Cucurbit Vegetable
Insect Control
WHAT IS DURIVO?

Insect Protection With Durivo

Durivo® insecticide is a broad-spectrum, systemic insecticide controlling key lepidopteran, sucking and chewing insect pests in vegetables. When Durivo is applied to the soil, it is readily taken up by the roots of germinating seedlings or transplants and is rapidly translocated throughout the plant. Because of its systemic activity, Durivo provides excellent residual control of key insect pests in cucurbit vegetables.

Durivo Spectrum Of Activity

<table>
<thead>
<tr>
<th>SUCKING AND CHEWING INSECTS</th>
<th>LEPIDOPTERANS</th>
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</thead>
<tbody>
<tr>
<td>Aphids</td>
<td>Melonworm</td>
</tr>
<tr>
<td>Cucumber Beetles*</td>
<td>Pickleworm</td>
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<tr>
<td>Flea Beetles</td>
<td></td>
</tr>
<tr>
<td>Leafhoppers</td>
<td></td>
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<tr>
<td>Leafminers*</td>
<td></td>
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<tr>
<td>Thrips</td>
<td></td>
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<tr>
<td>Whiteflies</td>
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</tbody>
</table>

*Suppression
Arizona and California Insect Control for Fall Melons

Option One:
1) FarMore® DI 400 seed treatment technology (a proprietary combination of separately registered products containing Cruiser® insecticide, Apron XL®, Dynasty®, and Maxim® fungicides) will provide early season control of flea beetles, whiteflies, aphids, leafminers, and leafhoppers.

2) The use of Voliam Xpress and Warrior II with Zeon Technology in rotation throughout the season provides excellent lepidopteran control while utilizing multiple modes of action for resistance management. Warrior II with Zeon Technology or Voliam Xpress will also control stink bug populations and other secondary pests.

3) Fulfill applied later in the season will control aphids utilizing a different mode of action than neonicotinoids.

4) Apply Agri-Mek when mite populations appear. Agri-Mek in rotation with Trigard will also provide excellent leafminer control.

Option Two:
1) Durivo applied at-planting or post-planting (shanked, drip chemigation) will provide significant residual control of both sucking and chewing insects.

2) Apply Agri-Mek when mite populations appear. Agri-Mek in rotation with Trigard will also provide excellent leafminer control.

3) Voliam Xpress applied later in the season will provide additional lepidopteran control as well as control of other insects like stink bugs and leafhoppers.

4) Fulfill applied later in the season will control aphids utilizing a different mode of action than neonicotinoids.

Option Three:
1) Platinum 75SG applied at planting will provide long residual control of sucking insect pests like flea beetles, whiteflies, aphids, leafminers, and leafhoppers.

2) The use of Voliam Xpress and Warrior II with Zeon Technology in rotation throughout the season provides excellent lepidopteran control while utilizing multiple modes of action for resistance management. Warrior II with Zeon Technology or Voliam Xpress will also control stink bug populations.

3) Fulfill applied later in the season will control aphids utilizing a different mode of action than neonicotinoids.

4) Apply Agri-Mek when mite populations appear.

Option Four:
1) Actara provides control of sucking pests like aphids and whiteflies. Fulfill provides an alternative mode of action for control of aphids and suppression of whiteflies.

2) Apply Agri-Mek when mite populations appear. Agri-Mek in rotation with Trigard will also provide excellent leafminer control.

3) Warrior II with Zeon Technology applied earlier in the season will control a number of different key pests in melons.

4) Voliam Xpress will control a number of pests, including lepidopteran pests, beetles, leafminers, and leafhoppers.

5) When sucking and chewing pests overlap or occur at the same time, Voliam Flexi is an excellent choice.

TECHNICAL OVERVIEW

Technical Features

» Broad-spectrum, systemic insecticide that controls key lepidopteran, sucking and chewing insect pests

» Combination of chlorantraniliprole (CTPR) and thiamethoxam (TMX)

» Readily taken up by the roots of germinating seeds or transplants and rapidly transported throughout the plant

» Low use rates

» Provides excellent residual control of key insect pests in vegetables

» Compatible with Integrated Pest Management (IPM) programs—minimal impact on beneficial arthropods

» Wide margin of plant safety when used in accordance with the label
Durivo

**Chemistry**
Chlorantraniliprole: diamide, Insecticide Resistance Action Committee (IRAC) Group 28; Thiamethoxam: neonicotinoid, IRAC Group 4A

**Formulation**
Soluble concentrate containing 2.5 lb a.i./gal

**Precautions/Safety**
Caution, Standard Personal Protective Equipment (PPE), 12-hour Restricted-entry Interval (REI)

**Tank Mix Guidelines**
Durivo is compatible with most commonly used tank mix partners; however, always consult the product label for complete use directions and precautions.

### DIRECTIONS FOR USE

**Best Use Guidelines**

- **Durivo** should be applied during planting or transplanting as an in-furrow spray, transplant hole drench or narrow surface band above the seedline; after planting as a post-seeding, post-transplanting or hill drench; drip chemigation; or root zone and shank application, which allow the insecticide to be absorbed by plant roots. Although Durivo is quickly taken up by plant roots and rapidly moves throughout the plant, the use of sufficient water volume will ensure the product contacts the roots, resulting in optimal uptake and performance.

- Some insect pests are known to develop resistance to products after repeated use. Because resistance development cannot be predicted, the use of Durivo should conform to sound resistance management practices established for the crop and use area.

*Always read and follow label instructions before buying or using this product.*

### PERFORMANCE RESULTS

#### CUCUMBERS: Melonworm (Diaphania hyalinata) Control

- **Notes:** Plant – 9 September 2009; PP = Post Plant – 1 October 2009
- **Source:** USVH0I0212009 – Syngenta VBRC; Vero Beach, Florida, 2009

<table>
<thead>
<tr>
<th>Date</th>
<th>Durivo 10 fl oz/A</th>
<th>Durivo 13 fl oz/A</th>
<th>Untreated Check</th>
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</thead>
<tbody>
<tr>
<td>23-Oct-09</td>
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<td>28-Oct-09</td>
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#### CUCUMBERS: Pickleworm (Diaphania nitidalis) Control

- **Notes:** Post Plant – 21 March 2007; DAT = Days After Treatment.
- **Source:** USVO0I0072007 – Syngenta VBRC; Vero Beach, Florida, 2007

<table>
<thead>
<tr>
<th>Date</th>
<th>Durivo 10 fl oz/A</th>
<th>Durivo 13 fl oz/A</th>
<th>Untreated Check</th>
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<tbody>
<tr>
<td>16 DAT</td>
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<td>31 DAT</td>
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<td>38 DAT</td>
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*Always consult the product label for a complete list of registered crops, use directions and application information.*
For more information, visit www.syngentacropprotection.com, www.durivo-insecticide.com or call the Syngenta Customer Center at 1-866-SYNGENTA (796-4368).

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**Important:** Always read and follow label instructions before buying or using Syngenta products. The instructions contain important conditions of sale, including limitations of warranty and remedy.

**Agri-Mek, Voliam Xpress and Warrior II with Zeon Technology are Restricted Use Pesticides.**

**Actara, Durivo, Platinum 75SG, Voliam Flexi, and Voliam Xpress are not currently registered for use or sale in all states. Please check with your state or local extension service before buying or using these products.**

Actara, Durivo, Platinum 75SG, Voliam Flexi, Voliam Xpress and Warrior II with Zeon Technology are highly toxic to bees exposed to direct treatment on blooming crops and weeds. Do not apply these products or allow them to drift onto blooming plants while bees are foraging in the treatment area.

FarMore Technology is a seed company- or seed technology provider-applied promotional combination of separately registered seed protection products and proprietary application technologies.