

LARIX 2002 INTERNATIONAL SYMPOSIUM

Improvement of larch for better growth, stem architecture, and wood quality

An international meeting on larch, called LARIX 2002 Symposium, took place in Gap, City of the Alps 2002 (Alps, France), followed by a field trip in Massif Central Mountains, from September 16 up to September 21, 2002. This meeting was jointly organised by INRA (Unit of Breeding, Genetics and Physiology of Forest trees, Orléans) and by Cemagref (Nogent and Clermont-Ferrand).

This Symposium was organised as a joint meeting between the EU Fair project 'Towards a European Larch Wood Chain' (coordination: L. E. Pâques) and the IUFRO Working Party S2.02-07 'Larch Genetics and Breeding' (chairman: Dr. O. Martinsson). It followed as such the last IUFRO meeting on larch held in Krasnoyarsk (Siberia) in 1998. Its main objective was to release part of the very rich information gained during the 4-year EU project and to share and extend it with expertise from IUFRO members and colleagues interested in larch species research.

More than 80 scientists from 20 different countries throughout the whole northern hemisphere participated. They represented various fields of research including genetics, breeding, physiology, pathology, entomology, ecology, silviculture, wood technology, etc. To enrich the discussion, some professionals (seed dealers, nurserymen, foresters, wood industrialists, architects) were also invited.

Following the organisation pattern of the EU project, the meeting was organised around 4 sessions, including 'Genetics and Breeding', 'Physiology and Pathology', 'Ecology and Silviculture' and 'Wood Technology'. Due to the success of the meeting, some sessions were held in parallel. Altogether, 42 papers were presented. A good balance among the 4 themes was reached with 12 papers in 'Genetics and Breeding', 10 in 'Physiology and Pathology', 9 in 'Ecology and Silviculture' and 11 in 'Wood Technology'. In addition, 23 posters were also presented.

Besides genetic diversity studies in several Eurasian species, original scientific and technical results have been provided on heterosis in hybrid larch, early prediction of stem form, species-specific molecular markers, disease resistance, physiology of flowering and fructification, rhizogenesis and routine rooting of larch, handling of nursery stocks, larch ecology, growth models for pure and mixed stands of larch and development of silvicultural scenarios, natural regeneration problems related to entomological causes, evaluation of larch wood properties from fast growing plantations through anatomical, chemical, physical, and mechanical evaluation, industrial evaluation of wood resources from lowland and from alpine material, natural durability and indirect prediction, etc.

Significant tools, many emerging out of the EU project, have been presented. They are right now (or soon) available to researchers and professionals and include among

others: identification of larch species and hybrids by molecular markers (hybrid purity in seed lots), database and catalogue of larch basic material in Europe, water activity tests for pollen and seed storage, new efficient technique for larch seed sorting, guidelines for nursery stock and root cutting handling, decision support system for silviculture of larch, indirect prediction of natural durability, detailed references on wood properties for lowland larch from plantations and from native stands.

In addition to a short field visit in the Alps, illustrating mountain silvicultural problems (rotation, regeneration, cattle grazing, harvesting, etc) and use of larch wood in modern housing, a 3-day field tour across the Massif Central Mountains was organised. It aimed at illustrating French attempts to enlarge the cultivation area of larch outside its native alpine range in mostly lowlands (< 1000 m). Visits included several progeny and clonal trials with hybrid larch, an evaluation trial of hybrid larch European seed orchard varieties, silvicultural trials illustrating thinning aspects, a nursery (vegetative propagation) and finally hybridisation seed orchards (supplemental pollination) and facilities.

Finally, during a short and late business meeting, Dr. O. Martinsson announced his decision to retire as chairman of the IUFRO group after a 7-year position. As new elected chairman of the S2.02.7 and on behalf of all the participants, I thank him very much for his numerous duties during his mandate. Are especially acknowledged his efforts to develop contacts with Russian colleagues and to make accessible information on larch research from the East.

The intensive discussion all along the week among researchers originating from many different scientific backgrounds and with professionals was extremely rich and fruitful: it is really for us an encouragement for the future to stick to the network concept of the "Larch Wood Chain" that was initially developed in the LARCH EU FAIR project.

Proceedings of the Symposium (534 pages) have been released to the participants during the meeting: they include 79 short papers (with both English and French abstracts) corresponding to 57 oral presentations and 22 posters. As well, a field guide (120 pages) was provided to participants to the field trip. Extra copies of the Proceedings and of the field guide are still available and can be ordered to "INRA, Larix 2002, avenue de la Pomme de Pin, F-45166 Olivet Cedex, France" either by mail, fax (+33 2 38 41 78 79, to Luc E. Pâques) or by e-mail (paques@orleans.inra.fr).

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