



Integrated Pest Management Program

Department of Plant Science and Landscape Architecture
UConn Extension

Some selected insecticides and miticides for use on herb bedding plants

If any information is inconsistent with the label, then follow the label.

Insecticide	Target Pests	Comments
Azadirachtin (Aza-Direct) (AzaGuard) (Azatin O) (Molt-X) (Neemix 4.5) 4 hr. REI OMRI-certified products Ornazin 3% EC 12 hr. REI	Aphids, beetles, caterpillars, fungus gnat larvae, leafhoppers, leafminers, mealybugs, scales, thrips, whiteflies	Contact insecticide. Insect growth regulator for immature stages of insects. Repeat applications needed.
Azadirachtin & pyrethrins (Azero Pro) 12 hr. REI OMRI-certified product Unknown and Group 3A	Aphids, beetles, caterpillars, fungus gnats, leafhoppers, leafminers, plant bugs, mealybugs, shore flies, spider mites, thrips, whiteflies	Insect growth regulator and contact insecticide combined.
<i>Bacillus thuringiensis</i> subsp. <i>aizawai</i> (XenTari) 4 hr. REI Group 11A OMRI-certified product	Armyworms, loopers, saltmarsh caterpillars	Stomach poison that must be ingested to be active. Most effective against small newly hatched larvae. Insects stop feeding and die 1 to 5 days later. Thorough spray coverage needed.
<i>Bacillus thuringiensis</i> subsp. <i>kurstaki</i> (Deliver), (DiPel Pro DF), (Javelin WG) (BTNow) 4 hr. REI Group 11A OMRI-certified products	Caterpillars	Stomach poison that must be ingested to be active. Most effective against small, newly hatched larvae. Insects stop feeding and die 1 to 5 days later. Thorough spray coverage needed.

<i>Beauveria bassiana</i> ANT-03 (BioCeres WP) 4 hr. REI	Aphids, plant bugs, thrips, whiteflies	Contact insecticide. Active ingredient is an insect-killing fungus. Thorough coverage of all plant parts is important.
<i>Beauveria bassiana</i> GHA (BotaniGard ES, WP) 4 hr. REI	Aphids, mealybugs, plant bugs, leafhoppers, thrips, whiteflies	Contact insecticide. Active ingredient is an insect killing fungus. Thorough coverage of all plant parts is important.
<i>Beauveria bassiana</i> GHA Mycotrol ESO, WPO) 4 hr. REI OMRI-certified products	Aphids, beetles, leafhoppers, mealybugs, plant bugs, thrips, whiteflies	Contact insecticide Active ingredient is an insect killing fungus. Thorough coverage of all plant parts is important.
<i>Beauveria bassiana</i> PPRI5539 (Velifer) 12 hr. REI	Aphids, mealybugs, mites, thrips and whiteflies	Contact insecticide. Active ingredient is an insect killing fungus.
<i>Burkholderia</i> A396 (Venerate CG) 4 hr. REI OMRI-certified product	Aphids, caterpillars, mites, thrips, whiteflies	Contact bioinsecticide & stomach poison that disrupts insect exoskeleton interfering with molting.
Canola oil & pyrethrins (Pycana) 12 hr. REI OMRI-certified product	Aphids, beetles, caterpillars, fungus gnats (adults), leafhoppers, leafminers, mealybugs, spider mites, plant bugs, scales, thrips, whiteflies	Combination of a botanical oil and pyrethrins. See label for application rates, directions and plant safety information.
<i>Chromobacterium subtsugae</i> PRAA41 (Grandevo GC) 4 hr. REI OMRI-certified product	Aphids, caterpillars, mites, thrips, whiteflies	Contact biological insecticide for young immature stages of pests. See label for plant safety information.
Insecticidal Soap Potassium Salts of Fatty Acids (Kopa Insecticidal Soap) 12 hr. REI OMRI-certified product	Aphids, mites, plant bugs, whiteflies	Contact insecticide/miticide. Short residual activity. See label for plant safety information.

Insecticidal Soap Potassium Salts of Fatty Acids (M-Pede) 12 hr. REI OMRI-certified product	Aphids, broad mites, leafhoppers, leafminers, mealybugs, plant bugs, spider mites, thrips, whiteflies	Contact insecticide/miticide. Short residual activity. See label for plant safety information.
Iron phosphate & spinosad (Brandt Antixx Plus) (Bug-N-Sluggo) 4 hr. REI OMRI-certified products	Cutworms, slugs, snails	Bait formulation.
<i>Isaria fumosorosea</i> (Ancora) (PFR-97 20% WDG) 4 hr. REI OMRI-certified products	Aphids, leafminers, mealybugs, plant bugs, spider mites, thrips, whiteflies Drench: thrips pupae	Microbial insecticides that work by contact. Apply when the relative humidity is >75% with moderate temperatures. See technical sheet and label for application directions.
Mineral Oil (Ultra-Pure Oil) 4 hr. REI OMRI-certified product	Aphids, beetle larvae, leafhoppers, leafminers, mites, thrips, whiteflies	Contact insecticide/miticide. Foliar injury may occur if applied during humid conditions. See label for plant safety information.
Neem Oil (Triact 70) 4 hr. REI OMRI-certified product	Aphids, leafhoppers, mealybugs, mites, scales, whiteflies	Contact insecticide/miticide. See label for plant safety information.
Nematodes (Entomopathogenic) (<i>Steinernema carpocapsae</i>) (Millenium) Exempt from REI	Shore flies (larvae)	Apply to moist growing media at temperatures of 55-86 F. Remove screens and filters from sprayers or injectors. See label for application directions. Repeat applications may be needed.

Nematodes (Entomopathogenic) (<i>Steinernema feltiae</i>) (NemaShield, Nemasys, ScanMask) Exempt from REI	Fungus gnat larvae, thrips pupae	Apply to moist growing media at temperatures of 50-80 F. Remove screens and filters from sprayers and injectors. Apply early in the cropping cycle. Repeat applications may be needed.
Pyrethrins (PyGanic EC 1.4 11, EC 5.0 11) 12 hr. REI Group 3A OMRI-certified products	Aphids, beetles, caterpillars, fungus gnats (adults), leafminers, leafhoppers, plant bugs, mites, scales, shore flies, thrips, whiteflies	Contact insecticide.
Pyrethrins & <i>Beauveria bassiana</i> GHA (BotaniGard Maxx) 12 hr. REI	Aphids, mealybugs, thrips, whiteflies (see label)	Contact insecticides. Natural pyrethrum combined with insect killing fungus. Do not apply when beneficial insects are present.
Pyrethrins & PBO (Pyrethrum TR) 12 hr. REI Group 3A	Aphids, beetles, caterpillars, fungus gnat adults, leafhoppers, mealybugs, spider mites, scales, thrips, whiteflies	Contact insecticide.

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Resistance Groups (number and letter) indicate products with a common mode of action based on the [Insecticide Resistance Action Committee \(IRAC\)](#) guidelines. For multiple applications to one crop, select products from different resistant groups. This information is supplied here with the understanding that no discrimination is intended and no endorsement supplied. Due to constantly changing regulations, we assume no liability for suggestions. Additional products may be available for certain herbs grown in the field. Growers should always read and follow label instructions. Always follow label instructions regarding registered uses and note cautions. To avoid any phytotoxicity problems, spot test first before widespread use.

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