Towards an Information Concerning Genetic Parameters of European Larch (*Larix decidua* Mill.) on the Base of Progenies from Diallel Crossing Evaluation at the age of 31 and 34 Years

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There are some information concerning evaluation of research plots No. 24 and 25 (key numbers of VULHM research plots registration) located both in Pribyslav Forest Administration and VULHM Jiloviste – Strnady, Gamapole, presented in this report. Complex of 25 progenies of 5 clones from incomplete reciprocal crossing has been evaluated in research plots No. 24 – Pribyslav and No. 25 – Gamapole at the age of 31 and 34 years. Used clones are of Sudeten larch ecotype origin.

Controlled crossing has been realized, within the framework of an extensive breeding project, in spring 1967 in seed orchard at Sternberk, Czech Republic, by Dr. Sindelar (VULHM Jiloviste – Strnady). Research plot has been established in spring 1970 by double grid method in 4 replications. Measurement and evaluation of tested progenies at the age of 31 and 34 years have been oriented to height growth, DBH, volume production and stem form, too. Variability of measured and evaluated characteristics has been examined by analyses of variance (ANOVA) with three variability factors – influence of maternal and paternal clones, replications and respective interactions. There has been calculated heritability both on the base of average effects for individual source of variability, as well as for individual differences. Thus, heritability in both wider and narrow sense (H^2, h^2) has been calculated. It was possible to characterize individual clones used for crossing by their combination ability according to Kraus' method.

As for results of reciprocal crossings, there have been found statistically important differences, but average magnitudes of these crossings statistically have differed, just a less. E.g., there is progeny from controlled self-pollination represented in research plot No. 25 – Gamapole, too. In this case, depression of evaluated characteristics presupposed theoretically, did not prove as true. It is possible to expect another findings about European larch genetic parameters on the base of evaluation of another research plots established within the framework of extensive breeding projects realized in the Czech Republic both in 1967 – 1968 and in 1983, too.