

OCT 28 1999

Eric H. Tamichi
Valent USA Corporation
1333 N. California Blvd.
Suite 600
Walnut Creek, CA 94596

Subject: Amendment To Add Citrus Fruits, Tree Nuts And Fruiting Vegetables :
EsSTEEM Insect Growth Regulator
EPA Registration No. 59639-104
Application July 31, 1998

Dear Mr. Tamichi:

The proposed amendment to the registration of the product cited above under The Federal Insecticide fungicide And Rodenticide Act, as amended is acceptable subject to the comments listed below:

1. Add a statement specifying ground and/or aerial application equipment and amount of spray volume indicated under the Special instructions for each pest use for almonds, citrus and walnuts.
2. The label must indicate a minimum retreatment interval (RTI) for each crop matching what was used in the crop field trials.
3. A 30-day plantback interval for rotational crops must be added to the label for fruiting vegetables. This is true for cotton as well.

Copies of the Hazard Evaluation Division and Environmental Fate and Effects Division Risk Assessments are enclosed for your records.

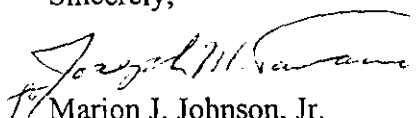
A stamped copy of the draft label is enclosed for your

records.

Submit two copies of the finished label amended as indicated above before the product is released for shipment under this amended label.

If you have any questions or comments please contact Joseph Tavano at (703) 305-6411.

Sincerely,



Marion J. Johnson, Jr.
Product Manager 10
Insecticide Branch
Registration Division (7505C)





ESTEEM[®] Insect Growth Regulator

Active Ingredient	By Wt.
*Pyriproxyfen (2-[1-methyl-2-(4-phenoxyphenoxy) ethoxy]pyridine)	33%
Other Ingredients	67%
Contains 2.9 pound a.i. per gallon.	
Contains aromatic petroleum distillates.	

**ACCEPTED
with COMMENTS
In EPA Letter Dated:**

OCT 28 1999

Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under EPA Reg. No.
59639-107

KEEP OUT OF REACH OF CHILDREN

WARNING

SEE BELOW FOR ADDITIONAL PRECAUTIONARY STATEMENTS

NET CONTENTS 1 GALLON

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS & DOMESTIC ANIMALS

WARNING

Causes substantial but temporary eye irritation. Causes skin irritation. Do not get in eyes or on clothing. Avoid contact with skin. Harmful if absorbed through skin, if swallowed or inhaled. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

- If in eyes:** Hold eyelids open and flush with a steady, gentle stream of water for 15 minutes. Get medical attention.
- If on skin:** Wash with plenty of soap and water. Get medical attention if irritation persists.
- If swallowed:** Call a doctor or get medical attention. Do not induce vomiting or give anything by mouth to an unconscious person. Drink promptly a large quantity of milk, eggwhites, gelatin solution, or if these are not available, drink large quantities of water. Avoid alcohol.
- If inhaled:** Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage. This product contains a light petroleum solvent and an aspiration hazard may exist. Emergency information - call 1-800-892-0099.

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 G 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 viton \geq 14 mils, shoes plus socks, protective eyewear.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/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 cleaning of equipment washwaters or rinsate. Avoid direct application and/or spray drift to beehives.

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 viton \geq 14 mils, shoes plus socks, protective eyewear.

**DISCLAIMER, CONDITIONS OF SALE,
LIMITED WARRANTY
AND LIMITATION OF LIABILITY**

IMPORTANT: Read the entire Label including this Disclaimer, Limited Warranty and Limitation of Liability before using this product. If the terms are not acceptable, return the unopened product within 15 days of purchase.

RISKS OF USING THIS PRODUCT

It is impossible to eliminate all risks associated with the use of this product. Such 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, injury caused by drift, and injury to rotational crops caused by carryover in the soil. Such risks of crop injury, non-performance or other unintended consequences are unavoidable and may result because of such factors as weather, soil conditions, moisture conditions, irrigation practices, presence of other materials, cultural practices or the manner of use or application, all of which are factors beyond the control of Valent. All such risks shall be assumed by the Buyer. Valent shall not be responsible for losses or damages resulting from use of this product in any manner not set forth on the label. User 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 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** described above.

DISCLAIMER OF ALL OTHER WARRANTIES

VALENT MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. No agent or representative of Valent or Seller is authorized to make or create any other express or implied warranty.

LIMITATION OF LIABILITY

In no event shall Valent or Seller be liable for any incidental, consequential, indirect or special damages resulting from the use or handling of this product. **THE EXCLUSIVE REMEDY OF THE USER OR 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 OR, AT THE ELECTION OF VALENT OR SELLER, THE REPLACEMENT OF THIS PRODUCT.**

NO AMENDMENTS

Valent and Seller offer this product, and Buyer and User accept it, subject to the foregoing Disclaimer, Conditions of Sale, Limited Warranty and Limitation of Liability, which may not be modified by any oral or written agreement.

PROMPT NOTICE OF CLAIM

Valent must have prompt notice as soon as Buyer or User has reason to believe they may have a claim (not to exceed twenty-one days from date of application) so that an immediate inspection of the affected property and growing crops can be made. Unless Buyer and Users shall promptly notify Valent of any claims, they shall be barred from obtaining any remedy.

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.

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

GENERAL INFORMATION

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

ESTEEM Insect Growth Regulator is intended for use in Integrated Pest Management (IPM) or Integrated Resistance Management (IRM) programs. ESTEEM Insect Growth Regulator 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.

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

COTTON

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

ESTEEM does exhibit translaminar movement in cotton leaves which means that ESTEEM 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	DOSAGE PER ACRE	SPECIAL INSTRUCTIONS
Cotton	Silverleaf Whitefly Sweetpotato Whitefly	2.5 to 3.0 fl. oz. (25 to 30 gms ai) Do not apply less than 2.5 fl. oz./A	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 MAY PROVIDE IMPROVED INSECT CONTROL. Make only one application per growing season. 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.
<p>Do not apply within 28 days of harvest. Do not apply more than 3.0 fl. oz. (30 gms ai) ESTEEM Insect Growth Regulator per acre per season. Do not make more than 1 application of ESTEEM Insect Growth Regulator per growing season.</p>			

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 ESTEEM Insect Growth Regulator applications to a single application per growing season. ESTEEM 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 2.5 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 Integrated Resistance Management (IRM) recommendations. Read and follow all product labels before applying any insecticide.

APPLE

GENERAL: ESTEEM Insect Growth Regulator acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. ESTEEM has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since ESTEEM 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	DOSAGE PER ACRE	SPECIAL INSTRUCTIONS
Apple	Codling Moth Suppression of: Leafroller Pandemis Oblique Banded	4.0 to 5.0 fl. oz. (40 to 50 gms ai)	Apply in 100 to 400 gals./A. 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. For additional generations apply other insecticides registered for Codling Moth control. The addition of oil at 1 to 2% has been shown to increase codling moth activity of ESTEEM. Follow local recommendations regarding in season use and rates of oil in your area. Oblique Banded Leafroller: Apply as the overwintering larvae become active (timing will depend upon location but is usually between tight cluster and petal fall tree growth stage). ESTEEM does not directly control the larvae but inhibits normal pupation and adult emergence.
	San Jose Scale	4.0 to 5.0 fl. oz. (40 to 50 gms ai)	Apply in 100 to 400 gals./A. 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 ESTEEM. 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.

CROP	PESTS	DOSAGE PER ACRE	SPECIAL INSTRUCTIONS
	Leafminer Spotted Tentiform Western Tentiform Aphid Rosy Apple Spirea Green Apple	3.0 to 5.0 fl. oz. (30 to 50 gms ai)	Apply in 100 to 400 gals./A. 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 delayed dormant. Spirea & Green Apple Aphid: Apply when aphids first appear, but before aphids are colonized. TIMING IS CRITICAL FOR ACCEPTABLE APHID CONTROL.
<p>ESTEEM Insect Growth Regulator may be mixed and/or alternated with commonly used insecticides to comply with local IPM programs and resistance management programs.</p> <p>Do not apply within 45 days of harvest. Do not exceed 15.0 fl. oz. (150 gms ai) of ESTEEM per acre per season.</p>			

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 USA Corporation is restricting ESTEEM Insect Growth Regulator to three applications per growing season. ESTEEM 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 Insect Resistance Management (IRM) recommendations. Read and follow all product labels before applying any insecticide.

PEAR

GENERAL: ESTEEM Insect Growth Regulator acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. ESTEEM has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since ESTEEM 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	DOSAGE PER ACRE	SPECIAL INSTRUCTIONS
Pear	Pear Psylla	4.0 to 5.0 fl. oz. (40 to 50 gms ai)	<p>Apply in 100 to 400 gals./A at delayed dormant with a superior spray at the manufacturer's recommended rates.</p> <p><i>For Pear Psylla a second application may be made at petal fall in addition to the delayed dormant application.</i></p> <p>For in season control of pear psylla use an insecticide recommended for this use.</p>
	San Jose Scale	4.0 to 5.0 fl. oz. (40 to 50 gms ai)	<p>Apply in 100 to 400 gals./A at delayed dormant with a superior spray at the manufacturer's recommended rates. Under heavy scale pressure, use the higher rate.</p> <p>For control of scale in season make application in cover sprays when scale crawlers first emerge.</p> <p>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.</p>
	Codling Moth Suppression of: Leafroller Pandemis Oblique Banded	4.0 to 5.0 fl. oz. (40 to 50 gms ai)	<p>Apply in 100 to 400 gals./A.</p> <p>1st Generation Codling Moth: Apply at Biofix plus 100 degree days. Make a second application 14 to 21 days later. For additional generations apply other insecticides registered for Codling Moth control. The addition of oil at 1 to 2% has been shown to increase codling moth activity of ESTEEM. Follow local recommendations regarding in season use and rates of oil in your area.</p> <p>For additional generations apply other insecticides registered for Codling Moth Control.</p>
<p>ESTEEM Insect Growth Regulator may be mixed and/or alternated with commonly used insecticides to comply with local IPM-programs and resistance management programs.</p> <p>Do not apply within 45 days of harvest. Do not exceed 15 fl. oz. (150 gms ai) of ESTEEM Insect Growth Regulator per acre per season.</p>			

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 USA Corporation is restricting ESTEEM Insect Growth Regulator to three applications per growing season. ESTEEM 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 Insect Resistance Management (IRM) recommendations. Read and follow all product labels before applying any insecticide.

WALNUT

GENERAL: ESTEEM Insect Growth Regulator acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. ESTEEM has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since ESTEEM 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	DOSAGE PER ACRE	SPECIAL INSTRUCTIONS
Walnut	Codling Moth Suppression of: Navel Orangeworm	4.0 to 5.0 fl. oz. (40 to 50 gms ai)	Apply 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. For additional generations apply other insecticides registered for Codling Moth control. The addition of oil at 1 to 2% has been shown to increase codling moth activity of ESTEEM. Follow local recommendations regarding in season use and rates of oil in your area. Late Season Codling Moth and Navel Orangeworm: Apply at egg deposition. Make a second application if needed 14 to 21 days later. Navel Orangeworm application should be made at hull split.
<p>ESTEEM Insect Growth Regulator may be mixed and/or alternated with commonly used insecticides to comply with local IPM programs and resistance management programs.</p> <p>Do not apply within 21 days of harvest. Do not exceed 15.0 fl. oz. (150 gms ai) of ESTEEM Insect Growth Regulator per acre per season.</p>			

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 USA Corporation is restricting ESTEEM Insect Growth Regulator to three applications per growing season. ESTEEM 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 Insect Resistance Management (IRM) recommendations. Read and follow all product labels before applying any insecticide.

ALMOND

GENERAL: ESTEEM Insect Growth Regulator acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. ESTEEM has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since ESTEEM 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	DOSAGE PER ACRE	SPECIAL INSTRUCTIONS
Almond	San Jose Scale Suppression of: Peach Twig Borer	4.0 to 5.0 fl. oz. (40 to 50 gms ai)	Apply in 100 to 400 gals./A. Apply at delayed dormant with spray oil or in cover sprays without oil. Use the manufacturers recommended rate of oil. Under heavy scale pressure, use the higher rate. <i>Make application in cover sprays when scale crawlers first emerge. Follow local recommendations regarding in season use and rates of oil in your area.</i> ESTEEM has provided good <i>suppression of Peach Twig Borer</i> when applied delayed dormant through bloom sprays.
<p>ESTEEM Insect Growth Regulator may be mixed and/or alternated with commonly used insecticides to comply with local IPM programs and resistance management programs.</p> <p>Do not apply within 21 days of harvest. Do not exceed 15.0 fl. oz. (150 gms ai) of ESTEEM Insect Growth Regulator per acre per season.</p>			

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 USA Corporation is restricting ESTEEM Insect Growth Regulator to three applications per growing season. ESTEEM 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 Insect Resistance Management (IRM) recommendations. Read and follow all product labels before applying any insecticide.

CITRUS

GENERAL: ESTEEM Insect Growth Regulator acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. ESTEEM has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since ESTEEM 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	DOSAGE PER ACRE	SPECIAL INSTRUCTIONS
Citrus	Scale California Red - Black Brown Soft	5.0 fl. oz. (50 gms ai)	Apply in 200 to 1500 gals./A. Apply anytime prior to fruit becoming infested when scale is in the crawler stage. Thorough coverage is essential for good control. ESTEEM IGR may be applied with superior spray oils at the manufacturers' recommended rates. NOTE: For scale apply only one application during emergence of scale crawlers per calendar year.
	Citrus Whitefly Citrus Leafminer Citrus Black Fly	2.5 to 3.0 fl. oz. (25 to 30 gms ai)	Apply in 200 to 1500 gals./A. Apply when pests are just beginning to build and before infestation has occurred. Thorough coverage is essential for good control. ESTEEM IGR may be mixed and/or alternated with commonly used insecticides to comply with local IPM programs and resistance management programs.
Do not apply within 1 day of harvest. Do not exceed 15.0 fl. oz. (150 gms ai) of ESTEEM Insect Growth Regulator per acre per season. Do not make more than three (3) ESTEEM applications 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 USA Corporation is restricting ESTEEM Insect Growth Regulator to three applications per growing season. ESTEEM 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 Insect Resistance Management (IRM) recommendations. Read and follow all product labels before applying any insecticide.

PEPPER

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

ESTEEM does exhibit translaminar movement in pepper leaves which means that ESTEEM 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	DOSAGE PER ACRE	SPECIAL INSTRUCTIONS
Pepper	Sweetpotato/Silverleaf Whitefly (immatures only)	2.5 to 3.0 fl. oz. (25 to 30 gms ai)	EARLY SEASON: Apply with ground equipment in adequate water for uniform coverage (10 to 50 gals./A). Higher water volumes may provide improved insect control. Make application when pest activity is first noticed.
	Sweetpotato/Silverleaf Whitefly (immatures & adults) Cabbage Looper Green Peach Aphid Tobacco Hornworm	2.0 to 2.5 fl. oz. (20 to 25 gms ai) + Orthene® 75 SP (0.5 - 1.0 lbs. ai)	Apply as a tank mix with ground equipment for uniform coverage (25 to 150 gals./A by ground. Make application when eggs or insects first appear. Do not make a second ESTEEM application sooner than 30 days following the first ESTEEM application. If control is needed during this period use an alternate insecticide registered for the target pest. ESTEEM 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 Orthene 75 SP.
<p>Do not apply within 14 days of harvest. Do not exceed 8 fl. oz. (80 gms ai) of ESTEEM Insect Growth Regulator per acre per season. Do not make more than three (3) ESTEEM applications per growing season.</p>			

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 USA Corporation is restricting ESTEEM Insect Growth Regulator to three applications per growing season. ESTEEM 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 Insect Resistance Management (IRM) recommendations. Read and follow all product labels before applying any insecticide.

TOMATO

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

ESTEEM does exhibit translaminar movement in tomato leaves which means that ESTEEM 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	DOSAGE PER ACRE	SPECIAL INSTRUCTIONS
Tomato	Sweetpotato/Silverleaf Whitefly (immatures only)	2.5 to 3.0 fl. oz. (25 to 30 gms ai)	EARLY SEASON: Apply with ground equipment in adequate water for uniform coverage (10 to 50 gals./A). Higher water volumes may provide improved insect control. Make application when pest activity is first noticed.
	Sweetpotato/Silverleaf Whitefly (immatures & adults) Tomato Pinworm Fruitworms Potato Aphid Thrips Yellowstriped Armyworm	2.0 to 2.5 fl. oz. (20 to 25 gms ai) + Monitor® 4 Spray 24 oz. (0.75 lbs. ai) + Danitol® 2.4 EC 10 ⅔ oz. (0.2 lbs. ai)	EARLY SEASON WHITEFLY CONTROL PROGRAM FOR REDUCTION OF GEMINIVIRUS: Apply as a tank mix with ground equipment for uniform coverage (10 to 120 gals./A. Make application when scouting first indicates adult whiteflies are on young plants. NOTE: This may result in treatment immediately 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 indicates whitefly are present. Do not make a second ESTEEM application sooner than 30 days following the first ESTEEM application. If control is needed during this period use an alternate insecticide registered for the target pest. ESTEEM 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 Spray and Danitol 2.4 EC.
Do not apply within 14 days of harvest. Do not exceed 8 fl. oz. (80 gms ai) of ESTEEM Insect Growth Regulator per acre per season. Do not make more than three (3) ESTEEM applications per growing 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 USA Corporation is restricting ESTEEM Insect Growth Regulator to three applications per growing season. ESTEEM 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 Insect Resistance Management (IRM) recommendations. Read and follow all product labels before applying any insecticide.

STORAGE AND DISPOSAL

PROHIBITIONS

Do not contaminate water, food or feed by storage, disposal or cleaning of equipment.

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.

For help with any spill, leak, fire or exposure involving this material, call day or night 1-800-892-0099.

PESTICIDE DISPOSAL

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

CONTAINER DISPOSAL

Triple rinse (or equivalent). Do not reuse container. Offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Copyright© 1998 by Valent U.S.A. Corporation

Danitol® — Reg. TM of Sumitomo Chemical Company, Ltd.

Monitor® — Reg. TM of Valent USA Corporation

Orthene® — Reg. TM of Monsanto Company

Manufactured for:

Valent U.S.A. Corporation

Walnut Creek, CA 94596-8025

Made in U.S.A.

Form 980706

EPA Reg. No. 59639-xx

EPA Est. _____