

SUMMARIES

DECIDUOUS TREE BREEDING IN LATVIA

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During the last 6 years systematic investigations on selection of deciduous trees for breeding purposes were started. The work was begun with examination of the most productive and good quality forest stands in the whole territory of the country. In the territory of every forest region the most valuable stands were scored in grades taking into consideration the average thickness and the angle of branches, the straightness of the stem, the share of the minus-trees and also the information about the health, management regime and other peculiarities of the stand.

For characterisation of the morphological traits of a stand, sample plots were established where all the particular tree species were described. Presently a series of 15 sample plots of natural origin birch have been established in the most fertile growing conditions, in which birch comprises at least 70% of the stand and the age of the stand was 45-55 years. The sample plot area was 0.5 ha. The diameter of trees in the sample plot has been measured. 10% of trees in the sample plot have been measured by the height, the height to the first dry branch, and to the beginning of the crown. The peculiarities of the crown branching were evaluated by marking out forked, hopper shaped, and broom shaped branching types. Stem damages – cracks, cancer hurts, and the trees with reddish colour of bark were marked as well.

For assessment of the genetic characteristics of the stands the establishment of progeny tests were started. For experimental purposes seeds were collected during the 1995-1998 period: birch ~1000 families, oak - 20 bulk samples from stands and old parks, as well as ~100 families, ash - 265 families, common alder ~ 200

families, maple ~ 200 families, elm - 62 families, sweet cherry - 50 families.

The number of tests has been established to study progenies of: penduculate oak – 8 stands and parks, 8 families in 1996, 13 stands and parks, 40 families in 1998, 40 families in 1999 and 32 families in 2000; sweet cherry 50 families in 1997; common ash 74 families in 1998, 5 stands (average samples) in 1999; aspen 26 clones in 1998 and 28 clones in 2000; silver birch - 640 families in 1999, 700 families in 2000; common alder - 20 families in 2000; Norway maple – 176 families in 1999 and 2000; elm – 62 families in 2000.

Selection of basic material has been started for establishing new seed orchards of deciduous tree species. Plus trees have been marked according to tree form and habit and scions collected in the best-selected stands of birch, oak, common alder, and maple.

