CYTOGENETIC STUDIES OF FOREST TREES AND SHRUBS

Cytogenetic studies of forest trees and shrubs. Helmut Guttenberger, Želimir Borzan, Scott E. Schlarbaum & Tom P. V. Hartmann (eds.). Arbora Publishers, Zvolen, 2000. 206 pp, ISBN 80-967088-8-0, paperback, price 25 USD.

After 1990 the IUFRO Working Party 2.04.08 "Cytogenetics" revitalized its activity and besides its meeting during the IUFRO Congress in Tampere two significant IUFRO Symposia aimed at cytogenetics of forest tree and shrub species were organized in Briuni, Croatia, and Graz, Austria. The last IUFRO Symposium was held on September 6–12, 1998. The reviewede book presents a critical view of the present state and future of this methodologically difficult but also important discipline.

The coordinator and deputy coordinator of the IUFRO Working Party summarize the history and past activities of the work group. In the introduction paper "Cytogenetics studies of forest trees" S. E. Schlarbaum summarizes the early stage of the issue of cytogenetic studies of wood species, application and improvement of cytogenetic methods, the period of acquisition and propagation of basic information, applied cytogenetic research with wood species ending by future role of cytogenetics in forestry research in gene mapping, detection of pollution, applied tree improvement and technological advancement of cytogenetics. The remaining 21 papers present a broad spectrum of issues ranging from

classical cytogenetics, cytotaxonomy or karyotaxonomy to the present methods, questions and problems of experimental karyology and molecular cytogenetics. Besides valuable experimental results they document the progress, present state and existing determining factors and specific features of cytogenetics of wood species but also the technological indispensability for future development and solution of scientific programmes. The publication is not only the way to present the meeting of the Cytogenetics Working Group but also an important source of information for all who are involved in cytogenetics and particularly cytogenetics of tree and shrub species. Perhaps the only drawback of this publication is rather an inconsistent order of the individual contributions. The proceedings appeared as a special issue of Forest Genetics which started actually the new edition of Symposia Proceedings. Its level is exceptional both in terms of contents and form. It represents an important contribution and impulse for further development of cytogenetic studies of forest trees and shrubs.

Karol Mičieta (Bratislava, Slovakia)