Lockett, TX. The grain volume weight of TAM 110 has been about 2.1 kg hL⁻¹ less than that of TAM 200 and about 1.0 kg hL⁻¹ greater than that of Siouxland.

TAM 110 spikes are awned, fusiform, middense, and inclined. Glumes are brown, glabrous, midlong, and narrow to midwide. Glume shoulders are narrow, wanting to oblique at the base and square at the apex. Beaks are midwide, acuminate and 3 to 4 mm long. Kernels are ovate to elliptical, with small germs. Kernel crease is midwide and middeep. Cheeks are rounded. The brush is midsized and midlong.

The most important distinguishing characteristic of TAM 110 is greenbug resistance. It is unique among U.S. hard red winter wheat cultivars in its resistance to Biotypes E and I, the current predominant biotypes. It is also resistant to all previous field biotypes. The Biotype E resistance has been found to be multigenic (5). In addition, TAM 110 carries the Amigo gene for resistance to some biotypes of the wheat curl mite (Eriophyes tulipae Keifer). TAM 110 is resistant to the Russian wheat aphid (Diuraphis noxia (Mordvilko)). TAM 110 is susceptible to the Russian wheat aphid (Diuraphis noxia (Mordvilko)). TAM 110 is resistant to powdery mildew (caused by Erysiphe graminis DC. f. sp. tritici Em. Marchal) and to stem rust (caused by Puccinia graminis Pers.:Pers. f. sp. tritici Eriks. & E. Henne.), but susceptible to current races of leaf rust (caused by P. recondita Roberge ex Desmaz.).

Quality characteristics have been generally similar to those of TAM W101’, TAM 107, and TAM 200. Analyses of TAM 110 were performed over three crop years (1992, 1993, and 1994) by two university laboratories, the U.S. Grain Marketing and Research Laboratory, Manhattan, KS, and several commercial laboratories. All quality characteristics of these samples were judged at least satisfactory by the respective laboratories. Grain protein content has been about 0.5 to 1.0% greater than that of TAM W101 or TAM 200.

Application for U.S. plant variety protection (Title V) of TAM 110 has been made (PVP 9700389). The Texas Foundation Seed Service of TAES will produce the foundation seed class and will supervise production of the registered and certified seed classes of TAM 110. Seed of TAM 110 may be sold by cultivar name only as a class of certified seed. Small quantities of seed for research purposes may be obtained from the corresponding author.


References and Notes

Registration of ‘General’ Soybean

‘General’ soybean [Glycine max (L.) Merr.] (Reg. no. CV-365, PI 593463) was developed by the Ohio Agricultural Research and Development Center of The Ohio State University (OSU). It was released on 1 Aug. 1995 because of its high yield potential and resistance to phytophthora rot (caused by Phytophthora sojae M.J. Kaufmann & J.W. Gerdemann).

General is an F₄-derived line, originally designated from the cross ‘311’ × ‘Resnik’ (4). The female parent was a proprietary cultivar developed by Voris Seed Co. (now LG Seeds) (2). The cross was made in the summer of 1986 at Columbus, OH. General was developed by early-generation F₂-derived line, HS88-7363, was tested in Ohio in 1990. General, which derived from an F₄ plant of HS88-7363, was tested in multiple Ohio locations from 1991 to 1995.

General has purple flowers, light tawny pubescence, and dull yellow seedcoats with black hila. Seedcoat activity is high. General is a Maturity Group III (relative maturity 3.9), indeterminate cultivar and is adapted as a full-season cultivar from 39° to 41° N lat. In Ohio tests (1992–1995) at five locations each year, seed yield of General averaged 3.56 Mg ha⁻¹ compared with 3.38 Mg ha⁻¹ for ‘Flyer’ (3). General averaged 80 cm in plant height (Flyer averaged 81 cm), and General and Flyer had equal mean dates of maturity (24 September) and lodging scores (1.3). General and Flyer were also similar in seed protein and oil content.

General has the Rpsl-k gene for race-specific phytophthora rot. In layer-tests with compatible Race 25 of P. sojae, General had relatively high tolerance, similar to that of ‘Conrad’ (1).

Breeder seed of General was distributed to OARDC-OSU Foundation Seeds, Inc., for production of foundation seed in 1995. Breeder seed of General will be maintained by OARDC-OSU with the cooperation of Ohio Foundation Seeds, Inc. A small sample of seed for research purposes can be obtained from the corresponding author. Protection for General under the U.S. Plant Variety Protection Act is pending (PVP 9600121).


References and Notes
2. LG Seeds, P.O. Box 950, Decatur, IL 62525.