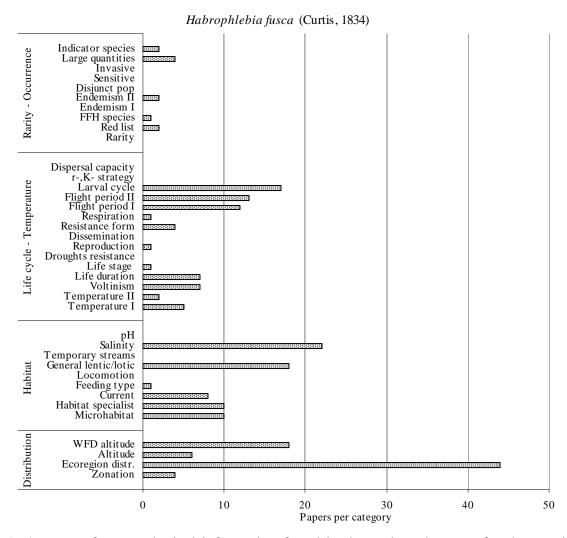


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: information were obtained for all categories, excluding Disjunct population, Sensitive and Invasive.

Life cycles – **Temperature**: information were available for all features excluding Droughts resistance.

Habitat: information were present only for Microhabitat, Habitat specialist and Current.

Autoecological categories for which a large amount of information was available are related to Larval cycles, Flight period and Altitudinal distribution.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	=	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data. General agreement was thus recorded for all categories.

Species Name: Habrophlebia lauta Eaton, 1884

Number of papers containing useful information: 46

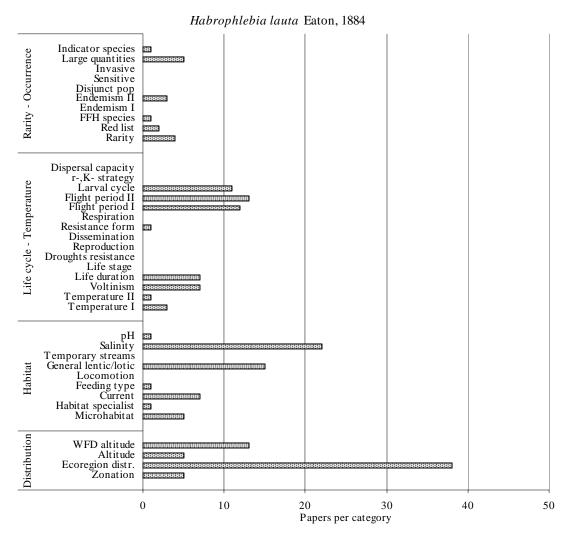


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: information were obtained for all categories, excluding Disjunct population, Sensitive and Invasive.

Life cycles – Temperature: data were available for Larval cycle, Flight period, Life duration, Voltinism and Temperature preference.

Habitat: information were present only for Microhabitat, Habitat specialist, Current and pH.

Autoecological categories for which a large amount of information was available are related to Larval cycles, Flight period and Altitudinal distribution.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	=	

No particular differences arose when summarizing the data. General agreement was thus recorded for all categories.

Species Name: Leptophlebia marginata (Linnaeus, 1767)

Number of papers containing useful information: 40

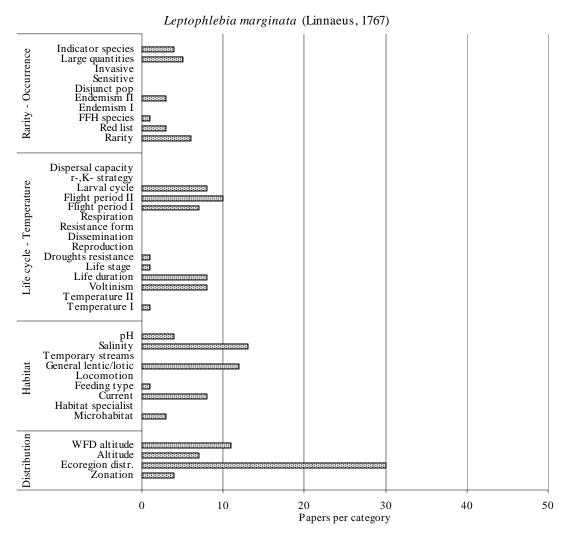


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: information were obtained for all categories, excluding Disjunct population, Sensitive and Invasive.

Life cycles – Temperature: data were available for all features.

Habitat: information were present only for Microhabitat, Current and pH.

Autoecological categories for which a large amount of information was available are related to Flight period and Altitudinal distribution.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	do authors generally agree?	Agreement on autoecologi is disagreement due to differences among	is disagreement due to differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data. General agreement was thus recorded for all categories.

Species Name: Leptophlebia vespertina (Linnaeus, 1758)

Number of papers containing useful information: 44

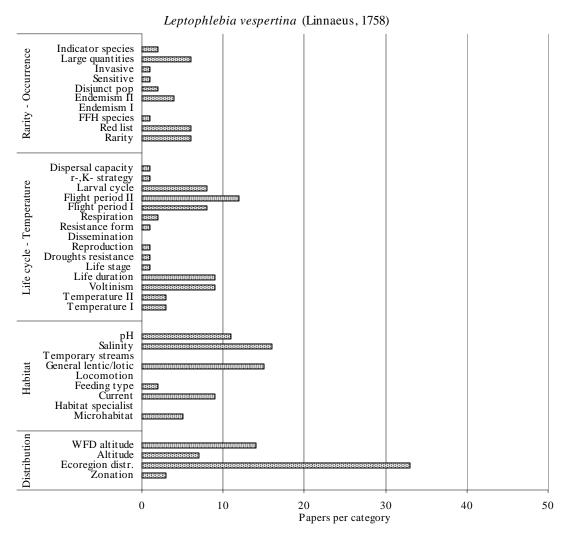


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – Occurrence: information were obtained for all features.

Life cycles – Temperature: data were available for all features.

Habitat: information were present for all categories excluding Habitat specialist, Locomotion and Temporary streams.

Autoecological categories for which a large amount of information was available are related to Flight period, pH and Altitudinal distribution.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	=	

No particular differences arose when summarizing the data. General agreement was thus recorded for all categories.

Species Name: Paraleptophlebia cincta (Retzius, 1783)

Number of papers containing useful information: 30

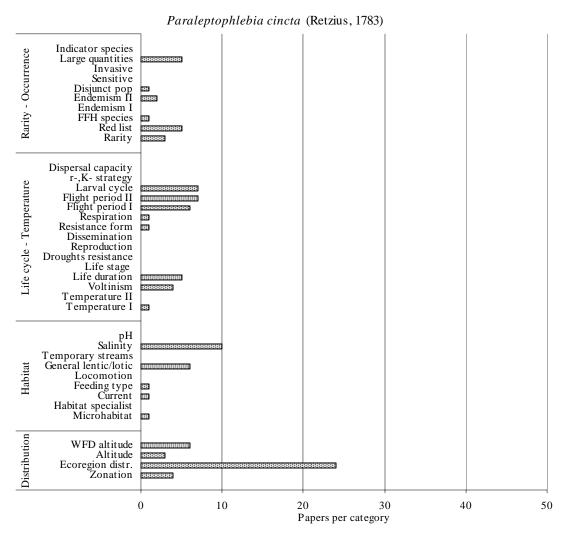


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: information were obtained for all categories, excluding Sensitive, Invasive and Indicator species.

Life cycles – Temperature: data were available for all features with the exception of Life stage and Droughts resistance.

Habitat: information were present only for Microhabitat and Current.

Autoecological categories for which a large amount of information was available are related to Larval cycle and Flight period.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	=	

No particular differences arose when summarizing the data. General agreement was thus recorded for all categories.

Species Name: Paraleptophlebia lacustris Ikonomov, 1962

Number of papers containing useful information: 3

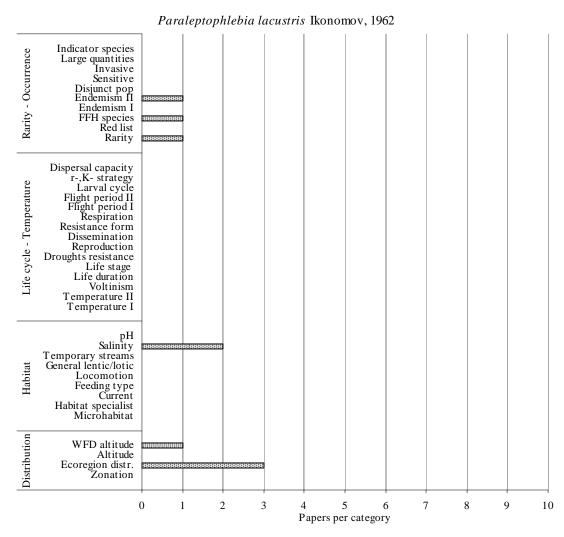


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all autoecological groups.

Rarity – **Occurrence**: Rarity and Endemism were the only categories for which information were available.

Life cycles – Temperature: no data were available for this group.

Habitat: no information were available.

Distribution: data were available only for WFD Altitude.

The information available was extremely restricted for all autoecological categories.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors generally agree?	is disagreement due to differences among geographical areas?	is disagreement due to differences among authors' opinions?
Autoecological groups		geograpmear areas:	opinions:
Rarity - Occurrence	Y	=	-
Life cycle - Temperature	Y if no	=	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

Species Name: Paraleptophlebia ruffoi Biancheri, 1956

Number of papers containing useful information: 8

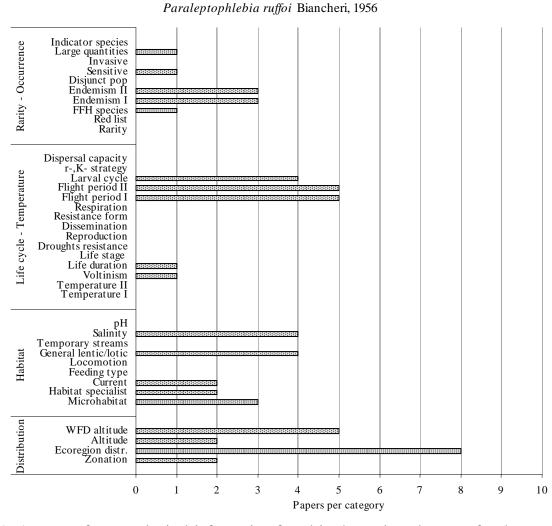


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: Endemism, Sensitive and Large quantities were the only categories for which information were available.

Life cycles – Temperature: information were available for Larval cycle, Flight period, Life duration and Voltinism.

Habitat: information were available only for Microhabitat, Habitat specialist and Current.

Autoecological categories for which a large amount of information was available are related to Larval cycle, Flight period and WFD altitude.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	=	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

Species Name: Paraleptophlebia strandii (Eaton, 1901)

Number of papers containing useful information: 1

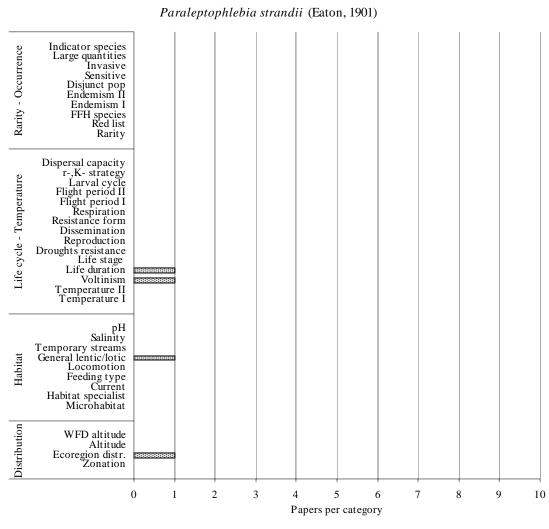


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all autoecological groups.

Rarity – Occurrence: no information were available.

Life cycles – Temperature: data were available only for Life duration and Voltinism.

Habitat: no information were available.

Distribution: no data were available for this group.

The information available was extremely restricted for all autoecological categories.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data as only one paper contained useful information.

Species Name: Paraleptophlebia submarginata (Stephens, 1835)

Number of papers containing useful information: 69

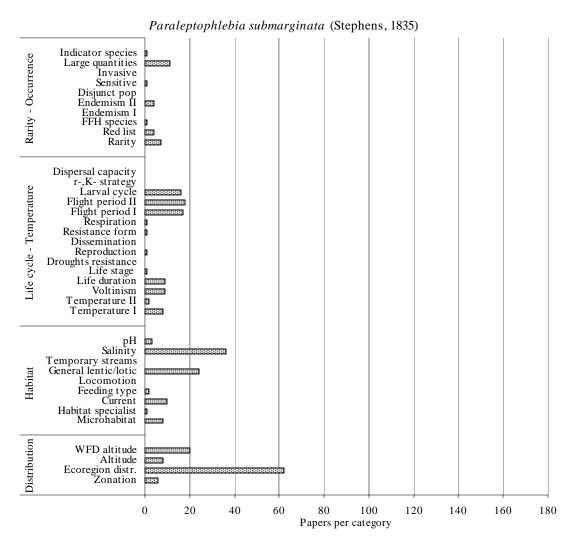


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: information were obtained for all categories, excluding Disjunct population and Invasive.

Life cycles – **Temperature**: information were available for all features excluding Droughts resistance.

Habitat: information were present for Microhabitat, Habitat specialist, Current and pH.

Autoecological categories for which a large amount of information was available are related to Larval cycles, Flight period and Altitudinal distribution.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	N if no	Y	N
Habitat	Y	-	-
Distribution	Y	-	-

When summarizing the information, some differences arose in the reviewed literature. In particular some disagreements have been pointed out for Life cycle - Temperature due to differences observed among European zones.

Species Name: Paraleptophlebia werneri Ulmer, 1920

Number of papers containing useful information: 19

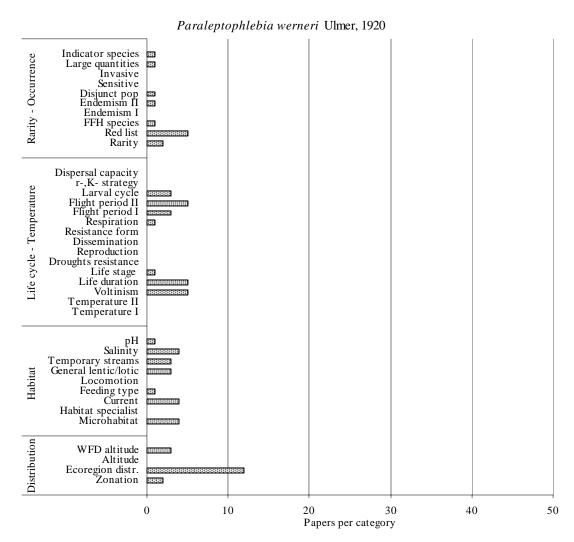


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: information were obtained for all categories, excluding Sensitive and Invasive.

Life cycles – Temperature: data were available for Larval cycle, Flight period, Life stage, Life duration and Voltinism.

Habitat: information were present for all features excluding Habitat specialist and Locomotion.

Distribution: data were available for all features with the exception of Altitude.

Autoecological categories for which a large amount of information was available are related to Red list, Larval cycles, Flight period, Life duration and Voltinism.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	=	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Thraulus bellus Eaton, 1881

Number of papers containing useful information: 12

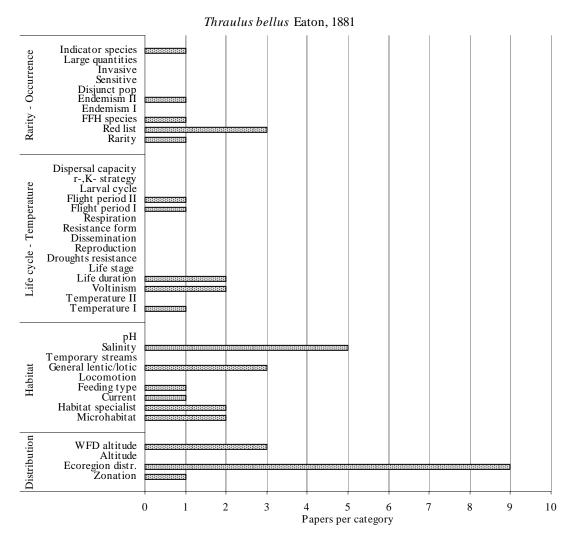


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: information were obtained for all categories, excluding Disjunct population, Sensitive, Invasive and Large quantities.

Life cycles – Temperature: data were available for Flight period, Life duration, Voltinism and Temperature preference.

Habitat: information were present for all features excluding Locomotion and Temporary streams.

Distribution: data were available for all features with the exception of Altitude.

Autoecological categories for which a large amount of information was available are related to Red list, Life duration, Voltinism, Microhabitat, Habitat specialist and WFD altitude.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	do authors generally agree?	Agreement on autoecologi is disagreement due to differences among	is disagreement due to differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	=	-
Distribution	Y	-	-

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Family Name: Neoephemeridae

Species Name: Neoephemera maxima (Joly, 1870)

Number of papers containing useful information: 4

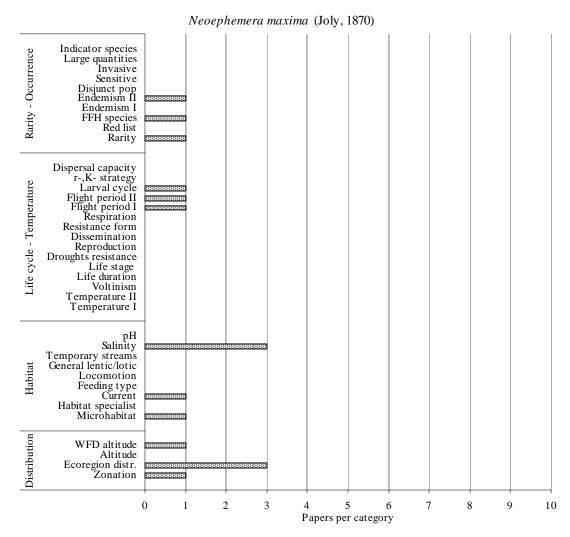


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all autoecological groups.

Rarity – **Occurrence**: Rarity and Endemism were the only categories for which information were available.

Life cycles – Temperature: data were available only for Larval cycle and Flight period.

Habitat: information were available only for Microhabitat and Current.

Distribution: data were available for all features excluding Altitude.

The information available was extremely restricted for all autoecological categories.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors generally agree?	is disagreement due to differences among geographical areas?	is disagreement due to differences among authors' opinions?
Autoecological groups		geograpmen areas.	opinions.
Rarity - Occurrence	Y	=	-
Life cycle - Temperature	Y if no	=	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

Family Name: Oligoneuriidae

Species Name: Oligoneuriella keffermuellerae Sowa, 1973

Number of papers containing useful information: 2

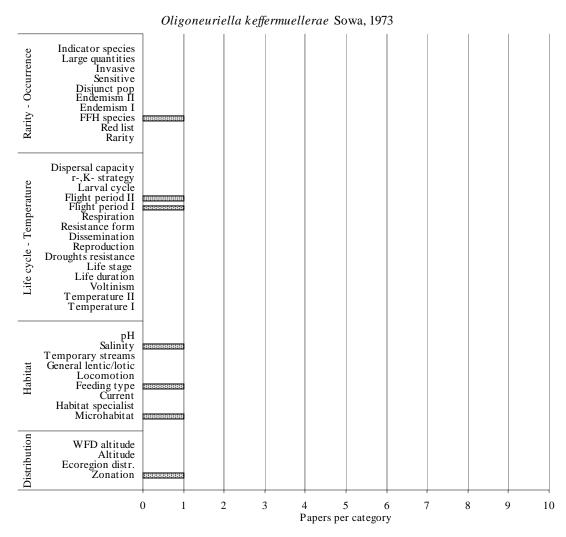


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all autoecological groups.

Rarity – Occurrence: no information were available.

Life cycles – Temperature: data were available only for Flight period.

Habitat: information were available only for Microhabitat.

Distribution: data were available only for zonation.

The information available was extremely restricted for all autoecological categories.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors generally agree?	is disagreement due to differences among geographical areas?	is disagreement due to differences among authors' opinions?
Autoecological groups		geograpmear areas.	opinions.
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

Family Name: Oligoneuriidae

Species Name: Oligoneuriella pallida (Hagen, 1855)

Number of papers containing useful information: 7

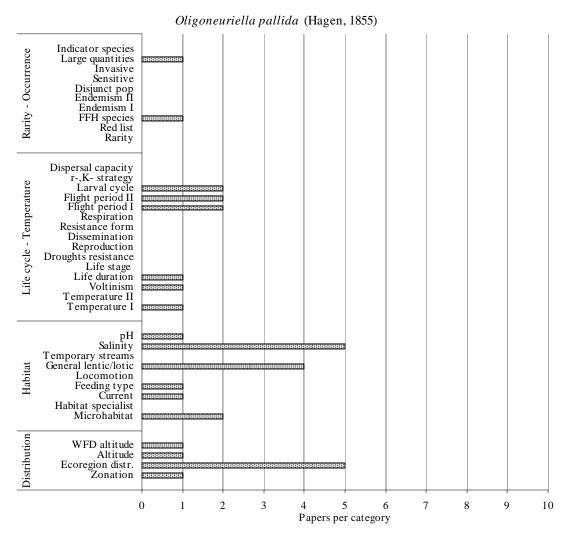


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – Occurrence: Large quantities was the only category for which information were available. **Life cycles – Temperature**: information were available for Larval cycle, Flight period, Life duration, Voltinism and Temperature preference.

Habitat: information were available for all excluding Habitat specialist, Locomotion and Temporary streams.

Distribution: data were available for all features.

Autoecological categories for which a large amount of information was available are related to Larval cycle, Flight period and WFD altitude.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	=	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

Family Name: Oligoneuriidae

Species Name: Oligoneuriella rhenana (Imhoff, 1852)

Number of papers containing useful information: 50

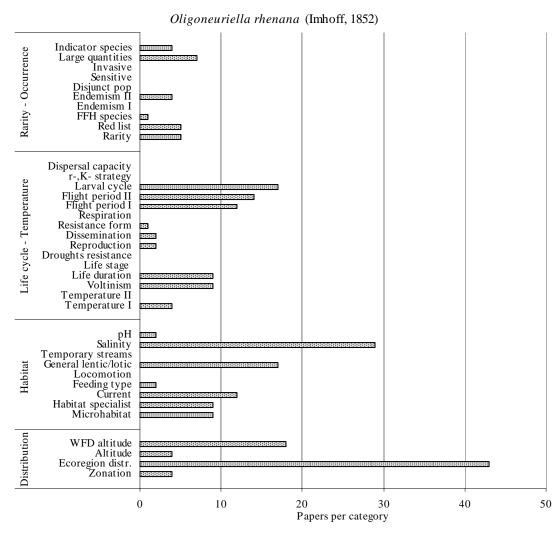


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: information were obtained for all categories, excluding Disjunct population, Sensitive and Invasive.

Life cycles – Temperature: information were available for all features excluding Life stage and Droughts resistance.

Habitat: information were present for all features excluding Locomotion and Temporary streams.

Distribution: data were available for all features.

Autoecological categories for which a large amount of information was available are related to Larval cycles, Flight period, Current and Altitudinal distribution.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	N if no	Y	Y
Habitat	Y	-	-
Distribution	Y	-	-

When summarizing the information, some differences arose in the reviewed literature. In particular some disagreements have been pointed out for Life cycle - Temperature due to differences observed among European zones and authors' opinions .

Family Name: Oligoneuriidae

Species Name: Oligoneurisca borysthenica (Tshernova, 1937)

Number of papers containing useful information: 1

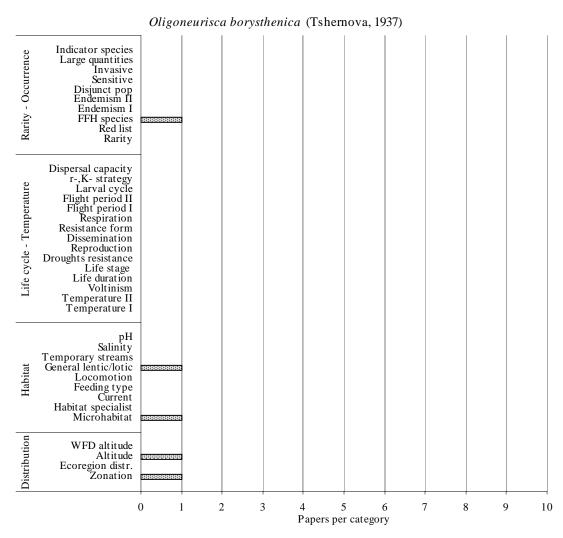


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all autoecological groups.

Rarity – Occurrence: no information were available. **Life cycles – Temperature**: no data were available.

Habitat: information were available only for Microhabitat.

Distribution: data were available only for zonation and Altitude.

The information available was extremely restricted for all autoecological categories.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

Autoecological groups	do authors generally agree?	Agreement on autoecologic is disagreement due to differences among geographical areas?	is disagreement due to differences among authors' opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information.

Family Name: Palingeniidae

Species Name: Palingenia fuliginosa (Georgi, 1802)

Number of papers containing useful information: 2

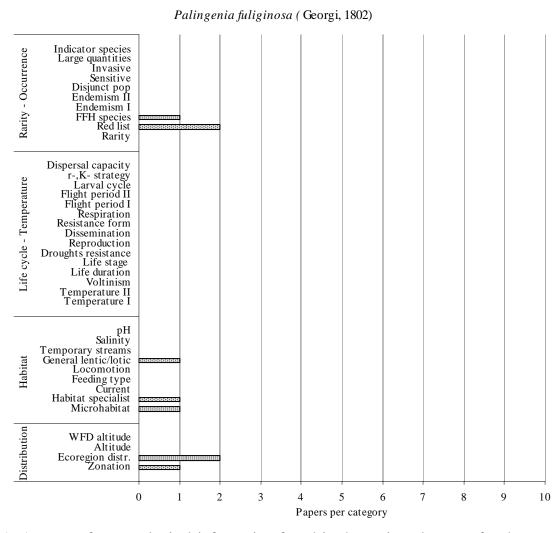


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have not been obtained for all categories.

Rarity – Occurrence: information were available only for Red list.

Life cycles – Temperature: no information were available.

Habitat: information were available only for Microhabitat and Habitat specialist.

Distribution: information were available only for zonation.

The information available was extremely restricted for all autoecological categories.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

Autoecological groups	do authors generally agree?	Agreement on autoecologi is disagreement due to differences among geographical areas?	is disagreement due to differences among authors' opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, as only two papers contained information on this species.

Family Name: Palingeniidae

Species Name: *Palingenia longicauda* (Olivier, 1791)

Number of papers containing useful information: 17

Palingenia longicauda (Olivier, 1791)

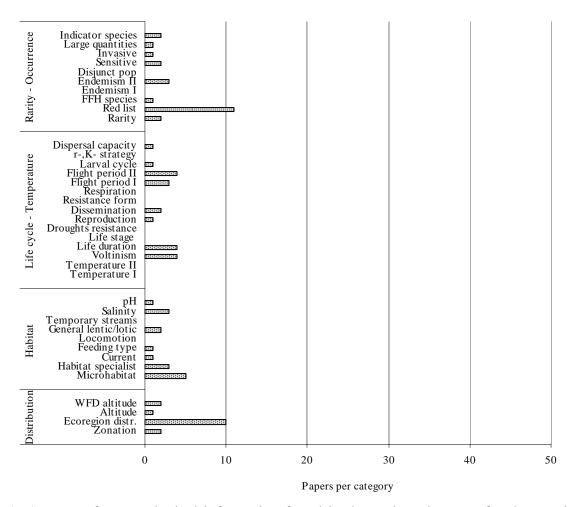


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were present for all autoecological traits, with the exception of Disjunct population.

Life cycles – Temperature: information were available for all categories excluding Temperature preference, Life stage and Resistance form.

Habitat: information were recorded for all autoecological traits, with the exception of Locomotion and Temporary streams.

Distribution: data were available for all considered features.

Autoecological categories for which a large amount of information was available are related to Red list, Voltinism, Life duration, Flight period and Microhabitats.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	N	Y
Habitat	N	-	-
Distribution	Y	-	-

When summarizing the information, some differences arose in the reviewed literature. In particular some disagreements have been pointed out for Life cycle – Temperature due to differences observed among authors' opinions.

Family Name: Polymitarcyidae

Species Name: *Ephoron virgo* (Olivier, 1791)

Number of papers containing useful information: 35

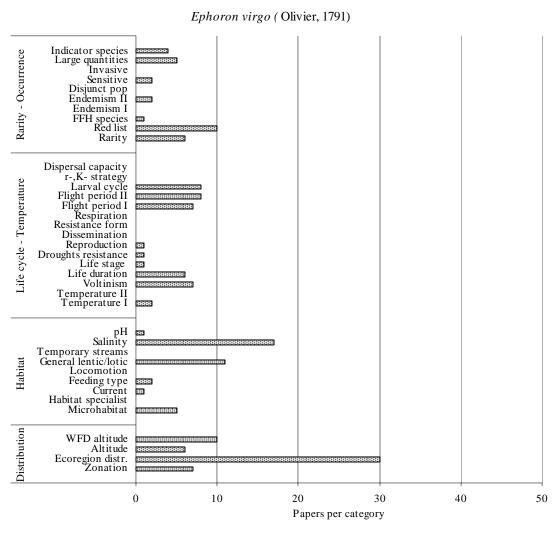


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: information were obtained for all categories, excluding Invasive and Disjunct population.

Life cycles – Temperature: a quite large amount of data was available for the group, i.e. for the features Larval cycle, Flight period, Life duration and Voltinism.

Habitat: information were present for all autoecological traits, with the exception of Habitat specialist, Locomotion and Temporary streams.

Distribution: information were available for all features.

Autoecological categories for which a large amount of information was available are related to Red list, Voltinism, Larval cycles and Altitudinal distribution.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
A 4 1 2 1		geographical areas?	opinions?
Autoecological groups			
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y		

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Family Name: Potamanthidae

Species Name: Potamanthus luteus (Linnaeus, 1767)

Number of papers containing useful information: 52

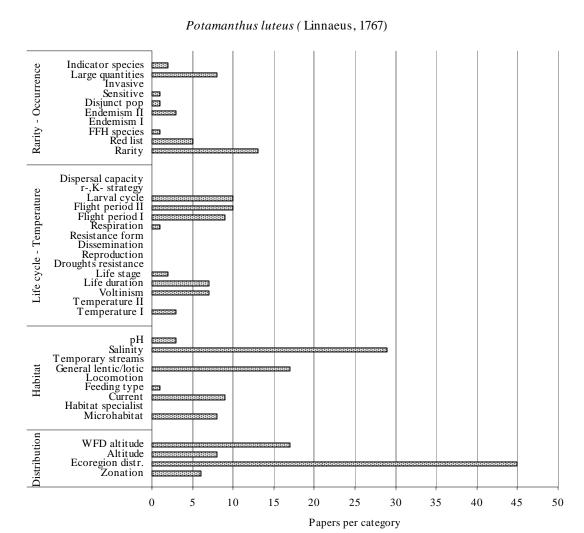


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – Occurrence: information were obtained for all categories, excluding Invasive.

Life cycles – Temperature: data were not available only for Droughts resistance.

Habitat: information were present for all autoecological traits, with the exception of Habitat specialist, Locomotion and Temporary streams.

Distribution: information were available for all features.

Autoecological categories for which a large amount of information was available are related to Altitudinal distribution, Flight period, Larval cycles, Rarity and Large quantities.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	N	Y
Life cycle - Temperature	N if no	-	-
Habitat	Y	N	Y
Distribution	N	-	-

When summarizing the information, some differences arose in the reviewed literature. In particular some disagreements have been pointed out for Rarity-Occurrence and Habitat, due to differences observed among authors' opinions.

Family Name: Prosopistomatidae

Species Name: Prosopistoma pennigerum (Müller, 1785)

Number of papers containing useful information: 17

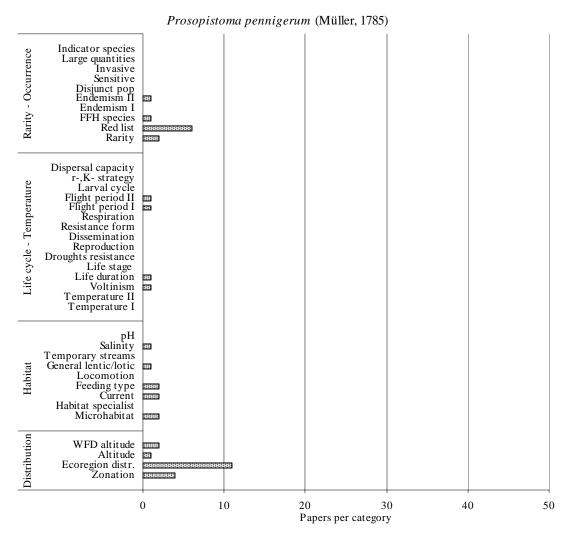


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: Rarity, Red list and Endemism were the only categories for which information were available.

Life cycles – Temperature: information were present only for Flight period, Life duration and Voltinism.

Habitat: information were present for all categories excluding Habitat specialist, Locomotion and Temporary streams.

Distribution: information were available for all features.

A large amount of information was available only for the Red list category.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

Autoecological groups	do authors generally agree?	Agreement on autoecologi is disagreement due to differences among geographical areas?	cal features is disagreement due to differences among authors' opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information. General agreement is thus recorded for all autoecological groups.

Species Name: Parameletus chelifer Bengtsson, 1908

Number of papers containing useful information: 9

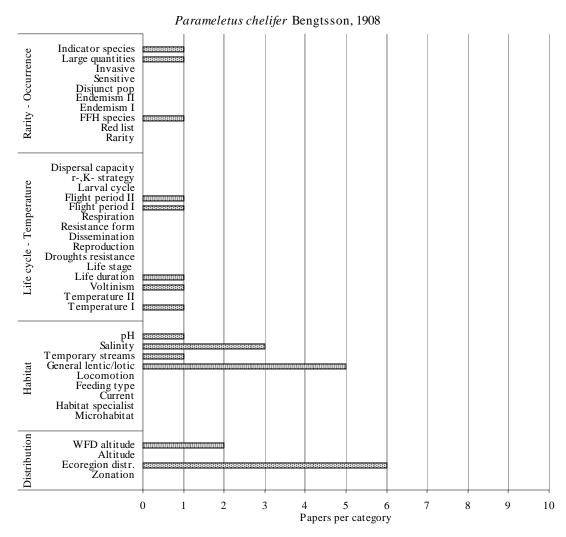


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: Indicator species and Large Quantities were the only categories for which information were available.

Life cycles – Temperature: a general lack of information was observed for this group, excluding Flight period, Life duration, Voltinism and Temperature preference.

Habitat: information were present only for pH and Temporary streams.

Distribution: data were available only for WFD altitude.

The information available was restricted for all autoecological categories.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

Autoecological groups	do authors generally agree?	Agreement on autoecologi is disagreement due to differences among geographical areas?	cal features is disagreement due to differences among authors' opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information. General agreement is thus recorded for all autoecological groups.

Species Name: Parameletus minor (Bengtsson, 1909)

Number of papers containing useful information: 6

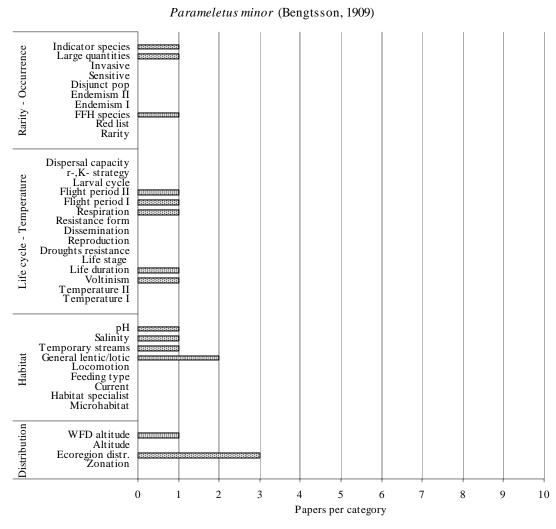


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

For all autoecological groups information have been obtained.

Rarity – **Occurrence**: Large Quantities and Indicator species were the only categories for which information were available.

Life cycles – Temperature: a general lack of information was observed for this group, excluding Flight period, Life duration and Voltinism.

Habitat: information were present only for pH and Temporary streams.

Distribution: data were available only for WFD altitude.

The information available was restricted for all autoecological categories.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

Autoecological groups	do authors generally agree?	Agreement on autoecologi is disagreement due to differences among geographical areas?	cal features is disagreement due to differences among authors' opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	-	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data, due to the low number of papers containing useful information. General agreement is thus recorded for all autoecological groups.

Species Name: Siphlonurus aestivalis (Eaton, 1903)

Number of papers containing useful information: 36



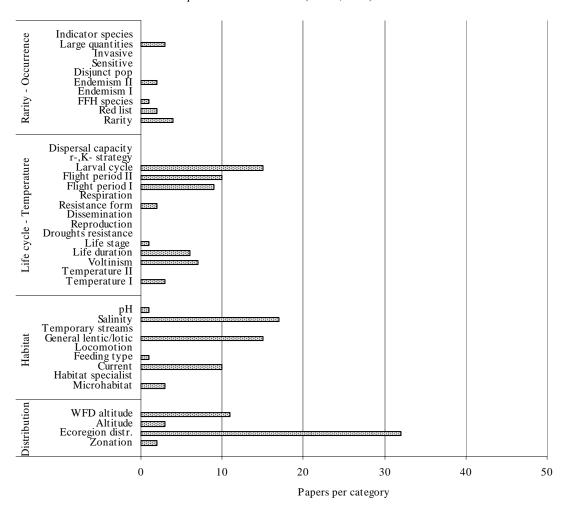


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were present for all autoecological traits, with the exception of Disjunct population, Sensitive, Invasive and Indicator species.

Life cycles – Temperature: information were available for all categories excluding Droughts resistance.

Habitat: information were recorded for all autoecological traits, with the exception of Habitat specialist, Locomotion and Temporary streams.

Distribution: data were available for all considered features.

Autoecological categories for which a large amount of information was available are related to Larval cycle, Flight period, Current and WFD altitude.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	N	Y
Habitat	N	-	-
Distribution	Y	-	-

When summarizing the information, some differences arose in the reviewed literature. In particular some disagreements have been pointed out for Life cycle – Temperature due to differences observed among authors' opinions.

Species Name: Siphlonurus alternatus (Say, 1824)

Number of papers containing useful information: 21

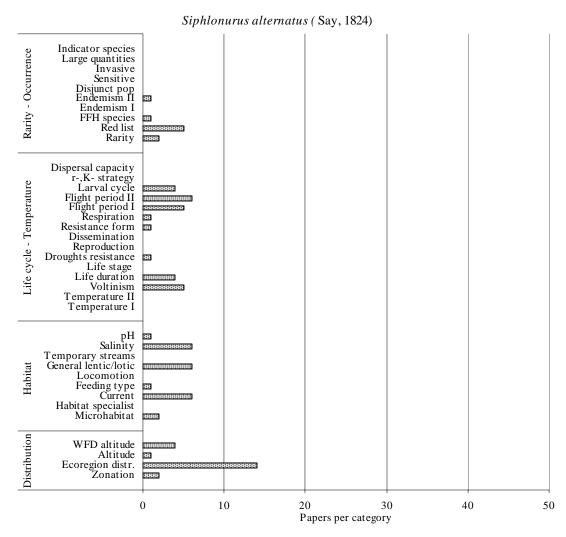


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – Occurrence: information were present only for Rarity, Red list and Endemism.

Life cycles – Temperature: information were available for all categories excluding Temperature preference.

Habitat: information were recorded for all autoecological traits, with the exception of Habitat specialist, Locomotion and Temporary streams.

Distribution: data were available for all considered features.

Autoecological categories for which a large amount of information was available are related to Red list, Flight period and Current.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	=	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.

Species Name: Siphlonurus armatus (Eaton, 1870)

Number of papers containing useful information: 28

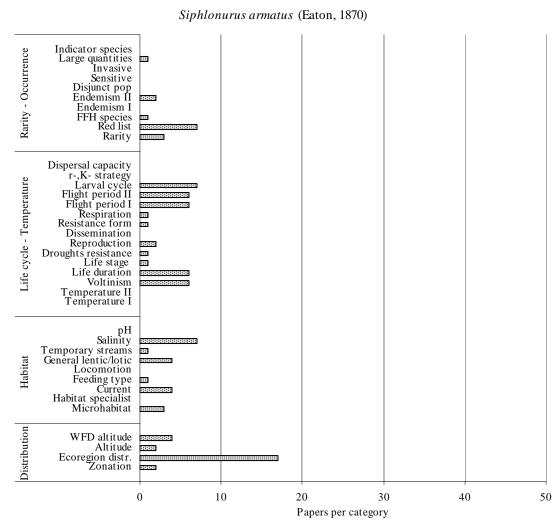


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were present for all autoecological traits, with the exception of Disjunct population, Sensitive, Invasive and Indicator species.

Life cycles – Temperature: information were available for all categories excluding Temperature preference.

Habitat: information were recorded for all autoecological traits, with the exception of Habitat specialist, Locomotion and pH.

Distribution: data were available for all considered features.

Autoecological categories for which a large amount of information was available are related to Red list, Larval cycle, Flight period, Life duration and Voltinism.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors generally agree?	is disagreement due to differences among	is disagreement due to differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	N if no	N	Y
Habitat	N	N	Y
Distribution	Y	-	-

When summarizing the information, some differences arose in the reviewed literature. In particular some disagreements have been pointed out for Life cycle – Temperature and Habitat due to differences observed among authors' opinions.

Species Name: Siphlonurus croaticus Ulmer, 1920

Number of papers containing useful information: 21

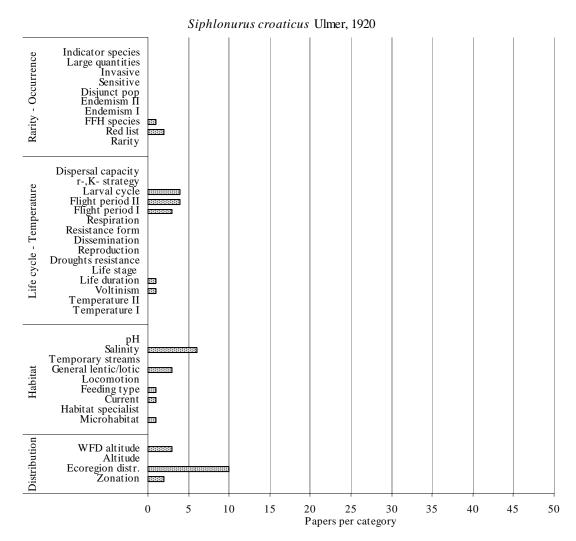


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – Occurrence: information were present only for Red list category.

Life cycles – **Temperature**: data were available only for Voltinism, Life duration, Flight period and Larval cycle.

Habitat: information were recorded for all autoecological traits, with the exception of Habitat specialist, Locomotion, Temporary streams and pH.

Distribution: data were available for all considered features excluding Altitude.

Autoecological categories for which a large amount of information was available are related to Flight period and Larval cycle.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	=	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data due to the low amount of information retrieved. General agreement is thus recorded for all autoecological groups.

Species Name: Siphlonurus lacustris (Eaton, 1870)

Number of papers containing useful information: 79

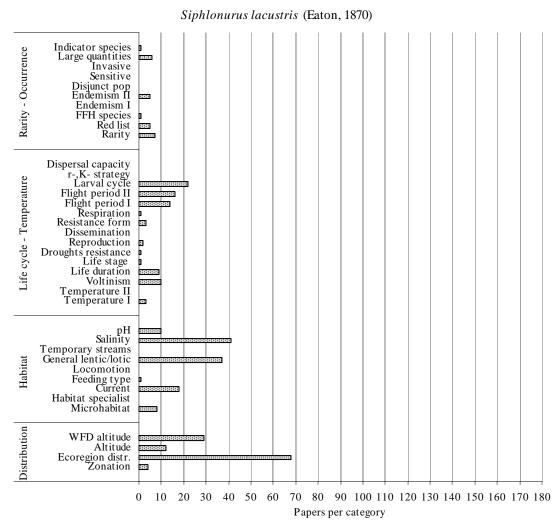


Figure 1: Amount of autoecological information found in the reviewed papers for the considered species.

The amount of information collected in terms of number of papers reviewed is briefly described, excluding the most reported categories, such as Salinity, General lentic/lotic preference and Ecoregion distribution (see paragraph 4). FFH directive information, being present for each species, is not here considered.

Information have been obtained for all categories.

Rarity – **Occurrence**: information were present for all autoecological traits, with the exception of Disjunct population, Sensitive and Invasive.

Life cycles – Temperature: information were available for all categories.

Habitat: information were recorded for all autoecological traits, with the exception of Habitat specialist, Locomotion and Temporary streams.

Distribution: data were available for all considered features.

Autoecological categories for which a large amount of information was available are related to Flight period, Larval cycle and Altitudinal distribution.

As expected (see also paragraph 4), a general lack of information was observed for characters related to general traits, such as Dispersal capacity, r-K strategy, Respiration, Resistance forms, Dissemination, etc.

Table 1: Agreement on autoecological features and possible differences among European zones (i.e. Northern, Central and Southern Europe) and among authors' opinions for the 4 autoecological groups.

	Agreement on autoecological features		
	do authors	is disagreement due to	is disagreement due to
	generally agree?	differences among	differences among authors'
Autoecological groups		geographical areas?	opinions?
Rarity - Occurrence	Y	-	-
Life cycle - Temperature	Y if no	=	-
Habitat	Y	-	-
Distribution	Y	-	-

No particular differences arose when summarizing the data. General agreement is thus recorded for all autoecological groups.