

Triticale "103BB"

Variety Description

Triticale "103BB" is a winter-type triticale developed for fall-planted forage production in the Northwest/Intermountain U.S. (see attached yield data). It is most similar to the variety "102". Like triticale 102, 103BB is a tall, late maturing forage triticale.

103BB is an "awnless" triticale, with awns being short, apically awnleted, or entirely absent, while 102 is awnleted. Awn length can be affected by environmental conditions and can differ among tillers and genetically identical plants, but 103BB is notable in having a high proportion of spikes (approximately 80% under most environmental conditions) that have no awn longer than one cm. In addition to the difference in awn length, 103BB is approximately six cm shorter than 102, and three days earlier to head.

The auricles of 103BB are glabrous and lack anthocyanin. At boot stage, the plant is blue green. The flag leaf is upright to recurved, and the sheath of the flag leaf has a green to moderately waxy blue color. The culms of 103BB are hollow, lightly waxy, and usually have four to five above-ground nodes. The neck is glabrous to moderately hairy. Spikes are dense, oblong, and yellow-white at maturity. Glumes are long and wide. Seed are light brown, elliptical, and have a large brush.

103BB contains patented awn-inhibitor genes (U.S. Patent Number: 5,969,219), and therefore has patent protection. Seed multiplication or sale, retaining seed from crop production, and using seed for plant breeding are all prohibited without authorization from Resource Seeds, Inc..

Stock Seed

A sequence of head selection, headrow selection, and the selection and bulking of headrow plots on the basis of trueness to type will be used to produce pre-breeder seed. Pre-breeder seed will be used to produce Breeder Seed, which will be used to produce Foundation Class. Foundation Class can be used to produce one additional generation of Foundation Class, then on to one generation of Registered Class, and one generation of Certified Class.

Triticale "103BB"

Origin and Breeding History

Triticale 103BB was developed from a single cross made in 1995 between the triticale variety, "102", and the triticale breeding line 4825, which is an awnless breeding line developed by Resource Seeds, Inc. from chemical mutagenesis of the breeding line 6TA419, which was developed by Dr. Charles Jenkins and acquired by Resource Seeds from Pioneer Hi-Bred International. Individual head selections from the F₂ through F₅ generations were made and replanted in bulk. Pre-breeder seed of "103BB" was produced from a bulked composite from five head rows selected for uniformity from 80 head rows in the F₇ generation.