LIVERWORTS NEW TO SOUTH GEORGIA

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ABSTRACT. A report is given of 27 species of liverworts which are new to South Georgia together with a summary of their distribution, habitat preferences on the island and their main diagnostic characters. The following nine genera are listed for the first time for South Georgia: *Acrobolbus*, *Anastrophyllum*, *Balantiopsis*, *Blepharidophyllum*, *Gackstroemia*, *Hygrolembidium*, *Lepicolea*, *Noteroclada* and *Pallavicinia*, while two species *Cryptochila acinacifolia* and *Herzogobryum atrocapillum* have not been reported previously from the South American sector. Mature capsules were present in six of the species, *Cryptochila acinacifolia*, *Herzogobryum atrocapillum*, *Herzogobryum molle*, *Hygrolembidium isophyllum*, *Noteroclada confluens* and *Pallavicina pisicolor*, while only perianths were observed for *Blepharidophyllum densifolium*, *Leptoscyphus abditus* and *Pachyglossa fissa*, with antheridiophores and young archegoniophores in *Marchantia polymorpha*. The total number of liverwort species now positively identified from South Georgia is 59.

KNOWLEDGE of the South Georgian liverwort flora is based on three publications (Gottsche, 1890; Stephani, 1905; Grolle, 1972*a*) which listed 27 species, Grolle including a revised nomenclature and an account of the distribution of the species on the island. In addition, Fulford (1966) reported *Neolepidozia seriatitexta*, Hässel de Menendez (1972) added *Riccardia granulata*, *R. papillosa* and *R. saxicola*, while Solari (1973) noted *Vetaforma dusenii* to give a total of 32 species. Subsequently Schuster and Engel (1973) transferred *Clasmatocolea georgiensis* to the genus *Evansianthus*.

An exchange programme between the Royal Society and the Consejo Nacional de Investigaciones Científicas y Técnicas of Argentina provided an opportunity for the author to examine the South Georgian hepatic collections in the British Antarctic Survey bryophyte herbarium (AAS)† at Birmingham during 1974. As a result, the following 27 species can now be added to those previously known from the island. All specimens cited are in AAS and they have been arranged by the 5 km. squares of the South Georgian grid (Greene, 1973). In the case of the common species, only a small number have been cited pending the preparation of a fuller treatment of the taxa.

Acrobolbus ochrophyllus (Hook. f. et Tayl.) Steph.

This species, designated as circum-sub-Antarctic by Grolle (1971*a*, p. 229), occurs in *Acaena magellanica* slopes or on wet ledges from 30 to 90 m. a.s.l. It appears to be rare and, as in Tierra del Fuego, it grows as isolated stems or in small groups in moss turves mixed with *Leptoscyphus abditus*, *Lepidozia fuegiensis*, *Schistochila alata*, *Gackstroemia magellanica* and *Riccardia granulata*.

So far it is only known in the sterile state on South Georgia and can be identified by its two rows of rather distant bifid succubous leaves with circular to ellipsoidal cuticular papillae which give it a pale green velvety appearance.

Specimens examined

030 155 R. Smith 1738. 075 125 R. Smith 1737. 110 105 BAS Misc. 129.
160 060 Greene 2832b.

Adelanthus integerrimus Grolle

Although *A. integerrimus* is very frequent in southern Chile, Tierra del Fuego and the Falkland Islands, its existence as a distinct species has only recently been recognized (Grolle,

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1972*b*, p. 342). It is also common on South Georgia on damp peaty banks amongst *Poa flabellata*, along the margin of moist drainage channels in the *Festuca contracta* association and on wet rocks by waterfalls from 0 m. to at least 75 m. a.s.l., occurring with *Blepharidophyllum densifolium*, *Lepidozia cuspidata*, *Gackstroemia magellanica*, *Roivainenia jacquinotii*, etc. Only sterile specimens have been collected to date.

Plants of this species, which are similar in appearance to those from Tierra del Fuego, can be distinguished by their erect stems which are dorsally curved at the apex and bear two rows of shiny brown or dark greenish leaves with involute entire margins to their ventral portions.

Specimens examined

030 150 Greene 337c. 035 150 Greene 479c. 145 070 Greene 2788b.
145 115 Greene 858c.

Adelanthus lindenbergianus (Lehm.) Mitt.

The known geographical distribution of *A. lindenbergianus* is Ireland, the Congo to Cape Town, the Tristan da Cunha group, Mexico to Tierra del Fuego and the Falkland Islands and so, predictably, it also occurs on South Georgia. As in Tierra del Fuego, it grows on rocks and in crevices but the plants are shorter, sterile and occur sporadically from 30 to 240 m. a.s.l. frequently being mixed with *Pachyglossa fissa*, *Evansianthus georgiensis*, *Pachyglossa dissitifolia*, *Adelanthus integerrimus*, *Leptoscyphus expansus*, *Lepidozia fuegiensis* and *Gackstroemia magellanica*.

This species can be distinguished from *A. integerrimus* by the dentate anterior margin of its leaves and by being less shiny.

Specimens examined

030 150 Greene 1164a, Greene 2006a. 125 125 Greene 2930a. 130 125 Greene 2064a.
145 070 Greene 2788e.

Anastrophyllum ciliatum Steph.

A. ciliatum has so far only been known from Isla de los Estados and the Falkland Islands. It has now been found on South Georgia as isolated plants lacking perianths growing on stream banks and amongst the *Festuca contracta* association from 0 to 30 m. a.s.l. with *Lepidozia fuegiensis*, *Adelanthus integerrimus*, *Riccardia granulata*, *Blepharidophyllum densifolium* and *Leptoscyphus expansus*.

This species has slender stems with green to dark brown squarrose to antically secund bifid leaves, the two acute segments of which are folded close together and end in a row of 2–5 cells. Near the stem on its dorsal border, the leaf has a short acute curved accessory segment which is a distinctive feature of the species. The leaf cells are small, rectangular and have large trigones which are not confluent.

Specimens examined

035 150 Greene 1109e. 115 105 BAS Misc. 130. 120 130 Greene 3009c.

Anastrophyllum involutifolium (Mont.) Steph.

This species was first described from Puerto Hambre (Port Famine) on the Magellan Straits and later listed from Valdivia, Islas Desolación, Basket and Isla Grant. It has now been collected on South Georgia amongst *Deschampsia antarctica* swards and from *Chorisodontium aciphyllum* banks amongst *Poa flabellata* slopes above sea cliffs from 3 to 30 m. a.s.l. in association with *Lepidozia cuspidata*, *L. fuegiensis*, *Blepharidophyllum densifolium*, *Adelanthus integerrimus*, *Leptoscyphus expansus*, *L. abditus* and *Riccardia granulata*.

A. involutifolium is a rather large representative of the genus with red-brown shiny leaves which are strongly dorsally secund and have involute margins. The apices of the unequal lobes and their associated sinus, are shortly obtuse, while the leaf cells have thick rounded confluent trigones. It has not been found fertile on South Georgia.

Specimens examined

030 150 Greene 343a. 035 150 Greene 465a. 080 125 Greene 2694b, Greene 2696.

Balantiopsis bisbifida Steph.

B. bisbifida, so far only known from high humid bogs in Tierra del Fuego and Isla Desolación, has been found sterile in a single locality on South Georgia in a north-east-facing rocky crevice at 300 m. a.s.l. in association with *Pachyglossa spegazziniana* and *Triandrophyllum subtrifidum*. The specimens do not differ markedly from Fuegian samples.

The creeping plants of this species may be recognized by the green crystalline appearance of their broad dorsally spreading succubous leaves with four to six attenuated lobes and one sinus deeper than the others.

Specimen examined

070 145 Greene 1186a.

Blepharidophyllum densifolium (Hook.) Angstr. ex Massal.

One of the commonest liverworts in bogs and forests in Tierra del Fuego and southern Chile, *B. densifolium* is also known from Gough, Marion and Prince Edward Islands, Iles Crozet and Iles Kerguelen. It has been found recently on South Georgia, where it is very frequent from 0 to 90 m. a.s.l. growing with *Lepidozia fuegiensis*, *Riccardia granulata*, *Leptoscyphus expansus* and *Adelanthus integerrimus* on peat amongst *Poa flabellata*, on *Chorisodontium aciphyllum* banks above sea cliffs, at stream sides, by waterfalls, etc. Only one specimen has been seen with perianths.

It can form small dense patches with all the stems upright and the two rows of canaliculate bilobed papillose leaves more or less distant but in more exposed habitats the plants creep over the substrate and have the leaves closer.

Specimens examined

030 150 Greene 252c. 035 150 Greene 1109d. 070 155 Greene 631c.
090 145 Greene 1711c.

Clasmatocolea gayana (Mont.) Grolle

This species, which can now be reported from South Georgia, is present throughout humid localities of western Patagonia, Tierra del Fuego and Isla de los Estados. On South Georgia it grows in crevices of wet rocks near the sea and amongst *Poa flabellata* behind the shoreline from 0 to 90 m. a.s.l. commonly associated with *Clasmatocolea vermicularis*, *Leptoscyphus expansus*, *Pachyglossa dissitifolia*, *Lepidozia fuegiensis*, *Blepharidophyllum densifolium* and *Riccardia georgiensis*.

Only sterile plants are known from the island and they are pale green, vermicular and with erect or creeping stems. The erect succubous leaves are orbicular and crowded, and therefore are arranged in two more or less parallel rows. Marginal teeth, 1–2 cells long, are present and increase in size and number towards the apex of the shoots. Both the cells of the lateral leaves and of the convex amphigastria have conspicuous trigones.

Specimens examined

035 150 Greene 504e. 070 155 Greene 618d.

Clasmatocolea obvoluta (Hook. f. et Tayl.) Grolle

C. obvoluta is known from the Magellanic region and the Falkland Islands, where it is of common occurrence in *Marsippospermum grandiflorum* bogs. It is apparently rare and sterile on South Georgia, having been found amongst *Deschampsia antarctica* swards and on damp peaty banks from 15 to 60 m. a.s.l. in association with *Clasmatocolea vermicularis*, *Blepharidophyllum densifolium*, *Leptoscyphus expansus*, *Lophocolea secundifolia* and *Lepidozia fuegiensis*.

This pale green species has upward-spreading leaves with strong oblique decumbent insertions. The ventral margins of the leaves are entire but in the middle they bear at least two teeth, while towards the dorsal edge they have a more or less pleated acute lobe with or without teeth.

Specimens examined

030 150 Greene 239. 035 150 Greene 480c.

Cryptochila acinacifolia (Hook. f. et Tayl.) Grolle

C. acinacifolia has been known from Campbell Island, Stewart and South Islands, New Zealand, as well as from Patagonia and Isla Hermite, although recently Grolle (1971*b*, p. 28, 31) assigned the South American material to *C. paludosa*. The species has been found growing on South Georgia in loose tufts in crevices of rocks at 30 m. a.s.l. with *Pachyglossa dissitifolia*, *Lepidozia fuegiensis* and *Herzogobryum molle*. It was found with capsules in January and March 1961 and in December 1969.

The South Georgian specimens listed below have been compared with the type specimen from Campbell Island (*Jungermannia acinacifolia* Hook. f. et Tayl. leg. Hooker, BM, G, PC) with which they agree in size, in having green-brown liguliform leaves showing a similar orientation as well as in having a finely papillose cuticle to the leaf cells in spite of Grolle's statement that the cuticle is smooth. *C. acinacifolia* can be distinguished from the other South Georgian species of the genus by the presence of forward-spreading leaves in which the cells are evenly thickened except for some in the centre base which are nodulose. The presence of a twisted perianth is a further distinctive character.

Specimens examined

035 150 Greene 690c. 120 135 Greene 3434.

Gackstroemia magellanica (Lam.) Trev.

G. magellanica is one of the first liverworts known from the Magellan Straits, where it was collected by Commerson in 1768. Later it was found at a number of Chilean localities, on Juan Fernández, and southward to Cape Horn, Isla de los Estados and the Falkland Islands, being very frequent on trees, rotten logs in bogs or on exposed rocks. It was not collected until recently on South Georgia, where it seems to be infrequent and sterile with its stems, so far as can be seen from the specimens listed below, shorter than those from Patagonia. It grows on south- or south-east-facing rocks from 0 to 380 m. a.s.l. in association with *Herzogobryum atrocapillum*, *Leptoscyphus expansus*, *Pachyglossa dissitifolia*, *Lepidozia fuegiensis*, *Adelanthus integerrimus* and *A. lindenbergianus*.

This is one of the most beautiful liverworts of the Patagonian region with a distinctive red to green tinge and feathery nature. The presence of reniform amphigastria with entire margins, long marginal teeth on the dorsal leaf lobes of the terminal branches, as well as the distinctive saccate ventral lobes of the leaves make this species easily recognizable.

Specimens examined

130 125 Greene 1804a. 145 070 Greene 2785. 155 095 Greene 2123a.

Herzogobryum atrocapillum (Hook. f. et Tayl.) Grolle

H. atrocapillum has been known previously only from Iles Kerguelen and Marion Island. It can now be reported from South Georgia, where it has been found in several localities from 0 to 300 m. a.s.l. mostly on wet rock faces or in moist crevices and on ledges, twice having been collected with perianths, i.e. in February 1971 and December 1973.

This diminutive species consists of thread-like brown to reddish brown stems covered with distantly inserted, but generally appressed, leaves which are concave and slightly compressed at their upper edges, the latter with two short blunt distal segments and a margin of two to three rows of radially elongated hyaline cells. The central leaf cells are nearly rectangular and trigones are absent.

Specimens examined

070 145 Greene 1207d, Greene 1367a. 120 135 Greene 3417b.
130 125 R. Smith 1088a. 145 070 Greene 2789.

Herzogobryum molle Grolle

H. molle was described by Grolle (1966) from Isla Hermite, Tierra del Fuego, but he also noted its occurrence on Tristan da Cunha at high altitudes. It is reported here for the first time from South Georgia, where it grows in dense patches in crevices of rock faces near sea-level together with *Pachyglossa dissitifolia*, *Cryptochila acinacifolia* and *Lepidozia fuegiensis*, and has been collected only once with capsules, i.e. in January 1961.

The pale green plants have very closely imbricate concave leaves, with two short acute segments, a leaf margin of elongated cells with thickened hyaline walls and sub-marginal to central leaf cells which are hexagonal to elongate with conspicuous hyaline trigones.

Specimens examined

035 150 Greene 690a. 080 125 Greene 2671c.

Hygrolembidium isophyllum Schust.

H. isophyllum was previously known from Tierra del Fuego (Schuster, 1968, p. 467), the Falkland Islands and southern Chile (Engel, 1974, p. 66), Signy Island (Smith, 1972, p. 24), and in Tierra del Fuego growing in flat exposed localities which are very moist and more than 400 m. a.s.l. On South Georgia it seems to occur infrequently on peat in the *Festuca contracta* association, amongst *Rostkovia magellanica*, or submerged in melt-water streams between 105 and 245 m. a.s.l. It was collected with perianths and capsules in March 1961 from a melt-water stream.

The species can be identified by its three rows of equal closely imbricate, entire, pale green leaves on short erect stems.

Specimens examined

115 130 Greene 3097. 120 130 Greene 2995c. 130 125 Greene 1942c.

Lepicolea rigida (De Not.) E. Scott

L. rigida, a species of tree trunks, bog margins or high-altitude localities in southern South America extending southward from Valparaiso, Chiloé, Aysen and Magallanes in Chile, and from Neuquen, Chubut and Isla de los Estados in Argentina, has now been collected sterile on

South Georgia from damp moss-covered rocks, between 0 and 160 m. a.s.l. where it grows with such associates as *Anthelia juratzkana*.

The dull imbricate leaves of *L. rigida* have a conspicuous vitta and cilia along their ventral margin, while the deflexed segment apices break easily.

Specimens examined

040 150 R. Smith 1740. 055 135 R. Smith 1516. 070 135 R. Smith 1739, R. Smith 1744.

Lepidozia fuegiensis Steph.

L. fuegiensis, which is also known from southern Chile, Tierra del Fuego, Isla de los Estados, Islas Hermite and Navarino, as well as the Falkland Islands, occurs frequently on South Georgia on wet rock faces and amongst moss turves in the *Festuca contracta* association from 0 to 105 m. a.s.l. It is usually associated with *Adelanthus lindenbergianus*, *A. integerrimus*, *Pachyglossa dissitifolia*, *Roivainenia jacquinotii*, *Lophozia* sp., *Leptoscyphus expansus*, *Lepidozia cuspidata* and *Hygrolembidium isophyllum*.

It can be distinguished readily by its smooth, incubously arranged leaves which have paired segments but lack marginal teeth. So far it has not been seen with sporophytes on South Georgia.

Specimens examined

120 130 Greene 3009e. 140 120 Greene 934b. 145 070 Greene 2786c.

Lepidozia laevifolia (Hook. f. et Tayl.) Tayl.

As this species has a rather wide southern circum-sub-polar distribution, extending from the Auckland and Campbell Islands, New Zealand, Tasmania, Iles Kerguelen and Marion Island to the Falkland Islands, Isla de los Estados, Tierra del Fuego and southern Chile, it is not surprising that it can now be reported from South Georgia. To judge from the few collections available, it seems to be infrequent and sterile on the island, occurring on wet rocks from 0 to 30 m. a.s.l. in association with *Leptoscyphus expansus* and *Lophocolea secundifolia*.

In contrast to the other species of the genus, which also have entire lateral margins to the leaves, the cuticle in *L. laevifolia* is coarsely papillose.

Specimens examined

035 150 Greene 1123b. 120 135 Greene 3423.

Leptoscyphus abditus (Sull.) Grolle

This species has been reported from Villarica to Tierra del Fuego in southern South America as well as from the Falkland Islands and Iles Kerguelen. On South Georgia it has been found several times on east-facing wet rocks and amongst the *Acaena magellanica* association, from 0 to 360 m. a.s.l., but it has only once been seen with perianths, i.e. during December 1970.

The presence of slightly concave dull pale green rather homomallous leaves, narrow amphigastria with two long attenuated segments, and a vermicular appearance make this species easily recognizable.

According to Schuster and Engel (1973, p. 520), this species should be placed in the genus *Pedinophyllopsis* (Schuster and Inoue, in press).

Specimens examined

075 125 R. Smith 1742. 080 125 Greene 2666. 130 125 Greene 1805.
145 070 Greene 2802.

Leptoscyphus horizontalis (Hook.) Grolle

This species is widely distributed throughout Chile from Llanquihue to Cape Horn, as well as in Argentine Tierra del Fuego and Isla de los Estados, from 0 to 665 m. a.s.l.

On South Georgia it was found sterile on rocks by the shore, by a waterfall, on east-facing scree slopes and on south-facing moist *Acaena magellanica* slopes.

L. horizontalis is one of the largest known species of *Leptoscyphus*, its long creeping stems bearing large brown expanded and closely imbricate leaves which have their margins incurved a little at times.

Specimens examined

045 145 R. Smith 1741. 080 125 Greene 2749a. 155 095 Greene 2385b.
160 060 Greene 2500.

Marchantia polymorpha L.

Marchantia polymorpha is a cosmopolitan species which has been collected recently in many localities on South Georgia, sometimes during the months of January and February with archegoniophores and antheridiophores. It has been found on wet rocks, at the sides of streams and waterfalls, and amongst *Rostkovia magellanica* from 0 to 90 m. a.s.l., often in association with *Lophocolea secundifolia*, *Cephaloziella* sp. and *Riccardia georgiensis*. The thalli seem to be well developed, although the specimens are generally scanty.

This species can be distinguished from *M. berteroana* by the presence of irregularly shaped cells projecting from the margins of the orbicular appendage of the central row of ventral scales, in contrast to *M. berteroana* which lacks such projections, having instead the margins of its ovate appendage formed by 1–2 rows of small cells.

Specimens examined

035 150 Greene 1108d. 130 125 Greene 1963b. 145 115 Greene 864.

Noteroclada confluens Tayl. ex Hook. f. et Wils.

N. confluens has been known from different localities along the Andes of South America, from Brazil, the Falkland Islands, Iles Kerguelen and New Zealand, usually growing in dense patches on very wet or inundated soil. It has now been found in similar situations on South Georgia growing amongst *Rostkovia magellanica*, *Juncus scheuchzerioides*, *Festuca contracta* or other grasses in flushes or on moist north-facing rocks or ledges from 15 to 120 m. a.s.l. At Kanin Point it was collected with well-developed capsules in December 1963.

The prostrate stems bear only two rows of nearly round entire leaves with the antheridia immersed on the dorsal side, while a conical laterally compressed involucrum is developed around the archegonia.

Specimens examined

115 130 Greene 3023. 115 135 Clarke and Greene CG 123, Longton 121.
135 120 R. Smith 1743.

Pachyglossa fissa (Mitt.) Grolle

This species, previously only known to occur on Iles Kerguelen, Marion Island, Tierra del Fuego and southern Chile, has now been collected on South Georgia. It was found twice with perianths in January 1961, and grows on south-facing rock crevices, on damp soil amongst glacial detritus and on a north-facing hillside in *Juncus scheuchzerioides* flushes from 30 to

150 m. a.s.l. in association with *Leptoscyphus expansus*, *Herzogobryum vermiculare*, *Anthelia juratzkana*, *Schistochila altissima*, *Evansianthus georgiensis*, etc.

It can be identified by its three rows of equal thick, stiff, brown transversally inserted leaves which are spreading but not much broader than the stem. The presence of an apical indentation to the leaves distinguishes it from the remaining species of the genus.

Specimens examined

030 150 Greene 391b. 040 150 Greene 756e. 115 135 Greene 3250b.

Pallavicinia pisicolor (Hook. f. et Tayl.) Steph.

P. pisicolor is a southern circum-sub-polar species which has not previously been known from South Georgia. In Tierra del Fuego it occurs frequently in more or less inundated swamps more than 200 m. a.s.l. but on South Georgia the species has been collected only from 0 to 25 m. a.s.l. on moist ground at stream sides and under the *Acaena–Tortula* association in the vicinity of Cumberland Bay together with *Cryptochila grandiflora*, *Pachyglossa fissa* and *Schistochila aberrans*.

This thalloid hepatic, which has a creeping brown to violet stem with a green flabellat[illegible] funnel-shaped lamina in which the mid ribs reach to the tips of the branches, was foun[illegible] once with capsules in March 1961.

Specimens examined

125 125 Greene 1545a. 130 125 Greene 1634a, Greene 3446b.

Schistochila alata (Lehm.) Steph.

This species, first described from Table Mountain in South Africa, is also known to occur on Tristan da Cunha and Inaccessible Island. In southern South America it extends from Juan Fernández to Isla de los Estados, where it forms dense dark brown to violet carpets in exposed sunny places between rocks above the tree line or grows epiphytically on trunks of *Lomatia ferruginea* about 4 m. high on the Chilean islands. It has been collected only once on South Georgia at 60–80 m. a.s.l., where it was growing with *Acrobolbus ochrophyllus*, *Lepidozia fuegiensis* and *Gackstroemia magellanica*. The specimen was sterile.

The species is readily recognized by the thickened trigones of the leaf cells, while the marginal indentation of the leaves is more or less conspicuous.

Specimen examined

075 125 R. Smith 1736.

Schistochila altissima Hodgs.

S. altissima was first described from an altitude of 1,820 m. on Mount Egmont, New Zealand (Hodgson, 1965), but it has only recently been reported from South America (Hässel de Menendez, 1975, p. 21), where it occurs occasionally in southern Chile on Isla Desolación and Tierra del Fuego between 700 and 1,200 m. a.s.l. in association with *Riccardia mycophora* and *Pachyglossa spegazziniana*. It is also infrequent and sterile on South Georgia growing on damp soil amongst glacial detritus at 120 m. a.s.l. with *Evansianthus georgiensis*, *Anthelia juratzkana* and *Pachyglossa fissa*.

The leaves of this small dark green species look imbricate at the tips of shoots, have sub-equal acute lobes which are not conduplicate and keels which do not reach the sinus.

Specimen examined

040 150 Greene 756c.

Schistochila fuegiana Hässel

S. fuegiana, which so far has only been known from sterile and male plants, from peat bogs or soil at more than 400 m. a.s.l. in Tierra del Fuego (Hässel de Menendez, in press, p. 78), can now be reported from South Georgia, where sterile specimens have been collected from 0 to 50 m. a.s.l. growing with *S. aberrans*.

S. fuegiana grows as more or less scattered stems and may be recognized by its sub-orbicular amphigastria being nearly as big as the non-complanate, squarrose and distant leaves.

Specimens examined

055 135 R. Smith 1734. 065 140 R. Smith 1735.

Schistochila leucophylla (Lehm.) Steph.

This species was believed to occur only in Tierra del Fuego in very humid places and bogs more than 400 m. a.s.l. as well as near the Magellan Straits, where it was collected first by Commerson in 1768. On South Georgia it has been found sterile only in a few localities on *Chorisodontium aciphyllum* banks, amongst *Poa flabellata* above a waterfall, and in rock crevices in association with *Clasmatocolea gayana*, *Pachyglossa dissitifolia* and *Evansianthus georgiensis*.

S. leucophylla, which is pale green in colour, is a rather small representative of the genus with distant leaves which have an acute dorsal lobe much smaller than the ventral lobe.

Specimens examined

035 150 Greene 691e. 055 155 Greene 662d.

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