Figure 4. Methyl bromide phytotoxicity on dianthus. Coleus, dusty miller, impatiens, lettuce, lobelia, tomato and verbena were not affected.

Figure 5. Methyl bromide burn.

tube flipped toward him when he removed it from under the plastic cover. Fortunately no permanent damage was done. Another burned his leg when the applicator broke while applying the material (Figure 5).

DON'T LET IT HAPPEN: CASARON IN THE GREENHOUSE

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The worst case of "crud" we have ever seen was found on a crop of Connecticut grown Poinsettias this past season. For a time, Extension agents and specialists alike were stumped. Finally we learned that an herbicide application was made sometime before Christmas in the house where the crop was

Figure 1. Casaron damage on poinsettia. After excessive crud appeared, the bracts died.
being finished. An employee inadvertently applied Casaron (in place of Simazine or Karmex) to control weeds under the greenhouse benches.

When the crop was moved into this house and the heat came on, troubles began. The steam lines run under the benches in this house and are quite close to the floor. When Casaron is heated above 80°F it begins to volatilize.

We are now reasonably sure that Casaron vapor caused the obvious problems which are seen in these photos.

Why were the bracts the only plant part affected? Because Casaron usually affects only the actively growing plant parts. More mature foliage was not

Figure 2. A few drops of crud are still obvious as these bracts shrivel and die.

Figure 3. Methyl bromide canister and applicator.

may be done at 60°F, it is more effective at 70°F or above. Then inject the methyl bromide under the cover with a special applicator with a tubing (Figure 3). The applicator punches a hole in the can which allows the material to travel through the tube under the plastic cover. A pan should be at the end of the tube for the material to evaporate. Leave the soil covered for 2-4 days for maximum effectiveness. Allow the soil to aerate for 2-3 days before using. Do not use on soil to be used for carnations or other Dianthus species (Figure 4).

Methyl bromide destroys beneficial bacteria such as those that transform organic, ammonium and nitrite forms of nitrogen to the more usable nitrate form. Therefore, the first application of fertilizer should be potassium or calcium nitrate.

CAUTION: Methyl bromide is a highly toxic material. A few injuries have been reported from those using it. One grower burned his eye when the
chains, sand filled fire hoses and pipes can be used to form a seal with less danger of contamination. A paved area is desirable if treating soil outdoors.

If possible, after covering the soil with plastic, wait a few days for the soil to warm up and allow the weed seeds to germinate. Although treatment noticeably damaged; and, plants with mature bracts brought in from other houses showed little or no damage at time of sale. Casaron inhibits new cell development. Consequently, the plants normally functioning vascular system literally burst the cells in the immature bracts and cyathia.

Don't let this happen to you! Always read the label and use all pesticides with care.

Figure 3. Christmas cactus flowers formed balls instead of opening normally when exposed to Casaron fumes. They sold well as novelties!