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 [Diatraea grandiosella (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 Peanut 876, a zeara type from the Sorghum Conversion program. This population was developed as a source of genes for resistance to leaf-feeding damage by southwestern corn borer [Diatraea grandiosella (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 Peanut 876, a zeara type from the Sorghum Conversion program.

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 AR-SEA-USDA and Texas Agric. Exp. Stn. The lines are designated A2 TAM428 and B2 TAM428 (Reg. No. GP70), A2 Tx624 and B2 Tx624 (Reg. No. GP71), A2 Tx2788 and B2 Tx2788 (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 with plant, panicle, and grain characteristics typical of most zeraria type sorghums. The cultivar is a 3-dwarf dominant with some red spots or discoloration. The endosperm is white and pearly in appearance, with a translucent testa.

A2 TAM428 and B2 TAM428 (Reg. No. GP 87)

A2 TAM428 was developed from the line 'TAM428' with subsequent paired-progeny backcrossing. The seed released was a mixture of BC1 and BC2 seed. TAM428 was developed in the milo (A1) cytoplasmic-genic sterility system, converted line selected from the second backcross of IS12610, a zeara type from Ethiopia, in the TAES-USDA Sorghum Conversion Program. IS12610 was designated by the TAES-USDA as a source of partial sterility. TAM428 was developed as a source of genes for resistance to leaf-feeding damage by southwestern corn borer [Diatraea grandiosella (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 Peanut 876, a zeara type from the Sorghum Conversion program.

A2 Tx624 and B2 Tx624 (Reg. No. GP 71)

A2 Tx624 was released was from the BC2 generation. BTx624 was a cross, 'BTx 3197' × SC0170-6, the latter a BC1 seed derived from a zeara type plant, panicle, and grain characteristics typical of most zeraria type sorghums. The cultivar is a 3-dwarf dominant at the Dw~ locus. The plant color of injured tissue is red to purplish-red. The panicles are intermediate in length, semi-compact, and slightly lax near the tip. The seed is white and pearly in appearance, with a thin pericarp and has no pigmented testa. Occasionally the seed has some red spots or discoloration. The endosperm is white and somewhat chalky in appearance, with a thin, pigmented testa.

A2Tx2788 and B2Tx2788 (Reg. No. GP 72)

A2Tx2788 was derived by crossing A2 TAM428 in the BC1 generation × 'BTx624.' It was subsequently backcrossed to BTX624. The seed released was from the BC2 generation. BTx624 was a cross, 'BTx 3197' × SC0170-6, the latter a BC1 seed derived from a zeara type plant, panicle, and grain characteristics typical of most zeraria type sorghums. The cultivar is a 3-dwarf dominant at the Dw~ locus. The plant color of injured tissue is red to purplish-red. The panicles are intermediate in length, semi-compact, and slightly lax near the tip. The seed is white and pearly in appearance, with a thin pericarp and has no pigmented testa. The endosperm is white and somewhat chalky in appearance, with a thin, pigmented testa.