Registration of ‘Bridger’ Teff

‘Bridger’ teff [*Eragrostis tef* (Zuccagni) Trotter] (Reg. no. CV-189, PI 595198) was developed in Montana and released by the Montana Agricultural Experiment Station in 1994. It is named for Bridger, MT, location of the USDA-NRCS Plant Materials Center. Bridger was tested in Montana under the experimental number MT88-220. Teff is a warm-season, small-seeded annual bunchgrass. Flour made from the seed is used to make *injera*, a fermented flat bread that is a staple food in Ethiopia. The flour is also used as a wheat (*Triticum* spp.) substitute for people who suffer from wheat intolerance. Teff produces a high-quality forage that is used for livestock in Africa and Europe.

Bridger is intended for grain production. The world teff collection of 338 landraces was grown in Sidney, MT, in 1988 and 1989. Bridger is the result of a single plant selection, MT88-220, made in 1989 from an early-maturing landrace (PI 494366). Seed was increased, and flour was evaluated for taste and use for injera production. Subsequent generations were handled as bulk composites. In 1995, 35 headrows were selected for uniformity and were bulked as the source for breeder seed.

The landrace from which Bridger was derived is very early maturing compared with other teff lines, producing mature seed 2 to 6 wk earlier than other landraces when grown in Montana. Early maturity was considered to be one of the most important criteria for selection because of the limited growing season for teff seed production in Montana. Bridger has short, weak stems, and it is prone to lodging. The very lax and flexible panicle is greenish-gray and of medium length (30 to 40 cm). Seed color is brown. Leaves are thin, and the plant is not particularly leafy. Bridger is less suitable for forage production than other teff lines. Average grain yields of Bridger in Montana were 690 kg ha⁻¹ for two station-years at one dryland site and 1345 kg ha⁻¹ for six station-years at two irrigated sites. Averaged over all sites, Bridger was 20% higher in grain yield than SD-100, an early-maturing disease-resistant cultivar. 

Breeder and foundation seed of Bridger will be maintained by the Foundation Seed Stock Program, Dep. of Plant, Soil and Environmental Sciences, Montana State University, Bozeman, MT 59717.


References and Notes


Registration of ‘KY 908’ Burley Tobacco

‘KY 908’ burley tobacco (*Nicotiana tabacum* L.) (Reg. no. CV-113, PI 596277) was developed by the Kentucky Agricultural Experiment Station and released in 1995 for its early multiple disease resistance. KY 908, tested as KY 17/'TN 86' (1,2). Individual plant selections from a single-plant selection in the F₅ generation were used as the source for breeder seed. Subsequent generations were handled as bulk composites.

KY 908 has high resistance to black root rot (*Thielaviopsis basicola* (Berk. & Broome) Ferraris) virus (TMV), tobacco vein mottling virus (TMVM), [caused by *Pseudomonas syringae* pv. *tobaci* (Breda de Haan) Tucker], and tobacco etch virus and tobacco vein mottling virus [caused by *Pseudomonas syringae* pv. *tabaci* (Wolf & Foster)]. KY 908 has moderate resistance to black shank [caused by *Phytophthora nicotianae* var. *parasitica* (Dastur) G.M. Waterhouse; syn. *Dastur var. nicotianae* (Breda de Haan) Tucker], and *Fusarium oxysporum* Schlechtend.:Fr. (J. Johnson) W.C. Snyder & H.N. Hans.]. It has moderate resistance to tobacco etch virus (TEV), black shank [caused by *Phytophthora nicotianae* var. *parasitica* (Dastur) G.M. Waterhouse; syn. *Dastur var. nicotianae* (Breda de Haan) Tucker], and *Fusarium oxysporum* Schlechtend.:Fr. (J. Johnson) W.C. Snyder & H.N. Hans.]. The source of TVMV resistance was probably KY 14, which is present in the pedigree of TN 86. Black root rot, wildfire, and TEV resistance were present in both parents of KY 908. Black root rot and TEV resistance, derived originally from *N. glutinosa* (TEV), black shank [caused by *Phytophthora nicotianae* var. *parasitica* (Dastur) G.M. Waterhouse; syn. *Dastur var. nicotianae* (Breda de Haan) Tucker], and *Fusarium oxysporum* Schlechtend.:Fr. (J. Johnson) W.C. Snyder & H.N. Hans.]. The source of TMV resistance, derived originally from *N. glutinosa* (TEV), black shank [caused by *Phytophthora nicotianae* var. *parasitica* (Dastur) G.M. Waterhouse; syn. *Dastur var. nicotianae* (Breda de Haan) Tucker], and *Fusarium oxysporum* Schlechtend.:Fr. (J. Johnson) W.C. Snyder & H.N. Hans.]. The source of TMV resistance was probably most of the fusarium wilt resistance in KY 14. KY 908 is a cultivar of medium height with an upright leaf orientation. The largest leaf of KY 908 averages 67 cm long and 34 cm wide. Leaf length and width are similar to TN 86. Leaf color during growth is similar to TN 86. KY 908 flowers 3 to 4 d earlier than KY 14. KY 908 is adapted to the standards for chemical and physical characteristics and for smoke flavor established by the Regional Burley Tobacco Standards Committee.

Breeder seed of KY 908 will be maintained by the Kentucky Agricultural Experiment Station, Lexington, KY 40546-0091.

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References and Notes


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