



2019 Easter Lily Production RootShield® Application Schedule

Easter this year is on April 21st. The date allows for adequate time to complete all the necessary steps without cutting corners. Below are schedules for RootShield treatments for your bulbs that will protect the stem root system for optimal plant growth and development. For years, growers have had excellent success protecting their Easter lilies from *Pythium*, *Rhizoctonia* and *Thielaviopsis*. RootShield *PLUS*⁺ is an option for controlling *Phytophthora* Root Rot and more complete suppression of *Fusarium* diseases with its additional modes of action. *The result? A robust basal root system and healthier plants.*



Left: Untreated bulb – *Rhizoctonia* damage
Right: Treated with RootShield – healthy roots, better growth, cleaner bulb

POT COOLED

October/Early November:

Option 1:

Cool bulbs at 40° - 45 °F for 6 weeks to satisfy the vernalization requirement.
Dust or dip bulbs with RootShield WP or RootShield *PLUS*⁺ WP before planting.

Dip: 8 oz/20 gallons

Dust: ½ - 1 lb/100 lb of bulbs

Option 2:

Pot up bulbs in media with RootShield Granules at 1.25 lb/cu yd or RootShield *PLUS*⁺ Granules incorporated 2.0 lb/cu yd

Option 3:

Drench with RootShield WP at 4 oz/100 gal or RootShield *PLUS*⁺ WP at 6 oz/100 gal after planting.
Allow bulbs to grow at 60° - 62 °F for up to 3 weeks for rooting before vernalization.
Then, cool at 40° - 45 °F for 6 weeks.

Mid-Late December:

Begin forcing lilies in greenhouses no later than 14 weeks before Easter. Pull from the cooler and drench with 4 oz/100gal of RootShield WP or 6 oz/100 gal RootShield *PLUS*⁺ WP if not already treated.

Early February

To continue protection, re-treat with a drench of RootShield WP at 2 oz/100 gal or RootShield *PLUS*⁺ WP at 6 oz/100 gal.

Mid-February

Flower buds should be visible on most plants 6 weeks ahead to be ready for Easter.



CASE COOLED

December:

Option 1:

Dust or dip bulbs with RootShield WP or RootShield *PLUS*⁺WP before planting.

Dip: 8 oz/20 gal

Dust: ½-1 lb/100 lbs of bulbs

Option 2:

Pot up bulbs in media with RootShield Granules at 1.25 lb/cu yd or RootShield *PLUS*⁺ Granules incorporated 2.0 lb/cu yd.

Option 3:

Drench with RootShield WP at 2 oz/100 gal or RootShield *PLUS*⁺ WP at 6 oz/100 gal after planting.

Begin forcing lilies in greenhouses no later than 17 weeks before Easter.



Late January to February:

To continue protection, re-treat with a drench of RootShield WP at 4 oz/100 gal or RootShield *PLUS*⁺WP at 6 oz/100 gal.

Early February:

Flower buds should be visible on most plants 6 weeks ahead to be ready for Easter.

Additional Notes

Soil Temperatures

- Storage conditions for the cooling period (vernalization) will not harm the active fungal ingredient, *Trichoderma harzianum* strain T-22, found in RootShield or T-22 plus *Trichoderma virens* strain G-41 found in RootShield *PLUS*⁺

Watering and Leaching

- Heavy watering increases the risk of root disease problems and should be avoided
- Watering will not leach RootShield away from the crop's root zone
- RootShield will grow on the roots as it expands through the growing media for up to 3 months