



We create chemistry

Resistance Management
Insecticide Rotation Programs

Ventigra™

Insecticide

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Insecticide

To protect plants throughout the production cycle, BASF recommends a rotation of products for superior control of aphids, whiteflies and mealybugs. Incorporating a rotation of insecticide products with different modes of action is a key element to resistance management and prolonging the effective lifespan of an insecticide. **Ventigra™ Insecticide** is a new tool in the fight against problematic piercing-sucking insects. **Ventigra** insecticide delivers exceptional activity and an alternative mode of action to incorporate into your program for healthy, high-quality plants.

APHIDS					
Program Approach	Insecticide	IRAC Group	Use Rate	Application Timing	Notes
Foliar Protection	Ventigra™ Insecticide	9D	1.4 fl oz	At start of infestation or preventative application for control up to 21 days	Controls all lifestages Translaminar and contact activity
	Altus®	4D	7-10.5 fl oz Foliar 21.0 to 28.0 fl oz Drench	Spray or drench once plants have rooted	Systemic and translaminar to protect new growth
	Mainspring® GNL	28	4.0 to 8.0 fl oz. Foliar 8.0 to 12.0 fl oz Drench	Spray or drench once plants have rooted	Locally systemic by foliar Activity by ingestion
	Azatin® O	UN	4.0 to 16.0 fl oz	Consider tank mixes with an IGR for introduction of alternative MOA	IGR-molting inhibitor Target immature lifestages
	Aria®	29	0.7 to 2.1 oz	Foliar with systemic activity	Stops insect feeding but insects may remain on plant for up to five days
	Talstar® S	3	5 to 10 fl oz/Acre	Quick knockdown	Broad spectrum activity Delay application to conserve beneficial insects
Systemic Drench Protection	Marathon® II	4A	1.7 fl oz	Preventative drench application	Controls all lifestages
	Ventigra™ Insecticide	9D	1.4 fl oz	Scout and apply at first sign of aphids after residual control from drench breaks down	Controls all lifestages Translaminar and contact activity
	Kontos®	23	1.7 to 3.4 fl oz Foliar 1.7 fl oz Drench	Spray or drench	Systemic alternative to Group 4
	Distance®	7C	6.0 to 8.0 fl oz	Consider tank mixes with an IGR for introduction of alternative MOA	IGR-molting inhibitor Target immature lifestages
	Hachi-Hachi®	21A	21.0 to 32.0 fl oz	Knockdown with broad spectrum	Contact activity

WHITEFLY					
Program Approach	Insecticide	IRAC Group	Use Rate	Application Timing	Notes
Foliar Protection	Ventigra™ Insecticide	9D	4.8 to 7.0 fl oz	At start of adult infestation Apply two sequential sprays for long residual control	Controls adults, eggs, early instar nymphs Translaminar and contact activity
	Savate®	23	2.0 to 4.0 fl oz	Foliar with systemic activity	Systemic alternative to Group 4 Target nymph lifestages
	Altus®	4D	10.5-14 fl oz Foliar 21.0 to 28.0 fl oz Drench	Spray or drench once plants have rooted	Systemic and translaminar to protect new growth
	Talus®	16	6.0 oz/acre	As soon as adults begin to appear	IGR-chitin inhibitor Target nymphs and adults to reduce eggs Contact activity
	Azatin® O	UN	6.0 to 16.0 fl oz	Consider tank mixes with an IGR for introduction of alternative MOA	Insect growth regulator Targets immature lifestages
	Talstar® S	3	10.0 to 20.0 fl oz/Acre	Knockdown and broad spectrum	Delay application to conserve beneficial insects
Systemic Drench Protection	Marathon® II	4A	1.7 fl oz	Preventative drench application	Controls all lifestages
	Kontos®	23	1.7 to 3.4 fl oz Foliar 1.7 fl oz Drench	Preventative drench application	Systemic alternative to Group 4 Target nymph lifestages
	Ventigra™ Insecticide	9D	4.8 to 7.0 fl oz	Scout and apply at first sign of adults after residual control from drench breaks down	Controls adults, eggs, early instar nymph Translaminar and contact activity
	Distance®	7C	6.0 to 8.0 fl oz	Consider tank mixes with an IGR for introduction of alternative MOA	IGR-molting inhibitor Target immature lifestages
	Sanmite® SC	21A	6.4 to 9.6 oz/Acre	Target whiteflies and mites	Contact activity

MEALYBUGS					
Program Approach	Insecticide	IRAC Group	Use Rate	Application Timing	Notes
Foliar Protection	Ultra-Pure® oil		0.5 to 2 gals	At first sign of infestation	Contact activity
	Ventigra™ Insecticide	9D	4.8 to 7.0 fl oz	Apply after or with a horticultural oil at the start of infestation. Apply two sequential applications for optimum performance.	Controls nymphs Translaminar and contact activity
	Altus®	4D	10.5-14 fl oz Foliar 21 to 28 fl oz Drench	Spray or drench once plants have rooted	Systemic and translaminar to protect new growth
	Distance®	7C	8.0 to 12.0 fl oz	Consider tank mixes with an IGR for introduction of alternative MOA	IGR-molting inhibitor Target immature lifestages
	Talus®	16	12 oz/acre	As first sign of infestation	IGR-chitin inhibitor Contact activity Target immature lifestages
	Orthene®	1B	0.5 lbs	Knockdown and broad spectrum	Delay application to conserve beneficial insects
	Scimitar® GC	3	3.0 to 5.0 fl oz	Knockdown and broad spectrum	Delay application to conserve beneficial insects
Systemic Drench Protection	Safari®	4A	12.0 to 24.0 fl oz	Preventative drench application	Highly systemic Controls all lifestages
	Ultra-Pure® oil		0.5 to 2 gals	At first sign of infestation	Contact activity
	Ventigra™ Insecticide	9D	4.8 to 7.0 fl oz	Apply after or with a horticultural oil at the start of infestation. Apply two sequential applications for optimum performance.	Controls nymphs Translaminar and contact activity
	Kontos®	23	1.7 to 3.4 fl oz Foliar 1.7 fl oz Drench	Preventative drench application	Systemic alternative to Group 4 Target immature lifestages
	Aria®	29	2.9 to 4.3 oz	Consider tank mixes with an IGR for introduction of alternative MOA	Insect growth regulator Target immature lifestages
	Discus® N/G	4A + 3	25 fl oz	Systemic and knockdown Can be applied as drench	Mixture of two insecticides Controls all lifestages

- Always read and follow label directions
- All products shown are per 100 gallons unless specified
- All rates given are for ornamentals in production based on labels valid for 2018
- Refer to product labels for specific instructions

DILUTION RATE CONVERSION FOR VENTIGRA					
Use Rate (fl oz product/100 gal)	Spray Volume (mL product/2 gal)	Spray Volume (mL product/5 gal)	Spray Volume (mL product/10 gal)	Spray Volume (mL product/25 gal)	Spray Volume (mL product/50 gal)
1.4	0.8	2	4	10	20
4.8	2.8	7	14	35	70
6	3.6	9	18	45	90
7	4.2	10.5	21	52.5	105

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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