

# OHP BIOSOLUTIONS®



## GREENHOUSE & NURSERY PRODUCTION

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An American Vanguard Company

# OHP Biosolutions Solutions

OHP Product	TYPE	OMRI Listed	Herbs	Vegetable Transplants	Vegetables	Tomatoes	Fruits and Nuts
<b>Ancora®</b>	Microbial Insecticide	✓	✓	✓	✓	✓	✓
<b>Azatin® O</b>	Insecticide	✓	✓	✓	✓	✓	✓
<b>Kopa™ Insecticidal Soap</b>	Insecticide/ Miticide/ Fungicide	✓	✓	✓	✓	✓	✓
<b>Pycana®</b>	Insecticide/ Miticide	✓	✓	✓	✓	✓	✓
<b>Grotto®</b>	Fungicide/ Bactericide	✓	✓	✓	✓	✓	✓
<b>Kalmor®</b>	Fungicide/ Bactericide	✓	✓	✓	✓	✓	✓
<b>Triact® 70</b>	Fungicide/ Insecticide/ Miticide	✓	✓	✓	✓	✓	✓
<b>Triathlon® BA</b>	Fungicide/ Bactericide	✓	✓	✓	✓	✓	✓
<b>FireWorxx™</b>	Herbicide	✓					

More information on the products listed above may be found on the OHP website at [ohp.com](http://ohp.com), or from your OHP technical sales manager.

## Ancora®

**Ancora** Microbial Insecticide is a naturally occurring fungus that infects both foliage and soil dwelling insects.

**Labeled for use on:** Vegetables, fruits, ornamental plants grown in greenhouses or other covered structures or in nurseries. **Ancora** is OMRI listed and approved for organic production

**Insects Controlled:** Aphids, thrips including pupae, spider mites, whiteflies, mealybugs, leafminers, psyllids, lepidopteran caterpillars, coleoptera grubs

**Packaging:** 1 pound bag, 10 per case

**Storage Notes:** Store **Ancora** in its original unopened package. **Ancora** is very stable in the unopened package for one year at 40° to 50° F.

With an opened package, squeeze out the excess air and keep refrigerated (40° to 50° F). Use any remaining product within 30 days of opening.

**Optimal Environmental Conditions:** Apply in the evening or early morning when the relative humidity is high (> 75%) and temperatures are moderate (65° to 85° F).

EPA Reg. No.	REI	Chemical Family	MOA	Active Ingredient	Rate per 100 gallons	Rate per 1 gallon	Application
70051-19-59807	4 hour	Microbial Insecticide	M	<i>Isaria fumosorosea</i> Apopka Strain 97	14 to 28 ounces	4.0 to 8.0 grams	Foliar and Drench

## Azatin® O

**Azatin O** is a biological insect growth regulator (IGR) used to control the larval stage of a broad-spectrum of greenhouse and nursery pests. **Azatin O** is OMRI listed, soft on beneficials, and carries a 4-hour REI. **Azatin O** contains 175 grams of the active ingredient azadirachtin per gallon.

**Azatin O** may be used for insect control on all crops such as ornamentals, vegetables, herbs, and berries, grown in the greenhouse, nursery, interiorscape, and in hydroponic growing situations. **Azatin O** may be used for control of insects on turfgrass. Insects do not survive the molting process to become reproductive adults. Death results in 3-10 days after application but insects will stop feeding long before they die.

**Labeled for use on:** Ornamentals, vegetables, herbs, and berries grown in the greenhouse, nursery, and interiorscape.

**Insects Controlled:** Aphids, thrips, whiteflies, fungus gnats, scales, chafers, leafhoppers, psyllids, grubs, borers, stink bugs, grasshoppers, Japanese beetles, and many Lepidoptera species (see label for complete list of insects controlled).

**Packaging:** 1 quart container, 6 per case

**Notes:** For best results thorough spray coverage and a final spray solution of 3.0 to 7.0 pH is recommended.

EPA Reg. No.	REI	Chemical Family	MOA	Active Ingredient	Rate per 100 gallons	Rate per 1 gallon	Application
70051-9-59807	4 hours	Biopesticide	UN	Azadirachtin	4 to 16 fluid ounces	¼ tsp to 1 tsp (1.2 mL to 4.8 mL)	Drench or spray

## Kopa™ Insecticidal Soap

**Kopa Insecticidal Soap** is a potassium salt of fatty acid soap that controls insects, mites and powdery mildew. **Kopa** is OMRI listed and approved for organic production.

**Labeled for use on:** Ornamental and shade trees including flower and foliage plants in greenhouses and outdoors. Pome, stone fruits, small fruits and vegetables, both in field and outdoor production, herbs and spices, hops, coffee and other crops. See full label for specific directions.

**Pests controlled:** Aphids, spider mites, mealybugs, scale insects, whiteflies, leafhoppers, tent caterpillars, plant bugs, earwigs, powdery mildew

**Packaging:** 2.5 gallon container, 2 per case

**Notes:** **Kopa** may be tank mixed with appropriate partners for additional activity.

EPA Reg. No.	REI	Chemical Family	MOA	Active Ingredient	Rate per 100 gallons	Rate per gallon	Application
67702-11-59807	12 hours	Biopesticide - Soaps	UNM	Potassium salts of fatty acids	1 to 2 gallons	1.28 to 2.56 fl. oz. 39 mL to 76 mL	Foliar spray

## Pycana®

**Pycana** Insecticide/Miticide is a combination of natural pyrethrins and canola oil that can be used in greenhouses, shadehouses, hoophouses, and container-grown nurseries. **Pycana** is OMRI listed and approved for organic production.

**Labeled for use on:** Bedding plants, flowering plants and foliage; bulbs; cole and leafy vegetables; citrus, pome and stone fruits; cucurbit vegetables; herbs and spices; legumes and fruiting vegetables; nuts; root and tuber vegetables; small fruits, vines and vegetables; trees and shrubs; woody ornamentals

**Insects Controlled:** Aphids, thrips, leafhoppers, earwigs, tent caterpillars, psyllids, plant bugs, mealybugs, spider mites, sawfly larvae, whiteflies

**Packaging:** 1 gallon container, 4 per case

EPA Reg. No.	REI	Chemical Family	MOA	Active Ingredient	Rate per 100 gallons	Rate per 1 gallon	Application
67702-53-59807	12 hours	Insecticide/Miticide	3+UNE	Pyrethrins + Oil	1 to 2 gallons (1% to 2%)	1.28 to 2.56 fl. oz. 39 mL to 76 mL	Foliar spray

## Grotto®

**Grotto** fungicide/bactericide is an effective broad-spectrum agent for prevention and control of diseases in a variety of plants and crops. **Grotto** is OMRI listed and approved for organic production.

**Labeled for use on:** Greenhouse and shadehouse vegetables and herbs, ornamentals, and turf.

**Diseases Controlled:** Anthracnose, bacterial blights (pseudomonas, erwinia), botrytis, cercospora leaf spot, downy mildew, powdery mildew, phomopsis, volutella leaf blight and more.

**Packaging:** 1 gallon container, 4 per case

EPA Reg. No.	REI	Chemical Family	MOA	Active Ingredient	Rate per 100 gallons	Rate per 1 gallon	Application
67702-2-59807	4 hours	Inorganic	M 01	Copper octanoate	0.5 to 2 gallons	3¾ tsp to 15 tsp	Foliar spray

## Kalmor®

**Kalmor** fungicide/bactericide is an effective broad spectrum agent for prevention and control of diseases in a variety of plants and crops. **Kalmor** is OMRI listed and approved for organic production.

**Labeled for use on:** Ornamentals and greenhouse vegetables.

**Diseases Controlled:** Anthracnose, bacterial blights (pseudomonas, erwinia), botrytis, cercospora leaf spot, downy mildew, powdery mildew, phomopsis, volutella leaf blight and more.

**Packaging:** 2.5 lbs, 4 per case

EPA Reg. No.	REI	Chemical Family	MOA	Active Ingredient	Rate per acre	Rate per 1,000 sq ft	Application
91411-11-59807	24 Greenhouse and 48 Nursery	Inorganic	M 01	Copper Hydroxide	0.5 to 2 lbs.	½ TBS to 1½ TBS	Foliar spray

## Triact® 70

**Triact 70** (clarified hydrophobic extract of Neem oil) is a broad-spectrum fungicide, miticide and insecticide. **Triact 70** is OMRI listed and approved for organic production. **Triact 70** may be used indoors as well as outdoors on ornamental flowering plants, trees, shrubs and foliage grown in greenhouses, interiorscapes and commercial landscapes. As a fungicide, **Triact 70** is a preventative as well as a curative. It coats fungal spores and then dehydrates them to stop the disease cycle. Use **Triact 70** when conditions favor disease development but before major symptoms occur. As a miticide and an insecticide, **Triact 70** acts as a suffocant. To ensure maximum control thorough coverage of **Triact 70** is key. Use **Triact 70** at rates of 0.5 to 2 percent at spray intervals of 7 to 10 days. **Triact 70** makes an excellent tool for all well developed IPM programs.

**Labeled for use on:** For indoor/outdoor use on ornamental flowering plants, trees, shrubs, foliage, herbs and vegetable plants grown in nurseries, greenhouses and commercial landscapes.

**Insects, Mites, and Diseases Controlled:** A broad spectrum insecticide, miticide and fungicide. See label for more information.

**Packaging:** 2.5 gallon container, 2 per case

**Notes:** Water temperature should be above 45° F. **Triact 70** is compatible with most commonly used fungicides, insecticides, and fertilizers. Avoid tank mixes of oxythioquinox, captan, sulfur, chlorothalonil or other chemically similar products. Refer to the label or Product Information Bulletin for crop sensitivities.

EPA Reg. No.	REI	Chemical Family	MOA	Active Ingredient	Rate per 100 gallons	Rate per 1 gallon	Application
70051-2-59807	4 hours	Oils	NC	Clarified hydrophobic extract of neem oil	0.5 gallon , 1 gallon to 2 gallons	3¾ tsp to 7½ tsp to 15 tsp (5 TBS) (19 mL to 38 mL to 76 mL)	Spray

## Triathlon® BA

**Triathlon BA** is a broad-spectrum preventative biofungicide for control of a wide variety of fungal and bacterial diseases on ornamentals, fruits, vegetables, herbs and spices grown in greenhouses, nurseries, and shadehouses. **Triathlon BA** is OMRI listed and approved for organic production.

**Labeled for use on:** Ornamentals, vegetables (fruiting and leafy), legumes, cucurbits, corms, fruits, tree nuts, and herbs and spices.

**Diseases Controlled:** botrytis, powdery mildew, downy mildew, rusts, leaf spots, scab, alternaria, pythium, phytophthora, rhizoctonia, fusarium, and bacterial spot.

**Packaging:** 1 gallon containers, 4 to a case

**Notes:** **Triathlon BA** contains a minimum of 1 x 10<sup>10</sup> colony-forming units (cfu) of active ingredient per milliliter.

EPA Reg. No.	REI	Chemical Family	MOA	Active Ingredient	Rate per 100 gallons	Rate per 1 gallon	Application
70051-107-59807	4 hours	<i>Bacillus</i> sp. and the fungicidal lipopeptides produced	BM 02	<i>Bacillus amyloliquefaciens</i>	foliar: 0.5 to 6 quarts; drench: 0.5 to 4.5 pints	1 tsp to 7½ tsp to 11½ tsp (4.8 mL to 38 mL to 57 mL)	Spray or drench

## FireWorxx™

**FireWorxx** is a post emergent herbicide for control of weeds in greenhouse, nursery and landscape ornamentals, grounds maintenance, and non-cropland areas. **FireWorxx** is a fast-acting, non-selective broadleaf weed, grass, algae and moss killer. **FireWorxx** is not translocated. It will burn only those plant parts that are coated with spray solution. **FireWorxx** can be used any time during the year and works best during sunny, warm and dry conditions. Application during cold weather may delay appearance of plant damage. If rain falls within 3 hours of treatment, an additional spray may be required. **FireWorxx** controls many common annual weeds and suppresses the growth of biennial and perennial weeds. It can be used in cultivated areas prior to planting crops. Treated areas can be re-planted as soon as desirable level of weed control is obtained.

**Labeled for use on:** Greenhouse, nursery and landscape ornamentals, grounds maintenance, and non-cropland areas.

**Weeds Controlled:** **FireWorxx** is a post emergent, burn-down herbicide. Any contact of **FireWorxx** to desirable plants or plant parts will risk significant plant injury. Do not overspray **FireWorxx** onto desirable plants.

**Packaging:** 1 gallon container, 4 per case

**Notes:** **FireWorxx** is a Caution labeled, OMRI-listed, USDA Organic herbicide that makes an excellent replacement for applicators concerned with glyphosate-based herbicides. **FireWorxx** is fast acting and does not have residual activity. It can be used around edible crops, herbs, ornamentals, landscapes and non-crop areas.

EPA Reg. No.	REI	Chemical Family	MOA	Active Ingredient	Rate per 100 gallons	Rate per 1 gallon	Application
67702-54-59807	24 hours	Soaps	M	Caprylic Acid + Capric Acid	3 to 9 gallons	3.8 to 11.5 fl. oz.	Contact foliar sprays

# OHP Key Pest Problems

Key Pests	OHP Solutions	Recommended Rate per 100 gallons	Recommended Rate per 1 gallon	Spray Interval
Aphids Thrips Whiteflies	Ancora®	16 oz.	5 grams	3 to 5 days
	Azatin® O	12 fl. oz.	4/5 tsp or 3.6 mL	3 to 5 days
	Kopa™ Insecticidal Soap	1 to 2 gallons	1.3 to 2.6 fl. oz. or 39 mL to 76 mL	7 to 14 days
	Pycana®	2 gallons	2.6 fl. oz. or 75 mL	7 days
	Triact® 70	1 gallon	7½ tsp or 38 mL	3 to 5 days
Caterpillars	Azatin® O	8 to 16 fl. oz.	½ tsp to 1 tsp 2.5 mL to 5 mL	7 days
Fungus Gnats	Azatin® O	8 to 16 fl. oz.	½ tsp to 1 tsp 2.5 mL to 5 mL	3 to 5 days
Spider mites	Ancora®	14 to 28 oz.	4 to 8 grams	3 to 5 days
	Kopa™ Insecticidal Soap	1 to 2 gallons	1.3 to 2.6 fl. oz. 39 mL to 76 mL	7 to 14 days
	Pycana®	1 to 2 gallons	1.3 to 2.6 fl. oz. 39 mL to 76 mL	7 days
	Triact® 70	0.5 to 1 gallon	3¾ tsp to 7½ tsp 19 mL to 38 mL	3 to 5 days
Botrytis	Triathlon® BA	4 quarts	7 <sup>2</sup> / <sub>3</sub> tsp or 38 mL	3 to 5 days
Downy Mildew	Triathlon® BA	0.5, 4 to 6 quarts	1 tsp, 7 <sup>2</sup> / <sub>3</sub> tsp, 11 <sup>1</sup> / <sub>5</sub> tsp 4.8 mL, 38 mL, 57 mL	3 to 5 days
Powdery Mildew	Grotto®	0.5 to 2 gallons	3¾ tsp to 15 tsp or 19 mL to 76 mL	7 to 10 days
	Kalmor®	0.5 to 2 lbs. per acre	½ TBS to 1½ TBS per 1,000 sq. ft.	7 days
	Kopa™ Insecticidal Soap	1 to 2 gallons	1.3 to 2.6 fl. oz. 39 mL to 76 mL	7 to 14 days
	Triact® 70	0.5 to 1 gallon	3¾ tsp to 7½ tsp 19 mL to 38 mL	3 to 5 days
	Triathlon® BA	0.5, 4 to 6 quarts	1 tsp, 7 <sup>2</sup> / <sub>3</sub> tsp, 11 <sup>1</sup> / <sub>5</sub> tsp 4.8 mL, 38 mL, 57 mL	3 to 5 days
Weeds, Algae or other undesired plants	FireWorxx™	3, 6, 9 gallons	3.8 to 11.5 fl. oz.	as needed

# OHP Product Rate Guide

Fungicides			
Products	Rate per 100 gallons	Rate per 1 gallon	Pre Harvest Interval
<b>Grotto®</b>	0.5 to 2 gallons	3¾ tsp to 15 tsp (5 TBS) (19 mL to 76 mL)	0 days
<b>Kalmor®</b>	0.5 to 2 lbs. per acre	½ TBS to 1½ TBS per 1,000 sq. ft.	0 days
<b>Kopa™ Insecticidal Soap</b>	1 to 2 gallons	1.3 to 2.6 fluid ounces (39 mL to 76 mL)	0 days
<b>Triact® 70</b>	0.5 gallon, 1 gallon, 2 gallons	3¾ tsp, 7½ tsp, 15 tsp (5 TBS) (19 mL, 38 mL, 76 mL)	0 days
<b>Triathlon® BA</b>	0.5 quart, 4 quarts, 6 quarts	1 tsp, 7⅔ tsp, 11⅓ tsp (4.8 mL, 38 mL, 57 mL)	0 days

Insecticides / IGRs/ Miticides			
Products	Rate per 100 gallons	Rate per 1 gallon	Pre Harvest Interval
<b>Ancora®</b>	14 to 28 ounces	4 to 8 grams	0 days
<b>Azatin® O</b>	4 to 16 fluid ounces	¼ tsp to 1 tsp (1.2 mL to 4.8 mL)	0 days
<b>Kopa™ Insecticidal Soap</b>	1 to 2 gallons	1.3 to 2.6 fluid ounces (39 mL to 76 mL)	0 days
<b>Pycana®</b>	1 to 2 gallons	1.3 to 2.6 fluid ounces (39 mL to 76 mL)	0 days
<b>Triact® 70</b>	0.5 gallon, 1 gallon, 2 gallons	3¾ tsp, 7½ tsp, 15 tsp (5 TBS) (19 mL, 38 mL, 76 mL)	0 days

Herbicides			
Products	Rate per 100 gallons	Rate per 1 gallon	Pre Harvest Interval
<b>FireWorxx™</b>	3, 6, 9 gallons	3.8 to 11.5 fluid ounces	NA

Users should read the entire label for full information and application instructions.

TBS = tablespoon    tsp = teaspoon    mL = milliliter    g = grams    1 fl oz = 29.6 mL    1 tsp = 5 mL    1 TBS = 15 mL



