NOTES

Table 1—Summation of data for the 15 highest yielding compact partial hybrids at 42,000 plants per acre, 1959.

<table>
<thead>
<tr>
<th>Hybrid</th>
<th>Yield*</th>
<th>% erect at harvest</th>
<th>Hybrid</th>
<th>Yield</th>
<th>% erect at harvest</th>
</tr>
</thead>
<tbody>
<tr>
<td>9241</td>
<td>138</td>
<td>61</td>
<td>92145</td>
<td>140</td>
<td>72</td>
</tr>
<tr>
<td>9250</td>
<td>148</td>
<td>82</td>
<td>92167</td>
<td>149</td>
<td>80</td>
</tr>
<tr>
<td>9269</td>
<td>136</td>
<td>28</td>
<td>92175</td>
<td>130</td>
<td>100</td>
</tr>
<tr>
<td>9280</td>
<td>131</td>
<td>72</td>
<td>92178</td>
<td>126</td>
<td>87</td>
</tr>
<tr>
<td>9293</td>
<td>152</td>
<td>59</td>
<td>92182</td>
<td>163</td>
<td>78</td>
</tr>
<tr>
<td>9297</td>
<td>139</td>
<td>17</td>
<td>92191</td>
<td>139</td>
<td>72</td>
</tr>
<tr>
<td>92194</td>
<td>141</td>
<td>89</td>
<td>92194</td>
<td>135</td>
<td>100</td>
</tr>
</tbody>
</table>

LSD (0.05) = 41 bushels

* In bushels/acre at 13.5% moisture.

As would be anticipated in crosses of completely unselected material, the range in yields was from very low to impressively high. The extremes were hybrids yielding 9 and 163 bushels per acre. The mean yield of all the hybrids in the test was 81 bushels per acre, and the coefficient of variation was 31%. Of the 196 hybrids 52 yielded more than 100 bushels per acre and 15 more than 125 bushels per acre. The data from the 15 highest yielding hybrids are summarized in table 1. Some hybrids, which are satisfactory in yield, must obviously be disqualified because of the large amount of stalk breakage under conditions of thick planting.

As a control the commercial hybrid, AES 702, was planted at the same population and spacing in an adjacent area. Six randomly selected plots were harvested. The mean yield of these plots was 15 bushels per acre.

Tests of partial hybrids which are homozygous for the ct gene have shown that many such hybrids retain the favorable response to population pressures first noted in the original ct inbred. Owing to this response, the optimum population for maximum yield is far above that considered optimum for normal hybrids. This high optimum population density of the compact strains gives promise of yields above those given by normal hybrids. It should be remembered, however, that this superior performance of the better compact strains is dependent on high soil fertility and adequate moisture to support the high populations required for maximum yield.—OLIVER E. NELSON, JR. and A. J. OHLROGGE, Professor of Genetics, Department of Botany and Plant Pathology, and Professor of Agronomy, Department of Agronomy, respectively.

A METHOD FOR KEEPING MAIZE PLANTS ALIVE IN THE TASSELING STAGE FOR DEMONSTRATIONS

TEACHERS, research workers, and extension personnel have needed a method of maintaining live maize plants in a fresh and green condition for visual aids in demonstrations. Sometimes the demonstrations continue over a period of several days (e.g., exhibits at agricultural fairs).

If the demonstration is in the field, it may not always be possible to grow the plants in the exact location of the demonstration. If the meeting is to be inside a building, it may not be possible to grow the plants in the exact location of the demonstration. If the meeting is to be inside a building, it may not be possible to grow the plants in the exact location of the demonstration.

A mature corn plant undergoing anthesis was dug from the field nursery. The roots, in a container 10 to 12 inches in diameter, were enclosed in a plastic fertilizer bag 19 inches wide and 28 inches deep. The plastic bag and the soil were sprinkled with water before tying the bag securely with a string. The bags were kept moist in this manner.

Five plants, thus treated, were transported from the nursery to a distance of 202 miles and placed in the sun during the hybrid demonstration. Holding the plastic bag over the roots of the plants under the sun while the plants were dug 1 to 2 days prior to the meeting, although they were dug 1 to 2 days prior to the meeting.

Three of the plants were transported back to Athens and placed in a grove of trees on the University campus. The soil was sprinkled occasionally into the plastic bag around the roots of the plants in the bag. The roots were thoroughly kept moist in this manner.

Five plants, thus treated, were transported in the trunk of an automobile for 202 miles and placed in the sun during the hybrid demonstration. Holding the soil at the site of the meeting for placing the plants in the trunk, the roots underneath the soil. Consequently, the plants were visible to the audience. If rain had forced the plants to remain indoor quarters, the plants in the bags would have been watered easily on the floor without support, another advantage of the method.

The plants were still alive and in good condition at the end of the demonstration, although they were dug 1 to 2 days prior to the meeting.

Three of the plants were transported back to Athens, placed in a grove of trees on the University campus, and kept moist in this manner.

Three of the plants were transported back to Athens, placed in a grove of trees on the University campus, and kept moist in this manner. The method apparently has other possibilities such as transferring plants from the greenhouse to various locations, vice versa, and crossing plants from different locations.

A. A. FLEMING, Associate Professor of Plant Breeding, College Experiment Station, University of Georgia.

AN AUTOMATIC FEEDER FOR THE LABORATORY ASPIRATOR

THE Bates laboratory aspirator is widely used for feeding small-sized seed samples. Originally intended for cereal seeds, its use has spread to the feeding of finer and lighter seeds by virtue of its reliability. The machine has proved especially valuable to plant breeders faced with the task of cleaning large amounts of smaller seed samples.

Certain kinds of seed, such as light or chaffy grass seeds, tend to bridge in the receiving hopper of the mechanism, making feeding difficult. Procedures commonly used to correct faulty feeding are slowly pouring samples into the receiving hopper with the hand and jarring the feed control mechanism to break up bridges. When the hand is used in this manner, it is difficult to keep the hand in a position to make a steady flow of seed.

A simple method was developed for feeding small-sized seed samples. For maximum use, it is essential to have a feed valve and consequently to poor separation. Procedures commonly used to correct faulty feeding are slowly pouring samples into the receiving hopper with the hand and jarring the feed control mechanism to break up bridges. When the hand is used in this manner, it is difficult to keep the hand in a position to make a steady flow of seed.

A simple method was developed for feeding small-sized seed samples. For maximum use, it is essential to have a feed valve and consequently to poor separation. Procedures commonly used to correct faulty feeding are slowly pouring samples into the receiving hopper with the hand and jarring the feed control mechanism to break up bridges. When the hand is used in this manner, it is difficult to keep the hand in a position to make a steady flow of seed.

A simple method was developed for feeding small-sized seed samples. For maximum use, it is essential to have a feed valve and consequently to poor separation. Procedures commonly used to correct faulty feeding are slowly pouring samples into the receiving hopper with the hand and jarring the feed control mechanism to break up bridges. When the hand is used in this manner, it is difficult to keep the hand in a position to make a steady flow of seed.

A simple method was developed for feeding small-sized seed samples. For maximum use, it is essential to have a feed valve and consequently to poor separation. Procedures commonly used to correct faulty feeding are slowly pouring samples into the receiving hopper with the hand and jarring the feed control mechanism to break up bridges. When the hand is used in this manner, it is difficult to keep the hand in a position to make a steady flow of seed.

A simple method was developed for feeding small-sized seed samples. For maximum use, it is essential to have a feed valve and consequently to poor separation. Procedures commonly used to correct faulty feeding are slowly pouring samples into the receiving hopper with the hand and jarring the feed control mechanism to break up bridges. When the hand is used in this manner, it is difficult to keep the hand in a position to make a steady flow of seed.