Jeff is a hard red winter wheat, which evolved from an F3 line from the cross 'Itana'/'Kiowa'/PI 178838 made at the Aberdeen branch of the Idaho Exp. Stn. in 1963. Jeff has been tested in Idaho dwarf bunt and yield trials since 1968 and in the western regional hard red winter wheat nursery since 1971 as Idaho Selection 0037.

Jeff is a tall variety with moderately stiff straw. Spikes of Jeff are inclined, awned, fusiform, and middense. Glumes are glabrous, brown, midlong, and midwide; shoulders middwide and oblique; beaks narrow, acuminate, and 2 to 3-mm long. Kernels are hard, red, midlong, and ovate; crease narrow to midwide and middeep; cheeks rounded; brush large and mid-

Based on percent seedling survival after infestation, KS10 is resistant to the pea aphid (Acyrthosiphon pisum Harris) in Kansas. Sixty-two plants were selected on the basis of seedling survival after infestation and selection of plants to support aphid colonies. Similarly, 18 plants resistant to the pea aphid (Acyrthosiphon pisum Harris), were selected from about 500 Ladak plants. These 80 selections were planted systematically in a seed-production nursery to facilitate recombination between the two groups of aphid-resistant plants. Independent culling was used in two subsequent cycles of selection for combined resistance to the pea and spotted alfalfa aphid. In the second cycle about 12,500 plants were screened and 200 plants were selected and recombined. In the third cycle 11,000 plants were screened and 95 were recombined to produce KS10, Syn 1. In the last cycle, selection also was made for resistance to bacterial wilt [Corynebacterium insidiosum (McCull.) H. L. Jen]

Registration of Germlasms

REGISTRATION OF KS10 PEST-RESISTANT
ALFALFA GERMPLASM1
(Reg. No. GP 44)

E. L. Sorensen, H. L. Hackerott, and T. L. Harvey

KS10 alfalfa (Medicago sativa L.) was developed by the Kans. Agr. Exp. Stn. and the ARS, USDA. It was released Apr 1974.

KS10 is a 95-clone synthetic derived from 'Ladak' by recurrent selection. About 50,000 Ladak seedlings were screened for resistance to biotypes of the spotted alfalfa aphid (Therioaphis maculata Buckton) present in Kansas. Sixty-two plants were selected on the basis of seedling survival after infestation and selection of plants to support aphid colonies. Similarly, 18 plants resistant to the pea aphid (Acyrthosiphon pisum Harris), were selected from about 500 Ladak plants. These 80 selections were planted systematically in a seed-production nursery to facilitate recombination between the two groups of aphid-resistant plants. Independent culling was used in two subsequent cycles of selection for combined resistance to the pea and spotted alfalfa aphid. In the second cycle about 12,500 plants were screened and 200 plants were selected and recombined. In the third cycle 11,000 plants were screened and 95 were recombined to produce KS10, Syn 1. In the last cycle, selection also was made for resistance to bacterial wilt [Corynebacterium insidiosum (McCull.) H. L. Jen].

Based on percent seedling survival after infestation, KS10 is resistant to the pea aphid (KS10 = 75%, Ladak = 4, Dawson = 59, Kanza = 84, and Washoe = 62; L.S.D. 0.05 = 12). KS10 is also resistant to the biotypes of the spotted alfalfa aphid in Kansas (KS10 = 71, Ladak = 4, Dawson = 61, Kanza = 88, and Washoe = 79; L.S.D. 0.05 = 15). In a bacterial wilt field test at St. Paul, Minn. KS10 was about equal to 'Vernal' and significantly more resistant than Ladak. KS10 also is more resistant than Ladak to Lepto leafspot [Leptosphaeriutina briostiana (Poll.) Graham & Luttrel]. It is similar to Ladak in resistance to bacterial leafspot [Xanthomonas alfalfae (Riker, Jones & Davis) Dows.] spring black stem and leaf spot (Phoma medicaginis Malbr. & Roum.); summer black stem and leaf spot (Cercospora medicaginis Ell. & Ev.); and downy mildew (Peronospora trifoliorum De Bary).

REGISTRATION OF CHICO
PEANUT GERMPLASM
(Reg. No. GP 2)

Wallace K. Bailey and Ray O. Hammons

Chico peanut (Arachis hypogaea L.) germplasm was named and released in Aug 1973 by the ARS, USDA, Georgia, Virginia, and Oklahoma Agr. Exp. Stns.

Chico was developed by line selection from introduction into the United States in 1960 from Italy, and had come originally from Krasnodar, USSR, where it was named Arachis Line No. 370 from 'VKIIMK 843'.

In observation nurseries and tests at the Coastal College of Agriculture Coastal Plain Station, Tifton, Tidewater Research Center, Suffolk, Va; Okla. Agr. Exp. Stns., Perkins; and the Beltsville Agr. Exp. Stns. of Georgia, Virginia, and Oklahoma. Chico has been found to possess attributes that are useful in commercial peanut cultivars. Chico is also superior to the earliest present cultivars in seed yield for production in home gardens in areas in the U.S. where the growing season is too short for even the earliest commercial varieties.

Plants of Chico (botanical subspecies Arachis hypogaea L. var. hypogaea, Wallon) are compact and comparatively small, with segmented pods, moderate constriction between seeds (approx. 28 g/100 seed). The plants have a yield potential is lower than that of present United States cultivars. Consequently, Chico is not released for commercial use also for production in the food trade.

It is believed that Chico will provide breeders a useful germplasm source for peanut improvement where early maturity may be desirable. This characteristic makes it particularly useful in breeding for early maturity in peanut.