REGISTRATION OF CULTIVARS

REGISTRATION OF 'CONDOR' BARLEY

'CONDOR' spring barley (*Hordeum vulgare* L.), (Reg. no. CV-227, PI 547163) was developed by Alberta Agriculture Crop Research, Lacombe, AB, Canada. It was selected from a cross made in 1975 between A.S.A, a hulless two-row of unknown origin, and TR410 from the University of Saskatchewan. TR410 was derived from a cross between 'Centennial' and 'Fergus'.

F_1 plants were grown in a growth chamber in the winter of 1975–1976. One thousand F_2 plants were grown in the field in the summer of 1976. From the F_3 to F_8 generation the population was grown alternately in a winter nursery at Sonora, Mexico, and a summer nursery at Lacombe. In the F_3 and F_4, a modified bulk procedure was used and from the F_5 to F_8, a modified pedigree system. In the F_8 generation, 200 lines were grown at Lacombe and a single line was selected, which became TR607. The first yield trials were conducted in 1980. From 1980 to 1985, yield tests were conducted at eleven locations in Alberta. This selection was entered as TR607 in the Western Canadian Two-row Cooperative Trials in 1985, 1986, and 1987. In 1985, 200 F_{11} head were selected, grown out as single rows, and evaluated for visual uniformity, test weight, and protein content. In 1988, 97 uniform lines were bulked to form the initial breeder seed of Condor.

Condor is a two-rowed, rough awn, hulless, medium maturing, spring feed barley. Juvenile plants have an intermediate growth habit. Leaves are medium green in color and medium in width, averaging 11 mm. Basal leaf sheaths are glabrous and auricles are purplish. Spikes are medium long, and nodding. Kernels have a yellow to amber aleurone and basal markings of a transverse crease. The rachilla is short with long rachilla hairs. Condor is medium-tall, ≈3 cm shorter than 'Abee'. Lower culm diameter is 4 mm. Stems are slightly waxy with a grass-green appearance.

Condor is adapted to the western, barley-producing areas of Canada with specific adaptation to the black soil zones of central Alberta where yields are comparable to the hulled cultivars Abee and 'Harrington'. Condor averages 2 to 2.5% higher protein in the grain compared with standard hulled cultivars. Its average protein content is 14.9%. The lysine content of the grain is relatively high, averaging 0.55 g 100 g^{-1} dry matter (DM). The resulting grain is higher in both digestible energy and digestible protein when fed to hogs. The β-glucan content of the seed is relatively high, averaging 5.2 g 100 g^{-1} of DM.

Condor is moderately susceptible to common root rot caused by *Helminthosporium* spp. It is moderately resistant to stem rust, caused by *Puccinia graminis* Pers. : Pers. It is moderately susceptible to the surface-borne smuts [causal agents *Ustilago avenae* (Pers.) Rostr. and *Ustilago hordei* (Pers.) Lagerh.] and to loose smut caused by *Ustilago tritici* (Pers.) Rostr. It is susceptible to septoria leaf blotch (caused by *Septoria passerinii* Sacc.), scald [caused by *Rhynchosporium secalis* (Oudem.) J.J. Davis], and net blotch (caused by *Pyrenophora teres* Drechs.). It shows some resistance to powery mildew (causal agent *Erysiphe graminis* DC. ex Merat f. sp. *hordei* Ém. Marchal).

Condor was released by Alberta Agriculture Crop Research in 1989 and is registered in Canada under the number 3015. Breeder seed will be maintained by Alberta Agriculture Crop Research, Lacombe, AB, and distributed through the SeCan Association, 200-57 Auriga Dr., Nepean, ON, Canada K2E 8B2.

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REGISTRATION OF 'ICGV 87187' PEANUT

'ICGV 87187' (Reg. no. CV-45, PI550930), which belongs to the spanish botanical group of peanut (*Arachis hypogaea* L. ssp. *fastigiata* Waldron var. *vulgaris* Hartz), was released in 1990 by the Central Subcommittee on Crop Standards, Notification, and Release of Varieties, Department of Agriculture and Cooperation, Ministry of Agriculture, Government of India for summer cultivation in Gujarat, northern Maharashtra, and Madhya Pradesh in India. It was designated as ICGS 37 during testing in All India Coordinated Research Project on Oilseeds (AICORPO) trials. It is also registered with the National Seed Registration Department, National Agricultural Research Center, Islamabad, Pakistan. In Pakistan, it forms a component line together with another ICRISAT groundnut cultivar, ICGV 87128 (4), of a recently released composite groundnut cultivar, BARD-699.

ICGV 87187 originated from a single-plant selection made in a natural hybrid population of the Indian cultivar 'Robut 33-1' (also known as Kadiri 3) in 1977–1978. This plant was grown in progeny rows for two seasons following pedigree method and later advanced to uniformity by bulk pedigree method. Its pedigree is (Robut 33-)-1-1-B_1-B_1-B_1-B_1-B_1. Robut 33-1 is an early-maturing virginia-type cultivar. The other parent of ICGV 87187 is unknown, but may have been a spanish-type cultivar, since the natural hybrids were identified by the presence of flowers on the-main axis, and sequentially branched spanish forms were subsequently observed in the segregating generations (3).

ICGV 87187 has shown an average pod yield superiority of 41.5% over the national control 'J 11', 27% over ICGV 87128, and 53% over 'JL 24' in various trials conducted for six years (1980–1981 to 1986–1987) by AICORPO. It has also outyielded popular cultivars 'GG 2', by 17%, and J 11, by 62%, in limited on-farm adaptive trials conducted in Gujarat (2).

ICGV 87187 has Decumbent 2 to Decumbent 3 growth habit, sequential flowering, and small to medium-sized el-

liptical dark-green leaves (1). It has four to five primary, and one to four secondary branches. The main axis height and crop canopy breadth are 16.5 and 30.3 cm, respectively. It matures in 110 to 120 d in India, and has a meat content of 70%. It has mainly two-seeded, medium-sized, attractive pods that are slightly reticulated with slight to moderate constriction and none to slight beak. Seeds are tan in color with a 100-seed mass of 53 g. Seed average 48% oil and 23% protein. Oil quality (oleic/linoleic acid ratio of 1.04) is similar to that of other popular cultivars such as J 11, JL 24, ICGS 11 and Kadiri 3(2).

ICGV 87187 has shown tolerance to end-of-season drought and bud necrosis disease in the field, and apparent tolerance to peanut mottle virus under artificial inoculation in the field(2). It is also insensitive to photoperiod. The ICRISAT Center, Patancheru, will maintain breeder seed.

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REGISTRATION OF 'MARC I' PEANUT

'MARC I' peanut cultivar (*Arachis hypogaea* L. subsp. *hypogaea* var. *hypogaea*) (Reg. no. CV-46, PI 552555) was developed by the Florida Agricultural Experiment Station and approved for release in 1990 (1). Tested experimentally as UF79308-1 or 72 × 78-11-1-1-B, Marc I was derived from a cross made in 1972 between a sister-line of 'Florunner' (F439-17-2-1-1) (2) and a component line of 'Early Bunch' (F459B-3-2-4-6-2-2-1) (3). The objectives of the cross were to select both runner and virginia market-types with improved yield and quality, early maturity, and reduced pod damage. The female parent came from the same cross as Florunner but had slightly smaller seed size and a somewhat better oil quality. The male parent showed excellent pod yields, early maturity, and less pod damage than some other selections. Pedigree selection was practiced among F_2–F_4 progeny of the cross. Marc I originally was tested as a component of UF79308 (72 × 78-11-1-*b3*-B), which was derived from a bulk of seed from three F_4 plants. Due to variability for seed size and oil chemistry in UF79308, individual component lines were generated from each F_4 plant and tested as UF79308-1, -2, and -3. The UF79308-1 was selected to release, since it possessed the best combination of acceptable traits (1).

Marc I plants have a runner or prostrate growth habit, with a more prominent mainstem and lighter green foliage than Florunner, with less vine growth and slightly smaller leaves. The pods and seed of Marc I mature ≈10 d earlier and tend to be more uniform than Florunner, but are similar in size, color, and texture to Florunner's seed and pods. Marc I averaged 79.9% TSMK (total sound mature kernels), 20.2% ELK (extra large kernels), 66.5 g 100-seed weight, and 1.0% other kernels, vs. 81.0% TSMK, 20.5% ELK, 65.7 g 100-seed weight, and 0.7% other kernels for Florunner in 15 Marianna, FL, tests (1982–1989). Marc I had a 12.2% higher pod yield than Florunner in the Marianna tests. Results from Gainesville, FL, tests gave similar comparisons in grade factors, but Marc I had only a 6.2% yield advantage over Florunner (1987–1989). No significant differences for average damaged kernel percentage between the two cultivars were observed at the two locations (1).

Marc I has a slightly higher oil content than Florunner (51.0 vs. 49.6%), with a somewhat higher oleic (O) (53.3 vs. 50.7%) and lower linoleic (L) (26.9 vs. 29.6%) fatty acid content. The iodine value for Marc I compared to Florunner (93.3 vs. 95.3) and O/L ratio (1.98 vs. 1.71) indicated that the oil quality of Marc I is somewhat better than for Florunner. Blanching and flavor tests on Marc I produced favorable results when compared to Florunner. March I tended to blanch better than Florunner, with no significant difference in taste tests from three labs (1).

Marc I should require about the same production practices as Florunner, with no known difference in pest reaction. Marc I, like Florunner, requires the initiation of a fungicide spray program at 30 to 40 d after planting in the southeastern USA to control late leafspot (*Phaeoisariopsis personata* (Berk. & M.A. Curtis) Arx (formerly *Cercosporidium personatum*) (4). The earlier maturity of Marc I should also allow for late May and early June plantings in the southern USA, with reduced risk of frost, compared with Florunner. Inquiries concerning Foundation Seed supply of Marc I should be directed to Florida Foundation Seed Producers, Inc., P. O. Box 309, Greenwood, FL 32443. Breeder seed will be maintained by the University of Florida Agricultural Experiment Station.

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