Ershabet is an early, two-rowed spring barley similar to Erbet in growth and seed characteristics. The glume awn is equal in length to the glume which is covered with long hairs. The spikes are lax, midlong, nodding, and have rough awns. The kernels have a white aleurone, long hairs on the rachilla, and an adhering, finely wrinkled hull. Ershabet is similar to Erbet for test weight, heading and maturity date, plant height, percent plump kernels, lodging, percent grain protein, and disease resistance. However, Ershabet exceeds Erbet in shatter resistance. Resistance to shattering, expressed as g/kernel on the measuring machine, is 16.4, 6.2, and 12.8 for Ershabet, Erbet, and Shabet, respectively. Ershabet averaged 5.2% higher in yield than Erbet in a 21 station-year comparison in Montana. In the 1976 and 1977 Western Dryland Spring Barley Nursery, grown at 27 locations, Ershabet performed similarly to Erbet for the characters measured. Because of its origin, Ershabet should be similar to Shabet for malting quality.

Ershabet is recommended for production where Erbet is adapted and is better adapted than most other cultivars under conditions where the growing season is short, moisture is limiting, and planting is delayed. It should be useful in barley growing areas in the western and Great Plains regions of the United States.

Breeder seed will be maintained by the Foundation Seed Stocks Committee, Department of Plant and Soil Science, Montana Agricultural Experiment Station, Montana State University, Bozeman, MT 59717.

REGISTRATION OF SURRY BARLEY

(T. M. Starling, H. M. Camper, Jr., and C. W. Roane)

'Surry' barley (Hordeum vulgare L.), CI 15689, was developed by the Virginia Agricultural Experiment Station and released in 1976. It was selected in the F2 generation from the cross 'Harrison'/3/'Cebada Capa'/Wong'/awnleted 'Hudson' selection. The awnleted Hudson selection came from a farmer's field of Hudson near Orange, Va., and appeared similar to Hudson in all respects except for the awnleted spike.

Tested initially as Va. 72-11-18, this cultivar was entered in the Uniform Semi-Hardy Nursery from 1975 through 1977. Survived all years, but was evaluated at several locations in Virginia over a 6-year period, 1975-1977. It was selected in the F3 generation from the cross 'Rapidan'/2/'Jefferson'/2/awnleted 'Maury', and 6% more than Jefferson and 2 days earlier than Harrison. In 31 yield trials conducted in Virginia, 'Surry' yielded 4% higher than 'Maury', 7% and 3% more than 'Jefferson' and 'Monroe' and 2% and 1% more than 'Monroe' and 'Harrison', respectively.

In the Uniform Semi-Hardy Nursery in 1975 and 1976 with 'Rapidan' and 4% higher than 'Barsoy'. In 44 yield trials conducted at eight locations in Virginia, it outyielded 'Rapidan' and 'Jefferson' by 6%, 9% and 12%, respectively. Under Virginia conditions, 'Surry' flowers about 3 days earlier than 'Rapidan' and 5 days later than 'Barsoy'. It was released as an alternative to 'Barsoy' for use in double-cropping with soybeans [Glycine max (L.) Merr.].

Compared with 'Rapidan', 'Surry' has slightly better test weight, is slightly taller, and has considerably more resistance to lodging. Like 'Rapidan', it is tolerant to the causal organism for leaf rust (Puccinia hordei Otth) and resistant to powdery mildew (caused by Erysiphe graminis D.C. f. sp. hordei Marchal). It is much improved over 'Rapidan' in tolerance to scald (caused by Rhynchosporium secalis (Oud.) Davis), net blotch (caused by Pyrenophora teres (Died.) Drechsler), and the barley yellow dwarf virus. While its winter hardiness is not as good as that of 'Henry', 'Maury', and 'Monroe', it is slightly improved over 'Rapidan' and is similar in hardiness to 'Barsoy'.

'Surry' is a winter feed barley, with early growth being semi-prostrate. The spike is six-rowed, short, dense, erect, and awnleted, with very short, rough awns occurring mainly on the central spikelets. Plants are midtall and midseason in maturity, with flag leaves which tend to be short and upright. The distance from the flag leaf to the spike ranges from 5 to 15 cm.

Auricles are white to faintly purple. Kernels are moderately plump with long rachilla hairs. Surry flowers about 3 days earlier than 'Rapidan' and 4% higher than 'Barsoy'. In 44 yield trials conducted in Virginia, it outyielded 'Rapidan' and 'Jefferson' by 6% and 12%, respectively. Under Virginia conditions, 'Surry' averaged 5% less than 'Maury', but 7% and 3% more than 'Jefferson' and 'Monroe', respectively. In the Uniform Semi-Hardy Nursery in 1975 and 1976, it outyielded 'Rapidan' and 4% higher than 'Barsoy'. In 44 yield trials conducted in Virginia, it outyielded 'Rapidan' and 'Jefferson' by 6%, 9% and 12%, respectively. Under Virginia conditions, 'Surry' flowers about 3 days earlier than 'Rapidan' and 5 days later than 'Barsoy'. It was released as an alternative to 'Barsoy' for use in double-cropping with soybeans [Glycine max (L.) Merr.].

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