



Florogram



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Preplanting Care

Store early shipments at 35° to 40° F. If kept at higher temperatures precooling effect is nullified, longer forcing period is required and bud count is reduced. Examine bulbs for possible damage from insects and disease. Report immediately any unusual conditions to your supplier and county agent or specialist.

Soil Preparation

For plastic pots usually 1 part loam, 1 part peatmoss, 1 part coarse concrete sand is satisfactory. For clay pots up to 3 parts loam, 1 part peatmoss and 1 part coarse concrete sand.

Drainage

Provide adequate drainage, regardless of type pot used, by placing 3/4" to 1" COARSE PEA STONE IN THE BOTTOM OF ALL TYPE POTS. Well drained soil is important in the prevention of root rot.

Sterilization

Sterilize all areas and equipment which are to come into contact with the crop with steam for 1 hour at 180°F.

Soil Nutrients

pH 6.5 to 7.0; soluble salts 50 to 60.

ACE - To the above soil mixture add a 3" pot of superphosphate and a 4" pot of ground limestone to 2½ bushels of soil.

CROFT - To the above soil mixture apply a 5" potful of ground limestone to 2½ bushels of soil. Have a moderate to low level of phosphorus. Have soil tested before using. Research shows that high calcium levels, high nitrogen levels and low phosphorus levels reduce the incidence of leaf scorch on Croft lily.

Planting Depth

Plant deep. Place a small amount of soil over pea stone and plant bulb low in pot to encourage stem rooting. Stem roots will usually carry a crop in the event of basal root disease.

Warning on Stacking Lily Pots

Bulbs may sprout before poinsettia crop is removed because of planting date (November 28). Stacked pots may be covered with plastic to reduce uneven drying, especially at the outer edges. Spread out as soon as space is available.

Bulb Dip Treatments

1. Captan 50% w.p. at 2 tablespoons to 1 gallon plus PCNB 75% w.p. (Terraclor) at 3/4 teaspoon to 1 gallon for 30 minutes.
2. PCNB 75% w.p. (Terraclor) 1 oz., Ferbam 76% w.p. 1 oz., and Parathion 15% w.p. 1 oz. to 3½ gallons of water for 30 minutes. Drench pots 8 weeks later with Parathion 15% w.p., 1 oz. to 3½ gallons of water at the rate of 1 pint per pot.

Fertilization Program (See Schedule)

ACE - 3 lbs. of 12-12-12 per 100 gallons of water
2 lbs. of 20-20-20 per 100 gallons of water

CROFT - 2 lbs. of 20-0-20 per 100 gallons of water

CROFT OR ACE - 1½ lbs. calcium nitrate per 100 gallons water
or
1½ lbs. nitrate of soda per 100 gallons of water
along with
1 lb. of potassium nitrate per 100 gallons of water

Insect Control (See schedule)

Recommended Insecticides

1. Lindane 25% w.p. at 1 lb. per 100 gallons of water.
2. Malathion 25% w.p. at 2 lbs. per 100 gallons of water.
3. Aerosol bomb of either of above materials.
4. Systox (Demeton), systemic, applied to soil, absorbed by roots and translocated to stems and leaves. Use at the rate of 1 fluid ounce to 15 gallons of water and apply to lily pots as a good watering.
CAUTION - SYSTOX IS VERY POISONOUS. Wear the proper respirator, rubber gloves and protective clothing. Houses should be ventilated often to rid them of excess fumes which will last about two months.

Miscellaneous (From N.Y.S.F.G. Bul. 155, Nov., 1958. "Lilies for Easter 1959," John C. Seeley)

1. Rate of growth. Since bulb storage conditions and weather, especially light during the growing period, have so much effect on lily growth, the grower has to adjust temperatures and/or move plants to speed up or slow down growth as necessary.
2. Lights. Lights at night speed up growth if greenhouse temperatures are below 65°. Lights cause stretching. A little extra heat to speed up growth is more desirable than lights.
3. Fertilization. Continue the fertilization until the plants are sold.
4. Leaf scorch. Although the basic causes of leaf scorch are not definitely known, it is desirable to have a soil pH of 6.5 to 7.0 and supply nitrogen fertilizer regularly. Straight nitrogen fertilizers are preferred to complete (especially high phosphorus) fertilizers.
5. Height. Not all factors affecting height are known.
 - a. To prevent stretching, space the plants so the tips of the leaves do not overlap. Grow lilies in light houses with clean glass, and not in houses shaded by trees, or nearby buildings.
 - b. Fertilizing will not stretch lilies; in fact, fertilized lilies are usually a little shorter than those in a low nutrient soil.
 - c. Running plants a little on the dry side tends to shorten them but don't overdo it. Keep soil moist during the root forming period, and when the flower buds are forming (when the plants are 2 to 4" tall).

d. Don't force plants at temperatures higher than necessary. High temperatures cause stretching.

6. Bud Count. Again, we don't know all the factors.

a. Probably growing conditions in the field as well as temperature and moisture during storage affect bud count since these affect the food reserves of the bulb.

b. Large bulbs tend to produce more flowers than small bulbs.

c. When received, bulbs should be planted as soon as possible. Don't store them in a hot dry location.

d. Careful handling of bulbs is essential. Breaking off scales tends to reduce the bud count.

e. Light intensity affects bud count. In general, plants in brighter regions of the country have more flower buds than in areas with little sunshine in winter. Give plants plenty of space on the bench. Avoid dark, shaded houses and dirty glass.

7. Blasted Buds. Poor plant growth such as caused by improper waterings, too little light, excess fertilizer and poor roots, will result in blasting. Plants being held in a cold greenhouse will have blasted buds if exposed to the morning sun before the soil gets warm. Watering with warm water or some light shade should help.

8. Splitting. Not all causes are known. Irregular temperatures and weather (light) conditions may induce splitting. An infestation of aphids will cause severe splitting.

9. Loss of Lower Foliage. Usually due to lack of nitrogen, lack of light due to crowding, or the soil being kept too dry.

SUGGESTED SCHEDULE FOR FORCING EASTER LILIES - 1961

<u>DATE STARTED</u>	<u>DAYS TO EASTER</u>	<u>Night Temperature</u>		<u>Day Temperature</u>
		<u>ACE</u>	<u>CROFT</u>	
		62°F.		70°F.
		60°F.		70°F.
<u>DATE STARTED</u>	<u>DAYS TO EASTER</u>	<u>REMARKS AND CONDITION OF PLANT</u>		
Nov. 28	17 weeks (120 days)	Plant into sterilized soil - 1 part sand, 1 part peatmoss, 1-3 parts loam, depending on whether crop is grown in clay or plastic pots. Soil of low salt content. Drainage 3/4"- 1", pea stones in bottom of pot. Water thoroughly and watch watering until plants are placed on bench.		
Dec. 12	15 weeks	Plants breaking soil.		
Dec. 26	13 weeks	Plants 1" tall.		
Jan. 9	11 weeks	Plants 1"- 4" tall, give Croft first feed.		
Jan. 16	10 weeks	Plants 3-5" tall, give Ace first feed. Spray, dust or bomb (use Systox) for insects.		
Jan. 23	9 weeks	Growth of lily 5-6" tall.		
Jan. 30	8 weeks	Growth 8-10" tall. Give second feed. Check for insects.		
Feb. 6	7 weeks	Growth 12-15" tall.		
Feb. 13	6 weeks	Buds size of a garden pea seed. Space out plants as much as possible.		
Feb. 20	5 weeks	Give third feeding. Spray, dust or bomb for control of insects.		
Feb. 27	4 weeks	Buds 1½"- 2" long.		
Mar. 6	3 weeks	Buds 2-3" long. Still bending down. Give feeding.		
Mar. 13	2 weeks	Buds 3-4" long. Check for insects. If aphids present, use smoke of dithio.		
Mar. 20	1 week	If plants are developing too fast, store at 40°F. Water soil well and store when the first bud is just ready to crack open. Mist spray plants with Zineb (1/2 lb. per 100 gals. of water) prior to storage for botrytis protection. Remove two days before full bloom is desired. Give final feeding in preparation of sales.		
Mar. 27		Preparation for Easter sales - 1 or 2 buds nearly white. Don't ship with all flowers opened.		