



U.S. ENVIRONMENTAL PROTECTION AGENCY
 Office of Pesticide Programs
 Biopesticides and Pollution Prevention Division (7511M)
 1200 Pennsylvania Ave., N.W.
 Washington, D.C. 20460

EPA Reg. Number:

1021-2867

Date of Issuance:

11/30/2023

NOTICE OF PESTICIDE:

Registration
 Reregistration
 (under FIFRA, as amended)

Term of Issuance:

Unconditional

Name of Pesticide Product:

MGK Formula 3186

Name and Address of Registrant (include ZIP Code):

McLaughlin Gormley King Company D/B/A MGK
 7325 Aspen Lane N
 Minneapolis, MN 55428

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Biopesticides and Pollution Prevention Division prior to use of the label in commerce. In any correspondence on this product, always refer to the above EPA Registration Number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide, and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the U.S. Environmental Protection Agency. In order to protect health and the environment, the Administrator, on his or her motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under the Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

1. Submit and/or cite all data required for registration or registration review of your product when the EPA requires all registrants of similar products to submit such data.

Signature of Approving Official:

Andrew Bryceland, Team Leader
 Biochemical Pesticides Branch
 Biopesticides and Pollution Prevention Division (7511M)
 Office of Pesticide Programs

Date:

11/30/2023

2. Make the following labeling change before you release this product for shipment:
 - Revise the EPA Registration Number to read, "EPA Reg. No. 1021-2867."
3. Submit one (1) copy of the final printed labeling for the record before you release this product for shipment.

Should you wish to add/retain a reference to your company's website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the EPA. If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section 12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements the EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the EPA find or if it is brought to our attention that a website contains statements or claims substantially differing from statements or claims made in connection with obtaining a FIFRA section 3 registration, the website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

Your release for shipment of this product constitutes acceptance of these terms. If these terms are not complied with, this registration will be subject to cancellation in accordance with FIFRA section 6. A stamped copy of the labeling is enclosed for your records. Please also note that the record for this product currently contains the following acceptable Confidential Statements of Formula (CSFs):

- Basic CSF dated 08/03/2021.
- Alternate CSF #1 dated 08/03/2021.

If you have any questions, please contact Andrew Bryceland via email at bryceland.andrew@epa.gov.

Sincerely,



Andrew Bryceland, Team Leader
Biochemical Pesticides Branch
Biopesticides and Pollution
Prevention Division (7511M)
Office of Pesticide Programs

Enclosure

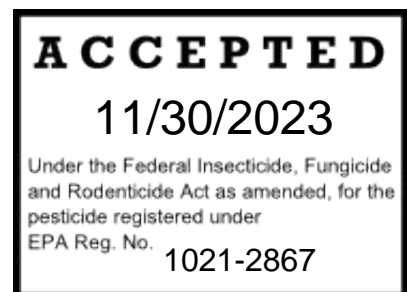


MGK Formula 3186

[ALTERNATE BRAND NAMES: Sabon™; Verbon™; Sabavera™

Sub-Label A: For Agricultural Use

Sub-Label B: For Residential Use



EPA Reg. No. 1021-Unassigned
EPA Est. No. 1021-MN-2



MGK Formula 3186

[ALTERNATE BRAND NAMES: Sabon™; Verbon™; Sabavera™

Sub-Label A: For Agricultural Use

EPA Reg. No. 1021-Unassigned
EPA Est. No. 1021-MN-2

MGK Formula 3186

(ABNs: Sabon™, Verbon™, Sabavera™)

 For Organic Production



[] denotes optional wording.

ACTIVE INGREDIENT:

Potassium Salts of Fatty Acids	42.00%
OTHER INGREDIENTS	58.00%
	100.00%

Contains 3.17 lbs. of active ingredient per Gallon

KEEP OUT OF REACH OF CHILDREN CAUTION / PRECAUCIÓN

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)

[See inside booklet for First Aid, Precautionary Statements, Directions for Use and Storage and Disposal]

FIRST AID	
IF IN EYES:	<ul style="list-style-type: none">Hold eye open and rinse slowly and gently with water for 15-20 minutes.Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.Call a poison control center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-888-740-8712 for emergency medical treatment information.	

Manufactured by

7325 Aspen Lane North
Minneapolis, MN 55428

EPA Reg. No. 1021-UNASSIGNED

EPA Est. No. 1021-MN-2

Net Contents: _____

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Causes moderate eye irritation. Wear safety glasses with side shields. Avoid contact with, eyes or clothing Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using toilet.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Wear protective eyewear, long sleeved shirt, long pants shoes and socks.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep PPE and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

Users should:

Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This product may be hazardous to aquatic invertebrates. Do not apply directly to water, in areas where surface water is present or to intertidal areas below the mean high-water mark. Do not contaminate water by cleaning of equipment or disposal of equipment wash waters.

PRODUCT INFORMATION

MGK Formula 3186 is a contact insecticide, miticide and fungicide for control of soft-bodied insects, listed mites and powdery mildew. The formulation is based on potassium salts of naturally derived fatty acids. This product may be used to control targeted pests on crops which include vegetables, grapes and other small fruits, tree fruits, tree nuts, cotton, tobacco, shrubs, shade and ornamental trees, turf, foliage and flowering plants growing outdoors, in greenhouses and in interiorscapes. This product can be applied up to harvest.

PESTS CONTROLLED

This product may be used as a foliar spray to control or suppress soft bodied pests which include: adelgids, aphids, caterpillars, earwigs, lace bugs, leafhoppers, leafminers, mealybugs, mole crickets, plant bugs, psyllids, root aphids, sawfly larvae, scales, spider mites, tent caterpillars, thrips, whiteflies, gypsy moth, and chinch bugs. MGK FORMULA 3186 is most effective on aphids, psyllids, whiteflies, thrips and listed mites. Effects on other pests are limited to early growth stages and eggs. This product provides curative control of powdery mildew.

GENERAL INFORMATION

- MGK FORMULA 3186 contains a unique blend of long chain fatty acids for enhanced insecticidal and miticidal activity.
- MGK FORMULA 3186 is a contact insecticide, miticide and fungicide.
- MGK FORMULA 3186 is a broad-spectrum insecticide and miticide.
- MGK FORMULA 3186 penetrates cuticle of the insects disrupting the wax layer and cell membranes and functions, leading to cellular damage, dehydration and impairment of respiratory functions.
- MGK FORMULA 3186 blocks the spiracles of insects interfering with respiration.
- MGK FORMULA 3186 has been formulated to provide optimum spreading.
- MGK FORMULA 3186 is effective against immature and adult stages of listed pests.
- MGK FORMULA 3186 can be used in Integrated Pest Management programs.
- MGK FORMULA 3186 is an excellent tool for managing insecticide resistance.
- MGK FORMULA 3186 can be used in combination with some biological control agents. Apply product to the crop prior to the release of biological control agents or treat hot spots of early colonization in greenhouses.
- The active ingredient in MGK FORMULA 3186 is exempted from the requirement of a tolerance for residues in or on all food commodities when used in accordance with good agricultural practices.
- MGK FORMULA 3186 can be applied on the same day as harvest. Follow REI guidance (12 hours).

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

USE RESTRICTIONS

- Apply this product only as specified on this label.
- Do not make applications during rain.
- Manzate and Dithane fungicides are incompatible with MGK FORMULA 3186.
- Combining MGK FORMULA 3186 with sulfur or applying this product within 3 days of sulfur application may increase the phytotoxicity caused by sulfur on sensitive plants (e.g., grape).
- Unless otherwise noted, do not tank mix this product with adjuvants such as penetrators, spreader stickers or activators, gibberellic acid, calcium nitrate, or diatomaceous earth, foliar nutrients, alkaline based chelating agents (such as EDTA), aluminum tris, chlorothalonil and pesticides containing sulfur or metallic ions (such as manganese, magnesium, iron, zinc, etc.) as they may be physically incompatible and/or phytotoxic.
- Do not exceed a maximum spray volume of 400 gallons per acre on perennial crops.
- Do not exceed a maximum spray volume of 100 gallons per acre on smooth skinned stone fruit up to fruit formation.
- Do not exceed a maximum spray volume of 175 gallons per acre on peaches.
- Do not use on yellow skinned nectarines.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR, Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

- Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.
- Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.
- Do not enter or allow others to enter until sprays have dried.

PPE required for early entry to treated areas (that is permitted under Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water), is:

- Long-sleeved shirt and long pants.
- Shoes plus socks.

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR, Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Keep unprotected persons out of treated areas until sprays have dried.

Wear protective eyewear when using or handling this product to help avoid exposure to eyes.

Allow spray to dry before allowing adults, children or pets on treated areas.

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

DIRECTIONS FOR MIXING

Determine the application volume for the spray application. Based upon the application volume, calculate the amount of MGK FORMULA 3186 needed to achieve the selected label rate, e.g., 1.0- to 4.0%. Fill 3/4 of the spray tank with water while ensuring proper agitation by pump or paddles. Continue agitation while slowly adding the required amount of MGK FORMULA 3186 into the tank. Once the product was added to the spray tank add the remaining water to reach the appropriate application volume, e.g., 100 gallons. MGK FORMULA 3186 applied alone only requires agitation prior to use.

APPLICATION INSTRUCTIONS

General field applications rate MGK FORMULA 3186 is 1.0% to 2.0% dilution but under heavy pest pressure the 4.0% rate may be used. Apply the solution in sufficient amount of water volume to achieve complete coverage of the crop canopy including the lower parts and the underside of leaves without run-off. MGK FORMULA 3186 is a contact insecticide with a physical mode of action requiring excellent coverage of the target pest for efficacy. Generally, total application volume of 25 to 400 gallons per acre using ground spray equipment is recommended. Adjust water volume based upon canopy size to achieve good coverage. For best results initiate treatment application at the early stages of infestation. Repeat application within 3-7 days after the initial application to maximize efficacy. Continue monitoring the pest population and apply additional treatments based upon economic thresholds. Monitor for phytotoxicity after each applications to ensure that plant injury does not occur. If needed, additional applications can be made if no phytotoxicity develops.

- Hard water in excess of 300 ppm should be conditioned to reduce its hardness prior to the addition of MGK FORMULA 3186.
- Do not lower pH of the final solution below 7.0.
- Apply promptly after mixing with other pesticides to avoid or reduce alkaline hydrolysis of certain pesticides, such as Pyrethrins.
- Avoid applications when wind conditions impair thorough coverage.
- Apply the solution in sufficient amount of water volume to achieve complete coverage of the crop canopy including the lower parts and the underside of leaves without run-off.
- Total application volume of 25 to 400 gallons per acre using ground spray equipment is recommended.
- Clean spray equipment thoroughly before and after applying this product, particularly if a product with the potential to cause plant injury was used prior to MGK FORMULA 3186.

MGK FORMULA 3186 alone only requires agitation prior to use. Continue to agitate tank mixes of MGK FORMULA 3186 with other pesticides throughout use. If using equipment without pump or paddle, shake often during use. Flush fluid in sprayer hose lines back into the tank if stirring is interrupted. **Do not allow solution to sit for longer than 24 hours before use. For best efficacy mix and spray as soon as possible.**

STAND ALONE APPLICATION INSTRUCTIONS

General field applications rate is 1.0 to 2.0% solution (1 to 2 gallons of product per 100 gallons total spray solution at a rate of 25 to 400 gal/acre using ground spray equipment. For best results initiate treatment application at the early stages of infestation. Apply the amount of spray solution that achieves excellent penetration of the crop without run-off to obtain good coverage of the foliage and pest populations. MGK FORMULA 3186 is a contact product, and thus, pests need to be contacted with spray solution to be effective. Efforts should be made to thoroughly reach all plant parts including undersides of leaves and lower parts of the canopy. Repeat treatment 3-7 days after first application and then continue applications based upon the rate of the development of the pest population. Monitor for plant injury after each application to ensure plant injury does not occur. Additional applications may be possible if previous experience with repeat applications of the product under the same conditions have not produced plant injury. May be used on edible crops up to and including day of harvest (follow REI of 12 hours).

Dilution Table

Total/Final Spray Solution (US gallon)	Desired concentration of MGK Formula 3186 in water. (% v/v)	Product amount (MGK Formula 3186 Concentrate)		Tablespoon
		US	Metric	
1 gallon	0.25%	0.32 fluid oz.	9.5 ml	0.6
	0.50%	0.64 fluid oz.	19 ml	1.3
	1.0%	1.28 fluid oz.	38 ml	2.6
	1.5%	1.92 fluid oz.	57 ml	3.8
	2.0%	2.56 fluid oz.	76 ml	5.1
	3.0%	3.84 fluid oz.	114 ml	7.7
	4.0%	5.12 fluid oz.	152 ml	10.2
100 gallons	0.25%	0.25 gallons	0.95 liters	-
	0.50%	0.50 gallons	1.9 liters	-
	1.0%	1.0 gallons	3.8 liters	-
	1.5%	1.5 gallons	5.7 liters	-
	2.0%	2.0 gallons	7.6 liters	-
	3.0%	3.0 gallons	11.4 liters	-
	4.0%	4.0 gallons	15.1 liters	-

TANK MIXING

MGK FORMULA 3186 may be combined with other pesticides to broaden target spectrum, improve efficacy, increase residual efficacy and manage insecticide resistance. When used as a tank-mix, observe all directions for use: crops, use rates, dilution ratios, precautions, and limitations, which appear on the tank mix product label. Follow the label directions for the most restrictive of label precautions and limitations. This product should not be mixed with any product, which prohibits such mixing. Tank mixtures are permitted only in those States where the tank mix partner is registered.

For tank mixing, use MGK FORMULA 3186 at a rate of 1.0% dilution (1 gallon of concentrate to 99 gallons of water to make 100 gallons of final spray solution).

ORDER OF TANK MIXING:

- 1) Water (approximately 3/4 of total volume)
- 2) Water conditioner (if needed)
- 3) Tank mix crop protection agents:

Add other products in the following order:

- Wettable powders in soluble packets or bags
- Soluble or wettable granules
- Oil dispersion
- Suspension concentrates or flowable liquids
- Emulsifiable concentrates
- Suspension emulsions (SE); emulsion is water; emulsion and water in oil
- Soluble concentrates
- Adjuvants
- Oils

- 4) MGK FORMULA 3186
- 5) Remainder of water

Make sure that each component is thoroughly mixed and suspended before adding tank mix partners. Maintain constant agitation during the application.

COMPATIBILITY ASSESSMENT

Prior to mixing products with MGK FORMULA 3186 assess compatibility in a standard jar test. Using a 2-quart glass jar, add the proportionate amounts of the products (in the order recommended above) to 1 quart of water. Close the jar, invert it 10 times and then let the solution stand for 5 minutes. If the combination remains mixed or can be re-mixed readily, it is compatible and can be used to create the spray solution.

APPLICATION OF TANK MIXTURES

Do not allow tank mixes to sit for longer than 24 hours before use. For best results, mix and spray as soon as possible.

Continue to agitate tank mixes of MGK FORMULA 3186 with other crop protection agents throughout the spray application. If using equipment without pump or paddle, shake often during use. Flush fluid in sprayer hose lines back into the tank if stirring is interrupted.

Considerations to Minimize Plant Injury (Phytotoxicity)

Prior to full scale application, evaluate the phytotoxicity potential of the product alone or in combination with desired companion product(s) on a few test plants to ensure crop safety.

- It is impossible for MGK to test all crops and varieties, all environmental conditions and all potential product mixture combinations.
- Local conditions can influence the susceptibility of the crop to injury.
Phytotoxicity to the product is influenced by several factors including species, variety/cultivar, environmental conditions (temperature, relative humidity, water stress, salt concentration, light intensity, etc.), pest and disease pressure, spray concentration, composition of the spray mixture (companion products, spray additives etc.), pH, delivery volume as well as the timing, number and frequency of applications.
- Potential for plant injury increases when this product is used under the following conditions:
 - Plants are under environmental stress
 - Canopy or fruit temperatures above 90 °F
 - High humidity
 - Drought conditions
 - More than two applications made within a 7-day interval.
 - High volume applications can cause the spray to collect on the bottom of fruit such as apple, pear, nectarine, orange and grape.
 - Tender new foliage is present on narrow leaf evergreen trees and shrubs.
 - Existing injuries on leaves and fruits caused by high pest pressure can exacerbate phytotoxicity potential of the application.
- Application of this product may alter the appearance of the glaucous bloom on spruces and the waxy bloom on grapes.
- Do not apply to new seedlings and transplants without first determining sensitivity (phytotoxicity).
- Use with care on blooms. Determine sensitivity before spraying.
- **Do not spray during full sun. Spray early in morning or evening or when overcast.**
Do not apply to new seedlings and transplants without assessing sensitivity to plant injury.

• Plants with high sensitivity to MGK FORMULA 3186: horse chestnut, Japanese maple, mountain ash, cherimoya, bleeding heart, impatiens, or sweet peas. Do not use products on these plants.

- The following plants may be sensitive to this product: bald cypress, begonia, chrysanthemum, Crown of Thorns and other Euphorbia, cucumber, delicate ferns, narrow leaf evergreens (especially when stressed or when tender new growth is present), Dieffenbachia, fuchsia, gardenia, ~~impatiens~~, jade plant, lantana, ornamental ivy, palms, poinsettia, redbud, river birch, schefflera, Zebra plant and some succulents. Test first on a few plants prior to broad scale applications when sensitivity under local use conditions is unknown. Sensitivity varies with plant varieties. Do not apply after coloring of bracts has begun in Poinsettias.
- Flowers of plants including African violet, ageratum, azalea, begonia, camellia, chrysanthemum, dahlia, geranium, gloxinia, impatiens, lily, marigold, orchid, pansy, petunia, poinsettia bracts, rose, salvia, snapdragon, vinca and zinnia may be injured when sprayed with this product. Sensitivity varies with plant varieties.
- Safety to blooms should be determined for each individual cultivar/variety of plant to be treated by conducting a small test under local use conditions.
- See individual use sites for additional restrictions and precautionary instructions.
- The user assumes responsibility for determining if MGK FORMULA 3186 is safe to plants under local ~~commercial~~ growing conditions.
 - If sooty mold is present, application of product may result in fruit marking.

PESTS and SITES

Preharvest Interval: MGK FORMULA 3186 has a 0-day Preharvest interval for ALL crops contained on this label.

Crop Group 1	
ROOT AND TUBER VEGETABLES	
Arracacha; arrowroot; artichoke*, Chinese; artichoke*, Jerusalem; beet, garden; beet, sugar; burdock, edible; canna, edible; carrot; cassava, bitter and sweet; celeriac (celery root); chayote (root); chervil, turnip-rooted; chicory; chufa; dasheen (taro); ginger; ginseng; horseradish; leren; parsley, turnip-rooted; parsnip; potato; radish; radish, oriental (daikon); rutabaga; salsify (oyster plant); salsify, black; salsify, Spanish; skirret; sweet potato; taniel (cocoyam); turmeric; turnip; yam bean; yam, true.	
*Not registered for use in the State of California	
Pests:	Instructions
Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations. Achieve thorough coverage of the canopy.
Leafhoppers, plant bugs, psyllids	To achieve control, use a 1-2% v/v solution of this product. Under severe pest pressure control can be enhanced by combining a 1-2 % v/v solution of this product with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II]. Scout and make first application to control nymphs during the first generation when the majority of nymphs are in the early instar stages. Make a second application 3-7-days later to target newly emerged nymphs. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Achieve thorough coverage of the canopy.
Mites: Twospotted spider mites, Citrus rust mite, European red mite, Pacific mite, Willamette mites, Russet mite, Spider mites.	Achieve thorough coverage of the underside of leaves. Make a second application 3-5-days later to target newly emerged immatures. To achieve enhanced short-term control prior to the release of biological control agents, use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II]. Apply when mites are first observed before mite populations have become severe. In case of spider mites apply prior to webbing.
Thrips	Suppression only of exposed thrips. A 3-day re-application schedule may be necessary when thrips population is rapidly increasing. Achieve thorough coverage of the canopy.
Whiteflies	Routinely check field margins for whiteflies; these areas are usually infested first. Be especially alert for rapid increase of whitefly numbers when nearby host crops are in decline. Apply a 1-2% v/v solution of this product for stand-alone use. To achieve enhanced and residual pest control, use a 1-2% v/v solution of this product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target newly hatched nymphs. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Achieve thorough coverage of the canopy.
Powdery mildew	Stand Alone Application: Apply 1.5 - 2% v/v solution of this product when the first signs of powdery mildew appear and repeat at 7 to 10-day intervals, or as needed. Schedule a follow-up fungicide application within 7-10 days after each application when this product is used alone. Achieve thorough coverage of the canopy. Tank Mix Application: Apply a 1 - 2% v/v solution of this product with a fungicide to achieve protectant/residual control of powdery mildew. Do not mix with sulfur. Do not use within 3 days of a sulfur application. Achieve thorough coverage of the canopy.
Additional Information:	
<ul style="list-style-type: none"> • Routinely scout fields with special focus on field margins to detect early stages of colonization. • Initiate application at the time of first colonization and appearance of the pest. • Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions. • The product can be applied as a tank mix combination with a labeled companion insecticide. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Do not store mixture for an extended period of time, apply mixture promptly. • Apply in sufficient spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment. • Use appropriate water volume that provides good coverage of the entire canopy. • Apply product in 3-7-day intervals starting at the time of colonization. Check for phytotoxicity after each application before additional applications are made. • Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program. 	

Crop Group 2 LEAVES OF ROOT AND TUBER VEGETABLES (HUMAN FOOD OR ANIMAL FEED)	
Beet, garden; beet, sugar; burdock, edible; carrot; cassava, bitter and sweet; celeriac (celery root); chervil, turnip-rooted; chicory; dasheen (taro); parsnip; radish; radish, oriental (daikon); rutabaga; salsify, black; sweet potato; tanager (cocoyam); turnip; yam, true	
Pests:	Instructions
Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations. Achieve thorough coverage of the canopy.
Leafhoppers, plant bugs	To achieve control, use a 1-2% v/v solution of this product. Under severe pest pressure control can be enhanced by combining a 1-2 % v/v solution of this product with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II]. Scout and make first application to control nymphs during the first generation when the majority of nymphs are in the early instar stages. Make a second application 3-7-days later to target newly emerged nymphs. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Achieve thorough coverage
Mites: Twospotted spider mites, Citrus rust mite, European red mite, Pacific mite, Willamette mites, Russet mite, Spider mites.	Achieve thorough coverage of the underside of leaves. Make a second application 3-5-days later to target newly emerged immatures. To achieve enhanced short-term control prior to the release of biological control agents, use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II]. Apply when mites are first observed before mite populations have become severe. In case of spider mites apply prior to webbing.
Thrips	Suppression only of exposed thrips. A 3-day re-application schedule may be necessary when thrips population is rapidly increasing. Achieve thorough coverage of the canopy.
Whiteflies	Routinely check field margins for whiteflies; these areas are usually infested first. Be especially alert for rapid increase of whitefly numbers when nearby host crops are in decline. Apply a 1-2% v/v solution of this product for stand-alone use. To achieve enhanced and residual pest control, use a 1-2% v/v solution of this product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target newly hatched nymphs. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Achieve thorough coverage of the canopy.
Powdery mildew	Stand Alone Application: Apply 1.5 - 2% v/v solution of this product when the first signs of powdery mildew appear and repeat at 7 to 10-day intervals, or as needed. Schedule a follow-up fungicide application within 7-10 days after each application when this product is used alone. Achieve thorough coverage of the canopy. Tank Mix Application: Apply a 1 - 2% v/v solution of this product with a fungicide to achieve protectant/residual control of powdery mildew. Do not mix with sulfur. Do not use within 3 days of a sulfur application. Achieve thorough coverage of the canopy.
Additional Information:	
<ul style="list-style-type: none"> • Routinely scout fields with special focus on field margins to detect early stages of colonization. • Initiate application at the time of first colonization and appearance of the pest. • Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions. • The product can be applied as a tank mix combination with a labeled companion insecticide. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Do not store mixture for an extended period of time, apply mixture promptly. • Apply in sufficient spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment. • Apply product in 3-7-day intervals starting at the time of colonization. Check for phytotoxicity before additional applications are made. • Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program. 	

Crop Group 3	
BULB VEGETABLE GROUP	
Chive, fresh leaves; chive, Chinese, fresh leaves; daylily, bulb; elegans hosta; fritillaria, bulb; fritillaria, leaves; garlic, bulb; garlic, greatheaded, bulb; garlic, serpent, bulb; kurrat; lady's leek; leek; leek, wild; lily, bulb; onion, Beltsville bunching; onion, bulb; onion, Chinese, bulb; onion, fresh; onion, green; onion, macrostem; onion, pearl; onion, potato, bulb; onion, tree, tops; onion, Welsh, tops; shallot, bulb; shallot, fresh leaves; cultivars, varieties, and/or hybrids of these	
Pests:	Instructions
Thrips	Suppression only of exposed thrips. A 3-day re-application schedule may be necessary when thrips population is rapidly increasing. Achieve thorough coverage of the canopy.
Powdery mildew	Stand Alone Application: Apply 1.5 - 2% v/v solution of this product when the first signs of powdery mildew appear and repeat at 7 to 10-day intervals, or as needed. Schedule a follow-up fungicide application within 7-10 days after each application when this product is used alone. Achieve thorough coverage of the canopy. Tank Mix Application: Apply a 1 - 2% v/v solution of this product with a fungicide to achieve protectant/residual control of powdery mildew. Do not mix with sulfur. Do not use within 3 days of a sulfur application. Achieve thorough coverage of the canopy.
Additional Information:	
<ul style="list-style-type: none"> • Routinely scout fields with special focus on field margins to detect early stages of colonization. • Initiate application at the time of first colonization and appearance of the pest. • Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions. • The product can be applied as a tank mix combination with a labeled companion insecticide. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Do not store mixture for an extended period of time, apply mixture promptly. • Apply in sufficient spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment. • Apply product in 3-7-day intervals starting at the time of colonization. Check for phytotoxicity before additional applications are made. • Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program. 	

Crop Group 4	
LEAFY VEGETABLES (EXCEPT BRASSICA VEGETABLES) GROUP	
Amaranth, Chinese; amaranth, leafy; arugula; aster, Indian; blackjack; broccoli, Chinese; broccoli raab; cabbage, abyssinian; cabbage, Chinese, bok choy; cabbage, seakale; cat's whiskers; cham-chwi; cham-na-mul; chervil, fresh leaves; chipilin; chrysanthemum, garland; cilantro, fresh leaves; collards; corn salad; cosmos; cress, garden; cress, upland; dandelion, leaves; dang-gwi, leaves; dillweed; dock; dolnam-mul; ebolo; endive; escarole; fameflower; feather cockscomb; Good King Henry; hanover salad; huauzontle; jute, leaves; kale; lettuce, bitter; lettuce, head; lettuce, leaf; maca, leaves; mizuna; mustard greens; orach; parsley, fresh leaves; plantain, buckhorn; primrose, English; purslane, garden; purslane, winter; radicchio; radish, leaves; rape greens; rocket, wild; shepherd's purse; spinach; spinach, Malabar; spinach, New Zealand; spinach, tanier; Swiss chard; turnip greens; violet, Chinese, leaves; watercress*; cultivars, varieties, and hybrids of these commodities	
*Not registered for use in the State of California	
Pests:	Instructions
Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations. Achieve thorough coverage of the canopy.
Mites: Twospotted spider mites, Citrus rust mite, European red mite, Pacific mite, Willamette mites, Russet mite, Spider mites.	Achieve thorough coverage of the underside of leaves. Make a second application 3-5-days later to target newly emerged immatures. To achieve enhanced short-term control prior to the release of biological control agents, use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II]. Apply when mites are first observed before mite populations have become severe. In case of spider mites apply prior to webbing.
Plant bugs	To achieve control, use a 1-2% v/v solution of this product. Under severe pest pressure control can be enhanced by combining a 1-2 % v/v solution of this product with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II]. Scout and make first application to control nymphs during the first generation when the majority of nymphs are in the early instar stages. Make a second application 3-7-days later to target newly emerged nymphs. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Achieve thorough coverage of the
Thrips	Suppression only of exposed thrips. A 3-day re-application schedule may be necessary when thrips population is rapidly increasing. Achieve thorough coverage of the canopy.
Whiteflies	Routinely check field margins for whiteflies; these areas are usually infested first. Be especially alert for rapid increase of whitefly numbers when nearby host crops are in decline. Apply a 1-2% v/v solution of this product for stand-alone use. To achieve enhanced and residual pest control, use a 1-2% v/v solution of this product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target newly hatched nymphs. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Achieve thorough coverage of the canopy.
Powdery mildew	Stand Alone Application: Apply 1.5 - 2% v/v solution of this product when the first signs of powdery mildew appear and repeat at 7 to 10-day intervals, or as needed. Schedule a follow-up fungicide application within 7-10 days after each application when this product is used alone. Achieve thorough coverage of the canopy. Tank Mix Application: Apply a 1 - 2% v/v solution of this product with a fungicide to achieve protectant/residual control of powdery mildew. Do not mix with sulfur. Do not use within 3 days of a sulfur application. Achieve thorough coverage of the canopy.
Additional Information:	
<ul style="list-style-type: none"> • Routinely scout fields with special focus on field margins to detect early stages of colonization. • Initiate application at the time of first colonization and appearance of the pest. • Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions. • The product can be applied as a tank mix combination with a labeled companion insecticide. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Do not store mixture for an extended period of time, apply mixture promptly. • Apply in sufficient spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment. • Apply product in 3-7-day intervals starting at the time of colonization. Check for phytotoxicity before additional applications are made. • Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program. 	

Crop Group 5 BRASSICA (COLE) LEAFY VEGETABLES	
Broccoli; broccoli, Chinese (gai lon); broccoli raab (rapini); Brussels sprouts; cabbage; cabbage, Chinese (bok choy); cabbage, Chinese (napa); cabbage, Chinese mustard (gai choy); cauliflower; cavalo broccolo; collards; kale; kohlrabi; mizuna; mustardgreens; mustard spinach; rape greens.	
Pests:	Instructions
Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations. Achieve thorough coverage of the canopy.
Plant bugs	To achieve enhanced control, use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II]. Scout and make first application to control nymphs during the first generation when the majority of nymphs are in the early instar stages. Make a second application 3-7-days later to target newly emerged nymphs. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations.
Thrips	Suppression only of exposed thrips. A 3-day re-application schedule may be necessary when thrips population is rapidly increasing. Achieve thorough coverage of the canopy.
Whiteflies	Routinely check field margins for whiteflies; these areas are usually infested first. Be especially alert for rapid increase of whitefly numbers when nearby host crops are in decline. Apply a 1-2% v/v solution of this product for stand-alone use. To achieve enhanced and residual pest control, use a 1-2% v/v solution of this product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target newly hatched nymphs. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Achieve thorough coverage of the canopy.
Powdery mildew	Stand Alone Application: Apply 1.5 - 2% v/v solution of this product when the first signs of powdery mildew appear and repeat at 7 to 10-day intervals, or as needed. Schedule a follow-up fungicide application within 7-10 days after each application when this product is used alone. Achieve thorough coverage of the canopy. Tank Mix Application: Apply a 1 - 2% v/v solution of this product with a fungicide to achieve protectant/residual control of powdery mildew. Do not mix with sulfur. Do not use within 3 days of a sulfur application. Achieve thorough coverage of the canopy.
Additional Information:	
<ul style="list-style-type: none"> • Routinely scout fields with special focus on field margins to detect early stages of colonization. • Initiate application at the time of first colonization and appearance of the pest. • Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions. • The product can be applied as a tank mix combination with a labeled companion insecticide. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Do not store mixture for an extended period of time, apply mixture promptly. • Apply in sufficient spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment. • Apply product in 3-7-day intervals starting at the time of colonization. Check for phytotoxicity before additional applications are made. • Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program. 	

Crop Group 6 LEGUMEVEGETABLES (SUCCULENT OR DRIED)	
Bean (<i>Lupinus</i> spp.) (includes grain lupin, sweet lupin, white lupin, and white sweet lupin); bean (<i>Phaseolus</i> spp.) (includes field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean); bean (<i>Vigna</i> spp.) (includes adzuki bean, asparagus bean, blackeyed pea, catjang, Chinese longbean, cowpea, Crowder pea, moth bean, mung bean, rice bean, southern pea, urd bean, yardlong bean); broad bean (fava bean); chickpea (garbanzo bean); guar; jackbean; lablab bean (hyacinth bean); lentil; pea (<i>Pisum</i> spp.) (includes dwarf pea, edible-pod pea, English pea, field pea, garden pea, green pea, snowpea, sugar snap pea); pigeon pea; soybean; soybean (immature seed); sword bean.	
Pests:	Instructions
Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations. Achieve thorough coverage of the canopy.
Leafhoppers, plant bugs	To achieve control, use a 1-2% v/v solution of this product. Under severe pest pressure control can be enhanced by combining a 1-2 % v/v solution of this product with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II]. Scout and make first application to control nymphs during the first generation when the majority of nymphs are in the early instar stages. Make a second application 3-7-days later to target newly emerged nymphs. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Achieve thorough coverage of the canopy.
Mites: Twospotted spider mites, Citrus rust mite, European red mite, Pacific mite, Willamette mites, Russet mite, Spider mites.	Achieve thorough coverage of the underside of leaves. Make a second application 3-5-days later to target newly emerged immatures. To achieve enhanced short-term control prior to the release of biological control agents, use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II]. Apply when mites are first observed before mite populations have become severe. In case of spider mites apply prior to webbing.
Thrips	Suppression only of exposed thrips. A 3-day re-application schedule may be necessary when thrips population is rapidly increasing. Achieve thorough coverage of the canopy.
Whiteflies	Routinely check field margins for whiteflies; these areas are usually infested first. Be especially alert for rapid increase of whitefly numbers when nearby host crops are in decline. Apply a 1-2% v/v solution of this product for stand-alone use. To achieve enhanced and residual pest control, use a 1-2% v/v solution of this product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target newly hatched nymphs. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Achieve thorough coverage of the canopy.
Powdery mildew	Stand Alone Application: Apply 1.5 - 2% v/v solution of this product when the first signs of powdery mildew appear and repeat at 7 to 10-day intervals, or as needed. Schedule a follow-up fungicide application within 7-10 days after each application when this product is used alone. Achieve thorough coverage of the canopy. Tank Mix Application: Apply a 1 - 2% v/v solution of this product with a fungicide to achieve protectant/residual control of powdery mildew. Do not mix with sulfur. Do not use within 3 days of a sulfur application. Achieve thorough coverage of the canopy.
Additional Information:	
<ul style="list-style-type: none"> • Routinely scout fields with special focus on field margins to detect early stages of colonization. • Initiate application at the time of first colonization and appearance of the pest. • Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions. • The product can be applied as a tank mix combination with a labeled companion insecticide. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Do not store mixture for an extended period of time, apply mixture promptly. • Apply in sufficient spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment. • Apply product in 3-7-day intervals starting at the time of colonization. Check for phytotoxicity before additional applications are made. • Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program. 	

Crop Group 7 FOLIAGE OF LEGUME VEGETABLES	
Plant parts of any legume vegetable included in the legume vegetables group that will be used as animal feed.	
Pests:	Instructions
Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations. Achieve thorough coverage of the canopy.
Leafhoppers, plant bugs	To achieve control, use a 1-2% v/v solution of this product. Under severe pest pressure control can be enhanced by combining a 1-2 % v/v solution of this product with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II]. Scout and make first application to control nymphs during the first generation when the majority of nymphs are in the early instar stages. Make a second application 3-7-days later to target newly emerged nymphs. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Achieve thorough coverage of the canopy.
Mites: Twospotted spider mites, Citrus rust mite, European red mite, Pacific mite, Willamette mites, Russet mite, Spider mites.	Achieve thorough coverage of the underside of leaves. Make a second application 3-5-days later to target newly emerged immatures. To achieve enhanced short-term control prior to the release of biological control agents, use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II]. Apply when mites are first observed before mite populations have become severe. In case of spider mites apply prior to webbing.
Thrips	Suppression only of exposed thrips. A 3-day re-application schedule may be necessary when thrips population is rapidly increasing. Achieve thorough coverage of the canopy.
Whiteflies	Routinely check field margins for whiteflies; these areas are usually infested first. Be especially alert for rapid increase of whitefly numbers when nearby host crops are in decline. Apply a 1-2% v/v solution of this product for stand-alone use. To achieve enhanced and residual pest control, use a 1-2% v/v solution of this product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target newly hatched nymphs. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Achieve thorough coverage of the canopy.
Powdery mildew	Stand Alone Application: Apply 1.5 - 2% v/v solution of this product when the first signs of powdery mildew appear and repeat at 7 to 10-day intervals, or as needed. Schedule a follow-up fungicide application within 7-10 days after each application when this product is used alone. Achieve thorough coverage of the canopy. Tank Mix Application: Apply a 1 - 2% v/v solution of this product with a fungicide to achieve protectant/residual control of powdery mildew. Do not mix with sulfur. Do not use within 3 days of a sulfur application. Achieve thorough coverage of the canopy.
Additional Information:	
<ul style="list-style-type: none"> • Routinely scout fields with special focus on field margins to detect early stages of colonization. • Initiate application at the time of first colonization and appearance of the pest. • Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions. • The product can be applied as a tank mix combination with a labeled companion insecticide. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Do not store mixture for an extended period of time, apply mixture promptly. • Apply in sufficient spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment. • Apply product in 3-7-day intervals starting at the time of colonization. Check for phytotoxicity before additional applications are made. • Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program. 	

Crop Group 8	
FRUITING VEGETABLES (EXCEPT CUCURBITS)	
African eggplant; bush tomato; bell pepper; cocona; currant tomato; eggplant; garden huckleberry; goji berry; groundcherry; Martynia; naranjilla; okra; pea eggplant; pepino; non-bell pepper; roselle; scarlet eggplant; sunberry; tomatillo; tomato; tree tomato; cultivars, varieties, and/or hybrids of these.	
Pests:	Instructions
Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations. Achieve thorough coverage of the canopy.
Mites: Twospotted spider mites, Citrus rust mite, European red mite, Pacific mite, Willamette mites, Russet mite, Spider mites.	Achieve thorough coverage of the underside of leaves. Make a second application 3-5-days later to target newly emerged immatures. To achieve enhanced short-term control prior to the release of biological control agents, use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II]. Apply when mites are first observed before mite populations have become severe. In case of spider mites apply prior to webbing.
Psyllids	To achieve control, use a 1-2% v/v solution of this product. Under severe pest pressure control can be enhanced by combining a 1-2 % v/v solution of this product with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II]. Scout and make first application to control nymphs during the first generation when the majority of nymphs are in the early instar stages. Make a second application 3-7-days later to target newly emerged nymphs. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Achieve thorough coverage of the canopy.
Thrips	Suppression only of exposed thrips. A 3-day re-application schedule may be necessary when thrips population is rapidly increasing. Achieve thorough coverage of the canopy.
Whiteflies	Routinely check field margins for whiteflies; these areas are usually infested first. Be especially alert for rapid increase of whitefly numbers when nearby host crops are in decline. Apply a 1-2% v/v solution of this product for stand-alone use. To achieve enhanced and residual pest control, use a 1-2% v/v solution of this product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target newly hatched nymphs. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Achieve thorough coverage of the canopy.
Powdery mildew	Stand Alone Application: Apply 1.5 - 2% v/v solution of this product when the first signs of powdery mildew appear and repeat at 7 to 10-day intervals, or as needed. Schedule a follow-up fungicide application within 7-10 days after each application when this product is used alone. Achieve thorough coverage of the canopy. Tank Mix Application: Apply a 1 - 2% v/v solution of this product with a fungicide to achieve protectant/residual control of powdery mildew. Do not mix with sulfur. Do not use within 3 days of a sulfur application. Achieve thorough coverage of the canopy.
Additional Information:	
<ul style="list-style-type: none"> • Routinely scout fields with special focus on field margins to detect early stages of colonization. • Initiate application at the time of first colonization and appearance of the pest. • Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions. • The product can be applied as a tank mix combination with a labeled companion insecticide. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Do not store mixture for an extended period of time, apply mixture promptly. • Apply in sufficient spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment. • Apply product in 3-7-day intervals starting at the time of colonization. Check for phytotoxicity before additional applications are made. • Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program. 	

Crop Group 9 CUCURBIT VEGETABLES	
Chayote (fruit); Chinese waxgourd (Chinese preserving melon); citron melon; cucumber; gherkin; gourd, edible (includes hyotan, cucuzza, hechima, Chinese okra); Momordica spp (includes balsam apple, balsam pear, bittermelon, Chinese cucumber); muskmelon (includes true cantaloupe, cantaloupe, casaba, crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon and snake melon); pumpkin; squash, summer (includes crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini); squash, winter (includes butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash); watermelon.	
Pests:	Instructions
Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations. Achieve thorough coverage of the canopy.
Leafhoppers	To achieve control, use a 1-2% v/v solution of this product. Under severe pest pressure control can be enhanced by combining a 1-2 % v/v solution of this product with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II]. Scout and make first application to control nymphs during the first generation when the majority of nymphs are in the early instar stages. Make a second application 3-7-days later to target newly emerged nymphs. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Achieve thorough coverage of the
Mites: Twospotted spider mites, Citrus rust mite, European red mite, Pacific mite, Willamette mites, Russet mite, Spider mites.	Achieve thorough coverage of the underside of leaves. Make a second application 3-5-days later to target newly emerged immatures. To achieve enhanced short-term control prior to the release of biological control agents, use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II]. Apply when mites are first observed before mite populations have become severe. In case of spider mites apply prior to webbing.
Thrips	Suppression only of exposed thrips. A 3-day re-application schedule may be necessary when thrips population is rapidly increasing. Achieve thorough coverage of the canopy.
Whiteflies	Routinely check field margins for whiteflies; these areas are usually infested first. Be especially alert for rapid increase of whitefly numbers when nearby host crops are in decline. Apply a 1-2% v/v solution of this product for stand-alone use. To achieve enhanced and residual pest control, use a 1-2% v/v solution of this product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target newly hatched nymphs. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Achieve thorough coverage of the canopy.
Powdery mildew	Stand Alone Application: Apply 1.5 - 2% v/v solution of this product when the first signs of powdery mildew appear and repeat at 7 to 10-day intervals, or as needed. Schedule a follow-up fungicide application within 7-10 days after each application when this product is used alone. Achieve thorough coverage of the canopy. Tank Mix Application: Apply a 1 - 2% v/v solution of this product with a fungicide to achieve protectant/residual control of powdery mildew. Do not mix with sulfur. Do not use within 3 days of a sulfur application. Achieve thorough coverage of the canopy.
Additional Information:	
<ul style="list-style-type: none"> • Routinely scout fields with special focus on field margins to detect early stages of colonization. • Initiate application at the time of first colonization and appearance of the pest. • Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions. • The product can be applied as a tank mix combination with a labeled companion insecticide. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Do not store mixture for an extended period of time, apply mixture promptly. • Apply in sufficient spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment. • Apply product in 3-7-day intervals starting at the time of colonization. Check for phytotoxicity before additional applications are made. • Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program. 	

Crop Group 10 CITRUS FRUITS	
Australian desert lime; Australian finger-lime; Australian round lime; Brown River finger lime; calamondin; citron; citrus hybrids; grapefruit; Japanese summer grapefruit; kumquat; lemon; lime; Mediterranean mandarin; mount white lime; New Guinea wild lime; orange, sour; orange, sweet; pummelo; Russell River lime; satsuma mandarin; sweet lime; tachibana orange; Tahiti lime; tangelo; tangerine (mandarin); tangor; trifoliolate orange; uni fruit; cultivars, varieties, and/or hybrids of these.	
Pests:	Instructions
Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations. Achieve thorough coverage of the canopy.
Mites: Twospotted spider mites, Citrus rust mite, European red mite, Pacific mite, Willamette mites, Russet mite, Spider mites.	Achieve thorough coverage of the underside of leaves. Make a second application 3-5-days later to target newly emerged immatures. To achieve enhanced short-term control prior to the release of biological control agents, use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II]. Apply when mites are first observed before mite populations have become severe. In case of spider mites apply prior to webbing.
Psyllids	To achieve control, use a 1-2% v/v solution of this product. Under severe pest pressure control can be enhanced by combining a 1-2 % v/v solution of this product with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II]. Scout and make first application to control nymphs during the first generation when the majority of nymphs are in the early instar stages. Make a second application 3-7-days later to target newly emerged nymphs. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Achieve thorough coverage of the canopy.
Scales	Suppression only. Apply a 1 to 2% v/v spray to target crawler stage. Apply with sufficient amount of water to uniformly wet all infested plant parts especially targeting shoot terminals and the underside of leaves. Make a second application 3-5-days later to target newly emerged crawlers.
Whiteflies	Routinely check field margins for whiteflies; these areas are usually infested first. Be especially alert for rapid increase of whitefly numbers when nearby host crops are in decline. Apply a 1-2% v/v solution of this product for stand-alone use. To achieve enhanced and residual pest control, use a 1-2% v/v solution of this product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target newly hatched nymphs. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Achieve thorough coverage of the canopy.
Powdery mildew	Stand Alone Application: Apply 1.5 - 2% v/v solution of this product when the first signs of powdery mildew appear and repeat at 7 to 10-day intervals, or as needed. Schedule a follow-up fungicide application within 7-10 days after each application when this product is used alone. Achieve thorough coverage of the canopy. Tank Mix Application: Apply a 1 - 2% v/v solution of this product with a fungicide to achieve protectant/residual control of powdery mildew. Do not mix with sulfur. Do not use within 3 days of a sulfur application. Achieve thorough coverage of the canopy.
Additional Information:	
<ul style="list-style-type: none"> • Apply in sufficient spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment. • Application of excessive water volumes will increase the potential for fruit injury by causing collection of spray on the bottom of fruit, especially when poor drying conditions exist. • Fruit marking may occur when sooty mold is present. • Routinely scout fields with special focus on field margins to detect early stages of colonization. • Initiate application at the time of first colonization and appearance of the pest. • Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions. • The product can be applied as a tank mix combination with a labeled companion insecticide. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Do not store mixture for an extended period of time, apply mixture as soon as possible. • Apply product in 3-7-day intervals starting at the time of colonization. Check for phytotoxicity before additional applications are made. 	

Crop Group 11 POME FRUITS	
Apple; azarole; crabapple; loquat; mayhaw; medlar; pear; pear, Asian; quince; quince, Chinese; quince, Japanese; tejocote; cultivars, varieties, and/or hybrids of these.	
Pests:	Instructions
Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations. Achieve thorough coverage of the canopy..
Leafhoppers	To achieve control, use a 1-2% v/v solution of this product. Under severe pest pressure control can be enhanced by combining a 1-2 % v/v solution of this product with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II]. Scout and make first application to control nymphs during the first generation when the majority of nymphs are in the early instar stages. Make a second application 3-7-days later to target newly emerged nymphs. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Achieve thorough coverage of the canopy.
Mites: Twospotted spider mites, Citrus rust mite, European red mite, Pacific mite, Willamette mites, Russet mite, Spider mites.	Achieve thorough coverage of the underside of leaves. Make a second application 3-5-days later to target newly emerged immatures. To achieve enhanced short-term control prior to the release of biological control agents, use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II]. Apply when mites are first observed before mite populations have become severe. In case of spider mites apply prior to webbing.
Pear psylla	To control pear psylla, apply a 1 to 2% v/v solution of this product alone or 0.25%-0.5% v/v solution of the product when using with another insecticide partner in tank mix. Apply at delayed dormant stage to control winterform adults and newly hatched nymphs. Time spray application at first sign of colonization. Do not tank mix it with oil. Do not apply during bloom. Make follow up applications on processing pears at petal fall targeting of 1 st and 2 nd instar nymphs. Coordinating application timing with neighbors can reduce the risk of reinfestation.
Scales	Suppression only. Apply a 1 to 2% v/v spray to target crawler stage. Apply with sufficient amount of water to uniformly wet all infested plant parts especially targeting shoot terminals and the underside of leaves. Make a second application 3-5-days later to target newly emerged crawlers.
Thrips	Suppression only of exposed thrips. A 3-day re-application schedule may be necessary when thrips population is rapidly increasing. Achieve thorough coverage of the canopy.
Powdery mildew	Stand Alone Application: Apply 1.5 - 2% v/v solution of this product when the first signs of powdery mildew appear and repeat at 7 to 10-day intervals, or as needed. Schedule a follow-up fungicide application within 7-10 days after each application when this product is used alone. Achieve thorough coverage of the canopy. Tank Mix Application: Apply a 1 - 2% v/v solution of this product with a fungicide to achieve protectant/residual control of powdery mildew. Do not mix with sulfur. Do not use within 3 days of a sulfur application. Achieve thorough coverage of the canopy.
Additional Information:	
<ul style="list-style-type: none"> Do not tank mix it with oil. Do not apply during bloom. Achieve thorough coverage of the canopy but minimize run off using an air blast or other appropriate sprayer. Application of excessive water volumes will increase the potential for fruit injury by causing collection of spray on the bottom of fruit, especially when poor drying conditions exist. Do not apply this product after the delayed dormant stage on fresh market pear varieties including d'Anjou and Asian pears. Applications after fruit set may cause marking which can reduce market value of the fruit. Routinely scout fields with special focus on field margins to detect early stages of colonization. Initiate application at the time of first colonization and appearance of the pest. Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions. The product can be applied as a tank mix combination with a labeled companion insecticide. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Do not store mixture for an extended period of time, apply mixture as soon as possible. Apply product in 3-7-day intervals starting at the time of colonization. Check for phytotoxicity before additional applications are made. Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program. To mitigate sooty mold and pear psylla honeydew at pre-harvest on pear, apply 0.25% v/v per 400 gallons at the rate of 400-800 gallons of spray volume per acre. Apply sufficient spray solution to the tree to completely remove honeydew from the fruit and leaves. To avoid possible fruit marking, users must follow the product application with a water rinse of equal amount of volume within 12 hours of the product application. Use a minimum retreatment interval of 7-10 days during growing season. Do not exceed three applications per season. Do not apply within 7 days of an oil, calcium or sulfur application. Cease spray activities at canopy temperatures above 85 degrees Fahrenheit. Avoid applications when trees are under environmental stress. The pH of the spray solution should be a neutral (7.0) pH or higher. A defoaming agent may be needed for use in sprayers equipped with an agitator. Use it with care on pears after delayed dormant stage due to potential for fruit marking. 	

Crop Group 12	
STONE FRUITS	
Apricot; apricot, Japanese; capulin; cherry, black; cherry, Nanking; cherry, sweet; cherry, tart; Jujube, Chinese; nectarine; peach; plum; plum, American; plum, beach; plum, Canada; plum, cherry; plum, Chickasaw; plum, Damson; plum, Japanese; plum, Klamath; plum, prune; plumcot; sloe; cultivars, varieties, and/or hybrids of these.	
Pests:	Instructions
Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations. Achieve thorough coverage of the canopy.
Mites: Twospotted spider mites, Citrus rust mite, European red mite, Pacific mite, Willamette mites, Russet mite, Spider mites.	Achieve thorough coverage of the underside of leaves. Make a second application 3-5-days later to target newly emerged immatures. To achieve enhanced short-term control prior to the release of biological control agents, use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II]. Apply when mites are first observed before mite populations have become severe. In case of spider mites apply prior to webbing.
Plant bugs	To achieve control, use a 1-2% v/v solution of this product. Under severe pest pressure control can be enhanced by combining a 1-2 % v/v solution of this product with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II]. Scout and make first application to control nymphs during the first generation when the majority of nymphs are in the early instar stages. Make a second application 3-7-days later to target newly emerged nymphs. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Achieve
Scales	Suppression only. Apply a 1 to 2% v/v spray to target crawler stage. Apply with sufficient amount of water to uniformly wet all infested plant parts especially targeting shoot terminals and the underside of leaves. Make a second application 3-5-days later to target newly emerged crawlers.
Spotted wing Drosophila	Suppression only. Monitor to detect the first appearance of the pest. Initiate application at the time of first appearance of the pest. Use a 1-2% v/v solution of this product. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-5-days later. Rotate with other registered products to suppress egg laying.
Thrips	Suppression only of exposed thrips. A 3-day re-application schedule may be necessary when thrips population is rapidly increasing. Achieve thorough coverage of the canopy.
Powdery mildew	Stand Alone Application: Apply 1.5 - 2% v/v solution of this product when the first signs of powdery mildew appear and repeat at 7 to 10-day intervals, or as needed. Schedule a follow-up fungicide application within 7-10 days after each application when this product is used alone. Achieve thorough coverage of the canopy. Tank Mix Application: Apply a 1 - 2% v/v solution of this product with a fungicide to achieve protectant/residual control of powdery mildew. Do not mix with sulfur. Do not use within 3 days of a sulfur application. Achieve thorough coverage of the canopy.
Additional Information:	
<ul style="list-style-type: none"> • Achieve thorough coverage of the canopy but minimize run off using an air blast or other appropriate sprayer. Application of excessive water volumes will increase the potential for fruit injury by causing collection of spray on the bottom of fruit, especially when poor drying conditions exist. • Concentrate (air blast) applications are specified with a maximum volume of 100 gallons per acre on smooth skinned fruits and 175 gallons per acre on peaches. Do not make dilute spray applications on smooth skinned fruit after fruit formation. This product is not specified for use on yellow skinned nectarine varieties. • Do not apply the product to sweet cherries between fruit formation and harvest. • Nursery and non-bearing trees can be sprayed to runoff with no more than 3 consecutive applications with 7-day intervals. • Routinely scout fields with special focus on field margins to detect early stages of colonization. • Initiate application at the time of first colonization and appearance of the pest. • Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions. • The product can be applied as a tank mix combination with a labeled companion insecticide. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Do not store mixture for an extended period of time, apply mixture as soon as possible. • Apply product in 3-7-day intervals starting at the time of colonization. Check for phytotoxicity before additional applications are made. • Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program. 	

Crop Group 13 BERRY AND SMALL FRUITS	
Amur river grape; aronia berry; bayberry; bearberry; bilberry; blackberry (including Andean blackberry, arctic blackberry, bingleberry, black satin berry, boysenberry, brombeere, California blackberry, Chesterberry, Cherokee blackberry, Cheyenne blackberry, common blackberry, coryberry, darrowberry, dewberry, Dirksen thornless berry, evergreen blackberry, Himalayaberry, hullberry, lavacaberry, loganberry, lowberry, Lucretiaberry, mammoth blackberry, marionberry, mora, mures deronce, nectarberry, Northern dewberry, olallieberry, Orgeon evergreen berry, phenomenalberry, rangeberry, ravenberry, rossberry, Shawnee blackberry, Southern dewberry, tayberry, youngberry, zarzamora, and cultivars, varieties and/or hybrids of these); blueberry, highbush; blueberry, lowbush; buffalo currant; buffaloberry; che; Chilean guava; chokecherry; cloudberry; cranberry; cranberry, highbush; currant, black; currant, red; elderberry; European barberry; gooseberry; grape; honeysuckle, edible; huckleberry; jostaberry; Juneberry (Saskatoon berry); kiwifruit, fuzzy; kiwifruit, hardy; lingonberry; maypop; mountain pepper berries; mulberry; muntries; native currant; partridgeberry; phalsa; pincherry; raspberry, black and red; riberry; salal; schisandra berry; sea buckthorn; serviceberry; strawberry; wild raspberry; cultivars, varieties, and/or hybrids of these.	
Pests:	Instructions
Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations. Achieve thorough coverage of the canopy.
Leafhoppers	To achieve control, use a 1-2% v/v solution of this product. Under severe pest pressure control can be enhanced by combining a 1-2 % v/v solution of this product with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II]. Scout and make first application to control nymphs during the first generation when the majority of nymphs are in the early instar stages. Make a second application 3-7-days later to target newly emerged nymphs. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Achieve thorough
Scales	Suppression only. Apply a 1 to 2% v/v spray to target crawler stage. Apply with sufficient amount of water to uniformly wet all infested plant parts especially targeting shoot terminals and the underside of leaves. Make a second application 3-5-days later to target newly emerged crawlers.
Spotted wing Drosophila	Suppression only. Monitor to detect the first appearance of the pest. Initiate application at the time of first appearance of the pest. Use a 1-2% v/v solution of this product. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-5-days later. Rotate with other registered products to suppress egg laying.
Thrips	Suppression only of exposed thrips. A 3-day re-application schedule may be necessary when thrips population is rapidly increasing. Achieve thorough coverage of the canopy.
Powdery mildew	Stand Alone Application: Apply 1.5 - 2% v/v solution of this product when the first signs of powdery mildew appear and repeat at 7 to 10-day intervals, or as needed. Schedule a follow-up fungicide application within 7-10 days after each application when this product is used alone. Achieve thorough coverage of the canopy. Tank Mix Application: Apply a 1 - 2% v/v solution of this product with a fungicide to achieve protectant/residual control of powdery mildew. Do not mix with sulfur. Do not use within 3 days of a sulfur application. Achieve thorough coverage of the canopy.
Additional Information:	
<ul style="list-style-type: none"> • Achieve thorough coverage of the canopy but minimize run off using an air blast or other appropriate sprayer. Application of excessive water volumes will increase the potential for fruit injury by causing collection of spray on the bottom of fruit, especially when poor drying conditions exist. • Routinely scout fields with special focus on field margins to detect early stages of colonization. • Initiate application at the time of first colonization and appearance of the pest. • Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions. • The product can be applied as a tank mix combination with a labeled companion insecticide. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Do not store mixture for an extended period of time, apply mixture as soon as possible. • Apply product in 3-7-day intervals starting at the time of colonization. Check for phytotoxicity before additional applications are made. • This product may alter the waxy bloom and or cause marking on the surface of grapes which can affect the quality rating of table grapes at harvest. To reduce potential for fruit injury, do not apply in greater than 75 gallons of water per acre on table grapes after berries are 6 to 7 mm in diameter. Do not apply this product to Calmeria or Italia varieties of grapes. • Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program. 	

Crop Group 14	
TREE NUTS	
African nut-tree; almond; beechnut; Brazil nut; Brazilian pine; bunya; bur oak; butternut; Cajou nut; candlenut; cashew; chestnut; chinquapin; coconut; coquito nut; dika nut; ginkgo; Guiana chestnut; hazelnut (filbert); heartnut; hickory nut; Japanese horse-chestnut; macadamia nut; mongongo nut; monkey-pot; monkey puzzle nut; Okari nut; Pachira nut; peach palm nut; pecan; pequi; Pili nut; pine nut; pistachio; Sapucaia nut; tropical almond; walnut, black; walnut, English; yellowhorn; cultivars, varieties, and/or hybrids of these.	
Pests:	Instructions
Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations. Achieve thorough coverage of the canopy.
Mites: Twospotted spider mites, Citrus rust mite, European red mite, Pacific mite, Willamette mites, Russet mite, Spider mites.	Achieve thorough coverage of the underside of leaves. Make a second application 3-5-days later to target newly emerged immatures. To achieve enhanced short-term control prior to the release of biological control agents, use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II]. Apply when mites are first observed before mite populations have become severe. In case of spider mites apply prior to webbing.
Scales	Suppression only. Apply a 1 to 2% v/v spray to target crawler stage. Apply with sufficient amount of water to uniformly wet all infested plant parts especially targeting shoot terminals and the underside of leaves. Make a second application 3-5-days later to target newly emerged crawlers.
Powdery mildew	Stand Alone Application: Apply 1.5 - 2% v/v solution of this product when the first signs of powdery mildew appear and repeat at 7 to 10-day intervals, or as needed. Schedule a follow-up fungicide application within 7-10 days after each application when this product is used alone. Achieve thorough coverage of the canopy. Tank Mix Application: Apply a 1 - 2% v/v solution of this product with a fungicide to achieve protectant/residual control of powdery mildew. Do not mix with sulfur. Do not use within 3 days of a sulfur application. Achieve thorough coverage of the canopy.
Additional Information:	
<ul style="list-style-type: none"> • Achieve thorough coverage of the canopy but minimize run off using an air blast or other appropriate sprayer. Application of excessive water volumes will increase the potential for injury especially when poor drying conditions exist. • Routinely scout fields with special focus on field margins to detect early stages of colonization. • Initiate application at the time of first colonization and appearance of the pest. • Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions. • The product can be applied as a tank mix combination with a labeled companion insecticide. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Do not store mixture for an extended period of time, apply mixture as soon as possible. • Apply product in 3-7-day intervals starting at the time of colonization. Check for phytotoxicity before additional applications are made. • Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program. 	

Crop Group 15	
CEREAL GRAINS	
Barley; buckwheat; corn; millet, pearl; millet, proso; oats; popcorn; rice; rye; sorghum (milo); teosinte; triticale; wheat; wild rice.	
Pests:	Instructions
Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations. Achieve thorough coverage of the canopy.
Leafhoppers	To achieve control, use a 1-2% v/v solution of this product. Under severe pest pressure control can be enhanced by combining a 1-2 % v/v solution of this product with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II]. Scout and make first application to control nymphs during the first generation when the majority of nymphs are in the early instar stages. Make a second application 3-7-days later to target newly emerged nymphs. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Achieve thorough coverage of the canopy.
Thrips	Suppression only of exposed thrips. A 3-day re-application schedule may be necessary when thrips population is rapidly increasing. Achieve thorough coverage of the canopy.
Additional Information:	
<ul style="list-style-type: none"> • Routinely scout fields with special focus on field margins to detect early stages of colonization. • Initiate application at the time of first colonization and appearance of the pest. • Stand Alone Application: Use 4 pints of this product per acre when applications are made in 3 - 25 gallons of water per acre. Use a 2% v/v spray solution of this product when 25 or more gallons of water are applied per acre. • Tank Mix Application: When used in combination with other labeled insecticides, use 0.75 to 4 pints of this product per acre when applied in 3 - 25 gallons of water per acre. Use a 1 - 2% v/v solution of this product when greater than 25 gallons of water are applied per acre. Apply product at 1-2% volume by volume solution. Do not store mixture for an extended period of time, apply mixture as soon as possible. Please see dilution table for specific instructions. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. • Apply in sufficient spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment. • Apply to wet (to minimize run off) with appropriate spray equipment. • Apply product in 3-7-day intervals starting at the time of colonization. Check for phytotoxicity before additional applications are made. • Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program. 	

Crop Group 17
GRASS FORAGE, FODDER, AND HAY

Forage, fodder, stover, and hay of any grass, Gramineae/Poaceae family (either green or cured) except sugarcane and those included in the cereal grains group, that will be fed to or grazed by livestock, all pasture and range grasses and grasses grown for hay or silage.

Pests:	Instructions
Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations. Achieve thorough coverage of the canopy.
Leafhoppers	To achieve control, use a 1-2% v/v solution of this product. Under severe pest pressure control can be enhanced by combining a 1-2 % v/v solution of this product with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II]. Scout and make first application to control nymphs during the first generation when the majority of nymphs are in the early instar stages. Make a second application 3-7-days later to target newly emerged nymphs. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Achieve thorough coverage of the canopy.
Thrips	Suppression only of exposed thrips. A 3-day re-application schedule may be necessary when thrips population is rapidly increasing. Achieve thorough coverage of the canopy.

Additional Information:

- Routinely scout fields with special focus on field margins to detect early stages of colonization.
- Initiate application at the time of first colonization and appearance of the pest.
- Stand Alone Application: Use 4 pints of this product per acre when applications are made in 3 - 25 gallons of water per acre. Use a 2% v/v spray solution of this product when 25 or more gallons of water are applied per acre.
- Tank Mix Application: When used in combination with other labeled insecticides, use 0.75 to 4 pints of this product per acre when applied in 3 - 25 gallons of water per acre. Use a 1 - 2% v/v solution of this product when greater than 25 gallons of water are applied per acre. Apply product at 1-2% volume by volume solution. Do not store mixture for an extended period of time, apply mixture as soon as possible. Please see dilution table for specific instructions. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations.
- Apply in sufficient spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment.
- Apply product in 3-7-day intervals starting at the time of colonization. Check for phytotoxicity before additional applications are made.
- Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program.

Crop Group 18
NONGRASS ANIMAL FEEDS (FORAGE, FODDER, STRAW AND HAY) GRASS FORAGE, FODDER, AND HAY

Alfalfa; bean, velvet; clover (*Trifolium* spp., *Medicago* spp.); kudzu; lespedeza; lupin; sainfoin; trefoil; vetch; vetch, crown; vetch, milk.

Pests:	Instructions
Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations. Achieve thorough coverage of the canopy.
Leafhoppers	To achieve control, use a 1-2% v/v solution of this product. Under severe pest pressure control can be enhanced by combining a 1-2 % v/v solution of this product with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II]. Scout and make first application to control nymphs during the first generation when the majority of nymphs are in the early instar stages. Make a second application 3-7-days later to target newly emerged nymphs. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Achieve thorough coverage of the canopy.
Thrips	Suppression only of exposed thrips. A 3-day re-application schedule may be necessary when thrips population is rapidly increasing. Achieve thorough coverage of the canopy.

- Additional Information:**
- Routinely scout fields with special focus on field margins to detect early stages of colonization.
 - Initiate application at the time of first colonization and appearance of the pest.
 - Stand Alone Application: Use 4 pints of this product per acre when applications are made in 3 - 25 gallons of water per acre. Use a 2% v/v spray solution of this product when 25 or more gallons of water are applied per acre.
 - Tank Mix Application: When used in combination with other labeled insecticides, use 0.75 to 4 pints of this product per acre when applied in 3 - 25 gallons of water per acre. Use a 1 - 2% v/v solution of this product when greater than 25 gallons of water are applied per acre. Apply product at 1-2% volume by volume solution. Do not store mixture for an extended period of time, apply mixture as soon as possible. Please see dilution table for specific instructions. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations.
 - Apply in sufficient spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment.
 - Apply product in 3-7-day intervals starting at the time of colonization. Check for phytotoxicity before additional applications are made.
 - Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program.

Crop Group 20 OILSEED GROUP	
Borage; calendula; castor oil plant; Chinese tallowtree; cottonseed; crambe; cuphea; echium; euphorbia; evening primrose; flax seed; gold of pleasure; hare's ear mustard; jojoba; lesquerella; lunaria; meadowfoam; milkweed; mustard seed; niger seed; oil radish; poppy seed; rapeseed; rose hip; safflower; sesame; stokes aster; sunflower; sweet rocket; tallowwood; tea oil plant; vernonia; cultivars, varieties, and/or hybrids of these.	
Pests:	Instructions
Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations. Achieve thorough coverage of the canopy.
Leafhoppers	To achieve control, use a 1-2% v/v solution of this product. Under severe pest pressure control can be enhanced by combining a 1-2 % v/v solution of this product with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II]. Scout and make first application to control nymphs during the first generation when the majority of nymphs are in the early instar stages. Make a second application 3-7-days later to target newly emerged nymphs. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Achieve thorough coverage of the canopy.
Thrips	Suppression only of exposed thrips. A 3-day re-application schedule may be necessary when thrips population is rapidly increasing. Achieve thorough coverage of the canopy.
Additional Information:	
<ul style="list-style-type: none"> • Routinely scout fields with special focus on field margins to detect early stages of colonization. • Initiate application at the time of first colonization and appearance of the pest. • Stand Alone Application: Use 4 pints of this product per acre when applications are made in 3 - 25 gallons of water per acre. Use a 2% v/v spray solution of this product when 25 or more gallons of water are applied per acre. • Tank Mix Application: When used in combination with other labeled insecticides, use 0.75 to 4 pints of this product per acre when applied in 3 - 25 gallons of water per acre. Use a 1 - 2% v/v solution of this product when greater than 25 gallons of water are applied per acre. Apply product at 1-2% volume by volume solution. Do not store mixture for an extended period of time, apply mixture as soon as possible. Please see dilution table for specific instructions. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. • This product may be tank mixed with penetrator type adjuvants for application to cotton only if prior use under local use conditions has demonstrated plant safety. • Apply in sufficient spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment. • Apply product in 3-7-day intervals starting at the time of colonization. Check for phytotoxicity before additional applications are made. • Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program. 	

Crop Group 22	
STALK, STEM AND LEAF PETIOLE VEGETABLES	
Agave; aloe vera; asparagus; bamboo, shoots; cardoon; celery; celery, Chinese; celtuce; fennel, Florence, fresh leaves and stalk; fern, edible, fiddlehead; fuki; kale, sea; kohlrabi; palm hearts; prickly pear, pads; prickly pear, Texas, pads; rhubarb; udo; zuiki; cultivars, varieties, and hybrids of these commodities.	
Pests:	Instructions
Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations. Achieve thorough coverage of the canopy.
Thrips	Suppression only of exposed thrips. A 3-day re-application schedule may be necessary when thrips population is rapidly increasing. Achieve thorough coverage of the canopy.
Powdery mildew	Stand Alone Application: Apply 1.5 - 2% v/v solution of this product when the first signs of powdery mildew appear and repeat at 7 to 10-day intervals, or as needed. Schedule a follow-up fungicide application within 7-10 days after each application when this product is used alone. Achieve thorough coverage of the canopy. Tank Mix Application: Apply a 1 - 2% v/v solution of this product with a fungicide to achieve protectant/residual control of powdery mildew. Do not mix with sulfur. Do not use within 3 days of a sulfur application. Achieve thorough coverage of the canopy.
Additional Information:	
<ul style="list-style-type: none"> • Routinely scout fields with special focus on field margins to detect early stages of colonization. • Initiate application at the time of first colonization and appearance of the pest. • Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions. • The product can be applied as a tank mix combination with a labeled companion insecticide. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Do not store mixture for an extended period of time, apply mixture as soon as possible. • Apply in sufficient spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment. • Apply product in 3-7-day intervals starting at the time of colonization. Check for phytotoxicity before additional applications are made. • Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program. 	

Crop Group 23	
TROPICAL AND SUBTROPICAL FRUIT, EDIBLE PEEL	
<p>Acai; acerola; achachairu; African plum; agritos; almondette; ambarella; apak palm; appleberry; araza; arbutus berry; babaco; bacaba palm; bacabade-leque; bayberry, red; bignay; bilimbi; borojo; breadnut; cabeluda; cajou, fruit; cambuca; carandas-plum; carob; cashew apple; Ceylon iron wood; Ceylon olive; cherry-of-the-RioGrande; Chinese olive, black; Chinese olive, white; chirauli-nut; ciruela verde; cocoplum; date; Davidson's plum; desert-date; doum palm coconut; false sandalwood; feijoa; fig; fragrant manjack; gooseberry, abyssinian; gooseberry, Ceylon; gooseberry, Indian; gooseberry, otaheite; governor's plum; grumichama; guabiroba; guava; guava berry; guava, Brazilian; guava, cattley; guava, Costa Rican; guava, Para; guava, purple strawberry; guava, strawberry; guava, yellow strawberry; guayabillo; illawarra plum; imbe; imbu; Indianplum; jaboticaba; Jamaica-cherry; jambolan; jelly palm; jujube, Indian; kaffir-plum; kakadu plum; kapundung; karanda; kwai muk; lemon aspen; mangaba; Marian plum; mombin, Malayan; mombin, purple; mombin, yellow; monkeyfruit; monos plum; mountain cherry; nance; natal plum; noni; olive; papaya, mountain; pataua; peach palm, fruit; persimmon, black; persimmon, Japanese; pitomba; plum-of-Martinique; pomerac; rambai; rose apple; rukam; rumberry; sea grape; sentul; sete-capotes; silver aspen; starfruit; Surinam cherry; tamarind; uvalha; water apple; water pear; water berry; wax jambu; cultivars, varieties, and hybrids of these commodities.</p>	
Pests:	Instructions
Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations. Achieve thorough coverage of the canopy.
Mites: Twospotted spider mites, Citrus rust mite, European red mite, Pacific mite, Willamette mites, Russet mite, Spider mites.	Achieve thorough coverage of the underside of leaves. Make a second application 3-5-days later to target newly emerged immatures. To achieve enhanced short-term control prior to the release of biological control agents, use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II]. Apply when mites are first observed before mite populations have become severe. In case of spider mites apply prior to webbing.
Psyllids	To achieve control, use a 1-2% v/v solution of this product. Under severe pest pressure control can be enhanced by combining a 1-2 % v/v solution of this product with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II]. Scout and make first application to control nymphs during the first generation when the majority of nymphs are in the early instar stages. Make a second application 3-7-days later to target newly emerged nymphs. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Achieve thorough coverage of the canopy.
Scales	Suppression only. Apply a 1 to 2% v/v spray to target crawler stage. Apply with sufficient amount of water to uniformly wet all infested plant parts especially targeting shoot terminals and the underside of leaves. Make a second application 3-5-days later to target newly emerged crawlers.
Thrips	Suppression only of exposed thrips. A 3-day re-application schedule may be necessary when thrips population is rapidly increasing. Achieve thorough coverage of the canopy.
Whiteflies	Routinely check field margins for whiteflies; these areas are usually infested first. Be especially alert for rapid increase of whitefly numbers when nearby host crops are in decline. Apply a 1-2% v/v solution of this product for stand-alone use. To achieve enhanced and residual pest control, use a 1-2% v/v solution of this product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target newly hatched nymphs. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Achieve thorough coverage of the canopy.
Additional Information:	
<ul style="list-style-type: none"> • Routinely scout fields with special focus on field margins to detect early stages of colonization. • Initiate application at the time of first colonization and appearance of the pest. • Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions. • The product can be applied as a tank mix combination with a labeled companion insecticide. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Do not store mixture for an extended period of time, apply mixture as soon as possible. • Apply in sufficient spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment. • Apply product in 3-7-day intervals starting at the time of colonization. Check for phytotoxicity before additional applications are made. • Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program. 	

Crop Group 24 TROPICAL AND SUBTROPICAL FRUIT, INEDIBLE PEEL	
Abiu; aisen; akee apple; atemoya; avocado; avocado, Guatemalan; avocado, Mexican; avocado, West Indian; bacury; bael fruit; banana; banana, dwarf; binjai; biriba; breadfruit; Burmese grape; canistel; cat's-eyes; champedak; cherimoya; cupuacu; custard apple; dragon fruit; durian; elephant-apple; etambe; granadilla; granadilla, giant; ilama; inga; jackfruit; jatoba; karuka; kei apple; langsai; lanjui; longan; lucuma; lychee; mabolo; madras-thorn; mammy-apple; manduro; mango; mango, horse; mango, Saipan; mangosteen; marang; marmaladebox; matisia; mesquite; mongongo; fruit; monkey-bread-tree; monstera; nicobarbreadfruit; paho; pandanus; papaya; passionflower, winged-stem; passionfruit; passionfruit, banana; passionfruit, purple; passionfruit, yellow; pawpaw, common; pawpaw, small-flower; pelipisan; pequi; pequia; persimmon, American; pineapple; pitahaya; pitaya; pitaya, amarillo; pitaya, roja; pitaya, yellow; plantain; pomegranate; poshte; prickly pear, fruit; prickly pear, Texas, fruit; pulasan; quandong; rambutan; saguaro; sapodilla; sapote, black; sapote, green; sapote, mamey; sapote, white; sataw; satinleaf; screw-pine; Sierra Leone-tamarind; soncoya; soursop; Spanish lime; star apple; sugar apple; sun sapote; tamarind-of-the-Indies; velvet tamarind; wampi; white star apple; wild loquat; cultivars, varieties, and hybrids of these commodities.	
Pests:	Instructions
Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations. Achieve thorough coverage of the canopy.
Lace bugs	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations.
Psyllids	To achieve control, use a 1-2% v/v solution of this product. Under severe pest pressure control can be enhanced by combining a 1-2 % v/v solution of this product with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II]. Scout and make first application to control nymphs during the first generation when the majority of nymphs are in the early instar stages. Make a second application 3-7-days later to target newly emerged nymphs. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Achieve thorough
Mites: Twospotted spider mites, Citrus rust mite, European red mite, Pacific mite, Willamette mites, Russet mite, Spider mites.	Achieve thorough coverage of the underside of leaves. Make a second application 3-5-days later to target newly emerged immatures. To achieve enhanced short-term control prior to the release of biological control agents, use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II]. Apply when mites are first observed before mite populations have become severe. In case of spider mites apply prior to webbing.
Scales	Suppression only. Apply a 1 to 2% v/v spray to target crawler stage. Apply with sufficient amount of water to uniformly wet all infested plant parts especially targeting shoot terminals and the underside of leaves. Make a second application 3-5-days later to target newly emerged crawlers.
Thrips	Suppression only of exposed thrips. A 3-day re-application schedule may be necessary when thrips population is rapidly increasing. Achieve thorough coverage of the canopy.
Additional Information:	
<ul style="list-style-type: none"> • Routinely scout fields with special focus on field margins to detect early stages of colonization. • Initiate application at the time of first colonization and appearance of the pest. • Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions. • The product can be applied as a tank mix combination with a labeled companion insecticide. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Do not store mixture for an extended period of time, apply mixture as soon as possible. • Apply in sufficient spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment. • Apply product in 3-7-day intervals starting at the time of colonization. Check for phytotoxicity before additional applications are made. • Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program. 	

Crop Group 25**HERBS AND SPICES**

Agrimony, fresh leaves; Agrimony, dried leaves; Amla, fresh leaves; Amla, dried leaves; Angelica, fresh leaves; Angelica, dried leaves; Angelica, dahurian, fresh leaves; Angelica, dahurian, dried leaves; Applemint, fresh leaves; Applemint, dried leaves; Avarum, fresh leaves; Avarum, dried leaves; Balloon pea, fresh leaves; Balloon pea, dried leaves; Balm, fresh leaves; Balm, dried leaves; Barrenwort, fresh leaves; Barrenwort, dried leaves; Basil, fresh leaves; Basil, dried leaves; Basil, American, fresh leaves; Basil, American, dried leaves; Basil, Greek, fresh leaves; Basil, Greek, dried leaves; Basil, holy, fresh leaves; Basil, holy, dried leaves; Basil, lemon, fresh leaves; Basil, lemon, dried leaves; Basil, Russian, fresh leaves; Basil, Russian, dried leaves; Bay, fresh leaves; Bay, dried leaves; Bearberry, fresh leaves; Bearberry, dried leaves; Bisongrass, fresh leaves; Bisongrass, dried leaves; Blue mallow, fresh leaves; Blue mallow, dried leaves; Boneset, fresh leaves; Boneset, dried leaves; Borage, fresh leaves; Borage, dried leaves; Borage, Indian, fresh leaves; Borage, Indian, dried leaves; Burnet, fresh leaves; Burnet, dried leaves; Burnet, garden, fresh leaves; Burnet, garden, dried leaves; Burnet, salad, fresh leaves; Burnet, salad, dried leaves; Butterbur, fresh leaves; Butterbur, dried leaves; Calamint, fresh leaves; Calamint, dried leaves; Calamint, large-flower, fresh leaves; Calamint, large-flower, dried leaves; Calamint, lesser, fresh leaves; Calamint, lesser, dried leaves; Calendula, fresh leaves; Calendula, dried leaves; Caltrop, fresh leaves; Caltrop, dried leaves; Camomile (Chamomile), fresh leaves; Camomile (Chamomile) dried leaves; Camomile (Chamomile), German, fresh leaves; Camomile (Chamomile), German, dried leaves; Camomile (Chamomile), Roman, fresh leaves; Camomile (Chamomile), Roman, dried leaves; Caraway, fresh leaves; Caraway, dried leaves; Cat's claw, fresh leaves; Cat's claw, dried leaves; Catnip, fresh leaves; Catnip, dried leaves; Catnip, Japanese, fresh leaves; Catnip, Japanese, dried leaves; Celandine, greater, fresh leaves; Celandine, greater, dried leaves; Celandine, lesser, fresh leaves; Celandine, lesser, dried leaves; Celery, dried leaves; Centaury, fresh leaves; Centaury, dried leaves; Chaste tree, fresh leaves; Chaste tree, dried leaves; Chaste tree, Chinese, fresh leaves; Chaste tree, Chinese, dried leaves; Chervil, dried leaves; Chinese blackberry, fresh leaves; Chinese blackberry, dried leaves; Chinese foxglove, fresh leaves; Chinese foxglove, dried leaves; Chive, dried leaves; Chive, Chinese, dried leaves; Cicely, sweet, fresh leaves; Cicely, sweet, dried leaves; Cilantro, dried leaves; Clary, fresh leaves; Clary, dried leaves; Coriander, Bolivian, fresh leaves; Coriander, Bolivian, dried leaves; Coriander, Vietnamese, fresh leaves; Coriander, Vietnamese, dried leaves; Costmary, fresh leaves; Costmary, dried leaves; Creat, fresh leaves; Creat, dried leaves; Culantro, fresh leaves; Culantro, dried leaves; Curry leaf, fresh leaves; Curry leaf, dried leaves; Curryplant, fresh leaves; Curryplant, dried leaves; Cut leaf, fresh leaves; Cut leaf, dried leaves; Damiana, fresh leaves; Damiana, dried leaves; Dillweed, dried leaves; Dokudami, fresh leaves; Dokudami, dried leaves; Echinacea, fresh leaves; Echinacea, dried leaves; Epazote, fresh leaves; Epazote, dried leaves; Eucommia, fresh leaves; Eucommia, dried leaves; Evening primrose, fresh leaves; Evening primrose, dried leaves; Eyebright, fresh leaves; Eyebright, dried leaves; Fennel, common, fresh leaves; Fennel, common, dried leaves; Fennel, Florence, dried leaves; Fennel, Spanish, fresh leaves; Fennel, Spanish, dried leaves; Fenugreek, fresh leaves; Fenugreek, dried leaves; Feverfew, fresh leaves; Feverfew, dried leaves; Field pennycress, fresh leaves; Field pennycress, dried leaves; Flowers, edible, fresh leaves, multiple species; Flowers, edible, dried leaves, multiple species; Fumitory, fresh leaves; Fumitory, dried leaves; Galbanum, fresh leaves; Galbanum, dried leaves; Galega, fresh leaves; Galega, dried leaves; Gambir, fresh leaves; Gambir, dried leaves; Geranium, fresh leaves; Geranium, dried leaves; Geranium, lemon, fresh leaves; Geranium, lemon, dried leaves; Geranium, rose, fresh leaves; Geranium, rose, dried leaves; Germander, golden, fresh leaves; Germander, golden, dried leaves; Goldenrod, European, fresh leaves; Goldenrod, European, dried leaves; Goldenseal, fresh leaves; Goldenseal, dried leaves; Gotu kola, fresh leaves; Gotu kola, dried leaves; Greater periwinkle, fresh leaves; Greater periwinkle, dried leaves; Guayusa, fresh leaves; Guyana, dried leaves; Gumweed, fresh leaves; Gumweed, dried leaves; Gymnema, fresh leaves; Gymnema, dried leaves; Gypsywort, fresh leaves; Gypsywort, dried leaves; Hawthorn, fresh leaves; Hawthorn, dried leaves; Heal-all, fresh leaves; Heal-all, dried leaves; Hemp nettle, fresh leaves; Hemp nettle, dried leaves; Honewort, fresh leaves; Honewort, dried leaves; Honeybush, fresh leaves; Honeybush, dried leaves; Horehound, fresh leaves; Horehound, dried leaves; Horsemint, fresh leaves; Horsemint, dried leaves; Horsetail, fresh leaves; Horsetail, dried leaves; Hyssop, fresh leaves; Hyssop, dried leaves; Hyssop, anise, fresh leaves; Hyssop, anise, dried leaves; Indian tobacco, fresh leaves; Indian tobacco, dried leaves; Ironwort, fresh leaves; Ironwort, dried leaves; Ivy, fresh leaves; Ivy, dried leaves; Jamaica dogwood, fresh leaves; Jamaica dogwood, dried leaves; Jasmine, fresh leaves; Jasmine, dried leaves; Labrador tea, fresh leaves; Labrador tea, dried leaves; Lavender, fresh leaves; Lavender, dried leaves; Lemon verbena, fresh leaves; Lemon verbena, dried leaves; Lemongrass, fresh leaves; Lemongrass, dried leaves; Lovage, fresh leaves; Lovage, dried leaves; Lovein-a-mist, fresh leaves; Lovein-a-mist, dried leaves; Mamaki, fresh leaves; Mamaki, dried leaves; Marigold, fresh leaves; Marigold, dried leaves; Marigold, African, fresh leaves; Marigold, African, dried leaves; Marigold, Aztec, fresh leaves; Marigold, Aztec, dried leaves; Marigold, French, fresh leaves; Marigold, French, dried leaves; Marigold, Irish lace, fresh leaves; Marigold, Irish lace, dried leaves; Marigold, licorice, fresh leaves; Marigold, licorice, dried leaves; Marigold, Mexican mint, fresh leaves; Marigold, Mexican mint, dried leaves; Marigold, signet, fresh leaves; Marigold, signet, dried leaves; Marjoram, fresh leaves; Marjoram, dried leaves; Marjoram, pot, fresh leaves; Marjoram, pot, dried leaves; Marjoram, sweet, fresh leaves; Marjoram, sweet, dried leaves; Marshmallow, fresh leaves; Marshmallow, dried leaves; Meadowsweet, fresh leaves; Meadowsweet, dried leaves; Mint, fresh leaves; Mint, dried leaves; Mint, corn, fresh leaves; Mint, corn, dried leaves; Mint, Korean, fresh leaves; Mint, Korean, dried leaves; Monarda, fresh leaves; Monarda, dried leaves; Moringa, fresh leaves; Moringa, dried leaves; Motherwort, fresh leaves; Motherwort, dried leaves; Mountainmint, fresh leaves; Mountainmint, dried leaves; Mountainmint, clustered, fresh leaves; Mountainmint, clustered, dried leaves; Mountainmint, hoary, fresh leaves; Mountainmint, hoary, dried leaves; Mountainmint, Virginia, fresh leaves; Mountainmint, Virginia, dried leaves; Mountainmint, whorled, fresh leaves; Mountainmint, whorled, dried leaves; Mugwort, fresh leaves; Mugwort, dried leaves; Mulberry, white, fresh leaves; Mulberry, white, dried leaves; Mullein, fresh leaves; Mullein, dried leaves; Mustard, hedge, fresh leaves; Mustard, hedge, dried leaves; Nasturtium, fresh leaves; Nasturtium, dried leaves; Nasturtium, bush, fresh leaves; Nasturtium, bush, dried leaves; Nasturtium, garden, fresh leaves; Nasturtium, garden, dried leaves; Nettle, stinging, fresh leaves; Nettle, stinging, dried leaves; Oregano, fresh leaves; Oregano, dried leaves; Oregano, Mexican, fresh leaves; Oregano, Mexican, dried leaves; Oregano, Puerto Rico, fresh leaves; Oregano, Puerto Rico, dried leaves; Oswego tea, fresh leaves; Oswego tea, dried leaves; Pandan leaf, fresh leaves; Pandan leaf, dried leaves; Pansy, fresh leaves; Pansy, dried leaves; Paracress, fresh leaves; Paracress, dried leaves; Parsley, fresh leaves; Parsley, dried leaves; Partridge berry, fresh leaves; Partridge berry, dried leaves; Patchouli, fresh leaves; Patchouli, dried leaves; Pennyroyal, fresh leaves; Pennyroyal, dried leaves; Pepper leaf, black, fresh leaves; Pepper leaf, black, dried leaves; Peppermint, fresh leaves; Peppermint, dried leaves; Perilla, fresh leaves; Perilla, dried leaves; Pill bearing spurge, fresh leaves; Pill bearing spurge, dried leaves; Pipsissewa, fresh leaves; Pipsissewa, dried leaves;

Crop Group 25 (Continued)

HERBS AND SPICES

Plantain, common, fresh leaves; Plantain, common, dried leaves; Rooibos, fresh leaves; Rooibos, dried leaves; Rose, fresh leaves; Rose, dried leaves; Rosemary, fresh leaves; Rosemary, dried leaves; Sage, fresh leaves; Sage, dried leaves; Sage, Greek, fresh leaves; Sage, Greek, dried leaves; Sage, Spanish, fresh leaves; Sage, Spanish, dried leaves; Sage, white, fresh leaves; Sage, white, dried leaves; Savory, summer, fresh leaves; Savory, summer, dried leaves; Savory, winter, fresh leaves; Savory, winter, dried leaves; Senna, fresh leaves; Senna, dried leaves; Siberian fir, fresh leaves; Siberian fir, dried leaves; Skullcap, fresh leaves; Skullcap, dried leaves; Small flower willow head, fresh leaves; Small flower willow head, dried leaves; Sorrel, fresh leaves; Sorrel, dried leaves; Sorrel, French, fresh leaves; Sorrel, French, dried leaves; Sorrel, garden, fresh leaves; Sorrel, garden, dried leaves; Southernwood, fresh leaves; Southernwood, dried leaves; Spearmint, fresh leaves; Spearmint, dried leaves; Spearmint, Scotch, fresh leaves; Spearmint, Scotch, dried leaves; Spilanthes, fresh leaves; Spilanthes, dried leaves; Spotted beebalm, fresh leaves; Spotted beebalm, dried leaves; St. John's Wort, fresh leaves; St. John's Wort, dried leaves; Stevia, fresh leaves; Stevia, dried leaves; Stoneroot, fresh leaves; Stoneroot, dried leaves; Swamp leaf, fresh leaves; Swamp leaf, dried leaves; Tansy, fresh leaves; Tansy, dried leaves; Tarragon, fresh leaves; Tarragon, dried leaves; Thuja, fresh leaves; Thuja, dried leaves; Thyme, fresh leaves; Thyme, dried leaves; Thyme, creeping, fresh leaves; Thyme, creeping, dried leaves; Thyme, lemon, fresh leaves; Thyme, lemon, dried leaves; Thyme, mastic, fresh leaves; Thyme, mastic, dried leaves; Toon, Chinese, fresh leaves; Toon, Chinese, dried leaves; Toothed clubmoss, fresh leaves; Toothed clubmoss, dried leaves; Trailing arbutus, fresh leaves; Trailing arbutus, dried leaves; Vasaka, fresh leaves; Vasaka, dried leaves; Verbena, blue, fresh leaves; Verbena, blue, dried leaves; Veronica, fresh leaves; Veronica, dried leaves; Violet, fresh leaves; Violet, dried leaves; Watermint, fresh leaves; Watermint, dried leaves; Waterpepper, fresh leaves; Waterpepper, dried leaves; Wild bergamot, fresh leaves; Wild bergamot, dried leaves; Wintergreen, fresh leaves; Wintergreen, dried leaves; Wood betony, fresh leaves; Wood betony, dried leaves; Woodruff, fresh leaves; Woodruff, dried leaves; Wormwood, fresh leaves; Wormwood, dried leaves; Wormwood, Roman, fresh leaves; Wormwood, Roman, dried leaves; Yarrow, fresh leaves; Yarrow, dried leaves; Yellow gentian, fresh leaves; Yellow gentian, dried leaves; Yerba santa, fresh leaves; Yerba santa, dried leaves; Yomogi, fresh leaves; Yomogi, dried leaves; Cultivars, varieties, and hybrids of these commodities.

Pests:	Instructions
Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations. Achieve thorough coverage of the canopy.
Mites: Twospotted spider mites, Citrus rust mite, European red mite, Pacific mite, Willamette mites, Russet mite, Spider mites.	Achieve thorough coverage of the underside of leaves. Make a second application 3-5-days later to target newly emerged immatures. To achieve enhanced short-term control prior to the release of biological control agents, use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II]. Apply when mites are first observed before mite populations have become severe. In case of spider mites apply prior to webbing.
Root aphids	Suppression only as a soil drench. Use a 0.25-4% v/v solution.
Whiteflies	Routinely check field margins for whiteflies; these areas are usually infested first. Be especially alert for rapid increase of whitefly numbers when nearby host crops are in decline. Apply a 1-2% v/v solution of this product for stand-alone use. To achieve enhanced and residual pest control, use a 1-2% v/v solution of this product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target newly hatched nymphs. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Achieve thorough coverage of the canopy.
Thrips	Suppression only of exposed thrips. A 3-day re-application schedule may be necessary when thrips population is rapidly increasing. Achieve thorough coverage of the canopy.
Powdery mildew	Stand Alone Application: Apply 1.5 - 2% v/v solution of this product when the first signs of powdery mildew appear and repeat at 7 to 10-day intervals, or as needed. Schedule a follow-up fungicide application within 7-10 days after each application when this product is used alone. Achieve thorough coverage of the canopy. Tank Mix Application: Apply a 1 - 2% v/v solution of this product with a fungicide to achieve protectant/residual control of powdery mildew. Do not mix with sulfur. Do not use within 3 days of a sulfur application. Achieve thorough coverage of the canopy.

Additional Information:

- Routinely scout fields with special focus on field margins to detect early stages of colonization.
- Initiate application at the time of first colonization and appearance of the pest.
- Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions.
- The product can be applied as a tank mix combination with a labeled companion insecticide. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Do not store mixture for an extended period of time, apply mixture as soon as possible.
- Apply in sufficient spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment.
- Apply product in 3-7-day intervals starting at the time of colonization. Check for phytotoxicity before additional applications are made.
- Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program.

Crop Group 26**SPICES**

Ajowan, seed; Alder buckhorn; Allspice; Ambrette, seed; Amla, seed; Angelica, dahurian, seed; Angelica, seed; Angostura, bark; Anise pepper; Anise, seed; Anise, star; Annatto, seed; Asafoetida; Ashwagandha, fruit; Autumn crocus; Balsam, Peruvian; Barberry, bark; Batavia-cassia, bark; Batavia-cassia, fruit; Belleric myrobalan; Betel vine; Birch, bark; Bisnaga, seed; Bitterwood; Black bread weed; Bloodroot; Blue mallee; Blushwood, seed; Boldo, leaf; Buchu; Calamus root; Candlebush; Canella, bark; Caper buds; Caper spurge, seed; Caraway, black; Caraway, fruit; Cardamom, black; Cardamom, Ethiopian; Cardamom, green; Cardamom, Nepal; Cardamom-amomum; Cascara sagrada; Cassia, bark; Cassia, Chinese, bark; Cassia, Chinese, fruit; Cassia, fruit; Cat's claw, bark; Catechu, bark; Celery, seed; Chaste tree, berry; Chaste tree, Chinese, roots; Chervil, seed; Chinese hawthorn; Chinese nutmeg tree; Chinese wineberry, fruit; Chinese-pepper; Cinnamon, bark; Cinnamon, fruit; Cinnamon, Saigon, bark; Cinnamon, Saigon, fruit; Clove buds; Clusterleaf; Comfrey; Copaiba; Coptis; Coriander, fruit; Coriander, seed; Cotton, bark; Crampbark; Cubeb, seed; Culantro, seed; Culvers root; Cumin; Cumin, black; Dill, seed; Dorrigo pepper, berry; Dorrigo pepper, leaf; Dragon blood; Echinacea, seed; Epimedium; Eucalyptus; Eucommia, bark; European beech; Felty germander; Fennel flower, seed; Fennel, common, fruit; Fennel, common, seed; Fennel, Florence, fruit; Fennel, Florence, seed; Fenugreek, seed; Fingerroot; Flame lily, seed; Frankincense; Frankincense, Indian; Fringetree, bark; Galbanum, resin; Gambooge; Grains of paradise; Grains of Selim; Guaiaac; Guarana; Guggul; Gum Arabic; Gum ghatti; Gum karaya; Gum tragacanth; Haw, black; Honewort, seed; Imperatoria; Indian tobacco, seed; Iva; Jalap; Jamaica dogwood, bark; Juniper berry; Kaffir lime, leaf; Kewra; Kokam; Linden, leaf; Lovage, seed; Mace; Magnolia, bark; Mahaleb; Malabar cardamom; Malabar-tamarind; Malabathrum; Mastic; Micromeria, white; Milk thistle; Mioga; Miracle fruit; Mistletoe; Mojave yucca; Muira puama; Mustard, black; Mustard, brown; Mustard, seed; Mustard, white; Myrrh; Myrrh, bisabol; Myrtle, anise; Myrtle, leaf; Myrtle, lemon; Nasturtium, bush, pods; Nasturtium, garden, pods; Nasturtium, pods; Nettle, stinging, seed; Nutmeg; Osha; Pepper, black; Pepper, Indian long; Pepper, Javanese long; Pepper, leaf; Pepper, pink; Pepper, Sichuan; Pepper, white; Pepperbush, berry; Pepperbush, leaf; Peppercorn, green; Peppertree; Peppertree, Peruvian; Perilla, seed; Phellodendron; Pine, maritime; Poppy, seed; Prickly ash, Chinese; Prickly ash, Southern, bark; Pygeum; Qing hua jiao; Quassia, bark; Quebracho, bark; Quillaja; Quinine; Rauwolfia, bark; Resin spurge; Rue; Saffron crocus; Sandalwood, seed; Sassafras, bark; Sassafras, leaf; Saunders, red; Saw palmetto; Sesame, seed; Silktree, bark; Simaruba, bark; Skunk cabbage, root; Slippery elm; Stemona, root; Suma; Sumac, fragrant; Sumac, smooth, leaf; Tahebo, bark; Tamarind, seed; Tasmanian pepper, berry; Tasmanian pepper, leaf; Threelaf caper; Tsaoko; Vanilla; Wattleseed; White willow; Willow; Witch hazel; Yaw root; Yellow gentian, roots; Yohimbe; Cultivars, varieties, and hybrids of these commodities.

Pests:	Instructions
Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations. Achieve thorough coverage of the canopy.
Mites: Twospotted spider mites, Citrus rust mite, European red mite, Pacific mite, Willamette mites, Russet mite, Spider mites.	Achieve thorough coverage of the underside of leaves. Make a second application 3-5-days later to target newly emerged immatures. To achieve enhanced short-term control prior to the release of biological control agents, use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II]. Apply when mites are first observed before mite populations have become severe. In case of spider mites apply prior to webbing.
Thrips	Suppression only of exposed thrips. A 3-day re-application schedule may be necessary when thrips population is rapidly increasing. Achieve thorough coverage of the canopy.
Whiteflies	Routinely check field margins for whiteflies; these areas are usually infested first. Be especially alert for rapid increase of whitefly numbers when nearby host crops are in decline. Apply a 1-2% v/v solution of this product for stand-alone use. To achieve enhanced and residual pest control, use a 1-2% v/v solution of this product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target newly hatched nymphs. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Achieve thorough coverage of the canopy.
Powdery mildew	Stand Alone Application: Apply 1.5 - 2% v/v solution of this product when the first signs of powdery mildew appear and repeat at 7 to 10-day intervals, or as needed. Schedule a follow-up fungicide application within 7-10 days after each application when this product is used alone. Achieve thorough coverage of the canopy. Tank Mix Application: Apply a 1 - 2% v/v solution of this product with a fungicide to achieve protectant/residual control of powdery mildew. Do not mix with sulfur. Do not use within 3 days of a sulfur application. Achieve thorough coverage of the canopy.

Additional Information:

- Routinely scout fields with special focus on field margins to detect early stages of colonization.
- Initiate application at the time of first colonization and appearance of the pest.
- Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions.
- The product can be applied as a tank mix combination with a labeled companion insecticide. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Do not store mixture for an extended period of time, apply mixture as soon as possible.
- Apply in sufficient spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment.
- Apply product in 3-7-day intervals starting at the time of colonization. Check for phytotoxicity before additional applications are made.
- Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program.

ORNAMENTAL LANDSCAPE TREES AND SHRUBS, CHRISTMAS TREES, FLOWERS, BEDDING AND INDOOR PLANTS	
Pests:	Instructions
Adelgids, psyllids on trees and shrubs	Apply in sufficient spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment.
Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations. Achieve thorough coverage of the canopy.
Balsam woolly adelgid	Apply 2% v/v solution of this product. Apply in sufficient spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment. Achieving excellent coverage is critical for successful application. Also treat stumps of trees cut within the last 6 months. Target application against crawler and immature stages. Make a second application 10 days later.
Cooley spruce gall adelgid	Apply a 4% v/v solution to spruce in fall or spring when females begin egg laying. On Douglas fir, control exposed "woolly aphids" in early spring immediately before bud break (April) or in the fall (Sept.-Oct.) after foliage has hardened off. Test for tree sensitivity before applying at this rate. Applications in early spring before bud break or in the fall on hardened off foliage is recommended. Apply in sufficient spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment. Achieving excellent coverage is critical for successful application.
Hemlock woolly adelgid	Apply this product immediately after detecting an adelgid infestation to avoid the spread of the pest. In regions with heavy infestations and on trees with a history of infestation, a total of four applications made in April/May, June, August/September and October may be necessary. Because it is a contact insecticide, do not use this product as a preventative control measure. Apply in sufficient spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment. Achieving excellent coverage is critical for successful application.
Conifer and pine needle scale	Suppression only. Monitor egg hatch and make application shortly following egg hatch to target the crawler stage. Apply a 1 to 2% v/v solution using a spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment. Repeat applications as necessary to target extended crawler activity, if it occurs.
Gypsy moth	Suppression only. Apply a 3% v/v solution directly to the larvae.
Mites: Twospotted spider mites, Citrus rust mite, European red mite, Pacific mite, Willamette mites, Russet mite, Spider mites.	Achieve thorough coverage of the underside of leaves. Make a second application 3-5-days later to target newly emerged immatures. To achieve enhanced short-term control prior to the release of biological control agents, use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II]. Apply when mites are first observed before mite populations have become severe. In case of spider mites apply prior to webbing.
Scales	Suppression only. Apply a 1 to 2% v/v spray to target crawler stage. Apply with sufficient amount of water to uniformly wet all infested plant parts especially targeting shoot terminals and the underside of leaves. Make a second application 3-5-days later to target newly emerged crawlers.
Tent caterpillar	Apply a 3% v/v solution. Spray directly on young larvae when congregated on outside of tent or dismantle tents and spray to thoroughly wet larval stages.
Blossom thrips on African violets	Suppression only. Spray to contact thrips on blooms.
Whiteflies	Routinely check field margins for whiteflies; these areas are usually infested first. Be especially alert for rapid increase of whitefly numbers when nearby host crops are in decline. Apply a 1-2% v/v solution of this product for stand-alone use. To achieve enhanced and residual pest control, use a 1-2% v/v solution of this product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target newly hatched nymphs. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Achieve thorough coverage of the canopy.
Powdery mildew on greenhouse grown roses	Apply a 1-2% solution of this product to control powdery mildew spores and hyphae. Initiate sprays when first signs of powdery mildew appear and repeat at 7 to 10-day intervals, or as needed. Alternate applications of this product with other fungicides to avoid making more than three successive applications of this product at intervals of 7-days or less. Roses may be treated with sublimated sulfur using sulfur-heating pots or similar devices before or after treatment with this product. To minimize the potential for plant injury, allow 24 hours to elapse between the application of this product and sublimated sulfur applications. Mixing other forms of sulfur (sprayable or dusting) or applying this product within up to 5 days of a sulfur application may also increase the potential for plant injury, especially during hot weather (>90°F).

Additional Information:

- Routinely scout fields and greenhouses to detect early stages of colonization.
- Initiate application at the time of first colonization and appearance of the pest.
- Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions.
- The product can be applied as a tank mix combination with a labeled companion insecticide. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Do not store mixture for an extended period of time, apply mixture as soon as possible.
- Tank mixes with products containing Chlorothalonil should be avoided as they can cause severe phytotoxicity.
- Apply in sufficient spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment.
- Apply product in 3-7-day intervals starting at the time of colonization. Check for phytotoxicity before additional applications are made.
- Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program.
- Cuttings Dip Application. MGK FORMULA 3186 maybe used as pre-plant dips for cuttings. To prepare the dip solution make a 0.5% v/v solution (0.5 gallons of MGK FORMULA 3186 per 10 gallons of water). Prepare as much dip solution that can be used in one day. Do not use the dip solution for more than one day.

Miscellaneous commodities	
Globe artichoke*, hops, peanut, and water chestnut	
*Not registered for use in the State of California	
Pests:	Instructions
Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations. Achieve thorough coverage of the canopy.
Leafhoppers	To achieve control, use a 1-2% v/v solution of this product. Under severe pest pressure control can be enhanced by combining a 1-2 % v/v solution of this product with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II]. Scout and make first application to control nymphs during the first generation when the majority of nymphs are in the early instar stages. Make a second application 3-7-days later to target newly emerged nymphs. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Achieve thorough coverage of the canopy.
Mites: Twospotted spider mites, Citrus rust mite, European red mite, Pacific mite, Willamette mites, Russet mite, Spider mites.	Achieve thorough coverage of the underside of leaves. Make a second application 3-5-days later to target newly emerged immatures. To achieve enhanced short-term control prior to the release of biological control agents, use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II]. Apply when mites are first observed before mite populations have become severe. In case of spider mites apply prior to webbing.
Whiteflies	Routinely check field margins for whiteflies; these areas are usually infested first. Be especially alert for rapid increase of whitefly numbers when nearby host crops are in decline. Apply a 1-2% v/v solution of this product for stand-alone use. To achieve enhanced and residual pest control, use a 1-2% v/v solution of this product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target newly hatched nymphs. Continue monitoring fields to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Achieve thorough coverage of the canopy.
Thrips	Suppression only of exposed thrips. A 3-day re-application schedule may be necessary when thrips population is rapidly increasing. Achieve thorough coverage of the canopy.
Additional Information:	
<ul style="list-style-type: none"> • Routinely scout fields with special focus on field margins to detect early stages of colonization. • Initiate application at the time of first colonization and appearance of the pest. • Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions. • The product can be applied as a tank mix combination with a labeled companion insecticide. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Do not store mixture for an extended period of time, apply mixture as soon as possible. • Apply in sufficient spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment. • Apply product in 3-7-day intervals starting at the time of colonization. Check for phytotoxicity before additional applications are made. • Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program. 	

TURF	
Pests:	Instructions
Chinch bugs, cutworms, fleas, greenbugs, spider mites mole crickets and sod webworms	Stand Alone Rate: Apply a 1 to 2% v/v solution of this product, unless otherwise noted. Tank Mix Rate: To achieve pest control, use a 1 to 2% v/v solution of this product in combination with a specified rate of another labeled product. For use on mole crickets, irrigate turf prior to application of this product to bring mole crickets to the surface.
Powdery mildew	Stand Alone Application: Apply 1.5 - 2% v/v solution of this product when the first signs of powdery mildew appear and repeat at 7 to 10-day intervals, or as needed. Schedule a follow-up fungicide application within 7-10 days after each application when this product is used alone. Achieve thorough coverage of the canopy. Tank Mix Application: Apply a 1 - 2% v/v solution of this product with a fungicide to achieve protectant/residual control of powdery mildew. Do not mix with sulfur. Do not use within 3 days of a sulfur application. Achieve thorough coverage of the canopy.
Additional Information:	
<ul style="list-style-type: none"> • Routinely scout fields with special focus on field margins to detect early stages of colonization. • Initiate application at the time of first colonization and appearance of the pest. • Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions. • The product can be applied as a tank mix combination with a labeled companion insecticide. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Do not store mixture for an extended period of time, apply mixture as soon as possible. • Apply in sufficient spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment. Apply product in 3-7-day intervals starting at the time of colonization. Check for phytotoxicity before additional applications are made. • Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program. 	

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

PESTICIDE STORAGE: Keep this product in its tightly closed original container, when not in use. Store in a cool, dry (preferably locked) area that is inaccessible to children and animals.

PESTICIDE DISPOSAL:

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL:

Non-refillable container. Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

Triple rinse as follows [For containers less than or equal to 5 gallons]: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank, or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Triple rinse as follows [For containers that are greater than 5 gallons]: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank, or store rinsate for later use or disposal. Repeat this procedure two more times. Offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

[Or for Refillable Containers]

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into rinsate collection system. Repeat this rinsing procedure two more times. Offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

[For totes/55 gal containers]

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

NOTICE TO BUYER

To the extent consistent with applicable law, seller warrants that this product conforms to the chemical description on this label and is reasonably fit for purposes stated on this label only when used in accordance with directions under normal use conditions. This warranty does not extend to use of this product contrary to label directions, or under abnormal use conditions, or under conditions not reasonably foreseeable to seller. To the extent consistent with applicable law, buyer assumes all risk of any such use. To the extent consistent with applicable l



MGK Formula 3186


[ALTERNATE BRAND NAMES: Sabon™; Verbon™; Sabavera™

Sub-Label B: For Residential Use

EPA Reg. No. 1021-Unassigned
EPA Est. No. 1021-MN-2

MGK Formula 3186

(ABNs: Sabon™, Verbon™, Sabavera™)

 For Organic Gardening



[] denotes optional wording.

ACTIVE INGREDIENT:		
Potassium Salts of Fatty Acids	42.00%	
OTHER INGREDIENTS	58.00%	
	100.00%	

Contains 3.17 lbs. of active ingredient per Gallon

KEEP OUT OF REACH OF CHILDREN CAUTION / PRECAUCIÓN

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)

[See inside booklet for First Aid, Precautionary Statements, Directions for Use and Storage and Disposal]

FIRST AID	
IF IN EYES:	<ul style="list-style-type: none">Hold eye open and rinse slowly and gently with water for 15-20 minutes.Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.Call a poison control center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-888-740-8712 for emergency medical treatment information.	

Manufactured by

7325 Aspen Lane North
Minneapolis, MN 55428

EPA Reg. No. 1021-UNASSIGNED

EPA Est. No. 1021-MN-2

Net Contents: _____

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS
<p>CAUTION</p> <p>Causes moderate eye irritation. Wear safety glasses with side shields. Avoid contact with, eyes or clothing. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using toilet.</p>
<p>ENVIRONMENTAL HAZARDS</p> <p>This product may be hazardous to aquatic invertebrates. Do not apply directly to water, in areas where surface water is present or to intertidal areas below the mean high-water mark. Do not contaminate water by cleaning of equipment or disposal of equipment wash waters.</p>

PRODUCT INFORMATION

For personal and residential home gardens use MGK Formula 3186 is a contact insecticide, miticide and fungicide for control of soft-bodied insects, listed mites and powdery mildew. The formulation is based on potassium salts of naturally derived fatty acids. This product may be used to control targeted pests on crops which include vegetables, grapes and other small fruits, tree fruits, tree nuts, cotton, tobacco, shrubs, shade and ornamental trees, turf, foliage and flowering plants growing outdoors, in greenhouses and in interiorscapes. This product can be applied up to harvest.

PESTS CONTROLLED

This product may be used as a foliar spray to control or suppress soft bodied pests which include: adelgids, aphids, caterpillars, earwigs, lace bugs, leafhoppers, leafminers, mealybugs, mole crickets, plant bugs, psyllids, root aphids, sawfly larvae, scales, spider mites, tent caterpillars, thrips, whiteflies, gypsy moth, and chinch bugs. MGK FORMULA 3186 is most effective on listed mites, aphids and whiteflies. Effects on other pests are limited to early growth stages and eggs. This product provides curative control of powdery mildew.

GENERAL INFORMATION

- MGK FORMULA 3186 contains a unique blend of long chain fatty acids for enhanced insecticidal and miticidal activity.
- MGK FORMULA 3186 is a contact insecticide, miticide and fungicide.
- MGK FORMULA 3186 is a broad-spectrum insecticide and miticide.
- MGK FORMULA 3186 penetrates cuticle of the insects disrupting the wax layer and cell membranes and functions, leading to cellular damage, dehydration and impairment of respiratory functions.
- MGK FORMULA 3186 blocks the spiracles of insects interfering with respiration.
- MGK FORMULA 3186 has been formulated to provide optimum spreading.
- MGK FORMULA 3186 is effective against immature and adult stages of listed pests.
- MGK FORMULA 3186 can be used in Integrated Pest Management programs.
- MGK FORMULA 3186 is an excellent tool for managing insecticide resistance.
- MGK FORMULA 3186 can be used in combination with biological control agents. Apply product to the crop prior to the release of biological control agents or treat hot spots of early colonization in greenhouses.
- The active ingredient in MGK FORMULA 3186 is exempted from the requirement of a tolerance for residues in or on all food commodities when used in accordance with good agricultural practice.
- MGK FORMULA 3186 can be applied on the same day as harvest.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

USE RESTRICTIONS

- Apply this product only as specified on this label.
- Do not make applications during rain.
- Manzate and Dithane fungicides are incompatible with MGK FORMULA 3186.
- Combining MGK FORMULA 3186 with sulfur or applying this product within 3 days of sulfur application may increase the phytotoxicity caused by sulfur on sensitive plants (e.g., grape).
- Unless otherwise noted, do not tank mix this product with adjuvants such as penetrators, spreader stickers or activators, gibberellic acid, calcium nitrate, or diatomaceous earth, foliar nutrients, alkaline based chelating agents (such as EDTA), aluminum tris, chlorothalonil and pesticides containing sulfur or metallic ions (such as manganese, magnesium, iron, zinc, etc.) as they may be physically incompatible and/or phytotoxic.
- Do not exceed a maximum spray volume of 400 gallons per acre on apples.
- Do not exceed a maximum rate of 100 gallons per acre on smooth skinned stone fruit up to fruit formation.
- Do not exceed a maximum rate of 175 gallons per acre on peaches.
- Do not use on yellow skinned nectarines.
- Not for use on plants grown for sale or research purposes.

DIRECTIONS FOR MIXING

Determine the application volume for the spray application. Based upon the application volume, calculate the amount of MGK FORMULA 3186 needed to achieve the selected label rate, e.g., 1.0- to 4.0%. Fill 1/3 of the spray container with water while ensuring proper agitation by pump, paddles or shaking. Continue agitation while slowly adding the required amount of MGK FORMULA 3186 into the container. Once the product was added to the spray container add the remaining water to reach the appropriate application volume, e.g., 1 gallon. MGK FORMULA 3186 applied alone only requires agitation prior to use.

APPLICATION INSTRUCTIONS

General applications rate MGK FORMULA 3186 is 1.0% to 2.0% dilution but under heavy pest pressure the 4.0% rate may be used. Apply the solution in sufficient amount of water volume to achieve complete coverage of the Plant crop canopy including the lower parts and the underside of leaves without run-off. MGK FORMULA 3186 is a contact insecticide with a physical mode of action requiring excellent coverage of the target pest for efficacy. Achieve uniform coverage without Adjust water volume based upon canopy size to achieve good coverage. For best results initiate treatment application at the early stages of infestation. Repeat application within 3-7 days after the initial application to maximize efficacy. Continue monitoring the pest population and apply additional treatments based upon economic thresholds. Monitor for phytotoxicity (plant damage) after each applications to ensure that plant injury does not occur. If needed, additional applications can be made if no phytotoxicity develops.

- Hard water in excess of 300 ppm should be conditioned to reduce its hardness prior to the addition of MGK FORMULA 3186.
- Do not lower pH of the final solution below 8.0.
- Apply promptly after mixing with other pesticides to avoid or reduce alkaline hydrolysis of certain pesticides, such as Pyrethrins.
- Avoid applications when wind conditions impair thorough coverage.
- Apply the solution in sufficient amount of water volume to achieve complete coverage of the plant canopy including the lower parts and the underside of leaves without run-off.
- Total application volume of 1/2 Gallon to 4.6 gallons Per 1,000 square feet (10ft x 10ft area)

MGK FORMULA 3186 alone only requires agitation prior to use If using equipment without pump or paddle, shake often during use. **Do not allow solution to sit for longer than 24 hours before use. For best efficacy mix and spray as soon as possible.**

STAND ALONE APPLICATION INSTRUCTIONS

Garden/Home applications rate is 1.0 to 2.0% solution (1/2 Gallon to 4.6 gallon per 1,000 sq feet) using pump sprayers or hand spraying equipment. For best results initiate treatment application at the early stages of infestation. Apply the amount of spray solution that achieves excellent penetration of the garden without run-off to obtain good coverage of the foliage and pest populations. MGK FORMULA 3186 is a contact product, and thus, pests need to be contacted with spray solution to be effective. Efforts should be made to thoroughly reach all plant parts including undersides of leaves and lower parts of the canopy. Repeat treatment 3-7 days after first application and then continue applications based upon the rate of the development of the pest population. Monitor for plant injury after each application to ensure plant injury does not occur. Additional applications may be possible if previous experience with repeat applications of the product under the same conditions have not produced plant injury. May be used on edible crops up to and including day of harvest after a minimum spray interval of 12 hours.

Dilution Table

Total Spray Solution (US gallon)	Desired concentration of MGK Formula 3186 in water. (% v/v)	Product amount (MGK Formula 3186 Concentrate)		Tablespoon
		US	Metric	
32 oz	1.0%	0.4	9.5	0.65
	2.0%	0.7	19	1.275
	4.0%	1.3	38	2.55
64 oz	1.0%	0.7	19	1.3
	2.0%	1.3	38	2.55
	4.0%	2.6	76	5.1
1 gallon	0.25%	0.32 fluid oz.	9.5 ml	0.6
	0.50%	0.64 fluid oz.	19 ml	1.3
	1.0%	1.28 fluid oz.	38 ml	2.6
	1.5%	1.92 fluid oz.	57 ml	3.8
	2.0%	2.56 fluid oz.	76 ml	5.1
	3.0%	3.84 fluid oz.	114 ml	7.7
	4.0%	5.12 fluid oz.	152 ml	10.2

Considerations to Minimize Plant Injury (Phytotoxicity)

Prior to application to garden, evaluate the phytotoxicity potential of the product alone or in combination with desired companion product(s) on a few test plants to ensure crop safety.

- The susceptibility of the plant to injury by the product is influenced by several factors including species, variety/cultivar, environmental conditions (temperature, relative humidity, water stress, salt concentration, light intensity, etc.), pest and disease pressure, spray concentration, composition of the spray mixture (companion products, spray additives etc.), pH, delivery volume as well as the timing, number and frequency of applications.
- Potential for plant injury increases when this product is used under the following conditions:
 - Plants are under environmental stress
 - Temperatures above 90 °F
 - High humidity
 - Drought conditions
 - More than 3 sequential applications are made within 7-day intervals.
 - High volume applications can cause the spray to collect on the bottom of fruit such as apple, pear, nectarine, orange and grape.
 - Tender new foliage is present on narrow leaf evergreen trees and shrubs.
 - Existing injuries on leaves and fruits caused by high pest pressure can exacerbate phytotoxicity potential of the application.
- Application of this product may alter the appearance of the glaucous bloom on spruces and the waxy bloom on grapes.
- Do not apply to new seedlings and transplants without first determining sensitivity (phytotoxicity).
- Use with care on blooms. Determine sensitivity before spraying.
- **Do not spray during full sun. Spray early in morning or evening or when overcast**
- Do not apply to new seedlings and transplants without first determining sensitivity (phytotoxicity).
- If sooty mold is present, application of product may result in fruit marking.

• Plants with high sensitivity to MGK FORMULA 3186: horse chestnut, Japanese maple, mountain ash, cherimoya, bleeding heart or sweet peas. Do not use products on these plants.

- The following plants may be sensitive to this product: bald cypress, begonia, chrysanthemum, Crown of Thorns and other Euphorbia, cucumber, delicate ferns, narrow leaf evergreens (especially when stressed or when tender new growth is present), Dieffenbachia, fuchsia, gardenia, impatiens, jade plant, lantana, ornamental ivy, palms, poinsettia, redbud, river birch, schefflera, Zebra plant and some succulents. Test first on a few plants prior to broad scale applications when sensitivity under local use conditions is unknown. Sensitivity varies with plant varieties. Do not apply after coloring of bracts has begun in Poinsettias.
- Flowers of plants including African violet, ageratum, azalea, begonia, camellia, chrysanthemum, dahlia, geranium, gloxinia, impatiens, lily, marigold, orchid, pansy, petunia, poinsettia bracts, rose, salvia, snapdragon, vinca and zinnia may be injured when sprayed with this product. Sensitivity varies with plant varieties.
- Safety to blooms should be determined for each individual cultivar/variety of plant to be treated by conducting a small test under local use conditions.
- See individual use sites for additional restrictions and precautionary instructions.
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PESTS and SITES

Preharvest Interval: MGK FORMULA 3186 has a 0-day Preharvest interval for ALL crops contained on this label.

<p>Crop Group 1 ROOT AND TUBER VEGETABLES</p> <p>Arracacha; arrowroot; artichoke*, Chinese; artichoke*, Jerusalem; beet, garden; beet, sugar; burdock, edible; canna, edible; carrot; cassava, bitter and sweet; celeriac (celery root); chayote (root); chervil, turnip-rooted; chicory; chufa; dasheen (taro); ginger; ginseng; horseradish; leren; parsley, turnip-rooted; parsnip; potato; radish; radish, oriental (daikon); rutabaga; salsify (oyster plant); salsify, black; salsify, Spanish; skirret; sweet potato; taniel (cocoyam); turmeric; turnip; yam bean; yam, true.</p> <p>*Not registered for use in the State of California</p>	
Pests:	Instructions
Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring gardens to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations.
Leafhoppers, plant bugs, psyllids	To achieve enhanced control, use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II]. Scout and make first application to control nymphs during the first generation when the majority of nymphs are in the early instar stages. Make a second application 3-7-days later to target newly emerged nymphs. Continue monitoring gardens to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product
Mites: Twospotted spider mites, Citrus rust mite, European red mite, Pacific mite, Willamette mites, Russet mite, Spider mites.	Achieve thorough coverage of the underside of leaves. Make a second application 3-5-days later to target newly emerged immatures. To achieve enhanced short-term control prior to the release of biological control agents, use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II] [or PyGanic® Gardening]. Apply when spider mites are first observed prior to webbing and before mite populations have become severe.
Thrips	Achieve thorough coverage of the canopy. Suppression only of exposed thrips. A 3-day re-application schedule may be necessary when thrips population is rapidly increasing.
Whiteflies	Routinely check margins for whiteflies; these areas are usually infested first. Be especially alert for rapid increase of whitefly numbers when nearby host crops are in decline. Apply a 1-2% v/v solution of this product for stand-alone use. To achieve enhanced and residual pest control, use a 1-2% v/v solution of this product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target newly hatched nymphs. Continue monitoring gardens to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations.
Powdery mildew	Stand Alone Application: Apply 1.5-2% v/v solution of this product when the first signs of powdery mildew appear and repeat at 7 to 10-day intervals, or as needed. Schedule a follow-up fungicide application within 7-10 days after each application when this product is used alone. Mix Application: Apply a 1 - 2% v/v solution of this product with a fungicide to achieve protectant/residual control of powdery mildew. Do not mix with sulfur. Do not use within 3 days of a sulfur application.
<p>Additional Information:</p> <ul style="list-style-type: none"> • Routinely inspect garden to detect early stages of infestation. • Initiate application at the time of first infestation and appearance of the pest. • Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions. • Apply to wet (to minimize run off) with appropriate spray equipment. • Use appropriate water volume that provides good coverage. • Apply product in 3-7-day intervals starting at the time of infestation. Check for phytotoxicity after each application before additional applications are made. • Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program. 	

Crop Group 2	
LEAVES OF ROOT AND TUBER VEGETABLES (HUMAN FOOD OR ANIMAL FEED)	
Beet, garden; beet, sugar; burdock, edible; carrot; cassava, bitter and sweet; celeriac (celery root); chervil, turnip-rooted; chicory; dasheen (taro); parsnip; radish; radish, oriental (daikon); rutabaga; salsify, black; sweet potato; taniel (cocoyam); turnip; yam, true	
Pests:	Instructions
Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring gardens to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations.
Leafhoppers, plant bugs	To achieve enhanced control, use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II] [or PyGanic® Gardening]. Scout and make first application to control nymphs during the first generation when the majority of nymphs are in the early instar stages. Make a second application 3-7-days later to target newly emerged nymphs. Continue monitoring gardens to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations.
Mites: Twospotted spider mites, Citrus rust mite, European red mite, Pacific mite, Willamette mites, Russet mite, Spider mites.	Achieve thorough coverage of the underside of leaves. Make a second application 3-5-days later to target newly emerged immatures. To achieve enhanced short-term control prior to the release of biological control agents, use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II] [or PyGanic® Gardening]. Apply when spider mites are first observed prior to webbing and before mite populations have become severe.
Thrips	Achieve thorough coverage of the canopy. Suppression only of exposed thrips. A 3-day re-application schedule may be necessary when thrips population is rapidly increasing.
Whiteflies	Routinely check margins for whiteflies; these areas are usually infested first. Be especially alert for rapid increase of whitefly numbers when nearby host crops are in decline. Apply a 1-2% v/v solution of this product for stand-alone use. To achieve enhanced and residual pest control, use a 1-2% v/v solution of this product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target newly hatched nymphs. Continue monitoring gardens to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations.
Powdery mildew	Stand Alone Application: Apply 1.5-2% v/v solution of this product when the first signs of powdery mildew appear and repeat at 7 to 10-day intervals, or as needed. Schedule a follow-up fungicide application within 7-10 days after each application when this product is used alone. Mix Application: Apply a 1 - 2% v/v solution of this product with a fungicide to achieve protectant/residual control of powdery mildew. Do not mix with sulfur. Do not use within 3 days of a sulfur application.
Additional Information:	
<ul style="list-style-type: none"> • Routinely inspect garden to detect early stages of infestation. • Initiate application at the time of first infestation and appearance of the pest. • Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions. • Apply to wet (to minimize run off) with appropriate spray equipment. • Use appropriate water volume that provides good coverage. • Apply product in 3-7-day intervals starting at the time of infestation. Check for phytotoxicity after each application before additional applications are made. • Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program. • 	

Crop Group 3	
BULB VEGETABLE GROUP	
Chive, fresh leaves; chive, Chinese, fresh leaves; daylily, bulb; elegans hosta; fritillaria, bulb; fritillaria, leaves; garlic, bulb; garlic, greatheaded, bulb; garlic, serpent, bulb; kurrat; lady's leek; leek; leek, wild; lily, bulb; onion, Beltsville bunching; onion, bulb; onion, Chinese, bulb; onion, fresh; onion, green; onion, macrostem; onion, pearl; onion, potato, bulb; onion, tree, tops; onion, Welsh, tops; shallot, bulb; shallot, fresh leaves; cultivars, varieties, and/or hybrids of these	
Pests:	Instructions
Thrips	Achieve thorough coverage of the canopy. Suppression only of exposed thrips. A 3-day re-application schedule may be necessary when thrips population is rapidly increasing.
Powdery mildew	Stand Alone Application: Apply 1.5-2% v/v solution of this product when the first signs of powdery mildew appear and repeat at 7 to 10-day intervals, or as needed. Schedule a follow-up fungicide application within 7-10 days after each application when this product is used alone. Mix Application: Apply a 1 - 2% v/v solution of this product with a fungicide to achieve protectant/residual control of powdery mildew. Do not mix with sulfur. Do not use within 3 days of a sulfur application.
Additional Information:	
<ul style="list-style-type: none"> • Routinely inspect garden to detect early stages of infestation. • Initiate application at the time of first infestation and appearance of the pest. • Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions. • Apply to wet (to minimize run off) with appropriate spray equipment. • Use appropriate water volume that provides good coverage. • Apply product in 3-7-day intervals starting at the time of infestation. Check for phytotoxicity after each application before additional applications are made. • Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program. • 	

Crop Group 4 LEAFY VEGETABLES (EXCEPT BRASSICA VEGETABLES) GROUP	
Amaranth, Chinese; amaranth, leafy; arugula; aster, Indian; blackjack; broccoli, Chinese; broccoli raab; cabbage, abyssinian; cabbage, Chinese, bok choy; cabbage, seakale; cat's whiskers; cham-chwi; cham-na-mul; chervil, fresh leaves; chipilin; chrysanthemum, garland; cilantro, fresh leaves; collards; corn salad; cosmos; cress, garden; cress, upland; dandelion, leaves; dang-gwi, leaves; dillweed; dock; dolnam-mul; ebolo; endive; escarole; fameflower; feather cockscomb; Good King Henry; hanover salad; huauzontle; jute, leaves; kale; lettuce, bitter; lettuce, head; lettuce, leaf; maca, leaves; mizuna; mustard greens; orach; parsley, fresh leaves; plantain, buckhorn; primrose, English; purslane, garden; purslane, winter; radicchio; radish, leaves; rape greens; rocket, wild; shepherd's purse; spinach; spinach, Malabar; spinach, New Zealand; spinach, tanier; Swiss chard; turnip greens; violet, Chinese, leaves; watercress*; cultivars, varieties, and hybrids of these commodities	
*Not registered for use in the State of California	
Pests:	Instructions
Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7 days later to target early colony formation. Continue monitoring gardens to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations.
Mites: Twospotted spider mites, Citrus rust mite, European red mite, Pacific mite, Willamette mites, Russet mite, Spider mites.	Achieve thorough coverage of the underside of leaves. Make a second application 3-5-days later to target newly emerged immatures. To achieve enhanced short-term control prior to the release of biological control agents, use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II] [or PyGanic® Gardening]. Apply when spider mites are first observed prior to webbing and before mite populations have become severe.
Plant bugs	To achieve enhanced control, use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II] [or PyGanic® Gardening]. Scout and make first application to control nymphs during the first generation when the majority of nymphs are in the early instar stages. Make a second application 3-7-days later to target newly emerged nymphs. Continue monitoring gardens to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations.
Thrips	Achieve thorough coverage of the canopy. Suppression only of exposed thrips. A 3-day re-application schedule may be necessary when thrips population is rapidly increasing.
Whiteflies	Routinely check margins for whiteflies; these areas are usually infested first. Be especially alert for rapid increase of whitefly numbers when nearby host crops are in decline. Apply a 1-2% v/v solution of this product for stand-alone use. To achieve enhanced and residual pest control, use a 1-2% v/v solution of this product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target newly hatched nymphs. Continue monitoring gardens to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations.
Powdery mildew	Stand Alone Application: Apply 1.5-2% v/v solution of this product when the first signs of powdery mildew appear and repeat at 7 to 10-day intervals, or as needed. Schedule a follow-up fungicide application within 7-10 days after each application when this product is used alone. Mix Application: Apply a 1 - 2% v/v solution of this product with a fungicide to achieve protectant/residual control of powdery mildew. Do not mix with sulfur. Do not use within 3 days of a sulfur application.
Additional Information:	
<ul style="list-style-type: none"> • Routinely inspect garden to detect early stages of infestation. • Initiate application at the time of first infestation and appearance of the pest. • Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions. • Apply to wet (to minimize run off) with appropriate spray equipment. • Use appropriate water volume that provides good coverage. • Apply product in 3-7-day intervals starting at the time of infestation. Check for phytotoxicity after each application before additional applications are made. • Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program. • 	

Crop Group 5 BRASSICA (COLE) LEAFY VEGETABLES	
Broccoli; broccoli, Chinese (gai lon); broccoli raab (rapini); Brussels sprouts; cabbage; cabbage, Chinese (bok choy); cabbage, Chinese (napa); cabbage, Chinese mustard (gai choy); cauliflower; cavalo broccolo; collards; kale; kohlrabi; mizuna; mustardgreens; mustard spinach; rape greens.	
Pests:	Instructions
Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring gardens to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations.
Plant bugs	To achieve enhanced control, use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II] [or PyGanic® Gardening]. Scout and make first application to control nymphs during the first generation when the majority of nymphs are in the early instar stages. Make a second application 3-7-days later to target newly emerged nymphs. Continue monitoring gardens to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations.
Thrips	Achieve thorough coverage of the canopy. Suppression only of exposed thrips. A 3-day re-application schedule may be necessary when thrips population is rapidly increasing.
Whiteflies	Routinely check margins for whiteflies; these areas are usually infested first. Be especially alert for rapid increase of whitefly numbers when nearby host crops are in decline. Apply a 1-2% v/v solution of this product for stand-alone use. To achieve enhanced and residual pest control, use a 1-2% v/v solution of this product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target newly hatched nymphs. Continue monitoring gardens to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations.
Powdery mildew	Stand Alone Application: Apply 1.5-2% v/v solution of this product when the first signs of powdery mildew appear and repeat at 7 to 10-day intervals, or as needed. Schedule a follow-up fungicide application within 7-10 days after each application when this product is used alone. Mix Application: Apply a 1 - 2% v/v solution of this product with a fungicide to achieve protectant/residual control of powdery mildew. Do not mix with sulfur. Do not use within 3 days of a sulfur application.
Additional Information:	
<ul style="list-style-type: none"> • Routinely inspect garden to detect early stages of infestation. • Initiate application at the time of first infestation and appearance of the pest. • Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions. • Apply to wet (to minimize run off) with appropriate spray equipment. • Use appropriate water volume that provides good coverage. • Apply product in 3-7-day intervals starting at the time of infestation. Check for phytotoxicity after each application before additional applications are made. • Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program. • 	

Crop Group 6 LEGUMEVEGETABLES (SUCCULENT OR DRIED)	
Bean (<i>Lupinus</i> spp.) (includes grain lupin, sweet lupin, white lupin, and white sweet lupin); bean (<i>Phaseolus</i> spp.) (includes field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean); bean (<i>Vigna</i> spp.) (includes adzuki bean, asparagus bean, blackeyed pea, catjang, Chinese longbean, cowpea, Crowder pea, moth bean, mung bean, rice bean, southern pea, urd bean, yardlong bean); broad bean (fava bean); chickpea (garbanzo bean); guar; jackbean; lablab bean (hyacinth bean); lentil; pea (<i>Pisum</i> spp.) (includes dwarf pea, edible-pod pea, English pea, field pea, garden pea, green pea, snowpea, sugar snap pea); pigeon pea; soybean; soybean (immature seed); sword bean.	
Pests:	Instructions
Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring gardens to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations.
Leafhoppers	To achieve enhanced control, use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II] [or PyGanic® Gardening]. Scout and make first application to control nymphs during the first generation when the majority of nymphs are in the early instar stages. Make a second application 3-7-days later to target newly emerged nymphs. Continue monitoring gardens to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations.
Plant bugs	To achieve enhanced control, use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II] [or PyGanic® Gardening]. Scout and make first application to control nymphs during the first generation when the majority of nymphs are in the early instar stages. Make a second application 3-7-days later to target newly emerged nymphs. Continue monitoring gardens to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations.
Mites: Twospotted spider mites, Citrus rust mite, European red mite, Pacific mite, Willamette mites, Russet mite, Spider mites.	Achieve thorough coverage of the underside of leaves. Make a second application 3-5-days later to target newly emerged immatures. To achieve enhanced short-term control use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II] [or PyGanic® Gardening]. Apply when spider mites are first observed prior to webbing and before mite populations have become severe.
Thrips	Achieve thorough coverage of the canopy. Suppression only of exposed thrips. A 3-day re-application schedule may be necessary when thrips population is rapidly increasing.
Whiteflies	Routinely check margins for whiteflies; these areas are usually infested first. Be especially alert for rapid increase of whitefly numbers when nearby host crops are in decline. Apply a 1-2% v/v solution of this product for stand-alone use. To achieve enhanced and residual pest control, use a 1-2% v/v solution of this product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target newly hatched nymphs. Continue monitoring gardens to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations.
Powdery mildew	Stand Alone Application: Apply 1.5-2% v/v solution of this product when the first signs of powdery mildew appear and repeat at 7 to 10-day intervals, or as needed. Schedule a follow-up fungicide application within 7-10 days after each application when this product is used alone. Mix Application: Apply a 1 - 2% v/v solution of this product with a fungicide to achieve protectant/residual control of powdery mildew. Do not mix with sulfur. Do not use within 3 days of a sulfur application.

Additional Information:

- Routinely inspect garden to detect early stages of infestation.
- Initiate application at the time of first infestation and appearance of the pest.
- Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions.
- Apply to wet (to minimize run off) with appropriate spray equipment.
- Use appropriate water volume that provides good coverage.
- Apply product in 3-7-day intervals starting at the time of infestation. Check for phytotoxicity after each application before additional applications are made.
- Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program.
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Crop Group 7**FOLIAGE OF LEGUME VEGETABLES**

Plant parts of any legume vegetable included in the legume vegetables group that will be used as animal feed.

Pests:	Instructions
Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring gardens to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations.
Leafhoppers	To achieve enhanced control, use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II] [or PyGanic® Gardening]. Scout and make first application to control nymphs during the first generation when the majority of nymphs are in the early instar stages. Make a second application 3-7-days later to target newly emerged nymphs. Continue monitoring gardens to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer
Plant bugs	To achieve enhanced control, use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II] [or PyGanic® Gardening]. Scout and make first application to control nymphs during the first generation when the majority of nymphs are in the early instar stages. Make a second application 3-7-days later to target newly emerged nymphs. Continue monitoring gardens to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer
Mites: Twospotted spider mites, Citrus rust mite, European red mite, Pacific mite, Willamette mites, Russet mite, Spider mites.	Achieve thorough coverage of the underside of leaves. Make a second application 3-5-days later to target newly emerged immatures. To achieve enhanced short-term control use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II] [or PyGanic® Gardening]. Apply when spider mites are first observed prior to webbing and before mite populations have become severe.
Thrips	Achieve thorough coverage of the canopy. Suppression only of exposed thrips. A 3-day re-application schedule may be necessary when thrips population is rapidly increasing.
Whiteflies	Routinely check margins for whiteflies; these areas are usually infested first. Be especially alert for rapid increase of whitefly numbers when nearby host crops are in decline. Apply a 1-2% v/v solution of this product for stand-alone use. To achieve enhanced and residual pest control, use a 1-2% v/v solution of this product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target newly hatched nymphs. Continue monitoring gardens to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations.
Powdery mildew	Stand Alone Application: Apply 1.5-2% v/v solution of this product when the first signs of powdery mildew appear and repeat at 7 to 10-day intervals, or as needed. Schedule a follow-up fungicide application within 7-10 days after each application when this product is used alone. Mix Application: Apply a 1 - 2% v/v solution of this product with a fungicide to achieve protectant/residual control of powdery mildew. Do not mix with sulfur. Do not use within 3 days of a sulfur application.

Additional Information:

- Routinely inspect garden to detect early stages of infestation.
- Initiate application at the time of first infestation and appearance of the pest.
- Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions.
- Apply to wet (to minimize run off) with appropriate spray equipment.
- Use appropriate water volume that provides good coverage.
- Apply product in 3-7-day intervals starting at the time of infestation. Check for phytotoxicity after each application before additional applications are made.
- Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program.
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Crop Group 8	
FRUITING VEGETABLES (EXCEPT CUCURBITS)	
African eggplant; bush tomato; bell pepper; cocona; currant tomato; eggplant; garden huckleberry; goji berry; groundcherry; Martynia; naranjilla; okra; pea eggplant; pepino; non-bell pepper; roselle; scarlet eggplant; sunberry; tomatillo; tomato; tree tomato; cultivars, varieties, and/or hybrids of these.	
Pests:	Instructions
Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring gardens to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations.
Mites: Twospotted spider mites, Citrus rust mite, European red mite, Pacific mite, Willamette mites, Russet mite, Spider mites.	Achieve thorough coverage of the underside of leaves. Make a second application 3-5-days later to target newly emerged immatures. To achieve enhanced short-term control use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II] [or PyGanic® Gardening]. Apply when spider mites are first observed prior to webbing and before mite populations have become severe.
Thrips	Achieve thorough coverage of the canopy. Suppression only of exposed thrips. A 3-day re-application schedule may be necessary when thrips population is rapidly increasing.
Whiteflies	Routinely check margins for whiteflies; these areas are usually infested first. Be especially alert for rapid increase of whitefly numbers when nearby host crops are in decline. Apply a 1-2% v/v solution of this product for stand-alone use. To achieve enhanced and residual pest control, use a 1-2% v/v solution of this product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target newly hatched nymphs. Continue monitoring gardens to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations.
Powdery mildew	Stand Alone Application: Apply 1.5-2% v/v solution of this product when the first signs of powdery mildew appear and repeat at 7 to 10-day intervals, or as needed. Schedule a follow-up fungicide application within 7-10 days after each application when this product is used alone. Mix Application: Apply a 1 - 2% v/v solution of this product with a fungicide to achieve protectant/residual control of powdery mildew. Do not mix with sulfur. Do not use within 3 days of a sulfur application.
Additional Information:	
<ul style="list-style-type: none"> • Routinely inspect garden to detect early stages of infestation. • Initiate application at the time of first infestation and appearance of the pest. • Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions. • Apply to wet (to minimize run off) with appropriate spray equipment. • Use appropriate water volume that provides good coverage. • Apply product in 3-7-day intervals starting at the time of infestation. Check for phytotoxicity after each application before additional applications are made. • Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program. • 	

Crop Group 9 CUCURBIT VEGETABLES	
Chayote (fruit); Chinese waxgourd (Chinese preserving melon); citron melon; cucumber; gherkin; gourd, edible (includes hyotan, cucuzza, hechima, Chinese okra); Momordica spp (includes balsam apple, balsam pear, bittermelon, Chinese cucumber); muskmelon (includes true cantaloupe, cantaloupe, casaba, crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon and snake melon); pumpkin; squash, summer (includes crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini); squash, winter (includes butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash); watermelon.	
Pests:	Instructions
Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring gardens to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations.
Leafhoppers	To achieve enhanced control, use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II] [or PyGanic® Gardening]. Scout and make first application to control nymphs during the first generation when the majority of nymphs are in the early instar stages. Make a second application 3-7-days later to target newly emerged nymphs. Continue monitoring gardens to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations.
Mites: Twospotted spider mites, Citrus rust mite, European red mite, Pacific mite, Willamette mites, Russet mite, Spider mites.	Achieve thorough coverage of the underside of leaves. Make a second application 3-5-days later to target newly emerged immatures. To achieve enhanced short-term control use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II] [or PyGanic® Gardening]. Apply when spider mites are first observed prior to webbing and before mite populations have become severe.
Thrips	Achieve thorough coverage of the canopy. Suppression only of exposed thrips. A 3-day re-application schedule may be necessary when thrips population is rapidly increasing.
Whiteflies	Routinely check margins for whiteflies; these areas are usually infested first. Be especially alert for rapid increase of whitefly numbers when nearby host crops are in decline. Apply a 1-2% v/v solution of this product for stand-alone use. To achieve enhanced and residual pest control, use a 1-2% v/v solution of this product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target newly hatched nymphs. Continue monitoring gardens to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations.
Powdery mildew	Stand Alone Application: Apply 1.5-2% v/v solution of this product when the first signs of powdery mildew appear and repeat at 7 to 10-day intervals, or as needed. Schedule a follow-up fungicide application within 7-10 days after each application when this product is used alone. Mix Application: Apply a 1 - 2% v/v solution of this product with a fungicide to achieve protectant/residual control of powdery mildew. Do not mix with sulfur. Do not use within 3 days of a sulfur application.
Additional Information:	
<ul style="list-style-type: none"> • Routinely inspect garden to detect early stages of infestation. • Initiate application at the time of first infestation and appearance of the pest. • Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions. • Apply to wet (to minimize run off) with appropriate spray equipment. • Use appropriate water volume that provides good coverage. • Apply product in 3-7-day intervals starting at the time of infestation. Check for phytotoxicity after each application before additional applications are made. • Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program. • 	

Crop Group 10 CITRUS FRUITS	
Australian desert lime; Australian finger-lime; Australian round lime; Brown River finger lime; calamondin; citron; citrus hybrids; grapefruit; Japanese summer grapefruit; kumquat; lemon; lime; Mediterranean mandarin; mount white lime; New Guinea wild lime; orange, sour; orange, sweet; pummelo; Russell River lime; satsuma mandarin; sweet lime; tachibana orange; Tahiti lime; tangelo; tangerine (mandarin); tangor; trifoliolate orange; uni; fruit; cultivars, varieties, and/or hybrids of these.	
Pests:	Instructions
Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring gardens to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations.
Mites: Twospotted spider mites, Citrus rust mite, European red mite, Pacific mite, Willamette mites, Russet mite, Spider mites.	Achieve thorough coverage of the underside of leaves. Make a second application 3-5-days later to target newly emerged immatures. To achieve enhanced short-term control use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II] [or PyGanic® Gardening]. Apply when spider mites are first observed prior to webbing and before mite populations have become severe.
Psyllids	To achieve enhanced control, use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II] [or PyGanic® Gardening]. Scout and make first application to control nymphs during the first generation when the majority of nymphs are in the early instar stages. Make a second application 3-5-days later to target newly emerged nymphs. Continue monitoring gardens to determine additional treatment needs. Consult your local extension specialist, certified
Whiteflies	Routinely check margins for whiteflies; these areas are usually infested first. Be especially alert for rapid increase of whitefly numbers when nearby host crops are in decline. Apply a 1-2% v/v solution of this product for stand-alone use. To achieve enhanced and residual pest control, use a 1-2% v/v solution of this product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target newly hatched nymphs. Continue monitoring gardens to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations.
Powdery mildew	Stand Alone Application: Apply a 1 - 2% v/v solution of this product to control powdery mildew when first signs of powdery mildew appear or as appropriate based on local powdery mildew recommendations and repeat at 7 to 14-day intervals, or as needed. Schedule a follow-up fungicide application within 7 to 14-days after each application when this product is applied alone. Mix Application: Apply a 1 - 2% v/v solution of this product with a fungicide to achieve protectant/residual control of powdery mildew. Do not mix with sulfur. Do not use within 3 days of a sulfur application.
Additional Information:	
<ul style="list-style-type: none"> • Routinely inspect garden to detect early stages of infestation. • Initiate application at the time of first infestation and appearance of the pest. • Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions. • Apply to wet (to minimize run off) with appropriate spray equipment. • Use appropriate water volume that provides good coverage. • Apply product in 3-7-day intervals starting at the time of infestation. Check for phytotoxicity after each application before additional applications are made. • Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program. 	

Crop Group 11	
POME FRUITS	
Apple; azarole; crabapple; loquat; mayhaw; medlar; pear; pear, Asian; quince; quince, Chinese; quince, Japanese; tejocote; cultivars, varieties, and/or hybrids of these.	
Pests:	Instructions
Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring gardens to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations.
Leafhoppers, psyllids	To achieve enhanced control, use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II] [or PyGanic® Gardening]. Scout and make first application to control nymphs during the first generation when the majority of nymphs are in the early instar stages. Make a second application 3-7-days later to target newly emerged nymphs. Continue monitoring gardens to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. To control pear psylla, apply a 1 to 2% v/v solution of this product alone or 0.25%-0.5% v/v solution of the product when using with another insecticide partner in tank mix. Apply at delayed dormant stage to control winterform adults and newly hatched nymphs. Time spray application at first sign of colonization. Do not tank mix it with oil. Do not apply during bloom. Make follow up applications on processing pears at petal fall targeting of 1 st and 2 nd instar nymphs. Coordinating application timing with neighbors can reduce the risk of reinfestation.
Mites: Twospotted spider mites, Citrus rust mite, European red mite, Pacific mite, Willamette mites, Russet mite, Spider mites.	Achieve thorough coverage of the underside of leaves. Make a second application 3-5-days later to target newly emerged immatures. To achieve enhanced short-term control use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II] [or PyGanic® Gardening]. Apply when spider mites are first observed prior to webbing and before mite populations have become severe.
Thrips	Achieve thorough coverage of the canopy. Suppression only of exposed thrips. A 3-day re-application schedule may be necessary when thrips population is rapidly increasing.
Powdery mildew	Stand Alone Application: Apply a 1 - 2% v/v solution of this product to control powdery mildew when first signs of powdery mildew appear or as appropriate based on local powdery mildew recommendations and repeat at 7 to 14-day intervals, or as needed. Schedule a follow-up fungicide application within 7 to 14-days after each application when this product is applied alone. Mix Application: Apply a 1 - 2% v/v solution of this product with a fungicide to achieve protectant/residual control of powdery mildew. Do not mix with sulfur. Do not use within 3 days of a sulfur application.
Additional Information:	
<ul style="list-style-type: none"> • Do not tank mix it with oil. • Do not apply during bloom. • Apply to wet and minimize run off. Application of excessive water volumes will increase the potential for fruit injury by causing collection of spray on the bottom of fruit, especially when poor drying conditions exist. • Do not apply this product after the delayed dormant stage on fresh market pear varieties including d'Anjou and Asian pears. Applications after fruit set may cause marking which can reduce market value of the fruit. • Routinely inspect gardens with special focus to detect early stages of infestations. • Initiate application at the time of first colonization and appearance of the pest. • Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions. • Apply product in 3-7-day intervals starting at the time of colonization. Check for phytotoxicity before additional applications are made. • Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program. • Use it with care on pears after delayed dormant stage due to potential for fruit marking. 	

Crop Group 12 STONE FRUITS	
Apricot; apricot, Japanese; capulin; cherry, black; cherry, Nanking; cherry, sweet; cherry, tart; Jujube, Chinese; nectarine; peach; plum; plum, American; plum, beach; plum, Canada; plum, cherry; plum, Chickasaw; plum, Damson; plum, Japanese; plum, Klamath; plum, prune; plumcot; sloe; cultivars, varieties, and/or hybrids of these.	
Pests:	Instructions
Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations.
Mites: Twospotted spider mites, Citrus rust mite, European red mite, Pacific mite, Willamette mites, Russet mite, Spider mites.	Achieve thorough coverage of the underside of leaves. Make a second application 3-5-days later to target newly emerged immatures. To achieve enhanced short-term control use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II] [or PyGanic® Gardening]. Apply when spider mites are first observed prior to webbing and before mite populations have become severe.
Plant bugs	To achieve enhanced control, use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II] [or PyGanic® Gardening]. Scout and make first application to control nymphs during the first generation when the majority of nymphs are in the early instar stages. Make a second application 3-7-days later to target newly emerged nymphs. Continue monitoring gardens to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations.
Spotted wing Drosophila	Suppression only. Monitor to detect the first appearance of the pest. Initiate application at the time of first appearance of the pest. Use a 1-2% v/v solution of this product. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-5-days later. Rotate product with other registered products to suppress egg laying.
Thrips	Achieve thorough coverage of the canopy. Suppression only of exposed thrips. A 3-day re-application schedule may be necessary when thrips population is rapidly increasing.
Powdery mildew	Stand Alone Application: Apply a 1 - 2% v/v solution of this product to control powdery mildew when first signs of powdery mildew appear or as appropriate based on local powdery mildew recommendations and repeat at 7 to 14-day intervals, or as needed. Schedule a follow-up fungicide application within 7 to 14-days after each application when this product is applied alone. Mix Application: Apply a 1 - 2% v/v solution of this product with a fungicide to achieve protectant/residual control of powdery mildew. Do not mix with sulfur. Do not use within 3 days of a sulfur application.
Additional Information:	
<ul style="list-style-type: none"> • Apply to wet minimize run off. Application of excessive water volumes will increase the potential for fruit injury by causing collection of spray on the bottom of fruit, especially when poor drying conditions exist. • Concentrate applications are specified with a maximum volume of 4.6 gallons per 1,000 sq ft on smooth. Do not make dilute spray applications on smooth skinned fruit after fruit formation. This product is not specified for use on yellow skinned nectarine varieties. • Do not apply the product to sweet cherries between fruit formation and harvest. • Routinely inspect gardens with special focus to detect early stages of infestation.. • Initiate application at the time of first infestation and appearance of the pest. • Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions. • The product can be applied as a mix combination with a labeled companion insecticide. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Do not store mixture for an extended period of time, apply mixture as soon as possible. • Apply product in 3-7-day intervals starting at the time of colonization. Check for phytotoxicity before additional applications are made. • Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program. 	

Crop Group 13	
BERRY AND SMALL FRUITS	
Amur river grape; aronia berry; bayberry; bearberry; bilberry; blackberry (including Andean blackberry, arctic blackberry, bingleberry, black satin berry, boysenberry, brombeere, California blackberry, Chesterberry, Cherokee blackberry, Cheyenne blackberry, common blackberry, coryberry, darrowberry, dewberry, Dirksen thornless berry, evergreen blackberry, Himalayaberry, hullberry, lavacaberry, loganberry, lowberry, Lucretiaberry, mammoth blackberry, marionberry, mora, mures deronce, nectarberry, Northern dewberry, olallieberry, Orgeon evergreen berry, phenomenalberry, rangeberry, ravenberry, rossberry, Shawnee blackberry, Southern dewberry, tayberry, youngberry, zarzamora, and cultivars, varieties and/or hybrids of these); blueberry, highbush; blueberry, lowbush; buffalo currant; buffaloberry; che; Chilean guava; chokecherry; cloudberry; cranberry; cranberry, highbush; currant, black; currant, red; elderberry; European barberry; gooseberry; grape; honeysuckle, edible; huckleberry; jostaberry; Juneberry (Saskatoon berry); kiwifruit, fuzzy; kiwifruit, hardy; lingonberry; maypop; mountain pepper berries; mulberry; muntries; native currant; partridgeberry; phalsa; pincherry; raspberry, black and red; riberry; salal; schisandra berry; sea buckthorn; serviceberry; strawberry; wild raspberry; cultivars, varieties, and/or hybrids of these.	
Pests:	Instructions
Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations.
Leafhoppers	To achieve enhanced control, use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II] [or PyGanic® Gardening]. Scout and make first application to control nymphs during the first generation when the majority of nymphs are in the early instar stages. Make a second application 3-7-days later to target newly emerged nymphs. Continue monitoring to determine additional treatment needs. This product is effective for late season and preharvest suppression of leafhoppers in wine and raisin grapes. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations.
Scales	Suppression only. Apply a 1 to 2% v/v spray to target crawler stage. Apply with sufficient amount of water to uniformly wet all infested plant parts especially targeting shoot terminals and the underside of leaves. Make a second application 3-5-days later to target newly emerged crawlers.
Spotted wing Drosophila	Suppression only. Monitor to detect the first appearance of the pest. Initiate application at the time of first appearance of the pest. Use a 1-2% v/v solution of this product. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-5-days later. Rotate product with other registered products to suppress egg laying.
Thrips	Achieve thorough coverage of the canopy. Suppression only of exposed thrips. A 3-day re-application schedule may be necessary when thrips population is rapidly increasing.
Powdery mildew	Stand Alone. Apply a 1 to 2% v/v solution of this product to control powdery mildew spores and hyphae. Initiate sprays at bud break or as appropriate based on local powdery mildew control requirements. Repeat at 7 to 10-day intervals, or as needed as needed through veraison (development of variety-specific color). Do not apply product past veraison. Schedule a follow-up fungicide application within 7 to 10-days after each application when this product is applied alone. Mix Application: Apply a 1.5 - 2% v/v solution of this product with a fungicide to achieve protectant/residual control of powdery mildew. Do not mix with sulfur. Do not use within 3 days of a sulfur application. Complete coverage of grape clusters as well as leaf surfaces is essential for effective control. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations.
Additional Information:	
<ul style="list-style-type: none"> • Apply to wet minimize run off. Application of excessive water volumes will increase the potential for fruit injury by causing collection of spray on the bottom of fruit, especially when poor drying conditions exist. • Routinely inspect with special focus to detect early stages of infestation. • Initiate application at the time of first infestation and appearance of the pest. • Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions. • The product can be applied as a mix combination with a labeled companion insecticide. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Do not store mixture for an extended period of time, apply mixture as soon as possible. • Apply product in 3-7-day intervals starting at the time of colonization. Check for phytotoxicity before additional applications are made. • This product may alter the waxy bloom and or cause marking on the surface of grapes which can affect the quality rating of table grapes at harvest. To reduce potential for fruit injury, do not apply in greater than 75 gallons of water per acre on table grapes after berries are 6 to 7 mm in diameter. Do not apply this product to Calmeria or Italia varieties of grapes. • Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program. 	

Crop Group 14	
TREE NUTS	
African nut-tree; almond; beechnut; Brazil nut; Brazilian pine; bunya; bur oak; butternut; Cajou nut; candlenut; cashew; chestnut; chinquapin; coconut; coquito nut; dika nut; ginkgo; Guiana chestnut; hazelnut (filbert); heartnut; hickory nut; Japanese horse-chestnut; macadamia nut; mongongo nut; monkey-pot; monkey puzzle nut; Okari nut; Pachira nut; peach palm nut; pecan; pequi; Pili nut; pine nut; pistachio; Sapucaia nut; tropical almond; walnut, black; walnut, English; yellowhorn; cultivars, varieties, and/or hybrids of these.	
Pests:	Instructions
Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations.
Mites: Twospotted spider mites, Citrus rust mite, European red mite, Pacific mite, Willamette mites, Russet mite, Spider mites.	Achieve thorough coverage of the underside of leaves. Make a second application 3-5-days later to target newly emerged immatures. To achieve enhanced short-term control use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II] [or PyGanic® Gardening]. Apply when spider mites are first observed prior to webbing and before mite populations have become severe.
Scales	Suppression only. Apply a 1 to 2% v/v spray to target crawler stage. Apply with sufficient amount of water to uniformly wet all infested plant parts especially targeting shoot terminals and the underside of leaves. Make a second application 3-5-days later to target newly emerged crawlers.
Powdery mildew	Stand Alone Application: Apply a 1 - 2% v/v solution of this product to control powdery mildew when first signs of powdery mildew appear or as appropriate based on local powdery mildew recommendations and repeat at 7 to 14-day intervals, or as needed. Schedule a follow-up fungicide application within 7 to 14-days after each application when this product is applied alone. Mix Application: Apply a 1 - 2% v/v solution of this product with a fungicide to achieve protectant/residual control of powdery mildew. Do not mix with sulfur. Do not use within 3 days of a sulfur application.
Additional Information:	
<ul style="list-style-type: none"> • Apply to wet minimize run off. Application of excessive water volumes will increase the potential for injury especially when poor drying conditions exist. • Routinely inspect with special focus to detect early stages of infestation. • Initiate application at the time of first infestation and appearance of the pest. • Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions. • The product can be applied as a mix combination with a labeled companion insecticide. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Do not store mixture for an extended period of time, apply mixture as soon as possible. • Apply product in 3-7-day intervals starting at the time of colonization. Check for phytotoxicity before additional applications are made. • Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program. 	

Crop Group 15	
CEREAL GRAINS	
Barley; buckwheat; corn; millet, pearl; millet, proso; oats; popcorn; rice; rye; sorghum (milo); teosinte; triticale; wheat; wild rice.	

Additional Information:

- Routinely inspect garden to detect early stages of infestation.
- Initiate application at the time of first infestation and appearance of the pest.
- Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions.
- Apply to wet (to minimize run off) with appropriate spray equipment.
- Use appropriate water volume that provides good coverage.
- Apply product in 3-7-day intervals starting at the time of infestation. Check for phytotoxicity after each application before additional applications are made.
- Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program.
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Crop Group 17**GRASS FORAGE, FODDER, AND HAY**

Forage, fodder, stover, and hay of any grass, Gramineae/Poaceae family (either green or cured) except sugarcane and those included in the cereal grains group, that will be fed to or grazed by livestock, all pasture and range grasses and grasses grown for hay or silage.

Additional Information:

- Routinely scout with special focus on margins to detect early stages of colonization.
- Initiate application at the time of first colonization and appearance of the pest.
- Stand Alone Application: Use 4 pints of this product per acre when applications are made in 3 - 25 gallons of water per acre. Use a 2% v/v spray solution of this product when 25 or more gallons of water are applied per acre.
- Apply in sufficient spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment.
- Apply product in 3-7-day intervals starting at the time of colonization. Check for phytotoxicity before additional applications are made.
- Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program.

Crop Group 18**NONGRASS ANIMAL FEEDS (FORAGE, FODDER, STRAW AND HAY) GRASS FORAGE, FODDER, AND HAY**

Alfalfa; bean, velvet; clover (*Trifolium* spp., *Melilotus* spp.); kudzu; lespedeza; lupin; sainfoin; trefoil; vetch; vetch, crown; vetch, milk.

Additional Information:

- Routinely inspect gardens with special focus to detect early stages of infestation.
- Initiate application at the time of first infestation and appearance of the pest.
- Stand Alone Application: Use 4 pints of this product per acre when applications are made in 3 - 25 gallons of water per acre. Use a 2% v/v spray solution of this product when 25 or more gallons of water are applied per acre.
- Apply in sufficient spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment.
- Apply product in 3-7-day intervals starting at the time of colonization. Check for phytotoxicity before additional applications are made.
- Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program.

**Crop Group 20
OILSEED GROUP**

Borage; calendula; castor oil plant; Chinese tallowtree; cottonseed; crambe; cuphea; echium; euphorbia; evening primrose; flax seed; gold of pleasure; hare's ear mustard; jojoba; lesquerella; lunaria; meadowfoam; milkweed; mustard seed; niger seed; oil radish; poppy seed; rapeseed; rose hip; safflower; sesame; stokes aster; sunflower; sweet rocket; tallowwood; tea oil plant; vernonia; cultivars, varieties, and/or hybrids of these.

Additional Information:

- Routinely inspect gardens with special focus to detect early stages of infestation.
- Initiate application at the time of first infestation and appearance of the pest.
- Stand Alone Application: Use 4 pints of this product per acre when applications are made in 3 - 25 gallons of water per acre. Use a 2% v/v spray solution of this product when 25 or more gallons of water are applied per acre.
- This product may be mixed with penetrator type adjuvants for application to cotton only if prior use under local use conditions has demonstrated plant safety.
- Apply in sufficient spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment.
- Apply product in 3-7-day intervals starting at the time of colonization. Check for phytotoxicity before additional applications are made.
- Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program.

**Crop Group 22
STALK, STEM AND LEAF PETIOLE VEGETABLES**

Agave; aloe vera; asparagus; bamboo, shoots; cardoon; celery; celery, Chinese; celtuce; fennel, Florence, fresh leaves and stalk; fern, edible, fiddlehead; fuki; kale, sea; kohlrabi; palm hearts; prickly pear, pads; prickly pear, Texas, pads; rhubarb; udo; zuiki; cultivars, varieties, and hybrids of these commodities.

Pests:	Instructions
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Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring gardens to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations.
Powdery mildew	Stand Alone Application: Apply a 1 - 2% v/v solution of this product to control powdery mildew when first signs of powdery mildew appear or as appropriate based on local powdery mildew recommendations and repeat at 7 to 14-day intervals, or as needed. Schedule a follow-up fungicide application within 7 to 14-days after each application when this product is applied alone. Mix Application: Apply a 1 - 2% v/v solution of this product with a fungicide to achieve protectant/residual control of powdery mildew. Do not mix with sulfur. Do not use within 3 days of a sulfur application.
<p>Additional Information:</p> <ul style="list-style-type: none"> • Routinely inspect gardens with special focus to detect early stages of infestation. • Initiate application at the time of first infestation and appearance of the pest. • Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions. • Apply in sufficient spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment. • Apply product in 3-7-day intervals starting at the time of colonization. Check for phytotoxicity before additional applications are made. • Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program. 	

Crop Group 23	
TROPICAL AND SUBTROPICAL FRUIT, EDIBLE PEEL	
<p>Acai; acerola; achachairu; African plum; agritos; almondette; ambarella; apak palm; appleberry; araza; arbutus berry; babaco; bacaba palm; bacabade-leque; bayberry, red; bignay; bilimbi; borojo; breadnut; cabeluda; cajou, fruit; cambuca; carandas-plum; carob; cashew apple; Ceylon iron wood; Ceylon olive; cherry-of-the-RioGrande; Chinese olive, black; Chinese olive, white; chirauli-nut; ciruela verde; cocoplum; date; Davidson's plum; desert-date; doum palm coconut; false sandalwood; feijoa; fig; fragrant manjack; gooseberry, abyssinian; gooseberry, Ceylon; gooseberry, Indian; gooseberry, otaheite; governor's plum; grumichama; guabiroba; guava; guava berry; guava, Brazilian; guava, cattley; guava, Costa Rican; guava, Para; guava, purple strawberry; guava, strawberry; guava, yellow strawberry; guayabillo; illawarra plum; imbe; imbu; Indianplum; jaborcaba; Jamaica-cherry; jambolan; jelly palm; jujube, Indian; kaffir-plum; kakadu plum; kapundung; karanda; kwai muk; lemon aspen; mangaba; Marian plum; mombin, Malayan; mombin, purple; mombin, yellow; monkeyfruit; monos plum; mountain cherry; nance; natal plum; noni; olive; papaya, mountain; pataua; peach palm, fruit; persimmon, black; persimmon, Japanese; pitomba; plum-of-Martinique; pomerac; rambai; rose apple; rukam; rumberry; sea grape; sentul; sete-capotes; silver aspen; starfruit; Surinam cherry; tamarind; uvalha; water apple; water pear; water berry; wax jambu; cultivars, varieties, and hybrids of these commodities.</p>	
Pests:	Instructions
Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations.
Mites: Twospotted Spider mites, Citrus rust mite, European red mite, Pacific mite, Willamette mites, Russet mite, Spider mites.	Achieve thorough coverage of the underside of leaves. Make a second application 3-5-days later to target newly emerged immatures. To achieve enhanced short-term control use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II] [or PyGanic® Gardening]. Apply when spider mites are first observed prior to webbing and before mite populations have become severe.
Psyllids	To achieve enhanced control, use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II] [or PyGanic® Gardening]. Scout and make first application to control nymphs during the first generation when the majority of nymphs are in the early instar stages. Make a second application 3-5-days later to target newly emerged nymphs. Continue monitoring to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations.
Scales	Suppression only. Apply a 1 to 2% v/v spray to target crawler stage. Apply with sufficient amount of water to uniformly wet all infested plant parts especially targeting shoot terminals and the underside of leaves. Make a second application 3-5-days later to target newly emerged crawlers.
Thrips	Achieve thorough coverage of the canopy. Suppression only of exposed thrips. A 3-day re-application schedule may be necessary when thrips population is rapidly increasing.
Whiteflies	Routinely check margins for whiteflies; these areas are usually infested first. Be especially alert for rapid increase of whitefly numbers when nearby host crops are in decline. Apply a 1-2% v/v solution of this product for stand-alone use. To achieve enhanced and residual pest control, use a 1-2% v/v solution of this product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target newly hatched nymphs. Continue monitoring to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations.
Additional Information:	
<ul style="list-style-type: none"> • Routinely inspect with special focus to detect early stages of infestation. • Initiate application at the time of first infestation and appearance of the pest. • Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions. • Apply in sufficient spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment. • Apply product in 3-7-day intervals starting at the time of colonization. Check for phytotoxicity before additional applications are made. • Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program. 	

Crop Group 24 TROPICAL AND SUBTROPICAL FRUIT, INEDIBLE PEEL	
Abiu; aisen; akee apple; atemoya; avocado; avocado, Guatemalan; avocado, Mexican; avocado, West Indian; bacury; bael fruit; banana; banana, dwarf; binjai; biriba; breadfruit; Burmese grape; canistel; cat's-eyes; champedak; cherimoya; cupuacu; custard apple; dragon fruit; durian; elephant-apple; etambe; granadilla; granadilla, giant; ilama; inga; jackfruit; jatoba; karuka; kei apple; langsai; lanjui; longan; lucuma; lychee; mabolo; madras-thorn; mammy-apple; manduro; mango; mango, horse; mango, Saipan; mangosteen; marang; marmaladebox; matisia; mesquite; mongongo, fruit; monkey-bread-tree; monstera; nicobarbreadfruit; paho; pandanus; papaya; passionflower, winged-stem; passionfruit; passionfruit, banana; passionfruit, purple; passionfruit, yellow; pawpaw, common; pawpaw, small-flower; pelipisan; pequi; pequia; persimmon, American; pineapple; pitahaya; pitaya; pitaya, amarillo; pitaya, roja; pitaya, yellow; plantain; pomegranate; poshte; prickly pear, fruit; prickly pear, Texas, fruit; pulasan; quandong; rambutan; saguaro; sapodilla; sapote, black; sapote, green; sapote, mamey; sapote, white; sataw; satinleaf; screw-pine; Sierra Leone-tamarind; soncoya; soursop; Spanish lime; star apple; sugar apple; sun sapote; tamarind-of-the-Indies; velvet tamarind; wampi; white star apple; wild loquat; cultivars, varieties, and hybrids of these commodities.	
Pests:	Instructions
Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations.
Lace bugs	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations.
Mites: Twospotted spider mites, Citrus rust mite, European red mite, Pacific mite, Willamette mites, Russet mite, Spider mites.	Achieve thorough coverage of the underside of leaves. Make a second application 3-5-days later to target newly emerged immatures. To achieve enhanced short-term control use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II] [or PyGanic® Gardening]. Apply when spider mites are first observed prior to webbing and before mite populations have become severe.
Scales	Suppression only. Apply a 1 to 2% v/v spray to target crawler stage. Apply with sufficient amount of water to uniformly wet all infested plant parts especially targeting shoot terminals and the underside of leaves. Make a second application 3-5-days later to target newly emerged crawlers.
Thrips	Achieve thorough coverage of the canopy. Suppression only of exposed thrips. A 3-day re-application schedule may be necessary when thrips population is rapidly increasing.
Additional Information:	
<ul style="list-style-type: none"> • Routinely inspect with special focus to detect early stages of infestation. • Initiate application at the time of first infestation and appearance of the pest. • Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions. • Apply in sufficient spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment. • Apply product in 3-7-day intervals starting at the time of colonization. Check for phytotoxicity before additional applications are made. • Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program. 	

Crop Group 25
HERBS AND SPICES

Agrimony, fresh leaves; Agrimony, dried leaves; Amla, fresh leaves; Amla, dried leaves; Angelica, fresh leaves; Angelica, dried leaves; Angelica, dahurian, fresh leaves; Angelica, dahurian, dried leaves; Applemint, fresh leaves; Applemint, dried leaves; Avarum, fresh leaves; Avarum, dried leaves; Balloon pea, fresh leaves; Balloon pea, dried leaves; Balm, fresh leaves; Balm, dried leaves; Barrenwort, fresh leaves; Barrenwort, dried leaves; Basil, fresh leaves; Basil, dried leaves; Basil, American, fresh leaves; Basil, American, dried leaves; Basil, Greek, fresh leaves; Basil, Greek, dried leaves; Basil, holy, fresh leaves; Basil, holy, dried leaves; Basil, lemon, fresh leaves; Basil, lemon, dried leaves; Basil, Russian, fresh leaves; Basil, Russian, dried leaves; Bay, fresh leaves; Bay, dried leaves; Bearberry, fresh leaves; Bearberry, dried leaves; Bisongrass, fresh leaves; Bisongrass, dried leaves; Blue mallow, fresh leaves; Blue mallow, dried leaves; Boneset, fresh leaves; Boneset, dried leaves; Borage, fresh leaves; Borage, dried leaves; Borage, Indian, fresh leaves; Borage, Indian, dried leaves; Burnet, fresh leaves; Burnet, dried leaves; Burnet, garden, fresh leaves; Burnet, garden, dried leaves; Burnet, salad, fresh leaves; Burnet, salad, dried leaves; Butterbur, fresh leaves; Butterbur, dried leaves; Calamint, fresh leaves; Calamint, dried leaves; Calamint, large-flower, fresh leaves; Calamint, large-flower, dried leaves; Calamint, lesser, fresh leaves; Calamint, lesser, dried leaves; Calendula, fresh leaves; Calendula, dried leaves; Caltrop, fresh leaves; Caltrop, dried leaves; Camomile (Chamomile), fresh leaves; Camomile (Chamomile) dried leaves; Camomile (Chamomile), German, fresh leaves; Camomile (Chamomile), German, dried leaves; Camomile (Chamomile), Roman, fresh leaves; Camomile (Chamomile), Roman, dried leaves; Caraway, fresh leaves; Caraway, dried leaves; Cat's claw, fresh leaves; Cat's claw, dried leaves; Catnip, fresh leaves; Catnip, dried leaves; Catnip, Japanese, fresh leaves; Catnip, Japanese, dried leaves; Celandine, greater, fresh leaves; Celandine, greater, dried leaves; Celandine, lesser, fresh leaves; Celandine, lesser, dried leaves; Celery, dried leaves; Centaury, fresh leaves; Centaury, dried leaves; Chaste tree, fresh leaves; Chaste tree, dried leaves; Chaste tree, Chinese, fresh leaves; Chaste tree, Chinese, dried leaves; Chervil, dried leaves; Chinese blackberry, fresh leaves; Chinese blackberry, dried leaves; Chinese foxglove, fresh leaves; Chinese foxglove, dried leaves; Chive, dried leaves; Chive, Chinese, dried leaves; Cicely, sweet, fresh leaves; Cicely, sweet, dried leaves; Cilantro, dried leaves; Clary, fresh leaves; Clary, dried leaves; Coriander, Bolivian, fresh leaves; Coriander, Bolivian, dried leaves; Coriander, Vietnamese, fresh leaves; Coriander, Vietnamese, dried leaves; Costmary, fresh leaves; Costmary, dried leaves; Creat, fresh leaves; Creat, dried leaves; Culantro, fresh leaves; Culantro, dried leaves; Curry leaf, fresh leaves; Curry leaf, dried leaves; Curryplant, fresh leaves; Curryplant, dried leaves; Cut leaf, fresh leaves; Cut leaf, dried leaves; Damiana, fresh leaves; Damiana, dried leaves; Dillweed, dried leaves; Dokudami, fresh leaves; Dokudami, dried leaves; Echinacea, fresh leaves; Echinacea, dried leaves; Epazote, fresh leaves; Epazote, dried leaves; Eucommia, fresh leaves; Eucommia, dried leaves; Evening primrose, fresh leaves; Evening primrose, dried leaves; Eyebright, fresh leaves; Eyebright, dried leaves; Fennel, common, fresh leaves; Fennel, common, dried leaves; Fennel, Florence, dried leaves; Fennel, Spanish, fresh leaves; Fennel, Spanish, dried leaves; Fenugreek, fresh leaves; Fenugreek, dried leaves; Fenugreek, dried leaves; Feverfew, fresh leaves; Feverfew, dried leaves; Field pennycress, fresh leaves; Field pennycress, dried leaves; Flowers, edible, fresh leaves, multiple species; Flowers, edible, dried leaves, multiple species; Fumitory, fresh leaves; Fumitory, dried leaves; Galbanum, fresh leaves; Galbanum, dried leaves; Galega, fresh leaves; Galega, dried leaves; Gambir, fresh leaves; Gambir, dried leaves; Geranium, fresh leaves; Geranium, dried leaves; Geranium, lemon, fresh leaves; Geranium, lemon, dried leaves; Geranium, rose, fresh leaves; Geranium, rose, dried leaves; Germander, golden, fresh leaves; Germander, golden, dried leaves; Goldenrod, European, fresh leaves; Goldenrod, European, dried leaves; Goldenseal, fresh leaves; Goldenseal, dried leaves; Gotu kola, fresh leaves; Gotu kola, dried leaves; Greater periwinkle, fresh leaves; Greater periwinkle, dried leaves; Guayusa, fresh leaves; Guayusa, dried leaves; Gumweed, fresh leaves; Gumweed, dried leaves; Gymnema, fresh leaves; Gymnema, dried leaves; Gypsywort, fresh leaves; Gypsywort, dried leaves; Hawthorn, fresh leaves; Hawthorn, dried leaves; Heal-all, fresh leaves; Heal-all, dried leaves; Hemp nettle, fresh leaves; Hemp nettle, dried leaves; Honewort, fresh leaves; Honewort, dried leaves; Honeybush, fresh leaves; Honeybush, dried leaves; Horehound, fresh leaves; Horehound, dried leaves; Horsemint, fresh leaves; Horsemint, dried leaves; Horsetail, fresh leaves; Horsetail, dried leaves; Hyssop, fresh leaves; Hyssop, dried leaves; Hyssop, anise, fresh leaves; Hyssop, anise, dried leaves; Indian tobacco, fresh leaves; Indian tobacco, dried leaves; Ironwort, fresh leaves; Ironwort, dried leaves; Ivy, fresh leaves; Ivy, dried leaves; Jamaica dogwood, fresh leaves; Jamaica dogwood, dried leaves; Jasmine, fresh leaves; Jasmine, dried leaves; Labrador tea, fresh leaves; Labrador tea, dried leaves; Lavender, fresh leaves; Lavender, dried leaves; Lemon verbena, fresh leaves; Lemon verbena, dried leaves; Lemongrass, fresh leaves; Lemongrass, dried leaves; Lovage, fresh leaves; Lovage, dried leaves; Lovein-a-mist, fresh leaves; Love-in-a-mist, dried leaves; Mamaki, fresh leaves; Mamaki, dried leaves; Marigold, fresh leaves; Marigold, dried leaves; Marigold, African, fresh leaves; Marigold, African, dried leaves; Marigold, Aztec, fresh leaves; Marigold, Aztec, dried leaves; Marigold, French, fresh leaves; Marigold, French, dried leaves; Marigold, Irish lace, fresh leaves; Marigold, Irish lace, dried leaves; Marigold, licorice, fresh leaves; Marigold, licorice, dried leaves; Marigold, Mexican mint, fresh leaves; Marigold, Mexican mint, dried leaves; Marigold, signet, fresh leaves; Marigold, signet, dried leaves; Marjoram, fresh leaves; Marjoram, dried leaves; Marjoram, pot, fresh leaves; Marjoram, pot, dried leaves; Marjoram, sweet, fresh leaves; Marjoram, sweet, dried leaves; Marshmallow, fresh leaves; Marshmallow, dried leaves; Meadowsweet, fresh leaves; Meadowsweet, dried leaves; Mint, fresh leaves; Mint, dried leaves; Mint, corn, fresh leaves; Mint, corn, dried leaves; Mint, Korean, fresh leaves; Mint, Korean, dried leaves; Monarda, fresh leaves; Monarda, dried leaves; Moringa, fresh leaves; Moringa, dried leaves; Motherwort, fresh leaves; Motherwort, dried leaves; Mountainmint, fresh leaves; Mountainmint, dried leaves; Mountainmint, clustered, fresh leaves; Mountainmint, clustered, dried leaves; Mountainmint, hoary, fresh leaves; Mountainmint, hoary, dried leaves; Mountainmint, Virginia, fresh leaves; Mountainmint, Virginia, dried leaves; Mountainmint, whorled, fresh leaves; Mountainmint, whorled, dried leaves; Mugwort, fresh leaves; Mugwort, dried leaves; Mulberry, white, fresh leaves; Mulberry, white, dried leaves; Mullein, fresh leaves; Mullein, dried leaves; Mustard, hedge, fresh leaves; Mustard, hedge, dried leaves; Nasturtium, fresh leaves; Nasturtium, dried leaves; Nasturtium, bush, fresh leaves; Nasturtium, bush, dried leaves; Nasturtium, garden, fresh leaves; Nasturtium, garden, dried leaves; Nettle, stinging, fresh leaves; Nettle, stinging, dried leaves; Oregano, fresh leaves; Oregano, dried leaves; Oregano, Mexican, fresh leaves; Oregano, Mexican, dried leaves; Oregano, Puerto Rico, fresh leaves; Oregano, Puerto Rico, dried leaves; Oswego tea, fresh leaves; Oswego tea, dried leaves; Pandan leaf, fresh leaves; Pandan leaf, dried leaves; Pansy, fresh leaves; Pansy, dried leaves; Paracress, fresh leaves; Paracress, dried leaves; Parsley, fresh leaves; Parsley, dried leaves; Partridge berry, fresh leaves; Partridge berry, dried leaves; Patchouli, fresh leaves; Patchouli, dried leaves; Pennyroyal, fresh leaves; Pennyroyal, dried leaves; Pepper leaf, black, fresh leaves; Pepper leaf, black, dried leaves; Peppermint, fresh leaves; Peppermint, dried leaves; Perilla, fresh leaves; Perilla, dried leaves; Pill bearing spurge, fresh leaves; Pill bearing spurge, dried leaves; Pipsissewa, fresh leaves; Pipsissewa, dried leaves;

Crop Group 25 (Continued)	
HERBS AND SPICES	
<p>Plantain, common, fresh leaves; Plantain, common, dried leaves; Rooibos, fresh leaves; Rooibos, dried leaves; Rose, fresh leaves; Rose, dried leaves; Rosemary, fresh leaves; Rosemary, dried leaves; Sage, fresh leaves; Sage, dried leaves; Sage, Greek, fresh leaves; Sage, Greek, dried leaves; Sage, Spanish, fresh leaves; Sage, Spanish, dried leaves; Sage, white, fresh leaves; Sage, white, dried leaves; Savory, summer, fresh leaves; Savory, summer, dried leaves; Savory, winter, fresh leaves; Savory, winter, dried leaves; Senna, fresh leaves; Senna, dried leaves; Siberian fir, fresh leaves; Siberian fir, dried leaves; Skullcap, fresh leaves; Skullcap, dried leaves; Small flower willow head, fresh leaves; Small flower willow head, dried leaves; Sorrel, fresh leaves; Sorrel, dried leaves; Sorrel, French, fresh leaves; Sorrel, French, dried leaves; Sorrel, garden, fresh leaves; Sorrel, garden, dried leaves; Southernwood, fresh leaves; Southernwood, dried leaves; Spearmint, fresh leaves; Spearmint, dried leaves; Spearmint, Scotch, fresh leaves; Spearmint, Scotch, dried leaves; Spilanthes, fresh leaves; Spilanthes, dried leaves; Spotted beebalm, fresh leaves; Spotted beebalm, dried leaves; St. John's Wort, fresh leaves; St. John's Wort, dried leaves; Stevia, fresh leaves; Stevia, dried leaves; Stoneroot, fresh leaves; Stoneroot, dried leaves; Swamp leaf, fresh leaves; Swamp leaf, dried leaves; Tansy, fresh leaves; Tansy, dried leaves; Tarragon, fresh leaves; Tarragon, dried leaves; Thuja, fresh leaves; Thuja, dried leaves; Thyme, fresh leaves; Thyme, dried leaves; Thyme, creeping, fresh leaves; Thyme, creeping, dried leaves; Thyme, lemon, fresh leaves; Thyme, lemon, dried leaves; Thyme, mastic, fresh leaves; Thyme, mastic, dried leaves; Toon, Chinese, fresh leaves; Toon, Chinese, dried leaves; Toothed clubmoss, fresh leaves; Toothed clubmoss, dried leaves; Trailing arbutus, fresh leaves; Trailing arbutus, dried leaves; Vasaka, fresh leaves; Vasaka, dried leaves; Verbena, blue, fresh leaves; Verbena, blue, dried leaves; Veronica, fresh leaves; Veronica, dried leaves; Violet, fresh leaves; Violet, dried leaves; Watermint, fresh leaves; Watermint, dried leaves; Waterpepper, fresh leaves; Waterpepper, dried leaves; Wild bergamot, fresh leaves; Wild bergamot, dried leaves; Wintergreen, fresh leaves; Wintergreen, dried leaves; Wood betony, fresh leaves; Wood betony, dried leaves; Woodruff, fresh leaves; Woodruff, dried leaves; Wormwood, fresh leaves; Wormwood, dried leaves; Wormwood, Roman, fresh leaves; Wormwood, Roman, dried leaves; Yarrow, fresh leaves; Yarrow, dried leaves; Yellow gentian, fresh leaves; Yellow gentian, dried leaves; Yerba santa, fresh leaves; Yerba santa, dried leaves; Yomogi, fresh leaves; Yomogi, dried leaves; Cultivars, varieties, and hybrids of these commodities.</p>	
Pests:	Instructions
Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring gardens to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations.
Mites: Twospotted spider mites, Citrus rust mite, European red mite, Pacific mite, Willamette mites, Russet mite, Spider mites.	Achieve thorough coverage of the underside of leaves. Make a second application 3-5-days later to target newly emerged immatures. To achieve enhanced short-term control use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II] [or PyGanic® Gardening]. Apply when spider mites are first observed prior to webbing and before mite populations have become severe.
Root aphids	Suppression only as a soil drench. Use a 0.25-4% v/v solution.
Powdery mildew	Stand Alone Application: Apply a 1 - 2% v/v solution of this product to control powdery mildew when first signs of powdery mildew appear or as appropriate based on local powdery mildew recommendations and repeat at 7 to 14-day intervals, or as needed. Schedule a follow-up fungicide application within 7 to 14-days after each application when this product is applied alone. Mix Application: Apply a 1 - 2% v/v solution of this product with a fungicide to achieve protectant/residual control of powdery mildew. Do not mix with sulfur. Do not use within 3 days of a sulfur application.
Additional Information:	
<ul style="list-style-type: none"> • Routinely inspect with special focus to detect early stages of infestation. • Initiate application at the time of first infestation and appearance of the pest. • Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions. • Apply in sufficient spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment. • Apply product in 3-7-day intervals starting at the time of colonization. Check for phytotoxicity before additional applications are made. • Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program. 	

Crop Group 26**SPICES**

Ajowan, seed; Alder buckhorn; Allspice; Ambrette, seed; Amla, seed; Angelica, dahurian, seed; Angelica, seed; Angostura, bark; Anise pepper; Anise, seed; Anise, star; Annatto, seed; Asafoetida; Ashwagandha, fruit; Autumn crocus; Balsam, Peruvian; Barberry, bark; Batavia-cassia, bark; Batavia-cassia, fruit; Belleric myrobalan; Betel vine; Birch, bark; Bisnaga, seed; Bitterwood; Black bread weed; Bloodroot; Blue mallee; Blushwood, seed; Boldo, leaf; Buchu; Calamus root; Candlebush; Canella, bark; Caper buds; Caper spurge, seed; Caraway, black; Caraway, fruit; Cardamom, black; Cardamom, Ethiopian; Cardamom, green; Cardamom, Nepal; Cardamom-amomum; Cascara sagrada; Cassia, bark; Cassia, Chinese, bark; Cassia, Chinese, fruit; Cassia, fruit; Cat's claw, bark; Catechu, bark; Celery, seed; Chaste tree, berry; Chaste tree, Chinese, roots; Chervil, seed; Chinese hawthorn; Chinese nutmeg tree; Chinese wineberry, fruit; Chinese-pepper; Cinnamon, bark; Cinnamon, fruit; Cinnamon, Saigon, bark; Cinnamon, Saigon, fruit; Clove buds; Clusterleaf; Comfrey; Copaiba; Coptis; Coriander, fruit; Coriander, seed; Cotton, bark; Crampbark; Cubeb, seed; Culantro, seed; Culvers root; Cumin; Cumin, black; Dill, seed; Dorrigo pepper, berry; Dorrigo pepper, leaf; Dragon blood; Echinacea, seed; Epimedium; Eucalyptus; Eucommia, bark; European beech; Felty germander; Fennel flower, seed; Fennel, common, fruit; Fennel, common, seed; Fennel, Florence, fruit; Fennel, Florence, seed; Fenugreek, seed; Fingerroot; Flame lily, seed; Frankincense; Frankincense, Indian; Fringetree, bark; Galbanum, resin; Gambooge; Grains of paradise; Grains of Selim; Guaiaac; Guarana; Guggul; Gum Arabic; Gum ghatti; Gum karaya; Gum tragacanth; Haw, black; Honewort, seed; Imperatoria; Indian tobacco, seed; Iva; Jalap; Jamaica dogwood, bark; Juniper berry; Kaffir lime, leaf; Kewra; Kokam; Linden, leaf; Lovage, seed; Mace; Magnolia, bark; Mahaleb; Malabar cardamom; Malabar-tamarind; Malabathrum; Mastic; Micromeria, white; Milk thistle; Mioga; Miracle fruit; Mistletoe; Mojave yucca; Muira puama; Mustard, black; Mustard, brown; Mustard, seed; Mustard, white; Myrrh; Myrrh, bisabol; Myrtle, anise; Myrtle, leaf; Myrtle, lemon; Nasturtium, bush, pods; Nasturtium, garden, pods; Nasturtium, pods; Nettle, stinging, seed; Nutmeg; Osha; Pepper, black; Pepper, Indian long; Pepper, Javanese long; Pepper, leaf; Pepper, pink; Pepper, Sichuan; Pepper, white; Pepperbush, berry; Pepperbush, leaf; Peppercorn, green; Peppertree; Peppertree, Peruvian; Perilla, seed; Phellodendron; Pine, maritime; Poppy, seed; Prickly ash, Chinese; Prickly ash, Southern, bark; Pygeum; Qing hua jiao; Quassia, bark; Quebracho, bark; Quillaja; Quinine; Rauwolfia, bark; Resin spurge; Rue; Saffron crocus; Sandalwood, seed; Sassafras, bark; Sassafras, leaf; Saunders, red; Saw palmetto; Sesame, seed; Silktree, bark; Simaruba, bark; Skunk cabbage, root; Slippery elm; Stemona, root; Suma; Sumac, fragrant; Sumac, smooth, leaf; Taheebo, bark; Tamarind, seed; Tasmanian pepper, berry; Tasmanian pepper, leaf; Threelaf caper; Tsaoko; Vanilla; Wattleseed; White willow; Willow; Witch hazel; Yaw root; Yellow gentian, roots; Yohimbe; Cultivars, varieties, and hybrids of these commodities.

Pests:

Instructions

Aphids

To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations.

Mites: Twospotted spider mites, Citrus rust mite, European red mite, Pacific mite, Willamette mites, Russet mite, Spider mites.

Achieve thorough coverage of the underside of leaves. Make a second application 3-5-days later to target newly emerged immatures. To achieve enhanced short-term control use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II] [or PyGanic® Gardening]. Apply when spider mites are first observed prior to webbing and before mite populations have become severe.

Powdery mildew

Stand Alone Application: Apply a 1 - 2% v/v solution of this product to control powdery mildew when first signs of powdery mildew appear or as appropriate based on local powdery mildew recommendations and repeat at 7 to 14-day intervals, or as needed. Schedule a follow-up fungicide application within 7 to 14-days after each application when this product is applied alone.
 Mix Application: Apply a 1 - 2% v/v solution of this product with a fungicide to achieve protectant/residual control of powdery mildew. Do not mix with sulfur. Do not use within 3 days of a sulfur application.

Additional Information:

- Routinely inspect with special focus to detect early stages of infestation.
- Initiate application at the time of first infestation and appearance of the pest.
- Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions.
- Apply in sufficient spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment.
- Apply product in 3-7-day intervals starting at the time of colonization. Check for phytotoxicity before additional applications are made.
- Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program.

ORNAMENTAL LANDSCAPE TREES AND SHRUBS, CHRISTMAS TREES, FLOWERS, BEDDING AND INDOOR PLANTS	
Pests:	Instructions
Adelgid, psyllid, scale on trees and shrubs	Apply in sufficient spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment.
Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations.
Balsam woolly adelgid	Apply 2% v/v solution of this product. Apply in sufficient spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment. Achieving excellent coverage is critical for successful application. Also treat stumps of trees cut within the last 6 months. Target application against crawler and immature stages. Make a second application 10 days later.
Cooley spruce gall adelgid	Apply a 4% v/v solution to spruce in fall or spring when females begin egg laying. On Douglas fir, control exposed "woolly aphids" in early spring immediately before bud break (April) or in the fall (Sept.-Oct.) after foliage has hardened off. Test for tree sensitivity before applying at this rate. Applications in early spring before bud break or in the fall on hardened off foliage is recommended. Apply in sufficient spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment. Achieving excellent coverage is critical for successful application.
Hemlock woolly adelgid	Apply this product immediately after detecting an adelgid infestation to avoid the spread of the pest. In regions with heavy infestations and on trees with a history of infestation, a total of four applications made in April/May, June, August/September and October may be necessary. Because it is a contact insecticide, do not use this product as a preventative control measure. Apply in sufficient spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment. Achieving excellent coverage is critical for successful application.
Conifer and pine needle scale	Suppression only. Monitor egg hatch and make application shortly following egg hatch to target the crawler stage. Apply a 1 to 2% v/v solution using a spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment. Repeat applications as necessary to target extended crawler activity, if it occurs.
Gypsy moth	Suppression only. Apply a 3% v/v solution directly to the larvae.
Mites: Twospotted spider mites, Citrus rust mite, European red mite, Pacific mite, Willamette mites, Russet mite, Spider mites.	Achieve thorough coverage of the underside of leaves. Make a second application 3-5-days later to target newly emerged immatures. To achieve enhanced short-term control use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II] [or PyGanic® Gardening]. Apply when spider mites are first observed prior to webbing and before mite populations have become severe.
Scales	Suppression only. Apply a 1 to 2% v/v spray to target crawler stage. Apply with sufficient amount of water to uniformly wet all infested plant parts especially targeting shoot terminals and the underside of leaves. Make a second application 3-5-days later to target newly emerged crawlers.
Tent caterpillar	Apply a 3% v/v solution. Spray directly on young larvae when congregated on outside of tent or dismantle tents and spray to thoroughly wet larval stages.
Blossom thrips on African violets	Suppression only. Spray to contact thrips on blooms.
Whiteflies	Routinely scout plants for whiteflies. Apply a 1-2% v/v solution of this product for stand-alone use. To achieve enhanced and residual pest control, use a 1-2% v/v solution of this product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target newly hatched nymphs. Continue monitoring to determine additional treatment needs. Avoid more than three consecutive weekly applications. Do not apply to poinsettia bracts. Lower rates (0.25 - 1% v/v solution) of this product may be used in mixes for knockdown and suppression of adult whiteflies. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations.
Powdery mildew on greenhouse grown roses	Apply a 1-2% solution of this product to control powdery mildew spores and hyphae. Initiate sprays when first signs of powdery mildew appear and repeat at 7 to 10-day intervals, or as needed. Alternate applications of this product with other fungicides to avoid making more than three successive applications of this product at intervals of 7-days or less. Roses may be treated with sublimated sulfur using sulfur-heating pots or similar devices before or after treatment with this product. To minimize the potential for plant injury, allow 24 hours to elapse between the application of this product and sublimated sulfur applications. Mixing other forms of sulfur (sprayable or dusting) or applying this product within up to 5 days of a sulfur application may also increase the potential for plant injury, especially during hot weather (>90°F).

Additional Information:

- Routinely scout and greenhouses to detect early stages of colonization.
- Initiate application at the time of first colonization and appearance of the pest.
- Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions.
- Tank mixes with products containing Chlorothalonil should be avoided as they can cause severe phytotoxicity.
- Apply in sufficient spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment.
- Apply product in 3-7-day intervals starting at the time of colonization. Check for phytotoxicity before additional applications are made.
- Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program.

Miscellaneous commodities

Globe artichoke*, hops, peanut, and water chestnut

*Not registered for use in the State of California

Pests:	Instructions
Aphids	To achieve control, use a 1-2% v/v solution of this product. Initiate application at the time of first colonization and appearance of the pest. To enhance efficacy, use the product in combination with a specified rate of another labeled product. Make a second application 3-7-days later to target early colony formation. Continue monitoring to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product and threshold recommendations.
Leafhoppers	To achieve enhanced control, use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II] [or PyGanic® Gardening]. Scout and make first application to control nymphs during the first generation when the majority of nymphs are in the early instar stages. Make a second application 3-7-days later to target newly emerged nymphs. Continue monitoring to determine additional treatment needs. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations.
Mites: Twospotted spider mites, Citrus rust mite, European red mite, Pacific mite, Willamette mites, Russet mite, Spider mites.	Achieve thorough coverage of the underside of leaves. Make a second application 3-5-days later to target newly emerged immatures. To achieve enhanced short-term control use of a 1-2 % v/v solution of this product in combination with products, such as PyGanic® Crop Protection EC 5.0 II [or PyGanic® Crop Protection EC 1.4 II] [or PyGanic® Gardening]. Apply when spider mites are first observed prior to webbing and before mite populations have become severe.
Thrips	Achieve thorough coverage of the canopy. Suppression only of exposed thrips. A 3-day re-application schedule may be necessary when thrips population is rapidly increasing.

Additional Information:

- Routinely inspect with special focus to detect early stages of infestation.
- Initiate application at the time of first infestation and appearance of the pest.
- Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions.
- The product can be applied as a mix combination with a labeled companion insecticide. Consult your local extension specialist, certified crop advisor, and/or manufacturer representative for specific product recommendations. Do not store mixture for an extended period of time, apply mixture as soon as possible.
- Apply in sufficient spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment.
- Apply product in 3-7-day intervals starting at the time of colonization. Check for phytotoxicity before additional applications are made.
- Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program.

TURF

Pests:	Instructions
Chinch bugs, cutworms, fleas, greenbugs, spider mites, mole crickets and sod webworms	Stand Alone Rate: Apply a 1 to 2% v/v solution of this product, unless otherwise noted. Mix Rate: To achieve pest control, use a 1 to 2% v/v solution of this product in combination with a specified rate of another labeled product. For use on mole crickets, irrigate turf prior to application of this product to bring mole crickets to the surface.

Powdery mildew	<p>Stand-alone Rate: Apply a 1.5 to 2% v/v solution of this product when the powdery mildew is first observed and repeat every 7 to 14 days, or as needed.</p> <p>Mix Rate: This product can also be mixed with other fungicide products suitable for turf powdery mildew use. mixes with products containing chlorothalonil should be avoided as they can cause severe phytotoxicity.</p>
<p>Additional Information:</p> <ul style="list-style-type: none"> • Routinely inspect gardens with special focus to detect early stages of infestation. • Initiate application at the time of first infestation and appearance of the pest. • Apply product at 1-2% volume by volume solution. Apply spray solution promptly. Please see dilution table for specific instructions. • . • Apply in sufficient spray volume to achieve complete and uniform coverage but minimize run off with appropriate spray equipment. Apply product in 3-7-day intervals starting at the time of colonization. Check for phytotoxicity before additional applications are made. • Use product in rotation with approved insecticides as part of an Insecticide Resistance Management Program. 	

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage and disposal.

PESTICIDE STORAGE

Store in a cool, dry area, preferably a locked storage area. Store above freezing. Do not store diluted spray. Store with container tightly closed. Always store pesticides in the original container, do not transfer to food or drink container. Avoid contamination of food, feed, and domestic water supplies. Store away from food and pet food.

PESTICIDE DISPOSAL AND CONTAINER HANDLING

Non-refillable container. Do not reuse or refill this container.

If empty:

Place in trash or offer for recycling if available.

If partly filled:

Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

NOTICE TO BUYER

To the extent consistent with applicable law, seller warrants that this product conforms to the chemical description on this label and is reasonably fit for purposes stated on this label only when used in accordance with directions under normal use conditions. This warranty does not extend to use of this product contrary to label directions, or under abnormal use conditions, or under conditions not reasonably foreseeable to seller. To the extent consistent with applicable law, buyer assumes all risk of any such use. To the extent consistent with applicable law, buyer assumes all risk of any such use. To the extent consistent with applicable law, buyer assumes all risk of any such use.