# OHP LANDSCAPE SOLUTIONS®

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An American Vanguard Company



## **Landscape Solutions**®

Controlling pests in the landscape is a challenging task. Problems in the landscape range from turf diseases to insect and mite problems on ornamental plants around houses and buildings. This brochure focuses on the available products from OHP and rotational strategies. These are all important factors for the LCO or turf manager to use in controlling landscape pests.

### Insects

### Landscape Insect and Mite Management

The main insect and mite pests of landscape plantings are aphids, caterpillars (leaf-feeding worms), thrips, leafminers and two-spotted spider mites.

OHP Landscape Product	Chemical	MOA		Residual	Application Rates		
	Class	Group	Target Pest	Control	Per 100 gallons	Per one gallon	OMRI listed
Azatin <sup>®</sup> O	Biopestcide IGR	UN	Aphids, fungus gnats, leafminers, thrips, caterpillars	5 to 7 days	4 to 16 fl oz	¼ to 1 tsp (1.2 to 5 mL)	1
BotaniGard® ES	Biopesticide fungal agents	UNF	Aphids, caterpillars, flea beetles, leafminers, leafhoppers mealybugs, root weevils, stink bugs, thrips, whiteflies	5 to 7 days	1/2 to 2 qts.	1 to 4 tsp.	1
BotaniGard® 22WP	Biopesticide fungal agents	UNF	Aphids, caterpillars, flea beetles, leafminers, leafhoppers mealybugs, root weevils, stink bugs, thrips, whiteflies	5 to 7 days	1/2 to 2 lbs.	1.5 to 2 tsp.	1
Floramite <sup>®</sup> SC	Carbazate	20D	Spider mites	21 to 28 days	4 to 8 fl oz	¼ to ½ tsp (1.2 to 2.5 mL)	
Fulcrum®	Pyridine IGR	7C	Aphids, fungus gnats, leafminers, mealybugs, scales, shore flies and whiteflies	14 to 28 days	2 to 12 fl oz	% to ¾ tsp (0.6 to 3.6 mL)	
Kopa™ Insecticidal Soap	Biopesticide soap	UNM	Aphids, fungus gnats, mealybugs, scales, thrips, whiteflies	3 to 5 days	1 to 2 gals	1.3 to 2.6 fl oz (39 to 75 mL)	1
Sirocco®	Glycosides + Carbazates	6 + 20D	Insects and mites, including thrips	14 days	3 to 6 fl oz	¾6 to ¾ tsp (0.9 to 1.8 mL)	
Shuttle <sup>®</sup> O	Napthoquinone derivative	20B	Spider mites	21 days	6.4 to 12.8 fl oz	¾ to ¾ tsp (1.8 to 3.6 mL)	
Triact <sup>®</sup> 70	Oil	UNE	Aphids, mites, whiteflies and more	14 days	0.5 to 2 gals	3¾ to 7½ to 15 tsp (5 TBS)	1

More information on the products listed can be found on the OHP website at ohp.com, or from your OHP technical sales manager.

### Diseases

### Landscape Disease Management

The most serious disease problems are Pythium and Phytophthora root rots.

OHP Landscape Product		MOA	Diseases Controlled	Residual Control	Application Rates		OMRI
		Group			Per 100 gallons	Per one gallon	listed
Areca®	Ethyl Phosphonates	P 07	Pythium and phytophthora root rots	14 days	1.25, 2.5 to 5 lbs	1¼, 2½ to 5 tsp	
Grotto®	Copper Octanoate	M 01	Anthracnose, bacterial blights (pseudomonas, erwinia), botrytis, cercospora leaf spot, downy mildew, powdery mildew, phomopsis	5 -14 days	0.5 to 2 gals	4 tsp to 8 tsp (20 to 40 mL)	1

OHP Landscape Product	Chemical MOA	Diseases Controlled	Residual	Application Rates		OMRI	
	Class	Group	Diseases Controlled	Control	Per 100 gallons	Per one gallon	listed
Kalmor® R	Copper Hydroxide	M 01	Anthracnose, bacterial blights, botrytis, cercospora leaf spot, downy mildew, powdery mildew, volutella leaf blight	7-14 days	.5 to 2 lbs./acre	1/2 tbsp to 1.5 tbsp/1,000 sq. ft.	1
OHP 6672° 50 WP	Thiophanates	1	Anthracnose, dollarspot, brown patch, snowmolds, summer patch fusarium blight, stripe smut	7 days	8 to 16 oz	% to ½ tsp	
OHP 6672° 4.5 F	Thiophanates	1	Anthracnose, dollarspot, brown patch, snowmolds, summer patch, fusarium blight, stripe smut	7 days	10 to 20 fl oz	<sup>3</sup> % to 11% tsp (3.2 to 5.9 mL)	
Terraclor <sup>®</sup> 400	Aromatic Hydrocarbons	14	Rhizoctonia, sclerotinia, pellicularia	28 days	6 to 12 fl oz	¾ to ¾ tsp	
Triact <sup>®</sup> 70	Oils	NC	Powdery mildew, botrytis, common leafspots	5 days	0.5 to 2 gals	3¾ to 7½ to 15 tsp (5 TBS)	1
Triathlon® BA	<i>Bacillus</i> sp. and the fungicidal lipopeptides produced	BM 02	Anthracnose, brown patch, powdery mildew, pythium	14 days	0.5 to 6 qts	1 to 11¼ tsp (4.8 to 57 mL)	1

More information on the products listed can be found on the OHP website at ohp.com, or from your OHP technical sales manager.

### Weeds

### Landscape Weed Management

**Biathlon** is a pre-emergent granular herbicide for control of weeds in field and grounds maintenance, and other label specified noncrop areas. **Biathlon** contains the active ingredients oxyfluorfen and prodiamine formulated on an engineered granule that provides an unprecedented level of dust reduction resulting in improved worker safety and ease of application. **Biathlon** applicators are required to wear minimal Personal Protective Equipment (PPE) – long sleeved shirt, pants and socks plus shoes. **Biathlon** has a Caution signal word. **Biathlon** provides control of a wide range of problem grasses and broadleaf weeds by creating a barrier in the soil and is active for several months. **Biathlon** works by inhibiting cell division and disrupting cell wall formation in shoots and roots of emerging seedling weeds. Users should irrigate new plantings before **Biathlon** application with ½" water to ensure firm soil or media around the root system. **Biathlon** should be applied when rain is soon forecasted or watered-in with approximately ½" of water. **Biathlon** should be broadcast evenly over media for maximum performance. To prevent weed escapes, do not disturb the soil or media in **Biathlon** treated areas; this will disrupt the barrier necessary for successful weed control.

**Casoron 4G** is a broad-spectrum granular herbicide that is effective on many hard to control grasses and broadleaf weeds. **Casoron 4G** may be applied around established woody ornamentals in the landscape. It may also be applied for general weed control under asphalt used for driveways, parking lots and recreational areas.

**FireWorxx** is a post-emergent, non-selective herbicide for control of weeds in greenhouse, nursery and landscape ornamentals, grounds maintenance, and non-cropland areas. **FireWorxx** is fast acting on broadleaf weeds, grasses, algae, and moss. **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. **FireWorxx** carries a Caution signal word and is an OMRI-listed, USDA Organic-approved herbicide. **FireWorxx** does not have residual activity. It can be used around edible crops, herbs, ornamentals, landscapes and non-crop areas.

**Fuerte** is a pre-emergent granular herbicide for control of weeds in field, container and landscape ornamentals, grounds maintenance, and non-cropland areas. Also for tree farms and conifer farms and other label specified non-crop areas. **Fuerte** contains the active ingredients flumioxazin and prodiamine formulated on an engineered granule that provides an unprecedented level of dust reduction resulting in improved worker safety and ease of application. **Fuerte** applicators are required to wear minimal Personal Protective Equipment (PPE) of long-sleeved shirt and long pants, waterproof gloves, socks and shoes. **Fuerte** has a Caution signal word and a 12-hour REI. **Fuerte** provides control of a wide range of problem grass and broadleaf weeds by creating a barrier in the soil and is active for several months. **Fuerte** contains the active ingredient flumioxazin, which is a protoporphyrinogen oxidase inhibitor (PPO) mode of action (MOA 14), and prodiamine, a member of the dinitroanilines family of herbicides (MOA 3) that inhibits the steps involved with cell division. The active ingredients control susceptible weeds by preventing growth and development of newly germinated seeds. **Fuerte** will not control established weeds. Irrigate new plantings before **Fuerte** application with 1/2" water to ensure firm and settled soil media around the root system. Broadcast **Fuerte** uniformly over ornamental containers or field soil at the rate of 100 lbs/acre. **Fuerte** should be applied when rain is soon forecasted or watered-in with approximately 1/2" of water soon after application. **Fuerte** should be broadcast evenly over media for maximum performance. To prevent weed escapes, do not disturb the soil or media in **Fuerte** treated areas; this will disrupt the barrier necessary for successful weed control.

OHP Landscape Product	Chemical Class	MOA Group	Target Pest	Residual Control	Application Rates		OMRI
					Lbs per acre	Per 1000 sq ft	listed
Biathlon®	Diphenylether + Dinitroanline	14 + 3	Grasses and broadleaf weeds	3 to 4 months	100 lbs	21⁄3 lbs	
Casoron <sup>®</sup> 4G	Benzonitrile	20	Grasses and broadleaf weeds	9 to 10 months	100 to 150 lbs	21⁄3 to 31⁄4 lbs	
FireWorxx™	Soap	М	Grasses and broadleaf weeds, moss and algae	No Residual	3% to 9% by volume	3% to 9% by volume	1
Fuerte®	N-phenylphthalimides + Dinitroaniline	14 + 3	Grasses and broadleaf weeds	3 to 4 months	100 lbs	21⁄3 lbs	

More information on the products listed can be found on the OHP website at ohp.com, or from your OHP technical sales manager.

### **OHP PRODUCT INFORMATION**

#### **Insecticides/Miticides**

Azatin<sup>®</sup> O - for control of a broad range of insects on ornamentals growing in outdoor residential or commercial landscapes and interiorscapes.

BotaniGard® 22WP & ES - biological insecticide for control of a wide range of insects on vegetables, herbs, ornamentals, and fruits.

- Floramite<sup>®</sup> SC a selective miticide for the control of a variety of mite pests on all ornamental plants, including bedding plants, flowering plants, foliage plants, bulb crops, perennials, trees and shrubs in the landscape.
- Fulcrum® for control of insects on shrubs, ornamentals, flowering plants, foliage plants, ground covers, ornamental trees, and non-bearing fruit, nut trees and vines.

Kopa<sup>™</sup> Insecticidal Soap - is a potassium salt of fatty acid soap that controls insects, mites, and powdery mildew.

- Sirocco<sup>®</sup> provides quick knockdown and long residual control of a wide variety of mite pests on all ornamental plants, including bedding plants, flowering plants, foliage plants, bulb crops, perennials and trees and shrubs grown and/or maintained in containers or in the ground in landscapes and interiorscapes.
- Shuttle<sup>®</sup> O controls susceptible mite infestations on ornamental plants growing in interiorscapes, residential and commercial landscapes, and recreation areas and areas surrounding schools. Not for indoor residential use.

Triact® 70 - for indoor/outdoor use on ornamental flowering plants, trees, shrubs, foliage, vegetables, and fruit grown in interiorscapes and landscapes.

#### **Fungicides**

Areca<sup>®</sup> - controls disease on ornamentals and bedding plants grown in the landscape.

- Grotto<sup>®</sup> is an effective fungicide/bactericide for prevention and control of anthracnose, bacterial leaf spot and blight, botrytis downy mildew, fire blight, fungal leaf spot and powdery mildew diseases on a variety of plants and crops.
- Kalmor® High-quality copper hydroxide fungicide/bactericide for prevention and control of diseases on a variety of ornamentals in the landscape, greenhouse, and nursery.
- **OHP 6672**<sup>®</sup> **4.5 F** provides broad spectrum disease control on woody, flowering, herbaceous, and tropical foliage, ornamental plants and trees in containers and land-scapes and also on turfgrass, such as golf course greens, tees and fairways, athletic fields, cemeteries, parks, and commercial and home lawns.
- **OHP 6672**<sup>®</sup> **50 WP** provides broad spectrum disease control on woody, flowering, herbaceous, and tropical foliage ornamental plants and trees in containers, interiorscapes, landscapes and also on turfgrass, such as golf course greens, tees and fairways, athletic fields, cemeteries, parks, and commercial and home lawns.

Terraclor® 400 - controls rhizoctonia and other tough root rots. Use on landscape ornamentals except residential, schools, playgrounds, and athletic fields.

**TriathIon**<sup>®</sup> **BA** - broad-spectrum preventative biopesticide for control of a wide variety of fungal and bacterial diseases on ornamentals, fruits, vegetables, interiorscapes and turf.

Triact® 70 - a broad-spectrum, preventative biopesticide for the control of powdery mildew, botrytis and common leafspots.

#### Herbicides

Biathlon® - pre-emergent granular herbicide for control of weeds in landscape ornamentals, grounds maintenance and non-crop areas.

Casoron<sup>®</sup> 4G - controls annual and perennial weeds in outdoor non-crop areas such as but not limited to: around buildings and structures, around fences, industrial areas, and recreational areas.

FireWorxx<sup>™</sup> - a post-emergent contact herbicide having quick burn-down activity on weeds in landscapes, grounds maintenance and other non-crop areas.

Fuerte<sup>®</sup> - pre-emergent granular herbicide for control of weeds in landscape ornamentals, grounds maintenance, and non-crop areas.

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