**REGISTRATION OF KLONDIKE BARLEY**

(Reg. No. 174)

R. I. Wolfe

'KLONDIKE' barley (Hordeum vulgare L.), CI 15964 (CN 452, BT 323, Br. YG3-4), was developed at the Agriculture Canada Research Station, Brandon, Manitoba, Canada, which is part of the Eastern Prairie Barley Group. It was licensed for sale in March 1976, No. 1855, and released that spring to seed growers in western Canada. It is an F3 selection made in 1969 from the cross, 'Galt'/NDB133, where NDB133 is 'Vantage'/Jet/Vantmore/32/Parkland/4/Dickson.'

Klondike is a six-rowed, smooth awned, spring habit barley that does not meet Canadian malting quality standards. Klondike is resistant to Puccinia graminis f. sp. tritici Eriks, and E. Henn. It has resistance from the cultivar Jet (CI 967) to Ustilago nuda (Jens.) Rostr., but is susceptible to some collections of this pathogen made in Canada since 1972. It is moderately susceptible to Ustilago hordei (Pers.) Lagerh. and Ustilago nigra Tapke. It has some field resistance to Pyrenophora teres (Pied.) Drechsl., Cochliobolus sativus (Ito and Kurib.) Drechsler. ex Dastur, and Septoria pasqualis Sacc. It is moderately susceptible to Rhynchosporium secalis (Oud.) J. J. Davis, and susceptible to Puccinia hordei Orth. and Erysiphe graminis (D.C.) ex Merat f. sp. hordei Em. Marchal. Its resistance to common root rot (caused by Helminthosporium species), as evidenced by subcrown internode staining, is intermediate between 'Bonnaz' and its parent Gait.

Klondike was released because of its high yield across the Canadian prairies, particularly in the eastern and central portions, where in licensing trials, 1973 to 1975, it outyielded the highest yielding check, Bonanza, by 7%. Klondike has had increasing acceptance by producers in Manitoba and parts of Alberta, reaching 7.0 and 3.4% of the barley harvest in these respective provinces in 1979.

Klondike is mid-late in maturity, being about 1 day later and 8 cm shorter than Bonanza.

The principle spike and kernel characteristics are as follows:

**Spike.** Six-rowed, mid-long, mid-lax to lax, base emerges 2 to 12 cm, semi-erect; lemma awn long, smooth up to one-fourth the distance from the tip; glume awn twos to four times the length of the glume; glume hairs short, numerous, generally confined to a broad band; rachis edges have a moderate to numerous number of very fine short hairs.

**Kernels.** Hulled, mid-size; hull smooth to slightly wrinkled; aleurone white; rachilla mid-long, few long; hairs short; barbs on lateral veins few to 15; basal marking on incomplete horseshoe depression; test weight slightly superior to Bonanza; percent seed over a 2.38 mm slotted screen inferior to Bonanza.

Breeder seed is being maintained by the Seed Section, Agriculture Canada Research Station, Box 440, Regina, Saskatchewan S4P 3A2, Canada.

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1 Registered by the Crop Sci. Soc. of Am. Accepted 29 Aug. 1980.
2 Research scientist, Agriculture Canada Research Station, Brandon, Manitoba RTA SZ7, Canada.

**REGISTRATION OF ‘APPALOW’ SERICEA LESPEDEZA**

(Reg. No. 10)

Donald S. Henry and N. L. Taylor

'APPALOW,' a prostrate sericea lespedeza, Lespedeza cuneata (Dumont) G. Don, was developed by the Soil Conservation Service, USDA, and released in 1978 in cooperation with the Kentucky Agric. Exp. Stn.

The cultivar is a seed increase of a strain (P.I. 386452) introduced from Japan in 1959 by the Soil Conservation Service. After testing at Beltsville, Md., the strain was evaluated for erosion control as Ky 520 at Quicksand, Ky. It was increased for several generations with only natural selection at Quwwsland.

Appalow is a hardy, perennial, warm-season cultivar recommended for use in areas where soil conservation is of maximum importance. Appalow is the only prostrate sericea lespedeza cultivar available. Its decumbent stems are seldom more than 15 to 45 cm tall. Individual plants may cover an area 75 by 75 cm. Stems are more numerous and smaller in diameter than 'Serala' or 'Interstate' sericea lespedeza. The leaves are small, dark green, and more numerous than those of other sericea cultivars.

Area of adaption is similar to that of other sericea cultivars. It has performed satisfactorily on highway roadbanks and surface mine spoils in Georgia, North Carolina, South Carolina, Kentucky, and Tennessee. Owing to its prostrate and dense growth, it affords minimum maintenance and maximum protection of the soil.

Two classes of seed beyond breeder seed are recognized: foundation and the new breeder seed is maintained by the Soil Conservation Service, Quicksand, Ky. and foundation seed by the Kentucky Foundation Seed Project, Dep. of Agronomy, Univ. of Kentucky, Lexington, KY 40546.

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1 Registered by Crop Sci. Soc. of Am. Accepted 10 Oct. 1980.
2 Registered by Crop Sci. Soc. of Am. The investigation reported in this paper (80-3-171) was in connection with a project of the Kentucky Agric. Exp. Stn. Lexington, KY 40546 and is published with approval of the Director. Accepted 10 Oct. 1980.
3 Plant materials specialist, USDA, Soil Conservation Service, Lexington, KY 40546 and is published with approval of the Director. Accepted 10 Oct. 1980.

**REGISTRATION OF YORKTOWN II PERENNIAL RYEGRASS**

(Reg. No. 70)

C. R. Funk, W. K. Dickson, F. B. Ledeboer, and K. J. McVeigh

'YORKTOWN II' perennial ryegrass (Lolium perenne L.) is a six-clone synthetic cultivar developed cooperatively by Lofts Pedigreed Seed, Inc. and the New Jersey Agric. Exp. Stn. in 1977. Lofts Syn D-1 was the experimental designation of Yorktown II.

Yorktown II is a leafy, persistent, turf-type ryegrass capable of producing an attractive, moderately dark-green turf of finer texture, greater density, and a slower rate of vertical growth than many other perennial ryegrass cultivars. This cultivar has shown the good winter performance and resistance to the brown blight disease (caused by Helminthosporium ucatum Dreschler) characteristic of Yorktown. Additionally, it has shown improvements over Yorktown in summer performance and in resistance to the large brown patch disease caused by Rhizoctonia solani Kuhn and some strains of crown rust incited by Puccinia coronata Corda var. lolii Brown. Yorktown II has the rapid germination and ease of establishment characteristic of most other perennial ryegrasses. Its mowing qualities are superior to common perennial ryegrass and many other cultivars, although clean mowing may be difficult under certain stress conditions unless a sharp mower is used. Yorktown II has shown good performance in trials in most areas where turf-type ryegrasses are well adapted. It has performed well for fall or winter overseeding of dormant bermudagrass (Cynodon dactylon).