Notes Section

The Journal of the American Society of Sugar Beet Technologists is initiating with this issue, a "Notes Section." Contributions to this section should be short, informative, and of technical nature. This is the place to report on items too short for a paper, but of value to beet sugar and sugar beet research. Your contributions are invited.

Plastic Sheeting Useful in Storing Mother Beets and Stecklings. A combination of low temperature (about 40°F) and high humidity (near 100 percent) provides near ideal conditions for storage of mother beets and stecklings. In the setup at The Great Western Experiment Station such roots have for several years been stored in jumbo cantaloupe crates, stacked five or six high in a root cellar. It has been relatively easy to obtain favorable temperatures, using artificial refrigeration units. Since this geographic area is characterized by low atmospheric humidity, the maintenance of a favorable highly humid condition has not been easy. Fans operating in connection with the unit coolers provide drafts with spots or areas developing which are subject to drying.

A 16½ ft. x 16½ ft. sheet of plastic of .004 inch thickness over a double stack including 130 crates has provided excellent conditions to the extent that roots stored will show no apparent dehydration. The initial cost for the plastic (trade name Vis-Queen) used in this test is about four cents per crate ($32.50 per roll 100 ft. x 16½ ft.). With proper care the plastic may be used over and over, also for other purposes wherever such air-tight covers might be useful.

H. E. BREWBAKER, DIRECTOR
AGRICULTURAL EXPERIMENT STATION
THE GREAT WESTERN SUGAR COMPANY

Selection for Fusarium Resistance. Seedlings grown in greenhouse flats till the roots were 5 to 10 mm. in diameter can be tested for Fusarium yellows resistance. The older leaves of the seedlings were cut off, the roots severed under a suspension of inoculum to about 1½ inch in length and the seedlings transplanted to greenhouse flats. The flats with the inoculated seedlings were then placed in a chamber having saturated humidity and a temperature of 30 to 32° C, where they were left for seven days. When inbred lines were tested, striking differences in resistance were apparent between lines (see photo). One Great Western variety, selected in the field for resistance, showed a gain in resistance over its parent when tested by the above method.

R. K. OLDEMEYER, PLANT BREEDER
AGRICULTURAL EXPERIMENT STATION
THE GREAT WESTERN SUGAR COMPANY
Variation in resistance to *Fusarium* of *S*, inbreds of sugar beets following artificial inoculation. White stakes limit the lines. Note line in upper left is comparatively resistant.

**Types of Bags for Self-Pollination.** In 1954, 749 comparisons indicated that untreated bleached Kraft (Snowfibre) bags yielded 17 percent more seed per bag than bags of the same size made of 27-pound parchment. Respective numbers of seed per bag were 48.5 and 41.4. Scalding in the parchment bags probably accounted for the difference.

Four different types of bags and bag treatments were tested for seed set on 170 different plants in 1955. The mean seeds set per bag are summarized below:

<table>
<thead>
<tr>
<th>Snowfibre (untreated)</th>
<th>Parchment (untreated)</th>
<th>Snowfibre Silicone Treated (heat cured)</th>
<th>Snowfibre Silicone Treated (air dried)</th>
</tr>
</thead>
<tbody>
<tr>
<td>39.0</td>
<td>33.6</td>
<td>44.7</td>
<td>47.4</td>
</tr>
</tbody>
</table>

The silicone treated bags weathered less than the untreated bags. Uncured bags weathered more than heat-cured bags but had sufficient water repellancy for use. Silicone treatment definitely does not lower seed yield and perhaps may increase it.

R. K. Oldemeyer, Plant Breeder
Agricultural Experiment Station
The Great Western Sugar Company