

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (H7505C)
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

EPA Reg. Number: 59639-160

Term of Issuance:

Conditional

Date of Issuance:

SEP 0 9 2008

NOTICE OF PESTICIDE:

X Registration Reregistration Pyriproxyfen 0.86 EC Ag

Name of Pesticide Product:

(Under FIFRA as amended)

Name and Address of Registrant (include ZIP Code):

Valent U.S.A Corp.

1600 Riviera Avenue, Suite 200

Walnut Creek, CA 94596-8025

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce all any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) provided:

- 1. You will submit and/or cite all data required for registration/reregistration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product under FIFRA section 4.
- 2. Make the following label changes before you release the product for shipment:
- a) Revise the EPA Registration Number to read "EPA Reg. No. 59639-160".
- b) Precautionary Statements:
 - i. Change to read: Harmful if absorbed through skin. Harmful if swallowed. Avoid contact with skin, eyes or clothing. Causes moderate eye irritation. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Wear long-sleeved shirt and long pants, socks, shoes, and chemical resistant gloves (such as barrier laminate or butyl rubber ≥ 14 mils; selection category D on an EPA chemical resistance category selection chart.) Remove and wash contaminated clothing before reuse.

Signature of Approving Official:	Seenext	pose	Date:	
Richard Gebken, Product Manag	ger (10), RD/IB (750)	5P)		

- ii. Change the order of First Aid statements. List "If on skin or clothing" before "If swallowed".
- iii. Remove the word 'further' from the First Aid statements.
- c) Personal Protective Equipment (PPE)
 - i. Add: "Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them."
- d) Directions for Use:
 - i. Change 'Pyriproxyfen' to read '"Pyriproxyfen 0.86 EC Ag" throughout the directions for use wherever the reference is intended to be product specific and should not infer a reference to the active ingredient only. This is consistent with Valent's approach to labeling other pyriproxyfen products including the cited product EPA Reg. No. 59639-95.
 - ii. Fruiting vegetables on page 15. Change "Monitor 4" to "Monitor 4 Spray" wherever it appears in this section of the label.
- 3. The basic Confidential Statement of Formula (CSF) dated January 28, 2008 is acceptable and is the basic CSF of record.
- 4. You must generate a one year storage stability (830.6317) and corrosion characteristics (830.6320) data on the proposed product. Observations must be made at 0, 3, 6, 9, and 12 month intervals. The results must be submitted to the Agency in electronic and hard copy formats.

Submit three (3) copies of your final printed labeling before releasing the product for shipment. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product bearing amended labeling constitutes acceptance of these conditions.

A stamped copy of the label and copies of the data evaluation reviews are enclosed for your records. Please contact Kevin Sweeney, at (703) 305-5063 if you have any questions. Thank you for your cooperation in this matter.

Sincerely,

Richard Gebken

Product Manager 10 Insecticide Branch

Registration Division (7505P)

Enclosure



PYRIPROXYFEN 0.86 EC Ag

INSECT GROWTH REGULATOR

Active Ingredient	 		, By Wt.
*Pyriproxyfen	 	• • • • • • • • • • • • • • • • • • • •	11.23%
Other Ingredients	 	• • • • • • • • • • • • • • • • • • • •	88.77%
Total			
*(2-[1-methyl-2-(4-phenoxyphenoxy)ethoxy]pyridine)			
7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 -			

Contains 0.86 pound ai per gallon.

Under the Franchi Insecticide, Fungicide, and Rodenticide Act, as amended, for the posticide registered under EPA Reg. No.

KEEP OUT OF REACH OF CHILDREN

CAUTION

SEE NEXT PAGE FOR ADDITIONAL PRECAUTIONARY STATEMENTS

N	ET	W	/EI	GH	IT	

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS & DOMESTIC ANIMALS CAUTION

Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes or clothing. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling.

FIRST AID

If swallowed:

- Call poison control center or doctor immediately for treatment advice.
- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to do so by the poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

If on skin or clothing:

- · Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for further treatment advice.

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 by 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 **800-892-0099** for emergency medical treatment information.

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 D 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 or Butyl Rubber ≥ 14 mils, shoes plus socks.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

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 toxic to fish and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water by disposing of equipment washwaters or rinsate. Avoid direct application and/or spray drift to bee hives.

DIRECTIONS FOR USE

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

READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS, AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.

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 12 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 Barrier Laminate or Butyl Rubber ≥ 14 mils, shoes plus socks.

DISCLAIMER, RISKS OF USING THIS PRODUCT, LIMITED WARRANTY AND LIMITATION OF LIABILITY

IMPORTANT: Read the entire Label including this Disclaimer, Risks of Using this Product, Limited Warranty, and Limitation of Liability before using this product. If the terms are not acceptable THEN DO NOT USE THE PRODUCT; rather, return the unopened product within 15 days of purchase for a refund of the purchase price.

RISKS OF USING THIS PRODUCT

The Buyer and User (referred to collectively herein as "Buyer") of this product should be aware that there are inherent unintended risks associated with the use of this product which are impossible to eliminate. These risks include, but are not limited to, injury to plants and crops to which this product is applied, lack of control of the target pests or weeds, resistance of the target pest or weeds to this product, injury caused by drift, and injury to rotational crops caused by carryover in the soil. Such risks of crop injury, non-performance, resistance or other unintended consequences are unavoidable and may result because of such factors as weather, soil conditions, disease, moisture conditions, irrigation practices, condition of the crop at the time of application, presence of other materials either applied in the tank mix with this product or prior to application of this product, cultural practices or the manner of use or application, (or a combination of such factors) all of which are factors beyond the control of Valent. The Buyer should be aware that these inherent unintended risks may reduce the harvested yield of the crop in all or a portion of the treated acreage, or otherwise affect the crop such that additional care, treatment and expense are required to take the crop to harvest. If the Buyer chooses not to accept these risks, THEN THIS PRODUCT SHOULD NOT BE APPLIED. By applying this product Buyer acknowledges and accepts these inherent unintended risks AND TO THE FULLEST EXTENT ALLOWED BY LAW. AGREES THAT ALL SUCH RISKS ASSOCIATED WITH THE APPLICATION AND USE ARE ASSUMED BY THE BUYER.

Valent shall not be responsible for losses or damages (including, but not limited to, loss of yield, increased expenses of farming the crop or such incidental, consequential or special damages that may be claimed) resulting from use of this product in any manner not set forth on the label. Buyer assumes all risks associated with the use of this product in any manner or under conditions not specifically directed or approved on the label.

LIMITED WARRANTY

Valent warrants only that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the label, under average use conditions, when used strictly in accordance with the label and subject to the Risks of Using This Product as described above. To the extent consistent with applicable law AND AS SET FORTH ABOVE, VALENT MAKES NO OTHER WARRANTIES, EITHER EXPRESSED OR IMPLIED. No agent or representative of Valent or Seller is authorized to make or create any other express or implied warranty.

LIMITATION OF LIABILITY

To the fullest extent allowed by law, Valent or Seller is not liable for any incidental, consequential, indirect or special damages resulting from the use or handling of this product. The limitation includes, but is not limited to, loss of yield on all or any portion of the treated acreage, increased care, treatment or other expenses required to take the crop to harvest, increased finance charges or altered finance ratings, emotional or mental distress and/or exemplary damages. TO THE FULLEST EXTENT ALLOWED BY LAW, THE EXCLUSIVE REMEDY OF THE BUYER, AND THE EXCLUSIVE MAXIMUM LIABILITY OF VALENT OR SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT SHALL BE THE RETURN OF THE PURCHASE PRICE OF THIS PRODUCT.

PROMPT NOTICE OF CLAIM

To the extent consistent with applicable law allowing such requirements, Valent must be provided notice as soon as Buyer has reason to believe it may have a claim, but in no event later than twenty-one days from date of planting, or twenty-one days from the date of application, whichever is latter, so that an immediate inspection of the affected property and growing crops can be made.

To the extent consistent with applicable law, if Buyer does not notify Valent of any claims, in such period, it shall be barred from obtaining any remedy.

NO AMENDMENTS

Valent and Seller offer this product, and Buyer accepts it, subject to the foregoing **Disclaimer**, **Risks of Using This Product**, **Limited Warranty** and **Limitation of Liability**, which may not be modified by any oral or written agreement.

TANK MIXES

NOTICE: Tank mixing or use of this product with any other product which is not specifically and expressly authorized by the label shall be the exclusive risk of user, applicator and/or application advisor, to the extent consistent with applicable law.

Read and follow the entire label of each product to be used in the tank mix with this product.

RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management purposes, Pyriproxyfen 0.86 EC Ag Insect Growth Regulator is a Group 7C insecticide. Any insect population may contain individuals naturally resistant to Pyriproxyfen and other Group 7C insecticides. The resistant individuals dominate the insect population if these insecticides are used repeatedly. These resistant insects may not be controlled by Pyriproxyfen or other Group 7C insecticides, although local experts should be consulted for local resistance recommendations. The classification scheme is based on mode of action. It is recognized that resistance of insects and mites to insecticides and acaricides can also result from enhanced metabolism, reduced penetration or behavioral changes that are not linked to any site of action classification but are specific for individual chemicals or chemical groupings. Despite this, alternation of compounds from different chemical classes remains a viable management technique.

To delay insecticide resistance

- Avoid exclusive repeated use of insecticides from the same chemical subgroup.
- Integrate other control methods (chemical, cultural, biological) into insect control programs.

For further information contact your local distributor.

GENERAL INFORMATION

Do not apply this product through any type of irrigation system.

Pyriproxyfen Insect Growth Regulator is intended for use in Insect Pest Management (IPM) or Insect Resistance Management (IRM) programs. Pyriproxyfen will not control insect adults, and it is recommended to be used in combination and/or rotation with other IPM or IRM materials. Contact your local state extension service for details.

Pyriproxyfen acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. Pyriproxyfen has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since Pyriproxyfen is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

BANANA AND PLANTAIN

GENERAL: Pyriproxyfen Insect Growth Regulator acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. Pyriproxyfen has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since Pyriproxyfen is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

Pyriproxyfen does exhibit translaminar movement which means that Pyriproxyfen applied to the upper surfaces of the leaves will move to the lower surface of the leaf. This translaminar movement is very important to chemical control of whitefly since one of the major obstacles is getting the product to the underside of the leaves where whitefly are present.

CROPS	PESTS	PRODUCT RATES PER ACRE	SPECIAL INSTRUCTIONS			
Banana Plantain	Banded Wing Whitefly Greenhouse Whitefly Silverleaf Whitefly Sweetpotato Whitefly	13 to 16 fl oz	Apply with air or ground equipment in adequate water for uniform coverage: By Air:			
			HIGHER WATER VOLUMES MAY PROVIDE IMPROVED INSECT CONTROL.			
			Begin applications when whiteflies reach threshold levels per University/Extension recommendations (e.g. 3 to 5 adults per leaf and/or equivalent levels of immatures).			
			Only whole fields should be treated.			
	Pyriproxyfen may be mixed and/or alternated with commonly used insecticides to comply with local Integrated Pest Management (IPM) and Insect Resistance Management (IRM) programs.					
	 Do not apply within 14 days of harvest. Do not make more than 3 Pyriproxyfen applications per growing season. Do not exceed 48 fl oz of Pyriproxyfen per acre per season. Regardless of formulation do not exceed 0.327 lb. Pyriproxyfen per acre per season. Do not apply earlier than 14 days after last Pyriproxyfen treatment. Do not plant any crop other than those with registered Pyriproxyfen uses in treated areas sooner than 30 days after the last application. 					

MANAGING INSECT RESISTANCE: Repeated use of the same class of insecticides or insecticides with similar modes of action can lead to the buildup of resistant whitefly strains. To optimize resistance management practices, Valent U.S.A. Corporation is restricting Pyriproxyfen Insect Growth Regulator to three applications per growing season. Pyriproxyfen may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Valent also does not recommend using rates below 13 fl oz per acre for whitefly control because reduced rates can lead to a greater potential for resistance development. Follow local, state and federal IPM and IRM recommendations. Read and follow all product labels before applying any insecticide.

BERRIES

GENERAL: Pyriproxyfen Insect Growth Regulator acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. Pyriproxyfen has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since Pyriproxyfen is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

CROPS	PESTS	PRODUCT RATE	SPECIAL INSTRUCTIONS
		PER ACRE	· .
Berries:	Cherry Fruitworm	16 fl oz	Apply with ground or air equipment as
Bingleberry	Cranberry		a full coverage spray (minimum of
Blackberry including	Fruitworm		5 gals/A by air or 50 gals/A by
Bingleberry	Lecanium Scale	,	ground). Thorough coverage is critical
Black Satin Berry			for adequate control. It is essential to
Boysenberry			use adequate water volume to ensure
Cherokee Blackberry			thorough coverage.
Chesterberry			,
Cheyenne Blackberry			Fruitworms: Apply when egg laying
Coryberry			begins and again at petal fall.
Darrowberry			Additional applications of another
Dewberry	•		insecticide, at 10 – 14 day intervals,
Dirksen thornless berry			may be needed under high population
Himalayaberry			pressure or sustained moth flight.
Hullberry			
Lavacaberry		10	Lecanium Scale: Apply at either
Lowberry			dormant, delayed dormant or an in-
Lucretiaberry			season cover spray. At dormant or
Mommoth Blackberry			delayed dormant use a spray oil at the
Marionberry			manufacturer's recommended oil rate.
Nectorberry	,	ı	In a cover spray make applications
Olallieberry			when scale crawlers first emerge.
Oregon Evergreen Berry	,		Follow local recommendations
Phenomenalberry			regarding in-season use and rates of
Rangeberry	,		oil in your area.
Ravenberry			ated with commonly used insecticides
Rossberry			agement (IPM) and Insect Resistance
Shawnee Blackberry	Management (IRM) p	rograms.	
Youngberry			
Blueberry		n 7 days of harvest	
Currant			en applications per growing season.
Elderberry			n per acre per season.
Gooseberry			er last Pyriproxyfen treatment.
Huckleberry	 Regardless of form 	mulation do not exc	eed 0.218 lb Pyriproxyfen per acre per
Juneberry	season.		
Lingonberry			
Loganberry	· ,		
Raspberry, (black and red)			
Salal	<u> </u>		

MANAGING INSECT RESISTANCE: Repeated use of the same class of insecticides with similar modes of action can lead to the buildup of resistant insect strains. To optimize resistance management practices, Valent U.S.A. Corporation is restricting Pyriproxyfen Insect Growth Regulator to two applications per growing season. Pyriproxyfen may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Follow local, state and federal IPM and IRM recommendations. Read and follow all product labels before applying any insecticide.

BRASSICA LEAFY VEGETABLES

GENERAL: Pyriproxyfen Insect Growth Regulator acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. Pyriproxyfen has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since Pyriproxyfen is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

Pyriproxyfen does exhibit translaminar movement which means that Pyriproxyfen applied to the upper surfaces of the leaves will move to the lower surface of the leaf. This translaminar movement is very important to chemical control of whitefly since one of the major obstacles is getting the product to the underside of the leaves where whitefly are present.

CROPS	PESTS	PRODUCT RATES PER ACRE	SPECIAL INSTRUCTIONS	
Brassica Leafy	Banded Wing Whitefly	8 to 10 fl oz	Apply with ground equipment	
Vegetables:	Greenhouse Whitefly		in adequate water for uniform	
Broccoli	Silverleaf Whitefly		coverage (10 to 50 gals/A).	
Broccoli Raab (rapini)	Sweetpotato Whitefly	•		
Brussels Sprouts		1	HIGHER WATER VOLUMES	
Cabbage	1		MAY PROVIDE IMPROVED	
Cauliflower			INSECT CONTROL.	
Cavalo Broccolo		٠.		
Chinese Broccoli (gai lon)			Begin applications when	
Chinese Cabbage			whiteflies reach threshold	
(bok choy and napa)			levels per University/Extension	
Chinese Mustard (gai			recommendations (e.g. 3 to	
choy)		_	5 adults per leaf and/or	
Collards			equivalent levels of	
Kale			immatures).	
Kohlrabi				
Mizuna Mustard Greens			Under severe pressure, use	
l l			the higher recommended	
Mustard Spinach			rates.	
Rape Greens	·			
Turnip Greens	,		Only whole fields should be	
,	<u>-</u>		treated.	
	 Do not apply within 7 			
			cations per growing season.	
	Do not exceed 20 fl oz Pyriproxyfen per acre per season.			
	Do not apply earlier than 14 days after last Pyriproxyfen treatment.			
		ation do not exceed 0.1	34 lb Pyriproxyfen per acre per	
	season.			
·			egistered Pyriproxyfen uses in	
	treated areas sooner	than 30 days after the l	ast application.	

MANAGING WHITEFLY RESISTANCE: Repeated use of the same class of insecticides with similar modes of action can lead to the buildup of resistant whitefly strains. To optimize resistance management practices, Valent U.S.A. Corporation is restricting Pyriproxyfen Insect Growth Regulator to two applications per growing season. Pyriproxyfen may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Valent also does not recommend using rates below 8 fl oz/A for whitefly control because reduced rates can lead to a greater potential for resistance development. Follow local, state and federal Integrated Pest Management (IPM) and Insect Resistance Management (IRM) recommendations. Read and follow all product labels before applying any insecticide.

BULB VEGETABLES

GENERAL: Pyriproxyfen Insect Growth Regulator acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. Pyriproxyfen has no activity on adult insects; but hatching of eggs laid by treated adults will be suppressed. Since Pyriproxyfen is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

CROPS	PESTS	PRODUCT RATES PER ACRE	SPECIAL INSTRUCTIONS
Bulb Vegetables: Garlic Garlic, Great Headed Leek Onion, Dry Bulb Onion, Green Onion, Welsh Shallot	Onion Thrips	8 fl oz	FOR SUPPRESSION OF ONION THRIPS: Apply with ground equipment in adequate water for uniform coverage (20 to 50 gals/A). Begin applications when thrips reach threshold levels per University/Extension. Thorough coverage is critical for adequate water volume to ensure thorough coverage.
	 Do not make Do not excee Do not apply Regardless o season. Do not plant a 	d 16 fl oz of Pyriproxyfer earlier than 14 days afte f formulation do not exce	en applications per growing season. In per acre per season. It last Pyriproxyfen treatment. It last Pyriproxyfen per acre per It with registered Pyriproxyfen uses in

MANAGING INSECT RESISTANCE: Repeated use of the same class of insecticides with similar modes of action can lead to the buildup of resistant insect strains. To optimize resistance management practices, Valent U.S.A. Corporation is restricting Pyriproxyfen Insect Growth Regulator to two applications per growing season. Pyriproxyfen may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Follow local, state and federal Integrated Pest Management (IPM) and Insect Resistance Management (IRM) recommendations. Read and follow all product labels before applying any insecticide.

COTTON

GENERAL: Pyriproxyfen Insect Growth Regulator acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. Pyriproxyfen has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since Pyriproxyfen is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

Pyriproxyfen does exhibit translaminar movement which means that Pyriproxyfen applied to the upper surfaces of the leaves will move to the lower surface of the leaf. This translaminar movement is very important to chemical control of whitefly since one of the major obstacles is getting the product to the underside of the leaves where whitefly are present.

CROP	PESTS	PRODUCT RATE PER ACRE	SPECIAL INSTRUCTIONS
Cotton	Banded Wing Whitefly Greenhouse Whitefly Silverleaf Whitefly	8 to 10 fl oz	Apply with air or ground equipment in adequate water for uniform coverage:
	Sweetpotato Whitefly	Do not apply less than 8 fl oz/A	By Air: 3 to 10 gals/A By Ground:10 to 50 gals/A
			HIGHER WATER VOLUMES MAY PROVIDE IMPROVED INSECT CONTROL.
			Make only one application per growing season.
			Begin application when whiteflies reach threshold levels per University/Extension recommendations (e.g. 3 to 5 adults per leaf and/or equivalent levels of immatures).
			Under severe pressure, use the higher recommended rates.
}			Only whole fields should be treated.
	 Do not exceed 10 fl oz i 	n 1 Pyriproxyfen application per Pyriproxyfen per acre per seas	growing season. on.
			Pyriproxyfen uses in treated areas

MANAGING WHITEFLY RESISTANCE: Repeated use of the same class of insecticides with similar modes of action can lead to the buildup of resistant whitefly strains. To optimize resistance management practices, Valent U.S.A. Corporation is restricting Pyriproxyfen Insect Growth Regulator to one application per growing season. Pyriproxyfen Insect Growth Regulator may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Valent also does not recommend using rates below 8 fl oz per acre for whitefly control because reduced rates can lead to a greater potential for resistance development. Follow local, state and federal Integrated Pest Management (IPM) and Insect Resistance Management (IRM) recommendations. Read and follow all product labels before applying any insecticide.

CITRUS (Including Ugli Fruit and White Sapote)

GENERAL: Pyriproxyfen Insect Growth Regulator acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. Pyriproxyfen has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since Pyriproxyfen is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

CROP	PESTS	PRODUCT RATES PER ACRE	SPECIAL INSTRUCTIONS
Citrus Ugli Fruit White Sapote	Black Scale Brown Soft Scale California Red Scale Florida Red Scale Snow Scale	16 fl oz	Apply with ground equipment in 200 to 1500 gals/A. Apply in sufficient water volume for tree size. Thorough coverage is critical for control. It is essential to use adequate water volume to ensure thorough coverage.
			Apply anytime prior to fruit becoming infested when scale is in the crawler stage. Application at the 2 nd or 3 rd generation of scale may result in excessive dead scale remaining on the fruit at harvest. Thorough coverage is essential for good control.
			Pyriproxyfen may be applied with superior spray oils at 1/2 to 1%. Follow the manufacturer's directions and recommendations on timing and rates.
			NOTE: For scale apply only one application during emergence of scale crawlers per calendar year.
	Citrus Black Fly Citrus Leafminer Citrus Whitefly	10 fl oz	Apply with ground application in 200 to 1500 gals/A. Apply in sufficient water volume for tree size. Thorough coverage is critical for control. It is essential to use adequate water volume to ensure thorough coverage.
	·		Apply when pests are just beginning to build and before infestation has occurred. Thorough coverage is essential for good control.
			with commonly used insecticides to comply with Insect Resistance Management (IRM)
	Do not exceed 26 fDo not apply earlie	than 2 Pyriproxyfen app il oz of Pyriproxyfen per r than 21 days after last	plications per growing season. acre per season. Pyriproxyfen treatment. 134 lb Pyriproxyfen per acre per season.

continued

CITRUS (continued)

MANAGING INSECT RESISTANCE: Repeated use of the same class of insecticides with similar modes of action can lead to the buildup of resistant insect strains. To optimize resistance management practices, Valent U.S.A. Corporation is restricting Pyriproxyfen Insect Growth Regulator to two applications per growing season. Pyriproxyfen may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Follow local, state, and federal IPM and IRM recommendations. Read and follow all product labels before applying any insecticide.

CRANBERRY

GENERAL: Pyriproxyfen Insect Growth Regulator acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. Pyriproxyfen has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since Pyriproxyfen is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

CROP	PESTS	PRODUCT RATES PER ACRE	SPECIAL INSTRUCTIONS			
Cranberry	Cherry Fruitworm Cranberry Fruitworm Lecanium Scale	16 fl oz	Apply with ground or air equipment as a full coverage spray (minimum of 5 gals/A by air or at least 20 gals/A by ground). Thorough coverage is critical for adequate control. It is essential to use adequate water volume to ensure thorough coverage.			
			Fruitworms: Apply when egg laying begins and again at petal fall. Additional applications of another insecticide, at 10 to 14 day intervals, may be needed under high population pressure or sustained moth flight.			
			Lecanium Scale: Apply at either dormant, delayed dormant or an in-season cover spray. At dormant or delayed dormant use a spray oil at the manufacturer's recommended oil rate. In a cover spray make applications when scale crawlers first emerge. Follow local recommendations regarding in-season use and rates of oil in your area.			
	Pyriproxyfen may be mixed and/or alternated with commonly used insecticides to comply with local Integrated Pest Management (IPM) and Insect Resistance Management (IRM) programs.					
	 Do not apply within 7 days of harvest. Do not make more than 2 Pyriproxyfen applications per growing season. Do not exceed 32 fl oz of Pyriproxyfen per acre per season. Do not apply earlier than 14 days after last Pyriproxyfen treatment. Regardless of formulation do not exceed 0.218 lb Pyriproxyfen per acre per season. 					

MANAGING INSECT RESISTANCE: Repeated use of the same class of insecticides with similar modes of action can lead to the buildup of resistant insect strains. To optimize resistance management practices, Valent U.S.A. Corporation is restricting Pyriproxyfen Insect Growth Regulator to two applications per growing season. Pyriproxyfen may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Follow local, state and federal IPM and IRM recommendations. Read and follow all product labels before applying any insecticide.

CUCURBITS

GENERAL: Pyriproxyfen Insect Growth Regulator acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. Pyriproxyfen has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since Pyriproxyfen is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

Pyriproxyfen does exhibit translaminar movement which means that Pyriproxyfen applied to the upper surfaces of the leaves will move to the lower surface of the leaf. This translaminar movement is very important to chemical control of whitefly since one of the major obstacles is getting the product to the underside of the leaves where whitefly are present.

CROPS	PESTS	PRODUCT RATES PER ACRE	SPECIAL INSTRUCTIONS		
Cucurbits: Balsam Apple Balsam Pear	Banded Wing Whitefly Greenhouse Whitefly Silverleaf Whitefly	8 to 10 fl oz	Apply with air or ground equipment in adequate water for uniform coverage:		
Bitter Melon Cantaloupe Chayote	Sweetpotato Whitefly	Do not apply less than 8 fl oz/A	By Air:		
Chinese Cucumber Chinese Waxgourd Citron Melon Cucumber			HIGHER WATER VOLUMES PROVIDE IMPROVED INSECT CONTROL.		
Edible Gourd Gherkin <i>Momordica</i> spp. Muskmelon			Begin application when whiteflies reach threshold levels per University/Extension recommendations (e.g. 3 to 5 adults		
Pumpkin Summer Squash Watermelon			per leaf and/or equivalent levels of immatures):		
Winter Squash			Under severe pressure, use the higher recommended rates.		
			Only whole fields should be treated.		
	 Do not apply within 7 				
	 Do not make more than 2 Pyriproxyfen applications per growing season. Do not exceed 20 fl oz Pyriproxyfen per acre per season. Do not apply earlier than 14 days after last Pyriproxyfen treatment. 				
-			yriproxyren treatment. 34 lb Pyriproxyfen per acre per		
	season.	ation do not exceed 0. I	or io i yripi oxyreii pei acie pei		
,			egistered Pyriproxyfen uses in		
L	treated areas sooner	than 30 days after the I	ast application.		

MANAGING WHITEFLY RESISTANCE: Repeated use of the same class of insecticides or insecticides with similar modes of action can lead to the buildup of resistant whitefly strains. To optimize resistance management practices, Valent U.S.A. Corporation is restricting Pyriproxyfen Insect Growth Regulator to two applications per growing season. Pyriproxyfen may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Valent also does not recommend using rates below 8 fl oz per acre for whitefly control because reduced rates can lead to a greater potential for resistance development. Follow local, state and federal Integrated Pest Management (IPM) and Insect Resistance Management (IRM) recommendations. Read and follow all product labels before applying any insecticide.

FRUITING VEGETABLES

GENERAL: Pyriproxyfen Insect Growth Regulator acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. Pyriproxyfen has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since Pyriproxyfen is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

Pyriproxyfen does exhibit translaminar movement which means that Pyriproxyfen applied to the upper surfaces of the leaves will move to the lower surface of the leaf. This translaminar movement is very important to chemical control of whitefly since one of the major obstacles is getting the product to the underside of the leaves where whitefly are present.

Fruiting Vegetables: Eggplant Ground Cherry Okra Pepino Pepper Tomatillo Tomato Banded Wing Whitefly Silverleaf Whitefly Soweetpotato Whitefly Tomatillo Tomato Banded Wing Whitefly Silverleaf Whitefly Soweetpotato Whitefly Soweetpotato Whitefly Soweetpotato Whitefly Soweetpotato Pepper Tomatillo Tomato Banded Wing Whitefly Cabbage Looper Green Peach Aphid Greenhouse Whitefly (immatures & adults) Silverleaf Whitefly Orthene 97 Sorten and Sorten	
Eggplant Ground Cherry Okra Pepino Pepino Tomatillo Tomato Greenhouse Whitefly Silverleaf Whitefly Sweetpotato Tomatillo Tomato Greenhouse Whitefly Silverleaf Whitefly Sweetpotato Whitefly Tomatillo Tomato Greenhouse Whitefly Cabbage Looper Green Peach Aphid Aphid Greenhouse Whitefly (immatures & adults) Silverleaf Whitefly Orthene 97 Green Whitefly Orthene 97 Do not apply less than 8 fl oz/A of Pyriproxyfen when used as a stand alone application. By Air:	
Ground Cherry Okra Pepino Pepper Tomatillo Tomato Whitefly Silverleaf Whitefly Sweetpotato Shepping Annual Section Segin application when whiteflies reach threshold levels per University/Extension recommended rates. Only whole fields should be treated. Apply as a tank mix with ground equipme for uniform coverage (25 to 150 gals/A by ground). Make application when eggs or insects first appear. If control is needed during this period use an alternate insection registered for the target pest. Pyriproxyfen may also be mixed or alternate with commonly used insecticides to comp with local IPM programs.	
Okra Pepino Pepper Tomatillo Tomato Silverleaf Whitefly Sweetpotato Salpha Sal	
Pepino Pepper Tomatillo Tomato Sweetpotato Whitefly Whitefly Banded Wing Whitefly Cabbage Looper Green Peach Aphid Greenhouse Whitefly (immatures & adults) Silverleaf Whitefly Sweetpotato Whitefly Corthene 97 Sweetpotato Whitefly Corthene 97 Whitefly Corthene 97 Whitefly Corthene 97 Whitefly Corthene 97 Sweetpotato Whitefly Used as a stand alone application. HIGHER WATER VOLUMES PROVIDE IMPROVED INSECT CONTROL. Begin application when whiteflies reach threshold levels per University/Extension recommendations (e.g. 3 to 5 adults per I and/or equivalent levels of immatures). U severe pressure, use the higher recommended rates. Only whole fields should be treated. Apply as a tank mix with ground equipme for uniform coverage (25 to 150 gals/A by ground). Make application when eggs or insects first appear. If control is needed during this period use an alternate insection registered for the target pest. Pyriproxyfen may also be mixed or alternate with commonly used insecticides to composite to composite the common of the common	
Pepper Tomatillo Tomato Whitefly alone application. Begin application when whiteflies reach threshold levels per University/Extension recommendations (e.g. 3 to 5 adults per land/or equivalent levels of immatures). Usevere pressure, use the higher recommended rates. Only whole fields should be treated. Apply as a tank mix with ground equipme for uniform coverage (25 to 150 gals/A by ground). Make application when eggs or insects first appear. If control is needed during this period use an alternate insection registered for the target pest. Whitefly (immatures & adults) Silverleaf Whitefly Orthene 97 IMPROVED INSECT CONTROL. Begin application when whiteflies reach threshold levels per University/Extension recommendations (e.g. 3 to 5 adults per land/or equivalent levels of immatures). Usevere pressure, use the higher recommended rates. Only whole fields should be treated. Apply as a tank mix with ground equipme for uniform coverage (25 to 150 gals/A by ground). Make application when eggs or insects first appear. If control is needed during this period use an alternate insection registered for the target pest. Pyriproxyfen may also be mixed or alternate with commonly used insecticides to comp with local IPM programs.	
Tomatillo Tomato Begin application when whiteflies reach threshold levels per University/Extension recommendations (e.g. 3 to 5 adults per land/or equivalent levels of immatures). Usevere pressure, use the higher recommended rates. Only whole fields should be treated. Banded Wing Whitefly Cabbage Looper Green Peach Aphid Orthene® 75 S Greenhouse Whitefly (immatures & adults) Silverleaf Whitefly Orthene 97 Begin application when whiteflies reach threshold levels per University/Extension recommendations (e.g. 3 to 5 adults per land/or equivalent levels of immatures). Usevere pressure, use the higher recommended rates. Only whole fields should be treated. Apply as a tank mix with ground equipme for uniform coverage (25 to 150 gals/A by ground). Make application when eggs or insects first appear. If control is needed during this period use an alternate insection registered for the target pest. Pyriproxyfen may also be mixed or alternate with commonly used insecticides to composite with local IPM programs.	
Tomatillo Tomato Begin application when whiteflies reach threshold levels per University/Extension recommendations (e.g. 3 to 5 adults per land/or equivalent levels of immatures). Usevere pressure, use the higher recommended rates. Only whole fields should be treated. Banded Wing Whitefly Cabbage Looper Green Peach Aphid Orthene® 75 S Greenhouse Whitefly (immatures & adults) Silverleaf Whitefly Orthene 97 Begin application when whiteflies reach threshold levels per University/Extension recommendations (e.g. 3 to 5 adults per land/or equivalent levels of immatures). Usevere pressure, use the higher recommended rates. Only whole fields should be treated. Apply as a tank mix with ground equipme for uniform coverage (25 to 150 gals/A by ground). Make application when eggs or insects first appear. If control is needed during this period use an alternate insection registered for the target pest. Pyriproxyfen may also be mixed or alternate with commonly used insecticides to composite with local IPM programs.	
threshold levels per University/Extension recommendations (e.g. 3 to 5 adults per land/or equivalent levels of immatures). Usevere pressure, use the higher recommended rates. Only whole fields should be treated. Banded Wing Whitefly Cabbage Looper Green Peach Aphid Orthene® 75 S Greenhouse Whitefly (immatures & adults) Silverleaf Whitefly Orthene 97 threshold levels per University/Extension recommendations (e.g. 3 to 5 adults per land/or adults per land). Was a tank mix with ground equipme for uniform coverage (25 to 150 gals/A by ground). Make application when eggs or insects first appear. If control is needed during this period use an alternate insection registered for the target pest. Pyriproxyfen may also be mixed or alternate with commonly used insecticides to composite to composite the target per land.	
threshold levels per University/Extension recommendations (e.g. 3 to 5 adults per I and/or equivalent levels of immatures). Usevere pressure, use the higher recommended rates. Only whole fields should be treated. Apply as a tank mix with ground equipme for uniform coverage (25 to 150 gals/A by ground). Make application when eggs or insects first appear. If control is needed during this period use an alternate insection registered for the target pest. Whitefly (immatures & adults) Silverleaf Whitefly Orthene 97 threshold levels per University/Extension recommendations (e.g. 3 to 5 adults per I and/or equivalent levels of immatures). Usevere pressure, use the higher recommended rates. Only whole fields should be treated. Apply as a tank mix with ground equipme for uniform coverage (25 to 150 gals/A by ground). Make application when eggs or insects first appear. If control is needed during this period use an alternate insection registered for the target pest. Pyriproxyfen may also be mixed or alternate with commonly used insecticides to composite to composite the provided recommendations (e.g. 3 to 5 adults per I and/or equivalent levels of immatures). Usever pressure, use the higher recommended rates. Only whole fields should be treated. Apply as a tank mix with ground equipme for uniform coverage (25 to 150 gals/A by ground). Make application when eggs or insects first appear. If control is needed during this period use an alternate insection registered for the target pest.	
recommendations (e.g. 3 to 5 adults per land/or equivalent levels of immatures). Usevere pressure, use the higher recommended rates. Only whole fields should be treated. Banded Wing Whitefly Cabbage Looper Green Peach Aphid Orthene® 75 S Greenhouse Whitefly (immatures & adults) Silverleaf Whitefly Orthene 97 Priproxyfen may also be mixed or alternative with local IPM programs.	
and/or equivalent levels of immatures). Usevere pressure, use the higher recommended rates. Only whole fields should be treated. Banded Wing Whitefly Cabbage Looper Green Peach Aphid Orthene® 75 S Greenhouse Whitefly (immatures & adults) Silverleaf Whitefly Orthene 97 and/or equivalent levels of immatures). Usever pressure, use the higher recommended rates. Only whole fields should be treated. Apply as a tank mix with ground equipme for uniform coverage (25 to 150 gals/A by ground). Make application when eggs or insects first appear. If control is needed during this period use an alternate insection registered for the target pest. Pyriproxyfen may also be mixed or alternate with commonly used insecticides to composite to composite the higher recommended rates. Only whole fields should be treated. Apply as a tank mix with ground equipme for uniform coverage (25 to 150 gals/A by ground). Make application when eggs or insects first appear. If control is needed during this period use an alternate insection registered for the target pest. Pyriproxyfen may also be mixed or alternate with commonly used insecticides to composite the programs.	eaf 1
severe pressure, use the higher recommended rates. Only whole fields should be treated. Banded Wing Whitefly Cabbage Looper Green Peach Aphid Orthene® 75 S Greenhouse Whitefly (immatures & adults) Silverleaf Whitefly Orthene 97 Severe pressure, use the higher recommended rates. Only whole fields should be treated. Apply as a tank mix with ground equipme for uniform coverage (25 to 150 gals/A by ground). Make application when eggs or insects first appear. If control is needed during this period use an alternate insecti registered for the target pest. Pyriproxyfen may also be mixed or alternate with commonly used insecticides to composite with local IPM programs.	
Banded Wing Whitefly Cabbage Looper Green Peach Aphid Greenhouse Whitefly (immatures & adults) Silverleaf Whitefly Cabbage Whitefly Cabbage Looper Green Peach Aphid Orthene® 75 S Orthene® 75 S Orthene® 75 S Orthene® 75 S Orthene 97 Only whole fields should be treated. Apply as a tank mix with ground equipme for uniform coverage (25 to 150 gals/A by ground). Make application when eggs or insects first appear. If control is needed during this period use an alternate insecti registered for the target pest. Pyriproxyfen may also be mixed or alternate with commonly used insecticides to composite to composite the programs.	
Banded Wing Whitefly Cabbage Looper Green Peach Aphid Greenhouse Whitefly (immatures & adults) Silverleaf Whitefly Whitefly Orthene 6 to 8 fl oz Apply as a tank mix with ground equipme for uniform coverage (25 to 150 gals/A by ground). Make application when eggs or insects first appear. If control is needed during this period use an alternate insection registered for the target pest. Pyriproxyfen may also be mixed or alternate with commonly used insecticides to composite with local IPM programs.	
Banded Wing Whitefly Cabbage Looper Green Peach Aphid Greenhouse Whitefly (immatures & adults) Silverleaf Whitefly Whitefly Orthene 6 to 8 fl oz Apply as a tank mix with ground equipme for uniform coverage (25 to 150 gals/A by ground). Make application when eggs or insects first appear. If control is needed during this period use an alternate insection registered for the target pest. Pyriproxyfen may also be mixed or alternate with commonly used insecticides to composite with local IPM programs.	-
Whitefly Cabbage Looper Green Peach Aphid Greenhouse Whitefly (immatures & adults) Silverleaf Whitefly Whitefly Cabbage Looper Green Peach Aphid Orthene® 75 S 0.66 to 1.33 lb/A Orthene® 75 S Orthene 97 Fyriproxyfen may also be mixed or alternate with commonly used insecticides to composite with local IPM programs.	
Cabbage Looper Green Peach Aphid Greenhouse Whitefly (immatures & adults) Silverleaf Whitefly Cabbage Looper H Ground). Make application when eggs or insects first appear. If control is needed during this period use an alternate insecti registered for the target pest. Pyriproxyfen may also be mixed or alternate with commonly used insecticides to composite with local IPM programs.	ıt
Green Peach Aphid Greenhouse Whitefly (immatures & adults) Silverleaf Whitefly Orthene® 75 S 0.66 to 1.33 lb/A Orthene® 75 S 0.66 to 1.33 lb/A Orthene® 75 S 0.66 to 1.33 lb/A Pyriproxyfen may also be mixed or alternate insection with commonly used insecticides to composite with local IPM programs.	
Aphid Orthene® 75 S Greenhouse 0.66 to 1.33 lb/A Whitefly (immatures & adults) Silverleaf Whitefly Orthene 97 With local IPM programs. Orthene® 75 S during this period use an alternate insection registered for the target pest. Pyriproxyfen may also be mixed or alternate insection with commonly used insecticides to composite with local IPM programs.	
Greenhouse	-
Whitefly (immatures & or Pyriproxyfen may also be mixed or alternated adults) Silverleaf Whitefly Orthene 97 with local IPM programs.	ide
(immatures & or Pyriproxyfen may also be mixed or alternated adults) with commonly used insecticides to compositive silverleaf Whitefly Orthene 97 with local IPM programs.	
adults) with commonly used insecticides to comp Silverleaf Whitefly Orthene 97 with local IPM programs.	ĺ
Silverleaf Whitefly Orthene 97 with local IPM programs.	
	y
	ĺ
Sweetpotato 0.5 to 1.0 lb/A	.
Whitefly Comply with all applicable directions,]
Tobacco restrictions and precautions on the registe	red
Hornworm labels for Orthene 75 S or Orthene 97.	
Do not apply within 1 day of harvest.	
 Do not make more than 2 Pyriproxyfen applications per growing season. 	
 Do not exceed 20 fl oz Pyriproxyfen per acre per season. 	ļ
 Do not apply earlier than 14 days after last Pyriproxyfen treatment. 	1
 Regardless of formulation do not exceed 0.109 lb Pyriproxyfen per acre per seaso 	.]
 Do not plant any crop other than those with registered Pyriproxyfen uses in treated 	
areas sooner than 30 days after the last application.	_

continued

FRUITING VEGETABLES (continued)

CROP	PESTS	PRODUCT RATES PER ACRE	SPECIAL INSTRUCTIONS
Fruiting Vegetables: Tomato	Banded Wing Whitefly Beet Armyworm Fruitworm	6 to 8 fl oz +	EARLY SEASON WHITEFLY CONTROL PROGRAM FOR REDUCTION OF GEMINIVIRUS:
	Greenhouse Whitefly (immatures & adults) Potato Aphid Silverleaf Whitefly	Monitor [®] 4 24 fl oz	Apply as a tank mix with ground equipment for uniform coverage (10 to 120 gals/A). Make application when scouting first
	Sweetpotato Whitefly Thrips Tomato Pinworm	+ Danitol® 2.4 EC Spray	indicates adult whiteflies are on young plants. NOTE: This may result in treatment immediately
	Yellowstriped Armyworm	10-2/3 fl oz	following transplanting.
			MID TO LATE SEASON WHITEFLY CONTROL PROGRAM FOR PREVENTION OF IRREGULAR FRUIT RIPENING: Apply as a tank mix with ground equipment for uniform coverage (20 to 120 gals/A by ground). Make application when scouting
			Pyriproxyfen may also be mixed or alternated with commonly used insecticides to comply with local IPM programs.
			Comply with all applicable directions, restrictions and precautions on the registered labels for Monitor 4 and <i>Danitol</i> 2.4 EC Spray.
	 Do not apply within 14 days of harvest. Do not make more than 2 Pyriproxyfen applications per growing season. Do not exceed 16 fl oz Pyriproxyfen per acre per season. Do not apply earlier than 14 days after last Pyriproxyfen treatment. Regardless of formulation do not exceed 0.134 lb Pyriproxyfen per acre per season. Do not plant any crop other than those with registered Pyriproxyfen uses in treated 		
		er than those with register is after the last application	

MANAGING INSECT RESISTANCE: Repeated use of the same class of insecticides with similar modes of action can lead to the buildup of resistant insect strains. To optimize resistance management practices, Valent U.S.A. Corporation is restricting Pyriproxyfen Insect Growth Regulator to two applications per growing season. Pyriproxyfen may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Follow local, state and federal Integrated Pest Management (IPM) and Insect Resistance Management (IRM) recommendations. Read and follow all product labels before applying any insecticide.

GRAPE

GENERAL: Pyriproxyfen Insect Growth Regulator acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. Pyriproxyfen has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since Pyriproxyfen is an insect growth regulator (IGR) and activity depends on the insects' development, evidence of activity will be slower than typical contact insecticides.

CROP	PESTS	PRODUCT RATE PER ACRE	SPECIAL INSTRUCTIONS	
Grape	Glassy-Winged Sharpshooter Grape Berry Moth Lecanium Scale	16 fl oz	Apply with ground equipment as a full coverage spray (50 to 200 gals/A). Thorough coverage is critical for adequate control. It is essential to use adequate water volume to ensure thorough coverage.	
			Lecanium Scale: Apply at either dormant, delayed dormant or an in-season cover spray. At dormant, delayed dormant you may use a spray oil at the manufacturer's recommended oil rate. Do not use oil in an in-season spray. In a cover spray make applications when scale crawlers first emerge.	
	}		Follow local recommendations regarding inseason use and rates of oil in your area.	
	Do not make moreDo not exceed 32Do not apply earlie	within 21 days of harvest. more than 2 Pyriproxyfen applications per growing season. d 32 fl oz Pyriproxyfen per acre per season. parlier than 14 days after last Pyriproxyfen treatment. formulation, do not apply more than 0.218 lb active of Pyriproxyfen per		

MANAGING INSECT RESISTANCE: Repeated use of the same class of insecticides with similar modes of action can lead to the buildup of resistant insect strains. To optimize resistance management practices, Valent U.S.A. Corporation is restricting Pyriproxyfen Insect Growth Regulator to two applications per growing season. Pyriproxyfen may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Follow local, state and federal Integrated Pest Management (IPM) and Insect Resistance Management (IRM) recommendations. Read and follow all product labels before applying any insecticide.

LEGUME VEGETABLES (Succulent or Dried)

GENERAL: Pyriproxyfen Insect Growth Regulator acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. Pyriproxyfen has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since Pyriproxyfen is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

Pyriproxyfen does exhibit translaminar movement which means that Pyriproxyfen applied to the upper surfaces of the leaves will move to the lower surface of the leaf. This translaminar movement is very important to chemical control of whitefly since one of the major obstacles is getting the product to the underside of the leaves where whitefly are present.

LEGUME VEGETABLES (continued)

LEGUME VEGETABLES (continued)				
CROPS	PESTS	PRODUCT RATES PER ACRE	SPECIAL INSTRUCTIONS	
Legume Vegetables :	Silverleaf Whitefly	, 8 to 10 fl oz	EARLY SEASON WHITEFLY	
Beans (Lupinus):	Sweetpotato		PROGRAM: Apply with ground	
Grain Lupin	Whitefly		equipment in adequate water for	
Sweet Lupin	·	,	uniform coverage (10 to 50 gals/A.	
White Lupin	,		Thorough coverage is critical for	
White Sweet Lupin		. '	adequate control. It is essential to	
Beans (<i>Phaaseolus</i>):			use adequate water volume to	
Field Bean			ensure thorough coverage.	
Kidney Bean	,	. `		
Lima Bean			Begin applications when whiteflies	
Navy Bean			reach threshold levels per	
Pinto Bean			University/Extension	
Runner Bean			recommendations (e.g. 3 to 5 adults	
Snap Bean			per leaf and/or equivalent levels of	
Tepary Bean			immatures).	
Wax Bean				
Bean (<i>Vigna</i>):	, ,	•	Under severe pressure, use the	
Adzuki Bean			higher recommended rates.	
Asparagus Bean	· ·			
Blackeyed Pea			Only whole fields should be treated.	
Catjang				
Chinese Longbean			ted with commonly used insecticides	
Cowpea			gement (IPM) and Insect Resistance	
Crowder Pea	Management (IRM)	programs.		
Moth Bean				
Mung Bean		nin 7 days of harvest.		
Rice Bean			applications per growing season.	
Southern Pea		0 fl oz of Pyriproxyfen		
Urd Bean			last Pyriproxyfen treatment.	
Yardlong Bean		rmulation do not exce	ed 0.134 lb Pyriproxyfen per acre per	
Broad Bean (fava)	season.			
Chickpea (garbanzo)			with registered Pyriproxyfen uses in	
Guar		oner than 30 days afte		
Jackbean		stock to graze treated		
Lablab Bean	 Do not use on leg 	gume vegetables varie	eties grown for livestock feed.	
Lentil				
Pea (Pisum):				
Dwarf Pea		•		
Edible-podded Pea		•		
English Pea				
Field Pea	·	•		
Garden Pea				
Green Pea				
Snowpea				
Sugar Snap Pea				
Pigeon Pea			ļ	
Soybean			<u>, </u>	
Sword Bean				

MANAGING INSECT RESISTANCE: Repeated use of the same class of insecticides or insecticides with similar modes of action can lead to the buildup of resistant whitefly strains. To optimize resistance management practices, Valent U.S.A. Corporation is restricting Pyriproxyfen Insect Growth Regulator to two applications per growing season. Pyriproxyfen may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Valent also does not recommend using rates below 8 fl oz per acre for whitefly control because reduced rates can lead to a greater potential for resistance development. Follow local, state and federal IPM and IRM recommendations. Read and follow all product labels before applying any insecticide.

OLIVE

GENERAL: Pyriproxyfen Insect Growth Regulator acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. Pyriproxyfen has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since Pyriproxyfen is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

CROP	PESTS	PRODUCT RATES PER ACRE	SPECIAL INSTRUCTIONS		
Olive	Black Scale San Jose Scale	13 to 16 fl oz	Apply with ground equipment in 100 to 400 gals/A. Apply in sufficient water volume for tree size. Thorough coverage is critical for adequate control. It is essential to use adequate water volume to ensure thorough coverage.		
			Apply at either dormant, delayed dormant or an inseason cover spray. At dormant, delayed dormant use a spray oil at the manufacturer's recommended oil rate. In a cover spray make applications when scale crawlers first emerge. Follow local recommendations regarding in-season use and rates of oil in your area.		
			Under heavy scale pressure, use the higher rate of Pyriproxyfen.		
	Pyriproxyfen may be mixed and/or alternated with commonly used insecticides to comply with local Insect Pest Management (IPM) and Resistance Management (IRM) programs.				
	Do not apply within 7 days of harvest. Do not make more than 2 Pyriproxyton applications per growing season.				
	 Do not make more than 2 Pyriproxyfen applications per growing season. Do not exceed 32 fl oz of Pyriproxyfen per acre per season. 				
	 Do not apply earli 	ier than 14 days after la	st Pyriproxyfen treatment.		
	 Regardless of for 	mulation do not exceed	0.218 lb Pyriproxyfen per acre per season.		

MANAGING INSECT RESISTANCE: Repeated use of the same class of insecticides with similar modes of action can lead to the buildup of resistant insect strains. To optimize resistance management practices, Valent U.S.A. Corporation is restricting Pyriproxyfen Insect Growth Regulator to two applications per growing season. Pyriproxyfen may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Follow local, state and federal IPM and IRM recommendations. Read and follow all product labels before applying any insecticide.

PASTURE GRASS AND RANGELAND

GENERAL: Pyriproxyfen Insect Growth Regulator acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. Pyriproxyfen has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since Pyriproxyfen is an insect growth regulator (IGR) and activity depends on the insects' development, evidence of activity will be slower than typical contact insecticides.

CROPS	PESTS	PRODUCT RATES PER ACRE	SPECIAL INSTRUCTIONS	
Pasture Grass and Rangeland	Cricket Grasshopper Locust	8 to 10 fl oz	Apply with air or ground equipment in adequate water for uniform coverage: By Air:3 to 10 gals/A By Ground:10 to 50 gals/A HIGHER WATER VOLUMES PROVIDE IMPROVED INSECT CONTROL. Begin application when pests reach threshold levels per University/Extension	
			recommendations. Under severe pressure, use the higher recommended rates.	
	 Do not exceed; Regardless of fineseason. 	nore than 2 Pyriproxyfen applications per growing season. I 20 fl oz Pyriproxyfen per acre per season. formulation do not exceed 0.134 lb Pyriproxyfen per acre per arlier than 14 days after last Pyriproxyfen treatment.		

MANAGING INSECT RESISTANCE: Repeated use of the same class of insecticides with similar modes of action can lead to the buildup of resistant insect strains. To optimize resistance management practices, Valent U.S.A. Corporation is restricting Pyriproxyfen Insect Growth Regulator to two applications per growing season. Pyriproxyfen may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Follow local, state and federal Integrated Pest Management (IPM) and Insect Resistance Management (IRM) recommendations. Read and follow all product labels before applying any insecticide.

PAWPAW

GENERAL: Pyriproxyfen Insect Growth Regulator acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. Pyriproxyfen has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since Pyriproxyfen is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

Pyriproxyfen does exhibit translaminar movement which means that Pyriproxyfen applied to the upper surfaces of the leaves will move to the lower surface of the leaf. This translaminar movement is very important to chemical control of whitefly since one of the major obstacles is getting the product to the underside of the leaves where whitefly are present.

CROP	PESTS	PRODUCT RATES PER ACRE	SPECIAL INSTRUCTIONS	
Pawpaw	Scale Whitefly	13 to 16 fl oz	Apply 100 to 400 gals/A with ground equipment. Coverage is essential for good control. Apply in sufficient water volume for tree size. Use of higher water volume will assure better coverage.	
		Scale: Apply at either dormant, delay dormant or an in-season cover spray. dormant or delayed dormant use a sp at the manufacturer's recommended on Do not use oil in an in-season spray.		
			In a cover spray make applications when scale crawlers first emerge.	
· 			Under heavy scale pressure, use the higher rate of Pyriproxyfen.	
	In-season sprays of Pyriproxyfen may not protect fruit from blemishes by scale.			
	Pyriproxyfen may be mixed and/or alternated with commonly used insecticides to comply with local Integrated Pest Management (IPM) and Insect Resistance Management (IRM) programs.			
	 Do not apply within 14 days of harvest. Do not make more than 3 Pyriproxyfen applications per growing season. Do not exceed 48 fl oz of Pyriproxyfen per acre per season. Do not apply earlier than 14 days after last Pyriproxyfen treatment. Regardless of formulation do not exceed 0.327 lb Pyriproxyfen per acre per season. 			

MANAGING INSECT RESISTANCE: Repeated use of the same class of insecticides with similar modes of action can lead to the buildup of resistant insect strains. To optimize resistance management practices, Valent U.S.A. Corporation is restricting Pyriproxyfen Insect Growth Regulator to three applications per growing season. Pyriproxyfen may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Follow local, state and federal IPM and IRM recommendations. Read and follow all product labels before applying any insecticide.

PINEAPPLE

GENERAL: Pyriproxyfen Insect Growth Regulator acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. Pyriproxyfen has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since Pyriproxyfen is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

Black Scale Brown Soft Scale California Red Scale Florida Red Scale Snow Scale	16 fl oz	Apply with ground equipment in 20 to 50 gals/A. Apply in sufficient water volume for plant size. Thorough coverage is critical for control. It is essential to use adequate water volume to	
		ensure thorough coverage. Apply anytime prior to fruit becoming infested when scale is in the crawler stage. Application at the 2 nd or 3 rd generation of scale may result in excessive dead scale remaining on the fruit at harvest. Thorough coverage is essential for	
		good control. Pyriproxyfen may be applied with superior spray oils at 1/2 to 1%. Follow the manufacturer's directions and recommendations on timing and rates.	
 Pyriproxyfen may be mixed and/or alternated with commonly used insecticides to comply with local Integrated Pest Management (IPM) and Insect Resistance Management (IRM) programs. Do not apply within 1 day of harvest. Do not make more than 2 Pyriproxyfen applications per calendar year. Do not exceed 32 fl oz of Pyriproxyfen per acre per season. Do not apply earlier than 21 days after last Pyriproxyfen treatment. 			
	Do not apply within 1 Do not make more the Do not exceed 32 ft on Do not apply earlier the Do no	Do not apply within 1 day of harvest. Do not make more than 2 Pyriproxyfen app Do not exceed 32 fl oz of Pyriproxyfen per a	

MANAGING INSECT RESISTANCE: Repeated use of the same class of insecticides with similar modes of action can lead to the buildup of resistant insect strains. To optimize resistance management practices, Valent U.S.A. Corporation is restricting Pyriproxyfen Insect Growth Regulator to two applications per growing season. Pyriproxyfen may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Follow local, state and federal IPM and IRM recommendations. Read and follow all product labels before applying any insecticide.

POME FRUIT

GENERAL: Pyriproxyfen Insect Growth Regulator acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. Pyriproxyfen has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since Pyriproxyfen is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

CROPS	PESTS	PRODUCT RATES PER ACRE	SPECIAL INSTRUCTIONS
Pome Fruit: Apple Crabapple Loquat Mayhaw Quince	Codling Moth Suppression of: Pandemis Leafroller Obliquebanded	13 to 16 fl oz	Apply by ground with airblast equipment in a minimum of 50 gals/A. Thorough coverage is critical for control. It is essential to use adequate water volume to ensure thorough coverage
Quince	Leafroller		1st Generation Codling Moth. Apply at Biofix plus 100 degree days (this is usually close to petal fall). Make a second application 14 to 21 days later or timed to coincide with peak moth flights. For subsequent applications, if needed, apply other insecticides registered for Codling Moth control. The addition of oil has been shown to increase Codling Moth activity of Pyriproxyfen. Follow local recommendations regarding in season use and rates of oil in your area.
			Obliquebanded and Pandemis Leafroller: Apply to the over-wintering larvae at the pink to petal fall tree growth stage. Pyriproxyfen does not directly control the larvae but inhibits normal pupation and adult emergence.
	Florida Red Scale Lecanium Scale San Jose Scale	13 to 16 fl oz	Apply by ground with airblast equipment in a minimum of 50 gals/A. Thorough coverage is critical for control. It is essential to use adequate water volume to ensure thorough coverage.
			Apply at delayed dormant through pink. For delayed dormant use a superior spray oil at the manufacturer's recommended rate of oil. Under heavy scale pressure, use the higher rate of Pyriproxyfen.
			Scale: For control in-season, make application in cover sprays when scale crawlers first emerge. The use of oil at the crawler emergence stage has been shown to improve control. Follow local recommendations regarding in-season use and rates of oil in your area.

continued

POME FRUIT (continued)

CROPS	PESTS	PRODUCT RATES PER ACRE	SPECIAL INSTRUCTIONS
Pome Fruit: Apple Crabapple Loquat Mayhaw Quince	Green Apple Aphid Rosy Apple Aphid Spirea Aphid Spotted Tentiform Leafminer Western Tentiform Leafminer	10 to 16 fl oz	Apply by ground with airblast equipment in a minimum of 50 gals/A. Thorough coverage is critical for control. It is essential to use adequate water volume to ensure thorough coverage Leafminers: Apply at peak moth flight for control of 1 st or 2 nd generation. This usually occurs at pre-pink to pink apple stage for 1 st generation and 2 nd cover for 2 nd generation.
			Rosy Apple Aphid: Apply at 1/2" green apple growth stage.
			Green Apple & Spirea Aphid: Apply when aphids first appear, but before aphids are colonized.
		·	TIMING IS CRITICAL FOR ACCEPTABLE APHID CONTROL.
Pear Oriental Pear	Pear Psylla	13 to 16 fl oz	Apply by ground with airblast equipment in 75 to 400 gals/A with a superior spray oil at manufacturer's recommended rates for the stage of growth. It is essential to use adequate water volume to ensure thorough coverage. Apply a single application during the delayed dormant to pink stage of growth at 16 fl oz/A or make two applications from delayed dormant through petal fall stage of growth at 13 to 16 fl oz/A. Make application just before sustained egg lay is anticipated. DO NOT USE SKIP ROWS DURING APPLICATION.
			For in-season control of pear psylla, use an insecticide recommended for this use.
	Lecanium Scale San Jose Scale	13 to 16 fl oz	Apply by ground with airblast equipment in 100 to 400 gals/A at delayed dormant with a superior spray oil at the manufacturer's recommended rates. Under heavy scale pressure, use the higher rate.
		•	Apply in sufficient water volume for tree size. Thorough coverage is critical for control. It is essential to use adequate water volume to ensure thorough coverage.
			For control of scale in-season make application in cover sprays when scale crawlers first emerge. The use of oil at the crawler emergence stage has been shown to improve performance. Follow local recommendations regarding in-season use and rates of oil in your area.

continued

POME FRUIT (continued)

CROPS	PESTS	PRODUCT RATES PER ACRE	SPECIAL INSTRUCTIONS	
Pome Fruit: Pear Oriental Pear	Codling Moth Suppression of: Obliquebanded Leafroller Pandemis Leafroller	13 to 16 fl oz	Apply by ground with airblast equipment in 100 to 400 gals/A. 1st Generation Codling Moth: Apply at Biofix plus 100 degree days. Make a second application 14 to 21 days later or timed to coincide with peak moth flights. For subsequent applications, if needed, apply other insecticides registered for Codling Moth control. The addition of oil has been shown to increase Codling Moth activity of Pyriproxyfen. Follow local recommendations regarding in-season use and rates of oil in your area. For additional generations apply other insecticides registered for Codling Moth Control.	
	 Pyriproxyfen may be mixed and/or alternated with commonly used insecticides to conwith local Integrated Pest Management (IPM) and Insect Resistance Management (IPM) programs. Do not apply within 45 days of harvest. Do not make more than 2 Pyriproxyfen applications per growing season. Do not exceed 32 fl oz of Pyriproxyfen per acre per season. Do not apply earlier than 14 days after last Pyriproxyfen treatment. Regardless of formulation do not exceed 0.218 lb Pyriproxyfen per acre per season. 			

MANAGING INSECT RESISTANCE: Repeated use of the same class of insecticides with similar modes of action can lead to the buildup of resistant insect strains. To optimize resistance management practices, Valent U.S.A. Corporation is restricting Pyriproxyfen Insect Growth Regulator to two applications per growing season. Pyriproxyfen may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Follow local, state and federal IPM and IRM recommendations. Read and follow all product labels before applying any insecticide.

POMEGRANATE

GENERAL: Pyriproxyfen Insect Growth Regulator acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. Pyriproxyfen has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since Pyriproxyfen is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

Pyriproxyfen does exhibit translaminar movement which means that Pyriproxyfen applied to the upper surfaces of the leaves will move to the lower surface of the leaf. This translaminar movement is very important to chemical control of whitefly since one of the major obstacles is getting the product to the underside of the leaves where whitefly are present.

PESTS	PRODUCT RATES PER ACRE	SPECIAL INSTRUCTIONS	
Banded Wing Whitefly Greenhouse Whitefly Silverleaf Whitefly Sweetpotato Whitefly	13 to 16 fl oz	Apply with air or ground equipment in adequate water for uniform coverage: By Air:	
,		HIGHER WATER VOLUMES MAY PROVIDE IMPROVED INSECT CONTROL.	
		Begin applications when whiteflies reach threshold levels per University/Extension recommendations (e.g. 3 to 5 adults per leaf and/or equivalent levels of immatures).	
		Only whole fields should be treated.	
 Do not make more that Do not exceed 48 floor Do not apply earlier the Regardless of formula Do not plant any crop 	n 14 days of harvest. e than 3 Pyriproxyfen applications per growing season. fl oz of Pyriproxyfen per acre per season. er than 14 days after last Pyriproxyfen treatment. nulation do not exceed 0.327 lb Pyriproxyfen per acre per season. rop other than those with registered Pyriproxyfen uses in treated		
	Banded Wing Whitefly Greenhouse Whitefly Silverleaf Whitefly Sweetpotato Whitefly • Do not apply within 14 • Do not make more tha • Do not exceed 48 fl or • Do not apply earlier the • Regardless of formula • Do not plant any crop	Banded Wing Whitefly Greenhouse Whitefly Silverleaf Whitefly Sweetpotato Whitefly Do not apply within 14 days of harvest. Do not make more than 3 Pyriproxyfen appli Do not exceed 48 fl oz of Pyriproxyfen per accept than 14 days after last Personal Regardless of formulation do not exceed 0.3	

MANAGING INSECT RESISTANCE: Repeated use of the same class of insecticides or insecticides with similar modes of action can lead to the buildup of resistant whitefly strains. To optimize resistance management practices, Valent U.S.A. Corporation is restricting Pyriproxyfen Insect Growth Regulator to three applications per growing season. Pyriproxyfen may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Valent also does not recommend using rates below 13 fl oz per acre for whitefly control because reduced rates can lead to a greater potential for resistance development. Follow local, state and federal Integrated Pest Management (IPM) and Insect Resistance Management (IRM) recommendations. Read and follow all product labels before applying any insecticide.

ROOT AND TUBER VEGETABLES

GENERAL: Pyriproxyfen Insect Growth Regulator acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. Pyriproxyfen has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since Pyriproxyfen is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

Pyriproxyfen does exhibit translaminar movement which means that Pyriproxyfen applied to the upper surfaces of the leaves will move to the lower surface of the leaf. This translaminar movement is very important to chemical control of whitefly since one of the major obstacles is getting the product to the underside of the leaves where whitefly are present.

CROPS	PESTS	PRODUCT RATES PER ACRE	SPECIAL INSTRUCTIONS
Root & Tuber Vegetables: Arracacha Arrowroot Artichoke, Chinese Artichoke, Jerusalem Beet, Garden Beet, Sugar Burdock, Edible Canna, Edible Carrot Cassava, (bitter and sweet) Celeriac Chaoyote (root) Chervil, Turnip-rooted Chicory Chufa Dasheen (taro) Ginger Ginseng Horseradish Leren Parsley, Turnip-rooted Parsnip Potato Radish, Oriental Rutabaga Salsify	Banded Wing Whitefly Greenhouse Whitefly Silverleaf Whitefly Sweetpotato Whitefly Sweetpotato Whitefly Do not apply within 3 Do not make more the Do not exceed 16 fleeth	PER ACRE 8 fl oz 3 days of harvest. han 2 Pyriproxyfen appl oz of Pyriproxyfen per a	Apply with ground equipment in adequate water for uniform coverage (20 to 50 gals/A). HIGHER WATER VOLUMES MAY PROVIDE IMPROVED INSECT CONTROL. Begin applications when whiteflies reach threshold levels per University/Extension recommendations (e.g. 3 to 5 adults per leaf and/or equivalent levels of immatures). Under severe pressure, use the higher recommended rates. Only whole fields should be treated.
Salsify, Black Salsify, Spanish Skirret Sweet Potato	 Do not apply earlier to Regardless of formula per season. 	than 14 days after last f llation do not exceed 0.	Pyriproxyfen treatment. 109 lb Pyriproxyfen per acre
Tanier Turmeric Turnip Yam, Bean	treated areas soone	p other than those with r than 30 days after the k to graze treated areas	
Yam, True			

continued

ROOT AND TUBER VEGETABLES (continued)

MANAGING WHITEFLY RESISTANCE: Repeated use of the same class of insecticides or insecticides with similar modes of action can lead to the buildup of resistant whitefly strains. To optimize resistance management practices, Valent U.S.A. Corporation is restricting Pyriproxyfen Insect Growth Regulator to two applications per growing season. Pyriproxyfen may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Valent also does not recommend using rates below 8 fl oz per acre for whitefly control because reduced rates can lead to a greater potential for resistance development. Follow local, state and federal Integrated Pest Management (IPM) and Insect Resistance Management (IRM) recommendations. Read and follow all product labels before applying any insecticide.

STONE FRUIT

GENERAL: Pyriproxyfen Insect Growth Regulator acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. Pyriproxyfen has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since Pyriproxyfen is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

CROPS	PESTS	PRODUCT RATES PER	SPECIAL INSTRUCTIONS	
		ACRE		
Stone Fruit: Apricot Cherry Chickasaw Plum Damson Plum	Lecanium Scale San Jose Scale	13 to 16 fl oz	Apply in 100 to 400 gals/A. with ground equipment. Coverage is essential for good control. Apply in sufficient water volume for tree size. Use of higher water volume will assure better coverage.	
Fresh Prune Japanese Plum Nectarine Peach Plum	Suppression of: Peach Twig Borer Oriental Fruit Moth		Scale: Apply at dormant, delayed dormant or as an in-season cover spray. At dormant, delayed dormant, use a spray oil at the manufacturer's recommended oil rate.	
Plumcot Prune			Under heavy scale pressure, use the higher rate of Pyriproxyfen.	
		٠.	Peach Twig Borer: Pyriproxyfen has provided good suppression of Peach Twig Borer when applied delayed dormant through bloom sprays. Use a spray oil at the manufacturer's recommended rate for the stage of crop growth.	
	In-season sprays of Pyriproxyfen may not protect fruit from blemishes by scale. Pyriproxyfen may be mixed and/or alternated with commonly used insecticides to conwith local Integrated Pest Management IPM and Insect Resistance Management (IR programs.			
	 Do not apply within 14 days of harvest. Do not make more than 3 Pyriproxyfen applications per growing season. Do not exceed 48 fl oz of Pyriproxyfen per acre per season. Do not apply earlier than 14 days after last Pyriproxyfen treatment. Regardless of formulation do not exceed 0.327 lb Pyriproxyfen per acre per season. 			

MANAGING INSECT RESISTANCE: Repeated use of the same class of insecticides with similar modes of action can lead to the buildup of resistant insect strains. To optimize resistance management practices, Valent U.S.A. Corporation is restricting Pyriproxyfen Insect Growth Regulator to three applications per growing season. Pyriproxyfen may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Follow local, state and federal IPM and IRM recommendations. Read and follow all product labels before applying any insecticide.

STRAWBERRY

GENERAL: Pyriproxyfen Insect Growth Regulator acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. Pyriproxyfen has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since Pyriproxyfen is an insect growth regulator (IGR) and activity depends on the insects' development, evidence of activity will be slower than typical contact insecticides.

Pyriproxyfen exhibits translaminar movement which means that Pyriproxyfen applied to the upper surfaces of the leaves will move to the lower surface of the leaf. This translaminar movement is very important to chemical control of whitefly since one of the major obstacles is getting the product to the underside of the leaves where whitefly are present.

CROP	PESTS	PRODUCT RATE PER ACRE	SPECIAL INSTRUCTIONS	
Strawberry	Banded Wing Whitefly Greenhouse Whitefly Silverleaf Whitefly Sweetpotato Whitefly	10 fl oz	Apply with ground equipment as a full coverage spray (100 to 400 gals/A). Thorough coverage is critical for adequate control. It is essential to use adequate water volume to ensure thorough coverage. Begin applications when whiteflies reach threshold levels per University/Extension recommendations (e.g. 3 to 5 adults per leaf and/or equivalent levels of immatures). Under severe pressure, use the higher recommended rates. Only whole fields should be treated.	
	 Do not exceed 20 fl of the control of the			

MANAGING WHITEFLY RESISTANCE: Repeated use of the same class of insecticides with similar modes of action can lead to the buildup of resistant whitefly strains. To optimize resistance management practices, Valent U.S.A. Corporation is restricting Pyriproxyfen Insect Growth Regulator to two applications per growing season. Pyriproxyfen may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Follow local, state and federal Integrated Pest Management (IPM) and Integrated Resistance Management (IRM) recommendations. Read and follow all product labels before applying any insecticide.

TREE NUTS

GENERAL: Pyriproxyfen Insect Growth Regulator acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. Pyriproxyfen has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since Pyriproxyfen is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

CROP	PESTS	PRODUCT RATES PER ACRE	SPECIAL INSTRUCTIONS	
Tree Nuts: Almond	Black Scale San Jose Scale Suppression of: Peach Twig Borer	13 to 16 fl oz	Apply with ground equipment in 100 to 400 gals/A. Coverage is essential for good control. Apply in sufficient water volume for tree size. Use of higher water volume will assure better coverage.	
			Apply at either dormant, delayed dormant or an in-season cover spray. At dormant, delayed dormant use a spray oil at the manufacturer's recommended oil rate. In a cover spray make applications when scale crawlers first emerge. Follow local recommendations regarding inseason use and rates of oil in your area.	
			Pyriproxyfen has provided good suppression of Peach Twig Borer when applied delayed dormant through bloom sprays.	
	Do not make moreDo not exceed 16 f	Almond: Do not apply within 21 days of harvest. Do not make more than 1 Pyriproxyfen application per growing season. Do not exceed 16 fl oz of Pyriproxyfen per acre per season. Regardless of formulation do not exceed 0.109 lb Pyriproxyfen per acre per		

continued

MANAGING INSECT RESISTANCE: Repeated use of the same class of insecticides with similar modes of action can lead to the buildup of resistant insect strains. To optimize resistance management practices. Valent U.S.A. Corporation is restricting Pyriproxyfen Insect Growth Regulator to one application per growing season. Pyriproxyfen may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Follow local, state and federal Integrated Pest Management (IPM) and Insect Resistance Management (IRM) recommendations. Read and follow all product labels before applying any insecticide.

TREE NUTS (continued)

CROPS	PESTS	PRODUCT RATES PER ACRE	SPECIAL INSTRUCTIONS		
Tree Nuts: Beechnut Brazil Butternut Cashew Chestnut	Codling Moth Dusky Veined Aphid Walnut Aphid	16 fl oz	Apply with ground equipment in 100 to 400 gals/A. Apply in sufficient water volume for tree size. Thorough coverage is critical for control. It is essential to use adequate water volume to ensure thorough coverage.		
Chinquapin Filbert (Hazelnut) Hickory Macadamia Pecan Pistachio Walnut			1st Generation Codling Moth: Apply at Biofix plus 100 degree days. Make a second application 14 to 21 days later or timed to coincide with peak moth flights. For subsequent applications, if needed, apply other insecticides registered for Codling Moth control. The addition of oil has been shown to increase Codling Moth activity of Pyriproxyfen. Follow local recommendations regarding in-season use and rates of oil in your area.		
	Black Scale Brown Soft Scale Italian Scale Lecanium Scale San Jose Scale Walnut Scale Suppression of: Peach Twig Borer	13 to 16 fl oz	Apply with ground equipment in 100 to 400 gals/A at either dormant, delayed dormant or an inseason cover spray. The addition of a superior spray oil at dormant or delayed dormant may improve scale control. However, do not use a spray oil in oil sensitive crops such as Walnut. Follow manufacturer's recommendations regarding use and rates of oil for your area. In a cover spray make applications when scale crawlers first emerge. Follow local recommendations regarding in-season use and rates of oil in your area. Under heavy scale pressure, use the higher rate. Coverage is essential for good control. Apply in sufficient water volume for tree size. Use of higher water volume will assure better coverage.		
	Pyriproxyfen may be mixed and/or alternated with commonly used insecticides to comply with local Integrated Pest Management (IPM) and Insect Resistance Management (IRM) programs.				
	 Do not apply within 21 days of harvest. Do not make more than 2 Pyriproxyfen applications per growing season. Do not exceed 32 fl oz of Pyriproxyfen per acre per season. Do not apply earlier than 14 days after last Pyriproxyfen treatment. Regardless of formulation do not exceed 0.218 lb Pyriproxyfen per acre per season. 				

MANAGING INSECT RESISTANCE: Repeated use of the same class of insecticides with similar modes of action can lead to the buildup of resistant insect strains. To optimize resistance management practices, Valent U.S.A. Corporation is restricting Pyriproxyfen Insect Growth Regulator to two applications per growing season. Pyriproxyfen may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Follow local, state and federal IPM and IRM recommendations. Read and follow all product labels before applying any insecticide.

TROPICAL & SUBTROPICAL FRUIT

GENERAL: Pyriproxyfen Insect Growth Regulator acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects.

Pyriproxyfen has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since Pyriproxyfen is an Insect Growth Regulator (IGR) and activity depends on the insect's development, evidence of activity will be slower than typical contact insecticides.

CROPS	PEST	PRODUCT RATE PER ACRE	SPECIAL INSTRUCTIONS
Tropical & Subtropical Fruit: Acerola Atemoya Avocado Biriba Black Sapote Canistel Cherimoya Custard Apple Feijoa Guava Ilama Jaboticaba Longan Lychee Mamey Sapote Mango Passionfruit Papaya Pulasan Rambutan Sapodilla Soursop	to comply with Management Do not app Do not ma Do not except to be not app	nay be mixed and/or local Integrated Pes (IRM) programs. bly within 14 days of I ke more than 2 Pyripiced 32 fl oz of Pyripicly earlier than 14 days	Apply with ground or air equipment as a full coverage spray (minimum of 5 gals/A by air or 50 gals/A by ground). Thorough coverage is critical for adequate control. It is essential to use adequate water volume to ensure thorough coverage. Apply at either dormant, delayed dormant or an in-season cover spray. At dormant or delayed dormant use a spray oil at the manufacturer's recommended oil rate. In a cover spray make applications when scale crawlers first emerge. Follow local recommendations regarding in-season use and rates of oil in your area. alternated with commonly used insecticides it Management (IPM) and Insect Resistance marvest. Proxyfen applications per growing season. Toxyfen per acre per season. Toxyfen per acre per season. Toxyfen per acre per season.
Spanish Lime Star Apple Starfruit Sugar Apple Wax Jambu	per seasor		

MANAGING INSECT RESISTANCE: Repeated use of the same class of insecticides with similar modes of action can lead to the buildup of resistant Pyriproxyfen insect strains. To optimize resistance management practices, Valent U.S.A. Corporation is restricting Pyriproxyfen Insect Growth Regulator to two applications per growing season. Pyriproxyfen may be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Follow local, state and federal IPM and IRM recommendations. Read and follow all product labels before applying any insecticide.

STORAGE AND DISPOSAL

PESTICIDE STORAGE

Store in a cool dry place.
Keep pesticide in original container.
Keep container closed when not in use.
Do not put concentrate or dilute into food or drink containers.
Not for use or storage in or around the home.
Do not contaminate water, food or feed by storage, disposal or cleaning of equipment.
For help with any spill, leak, fire or exposure involving this material, call day or night 800-892-0099.

PESTICIDE DISPOSAL

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL

Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) 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.

Copyright© 2008 by Valent U.S.A. Corporation

Danitol is a registered trademark of Sumitomo Chemical Company, Ltd. Monitor is a registered trademark of Bayer.

Orthene is a registered trademark OMS Investments, Inc.

Danitol is a restricted use product.

Manufactured for: **Valent U.S.A. Corporation** P.O. Box 8025 Walnut Creek, CA 94596-8025 www.valent.com

Made in U.S.A.

EPA Reg. No. 59639-XXX EPA Est. _____

059639-000XXX.20080228.PYRI 0.86 EC Ag.doc.