Registration of Crop Cultivars

REGISTRATION OF DAYTON BARLEY1

(Deg. No. 103)

Dale A. Ray2

'Dayton' barley (Hordeum vulgare L. emend. Lam.), CI 5617, was selected from Composite Cross × (CI 6025), completed in 1940 by H. V. Harlan, M. L. Martini, and G. A. Wiebe, of the U.S. Department of Agriculture. Bulk F2 seed from the last cross of the composite was made available to the Ohio Agricultural Experiment Station (now Ohio Agricultural Research and Development Center) at Wooster in 1942. The single head-row selection made by C. A. Lamb in 1947 was increased and tested as Ohio selection CH 47-115. It was named Dayton and released in 1955.

Dayton is a six-rowed, semismooth awned winter barley; early growth semiponestrate; plant early, midtall; spike lax, midlong, nodding; rachilla short haired; kernels light blue, midlong, weight 32 to 39 mg; hulls slightly wrinkled to semiwrinkled. Description in detail has been published previously.3

Dayton is moderately winter hardy, early maturing, and stiff straw. Immediately following release, Dayton became the predominant barley variety grown in Ohio and was recommended in the state until replaced in 1968 by the recent release of harder, more disease-resistant varieties. It has been grown extensively in Ohio and Kentucky and in limited acreages in adjoining and certain southeastern states.

Breeder seed was supplied by the Department of Agronomy to Ohio Foundation Seeds, Inc., Croton, Ohio. Subsequent seed production was limited to the sequence of foundation, registered or certified seed classes.

Dayton has been grown extensively in Ohio and Kentucky and in limited acreages in adjoining and certain southeastern states. Breeders' and certified seed classes. Foundation, registered or certified seed is still produced in limited quantities in Tennessee, Kentucky, and Ohio.

1 Registered by the Crop Science Society of America. Received Aug. 2, 1968.
2 Assistant Chairman and Professor of Agronomy, The Ohio State University, Columbus, Ohio, and The Ohio Agricultural Research and Development Center, Wooster, Ohio 44691.

REGISTRATION OF BRIGGS BARLEY2

(Deg. No. 104)

C. W. Schaller and J. D. Prato2

'Briggs' barley (Hordeum vulgare L. emend. Lam.), CI 13682, UC D 27, was developed at the University of California, Davis. It is a pure line selection from the backcross, 'California Mariout' × 'Arivat.' Final selection was made in 1960.

Briggs is a six-rowed, semismooth awned, spring-type feed barley. The kernels are large, white aleurone, with a long-haired rachilla. In most respects, it is similar to the parental variety, Arivat, including early growth, foliage coloration, kernel size and maturity. Major differences include a slight reduction in height, slightly stiffer straw, wider adaptation and higher yield. Although adapted to the same general area, Briggs has shown an 11 percent yield superiority over Arivat in 28 location-year tests and has exhibited less lodging.

Briggs was released by the University of California, Davis, in 1966. It is well adapted to the Sacramento Valley and Coastal area of California. Its performance has also been comparable to that of California Mariout in the San Joaquin and Imperial Valleys. Breeder seed will be maintained by the Agronomy Department, University of California, Davis.

The variety is named in honor of the late Dean F. N. Briggs, cereal breeder and geneticist, department chairman and the first Dean of the College of Agriculture at Davis.

REGISTRATION OF NUMAR BARLEY1

(Deg. No. 109)

C. W. Schaller and J. D. Prato2

'Numar' barley (Hordeum vulgare L. emend. Lam.), CI 15685, UC D 1920, was developed at the University of California, Davis. It is a F2 generation selection from the third backcross, 'California Mariout' × 'Arivat.' Final selection was made in 1960.

Numar is a six-rowed, smooth-awned, early-maturing, spring-type feed barley. It has short, stiff straw and medium-dense, erect spikes. The kernels are large, medium to dark blue aleurone, with a long-haired rachilla. Its early growth is similar to the recurrent parent, California Mariout; however, it is two days later in maturity, slightly taller and has appreciably stiffer straw.

Numar was released by the University of California, Davis, in 1966. It appears to combine the adaptation features of both parents, being equal or superior to the best parent at all test locations throughout the Sacramento, San Joaquin and Imperial Valleys of California. In 28 location-year tests, Numar has shown a yield superiority of 14 and 10 percent over California Mariout and Arivat, respectively. The area of major production will be in the San Joaquin and Imperial Valleys and Southern California.

Breeder seed will be maintained by the Agronomy Department, University of California, Davis 95616.

REGISTRATION OF YORK SOYBEANS1

(Deg. No. 70)

T. J. Smith2

'York' soybeans [Glycine max. (L.) Merr.] originated as an F3 plant selection from the cross 'Dorman' × 'Hood.' It was developed by the Virginia Agricultural Experiment Station in a cooperative program with the U.S. Regional Soybean Laboratory. Before release York was identified by the number V61-20. It is classed in maturity Group V and is best adapted to the Coastal Plain area of Maryland, Virginia, and North Carolina.

York plants are well branched, have heavy foliage, purple flowers, and gray pubescence. Seeds are slightly off-round with buff hilum, yellow cotyledons and yellow seed coats, and will average more than 2,500 per pound. Seeds have been free of mottingt and purple stain under conditions where other types were severely mottilled or stained. Maturity is 9 days later than Hill and 2 days earlier than Dare.

York has been tested on a regional basis for 4 years. Seed yields have averaged 5% above 'Dare' in the area of best adaptation. Growth characteristics are very similar to those of Dare.

York was released in 1967 in Maryland, Virginia, and North Carolina. The Agronomy Department, Virginia Polytechnic Institute, will be responsible for maintenance of breeder seed.

1 Registered by the Crops Science Society of America. Received Aug. 2, 1968.
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