Seeds of the five selections will be provided upon written request and agreement to make appropriate recognition of its source as a matter of open record when this germplasm contributes to the development of a new variety. Requests for seeds should be sent to Foundation Seed Service, Texas Agric. Exp. Stn., TAMU, College Station, TX 77843.

REGISTRATION OF MpSWCB-4 POPULATION OF MAIZE
(Reg. No. GP 87)
Gene E. Scott and Frank M. Davis

This population was developed as a source of genes for resistance to leaf-feeding damage by southwestern corn borer [Diabrotica virgifera (Dyar)]. Populations of Antigua Grupo 1, Antigua Grupo 2, Guadalupe Grupo 1A, and Republica Dominicana Grupo 1 obtained from the International Maize and Wheat Improvement Center (CIMMYT) were grown and manually infested with southwestern corn borer eggs. Resistant plants were crossed, and seed from these paired-plant crosses within and among populations were bulked. MpSWCB-4 is the result of two cycles of recurrent selection based on S, progeny evaluation for leaf-feeding resistance in this material. This population also has genes for resistance to leaf feeding by fall armyworms, Spodoptera frugiperda (J. E. Smith), and to southern corn rust caused by Puccinia polysora Underw. MpSWCB-4 has a maturity (AES 1200) similar to that of Underw. MpSWCB-4 has a maturity (AES 1200) similar to that of "poor root and stalk strength. Breeder seed is maintained by the full-season hybrid for Mississippi. Kernel color ranges primarily from

REGISTRATION OF THREE PAIRS (A AND B) OF SORGHUM GERMPLASM WITH A2 CYTOPLASMIC-GENIC STERILITY SYSTEM
(Reg. Nos. GP 70 to 72)
K. F. Schertz, D. T. Rosenow, and A. Sotomayor-Rios

THREE pairs of A (male sterile) and B (maintainer) lines of sorghum, Sorghum bicolor (L.) Moench, germplasm with A2 cytoplasmic-genic sterility were released in 1980 by AR-SEA-USDA and the Texas Agric. Exp. Stn. The lines are designated A2Tam428 and B2Tam428 (Reg. No. GP70), A2Tm624 and B2Tm624 (Reg. No. GP71), A2Tm2788 and B2Tm2788 (Reg. No. GP72). They provide an opportunity to diversify the cytoplasm and the female parentage of sorghum hybrids, and each is agronomically superior to Tx2753, the source of A2 cytoplasm released in 1976.

A2Tam428 and B2Tam428 (Reg. No. GP70)

A2Tm428 was developed from the cytoplasmic-genic sterile line 'TAM428' with subsequent paired-progeny backcrosses. B2Tm428 was released as a mixture of BC4 and BC6 seed. TAM428 was in the milo (A1) cytoplasmic-genic sterility system and is a converted line selected from the second backcross of IS12610, a zerazera type from Ethiopia, in the TAES-USDA Sorghum Conversion Program. IS12610 was designated as a maintainer of sterility when crossed to lines having the milo (A1) cytoplasm.

A2Tm428 has the characteristics of its recurrent parent, plant, panicle, and grain characteristics typical of zerazera type sorghums. The cultivar is a 5-dwarf dominant, and restoration of fertility in milo (A1) cytoplasm. A2Tm428 has the general agronomic characteristics of its recurrent parent, BTm428. It is a 3-dwarf dominant at the Dw locus. The plant will be slightly taller than BTx3197 in some environments. Injured plant tissue is red or purplish-red. It has long rachis branches that are slightly lax. Awns are absent; the seed is white and somewhat chalky in appearance, with a red pigmented testa.

A2Tm2788 and B2Tm2788 (Reg. No. GP71)

A2Tm2788 was derived by crossing A2Tm428 in the BC4 generation, 'BTm428' × 'BTx624.' It was subsequently backcrossed to BTx624, and the seed released was from the BC4 generation. BTx624 was derived from the cross, 'BTx3197' × SC0170-6, the latter a BC3 selection of a zerazera type from the Sorghum Conversion program. BTm2788 is a maintainer of sterility when crossed to lines having the milo (A1) cytoplasm.

A2Tm2788 has the general agronomic characteristics of its recurrent parent. BTm2788 is a 3-dwarf dominant at the Dw locus. The plant will be slightly taller than BTx3197 in some environments. Injured plant tissue is red or purplish-red. It has long rachis branches that are slightly lax. Awns are absent; the seed is white and somewhat chalky in appearance, with a red pigmented testa.

A2Tm2788 and B2Tm2788 (Reg. No. GP72)

A2Tm2788 was derived by crossing A2Tm428 in the BC4 generation, 'BTm428' × R1750, the designation for 'Tx2788' during its development. BTx2788 seed was released from the BC4 generation. Tx2788 is similar to A2Tm2788 in appearance to Tx2788 and late to flower 4 to 5 days later than BTx624 and is slightly taller. It is 3-dwarf dominant at the Dw locus. The plant tissue is red or purplish-red. The panicles are lax, with longer rachis branches giving it a more open panicle type. Awns are absent. The seed is white and pearly in appearance, and thin pericarp and has no pigmented testa. Occasional red spots or discoloration. The endosperm is white and pearly in appearance.

A2Tm2788 has partial fertility.