

Contents

PREFACE AND ACKNOWLEDGEMENT

Preface and Acknowledgement

Concepts and problems of forest tree breeding and improvement having been solved by the Forestry and Game Management Research Institute (FGMRI) Jíloviště-Strnady, brief survey of current results 7

Introductory Notes 9

PAPERS

DAG LINDGEREN
Tree breeding tools (tbt) - „Arker“ assisted selection 15

BENGT ANDERSSON, OLA ROSVALL
Genetic gain from existing and future seed orchards and clone mixes in Sweden 16

JOHAN WESTIN
Do the high growth performances in southern and selected populations have similar physiological bases? 17

JOSEF FRÝDL, JIŘÍ ŠINDELÁŘ
Study of selection criteria - long-term and early tests of European larch seed orchards 26

JANA MALÁ, HELENA CVRČKOVÁ, PAVLA MÁCHOVÁ, VLADIMÍR BYLINSKÝ
Micropropagation of endangered species of *Daphne cneorum* 45

ONDŘEJ IVANEK
Identification of forest tree gene resources in the FGMRI isoenzyme laboratory 49

JAROSLAV KOBLIHA, VLADIMÍR JANEČEK
Development of progenies from spontaneous hybrids within genus *Abies* 53

MILAN LSTIBŮREK
Theoretical analyses of the possible benefit of vegetative propagation in quality birch 61