

# **International Co-operative Programme on Assessment and Monitoring of Air Pollution Effects on Forests of UN/ECE in co-operation with the EC**

## **Minutes of the 7<sup>th</sup> Forest Foliar Expert Panel Meeting**

1. The 7<sup>th</sup> Forest Foliar Expert Panel meeting took place from 10 to 11 September 2001 in Tampere /Finland.
2. 19 Participants from 14 countries participated. In addition, a representative from the EC and the Forest Intensive Coordinating Institute (FIMCI) took part in the meeting (see Annex 1).
3. The meeting adopted the attached agenda (Annex 2). Mr. Winkler updated the panel, on behalf of the EC, on recent developments with regard to the future of the programme.
4. Mr. Bartels (Germany) presented the results of the 4<sup>th</sup> Interlaboratory ring-test for foliar analyses. In particular, he referred to significant improvements in the results of the mandatory elements compared to the 3<sup>rd</sup> ringtest. However, in relation to the other analysed elements further improvements are required. After taking into account the difficulties encountered by the laboratories in analysing Na and Al, the group agreed to delete these elements from the optional parameter list of the submanual.
5. After detailed discussion, it was decided to highly recommend the use of elemental analysers for testing of C, N and S and HNO<sub>3</sub> digestions in closed systems in combination with ICP detection for the remaining elements. Reference is made to findings of the 4<sup>th</sup> ring-test report (Bartels 2001). Countries which are unable to follow this recommendation are allowed to use other methods as described in the ICP Forest Manual (for details see [www.icp-forest.org](http://www.icp-forest.org)) provided that sufficient accuracy is obtained in the results.
6. The Expert Panel recommended that the number used to conceal the identity of the national laboratories participating in the ring-test be decoded for the internal use of the Expert Panel. Any reservations concerning this recommendation should be forwarded to the Chairman (hannu.raitio@metla.fi) by the 30<sup>th</sup> October 2001.
7. The Chairman of the Expert Panel will inform each National Focal Centre (NFC) on the performance of their analysing laboratory, offering support where necessary when problems had been identified. In addition, the NFCs will be informed on deviations from the manual concerning national sampling based on the information provided in the DAR-Q. In the meantime, it is expected that the NFCs will produce national instructions for foliar sampling procedures including training courses for the samplers where possible.

8. The Expert Panel agreed to open the ring-test to laboratories outside of the programme on the understanding that separate evaluations should be made for those labs involved in the ICP Forests work at Level I or Level II. Mr. Bartels will get in contact with the labs to get this information.
9. The Expert Panel suggested that a general sub-manual on quality assurance should be included in the ICP Forest manual covering points relevant for all surveys. In relation to foliar analysis, it is recommended to follow the accepted European norm "General requirements for the competence of testing and calibration laboratories" (EN 17025:2000). In addition, to the submission of data to FIMCI, NFCs should attach a report on the national QA system including control charts employed in the testing laboratories.
10. An update of the DAR Q should be made after finalisation of the discussion on improved QA only.
11. After short discussion, it was recommended to store foliage sample for a given period (min. 5 years). The need for a common European approach needs to be explored further and Belgium agreed to provide a draft proposal on this issue for the next meeting in 2003.
12. Mr. Vel (FIMCI) presented evaluations of the DAR Q. Referring to the rejection of samples by some laboratories, the Expert Panel recommended that only samples that are clearly contaminated, such as from bird dropping be rejected. The presence of fungi, dust or evidence of insect attacks are not reasons for rejection of samples.
13. Following an invitation of ICP Forests/Mr. Haussmann the Foliar Expert Panel agreed to contribute to the 2002 Technical Forest Condition Report in the field of QA/ring-test.
14. Mr. Fürst (FFCC) presented the updated homepage of FFCC (<http://fbva.forvie.ac.at/600/1026.html>). This homepage included accumulated data from the Level I plots, as well as general information on the survey. The Expert Panel warmly thanked Mr. Fürst for his tremendous work. It was agreed that this tool should be used as a platform for the work of the Panel (e.g. preparation of meetings, literature list, questions and answers raised by the NFCs). Panel members will be provided with an access code and will be informed via e-mail on recent updates. The FFCC was asked to provide by the next meeting information on the kind of persons accessing the homepage. It was agreed that NFCs should provide Mr. Fürst before end of October 2001 relevant information in specific with relevant publications, addresses of experts involved and information of related activities.
15. Mr. Raitio (FIN) informed the Panel on recent discussion on possible foliar surveys on Level I. Mr. Haußmann (ICP Forests) introduced relevant discussions within the Ministerial Conference on the Protection of Forests in Europe (MCPFE) on the indicators for sustainable forest management. In particular, he mentioned that tree nutrition is proposed as a new indicator. After detailed discussion, the Panel agreed that the next foliar survey at level I

must relate to the soil survey planned for 2004/05. Further joint planning was envisaged to ensure a common approach.  
In the short term, the panel will evaluate existing data from countries where repetitions have been made (e.g. Finland, Austria).

16. Mr. Sebastiaan Luyessaert (Belgium) gave a presentation entitled “Spatial variability of cadmium concentration in the crown of *Salix fragilis* L. and its implications for leaf sampling” suggesting improvements to the sampling strategy of broadleaf trees. The group felt that these interesting findings should be further tested for the most common broadleaves trees. Mr. Bohumir Lomsky (Czech republic) showed slides on the new type of forest decline detected in certain forests of the Czech republic. Slovakia and Germany also noted similar findings and expressed the need for future research. Mr. Raitio presented the forest monitoring activities in Finland.
17. Mr. Bartels informed the panel of the forthcoming 5<sup>th</sup> ringtest. Results together with national QA information are expected by the end of November 2001. It was agreed that the laboratories should take account of the findings of the 4<sup>th</sup> ringtest.
18. The preparation of the 6<sup>th</sup> ringtest (2003) was started. Austria, Finland, Hungaria and Belgium agreed to offer samples.
19. Mr. Vel (FIMCI) agreed to elaborate an update of the submission forms (additional of optional parameters C and Cd) and will be announced this change at the forthcoming NFC/SAG meeting (19-21 Sept. 2001). This is in line with decisions made at the 16<sup>th</sup> Task Force Meeting. The new forms should be already used for this years submission.
20. A discussion took place national and European evaluations of foliar data from the level I and level II plots. Several delegations informed the panel on ongoing work in this area.
21. Mr. Fürst was appointed Co-chairman of the Expert Panel.
22. The participants thanked the Finnish Ministry of Agriculture for its generous subsidy of the meeting and in particular the Trojan work of Mr. Raitio, Mrs. Kilponen and Mr. Seppälä for preparing and hosting the Panel meeting.

## Annexes

1. List of participants
2. Agenda