AC Taber was selected from the progeny of a cross ‘HY320’ × BW553. Resistance to common bunt [caused by Tilletia laevis Kühn in Rabenh. and T. caries (DC.) Tul. & C. Tul.] from BW553 was recombined with the high grain yield potential of the red-kerneled semidwarf HY320 (1) using a modified pedigree breeding procedure. BW553 obtained the gene Bt10, which confers resistance to common bunt, from PI 178383 via the cross ‘Red Bobs’ × ‘PI 178383/8’ *Neepawa*. A B CF2-derived BC2F1 line designated LB474-D2, which exhibited promising performance, was advanced to the 1987 High Yield Wheat Pre-Cooperative test, where it was evaluated for agronomic performance, reaction to diseases, grain quality, and kernel characteristics. From 1988 to 1990 it was assessed as ‘HY380’ in the High Yielding Wheat Cooperative tests at 18 to 20 locations per year.

AC Taber has grain yield potential similar to ‘Biggar’ in the agroclimatic zones where it was tested. It matures 2 to 3 days later than Biggar and 1 day later than ‘Genesis’. AC Taber is shorter and stronger than Genesis, with a trace of yellow, cream, and white. Flower color is approximately 86% purple and 14% variegated, and is moderately resistant to spotted alfalfa aphid [Ditylenchus dipsaci (Kiihn) Filipjev], and is moderately resistant to anthracnose (Race 1), bacterial wilt (caused by Clavibacter michiganense subsp. insidiosum (McCulloch) Davis et al., 1984), and Verta + . Germplasm sources of Resistar include 5% M. varia, 21% ‘Ladak’, 12% Turkistan, 46% Flemish, 7% Chilean, 2% Peruvian, and 2% unknown.

Registration of AC Taber

AC Taber is highly resistant to fusarium wilt (caused by Fusarium oxysporum Schlechtend. f. sp. medicaginis (L.J. Weiner) W.C. Snyder & H.N. Hans.), verticillium wilt and phytophthora root rot; it is resistant to anthracnose (Race 1), bacterial wilt (caused by Clavibacter michiganense subsp. insidiosum (McCulloch) Davis et al., 1984), and stem nematode [Ditylenchus dipsaci (Kühn) Filipjev], and is moderately resistant to spotted alfalfa aphid [Tetranychus maculatus (Buckton)]. Resistar has been tested and is adapted for use from the U.S. Upper Midwest through the Mid-South production areas. Flower color is approximately 86% purple and 14% variegated, with a trace of yellow, cream, and white.

Seed increase is limited to one generation of breeder (Syn 1), and two generations each of foundation (Syn 2 or 3) and certified (Syn 3 or 4) classes. Breeder and foundation seed production are limited to the northwestern United States. A maximum of 2, 3, and 6 harvest years is permitted on stands produced for U.S. plant variety protection of Bison.

Registration of Resistar

AC Taber eligible for grades of the Canada Prairie Spring (red) wheat class. AC Taber has shown superior quality compared with Biggar, exhibiting higher protein concentration, better milling quality, and improved gluten strength. A more detailed description of this cultivar has been published (2).

Breeder seed originating from a bulk of 130 breeder lines will be maintained by the Experimental Farm, Agriculture Canada, Indian Head, SK, S0G 2A0, Canada. The multiplication and distribution of pedigreed seed will be made by SeCan Association, 200-57 Auriga Dr., Nepean, ON, K2E 8B2, Canada.

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Registration of Resistar Alfalfa

Resistar is a 400-clone synthetic with parental clones selected for resistance to one or more of the following diseases: anthracnose (Race 1) (caused by Colletotrichum trifolii Bain & Essary), pythophthora root rot (caused by Phytophthora medicaginis E.M. Hans. & Maxwell), and verticillium wilt (caused by Verticillium albo-atrum Reineke & Berthier). Parent clones trace to the cultivars Arrow, Centurion, Dart, Sparta and Vorta + . Germplasm sources of Resistar include 5% M. falcata, 5% ‘Ladak’, 12% Turkistan, 46% Flemish, 7% Chilean, 2% Peruvian, and 2% unknown.

Fall dormancy of Resistar is similar to that of ‘Sarancac’. Resistar is highly resistant to fusarium wilt (caused by Fusarium oxysporum Schlechtend. f. sp. medicaginis (L.J. Weiner) W.C. Snyder & H.N. Hans.), verticillium wilt and phytophthora root rot; it is resistant to anthracnose (Race 1), bacterial wilt (caused by Clavibacter michiganense subsp. insidiosum (McCulloch) Davis et al., 1984), and stem nematode [Ditylenchus dipsaci (Kühn) Filipjev], and is moderately resistant to spotted alfalfa aphid [Tetranychus maculatus (Buckton)]. Resistar has been tested and is adapted for use from the U.S. Upper Midwest through the Mid-South production areas. Flower color is approximately 86% purple and 14% variegated, with a trace of yellow, cream, and white.

Seed increase is limited to one generation of breeder (Syn 1), and two generations each of foundation (Syn 2 or 3) and certified (Syn 3 or 4) classes. Breeder and foundation seed production are limited to the northwestern United States. A maximum of 2, 3, and 6 harvest years is permitted on stands producing breeder, foundation, and certified seed, respectively. Resistar was favorably reviewed by the National Alfalfa Variety Review Board in 1991. Application will not be made for U.S. plant variety protection.