

Registration of 'Bobcat' hard red winter wheat

Abstract

'Bobcat' (Reg. no. CV-1161, PI 693235) hard red winter (HRW) wheat (*Triticum aestivum* L.) was developed and released by the Montana Agricultural Experiment Station in September 2019. Bobcat is of unknown pedigree, derived from a composite of two related single crosses made in 2007: MT0598/98X366-E29-1 and 01X258-C1/MT0598. MT0598 is an unreleased, hollow-stem experimental line, and 98X366-E29-1 and 01X258-C1 are unreleased, Montana solid-stem experimental lines. Bobcat was developed using a modified bulk breeding method and selected as an F_{5:6} head row. Bobcat was tested under the experimental number MTS1588 from 2015 to 2019 in Montana. Quality was evaluated in multilocation Montana trials since 2015. Bobcat is a solid-stem, high-yielding HRW wheat cultivar with medium to high test weight, medium maturity, reduced height (*Rht-B1b*), medium to high grain protein, and acceptable milling and baking quality. Bobcat was released for its improved host plant resistance to wheat stem sawfly (*Cephus cinctus* Nort.) conditioned by stem solidness, along with short stature, and improved yield potential relative to 'Warhorse', the current predominant solid-stem cultivar in Montana.

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