

2020 University of Connecticut Easter Lily Schedule
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Weeks Prior to Easter	Date	Forcing Method	
		Case-Cooled	Pot-Cooled (CTF)
25-24	Oct 20-27	Bulbs dug, shipped & in hand by mid-Oct.	
23	Nov 3	Start bulb programming as soon as bulbs arrive but no later than 23 weeks before Easter.	
		Cool at 40-45F for 6 weeks	Pot & allow roots to grow at 60-62F for up to 3 weeks
20	Nov. 24	---	Cool at 40-45F for 6 weeks
17	Dec 15	Pot no later than 17 weeks before Easter	
		Force in greenhouse at 60-62F in pot.	---
14	Jan 5	Roots visible by week 15 & shoots emerge by week 14. Start fertilizing & keep moist.	Force in greenhouse (at 60-62F) no later than 14 weeks before Easter.
		Only use insurance lighting on bulbs that did not receive the full 6-weeks of cooling. As soon as shoots emerge, provide 1-week of lighting for each week of cooling needed to reach 1000-hours.	
13	Jan 12	1-2" tall. Keep lilies moist & use fungicide drench as needed.	
12	Jan 19	2-3" tall. Bud initiation coincides with stem root development.	
		Run 60-62F-day/ nights until bud set is complete.	
11	Jan 26	3-4" tall. Apply growth regulator when 3-5" tall.	
		Bud initiation nearly complete, maintain temperature below 65F until done.	
10	Feb 2	Check for bud set. Begin leaf counting & graphical tracking. Keep greenhouse cool if ahead of schedule.	
9	Feb 9	5-6" tall. Adjust temperatures as needed. Space lilies to avoid yellow leaves & stretching. Apply Fascination (10ppm) to lower leaves 7 to 10 days before visible bud if leaf yellowing is evident.	
8	Feb 16	Check for aphids & root problems. Apply systemic pesticides sometime during weeks 10, 9, or 8. Soil test & if leaf scorch is evident, use calcium nitrate for balance of schedule.	
7	Feb 23	7-8" tall. Lilies reach half of final height 42 days before sale. Buds can now be felt.	
		If buds are visible on early plantings run 60F until finish.	
6	Mar 1	35 days to sale. Buds should be visible no later than 30 days prior to sale. Grade for uniformity as buds become visible.	
5	Mar 8	Buds 1/2-1" long. Re-apply Fascination (10 ppm) to lower leaves if necessary.	
4	Mar 15	Buds 1-1 1/2", some bending down.	
3	Mar 22	Buds 1 1/2-2" long. If aphids present, use a total release smoke or aerosol.	
2	Mar 29	Buds 2 1/2-4" long, some turning whitish. Stop fertilizing just before sale & apply clear water once. Cool lilies at 35-45F to hold. Prior to cold storage, spray Fascination (100 ppm) over the entire plant.	
1	Apr 5	Ready to sell. Shade lilies once removed from storage. If needed, use EthylBloc prior to shipping.	
0	Apr 12	Easter 2020	

COMMENTS ON THE 2020 EASTER LILY SCHEDULE

Expectations for 2020: Easter 2020 falls on April 12, which allows enough time to complete the entire 23-week lily-forcing schedule without short cuts.

Pot-cooled bulbs are normally potted & held for three weeks at 63F before the six weeks of bulb cooling (at 40-45F) begins (see the 2020 Easter Lily schedule for details). The bulbs then require 14 weeks of greenhouse forcing. This entire process requires 23 weeks from initial potting to Easter. This is the same process is used for both naturally cooled or CTF bulbs.

Case-cooled bulbs require six weeks of cooling followed by 17 weeks of greenhouse forcing to flower in time for Easter. Schedule to receive commercially case-cooled bulb by Dec 15, 2019 and plant immediately. If you cool your own bulbs, start the Nov. 3 (23 wks before Easter). Insurance lighting will not needed, unless you cannot complete the full 6-weeks of bulb cooling.

Insurance lighting: Provide insurance lighting if you know or suspect that bulbs have not received the entire six weeks of cooling. Insurance lighting refers to night break lighting used to produce a long day photoperiod. Insurance lighting applied immediately following shoot emergence has the same effect as bulb cooling or vernalization. Therefore, use insurance lighting to substitute for inadequate bulb cooling. Provide one day of insurance lighting for each day of lost cooling. Incandescent, fluorescent, or HID lighting in excess of 10 f.c. from 10 pm to 2 am daily will provide the necessary night break.

Fertigation: Start fertilizing using a 15-0-15 or comparable formulation when lilies emerge. For potting medium not fortified with phosphorus, use 20-10-20 on an alternating basis with a 15-0-15. Fertilizer rates should range from 200-400 ppm. Do not allow medium EC to exceed 3-3.5 mmho/cm based on a Saturated Media Extract. Stop fertilizing 1-week prior to sale and use clear watering prior to shipping to reduce salt levels and maximize keeping quality. Do not withhold water or fertilizer to slow development. Do not over water (i.e. water too frequently) or root rot problems may occur.

Decrease Leaf Yellowing & Delay Flower Senescence: To prevent early-season leaf yellowing (7 to 10 days before visible bud) & mid-season leaf yellowing (7 to 10 days after visible bud) spray Fascination or Fresco at 10/10 ppm. Apply only to lower leaves & cover thoroughly. To prevent late-season leaf yellowing and post-harvest flower senescence, thoroughly cover all foliage & buds with spray at 100/100 ppm to. Apply when buds are 3 to 3 1/2" long BUT NOT MORE than 14 days before shipping or cooling. Protects leaves from yellowing for up to 14 days. Note: Avoid direct contact of spray to immature leaves during early- & mid-season applications or increased stem stretch will result.

Disease and pest control: Before planting, clean bulbs of debris removing any damaged scales, especially scales that show evidence of infection. Once potted, root rots associated with Rhizoctonia, Fusarium, and Pythium are a concern. Drench immediately with Banrot, Pageant Intrinsic, broad-spectrum fungicides, or you can treat to control these diseases separately by selecting from the fungicides specifically registered for Rhizoctonia, Fusarium and Pythium control on lily. Materials registered for Rhizoctonia and/or Fusarium include 3336, OHP 6672, 26/36 and many generics; Pageant Intrinsic, Emblem, Mural and Terraclor (Rhizoctonia). Materials registered for controlling Pythium include Alude, Banol, Subdue Maxx (beware of using mefenoxam exclusively because of widespread fungicide resistance issues with this active ingredient), Segway O, and Truban. Check with manufacturers regarding compatibility when tank mixing fungicides. Re-applied fungicides later in the crop as needed, check labels for guidance. Preventative biological fungicides (RootShield, Rootshield Plus, Cease, Actinovate, Mycostop, Companion, Prestop and Triathlon BA or Double- Nickel (Triathlon BA and Double-Nickel have the same a.i.) may be applied at planting for disease suppression and to enhance root growth. Check with company or product labels information for safe time intervals between application of biological agents and chemical fungicides.

Aphids, fungus gnats and bulb mites are a major concern. Many chemicals are listed for aphid control, including: Safari, Flagship, Tristar, Marathon and many generics, DuraGuard, Enstar AQ, Suffoil X., M- Pede, Kontos, Endeavor, Aria, Mainspring GNL and Rycar. Fungus gnats can be controlled with some of these same chemicals as well as Citation, Distance, Adept, Pylon, insect parasitic nematodes (Nemasys, NemaShield, Scanmask, Entonem) and Gnatrol WDG. Bulb mites, Rhizoglyphus robini, represent one of the more troublesome insect pests on lilies and effective management requires an integrated approach. Bulb mites are a secondary pest commonly associated with decay caused by fungus gnat damage and soil-borne fungal pathogens. Note: Registration of pesticides varies by state so consult and follow labels for registered use. To avoid any potential phytotoxicity or residue problems, spot test before widespread use. No discrimination intended for products not listed.

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Controlling Lily Height: Monitor lily height regularly during forcing. If height exceeds the target size, run negative DIF or use a growth retardant such as A-Rest, Chlormequat E-Pro, Concise, Cycocel or Sumagic to slow stem elongation. If height is less than the target size, run positive DIF or use a gibberellin PRG such as Fascination or Fresco to increase stem elongation. Split applications of PGRs provide the best results. You can apply any of the PGRs at 1/2 to 1/4 the normal rate (or even less) and use multiple applications as needed. Reduce the concentrations of Sumagic used when combined with DIF. Use DIF, or cool morning DIP, to control lily height. Equal day/night temperatures, high night/low day temperatures or a cool morning temperature dip will produce a DIF effect and keep lilies short.

Lily storage: Lilies can be stored for up to 14 days in the dark at 35-45F when buds turn white but before they open. Spray for Botrytis control prior to moving lilies to cold storage. Fungicides labeled for botrytis control include Affirm, Phyton, and the biofungicide Cease. Always follow label directions and test fungicides on a small group of lilies for damage to or residue on lily buds before using on the entire crop. Water Easter lilies thoroughly before starting cold storage. After removing from the cooler, place lilies in a shady location to avoid excessive wilting.

All agrichemical/pesticides listed are registered for suggested uses in accordance with federal and Connecticut state laws and regulations as of the date of printing. If the information does not agree with current labeling, follow the label instructions. The label is the law. Contact the Connecticut Department of Environmental Protection for current regulations. Where trade names are used for identification, no product endorsement is implied nor is discrimination intended.

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