## RESTRICTED USE PESTICIDE

**DUE TO TOXICITY TO FISH AND AQUATIC ORGANISMS**

FOR RETAIL SALE TO AND USE ONLY BY CERTIFIED APPLICATORS OR PERSONS UNDER THEIR DIRECT SUPERVISION AND ONLY FOR THOSE USES COVERED BY THE CERTIFIED APPLICATOR'S CERTIFICATION.

# PARADIGM®

| **ACTIVE INGREDIENT:** | **% BY WT.** |
|---|---|
| Lambda-cyhalothrin; [1α(*S**),3α(Z)]-(±)-cyano-(3-phenoxyphenyl)methyl-3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclopropanecarboxylate | 12.7% |
| **OTHER INGREDIENTS:** | 87.3% |
| **TOTAL:** | 100.0% |

Contains 1 pound of active ingredient per gallon

**SHAKE WELL BEFORE USING**

**KEEP OUT OF REACH OF CHILDREN**

# CAUTION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

| **FIRST AID** | |
|---|---|
| **IF ON SKIN OR CLOTHING:** | • Take off contaminated clothing.<br>• Rinse skin immediately with plenty of water for 15-20 minutes.<br>• Call a poison control center or doctor for treatment advice. |
| **IF SWALLOWED:** | • Call a poison control center or doctor immediately for treatment advice.<br>• Have person sip a glass of water if able to swallow.<br>• Do not induce vomiting unless told to do so by a poison control center or doctor.<br>• Do not give anything by mouth to an unconscious person. |
| **IF IN EYES:** | • Hold eye open and rinse slowly and gently with water for 15-20 minutes.<br>• Remove contact lenses, if present, after the first 5 minutes; then continue rinsing eye.<br>• Call a poison control center or doctor for treatment advice. |
| **IF INHALED:** | • Move person to fresh air.<br>• If person is not breathing, call 911 or an ambulance; then give artificial respiration, preferably mouth-to-mouth if possible.<br>• Call a poison control center or doctor for further treatment advice. |
| Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also call 1-877-424-7452 for emergency medical treatment information. | |

Manufactured for:
**United Suppliers, Inc.**
**30473 260th Street**
**Eldora, IA 50627**

EPA Reg. No. 66222-223-33270

EPA Est. No.
NET CONTENTS: ___ GALLON(S)
1/0119/6

## PRECAUTIONARY STATEMENTS
## HAZARDS TO HUMANS AND DOMESTIC ANIMALS
## CAUTION

Harmful if swallowed or absorbed through the skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. 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. Wear appropriate protective clothing.

Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Skin exposure may also result in a sensation described as a tingling, itching, burning, or prickly feeling. Onset may occur immediately to 4 hours after exposure and may last 2-30 hours, without damage. Wash exposed areas once with soap and water. Relief from the skin sensation may be obtained by applying an oil-based cream.

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical resistant to this product are listed below. If you want more options, follow the instructions for category ***A*** on an EPA chemical resistance category selection chart.

**Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants
- Chemical-resistant gloves such as nitrile rubber or butyl rubber
- Shoes plus socks

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

### USER SAFETY RECOMMENDATIONS

**Users should:**

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

### ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to fish and aquatic organisms and toxic to wildlife. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment wash water.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the Agency responsible for pesticide regulation.

## AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls
- Chemical-resistant gloves such as nitrile rubber or butyl rubber
- Shoes plus socks

## PRODUCT INFORMATION

Apply in sufficient water for thorough coverage of listed crops unless otherwise specifically noted. Base rate of application upon pest pressure, timing of sprays, and field scouting. Use higher rates under heavy pest pressure and lower rates under low to moderate pest pressure. Base timing and frequency of applications upon insect populations reaching locally determined economic thresholds and other local methods. For ground and air applications, unless otherwise noted, use the following spray volumes:

**Row Crops:** By ground, apply in a minimum of 10 gallons of finished spray per acre. By air, apply in a minimum of 2 gallons of finished spray per acre.

**Orchard and Vine Crops:** By ground, apply in a minimum of 50 gallons of finished spray per acre. By air, apply in a minimum of 10 gallons of finished spray per acre.

For cutworm control, PARADIGM may be applied before, during, or after planting. For soil incorporated applications, use listed higher rates for improved control.

## RESISTANCE

Some insects tend to develop resistance to products used repeatedly for control. Because the development of resistance cannot be predicted, the use of this product must conform to resistance management strategies established for the use area. Consult your local or state agricultural authorities for details.

If resistance to this product develops in your area, this product or other products with a similar mode of action may not provide adequate control. If poor performance cannot be attributed to improper application or extreme weather conditions, a resistant strain of insect may be present. If you experience difficulty with control and resistance is a reasonable cause, immediately consult your local company representative or agricultural advisor for the best alternative method of control for your area.

## SPRAY DRIFT PRECAUTIONS

### BUFFER ZONES

**Vegetative Buffer Strip**

Construct and maintain a minimum 10-foot-wide vegetative filter strip of grass or other permanent vegetation between the field edge and down gradient aquatic habitat (such as but not limited to lakes; reservoirs; rivers; permanent streams; marshes or natural ponds; estuaries; and commercial fish farm ponds).

Only apply products containing lambda-cyhalothrin onto fields where a maintained vegetative buffer strip of at least 10 feet exists between the field and down gradient aquatic habitat.

For guidance, refer to the following publication for information on constructing and maintaining effective buffers: *Conservation Buffers to Reduce Pesticide Losses. Natural Resources Conservation Services.* USDA, NRCS. 2000. Fort Worth, Texas. 21 pp.
http://www.in.nrcs.usda.gov/technical/agronomy/newconbuf.pdf

**Buffer Zone for Ground Application (ground boom, overhead chemigation, or airblast)**
Do not apply within 25 feet of aquatic habitats (such as but not limited to lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds).

**Buffer Zone for ULV Aerial Application**
Do not apply within 450 feet of aquatic habitats (such as but not limited to lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds).

**Buffer Zone for Non-ULV Aerial Application**
Do not apply within 150 feet of aquatic habitats (such as but not limited to lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds).

In the state of New York, a 25 foot vegetated, non-cropped buffer strip untraversed by drainage tiles must be maintained between a treated field and a coastal salt marsh or stream that drains into a coastal salt marsh, for both aerial or ground application. For aerial applications, the 25 foot vegetated non-cropped buffer strip for runoff protection would be part of the larger 150 foot buffer strip (or 450 foot buffer strip for ULV application) required for spray drift.

**SPRAY DRIFT REQUIREMENTS**
**Wind Direction and Speed**
Only apply this product if the wind direction favors on-target deposition.

Do not apply when the wind velocity exceeds 15 mph.

**Temperature Inversion**
Do not make aerial or ground applications into temperature inversions.

Inversions are characterized by stable air and increasing temperatures with height above the ground. Mist or fog may indicate the presence of an inversion in humid areas. The applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.
**Droplet Size**
Use only medium or coarser spray nozzles (for ground and non-ULV aerial application) according to ASAE (S572) definition for standard nozzles. In conditions of low humidity and high temperatures, use a coarser droplet size.

**Additional Requirements for Ground Applications**
Wind speed must be measured adjacent to the application site on the upwind side, immediately prior to application.

For ground boom applications, apply using a nozzle height of no more than 4 feet above the ground or crop canopy.

For airblast applications, turn off outward pointing nozzles at row ends and when spraying the outer two rows. To minimize spray loss over the top in orchard applications, spray must be directed into the canopy.

**Additional Requirements for Aerial Applications**
Mount the spray boom on the aircraft to minimize drift caused by wingtip or rotor vortices. Use the minimum practical boom length; do not exceed 75% of the wing span or 80% rotor diameter.

Flight speed and nozzle orientation must be considered in determining droplet size.

Spray must be released at the lowest height consistent with pest control and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety.

When applications are made with a crosswind, the swath will be displaced downwind. The applicator must compensate for this displacement at the downwind edge of the application area by adjusting the path of the aircraft upwind.

**TANK MIX APPLICATION**
Fill the spray tank at least one-third full of clean water or diluent. With the pump and agitator running continuously, add the specified amount of each product in the tank mix to the spray tank and allow to fully

disperse, adding PARADIGM last. Add the remainder of water or diluent to the spray tank. Follow the precautions and limitations of the most restricted product in the tank mixture.

**Compatibility testing for tank mixing partners:** Test compatibility of the intended tank mixture by adding proportionate amounts of each ingredient to a pint or quart jar, cap, shake, and let set 15 minutes. Formation of precipitates that do not readily redisperse indicates an incompatible mixture that must not be used.

Do not use non-emulsifiable oils in combination with PARADIGM. If adjuvants are used, use only:

- Nonionic Surfactant (NIS) containing at least 75% surface agent, or
- Non-phytotoxic Crop Oil Concentrate (COC) including once refined Vegetable Oil concentrate (VOC), or
- Methylated Seed Oils (MSO) containing a minimum of 17% emulsifier.

Adjuvants other than NIS or COC may be used providing the product;

1. Contains only EPA exempt ingredients.
2. Is non-phytotoxic to the target crop.
3. Is compatible in mixture (may be established through a jar test).
4. Is supported locally for use with PARADIGM on the target crop through proven field trials and through university and extension specifications.

The following may be used as diluents:

Crop Oil Concentrate
Methylated Seed Oils
Urea-Ammonium Nitrate

Do not use the following in combination with PARADIGM as diluents or adjuvants:

Non-emulsifiable Oils
Diesel Fuel
Straight Mineral Oil

When an adjuvant is to be used with this product, United Suppliers, Inc. suggests the use of a Chemical Producers and Distributors Association certified adjuvant.

## CHEMIGATION

**Sprinkler Irrigation Application**

Apply PARADIGM at rates and timing described elsewhere in this label. Consult your local State Extension Service or other local experts for specifications pertinent for your area.

Thorough, uniform coverage of foliage is required for good control. Maintain good agitation in the pesticide supply tank prior to and during the entire application period.

Apply by injecting the specified rate of PARADIGM into the irrigation system using a metering device that will introduce a constant flow and by distributing the product to the target area in 0.1-0.2 acre-inch of water. Use the least amount of water required for proper distribution and coverage. Inject the product into the main irrigation line ahead of a right angle turn in the line to insure adequate dispersion or mixing in the irrigation water. Once the application is completed, flush the entire irrigation and injection system with clean water before stopping the system.

Additionally, if application is being made during a normal irrigation set of a stationary sprinkler, inject the specified rate of PARADIGM for the area covered into the system only during the end of the irrigation set for sufficient time to provide adequate coverage and product distribution.

Do not apply PARADIGM through an irrigation system connected to a public water system. 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.

**Use Precautions: Sprinkler Irrigation Application**

Apply this product only through sprinkler irrigation systems (including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move). 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 specialist, equipment manufacturers, or other experts.
Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system.
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.
The system must contain a functional check valve, vacuum-relief valve, and a 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, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
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.
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.

## CROP USE DIRECTIONS
## AGRICULTURAL USES

| CROP | TARGET PESTS | RATE | | REMARKS |
|---|---|---|---|---|
| | | lb a.i./A | fl oz/A | |
| **ALFALFA AND ALFALFA GROWN FOR SEED** | Alfalfa Caterpillar<br>Army cutworm<br>Cutworm spp.<br>Green Cloverworm<br>Leafhopper spp.<br>Looper spp.<br>Threecornered Alfalfa Hopper<br>Velvetbean Caterpillar<br>Webworm spp. | 0.015-0.025 | 1.92-3.20 | **Ground application:** Apply in a minimum of 10 gals per acre or sufficient spray volume to obtain full coverage of the foliage or target area.<br>**Air application:** Apply in a minimum of 2 gals per acre or sufficient spray volume to obtain full coverage of the foliage or target area.<br>Make applications when pests appear. Apply in sufficient volume to ensure sufficient coverage of foliage.<br>When foliage is dense and/or pest populations are high, use 5-10 gals/A by air or 20 gals/A by ground and higher use rates. Use higher rates for increased residual control.<br>Avoid application when bees are actively foraging by applying during the early morning or during the evening hours. Be aware of bee hazard resulting from a cool evening and/or morning dew. It may be advisable to remove bee shelters during and for 2-3 days following application. Avoid direct application to bee shelters.<br>Apply only to fields planted to pure stands of alfalfa.<br>Apply as required by scouting.<br>[1]For control of first and second instars only.<br>[2]Suppression only.<br>[3]See resistance statement under **PRODUCT INFORMATION**.<br>[4] Does not include Western Flower Thrips |

| | | | | |
|---|---|---|---|---|
| | Alfalfa Seed Chalcid (Adult)<br>Alfalfa Weevil<br>Armyworm<br>Bean Leaf Beetle (Adult)<br>Blister Beetle spp.<br>Blue Alfalfa Aphid<br>Clover Leaf Weevil spp.<br>Clover Root Borer (Adult)<br>Clover Root Curculio spp. (Adult)<br>Clover Stem Borer (Adult)<br>Corn Earworm<br>Cowpea Aphid<br>Cowpea Curculio (Adult)<br>Cowpea Weevil (Adult)<br>Cucumber Beetle spp. (Adult)<br>Egyptian Alfalfa Weevil<br>Fall Armyworm[1]<br>Grape Colaspis (Adult)<br>Grasshopper spp.<br>Green June Beetle (Adult)<br>Green Peach Aphid[3]<br>Japanese Beetle (Adult)<br>Meadow Spittlebug<br>Mexican Bean Beetle<br>Pea Aphid<br>Pea Weevil (Adult)<br>Plant Bug spp., including Lygus spp.[3]<br>Spotted Alfalfa Aphid<br>Stink Bug spp.<br>Sweet Clover Weevil (Adult)<br>Thrips spp.[4]<br>Western Yellow-striped Armyworm<br>Whitefringed Beetle spp. (Adult)<br>Yellow-striped Armyworm | 0.02-0.03 | 2.56-3.84 | |
| | Beet Armyworm[1,3]<br>Blotch Leafminer[3]<br>Spider Mites[2] | 0.03 | 3.84 | |
| | • Do not apply more than 0.03 lb a.i. (0.24 pt) per acre per cutting.<br>• Do not apply more than 0.12 lb a.i. (0.96 pt) per acre per season.<br>• Do not apply within 1 day of harvest for forage or within 7 days of harvest for hay. | | | |
| **CANOLA** | Armyworm spp.<br>Cabbage Seedpod Weevil<br>Cutworm spp.<br>Diamondback Moth<br>Flea Beetle<br>Grasshoppers<br>Looper spp.<br>Lygus Bug | 0.015-0.03 | 1.92-3.84 | **Ground application:** Apply in sufficient spray volume to obtain full coverage of the foliage or target area.<br>**Air application:** Apply in a minimum of 2 gals per acre or sufficient spray volume to obtain full coverage of the foliage or target area.<br>Make applications when pests appear. If needed, make repeat applications after at least 5 or more days. Apply in sufficient volume to ensure sufficient coverage of foliage. |
| | Cabbage Aphid | 0.03 | 3.84 | |
| | • Do not apply within 7 days of harvest.<br>• Do not apply more than 0.09 lb a.i. (0.72 pt) per acre per year. | | | |

<table>
<tr><td rowspan="3">CEREAL GRAINS:<br>Corn (At-Plant):<br>Field Corn<br>Popcorn<br>Seed Corn<br>Sweet Corn</td><td>Corn Rootworm Larvae (Western, Northern, Southern, Mexican)<br>Cutworm spp.<br>Seedcorn Maggot<br>Seedcorn Beetle<br>Lesser Cornstalk Borer<br>White Grub spp.<br>Wireworm spp.<br>Red Imported Fire Ant[1]</td><td>0.005 lb a.i. per 1000 ft of row[2]</td><td>0.66 fl oz per 1000 ft of row[2]</td><td colspan="3">Banded Applications: Apply at planting as a 5-7 inch T-band sprayed across the open seed furrow between the furrow openers and the press wheels or as a band application behind the press wheel.<br>In-Furrow Applications: Apply into the seed furrow through spray nozzles or microtubes behind the planter furrow openers and in front of the press wheel. Apply a minimum of 3 gals of finished spray/A.<br>[1]Suppression only.</td></tr>
<tr><td colspan="6">[2]lbs ai and fl oz/A of PARADIGM applied at 0.66 fl oz/1000 ft of row for various row spacings:</td></tr>
<tr><td colspan="6"><table>
<tr><th>Row Spacing</th><th>40”</th><th>38”</th><th>36”</th><th>34”</th><th>32”</th><th>30”</th></tr>
<tr><td>Linear ft per acre</td><td>13,068</td><td>13,756</td><td>14,520</td><td>15,374</td><td>16,335</td><td>17,424</td></tr>
<tr><td>Lbs a.i. per acre</td><td>0.067</td><td>0.07</td><td>0.075</td><td>0.079</td><td>0.084</td><td>0.09</td></tr>
<tr><td>Fl oz per acre</td><td>8.6</td><td>9.1</td><td>9.6</td><td>10.1</td><td>10.8</td><td>11.5</td></tr>
</table></td></tr>
<tr><td colspan="6">• Do not harvest or graze livestock or cut treated crops for feed within 21 days of at-plant application.<br>• Do not apply more than 0.09 lb a.i. (0.72 pt) per acre per crop at-plant.<br>• Do not apply more than 0.12 lb a.i. per acre per crop from at-plant and foliar applications for field corn, popcorn, and seed corn. For sweet corn, do not apply more than 0.48 lb a.i. per acre per crop from at-plant and foliar applications.</td></tr>
<tr><td rowspan="2">CEREAL GRAINS<br>Corn (Foliar):<br>Field Corn<br>Popcorn<br>Seed Corn</td><td>Corn Earworm[1]<br>Cutworm spp.<br>Green Cloverworm<br>Meadow Spittlebug<br>Western Bean Cutworm[1]</td><td>0.015-0.025</td><td>1.92-3.20</td><td colspan="3" rowspan="2">Ground application: Apply in sufficient spray volume to obtain full coverage of the foliage or target area.<br>Air application: Apply in a minimum of 2 gals per acre or sufficient spray volume to obtain full coverage of the foliage or target area.<br>Make applications when pests appear. If needed, make repeat applications after at least 7 days. Apply in sufficient volume to ensure sufficient coverage of foliage.<br><u>Chinch bug control</u>: Begin applications when bugs migrate from small grains or grass weeds to small corn. Direct spray to the base of corn plants. Repeat applications at 3-5 day intervals if needed. PARADIGM may only suppress heavy infestations and/or subsequent migrations.<br><u>Adult corn rootworm beetles (Diabrotica species):</u> Use a minimum of 3.84 fl oz per acre (0.03 lb a.i. per acre) as part of an aerial-applied corn rootworm control program.<br>[1]For control before the larva bores into the plant stalk or ear.<br>[2]For control of first and second instar only.<br>[3]Suppression only.<br>[4]See resistance statement under PRODUCT INFORMATION.</td></tr>
<tr><td>Armyworm[2]<br>Bean Leaf Beetle<br>Bird Cherry-Oat Aphid[3]<br>Cereal Leaf Beetle<br>Corn Leaf Aphid[3]<br>English Grain Aphid[3]<br>European Corn Borer[1]<br>Fall Armyworm[2]<br>Flea Beetle spp.<br>Grasshopper spp.<br>Hop Vine Borer[1]<br>Japanese Beetle (Adult)<br>Lesser Cornstalk Borer<br>Mexican Corn Rootworm Beetle (Adult)<br>Northern Corn Rootworm Beetle (Adult)<br>Sap Beetle (Adult)<br>Seedcorn Beetle<br>Southern Corn Rootworm Beetle (Adult)<br>Southwestern Corn Borer[1]<br>Stalk Borer[1]<br>Stink Bug spp.<br>Tobacco Budworm[1,4]<br>Webworm spp.<br>Western Corn Rootworm Beetle (Adult)<br>Yellow-striped Armyworm[2]</td><td>0.02-0.03</td><td>2.56-3.84</td></tr>
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|---|---|---|---|---|
| | Beet Armyworm[4]<br>Chinch Bug<br>Green Bug[3,4]<br>Southern Corn Leaf Beetle[3]<br>Rice Stalk Borer[1]<br>Mexican Rice Borer[1]<br>Sugarcane Borer[1] | 0.03 | 3.84 | |
| | • Do not apply within 21 days of harvest.<br>• Do not allow livestock to graze in treated areas or harvest treated corn forage as feed for meat or dairy animals within 1 day after last treatment.<br>• Do not feed treated corn fodder or silage to meat or dairy animals within 21 days after last treatment.<br>• Do not apply more than 0.12 lb a.i. (0.96 pt) per acre per crop from at-plant and foliar applications.<br>• Do not apply more than 0.06 lb a.i. (0.48 pt) after silk initiation.<br>• Do not apply more than 0.03 lb a.i. (0.24 pt) after corn has reached the milk stage (yellow kernels with milky fluid). | | | |

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|---|---|---|---|---|
| **CEREAL GRAINS**<br>**Corn (Foliar):**<br>Sweet Corn | Aphid spp.[2,3]<br>Armyworm[1]<br>Aster Leafhopper<br>Beet Armyworm[1,3]<br>Chinch Bug<br>Common Cornstalk Borer<br>Corn Earworm<br>Cutworm spp.<br>European Corn Borer<br>Fall Armyworm[1]<br>Flea Beetle spp.<br>Grasshopper spp.<br>Japanese Beetle (Adult)<br>Mexican Corn Rootworm Beetle (Adult)<br>Northern Corn Rootworm Beetle (Adult)<br>Sap Beetle (Adult)<br>Southern Armyworm[1]<br>Southern Corn Rootworm Beetle (Adult)<br>Southwestern Corn Borer<br>Spider Mite spp.[2]<br>Stink Bug spp.<br>Tarnished Plant Bug<br>Webworm spp.<br>Western Bean Cutworm<br>Western Corn Rootworm Beetle (Adult)<br>Yellow-Striped Armyworm[1] | 0.02-0.03 | 2.56-3.84 | **Ground application:** Apply in sufficient spray volume to obtain full coverage of the foliage or target area.<br>**Air application:** Apply in a minimum of 2 gals per acre or sufficient spray volume to obtain full coverage of the foliage or target area.<br>Make applications when pests appear. If needed, make repeat applications after at least 4 days and before insects enter the stalk or ear. Apply in sufficient volume to ensure sufficient coverage of foliage and ears (if present).<br><u>Adult corn rootworm beetles (*Diabrotica* species):</u> Use a minimum of 3.2 fl oz per acre (0.025 lb a.i. per acre) as part of an aerial-applied corn rootworm control program.<br>[1]For control of first and second instar only.<br>[2]Suppression only.<br>[3]See resistance statement under **PRODUCT INFORMATION.** |
| | Corn Silkfly (Adult)[2] | 0.03 | 3.84 | |
| | • Do not apply within 1 day of harvest.<br>• Do not allow livestock to graze in treated areas or harvest treated corn forage as feed for meat or dairy animals within 1 day after last treatment.<br>• Do not feed treated corn fodder or silage to meat or dairy animals within 21 days after last treatment.<br>• Do not apply more than 0.48 lb a.i. (3.84 pts) per acre per crop from at-plant and foliar applications. | | | |

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|---|---|---|---|---|
| **CEREAL GRAINS:**<br>Rice<br>Wild Rice | Bird Cherry-Oat Aphid<br>Chinch Bug<br>Fall Armyworm<br>Grasshopper spp.<br>Greenbug<br>Leafhopper spp.<br>Rice Stink Bug<br>Rice Water Weevil (Adult)<br>Riceworm<br>Sharpshooter spp.<br>True Armyworm<br>Yellow Sugarcane Aphid<br>Yellow-striped Armyworm | 0.025-0.04 | 3.20-5.12 | **Ground application:** Apply in sufficient spray volume to obtain full coverage of the foliage or target area.<br>**Air application:** Mixers/loaders supporting aerial applications to wild rice at a rate of 0.04 a.i./A, and treating 1200 acres (or more) per day must wear dust/mist respirator. Apply in a minimum of 2 gals per acre in sufficient spray volume to obtain full coverage of the foliage or target area. Adding 1 pint per acre of an emulsifiable crop oil will help improve coverage, reduce evaporation, and improve efficacy. Monitor insect populations to determine timing and frequency of applications. Scout fields at a minimum of 5-day intervals. Make applications when pests appear. If needed, make repeat applications after at least 5-7 days. Apply in sufficient volume to ensure sufficient coverage of foliage. PARADIGM can be safely used when propanil products are being used for weed control. |
| | European Corn Borer[1]<br>Mexican Rice Borer[1]<br>Rice Seed Midge[1]<br>Rice Stalk Borer[1]<br>Sugarcane Borer[1] | 0.03-0.04 | 3.84-5.12 | |

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| **CEREAL GRAINS:**<br>Rice<br>Wild Rice<br>(*continued*) | | | | **Rice Water Weevil**: In dry seeded rice, make a foliar application as indicated by scouting for the presence of adults and/or feeding scars usually within 0-5 days after permanent flood establishment. Do not exceed 10 days from starting permanent flood until insecticide application unless scouting indicates weevils have not been previously present. Adults may also be treated at later stages of rice development to reduce overwintering populations. In water seeded rice, make the first foliar application after pinpoint flood as indicated by scouting for the presence of adults and/or feeding scars usually when rice has emerged 0.5 inch above the waterline. Under conditions of prolonged migration into the field, start field scouting for rice water weevil adults and/or feeding scars 3-5 days after the initial treatment and, if needed, apply a second application within 7-10 days of the first application. Adults may also be treated at later stages of rice development to reduce overwintering populations.<br>**California:** In addition to above directions, for control of rice water weevil in water seeded rice, PARADIGM may be applied at the 1- to 3-leaf growth stage with the majority at the 2-leaf growth stage.<br>Adults are vulnerable on levees and in the water. Larvae are vulnerable while feeding on the leaf prior to entering the soil. Monitor for adults based upon field history and density of population. Monitor field edges and levee areas for adults. Treat in the following manner: a) spray the inside perimeter of the field, or b) spray the entire field.<br>Green Bug: Known to have many biotypes, PARADIGM may only provide suppression. If satisfactory control is not achieved, a resistant biotype may be present. Use alternate chemistry for control.<br>For control of stem borers, scout fields when rice growth is near panicle differentiation, for early symptoms of damaging populations exhibited as discoloration (orange-tan) around the junction of the leaf sheath and leaf blade which is caused by feeding of young larvae within the sheath. Applications must be made before larvae bore into rice stems. Make the first application at panicle differentiation to 2 inch panicle for partial control. Make the second application at boot to heading for maximum control. All rice varieties are susceptible to stem borer damage, but Cocodrie and Priscilla are particularly susceptible.<br>[1]For control before the larvae bores into the plant stalk. |

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| | • Do not release floodwater within 7 days of an application.<br>• Do not apply more than 0.12 lb a.i. (0.96 pt) per acre per season.<br>• Do not apply more than 0.04 lb a.i. (0.32 pt) per acre within 21 to 27 days of harvest.<br>• Do not apply within 21 days of harvest.<br>• Do not use treated rice fields for the aquaculture of edible fish and crustacea.<br>• Do not apply as an ultra-low volume (ULV) spray. | | | |
| **CEREAL GRAINS:**<br>Wet-sown Rice<br>(CA Only) | Rice Water Weevil | 0.03-0.04 | 3.84-5.12 | Uniformly apply at 3.84-5.12 fl oz of product per acre as a pre-flood, pre-plant, broadcast soil application for control of Rice Water Weevil *(Lissorhoptrus oryzophilus)* in wet-sown rice culture.<br>Apply by air or ground equipment using sufficient water to obtain full coverage. Apply in a minimum of 2 gals of water (or a total carrier volume)/Acre by air or a minimum of 20 gals of water (or a total carrier volume)/Acre by ground.<br>For improved efficacy, light incorporation of this product into the upper 1-2 inches of soil following application is recommended - a "roller" may be used for this incorporation.<br>Apply pinpoint flood not more than 5 days after the soil application of this product, or weevil control may be reduced. Scout for feeding scars after plant emergence and apply a second foliar treatment if needed. |
| | • Restricted Reentry Interval (REI) is 24 hours.<br>• Do not apply more than 0.04 lb a.i. (5.12 fl oz) per acre per season.<br>• Do not release floodwater within 7 days of application.<br>• Do not use treated rice fields for aquaculture of edible fish and crustacea.<br>• Do not apply as an ultra-low volume (ULV) spray.<br>• Do not apply by chemigation. | | | |

<table>
<tr><td rowspan="4">CEREAL GRAINS:<br>Sorghum (Grain)</td><td>Cutworm spp.<br>Sorghum Midge</td><td>0.015-0.02</td><td>1.92-2.56</td><td rowspan="3">Ground application: Apply in sufficient spray volume to obtain full coverage of the foliage or target area.<br>Air application: Apply in a minimum of 2 gals per acre or sufficient spray volume to obtain full coverage of the foliage or target area.<br>Make applications when pests appear. If needed, make repeat applications after at least 5 days. Apply in sufficient volume to ensure sufficient coverage of foliage.<br>Sorghum Midge: Begin applications when 25% of the sorghum heads have emerged and are in tip bloom. Repeat applications at 5 day intervals if needed.<br>Chinch Bug: Begin applications when bugs migrate from small grains or grass weeds to small sorghum. Direct spray to the base of sorghum plants. Repeat applications at 3 to 5 day intervals if needed. PARADIGM may only suppress heavy infestations and/or subsequent migrations.<br>[1]For control of first and second instar only.<br>[2]For control before the larva bores into the plant stalk.<br>[3]See resistance statement under PRODUCT INFORMATION.</td></tr>
<tr><td>Armyworm<br>Beet Armyworm[3]<br>Corn Earworm<br>European Corn Borer[2]<br>Fall Armyworm[1]<br>Flea Beetle spp.<br>Grasshopper spp.<br>Lesser Cornstalk Borer[2]<br>Southwestern Corn Borer[2]<br>Stink Bug spp.<br>Webworm spp.<br>Yellow-striped Armyworm[1]</td><td>0.02-0.03</td><td>2.56-3.84</td></tr>
<tr><td>Chinch Bug<br>Mexican Rice Borer[2]<br>Rice Stalk Borer[2]<br>Sugarcane Borer[2]</td><td>0.03</td><td>3.84</td></tr>
<tr><td colspan="4">• Do not apply within 30 days of harvest.<br>• Do not apply more than 0.08 lb a.i. (0.64 pt) per acre per season.<br>• Do not apply more than 0.06 lb a.i. (0.48 pt) per acre per season after crop emergence.<br>• Do not apply more than 0.02 lb a.i. (0.16 pt) per acre per season once crop is in soft dough stage.</td></tr>
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<tr><td rowspan="5">CEREAL GRAINS:<br>Barley<br>Buckwheat<br>Oats<br>Rye<br>Triticale<br>Wheat<br>Wheat Hay</td><td>Army Cutworm<br>Cutworm spp.</td><td>0.015-0.025</td><td>1.92-3.20</td><td rowspan="4">Ground application: Apply in sufficient spray volume to obtain full coverage of the foliage or target area.<br>Air application: Apply in a minimum of 2 gals per acre or sufficient spray volume to obtain full coverage of the foliage or target area.<br>Make applications when pests appear. If needed, make repeat applications after at least 5 days. Apply in sufficient volume to ensure sufficient coverage of foliage.<br><u>Chinch Bug</u>: Repeat applications at 3 to 5 day intervals if needed. PARADIGM may only suppress heavy infestations and/or migrations.<br><u>Green Bug</u>: Known to have many biotypes, PARADIGM may only provide suppression. If satisfactory control is not achieved, a resistant biotype may be present. Use alternate chemistry for control.<br>[1]Best control is obtained before insects begin to roll leaves. Once wheat has started to boot, PARADIGM may provide suppression only. Higher rates and increased coverage will be necessary.<br>[2]Suppression only.<br>[3]See resistance statement under PRODUCT INFORMATION.<br>[4] Make applications when adults emerge.</td></tr>
<tr><td>Armyworm<br>Bird Cherry-Oat Aphid[1]<br>Cereal Leaf Beetle<br>English Grain Aphid[1]<br>Fall Armyworm<br>Flea Beetle spp.<br>Grasshopper spp.<br>Hessian fly[4]<br>Orange Blossom Wheat Midge<br>Russian Wheat Aphid[1]<br>Stink Bug spp.<br>Yellow-striped Armyworm</td><td>0.02-0.03</td><td>2.56-3.84</td></tr>
<tr><td>Grass Sawfly</td><td>0.025-0.03</td><td>3.20-3.84</td></tr>
<tr><td>Chinch Bug<br>Corn Leaf Aphid[2]<br>Greenbug[1,3]<br>Mite spp.[2]</td><td>0.03</td><td>3.84</td></tr>
<tr><td colspan="4"><ul><li>Do not apply within 30 days of harvest.</li><li>Do not allow livestock to graze in treated areas or harvest treated wheat forage as feed for meat or dairy animals within 7 days after treatment. Do not feed treated straw to meat or dairy animals within 30 days after the last treatment.</li><li>Do not apply more than 0.06 lb a.i. (0.48 pt) per acre per season.</li></ul></td></tr>
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| **COLE CROPS**<br>**Head and stem brassica crop group including:**<br>Broccoli<br>Brussels Sprouts<br>Cabbage<br>Cavalo Broccolo<br>Cauliflower<br>Chinese Broccoli (gai lon)<br>Chinese Cabbage (napa)<br>Chinese Mustard Cabbage (gai choy)<br>Kohlrabi | Alfalfa Looper<br>Cabbage Looper<br>Cabbage Webworm<br>Cutworm spp.<br>Imported Cabbageworm<br>Southern Cabbageworm | 0.015-0.025 | 1.92-3.20 | **Ground application:** Apply in sufficient spray volume to obtain full coverage of the foliage or target area.<br>**Air application:** Apply in a minimum of 2 gals per acre or sufficient spray volume to obtain full coverage of the foliage or target area.<br>Make applications when pests appear. If needed, make repeat applications after at least 5 days. Apply in sufficient volume to ensure sufficient coverage of foliage.<br>[1]For control of first and second instar only.<br>[2]Suppression only.<br>[3]See resistance statement under **PRODUCT INFORMATION**. |
| | Aphid spp.[2,3]<br>Armyworm<br>Beet Armyworm[1,3]<br>Corn Earworm<br>Diamondback Moth[3]<br>Fall Armyworm[1]<br>Flea Beetle spp.<br>Grasshopper spp.<br>Japanese Beetle (Adult)<br>Leafhopper spp.<br>Meadow Spittlebug<br>Plant Bug spp. including Lygus spp.[3]<br>Spider Mite spp.[2]<br>Stink Bug spp.<br>Thrips spp.[2]<br>Vegetable Weevil (Adult)<br>Whitefly spp.[2,3]<br>Yellow-striped Armyworm | 0.02-0.03 | 2.56-3.84 | |
| | • Do not apply within 1 day of harvest.<br>• Do not apply more than 0.24 lb a.i. (1.92 pts) per acre per season. | | | |

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<tr><td rowspan="4">COTTON</td><td>Cutworm spp.<br>Soybean Thrips<br>Tobacco Thrips</td><td>0.015-0.02</td><td>1.92-2.56</td><td rowspan="3">Ground application: Apply in sufficient spray volume to obtain full coverage of the foliage or target area.<br>Air application: Apply in sufficient spray volume to obtain full coverage of the foliage or target area.<br>ULV application: PARADIGM may be mixed with once-refined vegetable oil and applied in a minimum of at least 1 qt. of finished spray per acre.<br>Make applications when pests appear. If needed, make repeat applications after at least 5 to 7 days. Apply in sufficient volume to ensure sufficient coverage of foliage.<br>Under light bollworm/budworm infestation levels, 0.02 lb a.i. per acre may be applied in conjunction with intense field monitoring.<br><u>Boll Weevil</u>: Spray on a 3- to 5-day schedule.<br><u>Cotton Bollworm, Tobacco Budworm</u>: PARADIGM also provides ovicidal control of unhatched Heliothine spp. eggs.<br>[1]For control of first and second instar only.<br>[2]Suppression only.<br>[3]See resistance statement under PRODUCT INFORMATION.</td></tr>
<tr><td>Cabbage Looper<br>Cotton Fleahopper<br>Cotton Leafperforator<br>Cotton Leafworm<br>Lygus Bug spp.[3]<br>Pink Bollworm<br>Saltmarsh Caterpillar</td><td>0.02-0.03</td><td>2.56-3.84</td></tr>
<tr><td>Bandedwing Whitefly[2,3]<br>Beet Armyworm[1,3]<br>Boll Weevil<br>Brown Stink Bug<br>Cotton Aphid[2,3]<br>Cotton Bollworm<br>European Corn Borer<br>Fall Armyworm<br>Green Stink Bug<br>Southern Green Stink Bug<br>Sweetpotato Whitefly[2,3]<br>Tobacco Budworm[3]<br>Two-spotted Spider Mite[2]</td><td>0.025-0.04</td><td>3.20-5.12</td></tr>
<tr><td colspan="4"><ul><li>Do not apply within 21 days of harvest.</li><li>Do not graze livestock in treated areas.</li><li>Do not apply more than 1.6 pts (0.2 lb a.i.) per acre per season.</li><li>Do not make more than a total of 10 synthetic pyrethroid applications (of one product or combination of products) to a cotton crop in one growing season. Synthetic pyrethroid products include but are not limited to Ambush® insecticide (or other permethrin insecticide), Asana® XL insecticide (or other esfenvalerate insecticide), Baythroid® emulsifiable pyrethroid insecticide (or other cyfluthrin insecticide), Capture® insecticide/miticide (or other bifenthrin insecticide), Danitol® 2.4 EC Spray insecticide/miticide (or other fenpropathrin insecticide), Decis® insecticide, Fanfare® 2EC, Karate® insecticide (or other lambda-cyhalothrin insecticide), Karate® insecticide with Zeon® technology, Mustang® insecticide, and Warrior® or Warrior® insecticide with Zeon® technology (or other lambda cyhalothrin insecticide).</li></ul></td></tr>
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| **CUCURBIT VEGETABLES CROP GROUP Including:**<br>Chayote (fruit)<br>Chinese Waxgourd (Chinese pre-serving melon)<br>Citron Melon<br>Cucumber<br>Gherkin<br>Gourd (edible) *Lagenaria* spp. – Includes: hyotan, cucuzza<br>*Luffa acutangula,* Includes: hechima, Chinese okra<br>*Momordica* spp. - Includes: balsam apple, balsam pear, bitter melon, Chinese cucumber<br>Muskmelon (hybrids and/or cultivars of *Cucumis melo)* – Includes: true cantaloupe, cantaloupe, casaba, crenshaw melon, golden pershaw melon honeydew melon, honey balls, mango melon Persian melon, pineapple melon, Santa Claus melon, snake melon<br>Pumpkin<br>Squash, summer (*Cucurbita pepo* var. *melopepo)* – includes: crookneck squash, straightneck squash, vegetable marrow, zucchini<br>Squash, winter (*Cucurbita maxima, C. moschata)* – includes: | Armyworm spp.[1]<br>Blister Beetle spp.<br>Cabbage Looper<br>Corn Earworm<br>Cricket spp.<br>Cucumber Beetle spp. (adults)<br>Cutworm spp.<br>Flea Beetle spp.<br>Grasshopper spp.<br>June Beetle spp.<br>Leaffooted Bug<br>Leafhopper spp.<br>Lygus Bug spp.[1]<br>Melonworm<br>Pickleworm<br>Plant Bug spp.<br>Rindworm spp. complex<br>Saltmarsh Caterpillar<br>Squash Beetle<br>Squash Bug spp.<br>Squash Vine Borer spp.<br>Stink Bug spp.<br>Thrips spp. [1,2]<br>Tobacco Budworm[1]<br>Webworm spp. | 0.02–0.03 | 2.56-3.84 | **Ground application:** Apply in sufficient spray volume to obtain full coverage of the foliage or target area.<br>When applied by ground, use a minimum of 10 gals. solution per acre.<br>**Air application:** Apply in a minimum of 2 gals per acre or sufficient spray volume to obtain full coverage of the foliage or target area.<br>Monitor insect populations to determine timing and frequency of applications. Scout fields at a minimum of 5 day intervals.<br>Apply in sufficient volume to ensure sufficient coverage of foliage.<br>Insects that bore or tunnel into leaves, vines, stems, or fruit must be controlled before penetration. Only exposed insects (larvae and/or adults) can be controlled with foliar applications of PARADIGM.<br>[1]See resistance statement under **PRODUCT INFORMATION**.<br>[2]Does not include Western Flower Thrips.<br>[3]Suppression only. |
| | Aphid spp.[1]<br>Leafminer spp. [1,3]<br>Spider Mite spp. [3]<br>Whitefly spp. [1,3] | 0.03 | 3.84 | |
| | • Do not apply more than 0.18 lb a.i. (1.44 pts of product) per season.<br>• Do not apply within 1 day of harvest. | | | |

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| butternut squash, calabaza, hubbard squash (*C. mixta; C. pepo)* – Includes: acorn squash, spaghetti squash Watermelon – includes: Hybrids and/or varieties of *Citrulius lanatus* | |

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| **FRUITING VEGETABLES (EXCEPT CUCURBITS) CROP GROUP Including:**<br><br>Eggplant<br>Ground Cherry<br>Pepino<br>Peppers (bell and nonbell)<br>Tomatillo<br>Tomato | Cabbage Looper<br>Cutworm spp.<br>Hornworm spp. | 0.015-0.025 | 1.92-3.20 | **Ground application:** Apply in sufficient spray volume to obtain full coverage of the foliage or target area.<br>**Air application:** Apply in a minimum of 2 gals per acre or sufficient spray volume to obtain full coverage of the foliage or target area.<br>Make applications when pests appear. If needed, make repeat applications after at least 5 days. Apply in sufficient volume to ensure sufficient coverage of foliage.<br>[1]For control of first and second instar only.<br>[2]Suppression only.<br>[3]See resistance statement under **PRODUCT INFORMATION.**<br>[4]For control before the larva bores into the plant stalk or fruit.<br>[5]Does not include Western Flower Thrips. |
| | Aphid spp.[2,3]<br>Beet Armyworm[1,3]<br>Blister Beetle spp.<br>Colorado Potato Beetle[3]<br>Cucumber Beetle spp. (Adult)<br>European Corn Borer[4]<br>Fall Armyworm[1]<br>Flea Beetle spp.<br>Grasshopper spp.<br>Japanese Beetle (Adult)<br>Leafhopper spp.<br>Leafminer spp.[2]<br>Meadow Spittlebug<br>Pepper Weevil (Adult)[2]<br>Plant Bug spp.<br>Southern Armyworm[1]<br>Spider Mite spp.[2]<br>Stalk Borer[4]<br>Stink Bug spp.<br>Thrips[5]<br>Tobacco Budworm[3]<br>Tomato Fruitworm<br>Tomato Pinworm<br>Tomato Psyllid[2,3]<br>Vegetable Weevil (Adult)<br>Whitefly spp.[2,3]<br>Yellow-striped Armyworm[1] | 0.02-0.03 | 2.56-3.84 | |
| | • Do not apply within 5 days of harvest.<br>• Do not apply more than 0.36 lb a.i. (2.88 pts) per acre per season. | | | |

<table>
<tr><td rowspan="3">GRASS FORAGE, FODDER, AND HAY<br>Pasture and Rangeland Grass, Grass Grown for Hay or Silage, Grass Grown for Seed</td><td>Army Cutworm<br>Cutworm spp.<br>Essex Skipper<br>Range Caterpillar<br>Striped Grass Looper</td><td>0.015-0.025</td><td>1.92-3.20</td><td rowspan="2">Ground application: Apply in sufficient spray volume to obtain full coverage of the foliage or target area.<br>Air application: Apply in a minimum of 2 gals per acre or sufficient spray volume to obtain full coverage of the foliage or target area.<br><br>Monitor insect populations to determine timing and frequency of applications. Scout fields at a minimum of 5 day intervals.<br><br>Apply in sufficient volume to ensure sufficient coverage of foliage.<br><br><u>Chinch bugs</u>: PARADIGM may only suppress heavy infestations and/or migrations. In this situation, a second application using an alternative chemistry may be needed.<br><br><u>Greenbug</u>: Greenbug is known to have many biotypes. PARADIGM may provide suppression only. In this situation, a second application using an alternative chemistry may be needed.<br><br><u>Pasture and rangeland grass</u>: May be used for grazing or cut for forage 0 days after application. Do not cut grass to be dried and harvested for hay until 7 days after the last application.<br><br><u>Grass grown for seed</u>: Straw and mature seed (seed screenings) may be used as feed 7 days after the last application.<br>[1] Best control is obtained before insects begin to roll leaves.<br>[2] See resistance statement under PRODUCT INFORMATION.<br>[3] Suppression only.</td></tr>
<tr><td>Beet Armyworm<br>Billbug spp.[3]<br>Bird Cherry-Oat Aphid[1]<br>Black Grass Bug<br>Black Turfgrass Beetle (Adult)<br>Blue Stem Midge<br>Cereal Leaf Beetle<br>Chinch Bug<br>Crane Fly spp.<br>Cricket spp.<br>English Grain Aphid[1]<br>Fall Armyworm<br>Flea Beetle spp.<br>Grass Mealybug<br>Grass Sawfly (Adult)<br>Grasshopper spp.<br>Green June Beetle (Adult)<br>Greenbug [1, 2]<br>Japanese Beetle (Adult)<br>Katydid spp.<br>Leafhopper spp.<br>Mite sp.<br>Russian Wheat Aphid[1]<br>Southern Armyworm<br>Spittlebug spp.<br>Stink Bug spp.<br>Sugarcane Aphid<br>Thrips spp.<br>Tick spp.<br>True Armyworm<br>Webworm spp.<br>Yellowstriped Armyworm</td><td>0.02-0.03</td><td>2.56-3.84</td></tr>
<tr><td colspan="4">• Do not apply more than 0.03 lb a.i. (0.24 pts of product) per acre per cutting for pastures, rangeland, and grasses grown for seed. A minimum re-treatment interval (RTI) of 30 days is required for pastures and rangeland receiving 0.03 lb a.i./A which have not been cut between applications.<br>• Do not apply more than 0.09 lb a.i. (0.72 pts of product) per acre per season.</td></tr>
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<tr>
<td rowspan="4">LEGUME VEGETABLES (SUCCULENT OR DRIED) CROP GROUP Including but limited to: (BEANS AND PEAS) Edible Podded (only) Canavalia gladiata-sword bean Canavalia ensi-formis –jackbean Glycine max – Soybean immature seed Edible Podded, Succulent Shelled, or Dried Shelled Phaseolus spp. includes: black, field, kidney, lima, navy, pinto, runner, snap, tepary, and wax beans Vigna spp. includes: adzuki, asparagus, moth, mung, rice, urd and yardlong beans, black-eyed pea, catjang, Chinese longbean, cowpea, Crowder pea, and Southern pea Pisum spp. includes: dwarf, edible-pod, English, field, garden, green, snow and sugar snap peas Cajanus cajan-Pigeon pea Succulent Shelled or Dried Shelled Vicia faba.-broad-bean (favabean) Dried Shelled (only) Lupinus spp. includes: grain, sweet, white and sweet white lupines Cicer arietimum-chickpea (garbanzo bean) Cyamopsis tetragonoloba-guar Lablab pupureus - Lablab bean (hyacinth bean) Lens esculata - Lentils</td>
<td>Cutworm spp.<br>Green Cloverworm<br>Imported Cabbageworm<br>Mexican Bean Beetle<br>Saltmarsh Caterpillar<br>Velvetleaf Caterpillar</td>
<td>0.015-0.025</td>
<td>1.92-3.20</td>
<td rowspan="3">Ground application: Apply in sufficient spray volume to obtain full coverage of the foliage or target area.<br>Air application: Apply in a minimum of 2 gals per acre or sufficient spray volume to obtain full coverage of the foliage or target area.<br>Make applications when pests appear. If needed, make repeat applications after at least 5 days. Apply in sufficient volume to ensure sufficient coverage of foliage.<br>[1]For control before the larva bores into the plant stalk or pods.<br>[2]For control of the first and second instar only.<br>[3]For suppression only.<br>[4]See resistance statement under PRODUCT INFORMATION.<br>[5]Does not include Western Flower Thrips.</td>
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<td>Alfalfa Caterpillar<br>Aphid spp.[4]<br>Armyworm[2]<br>Bean Leaf Beetle<br>Bean Leaf skeletonizer<br>Blister Beetle spp.<br>Corn Earworm<br>Corn Rootworm Beetle spp.<br>(Adult)<br>Cucumber Beetle spp. (Adult)<br>Curculio and Weevil spp.[1] (foliage and pod feeding adults and larvae)<br>European Corn Borer<br>Fall Armyworm[2]<br>Flea Beetle spp. (Adult)<br>Flea Hopper spp.<br>Grasshopper spp.<br>Japanese Beetle (Adult)<br>Leafhopper spp.<br>Leaftier spp.<br>Looper spp.<br>Meadow Spittlebug<br>Painted Lady Butterfly (larva)<br>Plant Bug spp. including Lygus spp.[4]<br>Stalk Borer[1]<br>Stink Bug spp.<br>Three-cornered Alfalfa Hopper<br>Thrips spp.[4.5]<br>Tobacco Budworm[4]<br>Webworm spp.<br>Western Bean Cutworm<br>Western Yellow-striped Armyworm[2]<br>Yellow-striped Armyworm[2]</td>
<td>0.02-0.03</td>
<td>2.56-3.84</td>
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<tr>
<td>Beet Armyworm[3,4]<br>Leafminer spp.[3,4]<br>Lesser Cornstalk Borer[3]<br>Soybean Looper[3,4]<br>Spider Mite spp.[3]<br>Whitefly spp.[3,4]</td>
<td>0.03</td>
<td>3.84</td>
</tr>
<tr>
<td colspan="4">• For edible podded and succulent shelled legume vegetables, do not apply within 7 days of harvest.<br>• For dried shelled legume vegetables, do not apply within 21 days of harvest.<br>• Do not apply more than 0.12 lb a.i. (0.96 pt) per acre per season.<br>• For succulent and dried shelled peas and beans, do not graze livestock in treated areas or harvest vines for forage or hay</td>
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| **LEGUME VEGETABLES**<br>Soybean | Bean Leaf Beetle<br>Cabbage Looper<br>Corn Earworm<br>Cutworm spp.<br>Green Cloverworm<br>Mexican Bean Beetle<br>Mexican Corn Rootworm Beetle (Adult)<br>Northern Corn Rootworm Beetle (Adult)<br>Painted Lady (Thistle) Caterpillar<br>Potato Leafhopper<br>Saltmarsh Caterpillar<br>Southern Corn Rootworm Beetle (Adult)<br>Soybean Aphid[4]<br>Three-Cornered Alfalfa Hopper<br>Thrips spp.[5]<br>Velvetbean Caterpillar<br>Western Corn Rootworm Beetle (Adult)<br>Woollybear Caterpillar | 0.015-0.025 | 1.92-3.20 | **Ground application:** Apply in sufficient spray volume to obtain full coverage of the foliage or target area.<br>**Air application:** Apply in a minimum of 2 gals per acre or sufficient spray volume to obtain full coverage of the foliage or target area.<br>Make applications when pests appear. If needed, make repeat applications after at least 5 or more days.<br>Apply in sufficient volume to ensure sufficient coverage of foliage.<br>Adult corn rootworm beetles (*Diabrotica* .species): Use a minimum of 2.56 fl oz per acre (0.02 lb a.i. per acre) as part of an aerial-applied corn rootworm control program.<br>[1]Use higher rates for large larvae.<br>[2]Suppression only.<br>[3]See resistance statement under **PRODUCT INFORMATION**.<br>[4]Use lower rates for early season applications and/or lighter populations.<br>[5]Does not include Western Flower Thrips. |
| | Armyworm[1]<br>Blister Beetle spp.<br>European Corn Borer<br>Fall Armyworm[1]<br>Grasshopper spp.<br>Japanese Beetle (Adult)<br>Plant Bug spp.<br>Silverspotted Skipper<br>Stink Bug spp.<br>Tobacco Budworm[3]<br>Webworm spp.<br>Yellow-striped Armyworm[1] | 0.025-0.03 | 3.20-3.84 | |
| | Beet Armyworm[2,3]<br>Lesser Cornstalk Borer[2]<br>Soybean Looper[2,3]<br>Spider Mite spp.[2] | 0.03 | 3.84 | |
| | • Do not apply within 30 days of harvest.<br>• Do not apply more than 0.06 lb a.i. (0.48 pt) per acre per season.<br>• Do not graze or harvest treated soybean forage, straw, or hay for livestock feed. | | | |
| **LETTUCE (HEAD AND LEAF)** | Alfalfa Looper<br>Cabbage Looper<br>Cutworm spp.<br>Green Cloverworm<br>Imported Cabbageworm<br>Saltmarsh Caterpillar | 0.015-0.025 | 1.92-3.20 | **Ground application:** Apply in sufficient spray volume to obtain full coverage of the foliage or target area.<br>**Air application:** Apply in a minimum of 2 gals per acre or sufficient spray volume to |

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| | Aphid spp.[2,3]<br>Armyworm<br>Beet Armyworm[1,3]<br>Corn Earworm<br>Diamondback Moth[3]<br>European Corn Borer<br>Fall Armyworm[1]<br>Flea Beetle spp.<br>Grasshopper spp.<br>Japanese Beetle (Adult)<br>Leafhopper spp.<br>Meadow Spittlebug<br>Plant Bug spp. including Lygus spp.[3]<br>Southern Armyworm<br>Spider Mite spp.[2]<br>Stink Bug spp.<br>Tobacco Budworm[3]<br>Vegetable Weevil (Adult)<br>Whitefly spp.[2,3] | 0.02-0.03 | 2.56-3.84 | obtain full coverage of the foliage or target area.<br>Make applications when pests appear. If needed, make repeat applications after at least 5 or more days. Apply in sufficient volume to ensure sufficient coverage of foliage.<br>[1]For control of first and second instar only.<br>[2]Suppression only.<br>[3]See resistance statement under **PRODUCT INFORMATION.** |
| | • Do not apply within 1 day of harvest.<br>• Do not apply more than 0.3 lb a.i. (2.4 pts) per acre per season. | | | |
| **ONION (BULB) AND GARLIC** | Cutworm spp.<br>Leafminer spp. (Adult)<br>Onion Maggot (Adult)<br>Seedcorn Maggot (Adult) | 0.015-0.025 | 1.92-3.20 | **Ground application:** Apply in sufficient spray volume to obtain full coverage of the foliage or target area.<br>**Air application:** Apply in a minimum of 2 gals per acre or sufficient spray volume to obtain full coverage of the foliage or target area.<br>Make applications when pests appear. If needed, make repeat applications after at least 5 or more days. Apply in sufficient volume to ensure sufficient coverage of foliage.<br>Use the higher label rates as thrips population increases and avoid rescue situations.<br>For thrips control by aerial application, the addition of 1% COC v/v, ¼% NIS v/v, or a silicone adjuvant (follow manufacturer's use directions) may enhance the deposition of the spray and increase plant coverage.<br>[1]For control of the first and second instars only.<br>[2]Suppression only.<br>[3]See resistance statement under **PRODUCT INFORMATION.** |
| | Aphid spp.[2]<br>Armyworm spp.[1]<br>Flower Thrips[2,3]<br>Onion Thrips[3]<br>Plant Bug spp.<br>Stink Bug spp.<br>Tobacco Thrips[3]<br>Western Flower Thrips[2,3] | 0.02-0.03 | 2.56-3.84 | |
| | • Do not apply within 14 days of harvest.<br>• Do not apply more than 0.24 lb a.i.(1.92 pts) per acre per season. | | | |
| **PEANUT** | Cutworm spp.<br>Green Cloverworm<br>Potato Leafhopper<br>Red-necked Peanut Worm<br>Three-cornered Alfalfa Hopper<br>Velvetbean Caterpillar | 0.015-0.025 | 1.92-3.20 | **Ground application:** Apply in sufficient spray volume to obtain full coverage of the foliage or target area.<br>**Air application:** Apply in a minimum of 2 gals per acre or sufficient spray volume to obtain full coverage of the foliage or target area. |

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|---|---|---|---|---|
| | Bean Leaf Beetle<br>Corn Earworm<br>Fall Armyworm[1]<br>Grasshopper spp.<br>Southern Corn Rootworm (Adult)<br>Stink Bug spp.<br>Tobacco Thrips<br>Vegetable Weevil<br>Whitefringed Beetle (Adult) | 0.02-0.03 | 2.56-3.84 | Make applications when pests appear. If needed, make repeat applications after at least 7 or more days. Apply in sufficient volume to ensure sufficient coverage of foliage.<br>[1]Use higher rates for large larvae.<br>[2]Suppression only.<br>[3]See resistance statement under **PRODUCT INFORMATION**. |
| | Aphid spp.[2]<br>Beet Armyworm[2,3]<br>Lesser Cornstalk Borer[2]<br>Soybean Looper[2,3]<br>Spider Mite spp.[2] | 0.03 | 3.84 | |
| | • Do not apply within 14 days of harvest.<br>• Do not apply more than 0.12 lb a.i (0.96 pt) per acre per season. | | | |
| **POME FRUITS CROP GROUP Including:**<br>Apple<br>Crabapple<br>Loquat<br>Mayhaw<br>Oriental Pear<br>Pear<br>Quince | Apple Aphid<br>Apple Maggot (Adult)<br>Cherry Fruit Fly spp. (Adult)<br>Codling Moth<br>Green Fruitworm<br>Japanese Beetle<br>Leafhopper spp.<br>Leafroller spp.<br>Lesser Appleworm<br>Omnivorous leafroller<br>Orange Tortrix<br>Oriental Fruit Moth<br>Pear Psylla[1]<br>Pear Sawfly<br>Periodical Cicada<br>Plant Bug spp.<br>Plum Curculio<br>Rosy Apple Aphid<br>San Jose Scale (fruit infestations only)<br>Spirea Aphid[1]<br>Stink Bug spp.<br>Tent Caterpillar spp.<br>Tentiform Leaf Miner spp.<br>Tree Borer spp.<br>Tufted Apple Budworm<br>Webworm spp. | 0.02-0.04 | 2.56-5.12 | **Ground application:** Apply in sufficient spray volume to obtain full coverage of the foliage or target area.<br>**Air application:** Apply in a minimum of 5 gals per acre or sufficient spray volume to obtain full coverage of the foliage or target area.<br>Make applications when pests appear. If needed, make repeat applications after at least 5 or more days. Apply in sufficient volume to ensure sufficient coverage of foliage.<br>[1]Suppression only. |
| | • Do not apply within 21 days of harvest.<br>• Do not apply more than 0.2 lb a.i. (1.6 pts) per acre per year.<br>• Do not apply more than 0.16 lb a.i. (1.28 pts) per acre per year post bloom. | | | |

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| **STONE FRUITS CROP GROUP Including:**<br>Apricot<br>Sweet and Tart Cherry<br>Nectarine<br>Peach<br>Plum<br>Chickasaw Plum<br>Damson Plum<br>Japanese Plum<br>Plumcot<br>Prune | American Plum Borer<br>Apple Maggot (Adult)<br>Black Cherry Aphid<br>Cherry Fruit Fly spp. (Adult)<br>Codling Moth<br>Green Fruitworm<br>Japanese Beetle<br>June Beetle<br>Leafhopper spp.<br>Leafroller spp.<br>Oriental Fruit Moth<br>Peach Twig Borer<br>Peachtree Borer spp.<br>Pear Sawfly<br>Periodical Cicada<br>Plant Bug spp.<br>Plum Curculio<br>Rose Chafer<br>Stink Bug spp.<br>Tent Caterpillar spp.<br>Thrips spp. | 0.02-0.04 | 2.56-5.12 | **Ground application:** Apply in sufficient spray volume to obtain full coverage of the foliage or target area.<br>**Air application:** Apply in a minimum of 5 gals per acre or sufficient spray volume to obtain full coverage of the foliage or target area.<br>Make applications when pests appear. If needed, make repeat applications after at least 5 or more days. Apply in sufficient volume to ensure sufficient coverage of foliage. |
| | • Do not apply within 14 days of harvest.<br>• Do not apply more than 0.2 lb a.i. (1.6 pts) per acre per year.<br>• Do not apply more than 0.16 lb a.i.(1.28 pts) per acre per year post bloom. | | | |
| **SUGARCANE** | Mexican Rice Borer[1]<br>Pygmy Mole Cricket<br>Rice Stalk Borer[1]<br>Sugarcane Aphid[3]<br>Sugarcane Beetle (Adult)[2]<br>Sugarcane Borer[1]<br>Western Indian Cranefly<br>Yellow Sugarcane Aphid[3] | 0.025-0.04 | 3.20-5.12 | **Ground application:** Apply in sufficient spray volume to obtain full coverage of the foliage or target area.<br>**Air application:** Apply in a minimum of 2 gals per acre or sufficient spray volume to obtain full coverage of the foliage or target area.<br>Make applications when pests appear. If needed, make repeat applications after at least 7 or more days. Apply in sufficient volume to ensure sufficient coverage of foliage.<br>[1]For control before the larva bores into the plant stalk.<br>[2]Suppression only of beetles active above ground.<br>[3]See resistance statement under **PRODUCT INFORMATION.** |
| | • Do not apply within 21 days of harvest.<br>• Do not apply more than 0.16 lb a.i. (1.28 pts) per acre per season. | | | |

<table>
<tr><td rowspan="3">SUNFLOWER</td><td>Cutworm spp.<br>Sunflower Beetle</td><td>0.015-0.025</td><td>1.92-3.20</td><td rowspan="2">Ground application: Apply in sufficient spray volume to obtain full coverage of the foliage or target area.<br>Air application: Apply in a minimum of 2 gals per acre or sufficient spray volume to obtain full coverage of the foliage or target area.<br>Make applications when pests appear. If needed, make repeat applications after at least 5 or more days. Apply in sufficient volume to ensure sufficient coverage of foliage.<br>[1]For control of first and second instar only.<br>[2]Suppression only.<br>[3]See resistance statement under PRODUCT INFORMATION.</td></tr>
<tr><td>Banded Sunflower Moth<br>Fall Armyworm[1]<br>Grasshopper spp.<br>Head-Clipper Weevil (Adult)<br>Japanese Beetle (Adult)<br>Leafhopper spp.<br>Meadow Spittlebug<br>Painted Lady (Thistle) Caterpillar<br>Seed Weevil (Adult)<br>Spotted Cabbage Looper<br>Stem Weevil (Adult)<br>Stink Bug spp.<br>Sunflower Maggot (Adult)<br>Sunflower Moth<br>Woollybear Caterpillar</td><td>0.02-0.03</td><td>2.56-3.84</td></tr>
<tr><td>Beet Armyworm[2,3]<br>Spider Mite spp.[2]</td><td>0.03</td><td>3.84</td><td></td></tr>
<tr><td colspan="4">• Do not apply within 45 days of harvest.<br>• Do not apply more than 0.12 lb a.i. (0.96 pt) per acre per season. Do not apply more than 0.09 lb a.i. (0.72 pt) per acre per season after bloom initiation.<br>• Do not apply as an ultra-low volume (ULV) spray.</td></tr>
<tr><td rowspan="2">TOBACCO</td><td>Armyworm spp.[1]<br>Blister Beetle spp.<br>Cabbage Looper<br>Corn Earworm<br>Cucumber Beetle spp. (Adult)<br>Cutworm spp.<br>Grasshopper spp.<br>Japanese Beetle (Adult)<br>Katydid spp.<br>Plant Bug spp.[3]<br>Potato Tuberworm<br>Salt Marsh Caterpillar<br>Stink bug spp.<br>Tobacco Aphid spp.[2,3]<br>Tobacco Budworm[2]<br>Tobacco Flea Beetle (Adult)<br>Tobacco Hornworm<br>Tobacco Thrips spp.[2]<br>Tomato Hornworm<br>Tree Cricket spp.<br>Vegetable Weevil (Adult)<br>Webworm spp.</td><td>0.015-0.03</td><td>1.92-3.84</td><td>Ground application: Apply in sufficient spray volume to obtain full coverage of the foliage or target area.<br>Air application: Apply in a minimum of 2 gals per acre or sufficient spray volume to obtain full coverage of the foliage or target area.<br>Make applications when pests appear. If needed, make repeat applications after at least 7 or more days. Apply in sufficient volume to ensure sufficient coverage of foliage.<br>[1]For control of first and second instar only.<br>[2]Suppression only.<br>[3]See resistance statement under PRODUCT INFORMATION.</td></tr>
<tr><td colspan="4">• Do not apply within 40 days of harvest.<br>• Do not apply more than 0.09 lb a.i. (0.72 pt) per acre per year.</td></tr>
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| **TREE NUTS CROP GROUP**<br>**Including:**<br>Almond<br>Beech Nut<br>Brazil Nut<br>Butternut<br>Cashew<br>Chestnut<br>Chinquapin<br>Filbert (Hazelnut)<br>Hickory Nut<br>Macadamia Nut (Bush Nut)<br>Pistachio<br>Walnut, Black<br>Walnut, English (Persian) | Ants<br>Chinch Bug<br>Codling Moth<br>Filbertworm<br>Leaffooted Bug<br>Leafroller spp.<br>Navel Orangeworm<br>Peach Twig Borer<br>Plant Bug spp.<br>Stink Bug spp.<br>Walnut Aphid<br>Walnut Husk Fly spp. (Adult) | 0.02-0.04 | 2.56-5.12 | **Ground application:** Apply in or sufficient spray volume to obtain full coverage of the foliage or target area.<br>**Air application:** Apply in a minimum of 5 gals per acre or sufficient spray volume to obtain full coverage of the foliage or target area.<br>Make applications when pests appear. If needed, make repeat applications after at least 5 or more days. Apply in sufficient volume to ensure sufficient coverage of foliage. |
| Pecan | Hickory Shuckworm<br>Pecan Casebearer spp.<br>Pecan Weevil<br>Pecan Aphid spp.<br>Pecan Spittlebug<br>Stink bug spp.<br>Pecan Phylloxera spp. | 0.02-0.04 | 2.56-5.12 | |
| | • Do not apply within 14 days of harvest.<br>• Do not apply more than 0.16 lb a.i. (1.28 pts) per acre per year.<br>• Do not apply more than 0.12 lb a.i. (0.96 pt) per acre per year post bloom. | | | |
| **TUBEROUS AND CORM VEGETABLES CROP GROUP**<br>**Including:**<br>Arracacha<br>Arrowroot<br>Artichoke (Chinese and Jerusalem only)<br>Canna (edible)<br>Cassava (bitter and sweet)<br>Chayote (root)<br>Chufa<br>Dasheen<br>Ginger<br>Leren<br>Potato<br>Sweet Potato<br>Tanier<br>Turmeric<br>Yam (bean and true) | Cutworm spp.<br>Leafhopper spp.<br>Saltmarsh Caterpillar<br>Sweet Potato Hornworm<br>Woollybear Caterpillar spp. | 0.015-0.025 | 1.92-3.20 | **Ground application:** Apply in sufficient spray volume to obtain full coverage of the foliage or target area.<br>**Air application:** Apply in a minimum of 2 gals per acre or sufficient spray volume to obtain full coverage of the foliage or target area.<br>Make applications when pests appear. If needed, make repeat applications after at least 7 or more days. Apply in sufficient volume to ensure sufficient coverage of foliage.<br><br>Insects that bore or tunnel into leaves, vines, stems, tubers, or corms must be controlled before penetration. Only exposed insects (larvae and/or adults) can be controlled with foliar applications of PARADIGM .<br><br>[1]See resistance statement under **PRODUCT INFORMATION.**<br>[2]Does not include Western Flower Thrips.<br>[3]Suppression only. |
| | Aphid species [1]<br>Armyworm spp. [1]<br>Blister Beetle spp.<br>Colorado Potato Beetle[1]<br>Corn Earworm<br>Cricket spp.<br>Cucumber Beetle spp. (adult)<br>European Corn Borer<br>Flea Beetle spp. (adult)<br>Grasshopper spp.<br>Looper spp. [1]<br>Lygus Bug spp. [1]<br>Plant Bug spp.<br>Potato Psyllid<br>Potato Tuberworm<br>Stink Bug spp.<br>Sweet Potato Leaf Beetle (adult)<br>Swet Potato Vine Borer<br>Thrips spp. [1,2]<br>Tortoise Beetle spp.<br>Webworm spp.<br>Weevil spp. (adult) | 0.02-0.03 | 2.56-3.84 | |
| | Leafminer spp. [1,3]<br>Whitefly spp.[1,3]<br>Spider Mite spp. [3] | 0.03 | 3.84 | |

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| | • Do not apply more than 0.12 lb a.i. (0.96 pt) per acre per year per season.<br>• Do not apply within 7 days of harvest. | | | |
| **CROPS GROWN FOR SEED:**<br>**Dill**<br>**Carrot***<br>**Parsley**<br>**Parsnip**<br><br>**(WA and OR only) (*WA, OR and ID only)** | Lygus Bug spp.[1] | 0.02-0.03 | 2.56-3.84 | Apply with ground or air equipment using sufficient water to obtain full coverage of foliage. Apply in a minimum of 2 gallons per acre by air or 10 gallons per acre by ground. When foliage is dense and/or pest populations are high, 5-10 gallons per acre by air or 20 gallons per acre by ground and higher use rates are recommended. Use higher rates for increased residual control, such as prior to crop blooming. If application is made during bloom, use the lower rate of application.<br>This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or broadleaf weeds. Do not apply the 3.84 fl oz/acre (0.03 lb ai/acre) rate of this product to blooming seed crops. Apply the 3.84 fl oz/acre (0.03 lb ai/acre) rate as a prebloom or postbloom spray only. Applications of the 2.56 fl oz/acre (0.02 lb ai/acre) rate of this product to blooming seed crops must be timed to coincide with periods of minimum bee activity between late evening and midnight. Be aware of bee hazard resulting from a cool evening and/or morning dew. Avoid direct application to bee shelters/hives. It may be advisable to remove bee shelters/hives during and for 2-3 days following application.<br>If used as a prebloom spray, it is not advisable to use during bloom to reduce potential for the development of insecticide resistance.<br>'See resistance statement under **RESISTANCE.** |
| | • Do not apply more than 0.12 lb ai (0.96 pints) per acre per season.<br>• Do not apply this product through any type of irrigation system.<br>**RESTRICTIONS**<br>• All dill, carrot, parsley, and parsnip seed screenings shall be disposed of in such a way that they cannot be distributed or used for human food or animal feed. The seed conditioner shall keep records of screening disposal for three years from the date of disposal and shall furnish the records to the director immediately upon request. Conditional disposal records shall consist of documentation of on-farm disposal, disposal at a controlled dumpsite, incinerator, composter, or other equivalent disposal site and shall include the lot numbers, amount of material disposed of, the grower(s), and the date of disposal.<br>• No portion of the carrot, parsley, parsnip, and dill seed plant, including but not limited to green chop, hay, pellets, meal, whole seed, cracked seed, roots, bulbs, leaves, and seed screenings may be used or distributed for food or feed purposes.<br>• Carrot, parsley, parsnip, and dill seed shall bear a tag or container label which forbids use of the seed for human consumption or animal feed.<br>• Carrot, parsley, parsnip, and dill seed may not be distributed for human consumption or animal feed. | | | |

## USE DIRECTIONS
## OTHER USES

| CROP | TARGET PESTS | RATE | | REMARKS |
|---|---|---|---|---|
| | | lb a.i./A | fl oz/A | |
| **CONIFER AND DECIDUOUS TREES:** Plantations and Nurseries | Bagworm<br>Balsam Twig Aphid<br>Birch Leafminer<br>Black Pine Weevil<br>Elm Leaf Beetle<br>European Elm Bark Beetle<br>Gypsy Moth<br>Japanese Beetle<br>June Beetle spp.<br>Leaf Beetle spp.<br>Leafroller spp.<br>May Beetle spp.<br>Mealybug spp.[1]<br>Pales Weevil<br>Pine Chafer<br>Pine Colaspis Beetle<br>Pine Conelet Bug<br>Pine Leaf Chermid<br>Balsam Woolly Aphid<br>Pine Needle Scale<br>Pine Sawfly spp.<br>Pine Tip Moth spp.<br>Pine Tortoise Scale<br>Pine Weevil spp.<br>Poplar Aphid spp.<br>Sawfly spp.<br>Spittlebug spp.<br>Spruce Budworm<br>Tent Caterpillar spp.<br>Tussock Moth spp.<br>Webworm spp. | 0.02-0.04 | 2.56-5.12 | **Ground application:** Apply in sufficient spray volume to obtain full coverage of the foliage or target area.<br>**Air application:** Apply in a minimum of 2 gals per acre or sufficient spray volume to obtain full coverage of the foliage or target area.<br>Make applications when pests appear. Apply in sufficient volume to ensure sufficient coverage of foliage.<br>To control exposed foliage, flower, cone, seed, and bark feeding insects, apply as required by scouting.<br>[1]Suppression only. |
| | • Do not apply more than 0.24 lb ai (1.92 pts) per acre per year. | | | |
| **CONIFER AND DECIDUOUS TREES:** Seed Orchards | Coneworm spp.<br>Seed Bug spp.<br>Thrips spp. | See Remarks | See Remarks | For high volume sprayers, dilute 5.12 fl oz per 100 gals of water and apply 5-10 gals of finished spray per tree.<br>For low volume sprayers, dilute 20 fl oz per 100 gals of water and apply 100 gals of finished spray per acre.<br>For aerial applications, apply 15 fl oz/A in a minimum of 10 gals finished spray per acre. |
| | • Do not apply more than 0.5 lb a.i. (4.0 pts) per acre per year. | | | |
| **NON-CROPLAND (Excluding Public Land)** | See specific agricultural crop listing on this PARADIGM label for target pests and rates. | See specific agricultural crop listing | See specific agricultural crop listing | Spray non-cropland adjacent to agricultural areas to control migratory insects which may threaten crops. Follow use directions, rates, and spray directions found elsewhere on this label for the adjacent crop and target pests. Use highest labeled rates for dense/large foliage, high insect populations and larger larval stages. Repeat as necessary to maintain control. |
| | • Do not exceed 0.2 lb a.i. (1.6 pts) per acre per year.<br>• Do not graze livestock in treated areas. | | | |

| RATE CONVERSION CHART | | | |
|---|---|---|---|
| **Lb ai/A** | **Fl Oz/A** | **Pints/A** | **Treated Acres/ Gallon of product** |
| 0.015 | 1.92 | 0.12 | 66 |
| 0.020 | 2.56 | 0.16 | 50 |
| 0.025 | 3.20 | 0.20 | 40 |
| 0.030 | 3.84 | 0.24 | 33 |
| 0.040 | 5.12 | 0.32 | 25 |

## STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

**PESTICIDE STORAGE:** Store in original containers only. Keep container closed when not in use. Do not store near food or feed. In case of spill or leak on floor or paved surfaces, soak up with sand earth, or synthetic absorbent. Remove to chemical waste area. **DO NOT ALLOW PRODUCT TO FREEZE.**

**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your state pesticide or environmental control agency or the hazardous waste representative at the nearest EPA Regional Office for guidance.

**CONTAINER HANDLING:**

**Nonrefillable Container (five gallons or less):** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container 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. If recycling is not available, puncture or dispose of in a sanitary landfill or incineration or if allowed by state and local authorities, by burning. If burned stay out of smoke.

**Nonrefillable Container (greater than five gallons):** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. If recycling is not available, puncture or dispose of in a sanitary landfill or incineration or if allowed by state and local authorities, by burning. If burned stay out of smoke.

**Refillable Container (greater than 55 gallons):** Refillable container. Refill this container with lambda-cyhalothrin only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. For final disposal, offer for recycling or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

## WARRANTY DISCLAIMER

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED “AS IS” BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE

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If you do not agree with or do not accept any of directions for use, the warranty disclaimers, or limitations on liability, do not use the product, and return it unopened to the Seller, and the purchase price will be refunded.