

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460



OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

5/7/2008

Carolyn Brinkley  
Syngenta Crop Protection, Inc.  
PO Box 18300  
Greensboro, NC 27419

re: Proclaim Insecticide, EPA Reg. # 100-904  
label amendment submitted 1/29/2008, revised 3/20/2008  
conditionally accepted

Dear Ms. Brinkley:

The revised labeling submitted in connection with the registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is conditionally acceptable provided you submit the following required information within 90 days from date of this letter.

1. Submit information describing the reasons (e.g., differences in labs or test methodology) that could account for the difference in acute eye irritation study results from the old emamectin technical (#100-902) to the new emamectin technical (#100-1270) (i.e., a major change from Category I to Category III). See enclosed copy of the 5/7/2008 review on this subject by Jack Arthur of the Health Effects Division for more details.

This label amendment changes the restricted entry interval (REI) for emamectin from 48 to 12 hours. This decision is based on a review of both the acute toxicology of the new emamectin technical (# 100-1270) and a comparison of relevant systemic toxic effects with estimated exposure from postapplication activities for currently registered agricultural use sites. Given the degree of change in the acute eye irritation of emamectin technical, the Agency is requesting additional confirmatory information and temporarily implementing additional conservative labeling (by maintaining the use of "protective eyewear" for early reentry as listed on the proposed label as submitted) until the issue is resolved.

2 8 30

Submit two (2) copies of your final printed labeling prior to releasing your product for shipment. If the above provisions 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 the amended labeling constitutes acceptance of these conditions.

A copy of the label stamped "accepted" is enclosed for your records.

Sincerely yours,

/s/

Thomas C. Harris  
Biologist  
Insecticide Rodenticide Branch  
Registration Division (7505C)  
Harris.Thomas@epa.gov  
(703) 308-9423

enclosures (2)

(Booklet)

**RESTRICTED USE PESTICIDE**  
**TOXIC TO FISH, MAMMALS, AND AQUATIC ORGANISMS**  
 FOR RETAIL SALE TO AND USE ONLY BY CERTIFIED APPLICATORS OR PERSONS UNDER THEIR  
 DIRECT SUPERVISION, AND ONLY FOR THOSE USES COVERED BY THE CERTIFIED APPLICATOR'S  
 CERTIFICATION.

Proclaim®  
Insecticide

Group	6	Insecticide
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For control or suppression of certain lepidopterous larvae (worms/caterpillars), leafminers, and spider mites on Fruiting Vegetables, Leafy Vegetables including *Brassica* (cole crops), Pome Fruit, and Turnip Greens (tops, leaves)

Active Ingredient:	
Emamectin benzoate (CAS No. 155569-91-8) .....	5.0%
Other Ingredients:	95.0%
Total:	100.0%

Proclaim Insecticide is a soluble granule containing 5% emamectin benzoate.

**KEEP OUT OF REACH OF CHILDREN.**

**CAUTION**

See additional precautionary statements and directions for use in booklet.

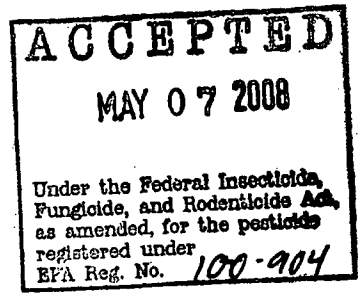
EPA Reg. No. 100-904

EPA Est. xxxxx

Product of xxxxx  
Formulated in xxxxx

SCP 904A-L(draft-b REI)

Net Weight



<b>FIRST AID</b>	
<b>If swallowed</b>	<ul style="list-style-type: none"><li>• Call poison control center or doctor immediately for treatment advice.</li><li>• Have person sip glass of water if able to swallow.</li><li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>
<b>If in eyes</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>If inhaled</b>	<ul style="list-style-type: none"><li>• Move person to fresh air.</li><li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li><li>• Call a poison control center or doctor for further treatment advice.</li></ul>
<b>NOTE TO PHYSICIAN</b>	
<p>Early signs of intoxication include dilation of pupils, muscular incoordination, and muscular tremors. Vomiting within one-half hour of exposure can minimize toxicity following accidental ingestion of the product; rapidly after exposure (&lt; 15 minutes) administer repeatedly medical charcoal in a large quantity of water or ipecac.</p>	
<p>If toxicity from exposure has progressed to cause severe vomiting, the extent of resultant fluid and electrolyte imbalance should be gauged. Appropriate supportive parenteral fluid replacement therapy should be given, along with other required supportive measures (such as maintenance of blood pressure levels and proper respiratory functionality) as indicated by clinical signs, symptoms, and measurements.</p>	
<p>In severe cases, observations should continue for at least several days until clinical condition is stable and normal. Since emamectin benzoate is believed to enhance GABA activity in animals, it is probably wise to avoid drugs that enhance GABA activity (barbiturates, benzodiazepines, valproic acid) in patients with potentially toxic emamectin benzoate exposure.</p>	
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment.</p>	

**HOT LINE NUMBER**  
For 24-Hour Medical Emergency Assistance (Human or Animal)  
Or Chemical Emergency Assistance (Spill, Leak, Fire or Accident)  
Call  
**1-800-888-8372**

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**PRECAUTIONARY STATEMENTS**

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**Hazards to Humans and Domestic Animals**

**CAUTION**

Harmful if swallowed, inhaled, or absorbed through skin. Causes moderate eye irritation. Avoid contact with the skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse. Avoid breathing dust or spray mist. Prolonged or frequently repeated exposure may cause allergic skin reactions in some individuals.

**Personal Protective Equipment (PPE)**

• **Ground Application (except airblast sprayers):**

**Applicators, mixers, loaders, and other handlers must wear:**

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material such as polyvinyl chloride, nitrile rubber or butyl rubber
- Shoes plus socks

• **Airblast Application:**

**Mixers, loaders, and other handlers must wear:**

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material such as polyvinyl chloride, nitrile rubber or butyl rubber
- Shoes plus socks

**Applicators using OPEN CAB airblast sprayers must wear:**

- Coveralls over long-sleeved shirt and long pants

- Chemical-resistant gloves made of any waterproof material such as polyvinyl chloride, nitrile rubber or butyl rubber
- Shoes plus socks

**Applicators using ENCLOSED CAB airblast sprayers**

**While inside the cab must wear:**

- Long-sleeved shirt and long pants
- Shoes plus socks

**When entering or leaving the cab must also wear:**

- Chemical-resistant gloves made of any waterproof material such as polyvinyl chloride, nitrile rubber or butyl rubber.

**NOTE:** Once inside the cab applicator must remove gloves and store them in a chemical resistant container such as a plastic bag.

- **Aerial application:**

**Mixers, loaders, and other handlers must wear:**

- Coveralls over long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves made of any waterproof material such as polyvinyl chloride, nitrile rubber or butyl rubber
- Dust/Mist filtering respirator or a NIOSH-approved respirator with any N, R, P, or HE filter

**Applicators (Enclosed Cockpit)**

**While inside the cockpit must wear:**

- Long sleeved shirt and long pants
- Shoes plus socks

**When entering or leaving the cockpit must also wear:**

- Chemical-resistant gloves made of any waterproof material such as polyvinyl chloride, nitrile rubber or butyl rubber.

**NOTE:** Once inside the cockpit applicator must remove gloves and store them in a chemical resistant container such as a plastic bag.

**Flaggers must wear:**

- Long sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves made of any waterproof material such as polyvinyl chloride, nitrile rubber or butyl rubber.

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.

**Engineering Controls**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170-240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

**User Safety Recommendations**

**Users should:**

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothes immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

**Environmental Hazards**

This pesticide is toxic to fish, birds, mammals, and aquatic invertebrates. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash water or rinsate.

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

**Physical or Chemical Hazards**

Do not use or store near heat or open flame.

**CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY**

**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, Inc. or Seller. To the extent permitted by applicable law, Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of the product contrary to label instructions, or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and (2) Buyer and User assume the risk of any such use. **TO THE EXTENT PERMITTED BY APPLICABLE LAW, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.**

To the extent permitted by applicable law, in no event shall SYNGENTA be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND 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 THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.



## **DIRECTIONS FOR USE**

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

Proclaim Insecticide must be used only in accordance with directions on this label or in separately published Syngenta supplemental labeling for this product.

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 made of any waterproof material such as polyvinyl chloride, nitrile rubber or butyl rubber
- Shoes plus socks
- Protective eyewear

**FAILURE TO FOLLOW DIRECTIONS AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR INSECT CONTROL, AND/OR ILLEGAL RESIDUES.**

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## GENERAL INFORMATION

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Proclaim Insecticide is a selective insecticide for use on: *Brassica* Leafy Vegetables (cole crops), Fruiting Vegetables, Leafy Vegetables, Pome Fruit, and Turnip Greens (tops, leaves).

Proclaim Insecticide controls the larval stages (worms/caterpillars) of certain lepidopteran species. Proclaim Insecticide has contact activity, but is most efficacious when ingested by the pest. Shortly after exposure to Proclaim Insecticide, affected larvae are paralyzed, stop feeding, and subsequently die after 2-4 days.

Proclaim Insecticide has been tested for phytotoxicity and has a wide margin of safety on the crops listed on this label.

- Apply Proclaim Insecticide to plant foliage when larvae first appear, but before populations reach damaging levels. Target Proclaim Insecticide applications at small (1/4 inch in length) larvae.
- Thorough spray coverage is essential for optimum performance. Apply Proclaim Insecticide in sufficient water to ensure good coverage of all plant surfaces. The use of greater water volumes will generally result in better coverage, especially under adverse conditions (e.g., hot, dry) or when the plant canopy is dense. See the **CROP USE DIRECTIONS** section of this label for specific spray volume recommendations for different crops.
- The use of a penetrating type spray adjuvant, at the manufacturer's suggested rate, is recommended for all applications of Proclaim Insecticide. The use of an adjuvant typically improves coverage and penetration and results in optimum insect control, especially in crops with hard-to-wet leaf surfaces. However, do not use sticker/binder type adjuvants because they may reduce translaminar movement of the active ingredient into the plant.

### Resistance Management

Proclaim Insecticide is a Group 6 insecticide (contains the active ingredient emamectin benzoate).

Because of the inherent risks of resistance development to any product, it is strongly advised that Proclaim Insecticide be used in a sound resistance management program. Treatment may not be effective against labeled pests if insect or mite-tolerant strains develop. When applying Proclaim Insecticide to plants that are hosts of labeled pests and these labeled pests have multiple generations per crop per year, use resistance management practices.

**Resistance management practices** may include, but are not limited to:

- Rotating Proclaim Insecticide with other products with different modes of action

- Avoiding treatment of successive pest generations with Proclaim Insecticide
- Using labeled rates at the specified spray intervals
- Using non-chemical alternatives such as beneficial arthropods
- Rotating susceptible to non-susceptible plants
- Using various cultural practices

For additional information regarding the implementation of these or other resistance management practices, consult your local agricultural advisor or company representative.

### **Rotational Restrictions**

There are no rotational (plant back) restrictions with Proclaim Insecticide. Treated areas may be replanted with any crop as soon as practical following the last application.

**See specific "Use Restrictions" in each crop section.**

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## **APPLICATION PROCEDURES**

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### **Application Prohibitions:**

- **Chemigation:** Do not apply this product through any type of irrigation system.
- **State Restriction:** Do not apply Proclaim Insecticide with aircraft in New York State.

### **Spray Equipment**

Spray equipment configuration should be arranged to provide accurate, uniform, and thorough coverage of the target crop and minimize potential for spray drift. Use spray nozzles that provide medium to fine-sized droplets. To ensure accuracy, calibrate sprayer before each use. For spray equipment and calibration information, consult sprayer manufacturers and/or state recommendations. All ground and aerial application equipment must be properly maintained and calibrated using appropriate carriers.

### **Spray Volume**

- Applications using sufficient water volume for thorough and uniform coverage of the target crop provide the most effective pest control.
- Avoid application when uniform coverage is not possible or if excessive spray drift or inversion is possible.

Type of Application Equipment	Minimum Gal. of Water	Comments
Ground Sprayers	10 gal./A	If the crop canopy is dense or worm infestation is high, increase the amount of water.
Air Blast Sprayers (For Orchard Application)	40 gal./A	<b>Concentrate sprays:</b> Minimum gal./A for concentrate spray application (i.e. an application method providing uniform spray coverage of all plant parts but not to the point of runoff.)
	See Comments	<b>Dilute sprays:</b> The rate of Proclaim Insecticide per 100 gal. is based on a volume of 400 gal./A of dilute spray. Dilute spray volume per acre will vary by orchard depending on tree size, tree spacing and canopy density. Dilute sprays are applied just to the point of runoff.
Aircraft	5 gal./A	Increase spray volume to 10-20 gal./A under adverse conditions (i.e., high temperature, low relative humidity, or dense canopy).

**SPRAY DRIFT**

**NOTE:** When states have more stringent regulations, they must be observed.

**Spray Drift Precautions – Aircraft and Ground Application Equipment**

Apply Proclaim Insecticide only when wind velocity favors on target product deposition (approximately 3 to 10 mph).

- **Do not** apply with ground application equipment within 25 ft. of or with aircraft within 150 ft. of lakes, reservoirs, rivers, permanent streams, marshes, pot holes, natural ponds, estuaries, or commercial fish farm ponds.
- **Do not** cultivate within 25 ft. of the aquatic area to allow growth of a vegetative filter strip.
- **Do not** allow this product to drift onto non-target areas. Drift may result in illegal residues or injury to nontarget species. Risk of exposure to sensitive areas can be reduced by applying this product when the wind direction is away from the sensitive area.

- **Do not apply when the weather conditions may cause drift:**
  - Avoid application when the temperature is high and/or the humidity is low. These conditions increase the evaporation of spray droplets and the likelihood of drift to aquatic areas.
  - **Do not apply** when wind speed or wind gusts are greater than 10 mph.
  - **Do not apply** when wind speed is below 2 mph because wind direction will vary and there is a high potential for inversion.

### **Spray Drift Precautions (Aerial Application)**

#### **Responsibility**

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator is responsible for considering all of these factors when making application decisions.

#### **Drift Management Requirements**

The following drift management requirements must be followed to avoid off-target movement from aerial applications to agricultural field crops.

- **Outermost Nozzle Distance**  
The distance of the outermost nozzles on the boom must not exceed  $\frac{3}{4}$  the length of the wingspan or rotor.
- **Nozzle Direction**  
Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.
- **Maximum Wind Speed**  
Do not apply when wind speed is greater than 10 mph.
- **Droplet Size**  
The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see **Wind, Temperature and Humidity, and Temperature Inversions**).

- **Controlling Droplet Size**

- **Volume**

- Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.

- **Pressure**

- Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.

- **Number of Nozzles**

- Use the minimum number of nozzles that provide uniform coverage.

- **Nozzle Orientation**

- Orienting nozzles so that the spray is released parallel to the air stream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.

- **Nozzle Type**

- Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

- **Boom Length**

- For some use patterns, reducing the effective boom length to less than  $\frac{3}{4}$  of the wingspan or rotor length may further reduce drift without reducing swath width.

- **Application Height**

- Applications should not be made at a height greater than 10 ft. above the top of the target plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

- **Swath Adjustment**

- When applications are made with a cross wind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind.

- **Wind**

- Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application must be avoided below 2 mph due to variable wind direction and high inversion potential. **NOTE:** Local terrain can influence wind

patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

- **Temperature and Humidity**

To compensate for evaporation when applying Proclaim Insecticide in low relative humidity, set up equipment to produce larger droplets. Evaporation of droplets is most severe when conditions are both hot and dry.

- **Temperature Inversions**

Proclaim Insecticide must not be applied during a temperature inversion because the potential for drift is high. Temperature inversions restrict vertical air mixing, and this causes small, suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds that are common during inversions. Temperature inversions are characterized by temperatures that increase with altitude and are common on nights with limited cloud cover and light to no wind. Inversions begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, the movement of smoke from a ground source or an aircraft smoke generator can also identify inversions. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates, indicates good vertical air mixing.

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## **MIXING PROCEDURES**

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1. Thoroughly clean spray equipment before using this product.
2. Prepare no more spray mixture than is needed for the immediate application.
3. Keep product container tightly closed when not in use.
4. Agitate the spray solution before and during application.
5. Do not let the spray mixture stand overnight in the spray tank.
6. Flush the spray equipment thoroughly following each use and apply rinsate to a previously treated area.

### **Mixing Instructions: Proclaim Insecticide Alone**

1. Add 1/3 of the required amount of water to the spray or mixing tank.
2. With the agitator running, add Proclaim Insecticide into the spray tank.
3. Continue agitation while adding the remainder of the water.
4. Begin application of the solution after Proclaim Insecticide has completely dispersed into the mix water.
5. Maintain agitation until all of the mixture has been applied.

**Note:** Do not use liquid fertilizer as a carrier for Proclaim Insecticide.

## Proclaim Insecticide - Tank Mixtures

### Compatibility

Proclaim Insecticide is compatible with most insecticide, fungicide, and foliar nutrient products. However, before tank mixing Proclaim Insecticide use a jar test, as described below, to test the physical compatibility of Proclaim Insecticide with tank mix partners.

1. Using a quart jar, add the proportionate amounts of the products to 1 qt. of water. Add wettable powders and water-dispersible granular products first, then liquid flowables, and emulsifiable concentrates last.
2. After thoroughly mixing, let the mixture stand for at least 5 minutes. If the combination remains mixed or can be remixed readily, it is physically compatible.
3. If compatibility is acceptable, follow the instructions in **Mixing Instructions: Proclaim Insecticide Tank Mixtures**.

### NOTE:

- The safety of all potential tank mixes on all crops may not have been tested. Before applying any tank mixture not specifically recommended on this label, the safety to the target crop should be confirmed.
- If using Proclaim Insecticide in a tank mixture:
  - Do not mix with any product that prohibits such mixing.
  - Observe all directions for use, crop/sites, use rates, dilution ratios, precautions, and limitations that appear on the tank mix product label.
  - Do not exceed any labeled use rate.
  - Follow the most restrictive label precautions and limitations.
- Tank mixtures or other applications of products referenced on this label are permitted only in those states in which the referenced products are labeled.

**IMPORTANT:** Do not tank mix Proclaim Insecticide with Bravo® Weather Stik®, Dithane® Rainshield™, or any other pesticide containing a sticker component in its formulation because this may drastically reduce Proclaim Insecticide's control of pests.

### Mixing Instructions: Proclaim Insecticide Tank Mixtures

1. Add 1/3 of the required amount of water to the mix tank.
2. Start the agitator running before adding any tank mix partners.
3. When using Proclaim Insecticide in tank mixtures:
  - a. All products in water-soluble packaging should be added to the tank before any other tank mix partner, including Proclaim Insecticide.



- b. Allow the water-soluble packaging to completely dissolve and the product(s) to completely disperse before adding any other tank mix partner to the tank.
  - c. Then add other tank mix partners in this order: wettable powders, wettable granules (dry flowables), liquid flowables, liquids and emulsifiable concentrates. Always allow each tank mix partner to become fully dispersed before adding the next product.
4. Provide sufficient agitation while adding the remainder of the water.
  5. Maintain agitation until all the mixture has been applied.

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**CROP USE DIRECTIONS**

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**VEGETABLES****Use Restrictions for All Vegetables**

- **Location Prohibition:** Do not use Proclaim Insecticide in greenhouses, nurseries, in plant propagation houses, or on any plants grown for use as transplants.
- **Minimum Application Rates:** Do not apply Proclaim Insecticide at rates lower than the rates specified on this label.
- **Number of Applications:** Do not apply more than 2 sequential applications of Proclaim Insecticide. Rotate to another insect control product with a different mode of action.
- **Adjuvant Recommendation:** Thorough spray coverage of plant foliage is essential for optimum control. To provide optimum coverage and insect control, the use of a penetrating type spray adjuvant at the manufacturer's suggested rate is recommended. Do not use a sticker/binder type adjuvant.
- **Application following failure of another insecticide:** Do not apply Proclaim Insecticide following the failure of another product if the larvae are large (>1/4 inch long).
- **Grazing:** Do not allow livestock to graze in treated areas.

**Brassica Head and Stem Vegetables Crop Subgroup**

Crops in this group are: Broccoli, Brussels sprouts, Cabbage, Cauliflower, Cavalo broccolo, Chinese broccoli (gai lon), Chinese (napa) cabbage, Chinese mustard cabbage (gai choy), and kohlrabi

**Brassica Leafy Vegetables Crop Subgroup**

Crops in this group are: Broccoli raab (rapini) Chinese (bok choy) cabbage, Collards, Kale, Mizuna; Mustard greens; Mustard spinach; Rape greens, and Turnip greens (tops, leaves)<sup>1</sup>

Pest	Oz. Product/A per Application	Instructions
Beet armyworm Cabbage webworm Corn earworm Cross-striped cabbageworm Diamondback moth Fall armyworm Imported cabbageworm	2.4-4.8 oz./A	Apply when larvae are first observed. Application may be repeated to maintain control; see <b>Use Restrictions-Brassica Leafy, Head, and Stem Vegetables Crop Groups</b> .  Use 2.4 oz./A for low to moderate infestations and 4.8 oz./A for high infestations.
Cabbage looper Soybean looper <i>Liriomyza</i> leafminers <sup>2</sup>	3.2-4.8 oz./A	Apply when larvae are first observed. Application may be repeated to maintain control; see <b>Use Restrictions-Brassica Leafy, Head, and Stem Vegetables Crop Groups</b> .  Use 3.2 oz./A for low to moderate infestations and 4.8 oz./A for high infestations.

<sup>1</sup>Turnip greens (top, leaves) only: For use on turnip varieties grown for leaves only. Do not use on turnip varieties grown for roots or dual-purpose varieties grown for roots and leaves.

<sup>2</sup>Proclaim Insecticide provides suppression of *Liriomyza trifolii* and *Liriomyza sativae* populations. Suppression means either erratic control ranging from good to poor or consistent control at a level below that which is generally considered acceptable for commercial control.

**Use Restrictions – Brassica Leafy, Head, and Stem Vegetables Crop Groups**

- **PHI: Brassica head and stem vegetables** – Allow a minimum of **7 days** between the last application and harvest.  
**Brassica leafy vegetables & turnip greens** - Allow a minimum of **14 days** between the last application and harvest.
- **Application Method:** **Ground** or **aerial** application is permitted.
- **Amount of Water:** Apply in sufficient water to ensure good coverage.
- **Ground Application Equipment:** Use a **minimum of 10 gal.water /A**. If the crop canopy is dense or the worm infestation is high, increase the amount of water.
- **Aircraft:** Use a **minimum of 5 gal.water /A**. Increase the amount of water to 10-20 gal. water/A under adverse conditions (high humidity, low relative humidity, or dense canopy).
- **Maximum Amount per Application:** Do not apply more than **4.8 oz./A** per application.
- **Application Interval:** Allow a minimum of **7 days** between applications.
- **Maximum Amount per Season:** Do not apply more than **28.8 oz./A** per season.
- **Grazing:** Do not allow livestock to graze in treated areas.

**Fruiting Vegetables (except cucurbits) Crop Group**

**Crops in this group are: Eggplant, Ground cherry, Pepino, Peppers: bell, chili, cooking, pimento, and sweet; Tomatillo, and Tomato**

Pest	Oz. Product/A per Application	Instructions
Beet armyworm Cabbage looper Fall armyworm Southern armyworm Tobacco budworm Tobacco hornworm Tomato hornworm Tomato fruitworm Tomato pinworm Yellowstriped armyworm	2.4-4.8 oz./A	Apply when larvae are first observed. Application may be repeated to maintain control; see <b>Use Restrictions – Fruiting Vegetables.</b>  Use 2.4 oz./A for low to moderate infestations and 4.8 oz./A for high infestations.
Alfalfa looper Soybean looper <i>Liriomyza</i> leafminers <sup>1</sup>	3.2-4.8 oz./A	Apply when larvae are first observed. Application may be repeated to maintain control; see <b>Use Restrictions – Fruiting Vegetables.</b>  Use 3.2 oz./A for low to moderate infestations and 4.8 oz./A for high infestations.

<sup>1</sup> Proclaim Insecticide provides suppression of *Liriomyza trifolii* and *Liriomyza sativae* populations. Suppression means either erratic control ranging from good to poor or consistent control at a level below that which is generally considered acceptable for commercial control.

**Use Restrictions – Fruiting Vegetables (except cucurbits) Crop Group**

- **PHI:** Allow a minimum of **7 days** between the last application and harvest.
- **Application Method:** **Ground** or **aerial** application is permitted.
- **Amount of Water:** Apply in sufficient water to ensure good coverage.  
**Ground Application Equipment:** Use a **minimum of 10 gal.water/A**. If the crop canopy is dense or the worm infestation is high, increase the amount of water.  
**Aircraft:** Use a **minimum of 5 gal.water/A**. Increase the amount of water to 10-20 gal. water/A under adverse conditions (high humidity, low relative humidity, or dense canopy).
- **Maximum Amount per Application:** Do not apply more than **4.8 oz./A** per application.
- **Application Interval:** Allow a minimum of **7 days** between applications.

- **Maximum Amount per Season:** Do not apply more than **28.8 oz./A** per season.
- **Grazing:** Do not allow livestock to graze in treated areas.

**Leafy Vegetables (except Brassica) Crop Group**

**Crops in this group are: Amaranth (leafy amaranth, Chinese spinach, tampala); Arugula (roquette); Cardoon; Celery; Celtuce; Chervil; Chinese celery; Edible-leaved chrysanthemum; Garland chrysanthemum; Corn salad; Cress (garden and upland); Dandelion; Dock (sorrel); Endive (escarole); Florence Fennel (finocchio); Head lettuce; Leaf lettuce; Orach; Parsley; Purslane (garden and winter); Radicchio (red chicory); Rhubarb; Spinach; New Zealand spinach; Vine spinach (Malabar spinach, Indian spinach); Swiss chard**

<b>Pest</b>	<b>Oz. Product/A per Application</b>	<b>Instructions</b>
Beet armyworm Corn earworm Fall armyworm Tobacco budworm	2.4-4.8 oz./A	Apply when larvae are first observed. Application may be repeated to maintain control; see <b>Use Restrictions – Leafy Vegetables</b> .  Use 2.4 oz./A for low to moderate infestations and 4.8 oz./A for high infestations.
Cabbage looper Soybean looper <i>Liriomyza</i> leafminers <sup>1</sup>	3.2-4.8 oz./A	Apply when larvae are first observed. Application may be repeated to maintain control; see <b>Use Restrictions – Leafy Vegetables</b> .  Use 3.2 oz./A for low to moderate infestations and 4.8 oz./A for high infestations.

<sup>1</sup> Proclaim Insecticide provides suppression of *Liriomyza trifolii* and *Liriomyza sativae* populations. Suppression means either erratic control ranging from good to poor or consistent control at a level below that which is generally considered acceptable for commercial control.

**Use Restrictions - Leafy Vegetables Crop Group:**

- **PHI:** Allow a minimum of **7 days** between the last application and harvest.
- **Application Method:** **Ground** or **aerial** application is permitted.
- **Amount of Water:** Apply in sufficient water to ensure good coverage.  
**Ground Application Equipment:** Use a **minimum of 10 gal. water/A**. If the crop canopy is dense or the worm infestation is high, increase the amount of water.  
**Aircraft:** Use a **minimum of 5 gal. water/A**. Increase the amount of water to 10-20 gal. water/A under adverse conditions (high humidity, low relative humidity, or dense canopy).
- **Maximum Amount Per Application:** Do not apply more than **4.8 oz./A** per application.
- **Application Interval:** Allow a minimum of **7 days** between applications.

- **Maximum Amount Per Season:** Do not apply more than **28.8 oz./A** per season.
- **Grazing:** Do not allow livestock to graze in treated areas.



**Pome Fruit Crop Group**

**Crops in this group are: apple, crabapple, loquat, mayhaw, oriental pear, pear and quince**

Pest	For Concentrate Sprays (oz. product/A)	For Dilute Sprays (oz. product/100 gal.)	Instructions
<p>Apple pandemis                      Bud moths:                          eyespotted                          tufted apple                      Cankerworm species                      Common winter moth                      Fruitworms:                          cherry                          green species                          laconobia                      Leafminers:                          blister moth species                          tentiform species                      Leafrollers:                          fruittree                          obliquebanded                          omnivorous                          redbanded                          variegated                      Orange tortrix</p> <p>Codling moth<sup>1,2</sup>                      Lesser appleworm<sup>1,2</sup>                      Oriental fruit moth<sup>1,2</sup>                      Pear psylla<sup>1</sup>                      Spider mites<sup>1,3</sup></p>	<p>3.2 – 4.8 oz.</p>	<p>0.8 – 1.2 oz.</p>	<ul style="list-style-type: none"> <li>• Apply as needed using locally recommended scouting and monitoring techniques. Timing and frequency of applications should be based on target insect populations reaching locally determined economic thresholds. Application may be repeated to maintain control – typically at 7-14 day intervals; see <b>Use Restrictions – Pome Fruit.</b></li> <li>• Proclaim Insecticide should be applied at or immediately after hatch of the target insect to ensure treatment of small larvae. Treatments must be made before larvae penetrate fruit or stems or before larvae begin webbing and sheltering.</li> <li>• Thorough spray coverage of plant foliage is essential for optimum control. Apply in sufficient water to ensure good coverage. See <b>Use Restrictions – Pome Fruit</b> below for minimum gals/.A.</li> <li>• For best results, it is recommended that Proclaim Insecticide be applied in combination with a Horticultural spray oil (not a dormant oil) or a nonionic</li> </ul>

			<p>surfactant as directed by the product manufacturer. Do not use a sticker/binder type adjuvant.</p> <ul style="list-style-type: none"> <li>• Use 3.2 oz./A for low to moderate infestations and 4.8oz./A for high infestations.</li> <li>• <b>Bee Precautions:</b> See <b>Environmental Hazards</b> section on this label.</li> <li>• See <b>Resistance Management</b> section on this label for guideline statements.</li> </ul>
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<sup>1</sup>Proclaim Insecticide provides suppression. Suppression means either erratic control ranging from good to poor or consistent control at a level below that which is generally considered acceptable for commercial control.

<sup>2</sup>Proclaim may be used at 4.8 ounces per acre to control first generation only of codling moth, lesser appleworm and oriental fruit moth east of the Rocky Mountains.

<sup>3</sup>Refers to phytophagous mites in the Acari subfamily Tetranychinae.

**Use Restrictions – Pome Fruit**

- **Location Prohibitions:** Do not use Proclaim Insecticide in greenhouses, nurseries or in plant propagation houses, or on any plants grown for use as transplants.
- **PHI:** Allow a minimum of **14 days** between the last application and harvest.
- **Application Method:** **Ground application equipment only. Aerial application is not permitted.**
- **Amount of Water:**
  - **Concentrate sprays:** Apply in sufficient water to provide uniform spray coverage of all plant parts but not to the point of runoff. For **airblast sprayers** use a **minimum of 40 gal. of water per acre.**
  - **Dilute sprays:** The rate of Proclaim Insecticide per 100 gal. is based on a volume of 400 gal./A of dilute spray. Dilute spray volume per acre will vary by orchard depending on tree size, tree spacing and canopy density. Dilute sprays are applied to the point of runoff.
- **Amount per Application:** Do not apply at rates lower than those recommended on this label. **Maximum:** Do not apply more than **4.8 oz./A** per application.
- **Application Interval:** Allow a minimum of **7 days** between applications.
- **Maximum Amount Per Season:** Do not apply more than **14.4 oz./A** per season.
- **Grazing:** Do not allow livestock to graze in treated areas.

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**STORAGE AND DISPOSAL**

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Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited. Do not reuse empty container.

**Storage**

Store tightly closed in original container in a cool, dry place.

**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**

Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or dispose of by other procedures approved by state and local authorities.

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Dithane® Rainshield™ is a trademark of Dow Agrosiences LLC

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For non-emergency (e.g., current product information) call  
Syngenta Crop Protection at 1-800-334-9481.

Manufactured for :  
Syngenta Crop Protection, Inc.  
P.O. Box 18300  
Greensboro, North Carolina 27419-8300  
[www.syngenta-us.com](http://www.syngenta-us.com)

SCP 904A-L(draft-b REI)

Proclaim904A-L(draft-b REI)clean-ig-3-20-08 000100-00904.20080128b.REI.pdf

(Non-detachable Container Label)

**RESTRICTED USE PESTICIDE**  
**TOXIC TO FISH, MAMMALS, AND AQUATIC ORGANISMS**  
 FOR RETAIL SALE TO AND USE ONLY BY CERTIFIED APPLICATORS OR PERSONS UNDER THEIR  
 DIRECT SUPERVISION, AND ONLY FOR THOSE USES COVERED BY THE CERTIFIED APPLICATOR'S  
 CERTIFICATION.

Proclaim®  
Insecticide

Group	<b>6</b>	Insecticide
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For control or suppression of certain lepidopterous larvae (worms/caterpillars), leafminers, and spider mites on Fruiting Vegetables, Leafy Vegetables including *Brassica* (cole crops), Pome Fruit, and Turnip Greens (tops, leaves)

Active Ingredient:  
Emamectin benzoate (CAS No. 137512-74-4)..... 5.0%  
Other Ingredients:..... 95.0%  
 Total: 100.0%

Proclaim is a soluble granule containing 5% emamectin benzoate.

**KEEP OUT OF REACH OF CHILDREN.**

**CAUTION**

See additional precautionary statements and directions for use in booklet.

**AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

EPA Reg. No. 100-904  
EPA Est. xxxxx

SCP 904A-L(draft-b REI)

Net Weight

Refer to **FIRST AID** section in attached booklet for additional precautionary statements.

## **PRECAUTIONARY STATEMENTS**

### **Hazards to Humans and Domestic Animals**

#### **CAUTION**

Harmful if swallowed, inhaled, or absorbed through skin. Causes moderate eye irritation. Avoid contact with the skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse. Avoid breathing dust or spray mist. Prolonged or frequently repeated exposure may cause allergic skin reactions in some individuals.

#### **Environmental Hazards**

This pesticide is toxic to fish, birds, mammals, and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash water or rinsate.

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

#### **Physical or Chemical Hazards**

Do not use or store near heat or open flame.

## **STORAGE AND DISPOSAL**

Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited. Do not reuse empty container.

#### **Storage**

Store tightly closed in original container in a cool, dry place.

#### **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**

Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or dispose of by other procedures approved by state and local authorities.

**Chemigation: Do not apply this product through any type of irrigation system**

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Manufactured for :  
Syngenta Crop Protection, Inc.  
P.O. Box 18300  
Greensboro, North Carolina 27419-8300  
[www.syngenta-us.com](http://www.syngenta-us.com)

SCP 904A-L(draft-b REI)

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