

Cone Viability.

A study now in progress at the Southern Station, U.S. Forest Service, indicates very strongly that cones of southern pines will open and free their seeds with difficulty or not at all, unless they have matured sufficiently to float in water immediately after being picked from the tree.

Journal of Forestry, Vol. 34, No. 12, December, 1936.

On the Effects of Seed Stratification.

In view of the fact that unsatisfactory results have frequently been obtained in the raising of indigenous forest tree species from seed, the following notes on the effects of pre-treatment of seed on germination will be of interest.

The method of stratification adopted was to mix the seed in fine sand in porous pots, and keep in a moist condition away from light. The untreated seed was stored in air-tight containers.

Podocarpus dactyloides.

After 3 months of stratification, the sowing of this seed yielded abundant germination in 42 days. The untreated sample failed to produce more than a few odd seedlings during the summer, nor was delayed germination recorded in the following year.

Podocarpus totara.

The stratified seed started to germinate 5 days after sowing and 103 days later a good stocking was obtained.

After the same period of time only 2 of the untreated seed had germinated; however, 377 days later, delayed germination began and a fair stocking was obtained.

Nothofagus fusca.

This seed was stratified for a period of 5 months and sown in early September. Germination was observed, in a few cases, at the time of sowing and was completed within 40 days, an abundant crop being obtained. (2 ounces of the same seed lot yielded 2,750 seedlings in 60 days in an open seed-bed at Palmerston North). The untreated seed showed a very poor germination; sporadic delayed germination was recorded 4 months after sowing.

These brief observations indicate that seed stratification has a definite application to indigenous species and should justify further experimental work.

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