

Utah Commercial Orchard Insect and Mite Management Guide - Peach and Nectarine
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| <u>Tree Phenology</u> | <u>MATERIAL</u> | <u>STAGE TARGETED</u> | <u>Chemical Class</u> | <u>REI</u> | <u>PHI</u> | <u>Examples</u> |
|-------------------------------|-------------------------|-----------------------|-----------------------|------------------|------------|-------------------------|
| <u>Delayed-Dormant</u> | | | | | | |
| Peach Twig Borer | Horticultural Spray Oil | larva | Inorganic Pesticide | n/a | n/a | Volck, Orchex, Sunspray |
| | Esfenvalerate | larva | P | 12 hrs | 14 | Asana proven @ 8 oz/A |
| | Chlorpyrifos | larva | OP | 96 hrs | n/a | Lorsban 75WG |
| | Diazinon | larva | OP | 24 hrs | 21 | Diazinon 50W |
| | Spinosad | larva | B | 4 hrs | 14 | Success |
| | Carbaryl | larva | C | 12 hrs | 3 | Sevin XLR |
| | Methidathion | larva | OP | 48 hrs - 14 days | n/a | Supracide 2E |
| | Permethrin | larva | P | 12 hrs | 14 | Ambush, Pounce |
| | Lamda-Cyhalothrin | larva | P | 24 | 14 | Warrior |
| | Pyriproxifen | larva | IGR | 12 hrs | 14 | Esteem 35WP |
| | Endosulfan | larva | OC | 24 hrs | 30 | Endosulfan 3EC |
| | Cryolite | larva | Inorganic Pesticide | 12 hrs | n/a | Prokil Cryolite 50 |
| | Methoxyfenozide | larva | IGR | 4 hrs | 7 | Intrepid 2F |
| | Malathion | larva | OP | 24 hrs | 7 | Malathion 8 E |
| European Red Mite | Horticultural Spray Oil | egg | Inorganic Pesticide | n/a | n/a | Volck, Orchex, Sunspray |
| | Hexythiazox | Eggs, Immatures | M | 12 hrs | 28 | Savey 50DF, Onager |
| | Clofentazine | Eggs, Immatures | M | 12 hrs | 21 | Apollo |
| San Jose Scale | Horticultural Spray Oil | nymph, adult | Inorganic Pesticide | n/a | n/a | Ferti-lome Scalecide |
| | Chlorpyrifos | nymph, adult | OP | 96 hrs | n/a | Lorsban 75WG |
| | Diazinon | nymph, adult | OP | 24 hrs | 21 | Diazinon 50W |
| | Pyriproxifen | nymph | IGR | 12 hrs | 14 | Esteem 35WP |
| | Methidathion | nymph, adult | OP | 48 hrs - 14 days | n/a | Supracide 2E |
| | Malathion | nymph | OP | 24 hrs | 7 | Malathion 8 E |
| Aphids | Horticultural Spray Oil | egg, nymph | Inorganic Pesticide | n/a | n/a | |
| | Esfenvalerate | nymph | P | 12 hrs | 14 | Asana proven @ 8 oz/A |
| | Chlorpyrifos | nymph | OP | 96 hrs | n/a | Lorsban 75WG |
| | Diazinon | nymph | OP | 24 hrs | 21 | Diazinon 50W |
| | Carbaryl | nymph | C | 12 hrs | 3 | Sevin XLR |

| | | | | | |
|-------------------|-------|----|------------------|-----|----------------|
| Methidathion | nymph | OP | 48 hrs - 14 days | n/a | Supracide 2E |
| Permethrins | nymph | P | 12 hrs | 14 | Ambush, Pounce |
| Lamda-Cyhalothrin | nymph | P | 24 | 14 | Warrior |
| Thiamethoxam | nymph | N | 12 hrs | 14 | Actara |
| Malathion | nymph | OP | 24 hrs | 7 | Malathion 8 E |

First-pink through Petal-fall

| | | | | | | |
|-------------------------|-------------------|------------|---------------------|---------|-----|-----------------------------|
| Peach Twig Borer | Bt-kurstaki | larva | B | n/a | n/a | DiPel, Crymax Bt |
| | Spinosad | larva | B | 4 hrs | 14 | Success |
| | Esfenvalerate | larva | P | 12 hrs | 14 | Asana proven @ 8 oz/A |
| | Permethrin | larva | P | 12 hrs | 14 | Pounce 3.2EC |
| | Cyhalothrin | larva | P | 24 | 14 | Warrior |
| | Endosulfan | larva | OC | 24 hrs | 30 | Endosulfan 3EC |
| | Azinphos-methyl | larva | OP | 14 days | 21 | Guthion 2L |
| | Carbaryl | larva | C | 12 hrs | 3 | Sevin XLR |
| | Diazinon | larva | OP | 24 hrs | 21 | Diazinon 50W |
| | Phosmet | larva | OP | 24 hrs | 14 | Imidan 70-W |
| | Diflubenzuron | larva | IGR | 12 hrs | n/a | Dimilin 2L |
| | Methoxyfenozide | egg, larva | IGR | 4 hrs | 7 | Intrepid 2F |
| | Cryolite | larva | Inorganic Pesticide | 12 hrs | n/a | Prokil Cryolite 50 |
| | Gamma-Cyhalothrin | larva | P | 24 hrs | 14 | Proaxis |
| | Malathion | larva | OP | 24 hrs | 7 | Malathion-5 (at Petal-fall) |

Western Flower Thrips

| | | | | | |
|---------------------------|--------------|----|---------|----|--------------------------|
| Formetanate Hydrochloride | nymph, adult | C | 10 days | 21 | Carzol SP |
| Spinosad | nymph, adult | B | 4 hrs | 14 | Success |
| Salts of Fatty Acids | nymph, adult | RR | 0 | 0 | M-Pede insecticidal soap |

Aphids

| | | | | | |
|-------------------------|--------------|----|------------------|-----|-----------------------------|
| Horticultural Spray Oil | nymph, adult | RR | n/a | n/a | |
| Esfenvalerate | nymph, adult | P | 12 hrs | 14 | Asana proven @ 8 oz/A |
| Chlorpyrifos | nymph, adult | OP | 96 hrs | n/a | Lorsban 75WG |
| Diazinon | nymph, adult | OP | 24 hrs | 21 | Diazinon 50W |
| Carbaryl | nymph, adult | C | 12 hrs | 3 | Sevin XLR |
| Methidathion | nymph, adult | OP | 48 hrs - 14 days | n/a | Supracide 2E |
| Permethrin | nymph, adult | P | 12 hrs | 14 | Ambush, Pounce |
| Methomyl | nymph, adult | C | 4 days | 4 | Lannate |
| Azinphos-methyl | nymph, adult | OP | 14 days | 21 | Guthion 2L |
| Imidacloprid | nymph, adult | N | 12 hrs | 0 | Provado 1.6 F |
| Salts of Fatty Acids | nymph, adult | RR | 0 | 0 | M-Pede insecticidal soap |
| Gamma-Cyhalothrin | nymph, adult | P | 24 hrs | 14 | Proaxis |
| Malathion | larva, adult | OP | 24 hrs | 7 | Malathion-5 (at Petal-fall) |

Cat-facing Insects (Lygus, Stink Bugs)

| | | | | | |
|---------------|-------|----|--------|-----|-----------------------|
| Endosulfan | adult | OC | 24 hrs | 30 | Endosulfan 3EC |
| Methomyl | adult | C | 4 days | 4 | Lannate |
| Esfenvalerate | adult | P | 12 hrs | 14 | Asana proven @ 8 oz/A |
| Chlorpyrifos | adult | OP | 96 hrs | n/a | Lorsban 75WG |

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|---|------------------------------|-------------------|-----|------------------|-----|--|
| | Diazinon | adult | OP | 24 hrs | 21 | Diazinon 50W |
| | Carbaryl | adult | C | 12 hrs | 3 | Sevin XLR |
| | Methidathion | adult | OP | 48 hrs - 14 days | n/a | Supracide 2E |
| | Permethrin | adult | P | 12 hrs | 14 | Ambush, Pounce |
| | Lamda-Cyhalothrin | adult | P | 24 | 14 | Warrior |
| | Azinphos-methyl | adult | OP | 14 days | 21 | Guthion |
| | Imidacloprid | adult | N | 12 hrs | 0 | Provado 1.6 F |
| | Gamma-Cyhalothrin | nymph, adult | P | 24 hrs | 14 | Proaxis |
| San Jose Scale | Imidacloprid | crawlers | N | 12 hrs | 0 | Provado 1.6 F |
| | Carbaryl | Immatures, Adults | C | 12 hrs | 3 | Sevin XLR |
| | Diazinon | Immatures, Adults | OP | 24 hrs | 21 | Diazinon 50W |
| | Salts of Fatty Acids | Immatures, Adults | RR | 0 | 0 | M-Pede insecticidal soap |
| | Phosmet | Immatures, Adults | OP | 24 hrs | 14 | Imidan 70-W |
| <u>Post-bloom</u> | | | | | | |
| Peach Twig Borer | Phosmet | larva, adult | OP | 24 hrs | 14 | Imidan 70-W |
| | Bacillus thuringiensis-kurst | larva | B | n/a | n/a | DiPel, Crymax Bt |
| | Spinosad | larva | B | 4 hrs | 14 | Success |
| | Methoxyfenozide | larva | IGR | 4 hrs | 7 | Intrepid 2F |
| | Esfenvalerate | larva, adult | P | 12 hrs | 14 | Asana proven @ 8 oz/A |
| | Lamda-Cyhalothrin | larva, adult | P | 24 | 14 | Warrior |
| | Endosulfan | larva, adult | OC | 24 hrs | 30 | Endosulfan 3EC |
| | Azinphos-methyl | larva, adult | OP | 14 days | 21 | Guthion |
| | Mating Disruptants | adult | RR | n/a | n/a | Checkmate, Isomate |
| | Carbaryl | larva, adult | C | 12 hrs | 3 | Sevin XLR |
| | Diazinon | larva, adult | OP | 24 hrs | 21 | Diazinon 50W |
| | Permethrin | larva, adult | P | 12 hrs | 14 | Pounce, Ambush |
| | Malathion | larva, adult | OP | 24 hrs | 7 | Malathion-5 |
| European Red Mites, Spider Mites | Formetanate Hydrochloride | Immatures, Adults | C | 10 days | 21 | Carzol SP |
| | Hexythiazox | Eggs, Immatures | M | 12 hrs | 28 | Savey 50DF |
| | Horticultural Spray Oil | All | RR | n/a | 0 | Volck Supreme, Orchex 796, Sunspray Ultra-Fine |
| | Clofentazine | Eggs, Immatures | M | 12 hrs | 21 | Apollo |
| | Fenbutatin Oxide | All | M | 48 hrs | 14 | Vendex 50WP |
| | Bifenazate | Eggs, Immatures | M | 12 hrs | 3 | Acramite 50WS |
| | Salts of Fatty Acids | Immatures, Adults | RR | 0 | 0 | M-Pede insecticidal soap |
| | Diazinon | All | OP | 24 hrs | 21 | Diazinon 50W |
| | Oxamyl | All | M | 48 hrs | n/a | Vydate L |
| | Pyridaben | Immatures, Adults | M | 12 hrs | 7 | Nexter |
| | Propargite | All | M | 7 days | 14 | Omite (nectarines only) |
| | Malathion | Immatures, Adults | OP | 24 hrs | 7 | Malathion 57 EC |
| Armyworms, Cutworms | Bt-kurstaki | larva | B | n/a | n/a | DiPel, Crymax Bt |

| | | | | | |
|-------------------|--------------|-----|--------|----|-----------------------|
| Spinosad | larva | B | 4 hrs | 14 | Success |
| Methoxyfenozide | larva | IGR | 4 hrs | 7 | Intrepid 2F |
| Esfenvalerate | larva, adult | P | 12 hrs | 14 | Asana proven @ 8 oz/A |
| Permethrin | larva, adult | P | 12 hrs | 14 | Pounce 3.2EC |
| Lamda-Cyhalothrin | larva, adult | P | 24 | 14 | Warrior |
| Endosulfan | larva, adult | OC | 24 hrs | 30 | Endosulfan 3EC |
| Phosmet | larva, adult | OP | 24 hrs | 14 | Imidan 70-W |
| Carbaryl | larva, adult | C | 12 hrs | 3 | Sevin XLR |
| Diazinon | larva | OP | 24 hrs | 21 | Diazinon 50W |

**Greater Peachtree
Borer**

| | | | | | |
|-------------------------|------------|---------------------|------------------|-----|-------------------------|
| Horticultural Spray Oil | egg, larva | Inorganic Pesticide | n/a | n/a | Volck, Orchex, Sunspray |
| Esfenvalerate | larva | P | 12 hrs | n/a | Asana |
| Chlorpyrifos | larva | OP | 96 hrs | n/a | Lorsban 4E |
| Carbaryl | larva | C | 12 hrs | n/a | Sevin XLR |
| Methidathion | larva | OP | 48 hrs - 14 days | n/a | Supracide 2E |
| Permethrins | larva | P | 12 hrs | n/a | Ambush, Pounce |
| Endosulfan | larva | OC | 24 hrs | n/a | Phaser 50WSP |
| Diazinon | larva | OP | 24 hrs | n/a | Diazinon 50W |
| Lamda-Cyhalothrin | larva | P | 24 | n/a | Warrior |
| Gamma-Cyhalothrin | larva | P | 24 hrs | 14 | Proaxis |
| Mating Disruptant | adult | RR | | | Isomate-P |
| Malathion | larva | OP | 24 hrs | 7 | Malathion 8 E |

**Cat-Facing Insects
(Lygus, Stink
Bugs)**

| | | | | | |
|-------------------|--------------|----|------------------|-----|-----------------------|
| Endosulfan | nymph, adult | OC | 24 hrs | 30 | Endosulfan 3EC |
| Methomyl | nymph, adult | C | 4 days | 4 | Lannate |
| Esfenvalerate | nymph, adult | P | 12 hrs | 14 | Asana proven @ 8 oz/A |
| Diazinon | nymph, adult | OP | 24 hrs | 21 | Diazinon 50W |
| Carbaryl | nymph, adult | C | 12 hrs | 3 | Sevin XLR |
| Methidathion | nymph, adult | OP | 48 hrs - 14 days | n/a | Supracide 2E |
| Permethrin | nymph, adult | P | 12 hrs | 14 | Ambush, Pounce |
| Lamda-Cyhalothrin | nymph, adult | P | 24 | 14 | Warrior |
| Azinphos-methyl | nymph, adult | OP | 14 days | 21 | Guthion |
| Imidacloprid | nymph, adult | N | 12 hrs | 0 | Provado 1.6 F |
| Thiamethoxam | all | N | 12 hrs | 14 | Actara |
| Gamma-Cyhalothrin | nymph, adult | P | 24 hrs | 14 | Proaxis |

**Pacific Flathead
Borer**

| | | | | | |
|-------------------------|------------|---------------------|------------------|-----|--|
| Horticultural Spray Oil | egg, larva | Inorganic Pesticide | n/a | n/a | Volck Supreme, Orchex 796, Sunspray Ultra-Fine |
| Esfenvalerate | larva | P | 12 hrs | n/a | Asana |
| Chlorpyrifos | larva | OP | 96 hrs | n/a | Lorsban 4E |
| Carbaryl | larva | C | 12 hrs | n/a | Sevin XLR |
| Methidathion | larva | OP | 48 hrs - 14 days | n/a | Supracide 2E |
| Permethrins | larva | P | 12 hrs | n/a | Ambush, Pounce |
| Endosulfan | larva | OC | 24 hrs | n/a | Phaser 50WSP |

| | | | | | | |
|--|-------------------|-------------------|-----------|--------|---------|-------------------------|
| | Diazinon | larva | OP | 24 hrs | n/a | Diazinon 50W |
| | Gamma-Cyhalothrin | larva | P | 24 hrs | n/a | Proaxis |
| Peach Silver Mite, other Eriophyids | Edosulfan | Immatures, Adults | OC | 24 hrs | 30 days | Thionex 3EC |
| | Sulfur | Immatures, Adults | Inorganic | | | Sulfur 90W |
| | Propargite | All | M | 7 days | 14 | Omite (nectarines only) |
| Shothole Borer | Endosulfan | adult | OC | 24 hrs | 30 days | Thiodan |
| | Esfenvalerate | adult | P | 12 hrs | | Asana |
| | Carbaryl | adult | C | 12 hrs | | Sevin XLR |
| | Permethrins | adult | P | 12 hrs | | Ambush, Pounce |
| | Diazinon | adult | OP | 24 hrs | | Diazinon 50W |

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