



Greenhouse and Nursery Insecticide and Fungicide Options for 2008

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Prepared by Rick Yates ryates@griffinmail.com, assisted by
Virginia Brubaker vbrubaker@griffinmail.com, Griffin Greenhouse and Nursery Supplies, Inc

**Not all of the products mentioned in this bulletin are registered in all states. Some pesticides are restricted use in some states or regions and not others. Contact your Griffin branch if there is a question about a specific product **

Information in this bulletin is believed to be correct but it is the responsibility of the grower to read and follow all label directions!!! Labels do change without notice. Pesticides other than those listed may be safe, legal and effective.

Many pesticide labels now contain resistance management instructions. They are legal requirements and are essential for helping to preserve the effectiveness of the chemistry. Please contact the Griffin Technical Department for help with pesticide rotations.

Mode of Action Groups (MOA's): In order to help growers make effective and responsible pesticide choices Griffin has begun to include Mode Of Action group designations (MOA) for insecticides and fungicides that have been classified. The codes are those established by the Insecticide Resistance Action Committee (IRAC- www.irac-online.org/) and the Fungicide Resistance Action Committee (FRAC- www.frac.info/frac/index.htm).

Pesticides with the same MOA group number share the same mode of action and therefore should not be used in rotation with each other. Griffin's Technical Services department is available to help you integrate this information into your pesticide decision making process.

All recommendations for insecticides are foliar sprays except as noted. Most foliar sprays listed will perform better with a surfactant such as CapSil added at ½ teaspoon per gallon, (8 oz per 100 gallons), to increase coverage and reduce visible residue. Some product labels state that surfactants should not be added.

Aphids-

Aria 50 WDG – (EPA Reg # 279-3287)

Foliar sprays at 1-3 packets per 100 gallons, or 1/8 to 3/8 heaping tsp per 3 gallons. Packets are not water soluble. Translaminar action and 7-28 day residual. Insects stop feeding in 30 minutes but may take several days to die. Certain pansy cultivars have shown sensitivity. 12 hr REI. MOA 9C.

Benefit 60WP- (EPA Reg # 42750-153-58185)

Up to 6 weeks control from one application. The label has rates based on pot diameter with higher rates for multiple plant containers and woody perennials. Applicator must apply a certain number of ounces of final solution per pot based on label chart. Some vegetable bedding plants are on the label. 12 hr REI. MOA 4A. Restricted use pesticide in NY.

Botanigard ES - (EPA Reg. # 70810-6)

1-4 teas per gallon or ½-2 qts per 100 gallons as a foliar spray. Naturally occurring fungus, not a quick kill. Use a minimum of three times in a row at 3-5 day intervals. Labeled for vegetables and herbs. May damage tomato foliage. Very little visible residue but burns some open blooms. More effective when tank mixed with Azatin or horticultural oil. 4 hr REI. 0 day PHI. MOA UN.

Discus – (EPA Reg # 432-1392-59807)

Nursery insecticide, not labeled for greenhouses. 2-4 week residual control from one foliar spray. 0.25 oz per gallon or 25 oz per 100 gallons. Drench rates per label. Same active ingredients that are in Marathon and Decathlon. Excellent plant and bloom safety with no visible residue. 12 hr REI. MOA 3 & 4A. Restricted use pesticide in NY.

Endeavor WSP - (EPA Reg. # 100-913)

2-3 week residual control from one foliar spray. Use 1 water-soluble packet per 50-gallon spray tank, or you can cut the packet open and use 1 TBLS/5 gallons. Once opened, the packet must be sealed in a zip-lock baggie and kept dry inside the original container. Takes 2-4 days to kill. No visible residue, safe on open blooms. 12 hr REI. MOA 9B. Restricted use pesticide in New York.

Enstar II - (EPA Reg. # 2724-476)

Insect growth regulator used at the rate of 2/3 teas per gallon or 10 oz per 100 gallons. No residue but burns some open blooms. 4 hr REI. MOA 7A.

Flagship G- (EPA Reg# 100-960)

Labeled for ornamentals in greenhouses and nurseries. Consult label for per pot rates 12 hr REI. MOA 4A Not labeled in NY. Restricted use pesticide in MA.

Flagship WG- (EPA Reg # 100-955)

2-4 week residual from a foliar spray at ¼ to ½ teas per 3 gallons or 2-4 oz per 100 gallons. Label contains directions for a soil drench. Very slight residue, safe on most open blooms. 12 hr REI. MOA 4A. Not labeled in NY. Restricted use pesticide in MA.

Marathon 1% G - (EPA Reg. # 432-1329-59807)

6+ weeks control from one application. The label has rates based on pot diameter with higher rates for multiple plant containers and woody perennials. 12 hr REI. MOA 4A. Restricted use pesticide in NY.

Marathon 60 WSP- (EPA Reg # 432-1361-59087)

6+ weeks control from one application. The label has rates based on pot diameter with higher rates for multiple plant containers and woody perennials. Applicator must apply a certain number of ounces of final solution per pot based on label chart. Some vegetable bedding plants are on the label. 12 hr REI. MOA 4A. Restricted use pesticide in NY.

Marathon II Flowable - (EPA Reg. # 432-1369-59807)

May be applied as a foliar spray at 1.7 oz per 100 gallons, or ½ teaspoon per 5 gallons. 2-4 week residual control with excellent plant and bloom safety. It can also be drenched per the chart found on the label. Some vegetable bedding plants are on the label. 12 hr REI. MOA 4A. Restricted use pesticide in NY.

Nicotine smoke generators - (EPA Reg. # 1327-41)

Restricted Use Pesticide. Two different size cans available. One treats 10,000, the other 20,000 cu feet. Use only when foliage is dry and the house can be closed up for a minimum of 4 hours. A few vegetables are on the label. After the ventilation requirements are met no further REI is required. MOA 4B. Not available in all states.

Orthene 97 SP – (EPA Reg. # 59639-91)

(Replaces Orthene 75 Turf and Ornamental)- 2/3 teas per gallon or 8 oz per 100 gallons as a foliar spray. Some resistance is reported to this product. No visible residue, but it will burn most open blooms. 24 hr REI. MOA 1B.

Safari SG- (EPA Reg # 33657-16-59639)

Systemic long residual control. Foliar sprays at ½ to 1 tsp per gallon or 4 to 8 oz per 100 gallons, drench at 1.5 tsp to 1 TBLS per gallon or 12 to 24 oz per 100 gallons (apply 4 oz per 6” pot). Excellent plant and bloom safety. Some edible crops on label. 12 hr REI. MOA 4A. NY Special Needs Label (greenhouse plants, post bloom only)

Tame/Orthene TR – (EPA Reg # 499-441)

1 can per 1500 to 3000 sq ft. No residue, excellent plant and bloom safety. Poinsettia bracts should be treated not more than once per week at 1 can per 3,000 sq ft. 24 hr REI. MOA 1B & 3.

Thionex 50 WSB (EPA Reg# 66222-62) Formerly Thiodan 50 WP

1 TBLS/gallon or 1 lb per 100 gallons as a foliar spray. Leaves visible residue and burns some open blooms. 24 hr REI. MOA 2A. Label change: tomatoes only greenhouse crop approved. Label still includes certain outdoor nursery items. Restricted use pesticide in CT, NH, NJ, NY and ME.

TriStar 30 SG- (EPA Reg # 8033-94-1001)

2-4 week translaminar systemic control from one foliar spray application. ½ teaspoon per 5 gallons or 1.3 oz per 100 gallons. Excellent plant and bloom safety, no visible residue. 12 hr REI. MOA 4A.

Broad and Cyclamen Mites-

Akari SC- (EPA Reg. # 71711-4-67690) 3/4 to 1 1/2 teaspoons per gallon or 12-24 oz per 100 gallons as a foliar spray. 21-28 day residual control on motile stages. No visible residue and good plant safety. 12 hr REI. MOA 21.

Avid EC- (EPA Reg. # 100-896)

¼-½ teas per gallon or 4-8 oz per 100 gallons as a foliar spray. Repeat in 7 days to help break life cycle. No visible residue, safe on open blooms. Same active ingredient as Flora-Mek. 12 hr REI. MOA 6.

Flora-Mek- (EPA Reg. # 100-896-72112)

¼-½ teas per gallon or 4-8 oz per 100 gallons as a foliar spray. Repeat in 7 days to help break life cycle. No visible residue, safe on open blooms. Same active ingredient as Avid. 12 hr REI. MOA 6.

Judo – (EPA Reg. # 432-1280-59807)

Foliar spray applied at 1/8 to 1/4 tsp per gallon or 2-4 oz per 100 gallons. Excellent translaminar movement and 28 day residual control of all life stages. Do not use on bacopa, dracaena, geraniums, impatiens, or English ivy. 12 hr REI. MOA 23.

Pylon EC - (EPA Reg. # 241-374-59807) ** Not for outdoor use**

1/6 to 1/3 teaspoons per gallon or 2.6 to 5.2 oz per 100 gallons applied as a foliar spray. 14-21 day control of motile stages. A second application can be made 5-7 days later for heavy infestations. No visible residue but may burn some open blooms. Read phytotoxicity cautions on the label. Do not add any surfactant. Certain fruiting greenhouse vegetables may be treated. 12 hr REI. MOA 13. Restricted use pesticide in New York.

Sanmite WSP - (EPA Reg. # 7969-20) **Does not control cyclamen mites*

One 1-ounce water-soluble packet per 25 gallons as a foliar spray for mites (3/4 teaspoon per gallon). No residue, safe on most blooms. Label prohibits use through low volume equipment. 12 hr REI. MOA 21.

Thionex 50 WSB (EPA Reg. # 66222-62) Formerly Thiodan 50 WP

1 TBLS/gallon or 1 lb per 100 gallons as a foliar spray. Leaves visible residue and burns some open blooms. 24 hr REI. MOA 2A. Label change: tomatoes only greenhouse crop approved. Label still includes certain outdoor nursery items. Restricted use pesticide in CT, NH, NJ, NY and ME.



Caterpillars-

Conserve SC - (EPA Reg. # 62719-291)

Apply 1/2 teas/gallon or 8 oz per 100 gallons as a foliar spray. Short residual control. No visible residue or bloom safety concerns. No more than three consecutive applications in a 30-day period without rotating to another class of chemistry. Labeled for certain edible crops. 4 hr REI. MOA 5.

Decathlon- (EPA Reg. #432-1402-59807)

1/4 tsp per gallon or 7 TBLS per 100 gallons as a foliar spray. Contact control. Safe on open blooms and leaves no residue. 12 hr REI. MOA 3. Restricted use pesticide in VT.

Discus – (EPA Reg. # 432-1392-59807)

Nursery insecticide, not labeled for greenhouses. 2-4 week residual control from one foliar spray. 0.25 oz per gallon or 25 oz per 100 gallons. Drench rates per label. Same active ingredients that are in Marathon and Decathlon. Excellent plant and bloom safety with no visible residue. 12 hr REI. MOA 3 & 4A. Restricted use pesticide in NY.

Dipel Pro DF - (EPA Reg. # 73049-39)

2 to 4 teaspoons per gallon or 1-2 lbs per 100 gallons as a foliar spray. Works best on immature caterpillars. Slight residue, safe on open blooms. Edible crops are on the label. 4 hr REI. MOA 11B2.

Duraguard ME - (EPA Reg. # 499-367)

Restricted Use Pesticide. 1 Tbls per gallon or 50 oz per 100 gallons as a foliar spray. No visible residue, it may burn some blooms. 24 hr REI. MOA 1B.

Orthene 97 SP - (EPA Reg. # 59639-91)

(Replaces Orthene 75 Turf and Ornamental)- 1/2 to 2/3 teas per gallon or 6-8 oz per 100 gallons as a foliar spray. No visible residue, but it will burn most open blooms. 24 hr REI. MOA 1B.

Pedestal SC- (EPA Reg. # 66222-40-400)

Insect growth regulator applied as a foliar spray at 1/2 teaspoon per gallon or 8 oz per 100 gallons. Maximum of 1 application in 30 days and 2 treatments per crop per year. 2 alternative products must be used between treatments with Pedestal. No visible residue, good bloom safety. Do not use on poinsettias. 12 hr REI. MOA 15.

Tame/Orthene TR – (EPA Reg # 499-441)

1 can per 1500 to 3000 sq ft. No residue, excellent plant and bloom safety. Poinsettia bracts should be treated not more than once per week at 1 can per 3,000 sq ft. 24 hr REI. MOA1B & 3

Thionex 50 WSB (EPA Reg# 66222-62) Formerly Thiodan 50 WP

1 TBLS/gallon or 1 lb per 100 gallons as a foliar spray. Leaves visible residue and burns some open blooms. 24 hr REI. MOA 2A. Label change: tomatoes only greenhouse crop approved. Label still includes certain outdoor nursery items. Restricted use pesticide in CT, NH, NJ, NY and ME.

Fungus Gnats and Shoreflies

Adept WSP - (EPA Reg. # 400-477)

One 1 oz water-soluble packet per 2 gallons of water through a 1:100 injector used as a top water soil drench. Apply only enough to wet up the top inch or two of soil. The label contains specific ounces per pot recommendations that must be followed to insure safe and effective use. Treat crops and under benches. Insect growth regulator. 30 days of control. Do not use on poinsettias, Reiger begonias, or hibiscus. 12 hr REI. MOA 14. Restricted use pesticide in NH, RI and VT.

Azatin XL - (EPA Reg. # 70051-27-59807)

1/2 teaspoon per gallon or 8 oz per 100 gallons as a soil drench. Insect growth regulator activity. No visible residue and safe on most open blooms. Certain edible crops are on the label. 4 hr REI. MOA 18 B.

Citation WSP - (EPA Reg. # 100-667)

One 2.66-ounce packet per 100 gallons of water as a soil surface spray or drench. It is not labeled for chemigation, (no injectors). Insect growth regulator. May be used through low volume applicators at 1 packet per 1/2 acre in the appropriate amount of water. Repeat at 14-day intervals to maintain control. 12 hr REI. MOA 17.

Conserve SC - (EPA Reg. # 62719-291)

1/2 teaspoon per gallon or 8 oz per 100 gallons as a foliar spray provides some control of adult fungus gnats and shoreflies. This use is not on the label but it is legal to use a pesticide on an unlabeled pest as long as it is used on a labeled site. No flower damage or visible residue. (Combining Conserve with Talstar at 1/2 teaspoon per gallon or 8 oz per 100 gallons may enhance control.) Conserve is labeled for certain edible crops. 4 hr REI. MOA 5.

Discus – (EPA Reg # 432-1392-59807)

Nursery insecticide, not labeled for greenhouses. Controls larval stage only. Drench rates per label. Same active ingredients that are in Marathon and Decathlon. Excellent plant and bloom safety. 12 hr REI. MOA 3 & 4A. Restricted use pesticide in NY.

Distance EC - (EPA Reg. # 59639-96)

Soil surface spray to control the larval stages of fungus gnats and shoreflies. 30-45 day control from one application. 1/3 to 1/2 teaspoons per gallon, 6-8 oz per 100 gallons (poinsettias- use rate of 1/3 teas per gallon, or 6 oz per 100 gallons). Supplemental label allows for a soil drench at 2 oz per 100 gallons applied to wet up only the top 1-1.5" of soil. See label for special precautions when treating poinsettias. Can be used on certain fruiting vegetables. Do not use on salvia, Boston fern, schefflera, heuchera, or poinsettia bracts. 12 hr REI. MOA 7C.

Duraguard ME - (EPA Reg. # 499-367)

(Restricted Use Pesticide) use as a soil surface spray on crops and under benches at ½ oz per gallon (50 oz per 100 gallons) or as a soil drench at 0.25 oz per gallon (25 oz per 100 gallons). Controls larval stage. No visible residue and safe on most open blooms. 24 hr REI. MOA 1B.

Flagship WG- (EPA Reg # 100-955)

Label contains directions for soil treatments. Controls larval stage. Not labeled for shoreflies. 12 hr REI. MOA 4A. Not labeled in NY. Restricted use pesticide in MA.

Gnatrol - (EPA Reg. # 73049-11)

Drench soil to control larvae by running undiluted through a 1:100 injector to wet the top inch or so of soil. Can be used on vegetables in the transplant stage. Three applications at 7-day intervals are needed for heavy infestations. Treat crops and under benches. Does not control shorefly larvae. 4 hr REI. MOA 11A1.

Nemasys or Nemashield -

Beneficial nematode, *Steinernema feltiae* applied to the soil as a spray or drench to control the larval stage. Repeat applications at 14-21 day intervals. Can be used on all crops including vegetables and herbs. No re-entry interval required. Does not control shorefly larvae. MOA UN.

Pylon EC – (EPA Reg. # 241-374-59807) ** Not for outdoor use**

1/3 to 2/3 teaspoons per gallon or 5.2 to 10 oz per 100 gallons applied as a soil surface spray. Maximum of two applications before rotating to another class of chemistry. No visible residue but may burn some open blooms. Read phytotoxicity cautions on the label. Do not add any surfactant. Certain greenhouse fruiting vegetables may be treated. 12 hr REI. MOA 13. Restricted use pesticide in NY.

Safari SG- (EPA Reg # 33657-16-59639)

4-6 week systemic control of larval stage. Drench 1.5 tsp to 1 TBLS per gallon or 12 to 24 oz per 100 gallons (apply 4 oz per 6" pot). Excellent plant and bloom safety. Some edible crops on label. 12 hr REI. MOA 4A. NY Special Needs Label (greenhouse plants, post bloom only)

Tame/Orthene TR – (EPA Reg # 499-441)

Adult control only. 1 can per 1500 to 3000 sq ft. No residue, excellent plant and bloom safety. Poinsettia bracts should be treated not more than once per week at 1 can per 3,000 sq ft. 24 hr REI. MOA 1B & 3.

Spider Mites- (see also Broad and Cyclamen Mites)

Akari SC- (EPA Reg. # 71711-4-67690) 3/4 to 1 1/2 teaspoons per gallon or 12-24 oz per 100 gallons as a foliar spray. 21-28 day residual control on motile stages. No visible residue and good plant safety. 12 hr REI. MOA 21.

Avid EC- (EPA Reg. # 100-896)

1/4-1/2 teas per gallon or 4-8 oz per 100 gallons as a foliar spray. Repeat in 7 days to help break life cycle. No visible residue, safe on open blooms. Same active ingredient as Flora-Mek. 12 hr REI. MOA 6.

Flora-Mek- (EPA Reg. # 100-896-72112)

1/4-1/2 teas per gallon or 4-8 oz per 100 gallons as a foliar spray. Repeat in 7 days to help break life cycle. No visible residue, safe on open blooms. Same active ingredient as Avid. Repeat in 7 days to help break life cycle. 12 hr REI. MOA 6.

Floramite SC- (SC=EPA Reg. #400-508)

1/4 to 1/2 teaspoon per gallon or 4-8 oz per 100 gallons as a foliar spray. Controls eggs and adults for up to 21 days. (Controls egg stage of spider mites only). Safe on most open blooms, and beneficial mites. Greenhouse tomatoes 1" or larger at maturity can be treated. 12 hr REI. MOA 25.

Hexygon DF - (EPA Reg. # 10163-251)

1/8 to 1/4 teaspoon per gallon or 1-2 oz per 100 gallons as a foliar spray. Effective against eggs and immature mites for about 30 days. Eggs laid on treated surfaces are rendered unviable. Limited to one application per crop cycle. Consider tank mixing this product with an adulticide. No residue, safe on most open blooms. 12 hr REI. MOA 10A. Restricted use pesticide in New York.

Judo – (EPA Reg # 432-1280-59807)

Foliar spray applied at 1/8 to 1/4 tsp per gallon or 2-4 oz per 100 gallons. Excellent translaminar movement and 28 day residual control of all life stages. Do not use on bacopa, dracaena, geraniums, impatiens, or English ivy. 12 hr REI. MOA 23.

Ovation SC - (EPA Reg. # 66222-53-58185)

1/8 teaspoon per gallon or 2 oz per 100 gallons as a foliar spray. Eggs and immature stages are controlled for 45 days. Consider tank mixing this product with an adulticide. Good plant safety but the bright magenta color of the residue may stain some open blooms. 12 hr REI. MOA 10A.

PureSpray Green Oil- (EPA Reg # 69526-9)

1-2.5 oz per gallon or 100 oz to 2 gallons per 100 gallons as a full contact foliar spray. Works by suffocation. Leaves a shiny residue on leaves, burns most open blooms. Labeled for many edible crops. 4 hr REI, OMRI listed. MOA UN

Pylon EC - (EPA Reg. # 241-374-59807) ** Not for outdoor use**

1/3 to 1/6 teaspoons per gallon or 2.6-5.2 oz per 100 gallons applied as a foliar spray. 14-21 day control of motile stages. A second application can be made 5-7 days later for heavy infestations. No visible residue but may burn some open blooms. Read phytotoxicity cautions on the label. Certain greenhouse fruiting vegetables may be treated. Do not add any surfactant. 12 hr REI. MOA 13. Restricted use pesticide in New York.

Sanmite WSP - (EPA Reg. # 7969-20)

One 1-ounce water-soluble packet per 25 gallons as a foliar spray for mites (3/4 teaspoon per gallon). No residue, safe on most blooms. Label prohibits use through low volume equipment. 12 hr REI. MOA 21.

Shuttle - (EPA Reg # 66330-38)

Combines a quick knockdown and long residual control. Shows activity against all life stages of susceptible mites. Labeled for ornamentals in greenhouse and nurseries. Relatively harmless for most predacious mites and beneficial insects. Foliar spray rates are 1/2 to 3/4 tsp per gallon or 6.4 to 12.8 oz per 100 gallons, approximately. Use only the lowest rates on impatiens and roses. Do not use on miniature roses. 12 hr REI. MOA 20B

Saf-T-Side Oil – (EPA Reg # 48813-1) ** Formerly Synergy Oil**

1.25- 2.5 TBLs per gallon or 1-2 gallons per 100 gallons as a foliar spray. Full coverage is essential, acts as a suffocant. Apply when rapid drying will occur and when air temperatures are below 85 degrees to avoid phytotoxicity. Labeled for many vegetables. Leaves a shiny residue behind and burns some open blooms. 4 hr REI. MOA UN.

TetraSan WDG- (EPA Reg #59639-108)

One 2-ounce water-soluble packet per 12.5 to 25 gallons as a foliar spray. Mite growth regulator and ovicide with 4 weeks or more of residual control. Strong translaminar movement. Excellent plant safety but it is not labeled for poinsettia bracts.

12 hr REI. MOA 10B.

Ultra-Fine oil - (EPA Reg. # 862-23-499)

1.25- 2.5 TBLs per gallon or 1-2 gallons per 100 gallons as a foliar spray. Full coverage is essential for control because it smothers mites. Apply when rapid drying will occur and when air temperatures are below 85 degrees to avoid phytotoxicity. Keep agitated, as it wants to separate. Labeled for herbs and vegetables. Leaves a shiny residue behind and burns some open blooms. 4 hr REI. MOA UN.



GRIFFIN
GREENHOUSE & NURSERY SUPPLIES

Scale and Mealybugs-

Aria 50 WDG – (EPA Reg # 279-3287)

Not labeled for scale* Foliar sprays at 3-6 packets per 100 gallons, or 3/8 to 3/4 heaping tsp per 3 gallons. Packets are not water soluble. Translaminar action and 7-28 day residual. Insects stop feeding in 30 minutes but may take several days to die. Certain pansy cultivars have shown sensitivity. 12 hr REI. MOA 9C.

Benefit 60WP- (EPA Reg # 42750-153-58185)

Up to 6 weeks control from one application. The label has rates based on pot diameter with higher rates for multiple plant containers and woody perennials. Applicator must apply a certain number of ounces of final solution per pot based on label chart. Some vegetable bedding plants are on the label. 12 hr REI. MOA 4A. Restricted use pesticide in NY.

Discus – (EPA Reg # 432-1392-59807)

Nursery insecticide, not labeled for greenhouses. 2-4 week residual control from one foliar spray. 0.25 oz per gallon or 25 oz per 100 gallons. Drench rates per label. Same active ingredients that are in Marathon and Decathlon. Excellent plant and bloom safety with no visible residue. 12 hr REI. MOA 3 & 4A. Restricted use pesticide in NY.

Distance EC - (EPA Reg. # 59639-96)

Insect growth regulator applied as a foliar spray. Make 2 applications 14-21 days apart. 1/2 to 2/3 teaspoons per gallon or 8-12 oz per 100 gallons. May burn some open blooms, no visible residue. Can be used on certain fruiting vegetables. Do not use on salvia, Boston fern, schefflera, heuchera, or poinsettia bracts. 12 hr REI. MOA 7C.

Duraguard ME - (EPA Reg. # 499-367)

Restricted Use Pesticide. 1 Tbls per gallon or 50 oz per 100 gallons as a foliar spray. No visible residue, it may burn some blooms. 24 hr REI. MOA 1B.

Flagship G- (EPA Reg# 100-960)

Labeled for ornamentals in greenhouses and nurseries. Consult label for per pot rates 12 hr REI. MOA 4A. Not labeled in NY. Restricted use pesticide in MA.

Flagship WG- (EPA Reg # 100-955)

2-4 week residual from a foliar spray at 1/2 teas per 3 gallons or 4 oz per 100 gallons. Label contains directions for a soil drench. Very slight residue, safe on most open blooms. 12 hr REI. MOA 4A. Not labeled in NY. Restricted use pesticide in MA.

Marathon II Flowable - (EPA Reg. # 432-1369-59807)

May be applied as a foliar spray at 1.7 oz per 100 gallons, or 1/2 teaspoon per 5 gallons. 2-4 week residual control with excellent plant and bloom safety. 12 hr REI. MOA 4A. Restricted use pesticide in NY.

Orthene 97 SP - (EPA Reg. # 59639-91)

(Replaces Orthene 75 Turf and Ornamental)- 2/3 teas per gallon or 8 oz per 100 gallons as a foliar spray. No visible residue, but it will burn most open blooms. 24 hr REI. MOA 1B.

PureSpray Green Oil- (EPA Reg # 69526-9)

1-2.5 oz per gallon or 100 oz to 2 gallons per 100 gallons as a full contact foliar spray. Works by suffocation. Leaves a shiny residue on leaves, burns most open blooms. Labeled for many edible crops. 4 hr REI, OMRI listed. MOA UN

Safari SG- (EPA Reg # 33657-16-59639)

Systemic long residual control. Foliar sprays 4 to 8 oz per 100 gallons, drench 12 to 24 oz per 100 gallons (apply 4 oz per 6" pot). Some edible crops on label. 12 hr REI. MOA 4A. NY Special Needs Label (greenhouse plants, post bloom only)

Talus 40 SC (EPA Reg. # 71711-20-67690)

Insect growth regulator with 3-4 week residual control from one foliar application. 1 1/8 to 1 1/3 tsp per gallon or 18-21.5 oz per 100 gallons. Excellent plant and bloom safety. May be used on greenhouse tomatoes, see label for specific rates and use patterns. 12 hr REI. MOA 16.

Talus WSP- (EPA Reg # 71711-15-67690)

Insect growth regulator with 3-4 week residual control from one foliar application. 1 packet per 5 gallons for mealybugs, 1 packet per 4 gallons for scale. Label forbids opening packets to measure out smaller amounts. Excellent plant and bloom safety. May be used on greenhouse tomatoes. 12 hr REI. MOA 16.

TriStar 30 SG- (EPA Reg # 8033-94-1001)

2-4 week translaminar systemic control from one foliar spray application. 1-2 teaspoons per 5 gallons or 2.7-5.3 oz per 100 gallons. Excellent plant and bloom safety, no visible residue. 12 hr REI. MOA 4A.

Saf-T-Side Oil – (EPA Reg # 48813-1) ** Formerly Synergy Oil**

1.25- 2.5 TBLS per gallon or 1-2 gallons per 100 gallons as a foliar spray. Full coverage is essential, acts as a suffocant. Apply when rapid drying will occur and when air temperatures are below 85 degrees to avoid phytotoxicity. Labeled for many vegetables. Leaves a shiny residue behind and burns some open blooms. 4 hr REI. MOA UN.

Ultra-Fine Oil - (EPA Reg. # 862-23-499)

1.25- 2.5 TBLS per gallon or 1-2 gallons per 100 gallons as a foliar spray. Full coverage is essential for control because it smothers insects. Apply when rapid drying will occur and when air temperatures are below 85 degrees to avoid phytotoxicity. Keep agitated, as it wants to separate. Labeled for herbs and vegetables. Leaves a shiny residue behind and burns some open blooms. 4 hr REI. MOA UN.

Thrips-

Aria 50 WDG – (EPA Reg # 279-3287)

Suppression of thrips* Foliar sprays at 3-4 packets per 100 gallons, or 3/8 to 1/2 heaping tsp per 3 gallons. Packets are not water soluble. Translaminar action and 7-28 day residual. Insects stop feeding in 30 minutes but may take several days to die. Certain pansy cultivars have shown sensitivity. 12 hr REI. MOA 9C.

Avid EC - (EPA Reg. # 100-896)

1/2 teaspoon per gallon or 8 oz per 100 gallons applied as a foliar spray. Tank mixing with Azatin may increase control per Raymond Cloyd, Kansas State University. Safe on open blooms and no visible residue. Same active ingredient as Flora-Mek. 12 hr REI. MOA 6.

Azatin XL - (EPA Reg. # 70051-27-59807)

1 teaspoon per gallon or 16 oz per 100 gallons applied as a foliar spray for insect growth regulator activity. Labeled for edible crops. No residue and safe on most blooms. 4 hr REI. MOA 18 B.

Botanigard ES - (EPA Reg. # 70810-6)

1-4 teas per gallon or 1/2-2 qts per 100 gallons as a foliar spray. Naturally occurring fungus, not a quick kill. Use a minimum of three times in a row at 3-5 day intervals. Labeled for vegetables and herbs. May damage tomato foliage. Very little visible residue but burns some open blooms. More effective when tank mixed with Azatin or horticultural oil. 4 hr REI. 0 day PHI. MOA UN.

Conserve SC - (EPA Reg. # 62719-291)

Apply 1/2 teas/gallon or 8 oz per 100 gallons as a foliar spray. Short residual control; make 2 applications 7 days apart. No visible residue or bloom safety concerns. No more than three consecutive applications in a 30-day period without rotating to another class of chemistry. Labeled for certain edible crops. 4 hr REI. MOA 5.

Enstar II - (EPA Reg. # 2724-476)

Insect growth regulator used at the rate of 2/3 teas per gallon or 10 oz per 100 gallons. No residue but burns some open blooms. 4 hr REI. MOA 7A.

Flora-Mek- (EPA Reg. # 100-896-72112)

½ teaspoon per gallon or 8 oz per 100 gallons applied as a foliar spray. Tank mixing with Azatin may increase control per Raymond Cloyd, Kansas State University. Safe on open blooms and no visible residue. Same active ingredient as Avid. 12 hr REI. MOA 6.

Mesuro 75 WP - (EPA Reg. # 10163-231)

Restricted use Pesticide. Foliar spray at 2 TBLS/gallon or 1 lb per 100 gallons. Leaves a residue, but it is safe on many open blooms. Label indicates it must be applied through conventional spray equipment. 24 hr REI. MOA 1A.

Pedestal SC- (EPA Reg. # 66222-40-400)

Insect growth regulator applied at ½ teaspoon per gallon or 8 oz per 100 gallons. Maximum of 1 application in 30 days and 2 treatments per crop per year. 2 alternative products must be used between treatments with Pedestal. No visible residue and good bloom safety. Do not use on poinsettias. 12 hr REI. MOA 15.

Pylon EC - (EPA Reg. # 241-374-59807) ** Not for outdoor use**

1/3 teaspoons per gallon or 5.2 oz per 100 gallons applied as a foliar spray. 7 day residual control. No visible residue but may burn some open blooms. Read phytotoxicity cautions on the label. Ornamentals and certain greenhouse fruiting vegetables may be treated. Do not add any surfactant. 12 hr REI. MOA 13. Restricted use pesticide in New York.

Safari SG- (EPA Reg # 33657-16-59639)

Foliar spray 8 oz per 100 gallons. Some edible crops on label. 12 hr REI. MOA 4A. NY Special Needs Label (greenhouse plants, post bloom only)

Tame/Orthene TR – (EPA Reg # 499-441)

1 can per 1500 to 3000 sq ft. No residue, excellent plant and bloom safety. Poinsettia bracts should be treated not more than once per week at 1 can per 3,000 sq ft. 24 hr REI. MOA 1B & 3.

Thionex 50 WSB (EPA Reg# 66222-62) Formerly Thiodan 50 WP

(Restricted use pesticide in some states) 1 TBLS/gallon or 1 lb per 100 gallons as a foliar spray. Leaves visible residue and burns some open blooms. 24 hr REI. MOA 2A. Label change: tomatoes only greenhouse crop approved. Label still includes certain outdoor nursery items. Restricted use pesticide in CT, NH, NJ, NY and ME.

TriStar 30 SG- (EPA Reg # 8033-94-1001)

2-4 week translaminar systemic control from one foliar spray application. 1.5-3 teaspoons per 5 gallons or 4-8 oz per 100 gallons. Excellent plant and bloom safety, no visible residue. 12 hr REI. MOA 4A.

Whiteflies

Aria 50 WDG – (EPA Reg # 279-3287)

* Suppression of silverleaf whiteflies.* Label recommends tank mixing or rotating with another whitefly product for optimum control. Foliar sprays at 4-6 packets per 100 gallons, or 1/2 to 3/4 heaping tsp per 3 gallons. Packets are not water soluble. Translaminar action and 7-28 day residual. Insects stop feeding in 30 minutes but may take several days to die. Certain pansy cultivars have shown sensitivity. 12 hr REI. MOA 9C.

Benefit 60WP- (EPA Reg # 42750-153-58185)

Up to 6 weeks control from one application. The label has rates based on pot diameter with higher rates for multiple plant containers and woody perennials. Applicator must apply a certain number of ounces of final solution per pot based on label chart. Some vegetable bedding plants are on the label. 12 hr REI. MOA 4A. Restricted use pesticide in NY.

Azatin XL - (EPA Reg. # 70051-27-59807)

2/3 to 1 teaspoon per gallon or 12-16 oz per 100 gallons applied as a foliar spray for insect growth regulator activity. Labeled for edible crops. No residue and safe on most blooms. 4 hr REI.

MOA 18 B.

Botanigard ES - (EPA Reg. # 70810-6)

1-4 teas per gallon or 1/2-2 qts per 100 gallons as a foliar spray. Naturally occurring fungus, not a quick kill. Use a minimum of three times in a row at 3-5 day intervals. Labeled for vegetables and herbs. May damage tomato foliage. Very little visible residue but burns some open blooms. More effective when tank mixed with Azatin or horticultural oil. 4 hr REI. 0 day PHI. MOA UN.

Discus - (EPA Reg # 432-1392-59807)

Nursery insecticide, not labeled for greenhouses. 2-4 week residual control from one foliar spray. 0.25 oz per gallon or 25 oz per 100 gallons. Drench rates per label. Same active ingredients that are in Marathon and Decathlon. Excellent plant and bloom safety with no visible residue. 12 hr REI. MOA 3 & 4A. Restricted use pesticide in NY.

Distance EC - (EPA Reg. # 59639-96)

Insect growth regulator applied as a foliar spray. One application provides controls for 30+ days. 1/3 to 1/2 teaspoons per gallon, 6-8 oz per 100 gallons. May burn some open blooms, no visible residue. Can be used on certain fruiting vegetables. Do not use on salvia, Boston fern, schefflera, heuchera, or poinsettia bracts. 12 hr REI. MOA 7C.

Endeavor WSP - (EPA Reg. # 100-913)

1-2 week residual control from one foliar spray. Use 1 water-soluble packet per 50 gallon spray tank, or you can cut the packet open and use 1 TBLS/5 gallons. Once opened, the packet must be sealed in a zip-lock baggie and kept dry inside the original container. Most effective when sprayed twice 7 days apart. Takes 2-4 days to kill. No residue, safe on open blooms. 12 hr REI. MOA 9B. Restricted use pesticide in New York.

Enstar II - (EPA Reg. # 2724-476)

Insect growth regulator used at the rate of 2/3 teas per gallon or 10 oz per 100 gallons. No residue but burns some open blooms. 4 hr REI. MOA 7A.

Flagship G- (EPA Reg# 100-960)

Labeled for ornamentals in greenhouses and nurseries. Consult label for per pot rates 12 hr REI. MOA 4A. Not labeled in NY. Restricted use pesticide in MA.

Flagship WG- (EPA Reg # 100-955)

2-4 week residual from a foliar spray at 1/2 teas per 3 gallons or 4 oz per 100 gallons. Label contains directions for a soil drench. Very slight residue, safe on most open blooms. 12 hr REI. MOA 4A. Not labeled in NY. Restricted use pesticide in MA.

Judo – (EPA Reg # 432-1280-59807)

Foliar spray applied at 1/8 to 1/4 tsp per gallon or 2-4 oz per 100 gallons. Excellent translaminar movement and 21 day residual control of all life stages. Do not use on dracaena, geraniums, impatiens, or English ivy. 12 hr REI. MOA 23.

Marathon 1% G - (EPA Reg. # 432-1329-59807)

Up to 6 weeks control from one application. The label has rates based on pot diameter with higher rates for multiple plant containers and woody perennials. 12 hr REI. MOA 4A. Restricted use pesticide in NY.

Marathon 60 WSP- (EPA Reg # 432-1361-59087)

Up to 6 weeks control from one application. The label has rates based on pot diameter with higher rates for multiple plant containers and woody perennials. Applicator must apply a certain number of ounces of final solution per pot based on label chart. Some vegetable bedding plants are on the label. 12 hr REI. MOA 4A. Restricted use pesticide in NY.

Marathon II Flowable - (EPA Reg. # 432-1369-59807)

May be applied as a foliar spray at 1.7 oz per 100 gallons, or 1/2 teaspoon per 5 gallons. 2-4 week residual control with excellent plant and bloom safety. It can also be drenched per the chart found on the label. Some vegetable bedding plants are on the label. 12 hr REI. MOA 4A Restricted use pesticide in NY.

Pedestal SC- (EPA Reg. # 66222-40-400)

Insect growth regulator applied at 1/2 teaspoon per gallon or 8 oz per 100 gallons. Maximum of 1 application in 30 days and 2 treatments per crop per year. 2 alternative products must be used between treatments with Pedestal. No visible residue and good bloom safety. Do not use on poinsettias. 12 hr REI. MOA 15.

PureSpray Green Oil- (EPA Reg # 69526-9)

1-2.5 oz per gallon or 100 oz to 2 gallons per 100 gallons as a full contact foliar spray. Works by suffocation. Leaves a shiny residue on leaves, burns most open blooms. Labeled for many edible crops. 4 hr REI, OMRI listed. MOA UN

Safari SG- (EPA Reg # 33657-16-59639)

Systemic long residual control. Foliar sprays at 1/2 to 1 tsp per gallon or 4 to 8 oz per 100 gallons, drench at 1.5 tsp to 1 TBLS per gallon or 12 to 24 oz per 100 gallons (apply 4 oz per 6" pot). Excellent plant and bloom safety. Some edible crops on label. 12 hr REI. MOA 4A. NY Special Needs Label (greenhouse plants, post bloom only)

Sanmite - (EPA Reg. # 7969-20)

One 1-ounce water-soluble packet per 16.6 gallons (1 1/8 teaspoons per gallon) as a foliar spray for whiteflies. Contact control of adult whiteflies. No residue, safe on most blooms. Label prohibits use through low volume equipment. 12 hr REI. MOA 21.

Saf-T-Side Oil – (EPA Reg # 48813-1) ** Formerly Synergy Oil**

1.25- 2.5 TBLS per gallon or 1-2 gallons per 100 gallons as a foliar spray. Full coverage is essential, acts as a suffocant. Apply when rapid drying will occur and when air temperatures are below 85 degrees to avoid phytotoxicity. Labeled for many vegetables. Leaves a shiny residue behind and burns some open blooms. 4 hr REI. MOA UN.

Talus 40 SC (EPA Reg. # 71711-20-67690)

Insect growth regulator with 3-4 week residual control from one foliar application.

1/2 tsp per gallon or 9 fl oz per 100 gallons. Excellent plant and bloom safety. May be used on greenhouse tomatoes, see label for specific rates and use patterns. 12 hr REI. MOA 16.

Talus WSP- (EPA Reg # 71711-15-67690)

Insect growth regulator with 3-4 week residual control from one foliar application.

1 packet per 10 gallons. Label forbids opening packets to measure out smaller amounts.

Excellent plant and bloom safety including poinsettia bracts. May be used on greenhouse tomatoes. 12 hr REI. MOA 16.

Tame/Orthene TR – (EPA Reg # 499-441)

1 can per 1500 to 3000 sq ft. No residue, excellent plant and bloom safety. Poinsettia bracts should be treated not more than once per week at 1 can per 3,000 sq ft.

24 hr REI. MOA 1B & 3.

Thionex 50 WSB (EPA Reg# 66222-62) Formerly Thiodan 50 WP

1 TBLS/gallon or 1 lb per 100 gallons as a foliar spray. Leaves visible residue and burns some open blooms. 24 hr REI. MOA 2A. Label change: tomatoes only greenhouse crop approved. Label still includes certain outdoor nursery items. Restricted use pesticide in CT, NH, NJ, NY and ME.

TriStar 30 SG- (EPA Reg # 8033-94-1001)

2-4 week translaminar systemic control from one foliar spray application. 1-2 teaspoons per 5 gallons or 2.7-5.3 oz per 100 gallons. Excellent plant and bloom safety, no visible residue. 12 hr REI. MOA 4A.

Ultra-Fine Oil - (EPA Reg. # 862-23-499)

1.25- 2.5 TBLS per gallon or 1-2 gallons per 100 gallons as a foliar spray. Full coverage is essential for control because it smothers insects. Apply when rapid drying will occur and when air temperatures are below 85 degrees to avoid phytotoxicity. Keep agitated, as it wants to separate. Labeled for herbs and vegetables. Leaves a shiny residue behind and burns some open blooms. 4 hr REI. MOA UN.

Fungicides

Botrytis-

All recommendations are for foliar sprays except as noted. Most foliar sprays listed will perform better with a surfactant such as CapSil added at 1/2 teaspoon per gallon, (8 oz per 100 gallons), to increase coverage and reduce visible residue. Some product labels state that surfactants should not be added.

Actinovate SP- (EPA Reg # 73314-1)

1 tsp per gallon or 12 oz per 100 gallons as a foliar spray. Has shown protectant and eradicant properties. Leaves some visible residue, safe on open blooms. Edible crops on the label. 1 hr REI. MOA 25. OMRI listed.

Camelot - (EPA Reg. #1812-381-499)

1 Tablespoon per gallon or 48 oz per 100 gallons. Leaves some visible residue and burns most open blooms. Do not allow this product to come in contact with aluminum sprayer or irrigation parts. Labeled for several greenhouse vegetables. 12 hr REI. MOA M1.

Chipco 26019 N/G- (EPA Reg # 432-889-59807)

Foliar spray at 1.33 to 2.66 tsp per gallon or 1-2 lbs per 100 gallons. Good bloom safety but it leaves a visible residue. 12 hr REI. MOA 2. Restricted use pesticide in NY only.

Chipco GT-O - (EPA Reg. # 432-888-59807)

2 to 4 1/2 teaspoons per gallon or 32-80 oz per 100 gallons as a foliar spray, safe on most open blooms but does leaves some residue. MOA 2. Restricted use pesticide in NY only.

Cleary's 26/36 Fungicide – (EPA Reg # 432-1414-1001)

26/36 is a combination of the active ingredients from Cleary's 3336 and Chipco 26019. Cleary's 26/36 can be used on turf, field and greenhouse grown ornamentals and landscapes. 12 hr REI. MOA 1.

Because this product was originally for turf the rates are expressed by square footage. Please note that the chart below includes maximum spray volume to make sure the user stays in compliance with the label.

Cleary's 2636 per 100 gallon foliar spray rate	32 oz per 100 gallons	64 oz per 100 gallons
Maximum gallons spray per acre	262 gallons per acre	131 gallons spray per acre
Cleary's 2636 rate per gallon foliar spray rate	0.32 oz or 1.92 tsp per gallon	0.64 oz or 3.84 tsp per gallon
Maximum gallons spray per 1,000 sq ft	6 gallons per 1,000 sq ft	3 gallons per 1,000 sq ft

Compass WDG - (EPA Reg. # 432-1371-59807)

1/2-1 teaspoon per 2.5 gallon, (2-4 ounces per 100 gallons), safe on most open blooms, slight visible residue. Long residual preventative properties. Do not use with CapSil or other organosilicone surfactants. 12 hour REI. MOA 11. Restricted use pesticide in NY.

Daconil Ultrex WDG - (EPA Reg. # 50534-202-100)

1 TBLS per gallon, (1.4 lbs per 100 gallons), leaves some residue and burns some blooms. Preventative control. The label prohibits the use of mist blowers or high-pressure spray equipment in greenhouses. 12 hr REI with additional WPS requirements for the next 6.5 days. MOA M5. Restricted use pesticide in MA and RI.

Daconil Weather-stik- (EPA Reg # 50534-209-100)

Foliar spray applied at 1.33 tsp per gallon or 22 oz per 100 gallons. Contains surfactant, do not add another. Leaves some visible residue and burns some open blooms. Preventative control. The label prohibits the use of mist blowers or high-pressure spray equipment in greenhouses. 12 hr REI with additional WPS requirements for the next 6.5 days. MOA M5. Restricted use pesticide in MA and RI.

Decree DF- (EPA Reg. #66330-35-67690)

1 rounded teaspoon per gallon, (16 oz per 100 gallons), safe on open blooms, minimal visible residue. Rain fast (won't wash off) two hours after application. Very effective long residual control. 12 hr REI. MOA 17. Many edible crops are now on the label.

Endorse- (EPA Reg #66330-41-1001)

Translaminar systemic, curative and protectant foliar biofungicide for ornamentals.
1-2 TBLS per gallon or 1.1-2.2 lbs per 100 gallons. 7-10 day re-application intervals.
4 hr REI. MOA 19

Exotherm Termil - (EPA Reg. # 70-223)

Ignitable powder used @ 1 can per 1,000 sq ft. Use as a protectant when leaf and flower surfaces are dry to insure there is no damage to plant tissue. (Never use on mature poinsettia bracts). 12 hour REI and label ventilation requirements must be met before entry into treated areas. Additional WPS requirements apply for the following 6.5 days. MOA M5. Restricted use pesticide. Not labeled in VT.

Fungaflor TR- (EPA Reg #499-508)

Total release aerosol, 2-3 two oz cans per 3,000 sq ft. Labeled for ornamentals in greenhouses. 24 hr REI. MOA 3.

Mainsail WDG - (EPA Reg. # 72112-5)

1 TBLS per gallon, (1.4 lbs per 100 gallons), leaves some residue and burns some blooms. Preventative control. The label prohibits the use of mist blowers or high-pressure spray equipment in greenhouses. 12 hr REI with additional WPS requirements for the next 6.5 days. MOA M5. Restricted use pesticide in MA and RI.

Mainsail 6F- (EPA Reg # 72112-6)

Foliar spray applied at 1.33 tsp per gallon or 22 oz per 100 gallons. Contains surfactant, do not add another. Leaves some visible residue and burns some open blooms. Preventative control. The label prohibits the use of mist blowers or high-pressure spray equipment in greenhouses. 12 hr REI with additional WPS requirements for the next 6.5 days. MOA M5. Restricted use pesticide in MA and RI.

Medallion WSP - (EPA Reg. # 100-769)

1 water-soluble packet per 50-100 gallons of water, or 1 teaspoon per 3 ½ to 7 gallons. Once opened, the packet must be sealed in a zip-lock baggie and kept dry in the original container. Very good plant and bloom safety, little visible residue. 12 hr REI. MOA 12. Restricted use pesticide in NY with Long Island use restrictions.

Milstop - (EPA Reg. # 70870-1-68539)

1.5 tsp to 3.5 teaspoons per gallon, or 1.25-3 lbs per 100 gallons as a foliar spray. Fast acting product that is labeled for ornamentals and many vegetable crops. Formulated with a surfactant so do not add another. Exempt from food tolerances. Leaves some residue but has good plant safety. Trial on open blooms, damage on hydrangea blooms has been reported. Use low rates only and 14 day treatment intervals on poinsettias. 1 hour REI. 0 day PHI. MOA NC. OMRI listed.

Oxidate - (EPA Reg. # 70299-2)

0.5 oz per gallon or 50 oz per 100 gallons as a preventative and 1.5 ounces per gallon or 150 oz per 100 gallons as a curative. No visible residue and safe on most open blooms. Contact control, no residual. Identical to Zero-Tol except that it is labeled for edible crops. There is no REI. MOA NC. OMRI listed.

Phyton-27 SC - (EPA Reg. # 49538-2)

.6 to 1.2 teaspoons per gallon or 10-20 oz per 100 gallons leaves no residue and is safe on many open blooms. Avoid spraying when leaves will stay wet for a long time to reduce chance of phytotoxicity. Do not add surfactant. The final spray solution should have a pH between 5.5 and 6.5. Avoid spraying within 3 days of B-9 to avoid burning. 24 hr REI. MOA M1.

Plantshield HC - (EPA Reg. # 68539-4)

Naturally occurring fungus that works as a protectant. Labeled for use on vegetable and herbs as well as ornamentals. 1/2 oz per gallon or 50 oz per 100 gallons as a foliar spray leaves a significant residue but no flower burn. Do not use low volume applicators. There is no REI. MOA NC.

Protect T/O WSP - (EPA Reg. # 1001-65), Protect DF (EPA Reg # 1001-77)

1 ½ tablespoons per gallon (1 tablespoon per gallon for DF formulation), (1.5 lbs per 100 gallons), leaves a visible residue but is safe on most open blooms. Preferred use is on outdoor perennial production or early in the season on greenhouse crops when residue is not an issue. Most effective as a protectant. Never use on marigolds or geraniums due to manganese toxicity. 24 hr REI. MOA M3.

Rhapsody AS- (EPA Reg # 69592-19)

Mycofungicide (bacteria: Bacillus subtilis QST 713). Foliar spray applied at 1.25 oz per gallon or 1 gallon per 100 gallons. Preventative control effective for about 7 days. Good plant safety including open blooms and no visible residue. Tank mixable with most common pesticides. Labeled for several edible crops. 4 hr REI, 0 day PHI. MOA-NC. OMRI listed.

Spectro 90 WDG - (EPA Reg. # 1001-72)

1 to 2 tablespoons per gallon or 1-2 lbs per 100 gallons as a foliar spray, leaves a visible residue and burns some open blooms. Not labeled for use in foggers or mist blowers.

12 hr REI with additional WPS requirements for the next 6.5 days. MOA 1 & M5.

Restricted use pesticide in MA.

Zero-Tol - (EPA Reg. # 70299-1)

.5 oz per gallon or 50 oz per 100 gallons as a preventative and 1.5 ounces per gallon or 150 oz per 100 gallons as a curative. No visible residue and safe on most open blooms. Contact control, no residual. Use 2 teas per gallon on poinsettia bracts. There is no REI. MOA NC.

Zyban WSP - (EPA Reg. # 58185-31)

4 teaspoons per gallon, 4 packets per 100 gallons as a foliar spray. Safe on most open blooms but does leave a visible residue. Do not use on marigolds or geraniums. 24 hr REI. MOA 1 & M3. Restricted use pesticide in CT and NY.

Fusarium-

All of the following recommendations are for soil drenches. Fungicides have limited success controlling Fusarium, but they can be used to help protect healthy plants.

Actino-iron - (EPA Reg #73314-2)

Granular for pre-incorporation into growing media at 5 lbs per cubic yard. Preventative not curative activity. Edible crops are on the label. 4 hr REI, some exceptions. MOA 25.

Actinovate SP- (EPA Reg # 73314-1)

1 tsp per 2 gallon or 4-6 oz per 100 gallons. Protectant only, apply as early in the crop cycle as possible. Labeled for vegetables and herbs. Typically only one application per growing season is needed. 1 hr REI, 0 if no contact with drenched surfaces. MOA 25. OMRI listed.

Banrot 40% WP - (EPA Reg. # 58185-10)

12 ounces per 100 gallons, (1.5 teas per gallon). Contains the same active ingredients that are in Truban and (Cleary's 3336/ OHP 6672/Transom). 12 hr REI. MOA 1 & 14. Restricted use pesticide in CT.

Cleary's 3336 WP and F - (EPA Reg. # 1001-63 = WP) (EPA Reg. # 1001-69 = F)

Rate for either formulation is 16 oz per 100 gallons. May be repeated at 2 to 4 week intervals as needed. 12 hr REI. MOA 1. Flowable is a restricted use pesticide in NY.

Companion- (EPA Reg # 71065-1)

16 oz per 100 gallons repeated every 14-28 days. Protectant that works primarily by the release of antibiotics produced by a beneficial bacteria. Compatible with most traditional fungicides. Excellent plant safety, not labeled for any edible crops. 4 hr REI. MOA NC. Not yet labeled in many states.

Heritage WDG - (EPA Reg. # 100-1093)

Soil drench at 0.2 to 0.9 oz per 100 gallons. Apply 1-2 pints of solution per sq ft of surface area. Repeat at 7 to 28 day intervals. Protectant only. 4 hr REI. MOA 11. Restricted use pesticide in VT.

Hurricane WSP- (EPA Reg # 100-951)

1 packet per 100 gallons plus 1 packet per 100 gallons of Medallion. Contains active ingredients found in Subdue Maxx and Medallion. 21-28 re-application interval. Label cautions regarding: impatiens, N.G. Impatiens, pothos, geraniums, and Easter lilies. 0 hr REI if there will be no contact with treated surfaces, otherwise a 48 hr REI is in effect. MOA 4 & 12.

Medallion WSP- (EPA Reg. # 100-769)

Two 1-ounce packets per 100 gallons of water. Do not drench impatiens, geranium caution added to the label. 12 hr REI. MOA 12. Restricted use pesticide in NY with Long Island use restrictions.

OHP 6672 WP and L - (EPA Reg. # 51036-330-59807 = WP)
(EPA Reg. # 51036-329-59807 = F)

Rate for the WP is 16 oz per 100 gallons. The L formulation rate is 20 oz per 100 gallons. May be repeated at 2 to 4 week intervals as needed. 12 hr REI. MOA 1. Restricted use pesticide in NY.

Plantshield HC - (EPA Reg. # 68539-4)

4 ounces per 100 gallons applied as early in the crop cycle as possible. Naturally occurring fungus that grows along with the roots to protect them. Will not clean up an existing problem. Labeled for vegetables and herbs. Typically only one application per growing season is needed. Long term crops should be retreated with a half-rate application midway through the crop. No re-entry time. MOA NC.

Rhapsody AS- (EPA Reg # 69592-19)

Mycofungicide (bacteria: Bacillus subtilis QST 713). Soil drench at 1 quart to 1 gallon per 100 gallons, (2 tsp to 1.25 oz per gallon) Labeled for ornamentals and certain edible crops in greenhouses and enclosed nurseries only. Re-application interval 21-28 days. 4 hr REI. 0 day PHI. MOA NC. OMRI listed.

Transom 50 WSB and F - (EPA Reg. # 72112-1 = WSB) (EPA Reg. # 72112-2 = F) WSB rate is 2 teaspoons per gallon, (16 ounces per 100 gallons), the F rate is 1.25 teaspoons, (20 oz per 100 gallons). May be repeated at 2-4 week intervals. 12 hr REI. MOA 1. Restricted use pesticide in NY.

Pythium and Phytophthora -

All recommendations are for soil drenches except as noted. Rotation of active ingredients is essential due to resistance issues.

Actino-iron - (EPA Reg #73314-2)

Granular for pre-incorporation into growing media at 5 lbs per cubic yard. Preventative not curative activity. Edible crops are on the label. 4 hr REI, some exceptions. MOA 25.

Actinovate SP- (EPA Reg # 73314-1)

1 tsp per 2 gallon or 4-6 oz per 100 gallons. Protectant only, apply as early in the crop cycle as possible. Labeled for vegetables and herbs. Typically only one application per growing season is needed. 1 hr REI, 0 if no contact with drenched surfaces. MOA 25. OMRI listed.

Aliette 80% WDG - (EPA Reg. # 432-890)

6.4 to 12.8 ounces per 100 gallons. Do not exceed 1 application per 30 days. 12 hr REI. MOA 33.

Alude - (EPA Reg # 71962-1-1001)

May be either applied as a foliar spray at .33 to .66 oz per gallon (1-2 qts per 100 gallons) or as a soil drench at 6.25 to 12.66 oz per 100 gallons. Stimulates plants natural defenses, primarily a protectant. Excellent plant safety, trial on open blooms before use as a foliar spray. 4 hr REI. MOA 33.

Banrot 40% WP - (EPA Reg. # 58185-10)

6 to 12 ounces per 100 gallons. Can retreat in 4 weeks if needed. Contains the same active ingredients that are in Truban and Cleary's 3336/ OHP 6672/Transom). 12 hr REI. MOA 1 & 14. Restricted use pesticide in CT.

Companion- (EPA Reg # 71065-1)

16 oz per 100 gallons repeated every 14-28 days. Protectant that works primarily by the release of antibiotics produced by a beneficial bacteria. Compatible with most traditional fungicides. Excellent plant safety, not labeled for any edible crops. 4 hr REI. MOA NC. Not yet labeled in many states.

Fenstop- (EPA Reg #432-1389-59807)

7-14 oz per 100 gallons, (1/2-3/4 tsp per gallon) 28 day re-application intervals. Labeled for ornamentals in greenhouses only. 12 hr REI. MOA 11. Not registered in NY.

Hurricane WSP- (EPA Reg # 100-951)

1 packet per 100 gallons except 1 packet per 200 gallons when applied at seeding. Contains active ingredients found in Subdue Maxx and Medallion. 21-28 re-application interval. Label cautions regarding: impatiens, N.G. Impatiens, pothos, geraniums, and Easter lilies. 0 hr REI if there will be no contact with treated surfaces, otherwise a 48 hr REI is in effect. MOA 4 & 12.

Plantshield HC - (EPA Reg. # 68539-4)

4 ounces per 100 gallons applied as early in the crop cycle as possible. Naturally occurring fungus that grows along with the roots to protect them. Will not clean up an existing problem. Labeled for vegetables and herbs. Typically only one application per growing season is needed. Long term crops should be retreated with a half-rate application midway through the crop. No re-entry time. MOA NC.

Rhapsody AS- (EPA Reg # 69592-19)

Mycofungicide (bacteria: Bacillus subtilis QST 713). Soil drench at 1 quart to 1 gallon per 100 gallons, (2 tsp to 1.25 oz per gallon) Labeled for ornamentals and certain edible crops in greenhouses and enclosed nurseries only. Re-application interval 21-28 days. 4 hr REI, 0 day PHI. MOA NC. OMRI listed.

Stature DM- (EPA Reg # 241-419-67690)

Does not control Pythium. Translaminar systemic as a soil surface directed spray to cover plant crown, stem and soil surface. Root penetrant as a soil drench to wet the root zone. Rates for both types of application: Greenhouse grown herbaceous annuals and perennials use 1 to 4 tsp per gallon or 3.2 to 12.8 oz per 100 gallons. Outdoor container grown herbaceous perennials and woody ornamentals use 6.4 to 25.6 oz per 100 gallons. 12 hr REI. MOA 40.

Subdue Maxx ME (Micro Emulsion) - (EPA Reg. # 100-796)

1 oz per 100 gallons, (1/2 teaspoon per 10 gallons), except 1/2 oz, (1/4 teaspoon per 10 gallons), for seed flats. Do not apply more often than every 6 weeks. REI- re-entry is allowed as soon as the treated area is dry. MOA 4. Easter lilies can be treated only once at planting to avoid a leaf scorch. 1/2 oz per 100 gallons is used for Easter lilies.

Truban WP and EC - (EPA Reg. # 58185-7 = WP) (EPA Reg. # 58185-8 = EC)

Apply the WP at 4 to 6 ounces per 100 gallons, or the EC at 3 to 4 ounces per 100 gallons. Apply to moist soil for maximum plant safety. Repeat applications can be made at 4 to 8 week intervals. 12 hour REI. MOA 14. WP form only is a restricted use pesticide in NY.

Powdery Mildew-

All recommendations are for foliar sprays except as noted. Most foliar sprays listed will perform better with a surfactant such as CapSil added at 1/2 teaspoon per gallon, (8 oz per 100 gallons), to increase coverage and reduce visible residue. Some product labels state that surfactants should not be added

Actinovate SP- (EPA Reg # 73314-1)

1 tsp per gallon or 12 oz per 100 gallons as a foliar spray. Has shown protectant and eradicant properties. Leaves some visible residue, safe on open blooms. Edible crops on the label. 1 hr REI. MOA 25. OMRI listed.

Camelot - (EPA Reg. # 1812-381-499)

1 Tablespoon per gallon or 48 oz per 100 gallons as a foliar spray. Leaves some visible residue and burns most open blooms. Do not allow this product to come in contact with aluminum sprayer or irrigation parts. Labeled for several greenhouse vegetables.

12 hr REI. MOA M1.

Clevis - (EPA Reg # 62719-418-72112)

Systemic and contact fungicide. It is a combination of the active ingredients found in Eagle and Protect DF. Labeled for ornamentals in greenhouse or outdoor nurseries. Packaged in 8 oz water soluble packets. One pkt per 25 gallons of water. Packets cannot be opened for smaller doses. Restricted use pesticide in NY with Long Island use restrictions. 24 hr REI MOA M3.

Compass WDG - (EPA Reg. # 432-1371-59807)

1 teas per 2.5 gallons or 4 oz per 100 gallons as a foliar spray. Has shown outstanding long residual protection from powdery mildew. Consider a spray of an eradicant first, followed by Compass. Do not use with CapSil or other organosilicone surfactants. Leaves a slight residue and is safe on many open blooms. Do not use on petunias, violets, or N.G. Impatiens. 12 hr REI. MOA 11. Restricted use in NY.

Daconil Ultrex WDG - (EPA Reg. # 50534-202-100)

1 TBLS per gallon or 1.4 lbs per 100 gallons, leaves some residue and is not safe on all open blooms. The label prohibits the use of mist blowers or high-pressure spray equipment in greenhouses. 12 hr REI with additional WPS requirements for the next 6.5 days.

MOA M5. Restricted use pesticide in MA and RI.

Daconil Weather-stik- (EPA Reg # 50534-209-100)

Foliar spray applied at 1.33 tsp per gallon or 22 oz per 100 gallons. Contains surfactant, do not add another. Leaves some visible residue and burns some open blooms.

Preventative control. The label prohibits the use of mist blowers or high-pressure spray equipment in greenhouses. 12 hr REI with additional WPS requirements for the next 6.5 days. MOA M5. Restricted use pesticide in MA and RI.

Eagle 20 EW- (EPA Reg # 62719-463)

Locally systemic, curative and protectant foliar fungicide applied at ½ to ¾ tsp per gallon or 6-12 oz per 100 gallons. Good plant and bloom safety. 24 hr REI. MOA 3. Restricted use pesticide in NY with Long Island use restrictions.

Endorse- (EPA Reg #66330-41-1001)

Translaminar systemic, curative and protectant foliar biofungicide for ornamentals. 1-2 TBLS per gallon or 1.1-2.2 lbs per 100 gallons. 7-10 day re-application intervals. 4 hr REI. MOA 19

Fungaflor TR- (EPA Reg #499-508)

Total release aerosol, 2-3 two oz cans per 3,000 sq ft. Labeled for ornamentals in greenhouses. 24 hr REI. MOA 3.

Heritage WDG - (EPA Reg. # 100-1093)

1 teas per 2.5 gallons, (4 ounces per 100 gallons), as a foliar spray. Most effective as a protectant. No visible residue and safe on most open blooms. Do not use with CapSil or other silicone containing surfactants. 4 hr REI. MOA 11. Restricted use pesticide in VT. Cannot be used through ultra low volume applicators.

Insignia- (EPA Reg# 7969-184)

Translaminar systemic applied as a foliar spray at the rate of 1/8 to ¼ tsp per gallon or 4-8 oz per 100 gallons. Labeled for use on ornamentals in greenhouses, interiorscapes and outdoor nurseries. Do not use CapSil or any other organo-silicone surfactant with Insignia. Do not apply to the open blooms of impatiens or petunias. 12 hours REI. MOA 11

Mainsail WDG - (EPA Reg. # 72112-5)

1 TBLS per gallon, (1.4 lbs per 100 gallons), leaves some residue and burns some blooms. Preventative control. The label prohibits the use of mist blowers or high-pressure spray equipment in greenhouses. 12 hr REI with additional WPS requirements for the next 6.5 days. MOA M5. Restricted use pesticide in MA and RI.

Mainsail 6F- (EPA Reg # 72112-6)

Foliar spray applied at 1.33 tsp per gallon or 22 oz per 100 gallons. Contains surfactant, do not add another. Leaves some visible residue and burns some open blooms. Preventative control. The label prohibits the use of mist blowers or high-pressure spray equipment in greenhouses. 12 hr REI with additional WPS requirements for the next 6.5 days. MOA M5. Restricted use pesticide in MA and RI.

Milstop - (EPA Reg. # 70870-1-68539)

1.5 tsp to 3.5 teaspoons per gallon, or 1.25-3 lbs per 100 gallons as a foliar spray. Fast acting product that is labeled for ornamentals and many vegetable crops. Formulated with a surfactant so do not add another. Exempt from food tolerances. Leaves some residue but has good plant safety. Trial on open blooms, damage on hydrangea blooms has been reported. Use low rates only and 14 day treatment intervals on poinsettias. 1 hour REI. 0 day PHI. MOA NC. OMRI listed.

Oxidate - (EPA Reg. # 70299-2)

.5 oz per gallon or 50 oz per 100 gallons as a preventative and 1.5 ounces per gallon or 150 oz per 100 gallons as a curative. No visible residue and safe on most open blooms. Contact control, no residual. Identical to Zero-Tol except that it is labeled for edible crops. There is no REI. MOA NC. OMRI listed.

Phyton-27 SC - (EPA Reg. # 49538-2)

1.5 teaspoons per gallon or 25 oz per 100 gallons as a foliar spray leaves no residue and is safe on many open blooms. Avoid spraying when leaves will stay wet for a long time to reduce chance of phytotoxicity. Ready to use spray solution should have a pH between 5.5 and 6.5. Do not add surfactant. Avoid spraying within 3 days of B-9 to avoid burning. 24 hr REI. MOA M1.

Plantshield HC - (EPA Reg. # 68539-4)

Naturally occurring fungus that works as a protectant. Labeled for use on vegetable and herbs as well as ornamentals. 1/2 oz per gallon or 50 oz per 100 gallons as a foliar spray leaves a significant residue but no flower burn. Do not use low volume applicators. There is no REI. MOA NC.

Protect T/O WSP - (EPA Reg. # 1001-65), Protect DF (EPA Reg # 1001-77)

1 ½ tablespoons per gallon (1 tablespoon per gallon for DF formulation), (1.5 lbs per 100 gallons), leaves a visible residue but is safe on most open blooms. Preferred use is on outdoor perennial production or early in the season on greenhouse crops when residue is not an issue. Most effective as a protectant. Never use on marigolds or geraniums due to manganese toxicity. 24 hr REI. MOA M3.

Rhapsody AS- (EPA Reg # 69592-19)

Mycofungicide (bacteria: Bacillus subtilis QST 713). Foliar spray applied at 1.25 oz per gallon or 1 gallon per 100 gallons. Preventative control effective for about 7 days. Good plant safety including open blooms and no visible residue. Tank mixable with most common pesticides. Labeled for several edible crops. 4 hr REI, 0 day PHI. MOA NC. OMRI listed.

Spectro 90 WDG - (EPA Reg. # 1001-72)

1 to 2 tablespoons per gallon or 1-2 lbs per 100 gallons as a foliar spray leaves a visible residue and burns some open blooms. Not labeled for use in foggers or mist blowers. 12 hr REI with additional WPS requirements for the next 6.5 days. MOA 1 & M5. Restricted use pesticide in MA.

Strike WDG - (50 WDG= EPA Reg # 432-1367-59807)

Foliar spray rates: ½ teaspoon per gallon, (2 oz per 100 gallons). Excellent plant and bloom safety with minimal visible residue. Check the Griffin Poinsettia culture guide for specific instructions for using Strike on that crop. Knock down and residual control. Make no more than 2 applications at 7-day intervals to avoid stunting from growth regulator activity, (similar to B-9). 12 hr REI. MOA 3.

Saf-T-Side Oil – (EPA Reg # 48813-1) ** Formerly Synergy Oil**

1.25- 2.5 TBSL per gallon or 1-2 gallons per 100 gallons as a foliar spray. Full coverage is essential, acts as a suffocant. Apply when rapid drying will occur and when air temperatures are below 85 degrees to avoid phytotoxicity. Labeled for many vegetables. Leaves a shiny residue behind and burns some open blooms. 4 hr REI. MOA UN.

Terraguard 50 WP - (EPA Reg. # 400-433)

The label allows for a one time application at the rate of 2 2/3 teas/gallon or 16 oz per 100 gallons for initial treatment of existing infections. Otherwise, use 1 1/3 teas/gallon or 8 oz per 100 gallons. Some visible residue may occur. 12 hr REI. MOA 3.

Ultra-Fine Oil - (EPA Reg. # 862-23-499)

1.25- 2.5 TBSL per gallon or 1-2 gallons per 100 gallons as a foliar spray. Apply when rapid drying will occur and when air temperatures are below 85 degrees to avoid phytotoxicity. Keep agitated, as it wants to separate. Labeled for herbs and vegetables. Leaves a shiny residue behind and burns open blooms. 4 hr REI. MOA NC.

Zero-Tol - (EPA Reg. # 70299-1)

.5 oz per gallon or 50 oz per 100 gallons as a preventative and 1.5 ounces per gallon or 150 oz per 100 gallons as a curative. Contact control, no residual. Use 2 teas per gallon on poinsettia bracts. There is no REI. MOA NC.

Zyban WSP - (EPA Reg. # 58185-31)

4 teaspoons per gallon, 4 packet per 100 gallons as a foliar spray. Safe on most open blooms but does leave a visible residue. Do not use on marigolds or geraniums. 24 hr REI. MOA 1 & M3. Restricted use pesticide in CT and NY.

Rhizoctonia (soil borne, see also: aerial) and Thielaviopsis-

All of the following recommendations are for soil drenches.

Actino-iron - (EPA Reg #73314-2) ** Not labeled for Thielaviopsis**
Granular for pre-incorporation into growing media at 5 lbs per cubic yard. Preventative not curative activity. Edible crops are on the label. 4 hr REI, some exceptions. MOA 25.

Actinovate SP- (EPA Reg # 73314-1) ** Not labeled for Thielaviopsis**
1 tsp per 2 gallon or 4-6 oz per 100 gallons. Protectant only, apply as early in the crop cycle as possible. Labeled for vegetables and herbs. Typically only one application per growing season is needed. 1 hr REI, 0 if no contact with drenched surfaces. MOA 25. OMRI listed.

Banrot 40% WP - (EPA Reg. # 58185-10)
6 to 12 ounces per 100 gallons, (¾ to 1. 5 teas per gallon). Can retreat in 4 weeks if needed. Contains the same active ingredients that are in Truban and Cleary’s 3336/OHP 6672/Transom. 12 hr REI. MOA 1 & 14. Restricted use pesticide in CT.

Chipco 26019 WP- (EPA Reg # 432-889)
Soil drench applied at 6.5 oz per 100 gallons. 12 hr REI. MOA 2.
Restricted use pesticide in NY only.

Cleary’s 26/36 Fungicide – (EPA Reg # 432-1414-1001)
26/36 is a combination of the active ingredients from Cleary’s 3336 and Chipco 26019.
Cleary’s 26/36 can be used on turf, field and greenhouse grown ornamentals and landscapes.
12 hr REI. MOA 1.

Because this product was originally for turf the rates are expressed by square footage. Please note that the chart below includes maximum spray volume to make sure the user stays in compliance with the label.

Cleary’s 2636 per 100 gallon foliar spray rate	32 oz per 100 gallons	64 oz per 100 gallons
Maximum gallons spray per acre	262 gallons per acre	131 gallons spray per acre
Cleary’s 2636 rate per gallon foliar spray rate	0.32 oz or 1.92 tsp per gallon	0.64 oz or 3.84 tsp per gallon
Maximum gallons spray per 1,000 sq ft	6 gallons per 1,000 sq ft	3 gallons per 1,000 sq ft

Cleary’s 3336 WP and F - (EPA Reg. # 1001-63 = WP) (EPA Reg. # 1001-69 = F)
WP formulation is 8-16 oz per 100 gallons; the F formulation is 8-16 oz per 100 gallons.
Use the lower rates preventatively, the higher rates for existing problems. May be repeated at 2-4 week intervals as needed. 12 hr REI. MOA 1. Flowable is a restricted use pesticide in NY.

Companion- (EPA Reg # 71065-1)
** Does not control Thielaviopsis** 16 oz per 100 gallons repeated every 14-28 days.
Protectant that works primarily by the release of antibiotics produced by a beneficial bacteria. Compatible with most traditional fungicides. Excellent plant safety, not labeled for any edible crops. 4 hr REI. MOA NC. Not yet labeled in many states.

Contrast 70 WSP - (EPA Reg. # 432-1223-58)

** Does not control Thielaviopsis** 3 to 6 ounces per 100 gallons. Can be retreated 21 to 28 days after initial treatment. Systemic preventative and curative activity. 12 hr REI. MOA 7. Restricted use pesticide in New York with specific use directions for Long Island.

Hurricane WSP- (EPA Reg # 100-951)

1 packet per 100 gallons. Requires addition of 1 packet per 100 gallons of Medallion for Thielaviopsis. Contains active ingredients found in Subdue Maxx and Medallion. 21-28 re-application interval. Label cautions regarding: impatiens, N.G. Impatiens, pothos, geraniums, and Easter lilies. 0 hr REI if there will be no contact with treated surfaces, otherwise a 48 hr REI is in effect. MOA 4 & 12.

Medallion WSP - (EPA Reg. # 100-769)

One 1-ounce packet per 100 gallons of water for Rhizoctonia, 2 packets per 100 gallons for Thielaviopsis. Do not use as a drench on impatiens or N.G. Impatiens. Geranium caution added to the label. Long residual protection product. May be repeated at 21-28 day intervals as needed. 12 hr REI. MOA 12. Restricted use pesticide in NY with Long Island use restrictions.

OHP 6672 WP and L - (EPA Reg. # 51036-330-59807 = WP)

(EPA Reg. # 51036-329-59807 = F)

Rate for the WP is 16 oz per 100 gallons. The L formulation rate is 20 oz per 100 gallons. May be repeated at 2 to 4 week intervals as needed. 12 hr REI. MOA 1. Restricted use pesticide in NY.

Plantshield HC - (EPA Reg. # 68539-4)

4 ounces per 100 gallons applied as early in the crop cycle as possible. Naturally occurring fungus that grows along with the roots to protect them. Will not clean up an existing problem. Labeled for vegetables and herbs. Typically only one application per growing season is needed. No re-entry time. MOA NC.

Rhapsody AS- (EPA Reg # 69592-19)

Mycofungicide (bacteria: Bacillus subtilis QST 713). Soil drench at 1 quart to 1 gallon per 100 gallons, (2 tsp to 1.25 oz per gallon) Labeled for ornamentals and certain edible crops in greenhouses and enclosed nurseries only. Re-application interval 21-28 days. 4 hr REI, 0 day PHI. MOA NC. OMRI listed.

Terraclor 75% WP - (EPA Reg. # 400-399)

** Does not control Thielaviopsis** 4 to 8 oz per 100 gallons. Terraclor 400 (EPA Reg # 400-454) rates are 6-12 oz per 100 gallons. Labeled for certain vegetables grown as bedding plants. 12 hr REI. MOA 14.

Transom 50 WSB and F - (EPA Reg. # 72112-1 = WSB) (EPA Reg. # 72112-2 = F)

WSB rate is 1-2 teaspoons per gallon, (8-16 ounces per 100 gallons), the F rate is 0.5 to 1.25 teaspoons, (7.5-20 oz per 100 gallons). Use the lower rates preventatively, the higher rates for existing problems. May be repeated at 2 to 4 week intervals as needed. 12 hr REI. MOA 1. Restricted use pesticide in NY.

Aerial Rhizoctonia-

All applications in this section are foliar sprays, except as noted. All foliar sprays listed will perform better with a surfactant such as CapSil added at ½ teaspoon per gallon, (8 oz per 100 gallons), to increase coverage and reduce visible residue.

Clery's 3336 WP and F - (EPA Reg. # 1001-63 = WP) (EPA Reg. # 1001-69 = F)
WP rate is 2 teaspoons per gallon, (16 ounces per 100 gallons), the F rate is 1 teaspoon, (16 oz per 100 gallons). Safe on open blooms but leaves some residue. 12 hr REI. MOA 1. Flowable is a restricted use pesticide in NY.

Contrast 70 WSP - (EPA Reg. # 432-1223-58)
4 teas per gallon or 12 oz per 100 gallons. Long lasting, systemic and curative. Good plant safety. 12 hour REI. MOA 7. Restricted use pesticide in New York with specific use directions for Long Island.

Medallion WSP - (EPA Reg. # 100-769)
Applied as a high volume spray or srench. 1 water-soluble packet per 25-50 gallons of water, or 1 teaspoon per 1 ¾ to 3 ½ gallons. Once opened, the packet must be sealed in a zip-lock baggie and kept dry in the original container. Very good plant and bloom safety, little visible residue.

12 hr REI. MOA 12. Restricted use pesticide in NY with Long Island use restrictions.

OHP 6672 WP and L - (EPA Reg. # 51036-330-59807 = WP) (EPA Reg. # 51036-329-59807 = F)
Rate for the WP is 16 oz per 100 gallons. The L formulation rate is 20 oz per 100 gallons. May be repeated at 2 to 4 week intervals as needed 12 hr REI. MOA 1. Restricted use pesticide in NY.

Oxidate - (EPA Reg. # 70299-2)
.5 oz per gallon or 50 oz per 100 gallons as a preventative and 1.5 ounces per gallon or 150 oz per 100 gallons as a curative. No visible residue and safe on most open blooms. Contact control, no residual. Identical to Zero-Tol except that it is labeled for edible crops. There is no REI. MOA NC. OMRI listed.

Transom 50 WSB and F - (EPA Reg. # 72112-1 = WSB) (EPA Reg. # 72112-2 = F)
WSB rate is 2 teaspoons per gallon, (16 ounces per 100 gallons), the F rate is 1.25 teaspoons, (20 oz per 100 gallons). Safe on open blooms but leaves some residue. 12 hr REI. MOA 1. Restricted use pesticide in NY.

Zero-Tol - (EPA Reg. # 70299-1)
.5 oz per gallon or 50 oz per 100 gallons as a preventative and 1.5 ounces per gallon or 150 oz per 100 gallons as a curative. No visible residue and safe on most open blooms. Contact control, no residual. Use 2 teas per gallon on poinsettia bracts. There is no REI. MOA NC.