FOREST GENETICS WORK IN THE NORTHEAST* \$1/\$ Scott S. Pauley

The following brief summary in outline form of forest genetic research activities under way in the Northeast is based primarily on Dr. J. W. Wright's "A Directory of Forest Genetics Research in the United States and Canada," (USDA, Forest Service, Northeastern Forest Experiment Station, Sta. Paper No. 53, 1952) and Dr. Hans Nienstaedt's "Report on Forest Genetics Research in New England and Neighboring States," recently compiled under the auspices of the New England Councilts Forestry and Forest Industries Committee.

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I. Federal Agencies

- A. Department of agriculture
 - 1. Forest Service
 - (a) Northeastern Forest Experiment Station, Upper Darby, Pa.E. J. Schreiner, J. W. Wright, A. F. Hough

Hybridization, selection, and field testing of cottonwood and balsam poplars, maple, birch, ash, pine, and spruce. Selection for weevil resistance in white pine.

- Bureau of Plant Industry, Soils and Agricultural Engineering, Division of Forest Pathology
 - (a) Beltsville, Md.

G. F. Gravatt, F. H. Berry, J. Diller

Studies of blight resistance in chestnut: introduction of exotics, hybridization, selection and field testing. Tests of resistance to <u>Septotinia</u> in Populus species, ecotypes and hybrids.

(b) New Haven, Conn. Alma A. Waterman

Testing for disease resistance in Populus clones.

- II. State Conservation Departments
 - 1. New Hampshire Forestry and Recreation Commission, Fox Demonstration Forest, Hillsboro, N.H.

Racial tests of Norway spruce and Scotch pine.

- III. Colleges, Universities, and Experiment Stations
 - Connecticut Agricultural Experiment Station, New Haven, Conn.
 A. H. Graves, Hans Nienstaedt

Continuation of Dr. Graves' studies in chestnut which have been in progress for 30 years. Racial studies in hemlock.

 University of New Hampshire, Durham, N.H. Howard Kriebel

Selection and testing for resistance to white pine weevil.

 State University of New York, Syracuse, N.Y. R. R. Hirt

Selection and field testing for resistance to white pine blister rust. Selection for resistance to chestnut blight. Racial tests of Norway spruce.

- 47 -

4. Boyce Thompson Institute for Plant Research, Inc., Yonkers, N.Y. Clyde Chandler

Hybridization, selection and testing of larch, natives and exotics.

5. Maria Moors Cabot Foundation for Botanical Research, Harvard University, Petersham, Mass. Scott S. Pauley, Albert G. Johnson, Helge Irgens-Moller, Wm. J. Gabriel

Studies of variation in <u>Populus, Pinus, Ouercus,</u> Acer, <u>Betula</u> and Picea.

Although the above outline presets at first glance a rather impressive array of forest genetic research activity in progress in the Northeast, one should not be beguiled into concluding that silvicultural thought and practice is in any way more advanced in that area than in other parts of the country. Environmentalist doctrine is still firmly entrenched, and much silvicultural research and practice is still based on the assumption that intraspecific diversity does not exist in Northeastern tree species.

Planting is done on a comparatively molest scale in most Northeastern states, and this situation may account for the tendency to place greater emphasis on the modernization of economical, rather than **biological**, aspects of silvicultural management. Unfortunately much of the planting stock that is utilized is still grown from seed of unknown or uncertain origin. This is a peculiarly anomalous situation, in view of the fact that forest nursery practices in the Northeast are otherwise of high **calibre**.