

CULTURAL SUGGESTIONS FOR HANDLING LILY CROP FOR 1962

Time of Planting - The lily bulb, either Croft or Ace, can be forced into bloom in about 120 days. As Easter comes on April 22 this year (1962) this means that they should be planted about December 20-25. It is possible that with the high day temperatures and higher light intensities prevailing later in the month of April, we shall be able to bring in the Easter crop in 105-110 days, so make your plans accordingly.

What to Do for Early Arrival of Bulbs - If bulbs arrive early, store them at 40-45°F until the planting date. Lilies kept at higher temperatures previous to the planting date may take longer to force into bloom and most important of all, they may have the flower count reduced.

Inspect Bulbs Carefully Upon Arrival - Lily bulbs should be carefully inspected upon arrival for any excessive wilting, damage from insects or disease.

Whom Should You Contact? - Call your supplier immediately for any disorder detected and your county agent and/or specialist.

Shall the Bulbs be Grown in Clay or Plastic Pots? - There are numerous advantages for plastic pots. They are lighter to handle; they are as cheap or cheaper; they do not require as much watering and there is a definite saving in labor for there is little if any cleaning. If soil preparation is adequate, the lily bulb seems to grow just as well in plastic as it does in clay.

What Soil Preparation to Use -

Plastic pots - 1 part soil
1 part peat moss
1 part sand (coarse grade)

Clay pots - 2-3 parts soil
1 part peat moss
1 part coarse sand

What Drainage Should Be Used? - 3/4 to 1" coarse pea stone placed in the bottom of the plastic or clay pot.

Should the Clay Pots be Sterilized? - Sterilize all old clay pots, benches or any area where the crop is likely to come in contact with soil. Sterilize soil, clay pots and other areas for 1 hour at 180°F.

How Can One Sterilize Plastic Pots? - Dip them in a solution 1-20 of any chlorine materials such as Clorox. Dry before using.

Do You Need to Test Your Soil? - If you are using a soil or soil mixture which you haven't had any experience with, then a soil test is in order. Usually a 4" pot each of ground limestone and superphosphate 20% to each three bushels of soil is adequate. Then feed the crop as needed for good development of color.

What Is the Recommended Depth to Plant Lily Bulbs? - We suggest planting the bulb deep in the pot by placing a small amount of soil over the pea stones 3/4 to 1". This encourages stem root formation and is good insurance to carry a crop to maturity in case root rot does show up.

What Are the Recommendations for Lily Bulb Treatments? - First, we would like to emphasize the proper culture needed to bring in a crop of lilies for such diseases can be kept to a minimum:

1. Proper soil structure and drainage.
2. Proper watering procedures.
3. Proper spacing.
4. If you have sterilized, be careful not to recontaminate the crop. Secondly, if you do get into trouble and need help, use one of the following materials with prescribed dosages.

Dip Treatments

- a. Captan 50% w.p. at 2 tablespoons per gallon and PCNB (Terraclor) 50% w.p. at 3/4 teaspoonful to 1 gallon and allow to soak for 30 minutes.
- b. For an alternative we suggest PCNB w.p. (Terraclor) 1 oz., ferbam 76% w.p. 1 oz., and parathion 15% w.p. at rate of 1 oz. to 3½ gallons and apply at the rate of 1/2 pint per 6" pot.

Dust Treatments - Reported from University of Wisconsin, 1956

- a. Thiram 50% (Arasan dustless type. Be sure to use a respirator).
- b. Zineb 65% w.p. (Parzate or Z-78)

What Are the Diseases Reported to Cause Root Rots on Lilies? - Rhizoctonia, Pythium, Fusarium and Thielaviopsis. No known chemical as yet to control the latter. Cool temperatures are known to be favorable to this disease.

How Shall We Fertilize the Lily Crop? - Results of research show that fertilizer will not cause elongation of the lily stem. Suggest following the time given in the schedule and the types to use:

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| 1. | 3 lbs. of 12-12-12 (XL-36) to 100 gals. | - Ace |
| 2. | 2 lbs. of 2-20-20 (Cupco) to 100 gals. | - Ace |
| 3. | 2 lbs. of 20-0-30 (XL-50) to 100 gals. | - Ace or Croft |
| 4. | 1½ lbs. of potassium nitrate and 1½ lbs. of calcium nitrate to 100 gals. | - Ace or Croft |

The schedule calls for feeding Ace five times during the forcing period. In checking out with how many times growers actually feed, we learned that most growers feed four times. We found one grower feeding only once and his crop looked very deficient in nitrogen.

What Is the Secret in Controlling Insects on Lilies? - Be timely in the application and rotate from one type of insecticide to another such as lindane to malathion.

Last spring Systox (Demeton, a systemic insecticide) was used in an experiment by Professors Whitcomb and Garland. They found Systox to be very effective in controlling aphids. Systox should be used at the rate of 1 fluid ounce to 15 gallons of water and applied to the pots as a good watering.

The following is a list of other insecticides for controlling aphids:

1. Lindane 25% w.p. at rate of 1 lb./100 gallons
2. Malathion 25% w.p. at rate of 2 lbs./100 gallons

Caution on Use of Systox - It is a very poisonous material. Wear the proper respirator, rubber gloves and protective clothing as you would for parathion. Houses should be occasionally ventilated to rid them of excess fumes.

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