

MT0301
Dry Bean Release

Seed of a dry bean (*Phaseolus vulgaris* L) was provided by Mr. John "Jack" Whitney (Bigfork, MT) to Dr. Duane Johnson, Northwestern Agricultural Research Center, Creston, MT in November, 2002. Mr. Whitney's family obtained the seed while they lived in central Nebraska in 1852. The beans were regenerated and have been grown by the Whitney family for 108 years. The original beans were reportedly recovered from the craw of a migrating Canadian goose. The Whitney family moved to Kalispell, Montana in 1902 with Jack's grandmother. The family has continuously grown and selected the most robust progeny of this bean in Kalispell and Bigfork, Montana since that time. It became a favored food of Charlie Russell when he visited the Whitneys in Kalispell and dined with the Whitney family. Mr. Whitney remembers, as a boy, cooking these beans for Mr. Russell. Food preparation of these beans is similar to pintos with a slightly longer time required to hydrate the beans.

The seed provided by Mr. Whitney was distributed with a small amount going to the dry bean program at Colorado State University for evaluation and the remainder was increased at the Northwestern Agricultural Research Center. Colorado State University classified the bean as being in the cranberry bean class and is therefore of Caribbean origin. Phenotypically, the bean resembles a pinto bean but is rounded both ventrically and dorsally and therefore is not as flattened or as elliptical as a pinto bean. The color is also similar to a pinto bean and is mottled maroon and cream. Approximately 1% of the beans are predominantly maroon with a speckling of cream. The thousand seed weight is 451 +/- 30 grams. MT0301 has been planted annually at NWARC as an increase and observation block beginning from 45 beans provided by Mr. Whitney. Planting occurs typically May 1 with harvest occurring early to mid-September. The beans are typically undercut and swathed prior to combining, a technique used for pinto bean production. No disease (white mold or rust) or insect damage has been noted during the 2003, 2004 or 2005 growing seasons. No damage from foraging deer has been noted. MT0301 has been grown as a dryland crop at Kalispell under 16-, 17.5- and 19-inch rainfalls, respectively.

No other dry beans of a similar nature are available for yield, quality or maturity comparisons in the Flathead Valley. Yield data has not been specifically collected during this phase of the project. Observations have been primarily for disease and insect potential. Plot sizes have ranged from 20 sq.ft (2003), 200 sq.ft (2004) and 200 sq.ft (2005). However, harvested observation yields have been 1,542 lbs/acre in 2004 and 1,365 lbs/acre in 2005. Average yield has been 1453.5 pounds per acre. Maturity has averaged 126 days with 1,642 and 1,631 GGD (base 50) in 2004 and 2005, respectively.

It is anticipated the required seed amount (1 pound) will be sent to the USDA National Seed Storage Laboratory (Ft. Collins, Colorado). The balance of the seed will be increased and maintained as a new dry bean variety for Montana by the Department of Research Centers. Seed will be increased in 2006 and 300-500 lbs of seed will be available in 2007.

The recommended cultivar release name would be "Whitney". This would be named after the family that generated the germplasm and developed the current line. The beans are unlikely to have a real commercial value but would be recommended for use on small farms and as a heritage variety. The cultivar is recommended as a public release.