

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

October 19, 2017

Diana Williams Registration Specialist United Suppliers, Inc. c/o Winfield Solutions, LLC, Agent P.O. Box 64589, MS 5705 St. Paul, MN 55164

Subject: Notification per PRN 98-10 – Minor label changes Product Name: PARADIGM VC EPA Registration Number: 33270-41 Application Date: 08/09/2017 Decision Number: 532426

Dear Ms. Williams:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The label submitted with the application has been stamped "Notification" and will be placed in our records.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

If you have any questions, you may contact Angela Hollis at 703 347-0216 or by email at <u>hollis.angela@epa.gov</u>.

Page 2 of 2 EPA Reg. No. 33270-41 Decision No. 532426

Sincerely,

Falul Elizabe

Elizabeth Fertich Acting Product Manager 03 Invertebrate & Vertebrate Branch 1 Registration Division (7505P) Office of Pesticide Programs

# 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.

# GROUP Paradigm<sup>®</sup> VC

#### ACTIVE INGREDIENT:

Lambda-cyhalothrin;  $[1a(S^*), 3a(Z)]-(\pm)$ -cyano-(3-phenoxyphenyl)methyl-3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclopropanecarboxylate **OTHER INGREDIENTS:** TOTAL:

# 100.0% NOTIFICATION

% BY WT.

12.7%

87.3%

**INSECTICIDE** 

EPA Est. No.

3

33270-41

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated: 10/19/2017

1/0406/7

# KEEP OUT OF REACH OF CHILDREN CAUTION

Contains 1 pound of active ingredient per gallon

SHAKE WELL BEFORE USING

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

> Manufactured for: United Suppliers, Inc.

<mark>30473-260<sup>th</sup> St.</mark>

Eldora, IA 50627 (moved below)

NET CONTENTS: GALLON(S)

EPA Reg. No. 33270-41

	FIRST AID					
IF ON SKIN OR	Take off contaminated clothing.					
CLOTHING:	Rinse skin immediately with plenty of water for 15-20 minutes.					
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>					
IF SWALLOWED:	Call a poison control center or doctor immediately for treatment advice.					
	<ul> <li>Have person sip a glass of water if able to swallow.</li> </ul>					
	• Do not induce vomiting unless told to do so by a poison control center or doctor.					
	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.					
	• Remove contact lenses, if present, after the first 5 minutes; then continue rinsing eye.					
	Call a poison control center or doctor for treatment advice.					
IF INHALED:	Move person to fresh air.					
If person is not breathing, call 911 or an ambulance; then give artificial respiration, preferably mouth-to-mouth if possible.						
	Call a poison control center or doctor for further treatment advice.					
	HOT LINE NUMBER					

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-424-7452 for emergency medical treatment information.

SEE BOOKLET FOR ADDITIONAL PRECAUTIONARY STATEMENTS, COMPLETE DIRECTIONS FOR USE. WARRANTY DISCLAIMER AND LIMITATION OF LIABILITY

EPA Reg. No. 33270-41

EPA Est. No. 070989-MO-001

Net Contents:

1/0809/7

#### 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 Barrier Laminate, Nitrile Rubber, Neoprene Rubber, or Viton.
- 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 foraging the treatment area.

#### PHYSICAL OR CHEMICAL HAZARDS

Do not mix or allow coming into contact with oxidizing agents. Hazardous Chemical reaction may occur.

## DIRECTIONS FOR USE

#### RESTRICTED USE PESTICIDE

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 VC 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 VC 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 VC 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 VC 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 VC as diluents or adjuvants:

Non-emulsifiable Oils Diesel Fuel Straight Mineral Oil

When an adjuvant is to be used with this product, <del>United Suppliers, Inc.</del> Winfield Solutions, LLC suggests the use of a Chemical Producers and Distributors Association Council of Producers & Distributors of Agrotechnology certified adjuvant.

#### CHEMIGATION

#### Sprinkler Irrigation Application

Apply Paradigm VC 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 VC 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 VC 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 VC 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 and 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.

P				
CROP	TARGET PESTS		TE	REMARKS
		lb a.i./A	fl oz/A	
ALFALFA AND ALFALFA GROWN FOR SEED	Alfalfa Caterpillar Army cutworm Cutworm spp. Green Cloverworm Leafhopper spp. Looper spp. Threecornered Alfalfa Hopper Velvetbean Caterpillar Webworm spp.	0.015-0.025	1.92-3.20	<ul> <li>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.</li> <li>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.</li> <li>Make applications when pests appear. Apply in sufficient volume to ensure sufficient coverage of foliage.</li> <li>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.</li> <li>Use higher rates for increased residual control.</li> <li>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. Do not apply directly to bee shelters.</li> <li>Apply only to fields planted to pure stands of alfalfa.</li> <li>Apply as required by scouting.</li> <li><sup>1</sup>For control of first and second instars only.</li> <li><sup>2</sup>Suppression only.</li> <li><sup>3</sup>See resistance statement under PRODUCT INFORMATION.</li> <li><sup>4</sup> Does not include Western Flower Thrips</li> </ul>

#### CROP USE DIRECTIONS AGRICULTURAL USES

		0.00.0	0 50 0 5 1	
	Alfalfa Seed Chalcid (Adult)	0.02-0.03	2.56-3.84	
	Alfalfa Weevil			
	Armyworm			
	Bean Leaf Beetle (Adult)			
	Blister Beetle spp.			
	Blue Alfalfa Aphid			
	Clover Leaf Weevil spp.			
	Clover Root Borer (Adult)			
	Clover Root Curculio spp.			
	(Adult) Clover Stem Borer (Adult)			
	Corn Earworm			
	Com Earworn Cowpea Aphid			
	Cowpea Curculio (Adult)			
	Cowpea Weevil (Adult)			
	Cucumber Beetle spp.			
	(Adult)			
	Egyptian Alfalfa Weevil			
	Fall Armyworm <sup>1</sup>			
	Grape Colaspis (Adult)			
	Grasshopper spp.			
	Green June Beetle (Adult)			
	Green Peach Aphid <sup>3</sup>			
	Japanese Beetle (Adult)			
	Meadow Spittlebug			
	Mexican Bean Beetle			
	Pea Aphid			
	Pea Weevil (Adult)			
	Plant Bug spp., including			
	Lygus spp. <sup>3</sup>			
	Spotted Alfalfa Aphid			
	Stink Bug spp.			
	Sweet Clover Weevil			
	(Adult)			
	Thrips spp. <sup>4</sup>			
	Western Yellow-striped			
	Armyworm			
	Whitefringed Beetle spp. (Adult)			
	(Adult) Yellow-striped Armyworm			
	Beet Armyworm <sup>1,3</sup>	0.03	3.84	-
	Blotch Leafminer <sup>3</sup>	0.03	5.04	
	Spider Mites <sup>2</sup>			
	<ul> <li>Do not apply more than 0.0</li> </ul>	)3 lb a i (0.24 m	) per acre per (	sutting
	<ul> <li>Do not apply more than 0.1</li> </ul>			
	<ul> <li>Do not apply within 1 day of</li> </ul>			
CANOLA	Armyworm spp.	0.015-0.03	1.92-3.84	Ground application: Apply in sufficient
	Cabbage Seedpod Weevil	0.010-0.00	1.02-0.04	spray volume to obtain full coverage of the
	Cutworm spp.			foliage or target area.
	Diamondback Moth			<b>Air application:</b> Apply in a minimum of 2
	Flea Beetle			gals per acre or sufficient spray volume to
	Grasshoppers			obtain full coverage of the foliage or target
	Looper spp.			area.
	Lygus Bug			Make applications when pests appear. If
	Cabbage Aphid	0.03	3.84	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 7 days	of harvest.		
	• Do not apply more than 0.0		t) per acre per v	year.
		· · · ·		

CEREAL GRAINS: Corn (At-Plant): Field Corn Popcorn Seed Corn Sweet Corn	Corn Rootworm Larvae (Western, Northern, Southern, Mexican) Cutworm spp. Seedcorn Maggot Seedcorn Beetle Lesser Cornstalk Borer White Grub spp. Wireworm spp.	0.005 lb per 1000 of row	) ft 1	6 fl oz per 000 ft of row <sup>1</sup>	a 5-7 inch T-t seed furrow b and the press application be <b>In-Furrow Ag</b> seed furrow t microtubes be	band sprayed between the f s wheels or a chind the pre <b>oplications:</b> hrough spray chind the pla in front of the	ss wheel. Apply into the / nozzles or nter furrow e press wheel.
	<sup>1</sup> lbs a.i. and f	l oz/A of P			at 0.66 fl oz/10	000 ft of row	for
				row spacin			
	Row Spacing	40"	38"	36"	34"	32"	30"
	Linear Ft per acre	13,068	13,756	14,520	15,374	16,335	17,424
	Lbs a.i. per acre	0.067	0.07	0.075	0.079	0.084	0.09
	FI oz per acre	8.6	9.1	9.6	10.1	10.8	11.5
	• Do not apply more than 0.0	livestock or cut treated crops for feed within 21 days of at-plant application. 0.09 lb a.i. (0.72 pt) per acre per crop at-plant.					
		12 lb a.i. per acre per crop from at-plant and foliar applications for field corn, For sweet corn, do not apply more than 0.48 lb a.i. per acre per crop from at-					

	Corp Forward <sup>1</sup>	0.015.0.005	1 00 0 00	Cround applications Apply in sufficient
CEREAL GRAINS Corn (Foliar): Field Corn Popcorn Seed Corn	Corn Earworm <sup>1</sup> Cutworm spp. Green Cloverworm Meadow Spittlebug Western Bean Cutworm <sup>1</sup> Armyworm <sup>2</sup> Bean Leaf Beetle Bird Cherry-Oat Aphid <sup>3</sup> Cereal Leaf Beetle Corn Leaf Aphid <sup>3</sup> English Grain Aphid <sup>3</sup> European Corn Borer <sup>1</sup> Fall Armyworm <sup>2</sup> Flea Beetle spp. Grasshopper spp. Hop Vine Borer <sup>1</sup> Japanese Beetle (Adult) Lesser Cornstalk Borer Mexican Corn Rootworm Beetle (Adult) Northern Corn Rootworm Beetle (Adult) Sap Beetle (Adult) Seedcorn Beetle Southern Corn Rootworm Beetle (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. 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. 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. <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 VC may only suppress heavy infestations and/or subsequent migrations. <u>Adult corn rootworm beetles (<i>Diabrotica</i> species): 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. <sup>1</sup>For control before the larva bores into the plant stalk or ear. <sup>2</sup>For control of first and second instar only. <sup>3</sup>Suppression only.</u>
	Stink Bug spp. Tobacco Budworm <sup>1,4</sup> Webworm spp. Western Corn Rootworm Beetle (Adult) Yellow-striped Armyworm <sup>2</sup> Beet Armyworm <sup>4</sup>	0.03	3.84	PRODUCT INFORMATION.
	<ul> <li>Chinch Bug</li> <li>Green Bug<sup>3,4</sup></li> <li>Southern Corn Leaf Beetle<sup>3</sup></li> <li>Rice Stalk Borer<sup>1</sup></li> <li>Mexican Rice Borer<sup>1</sup></li> <li>Sugarcane Borer<sup>1</sup></li> <li>Do not apply within 21 days</li> <li>Do not allow livestock to granimals within 1 day after labeled and statement of the statement of</li></ul>	aze in treated ar	eas or harvest t	reat corn forage as feed for meat or dairy
	<ul> <li>Do not feed treated corn fc</li> <li>Do not apply more than 0.1</li> <li>Do not apply more than 0.0</li> </ul>	odder or silage to 2 lb a.i. (0.96 pt )6 lb a.i. (0.48 pt	) per acre per cr ) after silk initiati	animals within 21 days after last treatment. op from at-plant and foliar applications. ion. reached the milk stage (yellow kernels with

CEREAL GRAINS Corn (Foliar): Sweet Corn	Aphid spp. <sup>2,3</sup> Armyworm <sup>1</sup> Aster Leafhopper Beet Armyworm <sup>1,3</sup> Chinch Bug Common Cornstalk Borer Corn Earworm	0.02-0.03	2.56-3.84	<b>Ground application:</b> Apply in sufficient spray volume to obtain full coverage of the foliage or target area. <b>Air application:</b> Apply in a minimum of 2 gals per acre or sufficient spray volume to obtain full coverage of the foliage or target area.
	Cutworm spp. European Corn Borer Fall Armyworm <sup>1</sup> Flea Beetle spp. Grasshopper spp. Japanese Beetle (Adult) Mexican Corn Rootworm Beetle (Adult) Northern Corn Rootworm Beetle (Adult) Sap Beetle (Adult) Southern Armyworm <sup>1</sup> Southern Corn Rootworm Beetle (Adult) Southwestern Corn Borer Spider Mite spp. <sup>2</sup> Stink Bug spp. Tarnished Plant Bug Webworm spp. Western Bean Cutworm Western Corn Rootworm Beetle (Adult) Yellow-Striped Armyworm <sup>1</sup>			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). <u>Adult corn rootworm beetles (<i>Diabrotica</i> 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. <sup>1</sup> For control of first and second instar only. <sup>2</sup> Suppression only. <sup>3</sup> See resistance statement under <b>PRODUCT</b> <b>INFORMATION</b> .
	Corn Silkfly (Adult) <sup>2</sup>	0.03	3.84	
	<ul> <li>animals within 1 day after 1</li> <li>Do not feed treated corn feed treated corn feed to not apply more than 0.4</li> </ul>	raze in treated a last treatment. odder or silage t 48 lb a.i. (3.84 p	o meat or dairy ts) per acre pe	t treated corn forage as feed for meat or dairy animals within 21 days after last treatment. crop from at plant and foliar applications.
CEREAL GRAINS:	Bird Cherry-Oat Aphid	0.025-0.04	3.20-5.12	Ground application: Apply in sufficient
Rice Wild Rice	Chinch Bug Fall Armyworm			spray volume to obtain full coverage of the foliage or target area.
	Grasshopper spp. Greenbug Leafhopper spp. Rice Stink Bug Rice Water Weevil (Adult) Riceworm Sharpshooter spp. True Armyworm Yellow Sugarcane Aphid Yellow-striped Armyworm European Corn Borer <sup>1</sup> Mexican Rice Borer <sup>1</sup> Rice Seed Midge <sup>1</sup> Rice Stalk Borer <sup>1</sup> Sugarcane Borer <sup>1</sup>	0.03-0.04	3.84-5.12	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 VC can be safely used when propanil products are being used for weed

	I	Dico Water Weevill In dry acaded rise
CEREAL GRAINS:		Rice Water Weevil: In dry seeded rice,
		make a foliar application as indicated by
Wild Rice		scouting for the presence of adults and/or
(continued)		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.
		California: In addition to above directions,
		for control of rice water weevil in water
		seeded rice, Paradigm VC may be applied at
		the 1- to 3-leaf growth stage with the
		majority at the 2-leaf growth stage.
		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.
		Green Bug: Known to have many biotypes,
		Paradigm VC may only provide
		suppression. If satisfactory control is not
		achieved, a resistant biotype may be
		present. Use alternate chemistry for
		control.
		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.
		<sup>1</sup> For control before the larvae bores into the
		plant stalk.
	<u> </u>	

	Do not release floodwater within 7 days of an application.					
	• Do not apply more than 0.12 lb a.i. (0.96 pt) per acre per season.					
	Do not apply more than 0	.04 lb a.i. (0.32 p	ot) per acre wit	hin 21 to 27 days of harvest.		
	Do not apply within 21 da		, ,	5		
	<ul> <li>Do not use treated rice field</li> </ul>		culture of edibl	le fish and crustacea		
	<ul> <li>Do not apply as an ultra-l</li> </ul>					
CEREAL GRAINS:	Rice Water Weevil	0.03-0.04	3.84-5.12	Uniformly apply at 3.84-5.12 fl oz of product		
Wet-sown Rice		0.00 0.01	0.01 0.12	per acre as a pre-flood, pre-plant, broadcast		
(CA Only)				soil application for control of Rice Water		
				Weevil (Lissorhoptrus oryzophilus) in wet-		
				sown rice culture.		
				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.		
				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.		
				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.					
	<ul> <li>Do not apply more than 0.0</li> </ul>					
	<ul> <li>Do not release floodwater</li> </ul>			51 5043011.		
		•		and arristoppo		
	Do not use treated rice field	•		i anu crustacea.		
	Do not apply as an ultra-lov		spray.			
	Do not apply by chemigation.					

CEREAL GRAINS:	Cutworm spp.	0.015-0.02	1.92-2.56	Ground application: Apply in sufficient
Sorghum (Grain)	Sorghum Midge			spray volume to obtain full coverage of the
	Armyworm	0.02-0.03	2.56-3.84	foliage or target area.
	Beet Armyworm <sup>3</sup>			Air application: Apply in a minimum of 2
	Corn Earworm			gals per acre or sufficient spray volume to
	European Corn Borer <sup>2</sup>			obtain full coverage of the foliage or target
	Fall Armyworm <sup>1</sup>			area.
	Flea Beetle spp.			Make applications when pests appear. If
	Grasshopper spp.			needed, make repeat applications after at
	Lesser Cornstalk Borer <sup>2</sup>			least 5 days. Apply in sufficient volume to
	Southwestern Corn Borer <sup>2</sup>			ensure sufficient coverage of foliage.
	Stink Bug spp.			Sorghum Midge: Begin applications when
	Webworm spp.			25% of the sorghum heads have emerged
	Yellow-striped Armyworm <sup>1</sup>	0.00	0.04	and are in tip bloom. Repeat applications
	Chinch Bug	0.03	3.84	at 5 day intervals if needed.
	Mexican Rice Borer <sup>2</sup> Rice Stalk Borer <sup>2</sup>			Chinch Bug: Begin applications when bugs
				migrate from small grains or grass weeds to small sorghum. Direct spray to the base
	Sugarcane Borer <sup>2</sup>			of sorghum plants. Repeat applications at
				3 to 5 day intervals if needed.
				Paradigm VC may only suppress heavy
				infestations and/or subsequent migrations.
				<sup>1</sup> For control of first and second instar only.
				<sup>2</sup> For control before the larva bores into the
				plant stalk.
				<sup>3</sup> See resistance statement under
				PRODUCT INFORMATION.

Do not apply within 30 days of harvest.
Do not apply more than 0.08 lb a.i. (0.64 pt) per acre per season.
• Do not apply more than 0.06 lb a.i. (0.48 pt) per acre per season after crop emergence.
• Do not apply more than 0.02 lb a.i. (0.16 pt) per acre per season once crop is in soft dough stage.

	A mass of Courts of a mass	0.045.0.005	1 00 0 00	Cround employed and Analysia sufficient	
CEREAL GRAINS:	Army Cutworm	0.015-0.025	1.92-3.20	Ground application: Apply in sufficient	
Barley	Cutworm spp.		0.50.0.04	spray volume to obtain full coverage of the	
Buckwheat	Armyworm	0.02-0.03	2.56-3.84	foliage or target area.	
Oats	Bird Cherry-Oat Aphid <sup>1</sup>			Air application: Apply in a minimum of 2	
Rye	Cereal Leaf Beetle			gals per acre or sufficient spray volume to	
Triticale	English Grain Aphid <sup>1</sup>			obtain full coverage of the foliage or target	
Wheat	Fall Armyworm			area.	
Wheat Hay	Flea Beetle spp.			Make applications when pests appear. If	
	Grasshopper spp.			needed, make repeat applications after at	
	Hessian fly <sup>4</sup>			least 5 days. Apply in sufficient volume to	
	Orange Blossom Wheat			ensure sufficient coverage of foliage.	
	Midge			<u>Chinch Bug:</u> Repeat applications at 3 to 5	
	Russian Wheat Aphid <sup>1</sup>			day intervals if needed. Paradigm VC may	
	Stink Bug spp.			only suppress heavy infestations and/or	
	Yellow-striped Armyworm			migrations.	
		0.025-0.03	3.20-3.84	Green Bug: Known to have many biotypes,	
	Grass Sawfly			Paradigm VC may only provide	
	Chinch Bug	0.03	3.84		
	Corn Leaf Aphid <sup>2</sup>			suppression. If satisfactory control is not	
	Greenbug <sup>1,3</sup>			achieved, a resistant biotype may be	
	Mite spp. <sup>2</sup>			present. Use alternate chemistry for	
				control.	
				<sup>1</sup> Best control is obtained before insects	
				begin to roll leaves. Once wheat has	
				started to boot, Paradigm VC may provide	
				suppression only. Higher rates and	
				increased coverage will be necessary.	
				<sup>2</sup> Suppression only.	
				<sup>3</sup> See resistance statement under	
				PRODUCT INFORMATION.	
				<sup>4</sup> Make applications when adults emerge.	
				mano applications when addits efferge.	
	Do not apply within 30 da	ave of harvest	I	1	
		•	arooo or homes	at tracted wheat forego as food for most as	
	<ul> <li>Do not allow livestock to graze in treated areas or harvest treated wheat forage as feed for meat dairy animals within 7 days after treatment. Do not feed treated straw to meat or dairy animals w</li> </ul>				
			I. Do not feed	treated straw to meat or dairy animals within	
	30 days after the last treatment.				
	Do not apply more than (	).06 lb a.i. (0.48 p	ot) per acre pe	r season.	

COLE CROPS Head and stem brassica crop group including: Broccoli Brussels Sprouts Cabbage Cavalo Broccolo Cauliflower Chinese Broccoli (gai lon) Chinese Cabbage (napa) Chinese Mustard Cabbage (gai choy) Kohlrabi	Alfalfa Looper Cabbage Looper Cabbage Webworm Cutworm spp. Imported Cabbageworm Southern Cabbageworm Aphid spp. <sup>2,3</sup> Armyworm Beet Armyworm <sup>1,3</sup> Corn Earworm Diamondback Moth <sup>3</sup> Fall Armyworm <sup>1</sup> Flea Beetle spp. Grasshopper spp. Japanese Beetle (Adult) Leafhopper spp. Meadow Spittlebug Plant Bug spp. including Lygus spp. <sup>3</sup> Spider Mite spp. <sup>2</sup> Stink Bug spp. Thrips spp. <sup>2</sup> Vegetable Weevil (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. 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. 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. <sup>1</sup> For control of first and second instar only. <sup>2</sup> Suppression only. <sup>3</sup> See resistance statement under PRODUCT INFORMATION.
	Vegetable Weevil (Adult) Whitefly spp. <sup>2,3</sup> Yellow-striped Armyworm • Do not apply within 1 day • Do not apply more than 0	•	ots) per acre pe	er season.

COTTON	Cutworm spp.	0.015-0.02	1.92-2.56	Ground application: Apply in sufficient
	Soybean Thrips			spray volume to obtain full coverage of the
	Tobacco Thrips			foliage or target area.
	Cabbage Looper	0.02-0.03	2.56-3.84	Air application: Apply in sufficient spray
	Cotton Fleahopper			volume to obtain full coverage of the foliage
	Cotton Leafperforator			or target area.
	Cotton Leafworm			ULV application: Paradigm VC may be
	Lygus Bug spp. <sup>3</sup>			mixed with once-refined vegetable oil and
	Pink Bollworm			applied in a minimum of at least 1 qt. of
	Saltmarsh Caterpillar			finished spray per acre.
	Bandedwing Whitefly <sup>2,3</sup>	0.025-0.04	3.20-5.12	Make applications when pests appear. If
	Beet Armyworm <sup>1,3</sup>			needed, make repeat applications after at
	Boll Weevil			least 5 to 7 days. Apply in sufficient volume
	Brown Stink Bug			to ensure sufficient coverage of foliage.
	Cotton Aphid <sup>2,3</sup>			Under light bollworm/budworm infestation
	Cotton Bollworm			levels, 0.02 lb a.i. per acre may be applied
	European Corn Borer			in conjunction with intense field monitoring.
	Fall Armyworm			Boll Weevil: Spray on a 3- to 5-day
	Green Stink Bug			schedule.
	Southern Green Sting Bug			Cotton Bollworm, Tobacco Budworm:
	Sweetpotato Whitefly <sup>2,3</sup>			Paradigm VC also provides ovicidal control
	Tobacco Budworm <sup>3</sup>			of unhatched <i>Heliothine</i> spp. eggs.
	Two-spotted Spider Mite <sup>2</sup>			<sup>1</sup> For control of first and second instar only.
				<sup>2</sup> Suppression only.
				<sup>3</sup> See resistance statement under
				PRODUCT INFORMATION.
	Do not apply within 21 da		1	
	Do not graze livestock in			
	Do not apply more than.			
				applications (of one product or combination
				nthetic pyrethroid products include but are
				nsecticide), Asana® XL insecticide (or other
				nroid insecticide (or other cyfluthrin
				thrin insecticide), Danitol® 2.4 EC Spray
				ecis® insecticide, Fanfare® 2EC, Karate®
				ate® insecticide with Zeon® technology,
		nd Warrior® or W	arrior® insectio	ide with Zeon® technology (or other lambda
	cyhalothrin insecticide).			

		0.00.0.00	0.50.0.01	
	Armyworm spp. <sup>1</sup>	0.02-0.03	2.56-3.84	Ground application: Apply in sufficient
	Blister Beetle spp.			spray volume to obtain full coverage of the
	Cabbage Looper			foliage or target area.
Including:	Corn Earworm Cricket spp.			When applied by ground, use a minimum of 10 gal solution per acre.
Chayote (fruit)	Cucumber Beetle spp.			<b>Air application:</b> Apply in a minimum of 2
Chinese Waxgourd	(adults)			gals per acre or sufficient spray volume to
(Chinese	Cutworm spp.			obtain full coverage of the foliage or target
preserving	Flea Beetle spp.			area.
melon)	Grasshopper spp.			
Citron Melon	June Beetle spp.			Monitor insect populations to determine
Cucumber	Leaffooted Bug			timing and frequency of applications. Scout
Gherkin	Leafhopper spp.			fields at a minimum of 5 day intervals.
Gourd (edible)	Lygus Bug spp. <sup>1</sup>			Apply in sufficient volume to ensure
<i>Lagenaria</i> spp. –	Melonworm			sufficient coverage of foliage.
Includes:	Pickleworm			Insects that bore or tunnel into leaves, vines,
hyotan, cucuzza	Plant Bug spp.			stems or fruit must be controlled before
Luffa acutangula,	Rindworm spp.			penetration. Only exposed insects (larvae
Includes:	complex Saltmarch Catarpillar			and/or adults) can be controlled with foliar
hechima,	Saltmarsh Caterpillar			applications of Paradigm VC.
Chinese okra	Squash Beetle Squash Bug spp.			
Momordica spp	Squash Bug spp. Squash Vine Borer			
Includes:	spp.			<sup>1</sup> See resistance statement under <b>PRODUCT</b>
balsam apple,	Stink Bug spp.			INFORMATION.
balsam pear,	Thrips spp. <sup>1,2</sup>			<sup>2</sup> Does not include Western Flower Thrips.
bitter melon,	Tobacco Budworm <sup>1</sup>			<sup>3</sup> Suppression only.
Chinese	Webworm spp.			
cucumber	Aphid spp. <sup>1</sup>	0.03	3.84	1
Muskmelon	Leafminer spp. <sup>1,3</sup>			
(hybrids and/or	Spider Mite spp. <sup>3</sup>			
cultivars of	Whitefly spp. <sup>1,3</sup>			
Cucumis melo) –	Do not apply more than (		ts of product) p	ber season.
Includes:	<ul> <li>Do not apply within 1 day</li> </ul>	/ of harvest.		
true cantaloupe,				
cantaloupe,				
casaba, crenshaw melon,				
golden pershaw				
melon				
honeydew melon,				
honey balls,				
mango melon				
Persian melon,				
pineapple melon,				
Santa Claus				
melon,				
snake melon				
Pumpkin				
Squash, summer				
( <i>Cucurbita pepo</i> var.				
val.				
melopeno) –				
<i>melopepo) –</i> includes:				
<i>melopepo) –</i> includes: crookneck				
includes: crookneck				
includes:				
includes: crookneck squash,				
includes: crookneck squash, straightneck				
includes: crookneck squash, straightneck squash, vegetable marrow,				
includes: crookneck squash, straightneck squash, vegetable marrow, zucchini				
includes: crookneck squash, straightneck squash, vegetable marrow, zucchini Squash, winter				
includes: crookneck squash, straightneck squash, vegetable marrow, zucchini Squash, winter ( <i>Cucurbita</i>				
includes: crookneck squash, straightneck squash, vegetable marrow, zucchini Squash, winter				

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			1 00 0 07			
FRUITING	Cabbage Looper	0.015-0.025	1.92-3.20	Ground application: Apply in sufficient		
VEGETABLES	Cutworm spp.			spray volume to obtain full coverage of the		
(EXCEPT	Hornworm spp.			foliage or target area.		
CUCURBITS)	Aphid spp. <sup>2,3</sup>	0.02-0.03	2.56-3.84	<b>Air application:</b> Apply in a minimum of 2		
CROP GROUP	Beet Armyworm <sup>1,3</sup>			gals per acre or sufficient spray volume to		
Including:	Blister Beetle spp.			obtain full coverage of the foliage or target		
_	Colorado Potato Beetle <sup>3</sup>			area.		
Eggplant	Cucumber Beetle spp.			Make applications when pests appear. If		
Ground Cherry	(Adult)			needed, make repeat applications after at		
Pepino	European Corn Borer <sup>4</sup>			least 5 days. Apply in sufficient volume to		
Peppers (bell and	Fall Armyworm <sup>1</sup>			ensure sufficient coverage of foliage.		
nonbell)	Flea Beetle spp.			<sup>1</sup> For control of first and second instar only.		
Tomatillo	Grasshopper spp.			<sup>2</sup> Suppression only.		
Tomato	Japanese Beetle (Adult)			<sup>3</sup> See resistance statement under		
	Leafhopper spp.			PRODUCT INFORMATION.		
	Leafminer spp. <sup>2</sup>			<sup>4</sup> For control before the larva bores into the		
	Meadow Spittlebug			plant stalk or fruit.		
	Pepper Weevil (Adult) <sup>2</sup>			<sup>5</sup> Does not include Western Flower Thrips.		
	Plant Bug spp.					
	Southern Armyworm <sup>1</sup>					
	Spider Mite spp. <sup>2</sup>					
	Stalk Borer <sup>4</sup>					
	Stink Bug spp.					
	Thrips <sup>5</sup>					
	Tobacco Budworm <sup>3</sup>					
	Tomato Fruitworm					
	Tomato Pinworm					
	Tomato Psyllid <sup>2,3</sup>					
	Vegetable Weevil (Adult)					
	Whitefly spp. <sup>2,3</sup>					
	Yellow-striped Armyworm <sup>1</sup>					
	Do not apply within 5 da					
	Do not apply more than 0.36 lb a.i. (2.88 pts) per acre per season.					

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GRASS FORAGE,	Army Cutworm	0.015-0.025	1.92-3.20	Ground application: Apply in sufficient		
FODDER, AND	Cutworm spp.			spray volume to obtain full coverage of the		
HAY	Essex Skipper			foliage or target area.		
Pasture and	Range Caterpillar			<b>Air application:</b> Apply in a minimum of 2		
Rangeland Grass,	Striped Grass Looper			gals per acre or sufficient spray volume to		
Grass Grown for	Beet Armyworm	0.02-0.03	2.56-3.84	obtain full coverage of the foliage or target		
Hay or Silage,	Billbug spp. <sup>3</sup>			area.		
Grass Grown for	Bird Cherry-Oat Aphid <sup>1</sup>					
Seed	Black Grass Bug			Monitor insect populations to determine		
	Black Turfgrass Beetle			timing and frequency of applications. Scout		
	(Adult)			fields at a minimum of 5 day intervals.		
	Blue Stem Midge			A multi in a di ci ante a luma da ancorre		
	Cereal Leaf Beetle			Apply in sufficient volume to ensure		
	Chinch Bug			sufficient coverage of foliage.		
	Crane Fly spp.			Chinch bugs: Paradigm VC may only		
	Cricket spp.			suppress heavy infestations and/or		
	English Grain Aphid <sup>1</sup>			migrations. In this situation, a second		
	Fall Armyworm			application using an alternative chemistry		
	Flea Beetle spp.			may be needed.		
	Grass Mealybug					
	Grass Sawfly (Adult)			<u>Greenbug:</u> Greenburg is known to have		
	Grasshopper spp.			many biotypes. Paradigm VC may provide		
	Green June Beetle			suppression only. In this situation, a second		
	(Adult)			application using an alternative chemistry		
	Greenbug <sup>1, 2</sup>			may be needed.		
	Japanese Beetle (Adult)			Pasture and rangeland grass: May be used		
	Katydid spp.			for grazing or cut for forage 0 days after		
	Leafhopper spp.			application. Do not cut grass to be dried		
	Mite sp.			and harvested for hay until 7 days after the		
	Russian Wheat Aphid <sup>1</sup>			last application.		
	Southern Armyworm			Cross grown for acade Strow and mature		
	Spittlebug spp.			<u>Grass grown for seed:</u> Straw and mature seed (seed screenings) may be used as		
	Stink Bug spp.			feed 7 days after the last application.		
	Sugarcane Aphid			<sup>1</sup> Best control is obtained before insects		
	Thrips spp.					
	Tick spp.			<sup>2</sup> See resistance statement under		
	True Armyworm			PRODUCT INFORMATION.		
	Webworm spp.			<sup>3</sup> Suppression only.		
	Yellowstriped					
	Armyworm	0.02 lb a : /0.04	to of product			
				per acre per cutting for pastures, rangeland		
				erval (RTI) of 30 days is required for		
				ve not been cut between applications.		
	Do not apply more than 0.09 lb a.i. (0.72 pts of product) per acre per season.					

		0.045.0.005	4 00 0 00	
	Cutworm spp.	0.015-0.025	1.92-3.20	Ground application: Apply in sufficient
VEGETABLES	Green Cloverworm			spray volume to obtain full coverage of the
(SUCCULENT OR	Imported Cabbageworm			foliage or target area.
DRIED) CROP	Mexican Bean Beetle			Air application: Apply in a minimum of 2
GROUP	Saltmarsh Caterpillar			gals per acre or sufficient spray volume to
Including but	Velvetleaf Caterpillar	0.00.0.00	0.50.0.04	obtain full
limited to:	Alfalfa Caterpillar	0.02-0.03	2.56-3.84	Make applications when pests appear. If
	Aphid spp. <sup>4</sup>			needed, make repeat applications after at
(BEANS AND	Armyworm <sup>2</sup> Bean Leaf Beetle			least 5 days. Apply in sufficient volume to
PEAS)				ensure sufficient coverage of foliage.
Edible Podded	Bean Leafskeletonizer			<sup>1</sup> For control before the larva bores into the
(only) Canavalia gladiata-	Blister Beetle spp. Corn Earworm			plant stalk or pods. <sup>2</sup> For control of the first and second instar
sword bean	Corn Rootworm Beetle			
Canavalia	spp. (Adult)			only. <sup>3</sup> For suppression only.
ensiformis –	Cucumber Beetle spp.			<sup>4</sup> See resistance statement under
jackbean	(Adult)			PRODUCT INFORMATION.
Glycine max –	Curculio and Weevil spp. <sup>1</sup>			<sup>5</sup> Does not include Western Flower Thrips.
Soybean immature	(foliage and pod feeding			Boos not molded western nower minps.
seed	adults and larvae)			
Edible Podded,	European Corn Borer			
Succulent Shelled,	Fall Armyworm <sup>2</sup>			
or Dried Shelled	Flea Beetle spp. (Adult)			
Phaseolus spp.	Flea Hopper spp.			
includes: black,	Grasshopper spp.			
field, kidney, lima,	Japanese Beetle (Adult)			
navy, pinto, runner,	Leafhopper spp.			
snap, tepary, and	Leaftier spp.			
wax beans	Looper spp.			
<i>Vigna</i> spp.	Meadow Spittlebug			
includes: adzuki,	Painted Lady Butterfly			
asparagus, moth,	(larva)			
mung, rice, urd and	Plant Bug spp. including			
yardlong beans,	Lygus spp. <sup>4</sup>			
black-eyed pea,	Stalk Borer <sup>1</sup>			
catjang, Chinese	Stink Bug spp.			
longbean, cowpea,	Three-cornered Alfalfa			
Crowder pea, and				
Southern pea	Thrips spp. <sup>4.5</sup>			
Pisum spp.	Tobacco Budworm <sup>4</sup>			
includes: dwarf,	Webworm spp.			
edible-pod, English, field, garden, green,	Western Bean Cutworm Western Yellow-striped			
snow and sugar	Armyworm <sup>2</sup>			
snap peas	Yellow-striped			
Cajanus cajan-	Armyworm <sup>2</sup>			
Pigeon pea	,, wom			
Succulent Shelled	Beet Armyworm <sup>3,4</sup>	0.03	3.84	1
or Dried Shelled	Leafminer spp. <sup>3,4</sup>	0.00	0.01	
Vicia faba	Lesser Cornstalk Borer <sup>3</sup>			
broadbean	Soybean Looper <sup>3,4</sup>			
(favabean)	Spider Mite spp. <sup>3</sup>			
Dried Shelled	Whitefly spp. <sup>3,4</sup>			

includes: grain, sweet, white and sweet white lupines <i>Cicer arietimum</i> - chickpea (garbanzo bean) <i>Cyamopsis</i> <i>tetragonoloba-</i> guar <i>Lablab pupureus</i> - Lablab bean (hyacinth bean) <i>Lens esculata</i> - Lentils	<ul> <li>Do not apply more than 0.</li> <li>For succulent and dried sh vines for forage or hay.</li> </ul>	nelled peas and b		season. raze livestock in treated areas or harvest
LEGUME VEGETABLES Soybean	Bean Leaf Beetle Cabbage Looper Corn Earworm Cutworm spp. Green Cloverworm Mexican Bean Beetle Mexican Corn Rootworm Beetle (Adult) Northern Corn Rootworm Beetle (Adult) Painted Lady (Thistle) Caterpillar Potato Leafhopper Saltmarsh Caterpillar Southern Corn Rootworm Beetle (Adult) Soybean Aphid <sup>4</sup> Three-Cornered Alfalfa Hopper Thrips spp. <sup>5</sup> Velvetbean Caterpillar Western Corn Rootworm Beetle (Adult) 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. 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. 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. Adult corn rootworm beetles ( <i>Diabrotica</i> .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. <sup>1</sup> Use higher rates for large larvae. <sup>2</sup> Suppression only. <sup>3</sup> See resistance statement under <b>PRODUCT INFORMATION</b> . <sup>4</sup> Use lower rates for early season applications and/or lighter populations. <sup>5</sup> Does not include Western Flower Thrips.
	Armyworm <sup>1</sup> Blister Beetle spp. European Corn Borer Fall Armyworm <sup>1</sup> Grasshopper spp. Japanese Beetle (Adult) Plant Bug spp. Silverspotted Skipper Stink Bug spp. Tobacco Budworm <sup>3</sup> Webworm spp. Yellow-striped Armyworm <sup>1</sup> Beet Armyworm <sup>2,3</sup> Lesser Cornstalk Borer <sup>2</sup> Soybean Looper <sup>2,3</sup> Spider Mite spp. <sup>2</sup> • Do not apply within 30 d	0.025-0.03 0.03 ays of harvest.	3.20-3.84 3.84	- Does not include western Flower Thirps.

LETTUCE (HEAD AND LEAF)	Alfalfa Looper Cabbage Looper Cutworm spp. Green Cloverworm Imported Cabbageworm Saltmarsh Caterpillar	0.015-0.025	1.92-3.20	<b>Ground application:</b> Apply in sufficient spray volume to obtain full coverage of the foliage or target area. <b>Air application:</b> Apply in a minimum of 2 gals per acre or sufficient spray volume to obtain full coverage of the foliage or target area.	
	Aphid spp. <sup>2,3</sup> Armyworm Beet Armyworm <sup>1,3</sup> Corn Earworm Diamondback Moth <sup>3</sup> European Corn Borer Fall Armyworm <sup>1</sup> Flea Beetle spp. Grasshopper spp. Japanese Beetle (Adult) Leafhopper spp. Meadow Spittlebug Plant Bug spp. including Lygus spp. <sup>3</sup> Southern Armyworm Spider Mite spp. <sup>2</sup> Stink Bug spp. Tobacco Budworm <sup>3</sup> Vegetable Weevil (Adult) Whitefly spp. <sup>2,3</sup>		2.56-3.84	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. <sup>1</sup> For control of first and second instar only. <sup>2</sup> Suppression only. <sup>3</sup> See resistance statement under <b>PRODUCT INFORMATION.</b>	
	• Do not apply more than 0.3 lb a.i. (2.4 pts) per acre per season.				

ONION (BULB) AND GARLIC	Cutworm spp. Leafminer spp. (Adult) Onion Maggot (Adult) Seedcorn Maggot (Adult)	0.015-0.025	1.92-3.20	<b>Ground application:</b> Apply in sufficient spray volume to obtain full coverage of the foliage or target area. <b>Air application:</b> Apply in a minimum of 2
	Aphid spp. <sup>2</sup> Armyworm spp. <sup>1</sup> Flower Thrips <sup>2,3</sup> Onion Thrips <sup>3</sup> Plant Bug spp. Stink Bug spp. Tobacco Thrips <sup>3</sup> Western Flower Thrips <sup>2,3</sup>	0.02-0.03	2.56-3.84	<ul> <li>gals per acre or sufficient spray volume to obtain full coverage of the foliage or target area.</li> <li>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.</li> <li>Use the higher label rates as thrips population increases and avoid rescue situations.</li> <li>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.</li> <li><sup>1</sup>For control of the first and second instars only.</li> <li><sup>2</sup>Suppression only.</li> <li><sup>3</sup>See resistance statement under <b>PRODUCT INFORMATION.</b></li> </ul>
	Do not apply within 14 d	•		
	Do not apply more than	0.24 lb a.i.(1.92 p	ts) per acre pe	r season.

PEANUT	Cutworm spp. Green Cloverworm Potato Leafhopper Red-necked Peanut Worm Threecornered Alfalfa Hopper Velvetbean Caterpillar Bean Leaf Beetle Corn Earworm Fall Armyworm <sup>1</sup> Grasshopper spp. Southern Corn Rootworm (Adult) Stink Bug spp. Tobacco Thrips Vegetable Weevil Whitefringed Beetle (Adult)	0.015-0.025	1.92-3.20 2.56-3.84	Ground application: Apply in sufficient spray volume to obtain full coverage of the foliage or target area. 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. 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. <sup>1</sup> Use higher rates for large larvae. <sup>2</sup> Suppression only. <sup>3</sup> See resistance statement under PRODUCT INFORMATION.
	Aphid spp. <sup>2</sup> Beet Armyworm <sup>2,3</sup> Lesser Cornstalk Borer <sup>2</sup> Soybean Looper <sup>2,3</sup> Spider Mite spp. <sup>2</sup>	0.03	3.84	
	<ul> <li>Do not apply within 14 d</li> <li>Do not apply more than</li> </ul>	•	t) per acre per	season.

POME FRUITS	Apple Apple	0.02-0.04	2.56-5.12	Cround application. Apply in sufficient
	Apple Aphid	0.02-0.04	2.30-3.12	Ground application: Apply in sufficient
CROP GROUP	Apple Maggot (Adult)			spray volume to obtain full coverage of the
Including:	Cherry Fruit Fly spp.			foliage or target area.
Apple	(Adult)			<b>Air application:</b> Apply in a minimum of 5
Crabapple	Codling Moth			gals per acre or sufficient spray volume to
Loquat	Green Fruitworm			obtain full coverage of the foliage or target
Mayhaw	Japanese Beetle			area.
Oriental Pear	Leafhopper spp.			Make applications when pests appear. If
Pear	Leafroller spp.			needed, make repeat applications after at
Quince	Lesser Appleworm			least 5 or more days. Apply in sufficient
	Omnivorous leafroller			volume to ensure sufficient coverage of
	Orange Tortrix			foliage.
	Oriental Fruit Moth			<sup>1</sup> Suppression only.
	Pear Psylla <sup>1</sup>			
	Pear Sawfly			
	Periodical Cicada			
	Plant Bug spp.			
	Plum Curculio			
	Rosy Apple Aphid			
	San Jose Scale (fruit			
	infestations only)			
	Spirea Aphid <sup>1</sup>			
	Stink Bug spp.			
	Tent Caterpillar spp.			
	Tentiform Leaf Miner spp.			
	Tree Borer spp.			
	Tufted Apple Budworm			
	Webworm spp.			
	Do not apply within 21 d	ays of harvest.	•	
	Do not apply more than		) per acre per v	ear.
	Do not apply more than			
	Senerappi, mere man	0		

STONE FRUITS CROP GROUP Including: Apricot Sweet and Tart Cherry Nectarine Peach Plum Chickasaw Plum Damson Plum Japanese Plum Plumcot Prune	American Plum Borer Apple Maggot (Adult) Black Cherry Aphid Cherry Fruit Fly spp. (Adult) Codling Moth Green Fruitworm Japanese Beetle June Beetle Leafhopper spp. Leafroller spp. Oriental Fruit Moth Peach Twig Borer Peachtree Borer spp. Pear Sawfly Periodical Cicada Plant Bug spp. Plum Curculio Rose Chafer Stink Bug spp. Tent Caterpillar spp. 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. 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. 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 more than	0.2 lb a.i. (1.6 pts)		
	Do not apply more than			
SUGARCANE	Mexican Rice Borer <sup>1</sup> Pygmy Mole Cricket Rice Stalk Borer <sup>1</sup> Sugarcane Aphid <sup>3</sup> Sugarcane Beetle (Adult) <sup>2</sup> Sugarcane Borer <sup>1</sup> Western Indian Cranefly Yellow Sugarcane Aphid <sup>3</sup>	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. 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. 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. <sup>1</sup> For control before the larva bores into the plant stalk. <sup>2</sup> Suppression only of beetles active above ground. <sup>3</sup> See resistance statement under <b>PRODUCT INFORMATION.</b>
	<ul> <li>Do not apply within 21 d</li> <li>Do not apply more than</li> </ul>		nts) per acre pe	er season
		0. 10 ID a.I. (1.20 p	no) per acre pe	1 3C03U11.

SUNFLOWER	Cutworm spp. Sunflower Beetle	0.015-0.025	1.92-3.20	<b>Ground application:</b> Apply in sufficient spray volume to obtain full coverage of the				
	Banded Sunflower Moth	0.02-0.03	2.56-3.84	foliage or target area.				
	Fall Armyworm <sup>1</sup>			<b>Air application:</b> Apply in a minimum of 2				
	Grasshopper spp.			gals per acre or sufficient spray volume to				
	Head-Clipper Weevil			obtain full coverage of the foliage or target				
	(Adult)			area. 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				
	Japanese Beetle (Adult) Leafhopper spp. Meadow Spittlebug Painted Lady (Thistle) Caterpillar							
					foliage.			
						Seed Weevil (Adult)	<sup>1</sup> For control of first and second instar only.	
						Spotted Cabbage Looper		
					Stem Weevil (Adult)			<sup>3</sup> See resistance statement under
	Stink Bug spp.					PRODUCT INFORMATION.		
	Sunflower Maggot (Adult)							
	Sunflower Moth							
	Woollybear Caterpillar							
	Beet Armyworm <sup>2,3</sup>	0.03	3.84	1				
	Spider Mite spp. <sup>2</sup>							
	Do not apply within 45 day	ys of harvest.	•					
		• 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.							
	Do not apply as an ultra-lo							
TOBACCO	Armyworm spp. <sup>1</sup>	0.015-0.03	1.92-3.84	Ground application: Apply in sufficient				
	Blister Beetle spp.			spray volume to obtain full coverage of the				
	Cabbage Looper			foliage or target area.				
	Corn Earworm			<b>Air application:</b> Apply in a minimum of 2				
	Cucumber Beetle spp.			gals per acre or sufficient spray volume to				
	(Adult)			obtain full coverage of the foliage or target				
	Cutworm spp.			obtain full coverage of the foliage or target area.				
	Cutworm spp. Grasshopper spp.			area. Make applications when pests appear. If				
	Cutworm spp. Grasshopper spp. Japanese Beetle (Adult)			area. Make applications when pests appear. If needed, make repeat applications after at				
	Cutworm spp. Grasshopper spp. Japanese Beetle (Adult) Katydid spp.			area. Make applications when pests appear. If needed, make repeat applications after at least 7 or more days. Apply in sufficient				
	Cutworm spp. Grasshopper spp. Japanese Beetle (Adult) Katydid spp. Plant Bug spp. <sup>3</sup>			area. 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				
	Cutworm spp. Grasshopper spp. Japanese Beetle (Adult) Katydid spp. Plant Bug spp. <sup>3</sup> Potato Tuberworm			area. 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.				
	Cutworm spp. Grasshopper spp. Japanese Beetle (Adult) Katydid spp. Plant Bug spp. <sup>3</sup> Potato Tuberworm Salt Marsh Caterpillar			area. 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. <sup>1</sup> For control of first and second instar only.				
	Cutworm spp. Grasshopper spp. Japanese Beetle (Adult) Katydid spp. Plant Bug spp. <sup>3</sup> Potato Tuberworm Salt Marsh Caterpillar Stinkbug spp.			area. 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. <sup>1</sup> For control of first and second instar only. <sup>2</sup> Suppression only.				
	Cutworm spp. Grasshopper spp. Japanese Beetle (Adult) Katydid spp. Plant Bug spp. <sup>3</sup> Potato Tuberworm Salt Marsh Caterpillar Stinkbug spp. Tobacco Aphid spp. <sup>2,3</sup>			area. 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. <sup>1</sup> For control of first and second instar only. <sup>2</sup> Suppression only. <sup>3</sup> See resistance statement under				
	Cutworm spp. Grasshopper spp. Japanese Beetle (Adult) Katydid spp. Plant Bug spp. <sup>3</sup> Potato Tuberworm Salt Marsh Caterpillar Stinkbug spp. Tobacco Aphid spp. <sup>2,3</sup> Tobacco Budworm <sup>2</sup>			area. 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. <sup>1</sup> For control of first and second instar only. <sup>2</sup> Suppression only.				
	Cutworm spp. Grasshopper spp. Japanese Beetle (Adult) Katydid spp. Plant Bug spp. <sup>3</sup> Potato Tuberworm Salt Marsh Caterpillar Stinkbug spp. Tobacco Aphid spp. <sup>2,3</sup> Tobacco Budworm <sup>2</sup> Tobacco Flea Beetle			area. 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. <sup>1</sup> For control of first and second instar only. <sup>2</sup> Suppression only. <sup>3</sup> See resistance statement under				
	Cutworm spp. Grasshopper spp. Japanese Beetle (Adult) Katydid spp. Plant Bug spp. <sup>3</sup> Potato Tuberworm Salt Marsh Caterpillar Stinkbug spp. Tobacco Aphid spp. <sup>2,3</sup> Tobacco Budworm <sup>2</sup> Tobacco Flea Beetle (Adult)			area. 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. <sup>1</sup> For control of first and second instar only. <sup>2</sup> Suppression only. <sup>3</sup> See resistance statement under				
	Cutworm spp. Grasshopper spp. Japanese Beetle (Adult) Katydid spp. Plant Bug spp. <sup>3</sup> Potato Tuberworm Salt Marsh Caterpillar Stinkbug spp. Tobacco Aphid spp. <sup>2,3</sup> Tobacco Budworm <sup>2</sup> Tobacco Flea Beetle (Adult) Tobacco Hornworm			area. 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. <sup>1</sup> For control of first and second instar only. <sup>2</sup> Suppression only. <sup>3</sup> See resistance statement under				
	Cutworm spp. Grasshopper spp. Japanese Beetle (Adult) Katydid spp. Plant Bug spp. <sup>3</sup> Potato Tuberworm Salt Marsh Caterpillar Stinkbug spp. Tobacco Aphid spp. <sup>2,3</sup> Tobacco Budworm <sup>2</sup> Tobacco Flea Beetle (Adult) Tobacco Hornworm Tobacco Thrips spp. <sup>2</sup>			area. 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. <sup>1</sup> For control of first and second instar only. <sup>2</sup> Suppression only. <sup>3</sup> See resistance statement under				
	Cutworm spp. Grasshopper spp. Japanese Beetle (Adult) Katydid spp. Plant Bug spp. <sup>3</sup> Potato Tuberworm Salt Marsh Caterpillar Stinkbug spp. Tobacco Aphid spp. <sup>2,3</sup> Tobacco Budworm <sup>2</sup> Tobacco Flea Beetle (Adult) Tobacco Hornworm Tobacco Thrips spp. <sup>2</sup> Tomato Hornworm			area. 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. <sup>1</sup> For control of first and second instar only. <sup>2</sup> Suppression only. <sup>3</sup> See resistance statement under				
	Cutworm spp. Grasshopper spp. Japanese Beetle (Adult) Katydid spp. Plant Bug spp. <sup>3</sup> Potato Tuberworm Salt Marsh Caterpillar Stinkbug spp. Tobacco Aphid spp. <sup>2,3</sup> Tobacco Budworm <sup>2</sup> Tobacco Flea Beetle (Adult) Tobacco Hornworm Tobacco Thrips spp. <sup>2</sup> Tomato Hornworm Tree Cricket spp.			area. 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. <sup>1</sup> For control of first and second instar only. <sup>2</sup> Suppression only. <sup>3</sup> See resistance statement under				
	Cutworm spp. Grasshopper spp. Japanese Beetle (Adult) Katydid spp. Plant Bug spp. <sup>3</sup> Potato Tuberworm Salt Marsh Caterpillar Stinkbug spp. Tobacco Aphid spp. <sup>2,3</sup> Tobacco Budworm <sup>2</sup> Tobacco Flea Beetle (Adult) Tobacco Hornworm Tobacco Thrips spp. <sup>2</sup> Tomato Hornworm Tree Cricket spp. Vegetable Weevil (Adult)			area. 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. <sup>1</sup> For control of first and second instar only. <sup>2</sup> Suppression only. <sup>3</sup> See resistance statement under				
	Cutworm spp. Grasshopper spp. Japanese Beetle (Adult) Katydid spp. Plant Bug spp. <sup>3</sup> Potato Tuberworm Salt Marsh Caterpillar Stinkbug spp. Tobacco Aphid spp. <sup>2,3</sup> Tobacco Budworm <sup>2</sup> Tobacco Flea Beetle (Adult) Tobacco Hornworm Tobacco Thrips spp. <sup>2</sup> Tomato Hornworm Tree Cricket spp. Vegetable Weevil (Adult) Webworm spp.			area. 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. <sup>1</sup> For control of first and second instar only. <sup>2</sup> Suppression only. <sup>3</sup> See resistance statement under				
	Cutworm spp. Grasshopper spp. Japanese Beetle (Adult) Katydid spp. Plant Bug spp. <sup>3</sup> Potato Tuberworm Salt Marsh Caterpillar Stinkbug spp. Tobacco Aphid spp. <sup>2,3</sup> Tobacco Budworm <sup>2</sup> Tobacco Flea Beetle (Adult) Tobacco Hornworm Tobacco Thrips spp. <sup>2</sup> Tomato Hornworm Tree Cricket spp. Vegetable Weevil (Adult)			area. 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. <sup>1</sup> For control of first and second instar only. <sup>2</sup> Suppression only. <sup>3</sup> See resistance statement under <b>PRODUCT INFORMATION.</b>				

TREE NUTS CROP GROUP Including: Almond Beech Nut Brazil Nut Butternut Cashew Chestnut Chinquapin Filbert (Hazelnut) Hickory Nut Macadamia Nut (Bush Nut) Pistachio Walnut, Black Walnut, English (Persian)	Ants Chinch Bug Codling Moth Filbertworm Leaffooted Bug Leafroller spp. Navel Orangeworm Peach Twig Borer Plant Bug spp. Stink Bug spp. Stink Bug spp. Walnut Aphid Walnut Husk Fly spp. (Adult)	0.02-0.04	2.56-5.12	<b>Ground application:</b> Apply in or sufficient spray volume to obtain full coverage of the foliage or target area. <b>Air application:</b> Apply in a minimum of 5 gals per acre or sufficient spray volume to obtain full coverage of the foliage or target area. 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 Pecan Casebearer spp. Pecan Weevil Pecan Aphid spp. Pecan Spittlebug Stink bug spp. Pecan Phylloxera spp. • Do not apply within 14 c • Do not apply more than • Do not apply more than	0.16 lb a.i. (1.28 µ	/ I I	5
TUBEROUS AND	Do not apply more than     Cutworm spp.	0.015-0.025	1.92-3.20	Ground application: Apply in sufficient
CORM VEGETABLES CROP GROUP Including: Arracacha Arrowroot	Leafhopper spp. Saltmarsh Caterpillar Sweet Potato Hornworm Woolybear Caterpillar spp. Aphid species <sup>1</sup>	0.015-0.025	2.56-3.84	<b>Ground application:</b> Apply in sufficient spray volume to obtain full coverage of the foliage or target area. <b>Air application:</b> Apply in a minimum of 2 gals per acre or sufficient spray volume to obtain full coverage of the foliage or target area.
Artichoke (Chinese and Jerusalem only) Canna (edible) Cassava (bitter and sweet)	Armyworm spp. <sup>1</sup> Blister Beetle spp. Colorado Potato Beetle <sup>1</sup> Corn Earworm Cricket spp. Cucumber Beetle spp.			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.
Chayote (root) Chufa Dasheen Ginger Leren Potato Sweet Potato	(adults) European Corn Borer Flea Beetle spp. (adults) Grasshopper spp. Looper spp. <sup>1</sup> Lygus Bug spp. <sup>1</sup> Plant Bug spp.			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 VC.
Tanier Turmeric Yam (bean and true)	Potato Psyllid Potato Tuberworm Stink Bug spp. Sweet Potato Leaf Beetle (adults) Sweet Potato Vine Borer Thrips spp. <sup>1,2</sup> Tortoise Beetle spp. Webworm spp. Weevil spp. (adults)			<sup>1</sup> See resistance statement under <b>PRODUCT INFORMATION.</b> <sup>2</sup> Does not include Western Flower Thrips. <sup>3</sup> Suppression only.
	Leafminer spp. <sup>1,3</sup> Whitefly spp. <sup>1,3</sup> Spider Mite spp. <sup>3</sup> • Do not apply more than	0.03	3.84	vear per season
	<ul> <li>Do not apply more than</li> <li>Do not apply within 7 date</li> </ul>		or) her acre her	year per season.

CROBS CROWN		0.02 0.56 0.04	Apply with ground or oir aquipment uping	
CROPS GROWN FOR SEED: Dill Carrot* Parsley Parsnip (WA and OR only) (*WA, OR and ID only)	Lygus Bug spp. <sup>1</sup> 0.02-0	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. 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. Do not apply directly to bee shelters/hives. It may be advisable to remove bee shelters/hives during and for 2- 3 days following application. If used as a prebloom spray it is not advisable to use during bloom to reduce potential for the development of insecticide resistance.	
			'See resistance statement under RESISTANCE.	
	Do not apply more than 0.12 lb a	i (0.96 pints) per acre p		
	Do not apply this product through     RESTRICTIONS			
	<ul> <li>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.</li> <li>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.</li> <li>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.</li> <li>Carrot, parsley, parsnip and dill seed may not be distributed for human consumption or animal feed.</li> </ul>			

### USE DIRECTIONS OTHER USES

CROP	TARGET PESTS	RATE		REMARKS	
UNUF		lb a.i./A	fl oz/A		
CONIFER AND DECIDUOUS TREES: Plantations and Nurseries	Bagworm Balsam Twig Aphid Birch Leafminer Black Pine Weevil Elm Leaf Beetle European Elm Bark Beetle Gypsy Moth Japanese Beetle June Beetle spp. Leaf Beetle spp. Leaf Beetle spp. Leafroller spp. May Beetle spp. May Beetle spp. May Beetle spp. Mealybug spp. <sup>1</sup> Pales Weevil Pine Chafer Pine Colaspis Beetle Pine Conelet Bug Pine Leaf Chermid Balsam Wooly Aphid Pine Needle Scale Pine Sawfly spp. Pine Tip Moth spp. Pine Tip Moth spp. Pine Tortoise Scale Pine Weevil spp. Poplar Aphid spp. Spruce Budworm Tent Caterpillar spp. Tussock Moth spp. 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. 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. Make applications when pests appear. Apply in sufficient volume to ensure sufficient coverage of foliage. To control exposed foliage, flower, cone, seed, and bark feeding insects, apply as required by scouting. <sup>1</sup> Suppression only.	
	Do not apply more than				
CONIFER AND DECIDUOUS TREES: Seed Orchards	Coneworm spp. Seed Bug spp. 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. For low volume sprayers, dilute 20 fl oz per 100 gals of water and apply 100 gals of finished spray per acre. For aerial applications, apply 15 fl oz/A in a minimum of 10 gals finished spray per acre.	
	Do not apply more than	, .			
NON- CROPLAND (Excluding Public Land)	See specific agricultural crop listing on this Paradigm VC 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.	
	<ul> <li>Do not graze livestock in</li> </ul>		c per year.		

RATE CONVERSION CHART				
Lb a.i./A	FI Oz/A	Pints/A	Treated Acres/ Gallon of product	
0.015	1.92	0.12	66	
0.02	2.56	0.16	50	
0.025	3.20	0.20	40	
0.03	3.84	0.24	33	
0.04	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 lambdacyhalothrin 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.

# FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident, call CHEMTREC 1-800-424-9300

#### 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 PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE. UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE MANNER OF USE OR APPLICATION, INCLUDING WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF MANUFACTURER OR SELLER AND ASSUMED BY BUYER OR USER. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN BUYER, MANUFACTURER AND SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS.

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