

Book Section (Abstract)

Harmens, H.; Mills, G.; Hayes, F.; Williams, P.; Jones, P. D.; Norris, D. A.. 2007 An overview of the achievements of the ICP Vegetation in 2006. In: *20th Task Force Meeting of the ICP Vegetation. Programme Abstracts*. Joint Institute for Nuclear Research, 28.

This version available at <http://nora.nerc.ac.uk/710/>

NERC has developed NORA to enable users to access research outputs wholly or partially funded by NERC. Copyright and other rights for material on this site are retained by the authors and/or other rights owners. Users should read the terms and conditions of use of this material at

<http://nora.nerc.ac.uk/policies.html#access>

Contact CEH NORA team at
nora@ceh.ac.uk

AN OVERVIEW OF THE ACHIEVEMENTS OF THE ICP VEGETATION IN 2006

Harmens H., Mills, G., Hayes, F., Williams, P.D., Jones, M.L.M., Norris D.A.
and the participants of the ICP Vegetation

*Centre for Ecology and Hydrology, Orton Building, Deiniol Road, Bangor,
Gwynedd LL57 2UP, UK. hh@ceh.ac.uk; gmi@ceh.ac.uk; fhay@ceh.ac.uk*

The ICP Vegetation is an international programme that reports to the Working Group on Effects (WGE) of the Convention on Long-range Transboundary Air Pollution (LRTAP) on the effects of air pollutants on natural vegetation and crops (Harmens et al., 2006). The ICP Vegetation has focussed on two air pollution problems of particular importance: quantifying the risks to vegetation posed by ozone pollution and the atmospheric deposition of heavy metals to vegetation. Recently, two further pollution problems were considered by the programme: plant responses to pollutant mixtures (i.e. ozone and nitrogen interactions) and the impacts of nitrogen pollutants on vegetation. In addition, the ICP Vegetation is taking into consideration consequences for biodiversity and the modifying influence of climate change on the impacts of air pollutants. The work of the ICP Vegetation currently aims to provide information for the revision of the Gothenburg Protocol (1999) designed to address the problems of acidification, nutrient nitrogen and ground-level ozone, and the Aarhus Protocol (1998) designed to reduce emissions of heavy metals. Over 180 scientists from 35 countries of Europe and North-America contribute to the programme.

We will report on the achievements of the ICP Vegetation in 2006, in particular regarding:

- biomonitoring of ozone pollution using standardized experiments for crops and (semi-) natural vegetation;
- further development of ozone critical levels and their application;
- (semi-)natural vegetation at risk from ozone pollution alone or in combination with nitrogen pollution;
- biomonitoring of heavy metal and nitrogen pollution using mosses:
 - progress with the European moss survey 2005/2006;
 - temporal trends of heavy metal and nitrogen concentrations in mosses.
- input of the ICP Vegetation to the revision of the Protocols of the Convention.

Apart from looking back to our achievements in 2006, throughout the Task Force Meeting we will be discussing our future plans, in particular the medium-term work plan (2007-2009) of the ICP Vegetation and the required deliverables to the Working Group on Effects.

Reference

Harmens, H., Mills, G., Hayes, F., Jones, L., Williams, P and the participants of ICP Vegetation. (2006). Air pollution and vegetation. ICP Vegetation annual report 2005/2006. ISBN: 1 870393 82 1. <http://icpvegetation.ceh.ac.uk>