REGISTRATION OF CROP CULTIVARS

flower introductions from the 1960 world safflower collection. This normal hull selection was obtained from a lower Yellowstone River Valley site continuously cropped to safflower since 1961. AC-1 is a high seed oil content cultivar with a purple-striped hull developed by Anderson Clayton Company, Phoenix, Ariz.

Sidwell is an F3 composite of 12 F2 plants selected for resistance to Alternaria leaf spot and bacterial blight, caused by Pseudomonas syringae. The seeds have a predominantly striped hull. The flowers are yellow with an occasional red segregate. Sidwell. Sidwell plants are predominantly spiny and average one day later in flowering than S-208. S-208 is a normal hull cultivar commercially grown in Montana and North Dakota and developed by Seedtec International Inc., Woodland, Calif. Mature plants average about 4 cm taller than S-208 under dryland conditions and 6 cm taller under irrigated conditions. Sidwell has greater resistance to Alternaria leaf spot and bacterial blight than S-208. Seeds are higher in test weight than S-208, averaging 1.4 kg/ha more than S-208 in 9 tests over a 3-year period. In the same tests conducted at Sidney, and Williston, Sidwell averaged 4.8% less in seed oil content on a 8% moisture basis and 4.4% less in oil/ha than S-208. The seed yield and oil percent of Sidwell over the 3-year period averaged 1754 kg/ha and 32.8% respectively.

Sidwell was released as an interim variety for production in eastern Montana and eastern North Dakota until further improved varieties become available. Its production reduces the risk of yield losses due to Alternaria leaf spot and bacterial blight diseases and helps to stabilize the yields of safflower in this production area.

Breeders seed will be maintained by the Eastern Agric. Res. Ctr., P.O. Box 393, Sidney, MT 59270.

J. W. BERGMAN AND N. R. RIVELAND

References and Notes


M 81E SWEET SORGUM

'M 81E' is a sweet sorghum, Sorghum bicolor (L.) Moench, (Reg. No. 121) cultivar developed for sirup and fermentable sugar production. The cultivar was developed at the U. S. Sugar Crops Field Station, Meridian, Miss. and released by the cooperative research program of USDA-ARS and the Agricultural Experiment Station of Alabama, Florida, Georgia, Kentucky, Mississippi, and South Carolina. M 81E was selected in 1967 from the F2 progeny of a brown appearing seed because of the presence of a pigmented testa. The endosperm is normal, nonwaxy. Necrotic plant color is purple and culms are juicy. The seed coat is underlain by a brown testa, and the endosperm is mostly starchy. The coleoptile is green.

M 81E is highly resistant to leaf anthracnose and stalk red rot, both caused by Colletotrichum graminicola and Peronosclerospora sorghii. (Weston and Uppal) C. G. Shaw. It has good resistance to downy mildew caused by Puccinia purpurea Cke. but tolerates most herbicides.

M 81E is a late maturing cultivar that matures about 1 week later than 'Theis'. It is similar to Theis in yield of gross and stripped stalks, sirup, and sugar. The sirup from M 81E has mild sorghum flavor, amber color, and excellent quality. Information on sirup, biomass, and fermentable sugar production has been published (1). The cultivar is adapted to the USA.

Breeder seed will be maintained at the U.S. Sugar Crops Field Station, Meridian, MS 39301.

DEMPSEY M. BROADHEAD AND NATALE ZUMMO

References and Notes


ROLAND WHEAT

'ROLAND' soft red winter wheat (Triticum aestivum L., Reg. No. 670), CI 17716 was developed by the University Agricultural Experiment Station in cooperation with USDA-ARS and released in 1977. Roland was selected from the cross 'Arthur'/NY 5726. The Arthur parent was once a widely grown and important soft red winter wheat cultivar developed at the New York Agricultur Experiment Station.

Roland was selected from the cross 'Arthur'/NY 5726. The Arthur parent was once a widely grown and important soft red winter wheat cultivar developed at the New York Agricultur Experiment Station.

Roland was tested in the Uniform Eastern Soft Red Winter Wheat Nursery from 1973 to 1977 and advanced yield trials since 1973. It was designated as a high yielder during development and testing prior to its release. The disease and insect resistance of Roland is similar to Theis. Roland is a semi-dwarf white winter wheat with a complex pedigree including 'Redcoat', 'Genesee', 'Yorkswear', 'Norin 10', and 'Breda'.

Roland was tested in the Uniform Eastern Soft Red Winter Wheat Nursery from 1973 to 1977 and advanced yield trials since 1973. It was designated as a high yielder during development and testing prior to its release. The disease and insect resistance of Roland is similar to Theis. Roland is a semi-dwarf white winter wheat with a complex pedigree including 'Redcoat', 'Genesee', 'Yorkswear', 'Norin 10', and 'Breda'.