Registration of Crop Cultivars

REGISTRATION OF UC SIGNAL BARLEY1
(Reg. No. 142)
G. F. Worker, Jr., and C. W. Schaller2

‘UC SIGNAL’ barley (Hordeum vulgare L.) CI 15536, was developed at the Imperial Valley Field Stn., Univ. of Calif., El Centro. It was developed from a single plant selected in 1965 from the F2 generation of a bulk population grown for 11 generations (F2 to F11) in the semi-arid environment at the Imperial Valley Stn. The original bulk F1 population was received from the Agron. and Range Sci. Dep., Univ. of Calif., Davis, in 1973. The population was synthesized using male-sterile selections from C.C. XIV and C.C. XV as female parents and C.C. II, C.C. V, and C.C. XII as pollen sources.

UC Signal is a six-rowed, semi-smooth awned, early maturing, spring-type feed barley. It has medium short, weak straw and medium dense, erect spikes. The kernels are large, with medium blue aleurone color and short-haired rachilla. It has limited tolerance to the barley yellow dwarf virus.

Yield trials comparing UC Signal with cultivars being grown commercially in the Valley were conducted over a 6-year period at the Imperial Valley Field Stn. UC Signal outyielded ‘California Mariout,’ ‘CM 67,’ ‘Numar,’ and ‘UC 566’ by 27, 13, 15, and 15%, respectively. In eight location-year comparisons in the San Joaquin Valley its performance was slightly lower than UC 566 and CM 67.

UC Signal was released by the Univ. of Calif., Davis, in 1973. It is recommended for production in the lower desert areas, principally in the Imperial Valley.

Breeder seed will be maintained by the Dep. of Agron. and Range Sci., Imperial Valley Field Stn., Univ. of Calif., El Centro.

1 Registered by the Crop Sci. Soc. of Am. Received Mar. 21, 1974.
2 Specialist in agronomy, Imperial Valley Field Stn., Univ. of Calif., El Centro, CA 92243, and professor, Dep. of Agron. and Range Sci., Univ. of Calif., Davis CA 95616, respectively.

REGISTRATION OF PURCELL BARLEY1
(Reg. No. 143)
E. A. Hockett, J. A. Benson, and R. F. Eslick2

‘PURCELL’ barley (Hordeum vulgare L.), CI 16181, was developed cooperatively by the ARS, USDA, and the Mont. Agric. Exp. Stn., Bozeman. It was selected from a ‘Freja’*7/Vantage’ backcross, with the original cross being made in 1952. Following the third backcross, selection for stiff straw was made each backcross generation. The final selection (MT 8553-Stiff Freja) was made in 1968 and was derived from a single F4 plant. Purcell was released to growers in 1974.

Purcell is a two-rowed, midseason, mid-tall, white-kerneled, colorless aleurone spring feed barley, very similar to Freja in appearance. It is equal to Freja for test weight and plant height, but heads one day earlier and is superior for lodging resistance. It has nodding spikes with rough awns, long hairs on the rachilla, glumes covered with long hairs, and glume colorless aleurone spring feed barley, very similar to Freja in

REGISTRATION OF TAMNUT 74 PEANUT1
(Reg. No. 19)
C. E. Simpson and O. D. Smith2

‘TAMNUT 74’ peanut (Arachis hypogaea L.) is a Spanish type with characteristics very similar to ‘Starr’ peanut, a small yellow peanut, and to ‘Fidelity,’ a large white peanut. It is recommended for production in the lower desert areas, principally in the Imperial Valley.

Breeder seed will be maintained by the Univ. of Calif., Davis, in 1973. It is recommended for production in the lower desert areas, principally in the Imperial Valley.

Breeder seed will be maintained by the Dep. of Agron. and Plant Genet., Univ. of Calif., Davis, in 1975.

1 Registered by the Crop Sci. Soc. of Am. Received Mar. 21, 1974.
2 Professors, Dep. of Agron. and Plant Genet., Agron. and Range Sci., Univ. of Calif., Davis, CA 95616, respectively.

Received Mar. 29, 1975.

REGISTRATION OF MANKER BARLEY1
(Reg. No. 144)
D. C. Rasmusson and E. E. Bantlin

‘MANKER’ barley (Hordeum vulgare L.), developed by the Minn. Agric. Exp. Stn. and released Apr. 1, 1974. It was tested as M16 before release. The name is from a contraction of the words “many kernels” which is a distinguishing characteristic of the cultivar. Manker originated from a single F2 plant selected from the cross ‘2/NDB112/3/Vantage’/2/‘Kindred’/‘Jotun,’ which was grown in a winter nursery at Ciudad Obregon, Sonora, Mexico.

Manker is a six-rowed, rough-awned, spring barley. The kernels are covered, medium sized, with a short straw and a white aleurone. The spike is medium-long and erect. Manker is medium-early, mid-tall and has a strong straw. It is distinct from ‘Larker’ and other malting barley cultivars in having many kernels, more than 100/kernel. Grain yields of Manker have exceeded those of Larker by 9%.

Manker appears best adapted to the Red River Valley area of Minnesota. Quality testing, done in collaboration with the USDA Barley and Malt Lab., Madison, Wis., and Plant Pathol., Univ. of Minn., St. Paul, MN, shows that Manker differs from Larker and other malting barley cultivars in the Midwest by having a higher protein and malt extract content. Industry plant scale malting trials should be completed with the 1974 crop.

Breeder seed is maintained by the Minn. Agric. Exp. Stn., St. Paul, MN 55108.

1 Published with the approval of the director, Minn. Agric. Exp. Stn. as journal article no. 8,953, 1975.
2 Professors, Dep. of Agron. and Plant Genet., Univ. of Minn., St. Paul, MN 55108.