REGISTRATION OF 'NOBLE' BARLEY

'NOBLE' barley (Hordeum vulgare L.), PI 5 1 1390 (Reg. no. 212), was developed by Alberta Agriculture Crop Research, Lacombe, Alberta, Canada. It was selected from a cross made in 1973 between a selection from BrY63-4, a bulk from Agriculture Canada, Brandon Manitoba, and 'Galt'. BrY63-4 gave rise to 'Klondike' barley.

F1 plants were grown in growth chambers during the winter of 1973 to 1974. One-thousand F2 plants were grown in the field in the summer of 1974. A modified bulk procedure was utilized in the F1 and F2 generations in a winter nursery at the Centra de Investigacione Agricolas del Noroeste (CIANO) Research Station near Cd. Obregon, Sonora, Mexico and in the summer nursery at Lacombe, Alberta, respectively. Single plant selections were made in the F2 generation and grown in head rows, alternately in Mexico and Alberta in the F3 through F8 generations. During the summer of 1977, H73052061 was selected from 200 lines grown at Olds, Alberta in single row plots. The first yield trials were conducted in 1978 at three locations in Alberta. During the years 1979, 1980, and 1981, this line was tested at eleven locations in Alberta and it was entered as BT 518 in the Western six-row Cooperative trials in 1982, 1983, and 1984. In 1979, 200 F6 head rows were evaluated visually and 183 true-to-type head rows were bulked to form the initial breeders seed of Noble.

Noble is a six-rowed, smooth awned, medium maturing, spring feed barley with nodding, semi-lax spikes. Juvenile plants have an intermediate growth habit. Leaves are medium green in color and medium wide, averaging 20 mm in width. Basal leaf sheaths are glabrous and auricles are white. Spikes are strap shaped, medium long, and nodding. The covered kernels have a yellow aleurone and basal markings of a transverse crease. The rachilla is medium long with medium length rachilla hairs. Straw of Noble is mid-tall and averages 6 mm in thickness. Stems are slightly waxy with a bluish-green appearance.

Noble is adapted to the brown soil zones of central and southern Alberta, where drought stress is prevalent during the growing season. It also is well adapted to irrigated areas of southern Alberta. Yield of Noble has exceeded that of Galt by 6% in irrigated tests in southern Alberta and that of Galt by 16% and of Bonanza by 23% in dryland production in Southcentral Alberta brown soil zones. It matures approximately 2 d later and is 20 cm shorter than Bonanza. It is superior to its parents in lodging resistance and has significantly stiffer straw than the standard height cultivars commonly grown in Alberta.

Noble is moderately susceptible to common root rot caused by Helminthosporium species. It is moderately resistant to stem rust (caused by Puccinia graminis f. sp. tritici Eriks & E. Henn.) and is moderately resistant to the surface borne smuts (caused by Ustilago nuda Tapke and Ustilago hordei (Pers.) Lagerh.). It is moderately susceptible to loose smut (caused by Ustilago nuda (Jens.) Rostr.) and to septoria leaf blotch (caused by Septoria passerinii Sacc.). Noble is susceptible to both scald and net blotch (caused by Rynchosporium secalis (Oud.) J.J. Davis and Pyrenophora teres Drechs., respectively) in seedling greenhouse tests, but shows the same resistance as Galt in the field.

Noble was released by Alberta Agricultural Crop Research in 1987 and is registered in Canada under the no. 2770. Breeders seed will be maintained by Alberta Agriculture Crop Research, Lacombe, Alberta, and distributed through the SeCan Association, 512-885 Meadowlands Drive, Ottawa, Ontario, Canada K2C 3N2.


References and Notes
1. Alberta Agric. Crop Res. Cereal Breeding Program, Bag service no. 47, Lacombe, Alberta, Canada T0C 1S0. Registration by CSSA. Accepted 30 July 1988. *Corresponding author.

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REGISTRATION OF 'MULTICUT' BERSEEM CLOVER

'MULTICUT' berseem clover (Trifolium alexandrium L.), (Reg. no. 77) (PI 520601), a winter-vigorous cultivar, was developed and released in 1988 by the University of California Agricultural Experiment Station and Cooperative Extension Service for green chop, silage, pasture, cover crop, and hay use with supplemental irrigation in the central valley of California and in the irrigated desert valleys of southern California and northern Mexico. Multicut is a unique cultivar that was unnamed at its source, a seed vendor in France who obtained it from an unidentified original source abroad. All efforts to locate the original source have failed. The seed