

APHID CONTROL

Summary of Effective Materials and Pertinent Information

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Pesticide	MOA	EPA Reg #	Rate	Comments
Aria 50 WDG	9	279-3287	1-3 packets/100 gal. 1/8-3/8 heaping tsp/3 gal.	12 hr. REI Several pansy cultivars are sensitive
Botaniguard ES	-	65626-8	1 qt/100 gal. 2 tsp/gal.	4 hr. REI Can burn open flowers Little residue
Discus	4	432-1392-59807	0.25 oz/gal 25 oz/100 gal	12 hr REI 2-4 week residual activity
Endeavor WSP	9	100-913	1 packet/50 gal. 1 tbs/5 gal.	12 hr REI 2-3 week residual activity. No visible residue.
Enstar II EC	7	2724-476	10 oz/100 gal 2/3 tsp/gal	4 hr REI Can burn open blooms No residual
Flagship WG	4	2724-476	¼-1/2 tsp/3 gal 2-4 oz/100 gal	12 hr REI 2-4 week residual activity Slight residue safe. Safe on most blooms.
Majesty	4	432-1369-59807	½ tsp/5 gal 1.7 oz/100 gal	12 hr REI 2-4 week residual activity Excellent plant and bloom safety Can be drenched
Marathon 1% G	4	3125-452-59807	Rate based on pot size	12 hr REI 6+ weeks of residual activity
Marathon 60 WSP	4	3125-492-59087	Rate based on pot size	12 hr REI 6+ weeks of residual activity Some vegetable crops are on the label.

Marathon II Flowable	4	3125-549-59807	½ tsp/5 gal 1.7 oz/100 gal	12 hr REI 2-4 week residual activity Excellent plant and bloom safety. Few vegetables on the label
Nicotine Smoke Generator	4B	1327-41	Can per 10,000 cu. ft OR Can per 20,000 cu ft	House must be closed for a min. of 4 hrs.
Orthene 97 SP	1	59639-91	2/3 tsp/gal 8 oz/100 gal.	24 hr REI Some resistance reported No residue. Can burn open blooms.
Safari SG	4	33657-16-59639	½-1 tsp/gal (spray) 4-8 oz/100 gal (spray) 1 ½ tsp-1 tbls/gal (drench) 12-24 oz/100 gal (drench)	12 hr REI Long residual activity Excellent plant and bloom safety
Tame/Orthene TR	1	499-441	1 can/1500 to 3000 sq ft	24 hr REI No residue. Excellent plant and bloom safety. Treat poinsettias no more than once per week at the lower rate.
Thionex (formerly Thiodan 50 WP)	2	279-1380-66222	1 tbls/gal 1 lb/100 gal	24 hr REI Visible residue. Can burn flowers.
TriStar WSP	4	8033-22-1001	1 packet/100 gal	12 hr REI 2-4 week residual activity. Excellent plant and bloom safety. Do not break packets into smaller amounts.

BROAD AND CYCLAMEN MITE CONTROL

Summary of Effective Materials and Pertinent Information

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Pesticide	MOA	EPA Reg #	Rate	Comments
Akari SC	20	71711-4-67690	$\frac{3}{4}$ -1 $\frac{1}{2}$ tsp/gal 12-24 oz/100 gal	12 hr REI 21-28 day residual activity
Avid EC	6	100-896	$\frac{1}{2}$ tsp/gal 8 oz/100 gal	12 hr REI Repeat in 7 days No visible residue, safe on blooms.
Flora-Mek	?	100-896-72112	$\frac{1}{2}$ tsp/gal 8 oz/100 gal	12 hr REI Repeat in 7 days No visible residue, safe on blooms.
Judo	23	432-1280-59807	$\frac{1}{8}$ - $\frac{1}{4}$ tsp/gal 2-4 oz/100 gal	12 hr REI 28 days residual activity. Do not use on geraniums, impatiens, ivy, or poinsettia bracts.
Pylon EC	13	241-374-59807	$\frac{1}{6}$ - $\frac{1}{3}$ tsp/gal 2.6-5.2 oz/100 gal	12 hr REI 14-21 day control of motile stage. Reapply after 5-7 days. Can burn some blooms. No residue.
Sanmite WSP (does not control cyclamen mite)	21	7969-106	1 1oz packet/25 gal ($\frac{3}{4}$ tsp/gal)	12 hr REI Safe on most blooms, no residue. Can not apply through low volume sprayer.
Thionex (does not control Broad mites!- formerly Thiodan)	2	279-1380-66222	1 tbls/gal 1 lb/100 gal	24 hr REI Visible residue Burns some open blooms.

FUNGUS GNATS and SHOREFLY CONTROL

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Pesticide	MOA	EPA Reg #	Rate	Comments
Adept WSP	15	400-477	1 1oz packet/100 gallon; wet top inch	12 hr REI 30 day residual activity
Citation WSP	17	100-667	1 2.66 oz packet/100 gal; soil surface spray 1 packet; low volume sprayer (1 packet/acre)	12 hr REI Repeat after 14 days
Conserve SC (labeled site use; good in combination with Talstar)	5	62719-291	½ tsp/gal 8 oz/100 gal	4 hr REI No flower damage or residue
Discus	4	432-1392-59807	0.25 oz/gal 25 oz/100 gal	12 hr REI 2-4 week residual activity Excellent bloom and plant safety
Distance EC	7	59639-96	1/3-1/2 tsp/gal (spray) 6-8 oz/100 gal (spray) 2 oz/100 gal (drench; 1 ½ surface only)	12 hr REI Can be used on tomato and peppers. Do not use on salvia, Boston fern, schefflera, heuchera or poinsettia bracts
Duraguard ME (controls larval stage)	1	499-367	½ oz/gal (spray) 50 oz/100 gal (spray) 0.25 oz/gal (drench) 25 oz/100 gal (drench)	24 hr REI No residue Safe on most open blooms

Duraplex TR (controls adults)	1	499-405	2 oz can/1500 sq ft, 1 6 oz can/4500 sq ft	24 hr REI Safe on open blooms
Flagship WG (controls larval stage; not labeled for shoreflies)	4	100-955	?	12 hr REI
Gnatrol (controls fungus gnat larvae only)	11	73049-11	Undiluted through 1:100 injector (drench upper 1” of soil)	4 hr REI Apply 3 times every 7 days to control severe infestation
Nemasys/Nemashield (beneficial nematode; does not control shorefly larvae)	-	-	Apply as a soil spray	No REI Can be used with all crops. Repeat every 14-21 days.
Ornazin EC	26	5481-476- 67690	½ tsp/gal 8 oz./100 gal	12 hr REI Repeat application every 7 days for 3 weeks. No residue. Safe on blooms.
Pylon EC (max of 2 applications before rotating)	13	241-374- 59807	1/3-2/3 tsp/gal 5.2-10 oz/100 gal (soil surface spray)	12 hr REI 14-21 day control of motile stage. Reapply after 5-7 days. Can burn some blooms. No residue. Can treat tomatos, peppers, and eggplant
Safari SG	4	33657-16- 59639	1.5 tsp – 1 tbls/gal 12-24 oz/100 gal (apply 4 oz/6”pot)	12 hr REI 4-6 week residual activity Excellent plant and bloom safety
Tame/Orthene TR (adult control only)	1	499-441	1 can/1500 to 3000 sq ft	24 hr REI No residue. Excellent plant and bloom safety. Treat poinsettias no more than once per week at the higher rate.

MITE CONTROL

Summary of Effective Materials and Pertinent Information

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Pesticide	MOA	EPA Reg #	Rate	Comments
Akari SC	20	71711-4-67690	$\frac{3}{4}$ -1 $\frac{1}{2}$ tsp/gal 12-24 oz/100 gal	12 hr REI 21-28 day residual activity
Avid EC	6	100-896	$\frac{1}{2}$ tsp/gal 8 oz/100 gal	12 hr REI Repeat in 7 days No visible residue, safe on blooms.
Flora-Mek	?	100-896-72112	$\frac{1}{2}$ tsp/gal 8 oz/100 gal	12 hr REI Repeat in 7 days No visible residue, safe on blooms.
Floramite SC	25	100-896-72112	$\frac{1}{4}$ - $\frac{1}{2}$ tsp/gal 4-8 oz/100 gal	12 hr REI Controls adults and eggs for 21 days. Safe with most beneficial mites. Greenhouse tomatoes 1" and larger can be treated
Hexagon DF (one application per crop cycle only; goos top tank mix with adulticide)	10A	10163-251	$\frac{1}{8}$ - $\frac{1}{4}$ tsp/gal 1-2 oz/100 gal	12 hr REI effects eggs and immature mites for 30 days. No residue, safe on most blooms
Judo	23	432-1280-59807	$\frac{1}{8}$ - $\frac{1}{4}$ tsp/gal 2-4 oz/100 gal	12 hr REI 28 days residual activity. Do not use on geraniums, impatiens, ivy, or poinsettia bracts.

Ovation SC (controls eggs and immature stages; consider mixing with aduIticide)	10A	432-946-58185	1/8 tsp/gal 2 oz/100 gal	12 hr REI control for 45 days Residue has bright magenta color
Pylon EC	13	241-374-59807	1/6-1/3 tsp/gal 2.6-5.2 oz/100 gal	12 hr REI 14-21 day control of motile stage. Reapply after 5-7 days. Can burn some blooms. No residue.
Sanmite WSP (does not control cyclamen mite)	21	7969-106	1 1oz packet/25 gal (3/4 tsp/gal)	12 hr REI Safe on most blooms, no residue. Can not apply through low volume sprayer.
Synergy Super Fine Oil	-	48813-1-75339	1.25-2.5 tbs/gal 1-2 gal/100 gal	4 hr REI Apply when air temp is below 85oF and when material will dry rapidly Can apply to many vegetables. Shiny residue.
Tetrasan WDG	10B	59639-108	1 2 oz packet/12.5-25 gal	12 hr REI 28 day residual activity. Excellent plant safety. Not labeled for poinsettia bracts.
Ultra-Fine Oil	-	862-23	1.25-2.5 tbs/gal 1-2 gal/100 gal	4 hr REI Keep agitated. Apply when air temp is below 85oF and when material will dry rapidly Can apply to many vegetables. Shiny residue.

SCALE AND MEALYBUG CONTROL

Summary of Effective Materials and Pertinent Information

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Pesticide	MOA	EPA Reg #	Rate	Comments
Aria 50 WDG (not labeled for scale)	9	279-3287	3-6 packets/100 gal. 3/8-3/4 heaping tsp/3 gal.	12 hr. REI 7-28 day efficacy. Several pansy cultivars are sensitive
Discus	4	432-1392-59807	0.25 oz/gal 25 oz/100 gal	12 hr REI 2-4 week residual activity
Distance EC	7	59639-96	1/3-1/2 tsp/gal (spray) 6-8 oz/100 gal (spray) 2 oz/100 gal (drench; 1 ½ surface only)	12 hr REI Can be used on tomato and peppers. Do not use on salvia, Boston fern, schefflera, heuchera or poinsettia bracts
Duraguard ME (controls larval stage)	1	499-367	½ oz/gal (spray) 50 oz/100 gal (spray) 0.25 oz/gal (drench) 25 oz/100 gal (drench)	24 hr REI No residue Safe on most open blooms
Duraplex TR (controls adults)	1	499-405	2 oz can/1500 sq ft, 1 6 oz can/4500 sq ft	24 hr REI Safe on open blooms
Flagship WG (controls larval stage; not labeled for shoreflies)	4	100-955	?	12 hr REI

Majesty	4	432-1369-59807	½ tsp/5 gal 1.7 oz/100 gal	12 hr REI 2-4 week residual activity Excellent plant and bloom safety Can be drenched
Marathon II Flowable	4	3125-549-59807	½ tsp/5 gal 1.7 oz/100 gal	12 hr REI 2-4 week residual activity Excellent plant and bloom safety. Few vegetables on the label
Orthene 97 SP	1	59639-91	2/3 tsp/gal 8 oz/100 gal.	24 hr REI Some resistance reported No residue. Can burn open blooms.
Safari SG	4	33657-16-59639	½-1 tsp/gal (spray) 4-8 oz/100 gal (spray) 1 ½ tsp-1 tbs/gal (drench) 12-24 oz/100 gal (drench)	12 hr REI Long residual activity Excellent plant and bloom safety
Talus WSP	15	71711-15-67690	1 packet/5 gal (mealybugs) 1 packet/4 gal (scale)	12 hr REI 3-4 week residual activity Excellent plant and bloom safety. Can be used on greenhouse tomato.

TriStar WSP	4	8033-22-1001	1 packet/100 gal	12 hr REI 2-4 week residual activity. Excellent plant and bloom safety. Do not break packets into smaller amounts.
Synergy Super Fine Oil	-	48813-1-75339	1.25-2.5 tpls/gal 1-2 gal/100 gal	4 hr REI Apply when air temp is below 85oF and when material will dry rapidly Can apply to many vegetables. Shiny residue.
Ultra-Fine Oil	-	862-23	1.25-2.5 tpls/gal 1-2 gal/100 gal	4 hr REI Keep agitated. Apply when air temp is below 85oF and when material will dry rapidly Can apply to many vegetables. Shiny residue.

THRIP CONTROL

Summary of Effective Materials and Pertinent Information

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Pesticide	MOA	EPA Reg #	Rate	Comments
Aria 50 WDG	9	279-3287	1-3 packets/100 gal. 1/8-3/8 heaping tsp/3 gal.	12 hr. REI Several pansy cultivars are sensitive
Avid EC	6	100-896	½ tsp/gal 8 oz/100 gal	12 hr REI Repeat in 7 days No visible residue, safe on blooms.
Azatin XL	26	70051-2759807	1 tsp/gal 16 oz/100 gal	4 hr REI Labeled for edible crops. No residue and safe for blooms.
Botaniguard ES	-	65626-8	1 qt/100 gal. 2 tsp/gal.	4 hr. REI Can burn open flowers Little residue
Conserve SC (labeled site use; good in combination with Talstar)	5	62719-291	½ tsp/gal 8 oz/100 gal	4 hr REI 2 applications 7 days apart. NO more than 3 consecutive applications in 30 days. No flower damage or residue
Enstar II EC	7	2724-476	10 oz/100 gal 2/3 tsp/gal	4 hr REI Can burn open blooms No residual
Flora-Mek	?	100-896-72112	½ tsp/gal 8 oz/100 gal	12 hr REI Repeat in 7 days No visible residue, safe on blooms.

Mesurool 75 WP	1	10163-231	2 tbls/gal 1 lb/100 gal	24 hr REI Leaves residue Safe on flowers. Must be applied through conventional spray equipment.
Ornazin EC	26	5481-476- 67690	½ tsp/gal 8 oz./100 gal	12 hr REI Repeat application every 7 days for 3 weeks. No residue. Safe on blooms.
Pedestal SC	15	66222-40-400	½ tsp/gal 8 oz/100 gal	12 hr REI Max of 1 application in 30 days and 2 treatments per crop per year. 2 alternative products must be use din between Pedestal treatments
Pyreth-It	3	1021-1091-499	½ tsp/gal 8 oz/100 gal	12 hr REI Labeled for vegetables and herbs No residue Can burn open flowers
Tame/Orthene TR	1	499-441	1 can/1500 to 3000 sq ft	24 hr REI No residue. Excellent plant and bloom safety. Treat poinsettias no more than once per week at the lower rate.
Thionex (formerly Thiodan 50 WP)	2	279-1380- 66222	1 tbls/gal 1 lb/100 gal	24 hr REI Visible residue. Can burn flowers.

WHITEFLY CONTROL

Summary of Effective Materials and Pertinent Information

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Pesticide	MOA	EPA Reg #	Rate	Comments
Aria 50 WDG (suppression of silverleaf whitefly)	9	279-3287	1-3 packets/100 gal. 1/8-3/8 heaping tsp/3 gal.	12 hr. REI Several pansy cultivars are sensitive
Azatin XL	26	70051-2759807	1 tsp/gal 16 oz/100 gal	4 hr REI Labeled for edible crops. No residue and safe for blooms.
Botaniguard ES	-	65626-8	1 qt/100 gal. 2 tsp/gal.	4 hr. REI Can burn open flowers Little residue
Discus	4	432-1392-59807	0.25 oz/gal 25 oz/100 gal	12 hr REI 2-4 week residual activity
Distance EC	7	59639-96	1/3-1/2 tsp/gal (spray) 6-8 oz/100 gal (spray) 2 oz/100 gal (drench; 1 ½ surface only)	12 hr REI Can be used on tomato and peppers. Do not use on salvia, Boston fern, schefflera, heuchera or poinsettia bracts
Endeavor WSP	9	100-913	1 packet/50 gal. 1 tbs/5 gal.	12 hr REI 2-3 week residual activity. No visible residue.

Enstar II EC	7	2724-476	10 oz/100 gal 2/3 tsp/gal	4 hr REI Can burn open blooms No residual
Flagship WG	4	2724-476	1/4-1/2 tsp/3 gal 2-4 oz/100 gal	12 hr REI 2-4 week residual activity Slight residue safe. Safe on most blooms.
Judo	23	432-1280- 59807	1/8-1/4 tsp/gal 2-4 oz/100 gal	12 hr REI 28 days residual activity. Do not use on geraniums, impatiens, ivy, or poinsettia bracts.
Majesty	4	432-1369- 59807	1/2 tsp/5 gal 1.7 oz/100 gal	12 hr REI 2-4 week residual activity Excellent plant and bloom safety Can be drenched
Marathon 1% G	4	3125-452- 59807	Rate based on pot size	12 hr REI 6+ weeks of residual activity
Marathon 60 WSP	4	3125-492- 59087	Rate based on pot size	12 hr REI 6+ weeks of residual activity Some vegetable crops are on the label.

Marathon II Flowable	4	3125-549-59807	½ tsp/5 gal 1.7 oz/100 gal	12 hr REI 2-4 week residual activity Excellent plant and bloom safety. Few vegetables on the label
Ornazin EC	26	5481-476-67690	½ tsp/gal 8 oz./100 gal	12 hr REI Repeat application every 7 days for 3 weeks. No residue. Safe on blooms.
Pedestal SC	15	66222-40-400	½ tsp/gal 8 oz/100 gal	12 hr REI Max of 1 application in 30 days and 2 treatments per crop per year. 2 alternative products must be use din between Pedestal treatments
Pyreth-It	3	1021-1091-499	½ tsp/gal 8 oz/100 gal	12 hr REI Labeled for vegetables and herbs No residue Can burn open flowers
Safari SG	4	33657-16-59639	½-1 tsp/gal (spray) 4-8 oz/100 gal (spray) 1 ½ tsp-1 tbls/gal (drench) 12-24 oz/100 gal (drench)	12 hr REI Long residual activity Excellent plant and bloom safety

Sanmite WSP (does not control cyclamen mite)	21	7969-106	1 1oz packet/16.6 gal (1 1/8 tsp/gal)	12 hr REI Safe on most blooms, no residue. Can not apply through low volume sprayer.
Synergy Super Fine Oil	-	48813-1-75339	1.25-2.5 tpls/gal 1-2 gal/100 gal	4 hr REI Apply when air temp is below 85oF and when material will dry rapidly Can apply to many vegetables. Shiny residue.
Talus WSP	15	71711-15-67690	1 packet/5 gal (mealybugs) 1 packet/4 gal (scale)	12 hr REI 3-4 week residual activity Excellent plant and bloom safety. Can be used on greenhouse tomato.
Tame/Orthene TR	1	499-441	1 can/1500 to 3000 sq ft	24 hr REI No residue. Excellent plant and bloom safety. Treat poinsettias no more than once per week at the lower rate.
Thionex (formerly Thiodan 50 WP)	2	279-1380-66222	1 tpls/gal 1 lb/100 gal	24 hr REI Visible residue. Can burn flowers.

TriStar WSP	4	8033-22-1001	1 packet/100 gal	12 hr REI 2-4 week residual activity. Excellent plant and bloom safety. Do not break packets into smaller amounts.
Ultra-Fine Oil	-	862-23	1.25-2.5 tpls/gal 1-2 gal/100 gal	4 hr REI Keep agitated. Apply when air temp is below 85oF and when material will dry rapidly Can apply to many vegetables. Shiny residue.