TX73V862 is susceptible to both stripe rust caused by *Puccinia striiformis* West and soil-borne mosaic virus.

*TX78V2154*, Short wheat/’Scout’ (TX69A509-2)/’Blue Boy II’/’Fox’ (GP no. 228) is a white chaff selection that is moderately resistant to leaf rust races prevalent in Texas. Reactions to leaf rust have varied from 0 to 30MR. Reaction to stem rust in an inoculated nursery in Minnesota was 40MS (1). *TX78V2154* is susceptible to stripe rust, powdery mildew, and soil-borne mosaic virus. It has large spikes and high yield potential, but it lacks sufficient winterhardiness for areas north of Texas.

These lines are released to plant breeders of public institutions under the ESCOP Seed Release, “A Statement of Responsibilities and Policies Relating to Development, Release and Multiplication of Publicly Developed Varieties of Seed-Propagated Crops” (3). Release to private plant breeding firms is limited by a specific memorandum of agreement with the Texas Agricultural Experiment Station which restricts use of these lines. This germplasm will be made available for testing and/or breeding purposes only. Reselection of these lines or release as a cultivar by private firms is prohibited. The release of these breeding lines does not preclude the possibility of one or more of the lines being released later as cultivars by the Texas Agricultural Experiment Station.

Requests for small amounts of seed should be sent to the Foundation Seed Service, Texas A&M Univ., College Station, TX 77843. Seed will be maintained at the Texas A&M Univ. Res. and Ext. Ctr., Vernon, Texas.

E. C. Gilmore, K. B. Porte, and F. A. Porte

References and Notes


3. A policy statement of the Experiment Station and Policy of the Experiment Stations of the State Universities and Land Grant Colleges in the U.S., USDA-SCS dated 26 June 1972.


**Registration of Parental Lines**

**ICMA-1 AND ICMB-1 PEARL MILLET PARENTAL LINES WITH A1 CYTOPLASMIC-GENIC MALE STERILITY SYSTEM**

One pair of A (male sterile) and B (maintainer) lines of pearl millet [*Pennisetum americanum* (L.) Leeke], with the A1 cytoplasmic-genic male sterility system, were made publicly available in April 1981. This pair is designated ICMA-1 (Reg. no. PI 12) and ICMB-1 (Reg. no. PI 13) and previously tested as ms81A and ms81B. They carry high levels of resistance to downy mildew caused by *Sclerospora graminicola* (Sacc.) Shroet. and being dwarf, ICMA-1 provides opportunities of making hybrids of various heights, depending on the pollen source.

ICMA-1 and ICMB-1 were developed by irradiating mature Tift 23DB seed with 30,000 kR of gamma rays from a cobalt 60 source. Plants from surviving seed were grown at ICRISAT Center in 1975, selfed, and then grown head-to-row in a downy mildew disease screening nursery. Dwarf to 90 cm tall, thin stemmed plants with good ability, very resistant to lodging and maturity (52 to 59 days to flowering). Test of resistance to downy mildew (0 to 1% infection in the downy mildew nursery (1), compared with 60 to 80% on the susceptible hybrid NHB3, and up to 100% on Tift 23DB). Seeds are light grey, round, and weigh about 7 g.

Test hybrids made with ICMA-1 averaged 4 days later in maturity than those made with 5141A (which until 1983 was the most widely used seed parent), were comparable in height and grain yield, but were superior in resistance to lodging and downy mildew.

An advantage of ICMA-1 for hybrid breeding programs is the higher rate and clarity with which new sources of A1 male sterility can be discovered by using it as a tester. The discovery rate of complete maintainers in over 2000 test crosses was nearly four times the rate obtained (0.63%) when using 5054A or 5141A.

Requests for small amounts of seed should be sent to the Foundation Seed Service, Texas A&M Univ., College Station, TX 77843. Seed will be maintained at the Texas A&M Univ. Res. and Ext. Ctr., Vernon, Texas.

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