Registration of Crop Cultivars

REGISTRATION OF DESERET ALFALFA
(Reg. No. 78)

M. W. Pedersen and G. D. Griffin

'Deseret' alfalfa (Medicago sativa L.) was developed cooperatively by the ARS, USDA, and the Utah Agricultural Experiment Station. Deseret was tested as Utah 5045, and released in April, 1975 as 'Kayseri'. The name was changed to Deseret in September, 1975 because of prior usage of Kayseri.

Deseret was developed from two cycles of phenotypic recurrent selection in the greenhouse for stem nematode [Ditylenchus dipsaci (Kuehn) Filip] resistance in a plant introduction from Turkey (P.I. 279 958). Approximately 150 stem nematode resistant plants were selected from a population of 2,500 plants. The resistant plants were interpollinated by leaf cutter bees in a field cage. The procedure was repeated in a second cycle of selection.

Deseret is a tall, high-yielding cultivar with dark green foliage and flowers that vary from nearly white to purple. Bacterial wilt resistance [Corynebacterium insidiosum (McCull.) H. L. Jens.] and cold tolerance of Deseret are about like 'Ranger', but stem nematode and downy mildew resistance (Peronospora trifoliorum de Bary) are considerably better than Ranger. Deseret is susceptible to both pea aphids [Acrystosiphon pisum (Harris)] and spotted alfalfa aphids [Theroaphis maculata (Buckton)]. The saponin concentration of Deseret (per bioassay) was lower than that of Ranger. Digestibility of Deseret was intermediate between Ranger and 'Dupuits' when tested in vitro, but similar to Ranger, 'Lahontan', and Dupuits when tested with sheep. Deseret is adapted to irrigated areas in the intermountain region where conditions are similar to northern Utah.

Seed produced from the second cycle of screening will constitute breeder seed and will be maintained at Logan, Utah. Three generations of increase beyond breeder (foundation, registered, and certified) will be permitted. The production of foundation and registered seed shall be restricted to Idaho, Oregon, Washington, and the northern half of Utah and Nevada.

Deseret was favorably reviewed in 1974 by the National Certified Alfalfa Variety Review Board.

REGISTRATION OF UC CARGO ALFALFA
(Reg. No. 79)


'UC Cargo' alfalfa (Medicago sativa L.) was developed by the University of California Agricultural Experimental Station and the ARS, USDA. It was tested experimentally as UC 66 and released in December, 1976.

UC Cargo is an upright, purple-flowered, highly nondormant variety with winter growth similar to UC Salton to low desert valley areas of southern California where the summer disease complex is important and winter forage is desired. It is highly nondormant, and flowers that vary from nearly white to purple.

UC Cargo was favorably reviewed by the National Certified Alfalfa Variety Review Board at its December, 1975 meeting. No restrictions on variety distribution will be imposed.

REGISTRATION OF UC SALTON ALFALFA
(Reg. No. 80)

W. F. Lehman, E. H. Stanford, and D. C. Erwin

'UC Salton' alfalfa (Medicago sativa L.) was developed by the University of California Agricultural Experiment Station. It was tested experimentally as UC 52 and released 1972.

UC Salton is the product of the fifth cycle of a broadbased germplasm pool in which germplasm was made in each cycle and severe selection pressure for the summer disease complex, Phytophthora root rot (Phytophthora megasperma Drechs.) and the spotted alfalfa aphid (Theroaphis maculata (Buckton)). Germplasm was from many sources, including old adapted cultivars, unadapted cultivars from the University of California breeding program, and lines from the University of California breeding program. For each cycle, the germplasm was planted in broadcast stands using seeding rates of 28 to 56 kg/ha in areas of 0.07 to 0.6 ha. Seed was produced on the surviving plants after the plants were treated with no insecticides were used.

UC Salton, purple-flowered, upright-growing after cutting. It is adapted to the low desert southern California where the summer disease complex is important and winter forage is desired. It is highly nondormant, low desert valley areas of southern California.