persensitive \( I \)-gene resistance to all strains of bean common mosaic virus (BCMV).

Norstar produced a satisfactory canned product in the North Dakota State University Bean Quality Lab. Drained weight of Norstar (286 g 100 g\(^{-1}\)) was similar to those of Upland (292 g 100 g\(^{-1}\)) and Seafarer (290 g 100 g\(^{-1}\)) when grown in the same year and location. Texture of the canned product, measured using a Kramer Shear Press (Instron Crop., Canton, MA) (1), averaged 48.6 kg 100 g\(^{-1}\), which was higher than Upland (32.1 kg 100 g\(^{-1}\)), but within the broad range of values exhibited by navy bean cultivars grown in the northern plains. Dry and processed color of Norstar averaged 63.9 and 55.4, respectively, for lightness (L-value) scale, measured using a Gardner model XL-23 colorimeter (Gardner Laboratory Inc., Bethesda, MD) (1). These values indicate a slightly darker dry seed (range of 64.3-66.0 for commercial cultivars grown in same environments), but a similar processed color (range of 54.9-56.8 for commercial cultivars).

Application for cultivar protection under the Plant Variety Protection Act, Public Law 91-577, has been made under the option that Norstar may be sold for seed by name only under the certified class. Breeder and foundation seed will be maintained by the seedstocks project, North Dakota State University, Fargo, ND 58105.


Registration of 'Thorne' Soybean

'Thorne' SOYBEAN [Glycine max (L.) Merr.] (Reg. no. CV-306, PI 564718) was developed by the Ohio Agricultural Research and Development Center, The Ohio State University (OARDC-OSU). It was released 1 August 1992 because of its superior yield and disease resistance.

Thorne originated as an \( F_2 \)-derived line from the cross A80-344003 \( \times \) A3127BC3F4-1. The line A80-344003 is from the cross A75-332035 \( \times \) 'Century' (5); A75-332035 is from L15 \( \times \) AP68-1016. The line L15 is from 'Wayne' * 6(1)/'Clark 63' (7), and AP68-1016 is from 'Clark' \( \times \) 5(3)/PI 84946-2. The line A3127BC3F4-1 is from Asgrow 'A3127' * 4/L24; L24 is from 'Williams' * 7 (2)/'Kingwa'. A.K. Walker selected the parents of the cross from which Thorne was developed, and the cross was made in the summer 1983 at Wooster, OH. The \( F_1 \) and the \( F_3 \) and \( F_4 \) bulks (modified single seed descent) were grown at the winter nursery facility of Iowa State University and the University of Puerto Rico at Mayaguez, PR. The \( F_2 \) and the \( F_5 \) bulks were grown at Wooster. One \( F_5 \)-derived line was selected based on evaluations in 1986 and 1987 and was designated HM8890. HM8890 was evaluated in multiple-location regional tests in Ohio from 1988 to 1992, in Uniform Preliminary Test IIIA in 1989 (6), and in Uniform Test III from 1990 to 1992 (6). HM8890 was named Thorne in honor of Charles E. Thorne, the first Director of the Ohio Agricultural Experiment Station (the forerunner of OARDC-OSU).

Thorne has the \( Rps1-k \) gene for resistance to phytophthora rot [caused by Phytophthora sojae (J.J. Kaufmann & J.W. Gerdemann). It is moderately resistant to brown stem rot [caused by Phialophora gregata (Ailiington & D.W. Chamberlain) W. Gams].

Breeder seed of Thorne was distributed to foundation seed organizations in Illinois and Ohio and will be maintained by OARDC-OSU. A small sample of seed for research purposes can be obtained from the corresponding author for at least 5 yr. Protection for Thorne under the Plant Variety Protection Act is pending.


References and Notes