REGISTRATION OF CULTIVARS

Registration of ‘Saline’ Soybean

‘Saline’ soybean [Glycine max (L.) Merr.] (Reg. no. CV-324, PI 578057) was developed cooperatively at the Illinois Agricultural Experiment Station and the Missouri Agricultural Experiment Station and released jointly in August 1993. It was released because of its resistance to soybean cyst nematode (SCN) (Races 3 and 14) (Heterodera glycines Ichinohe) derived from PI 88788 and higher yield when compared with cultivars of similar maturity.

Saline originated as a F$_4$ plant selection from the cross of ‘Sherman’ × ‘Fayette’ made at the Illinois Agricultural Experiment Station (2,4). The F$_2$ and F$_3$ generations were advanced at the Illinois Agricultural Experiment Station by harvesting in bulk in the absence of SCN. Saline was evaluated as LN87-2235 in Illinois for resistance to SCN (Races 3 and 4) in the greenhouse in 1987 and for agronomic performance during 1988–1992. It was evaluated in Missouri in 1990 to 1992 and in the SCN Regional Tests—Northern States in 1990 to 1992 (5).

Saline is classified as Group III maturity (relative maturity 3.9), averaging 6 d later than ‘Resnik’ and 1 d later than ‘Linford’ (1,3). It is best adapted to 38° to 41° N lat. Saline is similar to Linford in SCN resistance. When compared with Linford at SCN noninfested locations, Saline had 2% higher seed yield, 21 mg seed$^{-1}$ lower seed weight, 1.2 percentage points lower seed protein, and 1.5 percentage points higher seed oil. At SCN infested locations, seed yield of Saline is approximately the same as Linford and 12% higher than Resnik. Saline has a lodging score of 1.6, vs. 2.1 of Linford (1–5 scale, 1 = almost all plants erect, 5 = almost all plants down), and is 2 cm shorter.

Saline has white flowers, gray pubescence, tan pods at maturity, and seeds with a dull yellow coat and buff hila. It is susceptible to phytophthora rot (Races 1, 4, and 7) (caused by Phytophthora soiae M.J. Kaufmann & J.W. Gerdemann). When evaluated against SCN in the greenhouse, Saline is susceptible to Races 1 and 5, moderately resistant to Races 2 and 4, and resistant to Races 3 and 14 (6).

Breeder seed of Saline was distributed to foundation seed organizations in Missouri and Illinois for planting in 1993.

Breeder seed will be maintained by the Missouri Agricultural Experiment Station. Foundation seed will be distributed by Missouri Foundation Seeds, Dep. of Agronomy, 210 Waters Hall, University of Missouri, Columbia, MO 65211. A small sample of seed of Saline may be obtained for research purposes for at least 5 yr from the author.

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References and Notes


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Registration of ‘KAT/PRO-1’ Proso Millet

‘KAT/PRO-1’ proso millet (Panicum miliaceum L.) (Reg. no. CV-166, PI 578004) was developed by Kenya Agricultural Research Institute (KARI), National Dryland Farming Research Center (NDFRC), Katumani, Machakos, Kenya, and released in September 1985. KAT/PRO-1 was