REGISTRATIONS OF CULTIVARS

Registration of ‘Aquila’ Spring Barley

‘Aquila’ spring barley (Hordeum vulgare L.) (Reg. no. CV-319, PI 635120) was developed at the Utah Agricultural Experiment Station and released in 2003. Aquila has been tested as the breeding line UT97B1480-1632 and is a six-rowed spring feed barley. Its main characteristics are an early heading date, a low propensity for lodging, and a test-weight equal or superior to that of two-rowed cultivars.

Aquila was named after the genus name of several cagile species, including the golden eagle (Aquila chrysaetos L.). This species is found in mountainous regions, steppes, and high elevation deserts of most of the northern hemisphere.

Aquila has the pedigree UT-S.D.B1-1009/M72-395/3/Utah Short#2//ID633019///Woodvale//4//Steptoe//M27////Westbred Gustoe’ (Dewey, 1972; Muir and Nilan, 1973). UT-S.B1-1009 is a sib to ‘Bracken’ (Albrechtsen, 1993). Utah Short #2 is a six-rowed, semidwarf line selected at Logan, UT, from the cross S.D.S.S (a South Dakota breeding line)/’Primus’ (Price, Steptoe (11.1%) (36%). Aquila has the average height of Aquila (76.2 cm) was similar to that of Steptoe (75.4 cm) but significantly greater than that of Baronesse (70.7 cm) (P = 0.05). In 2002 to 2003 (5 site-years), average percentage of protein of grain for Aquila (12.3%) was lower than that of Baronesse (13.5%) but higher than that of Steptoe (11.1%) (P = 0.05). Aquila has been tested for four consecutive years (2000–2003) in several locations in the state of Utah (15 site-years). Aquila’s yield (5380 kg ha1) is not significantly different from that of Steptoe (5465 kg ha1) and Baronesse (5520 kg ha1) (P = 0.05). In these Utah trials, test weight for Aquila (680.0 kg m3) is similar to that of Baronesse (679.5 kg m3) and significantly higher than that of Steptoe (653.8 kg m3) (P = 0.05). Aquila’s performance in rainfed conditions is still under testing.

Aquila has shown field resistance to barley loose smut [caused by Ustilago nuda (Jens.) Rostr.] and covered smut [caused by U. hordei (Pers.) Lagerh.]. Preliminary tests have shown Aquila to be susceptible to barley stripe rust (caused by Puccinia striiformis Westend.).

The generation sequence of seed production of Aquila is Breeder, Foundation, Registered, and Certified. Breeder seed is maintained by the Utah Agricultural Experiment Station, Department of Plants, Soils, and Biometeorology, Utah State University, Logan, UT 84322-4820. Foundation Seed is available from the Utah Crop Improvement Association, Utah State University, Logan, UT 84322-4820. U.S. Plant Variety Protection of Aquila has been applied for.

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References


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