

BASF Foundational Fungicide Program

Specific Target Diseases

Production Ornamentals 8-10 Weeks of Protection

Nursery and greenhouse growers rely on BASF to provide innovative solutions for their most pressing challenges. To protect crops throughout the plant production cycle, the BASF Foundational Fungicide Programs recommend products and protocols that control key diseases and boost plant health. From propagation to shipping, **Intrinsic**® brand fungicides from BASF deliver greater disease resistance, stress tolerance and growth efficiency. The result is healthy, high-quality plants that shine on retail shelves.

 **BASF**
We create chemistry

BASF Foundational Fungicide Program

Foliar Diseases

Rotate products per recommended guidelines for superior preventive and early curative control of the pathogens in these charts. **Intrinsic**® brand fungicides from BASF deliver both exceptional disease control and plant health.

Production Ornamentals 8-10 Weeks of Protection

Target	Rotation 1	Rotation 2	Rotation 3	Rotation 4
Anthracnose				
Preventive	Pageant Intrinsic ® brand fungicide 18 oz	Phyton 27 ³ , copper or mancozeb	Trinity ® fungicide 8-12 fl oz	Pageant Intrinsic brand fungicide 18 oz
Early curative	Phyton 27, copper or mancozeb	Pageant Intrinsic brand fungicide 18 oz + mancozeb	Spectro	Pageant Intrinsic brand fungicide 18 oz
Shipping protection <i>1-3 weeks before shipping</i>	Spectro or Phyton 27 ³	Pageant Intrinsic brand fungicide 12 oz		
Downy mildew				
Preventive	Stature ® SC fungicide 6.12 fl oz	Segway O or Alette	Stature SC fungicide 6.12 fl oz	Pageant Intrinsic brand fungicide 14 oz
Early curative	Segway O + mancozeb	Mancozeb + Alette	Stature SC fungicide 12.25 fl oz	
Shipping protection <i>1-3 weeks before shipping</i>	Stature SC fungicide 12.25 fl oz	Pageant Intrinsic brand fungicide 14 oz		
Leaf spot complex¹				
Preventive	Chipco 26019, Cleary's 3336 or OHP 6672	Pageant Intrinsic brand fungicide 8 oz	Medallion	Pageant Intrinsic brand fungicide 8 oz
Early curative	Daconil or mancozeb	Medallion or Chipco 26019 + Daconil or mancozeb	Pageant Intrinsic brand fungicide 12 oz + mancozeb	Pageant Intrinsic brand fungicide 8-12 oz
Shipping protection <i>1-3 weeks before shipping</i>	Chipco 26019 (+ Daconil)	Pageant Intrinsic brand fungicide 8 oz		
Powdery mildew				
Preventive ²	Pageant Intrinsic brand fungicide 8-12 oz	Palladium	Trinity ® fungicide 6-12 fl oz or Terraguard	Pageant Intrinsic brand fungicide 8-12 oz
Early curative ²	Terraguard	Pageant Intrinsic brand fungicide 12 oz + mancozeb	Palladium + mancozeb	Pageant Intrinsic brand fungicide 12 oz
Shipping protection <i>1-3 weeks before shipping</i>	Terraguard or Palladium	Pageant Intrinsic brand fungicide 12 oz		
Rots and Blights, Botrytis				
Preventive	Pageant Intrinsic brand fungicide 8-12 oz	Medallion or Chipco 26019 + Daconil	Palladium	Pageant Intrinsic brand fungicide 12-14 oz
Early curative	Chipco 26019 + Daconil	Pageant Intrinsic brand fungicide 12-14 oz	Palladium + Daconil	Pageant Intrinsic brand fungicide 12-14 oz
Shipping protection <i>1-3 weeks before shipping</i>	Chipco 26019 or Medallion or Palladium	Pageant Intrinsic brand fungicide 12-14 oz		
Rust				
Preventive	Pageant Intrinsic brand fungicide 6-12 oz	Junction, Camelot, or Phyton 27	Terraguard	Pageant Intrinsic brand fungicide 12 oz
Early curative	Mancozeb + Terraguard	Pageant Intrinsic brand fungicide 12-18 oz + mancozeb	Junction, Camelot, or Phyton 27	Pageant Intrinsic brand fungicide 12-18 oz
Shipping protection <i>1-3 weeks before shipping</i>	Terraguard + Phyton 27 ³	Pageant Intrinsic brand fungicide 12 oz		
Bacterial diseases³				
Preventive ⁴	Junction, Camelot or Phyton 27	Cease or Rhapsody (biological)	Junction, Camelot or Phyton 27	Cease or Rhapsody (biological)
Early curative ⁴	Junction	Camelot or Phyton 27		

Always read and follow label directions.

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Crown, Root and Soilborne Diseases

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Target	Rotation 1	Rotation 2	Rotation 3	Rotation 4
Crown and Basal Rots, Soilborne⁵				
Preventive	Pageant® Intrinsic® brand fungicide 12 oz or Empress® Intrinsic brand fungicide 3-6 fl oz	Trinity® fungicide 8-12 fl oz or Medallion	Cleary's 3336, OHP 6672	Pageant Intrinsic brand fungicide 12 oz or Empress Intrinsic brand fungicide 3-6 fl oz
Early curative	Terraguard or Medallion	Cleary's 3336, OHP 6672	Pageant Intrinsic brand fungicide 12 oz or Empress Intrinsic brand fungicide 3-6 fl oz	Terraguard or Medallion
Shipping protection 1-3 weeks before shipping	Terraguard or Medallion	Pageant Intrinsic brand fungicide 12 oz		
Phytophthora⁶				
Preventive	Orvego® fungicide 11-14 fl oz	Pageant Intrinsic brand fungicide 12-18 oz or Empress Intrinsic brand fungicide 3-6 fl oz	Orvego fungicide 11-14 fl oz	Pageant Intrinsic brand fungicide 12-18 oz or Empress Intrinsic brand fungicide 3-6 fl oz
Early curative	Aliette or Banol	Orvego fungicide 14 fl oz	Aliette or Banol	Pageant Intrinsic brand fungicide 12-18 oz or Empress Intrinsic brand fungicide 3-6 fl oz
Shipping protection 1-3 weeks before shipping	Orvego fungicide 14 fl oz	Pageant Intrinsic brand fungicide 12 oz		
Pythium⁶				
Preventive	Segway O	Empress Intrinsic brand fungicide 3-6 fl oz	Segway O	Terrazole or Truban, Banrot or Banol
Early curative	Terrazole or Truban, Banrot or Banol	Segway O	Empress Intrinsic brand fungicide 3-6 fl oz	Segway O
Shipping protection 1-3 weeks before shipping	Segway O	Empress Intrinsic brand fungicide 3-6 fl oz		
Thielaviopsis				
Preventive and early curative	Orkestra™ Intrinsic brand fungicide 8-10 fl oz Control of <i>Thielaviopsis</i> spp. is very difficult and is dependent on cultural practices with soil pH and watering management. Orkestra Intrinsic brand fungicide is registered as 'suppression' of <i>Thielaviopsis</i> .	Cleary's 3336, OHP 6672 or Terraguard	Orkestra Intrinsic brand fungicide 8-10 fl oz	

- All product rates shown are per 100 gallons.
- The products in these rotations are translaminar and/or systemic and have 7-14 days residual activity, except contact products like mancozeb. With severe infections and early curative applications, tank mix mancozeb with the recommended fungicide and shorten the interval to 7 days, then apply the second rotation recommendation.
- Refer to product labels and recommendations for additional instructions.
- Additional sprays may be necessary depending on disease spectrum. Rotate chemistries for best program performance.

¹ Leaf spots are numerous and some are controlled at much lower rates of **Pageant Intrinsic** brand fungicide, from 4-8 oz/100 gal up to 8-12 oz/100 gal. Consult labels when targeting your specific leaf spots.

² **Ultra-Pure® Oil** horticultural insecticide, miticide and fungicide is labeled for powdery mildew and can be used in production conditions where humidity is below 80%. **Ultra-Pure Oil** horticultural insecticide, miticide and fungicide has contact activity on powdery mildew and shines leaves prior to shipping.

³ Use of Camelot, Junction, mancozeb or Phytan 27 prior to shipping may result in residues. Check labels and test under growing conditions to determine acceptability and plant safety. Consult the Phytan 27 label prior to application to confirm plant safety for crop and conditions at time of application. Other bacterial products that are pathogen-specific include Taegro or Cease/Rhapsody/Serenade. Test these products on crop under growing conditions to confirm plant safety prior to wide-scale use.

⁴ Consider **Pageant Intrinsic** brand fungicide in these rotations to protect plants from fungal diseases that may occur within the same production timing as bacterial infections.

⁵ Check product labels for specific pathogens controlled. Does not include *Pythium* and *Phytophthora* spp. unless specifically noted.

⁶ Includes *Pythium* and *Phytophthora* spp. but it is product specific. Check labels for specific pathogen to be controlled.

Dilution Tables*

Pageant® Intrinsic® brand fungicide (1.0 ounce = 28.35 gram)

Use Rate (oz product) / 100 gal	Spray Volume Rate (g) — Pageant Intrinsic brand fungicide			
	/ 100 gal	/ 50 gal	/ 10 gal	/ 2 gal
6 oz	170 g	85 g	17 g	3 g
8 oz	227 g	114 g	23 g	5 g
12 oz	341 g	171 g	34 g	7 g
16 oz	454 g	227 g	46 g	9 g

Empress® Intrinsic brand fungicide (29.57 mL = 1.0 fl ounce)

Use Rate (fl oz product) / 100 gal	Spray Volume Rate (mL) — Empress Intrinsic brand fungicide			
	/ 100 gal	/ 50 gal	/ 10 gal	/ 2 gal
2 fl oz	59 mL	30 mL	6 mL	1 mL
3 fl oz	89 mL	44 mL	9 mL	2 mL
4 fl oz	118 mL	59 mL	12 mL	2.4 mL
6 fl oz	177 mL	89 mL	18 mL	4 mL

* Rates are rounded to nearest whole number.

Always read and follow label directions.

Non-BASF products are included in this guide to provide a rotation of products with known efficacy, good plant safety and different modes of action. Always evaluate products that are new to your operation for safety on the plant species and cultivars you grow, and under your specific growing conditions prior to large-scale application.

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