

GENETICS OF SILVER FIR

V. Gagov, editor, 1997: Ergebnisse des 8. Tannen-Symposiums. [Results of the 8th Silver Fir Symposium]. Schriften aus der IUFRO und der Forsttechnischen Universität, Sofia, Bulgaria, 224 pp., ISBN 954-8783-14-2.

The proceedings of the IUFRO Symposium on Genetics and Silviculture of Silver Fir, which was organized on September 23-28, 1996 in Jundola, Bulgaria. The proceedings contain 14 papers presented at the Symposium and further 4 papers submitted to organizers, of which 11 papers are aimed at the genetics and breeding of silver fir.

In the symposium participated in total 32 scientists from Bulgaria, Germany, Greece, Italy, Yugoslavia, Austria, Poland, Macedonia, Romania, Switzerland, Slovakia, Slovenia, and the USA. Except for the indoor sessions the excursions aimed at gene pool conservation of silver fir in Pirin and Rodopi mountains as well as at breeding experiments were organized.

From among the papers published in the proceedings the first papers were aimed at the relationship between isozyme gene-systems and the adaptation processes (Bergmann), gene diversity in silver fir populations of Thuringia (Hosius, Konnert and Henkel), gene diversity and differentiation of Mediterranean fir species (Scaltsoyannes, Panetsos, Drouza and Tsaktsira). These contributions resulted from the genetic inventories of silver fir populations and are a part of extensive inventories which were carried out throughout the western and central Europe (Bergmann, Konnert, Vendramin, Longauer, Mejnartowicz etc.). The adaptive potential xxx

On the basis of the comparison of larger samples in silver fir relict populations of Thuringia, Hosius and Bergmann tried to make a proposal of how to construct the seed orchard based on former genotyping of silver fir individuals, recommending to include only those individuals which will contrib-

ute to increased genetic variation of orchard progenies and thus proper *ex situ* conservation.

The four other papers are aimed at the provenance results: (1) utilization of silver fir from Calabria in the altitudinal provenance experiment established in Switzerland (Commarmot); (2) evaluation of the provenance experiment with German and East European provenances established in Northern Germany (Svolba); (3) evaluation of two Bulgarian provenance experiments with four provenances established on two different sites (Gagov), and (4) broadly established provenance/progeny experiment with Polish silver fir (Sabor *et al.*).

In general there is a lack of provenance experiments in silver fir with higher number of provenances established on different contrast sites. Each information leading towards the characterization of response of the silver fir provenances to seed transfer or of G × E interactions is very valuable. This is the reason the Polish Silver Fir Provenance Inventory Test - established with 99 provenances (6 single tree progenies each) on 7 sites seems to be exceptional and it promises very valuable results.

Regardless the numerous typographic and language errors the proceedings represent a valuable contribution to the knowledge of silver fir genetics and breeding, as well as its silviculture and ecology. The publication is available at Dr. Velichko Gagov, Faculty of Forestry, University of Forestry, bul. Kliment Ohridski 10, BG-1756 Sofia, Bulgaria.

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