REGISTRATION OF FIVE SORGHUM GERMPLASM LINES
(Reg. Nos. GP 64 to GP 68)

R. R. Duncan and H. B. Harris*

Five inbreds of grain sorghum [Sorghum bicolor (L.) Moench] were developed through pedigree breeding by the Georgia Agric. Exp. Stn. They are available as A and B lines. The male-sterile cytoplasm was derived from 'Combine Kafir-60' (CK60). B lines are in the F₁ generation of selection and A lines are in the seventh generation of backcrossing. Agronomic characteristics of the inbreds are summarized in Table 1.

Table 1. Agronomic characteristics of sorghum inbred lines released as germplasm by the Georgia Agric. Exp. Stn.

<table>
<thead>
<tr>
<th>GP reg. no.</th>
<th>Inbred no.</th>
<th>Pedigree</th>
<th>Phenotypic kernel color</th>
<th>Glume color</th>
<th>Awns</th>
<th>Height†</th>
<th>Maturation§</th>
</tr>
</thead>
<tbody>
<tr>
<td>GP 64</td>
<td>83E</td>
<td>Day-CK60 × (Martin × SA380) x Combine Sagrain</td>
<td>Brown</td>
<td>Black</td>
<td>Yes</td>
<td>Medium</td>
<td>Late</td>
</tr>
<tr>
<td>GP 65</td>
<td>97E</td>
<td>Day-CK60 × Combine Sagrain</td>
<td>Brown</td>
<td>Black</td>
<td>Yes</td>
<td>Medium</td>
<td>Late</td>
</tr>
<tr>
<td>GP 66</td>
<td>68009</td>
<td>(Day-CK60 × Wheatland) × PI 267484</td>
<td>Red</td>
<td>Straw</td>
<td>No</td>
<td>Short</td>
<td>Medium</td>
</tr>
<tr>
<td>GP 67</td>
<td>68027</td>
<td>(Day-CK60 × Wheatland) × (Redlan × Wiley)</td>
<td>Red</td>
<td>Straw</td>
<td>No</td>
<td>Short</td>
<td>Medium</td>
</tr>
<tr>
<td>GP 68</td>
<td>68181</td>
<td>CK60 × (CK60 × SA 9702-2)</td>
<td>White</td>
<td>Black</td>
<td>No</td>
<td>Medium</td>
<td>Late</td>
</tr>
</tbody>
</table>

† Medium is comparable to 'BTx 624.' Short is comparable to 'BMartin.' § All lines have purple plant color and semi-open heads.

REGISTRATION OF IAP1R(M)C4 SORGHUM GERMPLASM
(Reg. No. GP 69)

R. E. Atkins*

The Iowa Agric. and Home Economics Exp. Stn. released the Sorghum bicolor (L.) Moench random mating population IAP1R(M)C4 in 1979. Development of the population was initiated at Ames in 1973 by making controlled pollinations of 10 fertility re-

male-sterile heads and from 450 fertile heads of the male-sterile heads are suitable for addition and seed composites from the fertile germplasm source in which to inbreed for R-

The IAP1R(M)C4 population is highly variable in agronomic characteristics. Selection for head type, male-sterile heads, and head color was not practiced during the development of the population. The population contains about 95% resistant plants. About showed resistance in a disease nursery at to 1979 (California is noted for its high

Composite Cross XXXVI should contain a gene resistance to scald due to the cycle of recombination, while at the same time provide sufficient agronomic quality to be directly usable.

Seed of the latest available generation of these lines can be obtained by writing to the collectors or from the Selection of Small Grains, AR-SEA-USDA, Beltsville Agric. Res. Ctr., Beltsville, MD 20705.

The inbreds should have potential in hybrid production and humid environmental conditions; disease resistance [particularly anthracnose caused by Colletotrichum graminicola (Ces.) G. W. Wils.] and weather characteristics of these lines.

Breeder seed will be maintained by the Department of Agronomy, Georgia Agric. Exp. Stn., Experiment, GA 30212 distributed in lots of 100-125 seed each.

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