

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

and

CALIFORNIA AGRICULTURAL EXPERIMENT STATION
Davis, California

NOTICE OF RELEASE OF 'BERBER' ORCHARDGRASS
FOR SOIL STABILIZATION, COVER AND RANGE USE

The United States Department of Agriculture, Soil Conservation Service and the California Agricultural Experiment Station announce the release of 'Berber' orchardgrass, *Dactylis glomerata* L.

'Berber' orchardgrass is a long lived, drought resistant, cool season perennial bunchgrass, native to Europe. It was originally tested and grown in South Australia and then dropped from commercial production. It has been tested in the mediterranean climate area of California for erosion control on natural and man-made disturbed areas, and for dryland range use.

Description

'Berber' is a dryland, cool season perennial bunchgrass that grows from 40 to 115 cm. high. Leaf blades are distinctly folded and sheaths are compressed. The cocksfoot seed head (panicle) is 10-25 cm. long with spikelets in dense, compact, one-sided clusters at the end of its branches. Spikelets are about 8 mm. long with lemmas 3-4 mm. long, pointed. Seed is slightly smaller than 'Akaroa' and 'Palestine' orchardgrasses.

'Berber' has good seedling vigor and has shown superior seedling establishment to 'Palestine', 'Kasbah', and 'Currie' orchardgrasses, 'Luna' pubescent wheatgrass, 'Oahe' intermediate wheatgrass, and Hardinggrass. Leaves are mainly basal with seed maturing in May-June.

Source

On January 14, 1972, seed was received from Mr. Burgess L. Kay, Wildlands Seeding Specialist, University of California, Davis. Mr. Kay had received this seed from Mr. Jim Silsbury, Waite Institute, South Australia in March 1971. This accession was assigned PL-2-72. It carries PI - 421010.

Development of Plant

Initial testing trials were seeded in 1968 by Bud Kay for range use. Original seed received was increased in a one-half acre block at the Lockeford Plant Materials Center. It was included in secondary testing in 1975 on several range and problem sites. It was compared to 'Palestine' orchardgrass and several perennials such as Hardinggrass, and the wheatgrasses. In some cases, it was equal to 'Palestine' in initial germination, but was superior in establishment on droughty soils and during the drier years.

Development of Plant (continued)

It appears that 'Berber' could be used for erosion control and fire control in areas adjacent to housing developments. It is very drought tolerant and would remain green throughout the summer with small amounts of supplemental water.

Adaptation

'Berber' is suited to well drained, coarse to fine textured soils, shallow to deep and medium acid to slightly saline-alkaline. It does not perform well on wet or poorly drained soils. It is drought tolerant and will persist and provide good erosion cover with an annual precipitation of 14-16 inches or on areas receiving some supplemental irrigation. In California, it is adapted to Major Land Resource Areas 4, 14, 15, 16, 17, 18, 19, and 20.

Seed Production

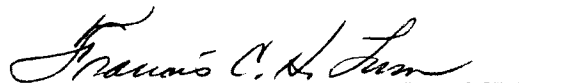
'Berber' has been grown in large scale seed increase at the Lockeford Plant Materials Center for the last five years. Five year average is 305 pounds per acre. Seed was planted at a 4-pound per acre rate in 30 inch rows with a Planet Junior planter. Harvest is accomplished by windrowing and then combining with a John Deere, Model 2300 harvester. No particular seed harvest problems have been encountered.

Seed Source

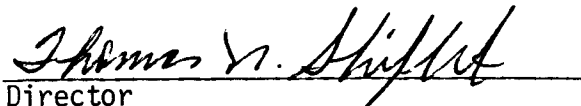
Breeder and Foundation seed will be produced by the Foundation Seed and Plant Materials Service, Davis, California. Foundation seed will be available to qualified growers through the Foundation Seed and Plant Materials Service, University of California, and the Resource Conservation District Seed Increase Program in 1981. Commercial seed is anticipated for the 1982 season.



Director
California Agricultural Experiment Station



California State Conservationist
Soil Conservation Service



Director
Ecological Sciences and
Technology Division
Soil Conservation Service
United States Department of Agriculture