

## Native Trees Are Better Seed Source, Geneticist Reports

Reflecting upon studies resulting from a forestry improvement project which began in 1955, S. S. Pauley says that native trees tend to be better seed sources than nonnative trees.

This statement was recently made to a group of visitors at the North Central School and Experiment Station, Grand Rapids, Minn. Pauley is Professor of Forestry at the University of Minnesota.

Objective of the project, Pauley said, is to develop improved lines through selection and breeding of genetically superior wild ecotypes of native species and promising nonnative ecotypes and species.

Studies with white spruce, Scots pine, red oak, aspen, and jack pine have shown considerable genetic variability, depending upon the source of seed. Crosses of the natural hybrid between white and black spruce discovered near Cromwell, Minn., are difficult to make, but the hybrid shows promise.

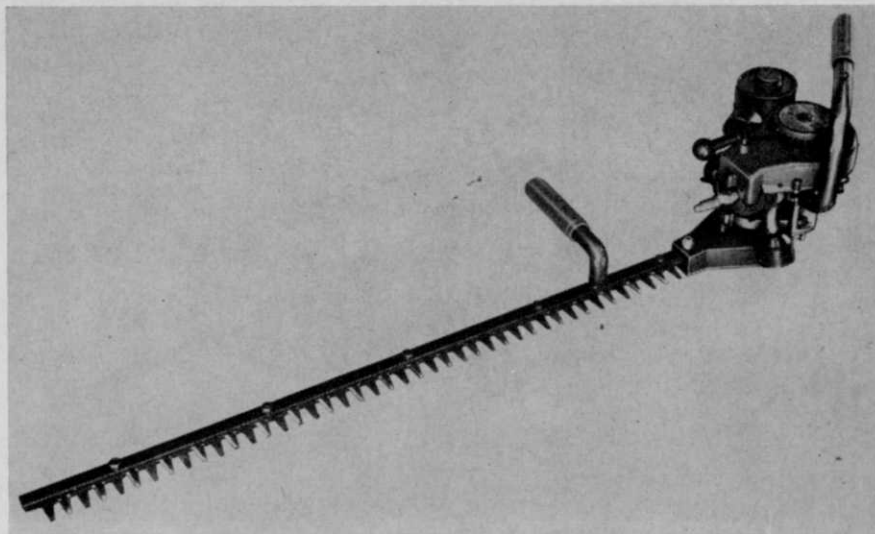
Studies of Scots pine seed sources show all seed sources to be hardy with the exception of Spanish sources. Central European seed sources show the most promise for Christmas tree plantings.

A larch species from Japan appears to be encouraging an introduction to Minnesota. However, the species shows considerable variability in hardiness, but those that are hardy may be acceptable for timber production and ornamental use.

## Poa annua Can Be Stopped

Application of the preemergence herbicide Betasan will prevent *Poa annua* from sprouting and spoiling golf greens, tees, and other turf areas, according to Betasan's producer, Stauffer Chemical Co. With this overwintering pest stopped, the desirable perennial grasses can spread and maintain a good cover throughout the fall playing season and into spring.

Betasan is also effective for



Said to weigh only 10 pounds, and run one hour on a pint of fuel, the Jupiter Trimmer-Clipper will prune trees, trim shrubs and hedge, and mow high grass and weeds. Powered with a 3/4-hp Ohlsson & Rice engine, the machine can be used in remote areas. Complete details are available from Marine Industrial Supply Co., Dept. WT, 645 W. Anaheim St., Long Beach, Calif.

control of crabgrass and goosegrass, Stauffer claims. Applications exceeding twice the recommended rate have been made to bentgrasses, fescues, bluegrass, and other turf grasses without injury.

Betasan is available in granular or liquid form; the liquid formulation is suggested for use on greens. Ten to fifteen minutes of watering immediately after application is essential to move the herbicide down to the soil where contact with weed seed is assured. For more information write the firm at 380 Madison Ave., New York, N. Y. 10017.

## Dual Fertilizer Labels Suggested by Iowa Agronomists

Agronomists at Iowa State University are encouraging dual labeling of the phosphorus and potassium content of fertilizers.

These two nutrients are commonly expressed in the oxide form as  $P_2O_5$  and  $K_2O$ . The agronomists suggest that they also be labeled in the elemental form as P and K.

Expressing the phosphorus (P) and potassium (K) content of fertilizers in the elemental form would place these two nutrients on the same basis as nitrogen (N) and other nutrients already expressed in elemental form, J. A. Stritzel writes in a

recent issue of *Iowa Farm Science* magazine.

If you buy fertilizer with an analysis of 6-24-24, you may think you are getting a fertilizer that contains 6% nitrogen, 24% phosphorus and 24% potassium. The elemental analysis, however, is 6-10-20—6% nitrogen, 10% phosphorus, 20% potassium.

The difference between the elemental analysis and the oxide analysis is the weight of the oxygen. The oxygen weight is eliminated in the elemental analysis, which gives a more accurate proportion of each nutrient in relation to the other nutrients in the fertilizer.

More information is contained in "Better Names for Phosphate and Potash," Reprint FS-1050, available from Publications Distribution, Morrill Hall, Iowa State University, Ames, Iowa.

## Penn State Has Soil Course

"Soil Fertility and Management," is the subject of another correspondence course offered by the Pennsylvania State University. Lessons are prepared by soil experts and include "Garden Soil Management," and "Your Flower Garden."

To learn more about soil and its care, submit name and address to Soil Fertility, Box 5000, University Park, Pa. 16802. Enrollment fee is \$2.25.