Registration of Crop Cultivars

REGISTRATION OF SCHUYLER BARLEY
(Reg. No. 121)
Neal F. Jensen

'SCHUYLER' barley (Hordeum vulgare L. emend. Lam.), CI 11887, was selected from the hybrid of Hudson × Alpine. Both the 1956 cross and the line selection were made at Ithaca, New York. The single head row selection was tested as N.Y. 561B-3B-1. Schuyler was named and approved for release and 1969 seed production in July, 1968.

Schuyler is a 6-rowed, rough awned, feed type hardy winter barley. The straw is short. Maturity is mid-late. Schuyler has shown excellent resistance to powdery mildew and scald. The spike of Schuyler is large, compact, hexagonal in shape. The kernels are medium large, plump, with white aleurone.

Prior to release Schuyler was evaluated in 97 nurseries, including experiment stations cooperating in the USDA Uniform Hardy Barley Nurseries. Any average yield of 3896 kg/ha of Schuyler was 7% above that of 'Hudson.' Schuyler showed greater winter survival, less lodging and was 15 cm shorter in height than Hudson. The later maturity, compared with Hudson, might be considered an unfavorable attribute. Test weight per bushel is good but not as high as Hudson, an unusually high test weight variety.

Performance data and other information on Schuyler were reported by Jensen.

Seed production will be Breeder, Foundation, Registered and Certified. Breeder seed will be maintained by Cornell University.

REGISTRATION OF BONNEVILLE 70 BARLEY
(Reg. No. 122)
Wade G. Dewey

'BONNEVILLE 70' spring barley (Hordeum vulgare L. emend. Lam.), CI 10640, was developed cooperatively by the Utah Agricultural Experiment Station and the Plant Science Research Division, Agricultural Research Service, U. S. Department of Agriculture.

Seed of the popular, but tough-threshing, cultivar 'Bonneville' was sent to the Brookhaven National Laboratory, L. I., New York, for irradiation in 1952. Out of several thousand X₂ plants, a number of brittle-awned types were isolated which threshed much better than regular Bonneville but which were otherwise morphologically indistinguishable from it. One of these lines gave rise to Bonneville 70. This cultivar was released in 1969.

In addition to their morphological similarity, Bonneville and Bonneville 70 appear to be essentially identical in maturity, yield and test weight. The only characteristic besides threshability which seems to have been altered significantly is field resistance to loose smut. Under field conditions, Bonneville 70 frequently shows more smut than does Bonneville. When the cultivars are artificially inoculated, however, they are equally susceptible.

Bonneville 70 is a white kerneled, six-rowed, smooth-awned spring barley. It is midtall, stiff strawed, has wide leaves and a dense spike, and is late in maturity. It performs best on medium-to-heavy soils under conditions of good moisture and fertility. It is being recommended as a replacement for Bonneville.

Breeder seed will be maintained by the Utah Agricultural Experiment Station, Logan, Utah 84321.