UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
ECOLOGICAL SCIENCES AND TECHNOLOGY DIVISION

OREGON AGRICULTURAL EXPERIMENT STATION
CORVALLIS, OREGON

AND

WASHINGTON AGRICULTURAL EXPERIMENT STATION
PULLMAN, WASHINGTON

NOTICE OF RELEASE OF 'KALO' DWARF ENGLISH TREFOIL

The Ecological Sciences and Technology Division, Soil Conservation Service of the United States Department of Agriculture, and the Agricultural Experiment Stations of Oregon and Washington, announce the release of 'Kalo' dwarf English trefoil (Lotus corniculatus var arvensis Pers.). It was developed by Stanley L. Swanson, Soil Conservation Service, Plant Materials Center, Corvallis, Oregon, and William H. Billings, Soil Conservation Service, Portland, Oregon.

'Kalo' is a semierect, moderately rhizomatous dwarf English trefoil selected from PI 234 670, introduced from France. Testing was initiated at the Corvallis Plant Materials Center in the spring of 1959. Plants have medium green foliage, and typically, fine hairs occur on the stems, leaf margins, the underside of the leaflets, and on the flower buds. The flower buds are red tipped. The flowers are medium yellow to deep yellow and are streaked with thin red lines.

One of the most distinctive characteristics of this variety is a profusion of short pink rhizomes. These rhizomes, coupled with a low growth habit, are believed to enable 'Kalo' dwarf English trefoil to withstand close grazing.

During initial evaluation in observational rows, PI 234 670 was found to have rhizomes in its second year (1960). During subsequent observations, rhizomes were frequently noted and it was consistently described as semierect and high in seed yield. It was usually rated about one-third less productive than the most vigorous erect type birdsfoot trefoil varieties such as 'Cascade' and 'Granger'.

During 1965-67, the most vigorous, prostrate, profusely flowering plants were selected from the original material. These plants were transplanted into a breeder block in 1967.

In the spring of 1971, a 4-year replicated trial was initiated, using seed derived from the breeder block. Of the four trefoils included, only 'Cascade' and 'Kalo' maintained dense, uniformly vigorous stands throughout the trial, under late hay management. 'Cascade' trefoil was significantly higher yielding than 'Kalo' during 1972 and 1973, but in 1974 and 1975, yields of the two trefoils were nearly identical on a shallow non-irrigated upland site.

'Kalo' dwarf English trefoil has been consistently successful in field plantings on a wide variety of soils and sites. At two mine spoil locations, it has withstood heavy browsing by deer. 'Kalo' trefoil has proved compatible with several other species, including pubescent, intermediate and tall wheatgrass, field brome, creeping red fescue, tall fescue, orchardgrass, meadow foxtail, timothy, hardinggrass, reed canarygrass, and sickle-keeled lupine.

Breeder and Foundation seed are being maintained by the Corvallis, Oregon Plant Materials Center, United States Department of Agriculture, Soil Conservation Service. Foundation seed is available in quantity.

Director, Ecological Sciences and Technology Division, Soil Conservation Service, U.S. Department of Agriculture	Date
Director, Oregon Agricultural Experiment Station	12/10/76 Date
Director, Washington Agricultural Experiment Station	12/27/76 Date