Management Tips for the 1995 Easter Lily Crop

Richard J. McAvoy Associate Professor and Extension Specialist Greenbouse Crops

aster 1995 falls on April
16. This is considered a

late Easter. Compared to last year, when Easter fell on April 3, in 1995 you will have two extra weeks from the time the bulbs are dug until the flowers are sold. Growers may find they have to slow the crop so that it does not come in too early.

Last year, many Lily growers were reminded just how dominant an effect weather can have on the Easter crop. Following a cool, wet summer, bulbs for the 1994 crop were in limited supply (especially the larger sized grades) and quality was generally below standard. In the east, the weather was horrible for forcing. Record cold prevented growers from maintaining desirable temperatures early in the crop and snow clouds darkened the skies for much of the season. Growers had to really push the crop with high temperatures in the final weeks to finish on time. By Easter, good quality lilies were hard to find.

It's too early to predict what will happen in 1995. Bulb quality from the northwest production fields will not be assessed for several weeks, and no one can predict what the winter will bring. However, we do know that a late Easter gives growers the opportunity to really work on increasing bud count and still bring the crop in on time.

Use the Extra Time to Increase Bud Count

Bulbs dug in late-September to mid-October will be shipped to bulb growers 25 to 26 weeks before Easter. (See the 1995 Easter Lily Schedule in this issue.) This is early. Growers must begin programming bulbs as soon as they arrive. Normally, bulb programming (vernalization) starts about 23 weeks before Easter to provide adequate time for

greenhouse forcing (17 weeks for case-cooled bulbs and 14 weeks for pot-cooled). This year growers must choose how they will use the extra time.

One option is to begin cooling the bulbs at recommended temperatures ('Ace' at 35° to 40°F, 'Nellie White' at 40° to 45°F and 40°F for mixed lots). After four weeks, drop the temperature to 32° to 34°F. This will slow vernalization, so that the bulbs can remain in the cooler beyond the normal six weeks without "perceiving" more than 1,000 hours of vernalization. **Note:** If you use this method, do not allow the bulbs to freeze.

A second option is to run cooler than normal temperatures after the primary buds initiate. The cool temperatures will stimulate secondary bud formation and also slow lily development. With this technique, vernalize bulbs as you normally would, then move the bulbs into the 60° to 62°F greenhouse 19 weeks before Easter. Once the primary buds initiate, lower greenhouse temperature to 46°F for 'Nellie White', 55°F for 'Ace', or use 50°F for mixed lots. Maintain these temperatures for seven to 14 days to stimulate secondary bud formation.

Warning, do not use the cool temperature dip unless greenhouse forcing begins early (i.e., prior to week 17 for case-cooled bulbs and prior to week 14 for pot-cooled bulbs). After this period, raise the temperature to 60°F for 'Nellie White' and 70°F for 'Ace' until bud initiation is complete. Raising the temperature will increase tertiary bud initiation.

Timing of the cool temperature dip is critical. It must follow primary bud initiation. Dissect some lilies to determine when the primary buds initiate. If the temperature is lowered before the primary buds are set, flower bud initiation may be adversely affected or delayed. If the temperature is lowered after bud initiation is complete, it will have no effect on bud count.

Regardless of the way you use the extra time this year, only use temperature to slow the crop. Do not withhold water or nutrients to accomplish this task. Withholding water or fertilizer will result in poor crop quality.

Use the 1995 Easter Lily Schedule as a guide for planning the Easter crop. Final crop height and crop timing will depend on how you manage the crop. The following tips, along with the 1995 schedule, will help you make informed management decisions. Look for crop updates and finishing tips in future issues of the *Connecticut Greenhouse Newsletter*.

Each year's Easter lily crop represents a new experience. Although we cannot predict the future, we can learn from the past. It's still too early to tell what special circumstances will confront Easter lily growers this year, but from experience, we know that growers who pay close attention to crop development and cultural details have the most success. This will be the case again in 1995.

48th Annual Horticulture Show

Saturday, October 8 10:00 a.m. until 6:00 p.m. Sunday, October 9 9:00 a.m. until 4:00 p.m.

Ratcliffe Hicks Arena Route. 195 at North Eagleville Road in Storrs, CT

FREE ADMISSION

Live plant and flower displays, petting zoo and other educational displays. Pumpkins, apples, herbs, bulbs, chrysanthemums, dried flowers and more for sale.

Sponsored by the UConn Horticulture Club Department of Plant Science