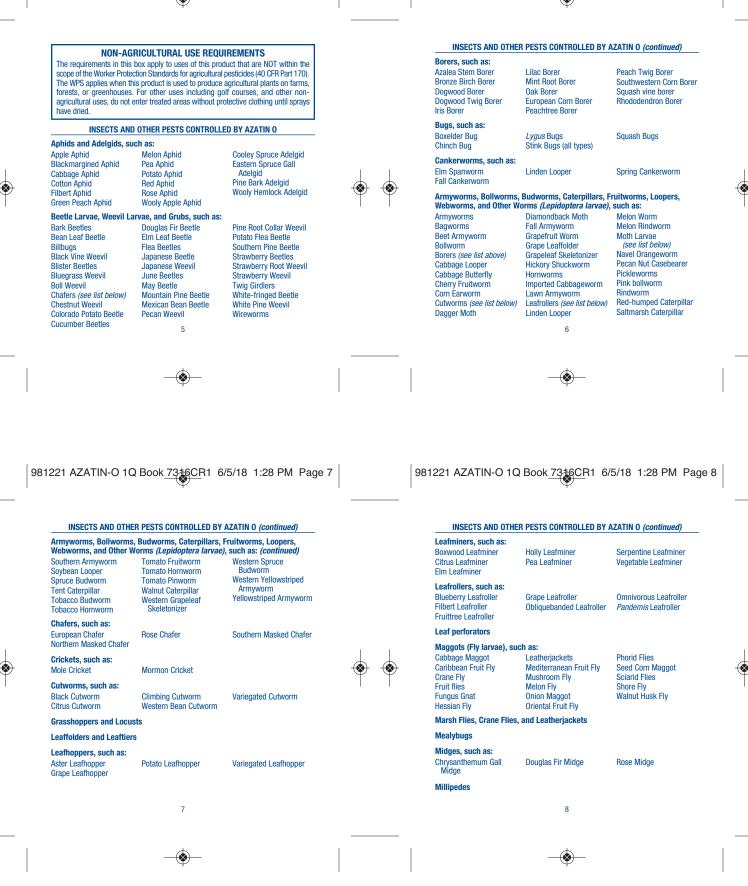


- Protective Evewear

# 981221 AZATIN-O 1Q Book 7316CR1 6/5/18 1:28 PM Page 6



# 981221 AZATIN-O 1Q Book 7316CR1 6/5/18 1:28 PM Page 10

Moth Iarvae, such as: Artichoke Plume Moth Codling Moth Diamondback Moth European Pine Shoot Moth	Gypsy Moth Light Brown Apple Moth Oriental Fruit Moth Pine Tip Moth	Sunflower Moth Tiger Moth Tufted Apple Bud Moth Tussock Moth			Thrips, such as: Citrus Thrips Flower Thrips Gladiolus Thrips	Melon Thrips Onion Thrips Pear Thrips	<i>Thrips palmi</i> (Melon Thrips) Western Flower Thrips
European Grapevine Moth	Sunflower Bud Moth				Webworms, such as: Fall Webworm	Lesser Webworm	Sod Webworm
Nematodes (suppression	)				Garden Webworm		
Phylloxera, such as: Grape Phylloxera	Pecan Leaf Phylloxera	Pecan Stem Phylloxera			Whiteflies, such as: Ash Whitefly	Cloudy-winged Whitefly	Sweetpotato Whitefly
<b>Psyllids, such as:</b> Asian Citrus Psyllid Pear Psylla	Potato Psyllid	Tomato Psyllid			Banded-wing Whitefly Bayberry Whitefly Citrus Whitefly	Greenhouse Whitefly Silverleaf Whitefly	Variegated Whitefly Wooly Whitefly
Sawflies			Ŷ	Ŷ		S ON WHICH AZATIN O CAN	
Scale insects, such as: Azalea Bark Scale Black Scale Brown Soft Scale California Red Scale California Red Scale Camellia Scale Cottony-cushion Scale Sowbugs (Pillbugs) Spittlebugs	Fern Scale Florida Red Scale Frosted Scales Green Scale Juniper Scale Pine Needle Scale	Purple Scale Rose Scale San Jose Scale Sugar Pine Scale Tea Scale Wax Scale			<ul> <li>Greenhouses and other of turf, nurseries, and landi plants, cut flowers, greed and other food crops ra resale, and nursery st grapevines).</li> <li>For all outdoor grown n field grown foliage, flow</li> </ul>	scapes: For use on ornamenta rs, shrubs), herbs, spices, veg ised to harvest or food crop cck (including bearing and on-food crops including non- vering and ornamental plants d outdoors. Plants may be pc	ath and shade), interiorscapes, al plants (foliage and flowering etables, melons, strawberries, plants raised for commercial non-bearing fruit trees and -bearing fruit trees and other
opinicougo	9					10	
1221 AZATIN-O 1Q	Book 7316CR1 6	/5/18 1:28 PM Page <sup>-</sup>	11		981221 AZATIN-O 10	Q Book 7316CR1 6	5/5/18 1:28 PM Pag
CROPS ON W	HICH AZATIN O CAN BE US	ED (continued)			CROPS ON V	VHICH AZATIN O CAN BE US	SED (continued)
	HICH AZATIN O CAN BE US plants, Flowers, Potted Pla				Brassica (Cole) Crops, s	VHICH AZATIN O CAN BE US such as: liflower Cavalo Broc	

<b>Ornamental Plants</b>	, such as:		
Actinopteris	Chrysanthemum	Geranium	Phlox
African Violet	Cineraria	Gerbera	Photinia
Ageratum	Coleus	Gladioli	Pinks
Aglaonema	Columbine	Gloxinia	Pittosporum
Allamanda	Cyclamen	Gypsophila	Poinsettia
Algerian Ivy	Daffodil	Hedera	Portulaca
Alocasia	Dahlia	Hibiscus	Primrose
Anthurium	Daisy	Hyacinth	Pothos
Aphelandra	Daylily	Hydrangea	Rosemary
Artemisia	Delphinium	Impatiens	Rose
Aster	Dianthus	Iris	Rubberplant
Aucuba Illex	Dieffenbachia	lvy (all types)	Salvia
Azalea	Dracaena	Lily (all types)	Schefflera
Baby's Breath	Dusty Miller	Maidenhair Fern	Sedum
Begonia	Easter Lily	Mandavilla	Sempervivum
Bougainvillea	English Ivy	Marigold	Snapdragon
Boston Fern	Euphorbia	Narcissus	Spathiphyllum
Boxwood	Fern	Nasturtium	Stock
Brachycome	Ficus	Orchid (all types)	Syngonium
Cacti	Foliage Plants	Pansy	Tulip
Calabrese	Foxglove	Pelargonium	Verbena
Caladium	Freesia	Peony	Vinca
Calla	Fuchsia	Peperomia	Wandering Jew
Calathea	Gaillardia	Petunia	Yucca
Calendula	Gardenia	Philodendron	Zinnia
Carnation			

11

۲



Broccoli

Cabbage

Garlic

Broccoli Raab Brussels Sprouts

Citron Melon (Bitter Melon) Crenshaw Cantaloupe Casaba Cucumber Gherkin Chinese Waxgourd Gourds Fruiting Vegetables, such as:

Bulb Vegetables, such as:

Citrus Fruits, such as:

Chinese Cabbage (Bok Choy, Gai Lon, Napa)

Leek

Kumquat

Lemon

Lime

Collards

Kohlrabi

Onion (all types)

Mandarin (Tangerine)

Honeyballs Honeydew

Mango Melon

Muskmelon

Peppers (all types) Tomato Tomatillo

Orange (all types)

Kale

Eggplant Ground Cherry Okra Pepino

12

 $(\otimes)$ 

Pumpkin

Mizuna

Shallot

Pummelo

Satsuma Mandarin

Squash (all types)

Watermelon

Other Melons

Rapini Turnip Tops

CROP	S ON WHICH AZATIN	O CAN BE USED (con	ntinued)	CROP	S ON WHICH AZAT	IN O CAN BE USED (co	ontinued)
Herbs and Spice: Allspice Angelica Annatto Balm Basil Borage Burnet Camomile Caper Buds Caraway Cardamom Cardamom Cassia Catnip Celery Seed Leafy Vegetables Arugula Cardoon	Chives Cilantro Cinnamon Cloves Coriander Costmary Cumin Curry Leaf Dill Fennel Fenugreek Horehound Hyssop Juniper Berry Lavender <b>5, such as:</b> Chinese Spinach Corr Salad	Lemongrass Lovage Mace Marigold Marjoram Mint Mustard Seed Nasturtium Nutmeg Pennyroyal Pepper (Black or White) Poppy Seed Rosemary Dandelion Dock (Sorrel)	Rue Saffron Sage Savory Spearmint Sweet Basil Sweet Bay Tansy Tansy Tansy Tansy Tansy Tansy Tansy Tansy Tansy Tansy Vanilla Wintergreen Woodruff Wormwood	Andromeda Arborvitae Ash Aucuba llex Austrian Pine Azalea Beech Birch Birdsnest Spruce Blue Spruce Boxwood Butternut Cacti Camellia Ceanothus Cedar Chamaecyparis Cherry	and Shrubs, such Cotoneaster Crabapple Cyprus Dogwood Douglas Fir Elm Euonymus Ficus Firethorn Forsythia Hackberry Hawthorn Hemlock Hibiscus Hickory Holly Honey Locust	I as: Horse Chestnut Hydrangea Juniper Larch Laurel Linden London Plane Mandevila Mandevila Maple (all types) Mirnosa Mountain Ash Myrtle Oak Pachysandra Peach	Photinia Pine (all types) Pittosporum Planetree Poplar Privet Pyracantha Quince Rhododendron Rose Rubber Plant Spruce Sycamore White Cedar White Pine Yew Yucca
Celery Celtuce Chervil Chinese Celery	(Mâche) Chrysanthemum (Edible) Cress (all types)	Endive (Escarole) Fennel Lettuce (all types) Orach	Radicchio Rhubarb Spinach Swiss Chard	<b>Pome Fruits, sucl</b> Apple Crabapple	Jujube Loquat	Mayhaw Pear	Quince
		13				14	
	—(	<b>)</b> —			_	- <b>&amp;</b>	

# 981221 AZATIN-O 1Q Book 7316CR1 6/5/18 1:28 PM Page 15

981221 AZATIN-O 1Q Book 7316CR1 6/5/18 1:28 PM Page 16

Root and Tuber (	Crops, such as:		
Beet (all types)	Dasheen (taro)	Parsnip	Sweet Potato
Carrot	Ginger	Potato	Turmeric
Cassava	Ginseng	Radish	Turnip
Celeriac	Horseradish	Rutabaga	Yam
Chervil	Japanese radish	Salsify	Yam bean
Daikon	Jicama	Sugarbeet	
Small Fruits and	Berries, such as:		
Blackberry	Currant	Grapes (all types)	Olallieberry
(all types)	Dew Berry	Huckleberry	Raspberry
Blueberry	Elderberry	Loganberry	Strawberry
Boysenberry	Gooseberry	Olives	Youngberry
Stone Fruits, suc	ch as:		
Apricot	Nectarine	Plum	Pluot
Aprium	Peach	Plumcot	Prune
Cherry (all types)			
Tree Nuts, such	as:		
Almond	Cashew	Filberts (Hazelnuts)	Pecan
Beech Nut	Chestnut	Hickory Nuts	Pistachio
Brazil Nut	Chinguapin	Macadamia	Walnuts
Butternut			
Tropical and Sub	tropical Fruits, such	as:	
Banana	Plantain		

15

CROPS ON WHICH AZATIN O CAN BE USED (continued)

Turfgrass, such as	8:		
Annual Bluegrass	Bermuda grass	Perennial Ryegrass	Seashore Paspalum
Annual Ryegrass	Centipede Grass Fescue	St. Augustine Grass	Wheatgrass Zoysia Grass
Bentgrass	rescue	or. Augustine drass	ZUYSIA GLASS
<b>Miscellaneous Cro</b>	ps, such as:		
Artichoke	Edible flowers	Mushrooms	Pomegranate
Asparagus	Feijoa	(all types)	Tamarillo
Birdseed	Figs	Palm	Tea
Cacao	Hops	Pawpaw	Tobacco
Coffee	Guayule	Persimmon	Waterchestnut
Corn (all types)	Kiwi	Pineapple	Watercress

Important note: This product has been evaluated for phytotoxicity on a wide range of crops. However, since all combinations or sequences of pesticide sprays including fertilizers, surfactants and adjuvants have not been tested, spray a small area first to make certain that no phytotoxicity occurs.

## PREHARVEST INTERVAL

AZATIN 0 can be applied up to and including the day of harvest (zero PHI). Individual state regulations may vary and should be consulted for allowable preharvest interval.

## MODE OF ACTION

This product controls targeted insect larvae when they ingest or come in contact with it, by interfering with the insect's ability to molt. It is effective on all larval or nymphal stages. It also reduces crop damage by repelling and deterring feeding of all stages of insects.

16

#### SPRAY EQUIPMENT

Use any suitable application equipment that allows for uniform coverage of the targeted treatment area, such as hand- or power-operated spray equipment.

## **GENERAL APPLICATION DIRECTIONS**

## **General Information**

- · Broad Spectrum Insect Growth Regulator Insecticide
- · Not for use in food-handling establishments.
- Shake well before using.
- · Kills only immature stages (larvae or nymphs) of insects. Treated larvae may die as pupae.
- Make applications when pests first appear and are in their early larval stages. Repeat applications every 7 days or as needed.
- Botanical Insecticide Concentrate.
- Formulated for interiorscape use.
- For indoor and outdoor use.
- Spraying directly onto the pest and a longer duration of leaf wetting increases effectiveness. Apply in early to mid-morning or late afternoon.
- The pH of spray solution containing AZATIN O must be kept between 3 and 8. Use spray solutions within several hours of preparation for maximum effectiveness. Do not store diluted solution for later use.
- Do not apply to wilted or otherwise stressed plants, or to newly transplanted material prior to root establishment. Do not apply to known spray sensitive plants without testing.
- AZATIN O has been found to be compatible when used in conjunction with most beneficial insects. Conduct a small trial to assure compatibility before using on a large scale.
- . Use with care when applying near streams, ponds, lakes or bodies of water. 17



. Do not apply AZATIN O when weather conditions favor drift or the likelihood of runoff is high

For best results, add a spreader-sticker or oil-based adjuvant (such as methylated seed oil) at the label rate. This product may be pre-mixed in a supply tank with water, fertilizer or other appropriate agricultural chemicals. Agitation is necessary (see Mixing Directions). Crop injury or lack of effectiveness can result if uniform distribution is not achieved.

When pest populations are high, use the higher label rates

#### SPRAY APPLICATION:

High volume: If plant foliage is dense, use higher label rates and increase spray volume to obtain uniform and complete coverage

Low and ultra-low volume: Apply AZATIN 0 at rates of 4 to 16 fluid ounces per acre in a minimum of 3 gallons of water per acre. For best results, ensure uniform and complete plant coverage.

### DRENCH APPLICATION:

AZATIN O is effective as a soil drench for control of soil-dwelling insect larvae such as fungus gnats. It is also effective as a soil drench for control of both foliar and soil-dwelling pests, particularly when alternated with foliar sprays of AZATIN 0. Apply AZATIN 0 in sufficient water and for sufficient duration so as to distribute the application rate evenly to the entire treated area.

Apply to moderately moist soils. Use volumes that thoroughly wet the soil, but do not cause significant surface runoff or excessive drip from pots

#### CHEMIGATION:

Refer to the attached "Chemigation Bulletin" for use directions for chemigation. Do not apply this product through any irrigation system not specifically included in the Chemigation Bulletin

18

981221 AZATIN-O 1Q Book 7316CR1 6/5/18 1:28 PM Page 19

#### MIXING DIRECTIONS:

AZATIN O must be mixed with water for application. Do not apply undiluted product to plants. For best results:

- 1. Use clean equipment and clean water.
- 2. Add 1/2 to 3/4 of total water volume to the tank and begin agitation.
- 3. Add pesticide to the tank.
- 4. Add water up to full intended spray volume and mix thoroughly before applying. 5. Adjust pH of the spray solution to between 3 and 7, if necessary.
- 6. Apply pesticide mix immediately after mixing.
- 7. If the mixture is not applied immediately, agitate before application. 8. Thoroughly clean equipment following application.

## TANK MIXTURES OR FLUID FERTILIZERS:

- 1. Before using this product in a tank mix with fertilizer or registered pesticide, determine compatibility by conducting a compatibility test with a small amount of each product.
- 2. Observe all cautions and limitations on labels of all products used in combination.
- Follow all tank mix directions and observe limitations listed in the combination product(s) label.

## COMPATIBILITY TEST:

Perform a compatibility test before tank mixing this product with other product(s) or liquid fertilizer(s). Fill three separate 1 quart jars with 1 pint of water and fertilizer. To a first jar add this product and mix well. To a second jar, add the desired other tank mix product(s) and mix well. To a third jar, combine this product with the other tank mix product(s) and mix well. If more than one product is used, add them separately with dry formulations first, flowables next, and emulsifiable concentrates



last. After each addition, shake or stir gently to thoroughly mix. For the appropriate amount of product for this test use the following

Dry products - For each pound to be applied per acre, add 1.5 level teaspoons to each iar.

Liquid products - For each pint to be applied per acre, add 0.5 teaspoons or 2.5 ml to each jar

Note any differences between the mixtures in the jars (compounds alone vs mixtures) after 15 minutes. Look for evidence of physical incompatibility such as clumping, precipitation, oily residues on the sides of the glass or other signs of incompatibility. If either mixture separates, but can be readily re-mixed, the mixture can be sprayed as long as good agitation is used. If the mixtures are incompatible, do not use the mixture.

### TANK MIX COMPATIBILITY

AZATIN O Biological Insecticide has been found to be compatible with most commonly used fungicides, insecticides, and fertilizers. Check physical compatibility first by using the correct proportion of products in a small jar test. Then, test tank-mix combinations for phytotoxicity on a sample of plants prior to use. This must be done with combinations used before as environmental conditions can alter the interaction between compounds. Due to the wide variation in climatic conditions, cultural practices, and other factors, the user assumes full responsibility for any crop damage or other liability resulting from the use of AZATIN 0 in a tank mix combination. Do not mix AZATIN 0 with oxidizing agents such as bleach, or strong acids and bases as they will destabilize the product.

20



SPECIFIC PLANT/PEST DIRECTIONS:

**Fungus Gnats** 

Leafminers

GENERAL DIRECTIONS FOR INTERIORSCAPES, ORNAMENTAL PLANTS, LANDSCAPES, TREES, SHRUBS, LAWNS, TURF, AND GREENHOUSES For use to control whiteflies, thrips, mealybugs, leafminers, loopers, caterpillars,

beet armyworms, aphids, and other pests on bedding plants, potted plants, foliage plants, ornamentals, trees, and shrubs in and around greenhouses, commercial nurseries, and interiorscapes. For use to control insect pests of field-grown cut flowers and greens.

For use to control gypsy moths, weevils, psyllids, webworms, hornworms, spruce budworms, tent caterpillars, sawflies, and other pests on trees and shrubs in commercial landscapes.

AZATIN O may be used on fruits, vegetables, vegetable transplants, and herbs both inside and outside of the greenhouse.

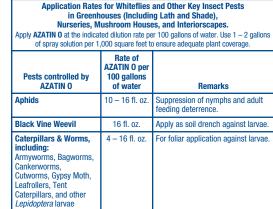
Apply on a preventative 7 - day schedule or at the first sign of insect presence. This schedule is effective under low insect pressure. Under high insect pressure, apply every 3-4 days

For Field-Grown Cut Flowers and other Field-Grown Ornamental Plants: Apply AZATIN 0 at 4 – 16 fluid ounces per acre in sufficient volume of water to achieve uniform and thorough spray coverage. For conventional ground application equipment apply 30 – 100 gallons of spray mix per acre. For low volume application, apply 0.5 pint (8 fluid ounces) of **AZATIN 0** per acre in sufficient water to provide adequate coverage. For Use in Greenhouses, Landscapes, Interiorscapes, and Nurseries: Dilute **AZATIN 0** at 4 – 16 fluid ounces per 100 gallons of water. Mix thoroughly. Apply at 25 – 40 psi with hand sprayer or 100 – 200 psi with power sprayer as a fine spray to all foliage and fruit surfaces to runoff (typically 1 – 2 gallons of spray solution per 1,000 sq. ft.). Avoid excessive application.

For drench applications, use 8 - 16 fluid ounces of AZATIN 0 per 100 gallons of water and apply at the rate of 1 quart of diluted solution per square foot of growing media surface. Repeat at 14-day intervals during the growing season.







8 fl. oz.

6 – 16 fl. oz.

22

Apply as a soil drench for maggot

For foliar application against larvae

control

981221 AZATIN-O 1Q Book 7316CR1 6/5/18 1:28 PM Page 23

Application Rates for Whiteflies and Other Key Insect Pests in Greenhouses (Including Lath and Shade), Nurseries, Mushroom Houses, and Interiorscapes. <i>(continued)</i>					
Pests controlled by AZATIN O	Rate of AZATIN 0 per 100 gallons of water	Remarks			
Mushroom Fly	16 fl. oz.	Apply as soil drench against larvae.			
Western Flower Thrips	12 – 16 fl. oz.	Suppression of larvae and adult feeding deterrence.			
Whiteflies, including: Greenhouse Whitefly, Silverleaf Whitefly, and Sweetpotato Whitefly	6 – 16 fl. oz.	Foliar application against nymphs. Spray should be directed to under- sides of leaves.			
Others, such as: Leafhoppers, Sawflies	10 – 16 fl. oz.	For foliar application against larvae or nymphs. For leafhoppers, spray should be directed to undersides of leaves.			

23

981221 AZATIN-O 1Q Book 7316CR1 6/5/18 1:28 PM Page 24

## DIRECTIONS FOR REPELLING JAPANESE BEETLES FROM ROSE PLANTS

For best results, apply to roses at the first sign of Japanese beetle emergence in early summer at the rate of 0.5 pint of AZATIN O per 100 gallons of water. AZATIN 0 is more effective when used as a preventative

Spray to run-off, making sure to completely cover all parts of the plant, including buds and flowers.

Repeat application weekly, after rainfall or during periods of rapid plant growth as new growth that occurs after application is not fully protected. Continue applications as long as adult beetles are present.

Do not spray water directly onto foliage or otherwise wash off the leaves after treatment. This will reduce the effectiveness of the application.

After initial application, some beetles may be present on foliage but they will not feed on it.

## DIRECTIONS FOR LAWNS AND TURF Surface-Feeding Insects:

For use to control cutworms, armyworms, sod webworms, crickets, chinch bugs, leafhoppers, and grasshoppers.

Apply at first sign of pest presence or damage to turf. Do not apply if rain is forecast within the next 24 hours.

Apply 1 quart - 3 gallons of AZATIN O per acre (or 0.75 - 9 fluid ounces per 1,000 square feet) using enough spray volume to obtain thorough coverage and penetration of the turf canopy. Use 2-5 gallons of diluted material per 1,000 square feet, or 50-100 gallons of diluted material per acre.

The treated area may be lightly irrigated for 3 - 5 minutes after application if desired to increase penetration of the turf surface. However, do not water turf again for 2 days after application.



 $50-100\ \text{gallons}$  of diluted material per acre, or  $2-5\ \text{gallons}$  of diluted material

· Reapply as necessary. Repeat treatment in early to mid fall to control possible

Apply 1 quart - 3 gallons of AZATIN O per acre (0.75 - 9 fluid ounces per 1,000 square feet) using enough spray volume to obtain thorough coverage. Use 50-100 gallons of diluted material per acre. Use 2-5 gallons of diluted material per 1,000 square

Application Rates for Key Insect Pests of Vegetables Raised to Harvest

DIRECTIONS FOR GREENHOUSE AND NURSERY-GROWN

Reapply as needed to maintain control of turf damage. Be sure to treat under shrubs and plants bordering houses or other structures.

## Subsurface-Feeding Insects:

Mow and irrigate turf prior to application. The treated area may be lightly irrigated for 3 - 5 minutes after application if desired to increase penetration of the turf surface. Do not water turf again within 24 hours after application. Do not mow again within 3 days after application.

For use to control white grubs (Japanese beetles, European chafers, dung beetles, June beetles, green June beetles, May beetles, annual white grubs, grub beetles, southern masked chafers, etc.) and crane fly larvae (leatherjackets):

- For white grubs, make application soon after adults emerge in summer (1 -3 weeks after first sign of adults). Leatherjackets should be targeted as young larvae while feeding near the soil surface.
- Apply 1 quart 3 gallons of AZATIN 0 per acre (0.75 9 fluid ounces per 1,000 square feet) using enough spray volume to obtain thorough coverage and penetration of the turf. Use 50 100 gallons of diluted material per acre, or 2 5 gallons of diluted material per 1,000 square feet.

#### For use to control mole crickets:

- Apply 1 guart 3 gallons of AZATIN O per acre (0.75 9 fluid ounces per 1.000 square feet) using enough spray volume to obtain thorough coverage. Use 2 - 5 gallons of diluted material per 1,000 square feet, or 50 - 100 gallons of diluted material per acre.
- · For best results, apply when nymphs are small, in the early spring. If necessary, reapply at 1 - 2 week intervals.
- For use to control billbugs:
- Apply in mid to late spring or at first sign of pest emergence or damage.
- Apply 1 guart 3 gallons of AZATIN O per acre (0.75 9 fluid ounces per 1000 square feet) using enough spray volume to obtain thorough coverage. Use







(including Transplants for Commercial Resale), Fruits, and Nut Crops Grown in Greenhouses, Lath and Shade Houses, and Nurseries. Apply AZATIN 0 at the indicated rates in sufficient water to ensure adequate

per 1,000 square feet.

feet. Repeat as necessary.

second generation.

Nematodes:

FOOD CROPS

plant coverage. Use 1 - 2 gallons of spray solution per 1,000 square feet, or equivalent to a minimum of 30 gallons of water per acre for conventional application equipment (3 gallons of water per acre for low/ultralow volume equipment).

Pests controlled by AZATIN 0	Rate of AZATIN 0 per 100 gallons of water*	Remarks	
Aphids	10 – 16 fl. oz.	Foliar application for suppression and adult feeding deterrence.	
Armyworms	4 – 16 fl. oz.	Foliar application against larvae.	

26

981221 AZATIN-O 1Q Book 7316CR1 6/5/18 1:28 PM Page 27

# 981221 AZATIN-O 1Q Book 7316CR1 6/5/18 1:28 PM Page 28

Application Rates for Key Insect Pests of Vegetables Raised to Harvest (including Transplants for Commercial Resale), Fruits, and Nut Crops Grown in Greenhouses, Lath and Shade Houses, and Nurseries. <i>(continued)</i>					
Pests controlled by AZATIN 0	Rate of AZATIN 0 per 100 gallons of water*	Remarks			
Borers, including: Peach Twig Borer, Peachtree Borer, and Squash Vine Borer	4 – 16 fl. oz.	Foliar application against young larvae before boring or tunneling in the plant.			
Caterpillars, Loopers, and other <i>Lepidoptera</i> Larvae (worms)	4 – 16 fl. oz. (Except as noted at right)	Foliar application against larvae feeding externally on leaves, fruits, other external plant parts. Corn Earworm, Diamondback Moth, Hickory Shuckworm, Imported Cabbageworm (larvae of Cabbage Butterfly), and Navel Orangeworm: Use 10 – 16 fl. oz./100 gal. Artichoke Plume Moth: Apply at 16 fl. oz./100 gal.			
Colorado Potato Beetle & other leaf-feeding beetles	4 – 16 fl. oz.	Foliar application against leaf- feeding larvae.			

27

۲



Application Rates for Key Insect Pests of Vegetables Raised to Harvest (including Transplants for Commercial Resale), Fruits, and Nut Crops Grown in Greenhouses, Lath and Shade Houses, and Nurseries, (continued)

Rate of AZATIN 0 per 100 gallons of water*	Remarks
5 – 16 fl. oz.	Foliar application against larvae feeding on leaves or stems.
10 – 16 fl. oz.	Foliar application against nymphs.
6 – 16 fl. oz.	Foliar application against larvae. Mix with approved oil-based adju- vant for best results.
4 – 16 fl. oz.	Foliar application against larvae.
6 – 16 fl. oz.	Foliar or stem application target- ing crawler stages.
6 – 16 fl. oz.	Foliar application against nymphs. Spray should be directed to undersides of leaves.
	100 gallons of water*           5 - 16 fl. oz.           10 - 16 fl. oz.           6 - 16 fl. oz.           4 - 16 fl. oz.           6 - 16 fl. oz.

adjuvant such as a non-phytotoxic crop oil, up to 1% for improved spray coverage and translaminar uptake. Always use sufficient spray volume to ensure good coverage of all plant parts. Treat early and target youngest larvae or nymphs for best control. Repeat applications every 7-10 days or as needed to maintain control.

## STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage and disposal. **PESTICIDE STORAGE**: Do not store above 100 degrees F or below -20 degrees F for extended periods of time. Keep containers tightly closed when not in use. **PESTICIDE DISPOSAL**: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility. **CONTAINER HANDLING**: Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: 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 1/4 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. Then offer for recycling, if available or puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

### WARRANTY

OHP, Inc. warrants that the material contained herein conforms to the description on the label and is reasonably fit for the purposes referred to in the directions for use. Timing and method of application, weather, watering practices, nature of soil, the insect problem, condition of the crop, incompatibility with other chemicals not specifically recommended, and other influencing factors in the use of this product are beyond the control of the seller. To the extent consistent with applicable law, buyer assumes all risks of use, storage or handling of this material not in strict accordance with directions given herein. NO OTHER EXPRESS OR IMPLIED WARRANTY OF THE FITNESS OR MERCHANTABILITY IS MADE.



981221 AZATIN-O 1Q Book 7316CR1 6/5/18 1:28 PM Page 31

The pesticide injection pipeline must contain a functional, normally closed, solenoid operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock. Do not apply when wind speed favors drift beyond the area intended for treatment.

#### DRIP TRICKLE CHEMIGATION:

- The system must contain a functional check valve, vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- The pesticide injection pipeline must contain a functional, automatic, quickclosing valve to prevent the flow of fluid back toward the injection pump.
- 3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

31



## **GENERAL INFORMATION:**

Apply this product only through drip (trickle); sprinkler (solid set, lateral move, end tow, side-roll, center pivot, or hand move); flood (basin); furrow; or border irrigation systems. Do not apply this product through any other type of irrigation system. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

If you have questions about calibration, contact State Extension Service specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection.



# 981221 AZATIN-O 1Q Book 7316CR1 6/5/18 1:28 PM Page 32

- 6. Systems must use a metering pump such as a positive displacement injection pump (i.e., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- 7. Dilute the product in water following the label mixing directions. It may be premixed in a supply tank with water, fertilizer, or other appropriate tank-mixed agricultural chemicals. Agitation is necessary. Apply to moderately moist soils. Use volumes that thoroughly wet the soil but that do not cause significant runoff or excessive drip from pots. Application should be continuous in sufficient water to apply the recommended rate evenly to the entire treated area.

## SPRINKLER CHEMIGATION:

- The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- The pesticide injection pipeline must also contain a functional, automatic, quickclosing check valve to prevent the flow of fluid back toward the injection pump.
- 3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6. Systems must use a metering pump, such as a positive displacement injection pump (i.e., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.





f. Systems must use a metering pump, such as a positive displacement injection

 Dilute the product in water following the label mixing directions. It may be premixed in a supply tank with water, fertilizer, or other appropriate tank-mixed agricultural chemicals. Agitation is necessary. Apply to moderately moist soils.

Use volumes that thoroughly wet the soil but that do not cause significant runoff. Application should be continuous in sufficient water to apply the recommended

pump (i.e., diaphragm pump) effectively designed and constructed of materials

that are compatible with pesticides and capable of being fitted with a system

- 7. Dilute the product in water following the label mixing directions. It may be premixed in a supply tank with water, fertilizer or other appropriate tank-mixed agricultural chemicals. Agitation is necessary. Apply when soils are moderately moist. Use volumes that thoroughly wet the foliage and/or soil but that do not cause significant runoff or excessive drip from pots. Application should be continuous in sufficient water to apply the recommended rate evenly to the entire treated area.
  - 8. Do not apply when wind speed favors drift beyond the area intended for treatment.

## FLOOD (BASIN), FURROW AND BORDER CHEMIGATION:

- Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity such as a drop structure or weir box to decrease potential of water source contamination from the backflow if water flow stops.
- 2. Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:
- a. The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- b. The pesticide injection pipeline must contain a functional, automatic, quickclosing check valve to prevent the flow of fluid back toward the injection pump.
- c. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- d. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- e. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected. 33

rate evenly to the entire treated area. Azatin is a registered trademark of Certis USA. The OMRI Listed seal (the Seal) is a registered trademark of OMRI (Organic Materials Review Institute).

interlock



Manufactured for: OHP, Inc. PO Box 746 Bluffton, SC 29910-0746 (800) 356-4647

ohp Partners with solutions

ESL031816 REV060518



981221 AZATIN-O 1Q Book 7316CR1 6/5/18 1:28 PM Page 35

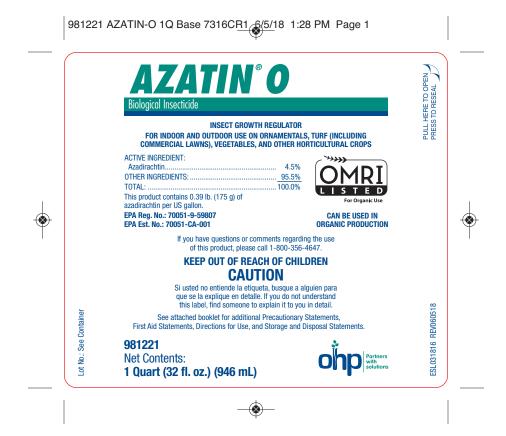
981221 AZATIN-O 1Q Book 7316CR1 6/5/18 1:28 PM Page 36

NOTES

35

NOTES

36



981221 AZATIN-O 1Q Back Label 731681 6/5/18 1:29 PM Page 1



If in eyes: Hold eye open and mise 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. If on skin or clothing: Take of contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration preferably mouth-to-mouth, if possible. Call a poison control center or doctor for treatment advice. If swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything to an uncon scious person.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. Hot Line Number: 1-800-356-4647

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION: Avoid contact with skin, eyes or clothing. Harmful if swallowed or inhaled. Avoid breathing vapors or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

## **ENVIRONMENTAL HAZARDS**

۲

This product may be hazardous to fish and aquatic invertebrates. For terrestrial uses: Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

PHYSICAL AND CHEMICAL HAZARDS Combustible: Do not use or store near heat or open flame. **DIRECTIONS FOR USE** It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage and disposal. **PESTICIDE STORAGE:** Do not store above 100 degrees F or below -20 degrees F for extended peri-dos of time. Keep containers tightly closed when not in use. **PESTICIDE DISPOSAL:** Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

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

# For Triple rinse, see inside AZATIN O booklet.

See attached booklet for additional Precautionary Statements, First Aid Statements, Directions for Use, and Storage and Disposal Statements. Azatin is a registered trademark of Certis USA.

## Manufactured for:

OHP, Inc. PO Box 746 Bluffton, SC 29910-0746

(800) 356-4647

981221 ESL031816 REV060518

