published data). It has good resistance to stem rust (*Puccinia graminis tritici*) and powdery mildew (*Microsphaera diffusa*) and appears to be intermediate in reaction to wheat streak mosaic virus and bunt (*Tilletia caries*). It is susceptible to soilborne mosaic virus and Septoria leaf blotch. The grain yield of Osage exceeded that of Scout 66 by an average of 14% in Oklahoma tests during the past 4 years (1972-75). It compares favorably with other cultivars in terms of winter pastures.

Variety protection has been applied for under the Plant Variety Protection Act, Public Law 91-577. If grown for seed use only as a class of certified seed and not for human consumption or for sale as a protected variety. Breeder seed will be maintained by the Oklahoma Agric. Exp. Stn., Stillwater, OK 74074.

## Registration of Germplasms

### REGISTRATION OF C-3 ALFALFA GERMPLASM

(Reg. No. GP 52)


The C-3 alfalfa (*Medicago sativa* L.) germplasm pool was released by the ARS USDA and the Colorado State Univ. Exp. Stn. in February 1975. It was developed to provide a genetically diverse population for use in breeding alfalfa varieties adapted to dryland conditions.

C-3 is interpollinated seed that traces to 63 cultivars, experimental synthetics, breeding populations, and germplasm releases. Most parental entries were selected because of their known adaptability to the environmental conditions of the Central and Northern Great Plains. The parental entries included the cultivars—'Agate,' 'Beaver,' 'Bison,' 'Cossack,' 'Dawson,' 'Drylander,' 'Iroquois,' 'Ladak,' 'Nomad,' 'Rambler,' 'Ramsey,' 'Roamer,' 'Sevelra,' 'Semipalatinsk,' 'Teton,' and 'Travois;' and the experimental and released germplasm populations (*Medicago falcata* L.) A69-13 from the Alaska Agric. Exp. Stn. and ARS, USDA; KS 10, KS 14, KS 15, 19 Kan. 2961, 19 Kan. 2962, 19 Kan. 2963, 19 Kan. 2964, 19 Kan. 2976; 19 Kan. 2977, 19 Kan. 2981, 19 Kan. 2983, 19 Kan. 2984, and 19 Kan. 2985 from the Kansas Agric. Exp. Stn. and ARS, USDA; Minn. Syn. M, Mn C-1, MnP-B1, MnPL-1, and BIC-6 from the Minnesota Agric. Exp. Stn. and ARS, USDA; N.S. 31, N.S. 33, N.S. 46, N.S. 47, A603, and A604 from the Nebraska Agric. Exp. Stn. and ARS, USDA; open-pollinated collections from pastures at the Northern Great Plains Research Center, Mandan, N.D., from ARS, USDA; Glad Valley Falcata, Falcata Composite, Vernal × Travois derivatives, 1108 × 247, H2-5 × 247, Low Foam Creeper Syn. 1, and other collections of open-pollinated seed from a seeding (including Cossack and Ladak) made in the early 1950’s at the Antelope Range Field Stn., Buffalo, S.D., from the South Dakota Agric. Exp. Stn.; A-169, U-5026, U-5039, U-5040 (P-550), U-5045, and U-5331 from the Utah Agric. Exp. Stn. and ARS, USDA.

Many parental entries were known to possess high levels of winterhardiness and tolerance to prolonged periods of drought. The pool includes diversity for growth habit, initiation of spring growth, leafiness, and flower color. Growth habit ranges from low-growing to upright and includes creeping, noncreeping, and broad-crowned types. Many entries have some *Medicago falcata* L. parentage.

Cycle 1 seed was produced in 1973 from a spaced-plant nursery of the 63 parental entries arranged in a randomized complete block design with eight replications and 10 plants/replication. Cycle 1 seed was produced in 1974 from a spaced-plant nursery of the 63 parental entries arranged in a randomized complete block design with eight replications and 10 plants/replication. A single plot consisted of one row 3.5 m long and the spacing between rows was 0.6 m. Both native bees and honeybees provided cross-pollination in each cycle under limited isolation at Fort Collins, Colo.

C-3 consists of equal weight of Cycle 2 seed from 63 entries. Seed stocks are maintained by the Plant Pathology and Bacteriology Research Laboratory, ARS-USDA, Colorado State University Laboratory, ARS-USDA, Fort Collins, Colo.

### REGISTRATION OF PR-MO2 MAIZE GERMPLASM

(Reg. No. GP 63)

Jeweus Craig, O. J. Webster, and W. M. Williams

PR-Mo2 ('Puerto Rico-Missouri 2') is a synthetic composite with wide genetic diversity released in 1975 and developed cooperatively by the Major Cereals in Africa Project (USAID Project 625-11-130-305); the Federal Agricultural Research, Ibadan, Nigeria; the Major Cereals in Africa Project (USAID Project 625-11-130-305); the Federal Agricultural Research, Ibadan, Nigeria; and the Institute of Tropical Agriculture, Mayaguez, Puerto Rico. See MNL, May 1976. 

PR-Mo2 was derived from Nigeria Composite B (NCB), which was developed from Median Composite (MEL) and NCB by six cycles of mass selection. NCB was developed by the Nigerian Federal Department of Agriculture, Mayaguez, Puerto Rico. See MNL, May 1976. 

Selection of the components of NCB was based on yielding ability or disease resistance in African and American germplasm. Any differences among the components were retained during the selection process. Each cultivar was grown in female rows. Male rows were planted from the bulked seed of the components. Ears from the male rows were harvested and used for bulking seed for female rows and male bulking used in the following cycle. 


Many parental entries were known to possess high levels of winterhardiness and tolerance to prolonged periods of drought. The pool includes diversity for growth habit, initiation of spring growth, leafiness, and flower color. Growth habit ranges from low-growing to upright and includes creeping, noncreeping, and broad-crowned types. Many entries have some *Medicago falcata* L. parentage.

Cycle 1 seed was produced in 1973 from a spaced-plant nursery of the 63 parental entries arranged in a randomized complete block design with eight replications and 10 plants/replication. Cycle 1 seed was produced in 1974 from a spaced-plant nursery of the 63 parental entries arranged in a randomized complete block design with eight replications and 10 plants/replication. A single plot consisted of one row 3.5 m long and the spacing between rows was 0.6 m. Both native bees and honeybees provided cross-pollination in each cycle under limited isolation at Fort Collins, Colo.

C-3 consists of equal weight of Cycle 2 seed from 63 entries. Seed stocks are maintained by the Plant Pathology and Bacteriology Research Laboratory, ARS-USDA, Colorado State University Laboratory, ARS-USDA, Fort Collins, Colo.