SULFURIC ACID SEED TREATMENT OF BEACH PEA, 
*LATHYRUS MARITIMUS*, and SILVERY PEA, *L. LITTORALIS*, TO INCREASE GERMINATION, 
SEEDLING ESTABLISHMENT, AND 
FIELD STANDS

PAUL E. LEMMON, ROBERT L. BROWN, AND WILBUR E. CHAPIN

BEACH pea, *Lathyrus maritimus* (L) Bigel., commonly found along sandy beaches of the Northern Hemisphere and around the Great Lakes (1, 10), and silvery pea, *L. littoralis* (Nutt.) Endl., found along the sea coast of Washington, Oregon, and California (4, 6), are valuable plant species for the revegetation and stabilization of marine sand dunes. Recognition of this is indicated by the Soil Conservation Service in a publication (8) discussing sand dune stabilization undertakings near the mouth of the Columbia River in Oregon. With increasing knowledge of these plants, needs have developed for seed, especially by public agencies engrossed in marine sand dune stabilization programs.

Seed of these two species has been limited. Production by native stands has been erratic and the cost of collection has been high. Seed is being produced in government nurseries, but problems in germination, establishment, and culture have been encountered that must be solved before seed can be produced at reasonable cost. Prompt, uniform, and high percentage of germination, if attainable, would facilitate production of seed in nurseries or production of vegetal cover for erosion control in areas where these species are adapted.

Recognizing the work of many authors concerning seed treatment to increase germination of leguminous seeds (7, 9, 12), a series of tests with several seasons' collection of both species were begun to determine the effect of sulfuric acid seed treatment on (a) germina-