approximately 72 cm in height, has poor panicle exsertion (less than 5 cm), purple plant color, dry stalk, and is awnless. The grain is smaller than 'Tx2737', has a thick white pericarp and a nonpigmented testa. The line is heterogenous for fertility restoration in A1 cytoplasm, while reaction in A2 cytoplasm is not known.

Seed will be maintained and distributed by the Texas Agric. Exp. Stn., Route 3, Lubbock, TX 79401.


References and Notes

1. Assistant professor, Texas Agric. Exp. Stn., Lubbock, TX 79401; director of sorghum research, Northrup King Co., New Deal, TX 79550 (formerly professor, Texas Agric. Exp. Stn); professor, Dep. of Entomology, Texas A&M Univ., College Station, TX 77843; professor, Texas Agric. Exp. Stn., Lubbock, TX 79401; and sorghum specialist, Interamerican Inst. for Agricultural Cooperation/EMBRAPA-CNPM/World Bank, Caixa Postal 151, Sete Lagoas, Minas Gerais, 35700, Brazil. Registration by Crop Sci. Soc. of Am. Contribution no. TA18410, Texas Agric. Exp. Stn., Texas A&M Univ., College Station, TX 77843. This research was supported in part by grant AID/DSAN/XII/G-0149 from the U.S. Agency for International Development, Washington, D.C. 20523. Accepted 23 Sept. 1983.

REGISTRATION OF Tx2783 GREENBUG RESISTANT SORGHUM GERMPLASM LINE

'Tx2783' grain sorghum [Sorghum bicolor (L.) Moench] (Reg. No. GP157) was developed by the Texas Agricultural Experiment Station as a source of resistance to greenbug [Schizaphis graminum (Rondani)] biotypes C and E, derived from 'Capbam'. Capbam was an introduction from Russia received from DeKalb Agricultural Research Inc. in 1971. Tx2783 was released in 1981.

Tx2783 has a complex parentage. In 1971, the cross Tx424 × Capbam was made. Greenbug resistant F2 selections were made in 1972. A resistant F3 selection was crossed with a genetic male sterile (ms3) from [(TX412 × SC0173-9) × SC0326-6] × SC0110-9. A greenbug resistant F2 selection was then crossed with a genetic male sterile (ms3) from [(ROKY8 × Tx2536) × SC0110-9] × SC0599-6. Greenbug-resistant selections were made in the F4 and F5 generations. A resistant F5 was crossed with a genetic male sterile (ms3) from IS12610C (SC0110-9). Prior to 1980, selection was for biotype C resistance. In 1980 selection was for biotype E resistance. The release was a bulk of two F5 rows derived from one F5 plant.

Tx2783 exhibits a high level of resistance to greenbug biotype E in field screening and greenhouse seedling screening tests (Table 1). Tx2783 is heterogenous for height

Table 1. Reaction of three sorghum lines to biotype E greenbug infestations, 1980.

<table>
<thead>
<tr>
<th>Line†</th>
<th>Early</th>
<th>Late</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tx2536</td>
<td>5.5</td>
<td>8</td>
</tr>
<tr>
<td>Tx2737</td>
<td>5.5</td>
<td>8</td>
</tr>
<tr>
<td>Tx2783</td>
<td>3.5</td>
<td>5</td>
</tr>
</tbody>
</table>

†Tx2536 susceptible to biotype C. Tx2737 resistant to biotype C. Tx2783 resistant to biotype E.

‡Rating system: 1 = No red spotting on leaves, 2 = Red spotting on leaves, 3 = Portion of one leaf killed by greenbugs, 5 = Two leaves killed by greenbugs, 6 = Four entire leaves killed by greenbugs, 7 = Six leaves killed by greenbugs, 8 = Eight leaves killed by greenbugs, and 9 = Dead plant.
§Seedling rating based on percent of plant tissue feeding: 4 = 40%, 9 = 90%, 10 = 100%.

Seed will be maintained and distributed by the Texas Agric. Exp. Stn., Route 3, Lubbock, TX 79401.


References and Notes

1. The IS numbers associated with the SC designation 9 was a BC3F6 selection from 'IS12664', SC099-6 was a BC3F6 selection from 'IS5758', SC0110-9 was a BC3F6 selection from 'Rio', and SC0599-6 was a BC3F6 selection from 'Estes'.
2. Assistant professor, Texas Agric. Exp. Stn., director of sorghum research, Northrup King Co., New Deal, TX 79550 (formerly professor, Texas Agric. Exp. Stn); professor, Dep. of Entomology, Texas A&M Univ., College Station, TX 77843; professor, Texas Agric. Exp. Stn., Lubbock, TX 79401; and sorghum specialist, Interamerican Inst. for Agricultural Cooperation/EMBRAPA-CNPM/World Bank, Caixa Postal 151, Sete Lagoas, Minas Gerais, 35700, Brazil. Registration by Crop Sci. Soc. of Am. Contribution no. TA18410, Texas Agric. Exp. Stn., Texas A&M Univ., College Station, TX 77843. This research was supported in part by grant AID/DSAN/XII/G-0149 from the U.S. Agency for International Development, Washington, D.C. 20523. Accepted 23 Sept. 1983.

REGISTRATION OF A GERMPLASM LINE OF SOYBEAN, A7

The soybean [Glycine max (L.) Merr.] germplasm line, A7, was developed cooperatively by the Iowa Agriculture and Home Economics Experiment Station and the Puerto Rico Agricultural Experiment Station. Its resistance to iron-deficiency chlorosis is superior to any other genotype of soybean that has been evaluated for the character. The line will be maintained as a parent stock in soybean breeding programs.