

# Orthene<sup>®</sup> Insecticide

A Powerful One-Two Punch



## For contact and systemic control of key insect pests in registered vegetable crops, tobacco and ornamental plants.

When it comes to controlling key insect pests in many high-value vegetables, ornamentals and tobacco, you just can't beat the powerful one-two punch of ORTHENE<sup>®</sup> 75 SP Insecticide from Arysta LifeScience.

ORTHENE controls a wide variety of damaging insects, but is best known for the excellent activity on aphids and *Lepidoptera* larvae. Once applied, ORTHENE works in two ways to control insect pests. First, it provides effective contact control of foliar-feeding insects. Also, it is rapidly absorbed into plant tissue, controlling insects as they feed for two to three weeks after application. Growers will appreciate the fact that acephate – the active ingredient in ORTHENE – rapidly penetrates plant tissue and, once dried, is less susceptible to wash off during rainfall or irrigation.

### In vegetables...

ORTHENE Insecticide can be used as a foliar spray to protect labeled vegetable crops from European corn borer, tarnished plant bug, potato flea beetle, green peach aphid and other damaging pests. In addition, it can be applied to young tomato plants in transplant water to provide powerful systemic protection during those critical first weeks of crop development.

### In ornamentals...

When used as a foliar spray, ORTHENE provides both contact and systemic control of key pests, including aphids, armyworm, greenhouse whitefly, leafminer, leafroller, mealybug and flower thrips.

### In tobacco...

ORTHENE can be applied as a foliar spray to control tomato hornworm, flea beetle and green peach aphid. In addition, it can be added to transplant water to control darksided cutworm, potato flea beetle, root maggot, green peach aphid and thrips for two to three weeks after transplanting.

Updated label maintains key ORTHENE uses following PMRA re-evaluation

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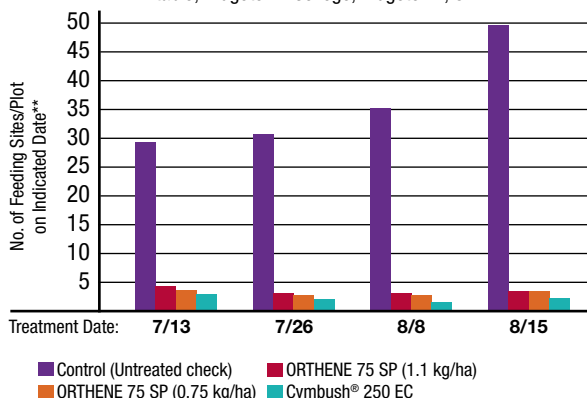
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## Independent trials confirm the outstanding insect control of ORTHENE Insecticide.

Years of independent field trials and actual grower use prove that ORTHENE Insecticide offers excellent control of key insect pests in registered vegetables, tobacco and ornamentals, the level of control needed to help maximize yield and quality.

### Control of Foliar Insects\* Causing Damage to Cabbage

R. Pitablo; Ridgetown College, Ridgetown, ON

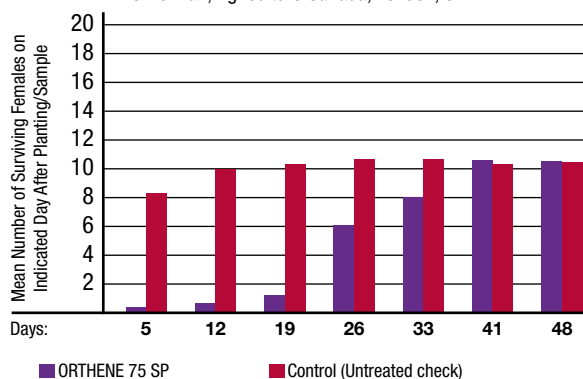


\*Imported cabbageworm & diamondback moth

\*\*Number of feeding clusters counted per plot. The larger the count, the greater the damage and less effective the treatment.

### Effect of Planting Treatments on Survival of Introduced Tobacco Aphid, *Myzus nicotianae*

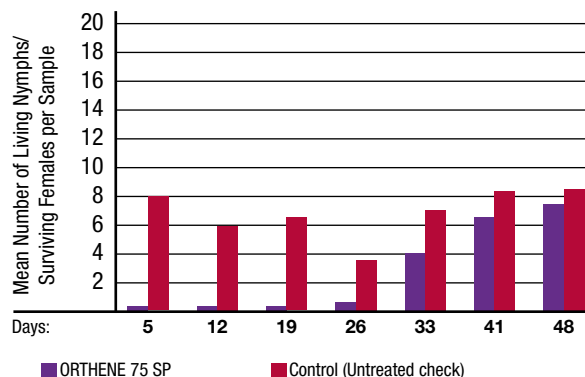
J. Tolman; Agriculture Canada, London, ON



ORTHENE applied @ rate of 75.0 grams/1000 plants, pre-plant tray drench treatment.

### Effect of Planting Treatments on Production of Living Nymphs by Introduced Tobacco Aphid, *Myzus nicotianae*

J. Tolman; Agriculture Canada, London, ON



ORTHENE applied @ rate of 75.0 grams/1000 plants, pre-plant tray drench treatment.

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## Application Rates and Timing for ORTHENE 75 SP Insecticide\*

Crop	Insect	Rate of Application (AI)
<b>Celery</b>	Green peach aphid, Tarnished plant bug	563-825 g/ha in 225-1650 L of water with conventional ground application equipment only. No more than 4 applications/season.
<b>Sweet peppers (Bell type)</b>	Green peach aphid, Pepper maggot	562 g/ha in 225-1650 L of water with conventional ground application equipment. No more than 4 applications/season.
	European corn borer	825 g/ha in 225-1650 L of water with conventional ground application equipment. No more than 4 applications/season.
<b>Cabbage, Brussels sprouts, Cauliflower, Head lettuce (Crisp head type only)</b>	Cabbage looper, Imported cabbageworm, Diamondback moth larvae, Green peach aphid	563-825 g/ha in 225-1650 L of water with conventional ground application equipment. Use high rate only when heavy pest infestations are present. No more than 2 applications/season in cabbage, Brussels sprouts and cauliflower; no more than 4 applications/season in lettuce.
<b>Corn (Seed and Sweet)</b>	European corn borer	563-825 g/ha in 220-1000 L of spray mix with conventional ground application equipment. Use high rate only when heavy pest infestations are present. No more than 4 applications/season.
<b>Tomato (Transplant water application)</b>	Cutworms, Potato flea beetle, Root maggots, Wireworms, Aphids, Thrips, Colorado potato beetle	900 g/ha in 2000 L of water. (This rate is based on 14,000 plants per hectare.)
<b>Potato</b>	Green peach aphid, Potato aphid, Potato flea beetle, Potato leafhopper, Tarnished plant bug	563-825 g/ha in 225-1650 L of water with conventional ground application equipment. Use high rate only when heavy pest infestations are present. No more than 4 applications/season.
<b>Cranberries</b>	Blackheaded fireworm	562 g/ha in 225-1650 L of water with conventional ground application equipment. Second application of 562 g/ha post-bloom if required.
<b>Saskatoon berry - non-bearing plants (Soil injection application)</b>	Woolly elm aphid	Mix 637 mg/L of water. Apply 2 L of solution per plant. 3-5 injections per plant to a depth of 12 cm, 15 cm from the plant stem. Apply once per year in mid-July or early August.
<b>Saskatoon berry - bearing plants (Soil injection application)</b>	Woolly elm aphid Woolly apple aphid	Mix 637 mg/L of water. Apply 2 L of solution per plant. 3-5 injections per plant to a depth of 12 cm, 15 cm from the plant stem. Apply once per year in mid-July to early August after harvest is complete.
<b>Trees and ornamentals</b>	Many insects controlled (see label)	Hydraulic sprayer: 637 g/1000 L of water. Mist blowers: 1312 g/1000 L of water. Mix thoroughly and spray entire plant covering both sides of foliage.
<b>Tobacco (Flue-cured)</b>	Tomato hornworm, Flea beetle, Green peach aphid	563-825 g/ha in at least 100 L of water with conventional ground application equipment. Use 825 g/ha for established populations.
	Darksided cutworm (Before planting)	Rye or wheat cover crop: 563 g/ha in at least 200 L of water. Soil treatment: 1125 g/ha in at least 200 L of water.
	Darksided cutworm (After planting)	1125 g/ha in sufficient water to give good coverage of seedlings.
<b>Tobacco (Transplant water application)</b>	Darksided cutworm, Potato flea beetle, Root maggot, Green peach aphid, Thrips	825-1275 g/ha in a minimum of 1200 L of transplant water. No more than 1275 g/ha in a transplant water treatment.
	Wireworms	825 g/ha in 1200 L of transplant water. Make one application/season at transplanting.

\* See label for pre-harvest and re-entry intervals.

**Note:** The information contained in this document is believed to be correct at the time of printing. Always refer to the ORTHENE label prior to use.

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## Count on the proven performance of ORTHENE to help protect your hard-earned profits.

When you add up all the benefits of ORTHENE Insecticide, it's easy to see why this product is such a great insecticide value.

- Contact and systemic activity for a powerful one-two punch against insect pests
- Broad-spectrum insect control in registered vegetables, ornamentals or tobacco
- Especially effective on sap-feeding insects
- Flexible application methods to fit your needs (see label for specific crops)
- Registered for use on more than 60 different vegetable crops and ornamental plants across Canada
- Rapidly absorbed into plant tissue for long-lasting, rainfast control
- Degrades rapidly in the soil to help minimize environmental impact

To discover how the one-two punch of ORTHENE Insecticide can improve your insect control program, contact your crop consultant or crop protection retailer. And for more information about ORTHENE, log on to [www.arystalifescience.ca/orthene](http://www.arystalifescience.ca/orthene) or call 1-866-761-9397 toll free.

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