Notes Section

Marlex Plastic Containers for Growing Sugar Beet Seedlings.

Aluminum foil is being used for containers in growing sugar beet seedlings in the greenhouse. A container 2" x 2" which is 7" deep holds about the same volume of soil as a standard 4" clay pot, but occupies only one fourth as much space. These containers have proven excellent for vernalization of seedlings which are to be transplanted to clay pots or to greenhouse beds and for screening individual seedlings for nematode resistance.

Aluminum foil containers have the following disadvantages: (1) If not reused, the foil has to be collected for disposal; (2) if reused, the pots need reforming and can generally be used only one more time before corrosion occurs through the foil; and (3) the foil is not stiff enough for convenient filling of the containers with soil. Aluminum foil is, however, inexpensive.

To overcome the disadvantages of aluminum foil, a search was made for a plastic which could be creased in forming. Marlex polypropylene plastic formed a nearly indestructible hinge when creased. Precut sheets of Marlex, 7" x 9 1/4", 15 mils thick, were obtained for less than 5 cents each.

A forming device was designed, as shown in Figure 1. It is comprised of a length of angle iron 1 7/8" wide, beveled on the front edge. The plastic is placed on the angle iron with the edge flush with the back of the angle iron. The plastic is hinged by forcing a piece of extruded aluminum angle, bent to about 50°, over the plastic at the beveled edge of the angle iron. A handle was fitted to the aluminum angle for ease of handling. Each of the four corners of the container is hinged in this way. A paper clip holds the 2" x 2" x 7" deep container in shape until it is filled with soil.

Figure 1.—Forming device for creasing Marlex plastic. Note 3/4" overlap held by paper clip on finished container.

* Mimeographed report to Beet Sugar Development Foundation by J. S. McFarlane, ARS, USDA, 1953.*
Boxes for holding the containers are made by modifying a standard cantelope crate and are 22\(\frac{1}{8}\)" x 13\(\frac{1}{8}\)" x 7\(\frac{1}{4}\)" deep inside dimensions. Sixty containers fit compactly into the box (see Figure 2).

![Figure 2](image)

Figure 2.—Illustration of the complete operation in forming containers and placement in boxes.

After use, the pieces of plastic are washed in our laboratory beet washer and are reused without further creasing.

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