REGISTRATION OF CROP CULTIVARS

spot and net blotch, incited by Helminthosporium sativum Pam., King, and Bakke and Pyrenophora teres Drechs., respectively, than Klages at three locations each in Montana and North Dakota. Lewis is similar to Clark and Hector in tolerance to common root rot, incited by Cochliobolus sativus (Ito & Kurib) Drechs. ex Dast., but more tolerant than Klages or ‘Shabet’ (1). In 1979 to 1981 Montana and Western Regional yield trials, MT 547123 yielded about 7% more than Klages in 98 trials. In the 1983 Western Regional Spring Barley Nursery, Lewis yielded 10% more than Klages and 1% less than ‘Steptoe’ in a 17 environment comparison. In the 1983 Western Regional Dryland Spring Barley Nursery, however, Lewis yielded 5% more than Steptoe in a 14 environment comparison. Lewis yielded 111 and 96% of Klages and Steptoe, respectively, in the 10 1983 Montana yield trials.

Lewis appears to be similar in malting quality to Klages from 34 Montana and Western Regional nursery samples grown in 1979 to 1982 (2). Pilot scale evaluation of malting and brewing quality of Lewis in 1979 in cooperation with the American Malting Barley Association (formerly Malting barley Improvement Association) indicated quality similar to Klages. Final approval of Lewis as a malting barley awaits further pilot and plant scale tests. Lewis is recommended in Montana as a feed barley under irrigated and high precipitation conditions. It has feed quality superior to Steptoe (2).

Breeder and foundation seed of Lewis will be maintained by Foundation Seed Stocks, Plant and Soil Science Dep., Montana Agric. Exp. Stn., Montana State Univ., Bozeman, MT 59717. The USDA has no seed for distribution.

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References and Notes


REGISTRATION OF 'BIGBEE' BERSEEM CLOVER

‘BIGBEE’, a winter-hardy berseem clover (Trifolium alexandrinum L.) (Pers. ex Pers.) var. ‘BIGBEE’, was developed cooperatively by the USDA-ARS and the Mississippi Agricultural and Forestry Experiment Station. Bigbee is a selection for winter hardiness. Bigbee is the only cultivar of berseem clover that can survive north of the Gulf Coast and Peninsular Florida. The level of winter hardiness in Bigbee gives it the same hardiness from the Italian cultivar Sacromonte. Selection was made during the growing seasons of 1970 to 1971 and 1971 to 1972. In January 1972, stands of Sacromonte were lost in tare over a 4.0 X 19 mm screen than Bigbee subjected to —15 °C and —18 °C within the same week.

Nodak was tested as NDP-912 in the national Cooperative Dry Bean Nursery (CDBN) in 1982 and 1983. Nodak has outyielded both ‘UI-114’ and the check cultivar, by 7% when averaged over 19 locations. Nodak has effective resistance to the prevalent races of bean rust caused by Uromyces appendiculatus (Pers. ex Pers.) Unger var. appendiculatus (syn. U. phaseoli (L.) (Reg. no. 48), was developed cooperatively by the North Dakota Agric. Exp. Stn. and New York 15 strains of bean common mosaic virus.

Nodak has outyielded all pinto entries except the cultivar ‘Holberg’, earlier than either UI-114 or Olathe. Nodak has higher weight than UI-114, although fewer seeds were lost in tare over a 4.0 X 19 mm screen than UI-114 or Olathe, conducted by Helen Koehler, Home Economics Research Center, Washington State Univ., Pullman, WA, indicated that cooked Nodak beans are similar to the control cultivar, pinto, for texture, flavor, and nutritional factors.

Nodak is resistant to the curly top virus and to the Type 3 bean rust caused by Uromyces appendiculatus (Pers. ex Pers.) Unger var. appendiculatus (syn. U. phaseoli (L.) (Reg. no. 47), was developed cooperatively by the USDA-ARS and the Mississippi Agricultural and Forestry Experiment Station. Bigbee is a selection for winter hardiness. Bigbee is easily established, with vigorous seedlings and crimson clover (T. incarnatum L.). Bigbee is easier to establish than Klages at three locations each in Montana and North Dakota. Lewis is similar to Clark and Hector in tolerance to common root rot, incited by Cochliobolus sativus (Ito & Kurib) Drechs. ex Dast., but more tolerant than Klages or ‘Shabet’ (1). In 1979 to 1981 Montana and Western Regional yield trials, MT 547123 yielded about 7% more than Klages in 98 trials. In the 1983 Western Regional Spring Barley Nursery, Lewis yielded 10% more than Klages and 1% less than ‘Steptoe’ in a 17 environment comparison. In the 1983 Western Regional Dryland Spring Barley Nursery, however, Lewis yielded 5% more than Steptoe in a 14 environment comparison. Lewis yielded 111 and 96% of Klages and Steptoe, respectively, in the 10 1983 Montana yield trials.

Lewis appears to be similar in malting quality to Klages from 34 Montana and Western Regional nursery samples grown in 1979 to 1982 (2). Pilot scale evaluation of malting and brewing quality of Lewis in 1979 in cooperation with the American Malting Barley Association (formerly Malting barley Improvement Association) indicated quality similar to Klages. Final approval of Lewis as a malting barley awaits further pilot and plant scale tests. Lewis is recommended in Montana as a feed barley under irrigated and high precipitation conditions. It has feed quality superior to Steptoe (2).

Breeder and foundation seed of Lewis will be maintained by Foundation Seed Stocks, Plant and Soil Science Dep., Montana Agric. Exp. Stn., Montana State Univ., Bozeman, MT 59717. The USDA has no seed for distribution.

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References and Notes


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