

Supplemental Label



Valent U.S.A. Corporation
P.O. Box 8025
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GROUP	7D	INSECTICIDE
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ESTEEM[®] 0.86 EC Insect Growth Regulator **EPA Reg. No. 59639-95** **(EXCEPT CALIFORNIA AND NEW YORK)**

ESTEEM 0.86 EC INSECT GROWTH REGULATOR USES ON: CITRUS (Including Ugli Fruit and White Sapote), GRAPES, ONIONS (DRY BULB ONLY), LEGUME VEGETABLES (Except Soybean), AND STRAWBERRY

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.

GENERAL INFORMATION

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

Esteem 0.86 EC is intended for use in Insect Pest Management (IPM) or Insect Resistance Management (IRM) programs. *Esteem* 0.86 EC 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 0.86 EC acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. *Esteem* 0.86 EC has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since *Esteem* 0.86 EC is an Insect Growth Regulator (IGR) and activity depends on the insects' development, evidence of activity will be slower than typical contact insecticides.

RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management purposes, *Esteem* 0.86 EC is a Group 7D insecticide. Any insect population may contain individuals naturally resistant to *Esteem* 0.86 EC and other Group 7D insecticides. The resistant individuals dominate the insect population if these insecticides are used repeatedly. These resistant insects may not be controlled by *Esteem* 0.86 EC or other Group 7D 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.

CITRUS (Including Ugli Fruit and White Sapote)

GENERAL: *Esteem* 0.86 EC Insect Growth Regulator acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. *Esteem* 0.86 EC has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since *Esteem* 0.86 EC 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 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.	<p>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.</p> <p>Apply anytime prior to fruit becoming infested when scale is in the crawler stage. Application at the 2nd or 3rd generation of scale may result in excessive dead scale remaining on the fruit at harvest. Thorough coverage is essential for good control.</p> <p><i>Esteem</i> 0.86 EC may be applied with superior spray oils at 1/2 to 1%. Follow the manufacturer's directions and recommendations on timing and rates.</p> <p>NOTE: For scale apply only one application during emergence of scale crawlers per calendar year.</p>
	Citrus Black Fly Citrus Leafminer Citrus Whitefly	10 fl. oz.	<p>Apply with ground application in 200 to 1,500 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.</p> <p>Apply when pests are just beginning to build and before infestation has occurred. Thorough coverage is essential for good control.</p>
	<p><i>Esteem</i> 0.86 EC may be mixed and/or alternated with commonly used insecticides to comply with local IPM programs and Resistance Management programs.</p> <ul style="list-style-type: none"> Do not apply within 1 day of harvest. Do not make more than 2 <i>Esteem</i> 0.86 EC applications per growing season. Do not exceed 26 fl. oz. of <i>Esteem</i> 0.86 EC per acre per season. Regardless of formulation do not exceed 0.134 lb. pyriproxyfen per acre per season. Do not apply earlier than 21 days after last <i>Esteem</i> 0.86 EC 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 *Esteem* 0.86 EC Insect Growth Regulator to two applications per growing season. *Esteem* 0.86 EC 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.

GRAPE

Esteem 0.86 EC Insect Growth Regulator acts by suppressing embryogenesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. *Esteem* 0.86 EC has no activity on adult insects, but hatching of eggs laid by treated adults will be suppressed. Since *Esteem* 0.86 EC 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.	<p>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.</p> <p>Lecanium Scale: Apply at either dormant, delayed dormant or as 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.</p> <p>Follow local recommendations regarding in-season use and rates of oil in your area.</p>
	<ul style="list-style-type: none"> Do not apply within 21 days of harvest. Do not make more than two (2) <i>Esteem</i> 0.86 EC applications per growing season. Do not exceed 32 fl. oz. <i>Esteem</i> 0.86 EC per acre per season. Do not apply earlier than 14 days after last <i>Esteem</i> 0.86 EC treatment. Regardless of formulation, do not apply more than 0.22 lb. active of pyriproxyfen per acre per season. 		

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ONION (DRY BULB ONLY)

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CROP	PESTS	PRODUCT RATES PER ACRE	SPECIAL INSTRUCTIONS
Onion (Dry Bulb Only)	Onion Thrips Western Flower 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.
	<ul style="list-style-type: none"> Do not apply within 3 days of harvest. Do not make more than two (2) <i>Esteem</i> 0.86 EC applications per growing season. Do not exceed 16 fl. oz. <i>Esteem</i> 0.86 EC per acre per season. Do not apply earlier than 14 days after last <i>Esteem</i> 0.86 EC treatment. Do not plant any crop other than those with registered pyriproxyfen uses in treated areas sooner than 30 days after the last application. Regardless of formulation, do not apply more than 0.11 lb. of pyriproxyfen per acre per season. 		

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LEGUME VEGETABLES (Except Soybean)

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Esteem 0.86 EC exhibits translaminar movement which means that *Esteem* 0.86 EC 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
Legume Vegetables (except Soybean)	Silverleaf Whitefly Sweetpotato Whitefly	8 to 10 fl. oz.	<p>EARLY SEASON WHITEFLY PROGRAM:</p> <p>Apply with ground equipment in adequate water for uniform coverage. (10 to 50 gals./A). Thorough coverage is critical for adequate control. It is essential to use adequate water volume to ensure thorough coverage.</p> <p>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).</p> <p>Under severe pressure, use the higher recommended rates.</p> <p>Only whole fields should be treated.</p>
	<ul style="list-style-type: none"> Do not use on legume vegetable varieties grown for livestock feed. Do not apply within 7 days of harvest. Do not make more than two (2) <i>Esteem</i> 0.86 EC applications per growing season. Do not exceed 20 fl. oz. <i>Esteem</i> 0.86 EC per acre per season. Do not apply earlier than 14 days after last <i>Esteem</i> 0.86 EC treatment. Do not plant any crop other than those with registered pyriproxyfen uses in treated areas sooner than 30 days after the last application. Regardless of formulation, do not apply more than 0.134 lb. of 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 *Esteem* 0.86 EC Insect Growth Regulator to two applications per growing season. *Esteem* 0.86 EC 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.

STRAWBERRY

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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.
	<ul style="list-style-type: none">• Do not apply within 2 days of harvest.• Do not make more than two (2) <i>Esteem</i> 0.86 EC applications per growing season.• Do not exceed 20 fl. oz. <i>Esteem</i> 0.86 EC per acre per season.• Do not apply earlier than 30 days after last <i>Esteem</i> 0.86 EC treatment.• Do not plant any crop other than those with registered pyriproxyfen uses in treated areas sooner than 30 days after the last application.• Regardless of formulation, do not apply more than 0.134 lb. of pyriproxyfen per acre per season.		

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 *Esteem* 0.86 EC Insect Growth Regulator to two applications per growing season. *Esteem* 0.86 EC 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.

THIS LABELING MUST BE IN THE POSSESSION OF THE USER AT THE TIME OF APPLICATION. PLEASE REFER TO CONTAINER LABEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS. FOLLOW ALL APPLICATION DIRECTIONS, RESTRICTIONS AND PRECAUTIONS ON THE EPA REGISTERED LABEL.

PLEASE CONTACT VALENT U.S.A. CORPORATION AT 1-800-6-VALENT (682-5368) TO DETERMINE IF THIS USE IS REGISTERED IN YOUR STATE.

Manufactured for
Valent U.S.A. Corporation
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www.valent.com

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Read and follow the label instructions before using.

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