

### Sex and Vigor in *Populus*

A point of some interest to geneticists and tree breeders is suggested by the preliminary analysis of data on the sex of a number of poplar clones selected in the fall of 1947. The material assembled represents the initial collection of a project sponsored by the Maria Moors Cabot Foundation and designed to assess the degree of wild variability prevailing within various species of the genus. Out of 76 clones (including *tremuloides*, *grandidentata*, *Tacamahaca*, *trichocarpa*, and *deltoides*) bearing flower buds, only 18 (23.7%) proved to be females. Several factors were involved which would tend to destroy the true randomness of the sample. The most important of these seems to be that the individual trees were selected on the basis of their apparent vigor, health, and good stem form as compared with their associates in the various stands throughout the United States and Canada, where the collections were made. This, then, suggests that a positive correlation may exist in this genus between maleness and such desirable characters as vigor and form.

Further support of this hypothesis is revealed by a check of the old cottonwood or black poplar clones long cultivated in Europe. G. Houtzagers (*Het Geslacht Populus in Verband met zijn Beteekenis voor de Houtteelt* (The genus *Populus* and its significance in silviculture). Wageningen, Netherlands: H. Veenman and Zonin, 1937), for instance, in his description of poplar clones cultivated in Holland, notes that of the 8 most commonly planted, only 2 (25%) are females.

If the accumulation of more extensive data confirms these preliminary observations, it is needless to point out that this knowledge will be an invaluable tool to tree breeders and silviculturists interested in the genus *Populus*.

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