

#### U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs
Registration Division (7505P)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

NOTICE OF PESTICIDE:

X Registration
Reregistration
(under FIFRA, as amended)

|     | _    |     |      |
|-----|------|-----|------|
| EPA | Reg. | Num | ber: |

Date of Issuance:

67760-131

02/23/2015

Term of Issuance:

Conditional

Name of Pesticide Product:

Malathion 851 g/L + Gammacyhalothrin 12.8 g/L EC

Name and Address of Registrant (include ZIP Code):

Patricia McFadden Cheminova, Inc. P.O. Box 110566 One Park Drive, Suite 400 Research Triangle Park, NC 27709

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

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

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

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A). You must comply with the following conditions:

1. Submit and/or cite all data required for registration/registration/registration review of your product under FIFRA when the Agency requires all registrants of similar products to submit such data.

| Signature of Approving Official:                                  | Date:      |
|---|------------|
| Ve  | 02/23/2015 |
| Venus Eagle, Product Manager 01                                   |            |
| Invertebrate & Vertebrate Branch 3, Registration Division (7505P) |            |

- 2. You are required to comply with the data requirements described in the DCI and EDSP Order identified below:
  - a. Malathion GDCI-057701-830
  - b. Malathion EDSP-057701

You must comply with all of the data requirements within the established deadlines. If you have questions about the Generic DCI or EDSP Order listed above, you may contact the Chemical Review Manager in the Pesticide Reevaluation Division:

http://www.epa.gov/oppsrrd1/contacts\_prd.htm

- 3. Make the following label changes before you release the product for shipment:
  - Revise the EPA Registration Number to read, "EPA Reg. No. 67760-131."
- 4. Submit one copy of the final printed label for the record before you release the product for shipment.

If you fail to satisfy these data requirements, EPA will consider appropriate regulatory action including, among other things, cancellation under FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated 06/30/2014
- Alternate CSF #1 dated 06/30/2014
- Alternate CSF #2 dated 06/30/2014

If you have any questions, please contact Marianne Lewis at (703) 308-8043 or lewis.marianne@epa.gov.

Venus Eagle, Product Manager 01 Invertebrate Vertebrate Branch 3 Registration Division (7505P)

Attachment: Stamped Label

# ACCEPTED

2/23/2015

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under

EPA Reg. No. 67760-131

# **Restricted Use Pesticide**

Due to toxicity to fish and aquatic organisms.

For retail sale to and use only by Certified Applicators, or persons under their direct supervision, and only for those uses covered by the Certified Applicator's certification.

# Malathion 851 g/L + Gamma-cyhalothrin 12.8 g/L EC

For control of insects infesting listed field, fruit, nut, and vegetable crops.

**Alternative Brand Name: Temitry Insecticide** 

#### **ACTIVE INGREDIENTS:**

Malathion: O,O-dimethyl phosphorodithioate of diethyl mercaptosuccinate 73.70% Gamma-cyhalothrin: Cyclopropanecarboxylic acid, 3-(2-chloro-3,3,3-trifluoro-1-1.11% propenyl) 2,2-dimethyl,-cyano(3-phenoxyphenyl) methyl ester

OTHER INGREDIENTS:

**TOTAL** 

25.19 % 100.00%

### Contains 7.1 lbs. malathion per gallon and 0.1068 lb of gamma-cyhalothrin per gallon Contains petroleum distillate. Emulsifiable Concentrate

# KEEP OUT OF REACH OF CHILDREN **WARNING / AVISO**

#### SEE BOOKLET FOR ADDITIONAL PRECAUTIONARY STATEMENTS AND USE DIRECTIONS

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

| EPA Reg. No. 67760-XXX   |  |
|--------------------------|--|
| EPA Est. No.             |  |
| NET [CONTENTS] [WEIGHT]: |  |

Fyfanon is a registered trademark of Cheminova

Manufactured for: Cheminova, Inc. P.O. Box 110566 Research Triangle Park, NC 27709 1-800-548-6613 Product of Denmark

# IN CASE OF A MEDICAL EMERGENCY INVOLVING THIS PRODUCT, CALL TOLL FREE, DAY OR NIGHT, 1-866-303-6950

- OR -

| FOR MEDICAL    | FOR SPILLS     |
|----------------|----------------|
| EMERGENCY      | CHEMTREC       |
| 1-866-303-6950 | 1-800-424-9300 |

Read the entire label before using this product. Use only according to label instructions. Read the WARRANTY DISCLAIMER, INHERENT RISKS OF USE, and LIMITATION OF REMEDIES before buying or using. If terms are unacceptable, return product unopened without delay.

- OR -

Read WARRANTY DISCLAIMER, INHERENT RISKS OF USE, and LIMITATION OF REMEDIES before buying or using. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

**Note to PM**, the following bracketed statements are individually optional depending on the packaging configuration and whether a booklet label design is used:

- a. [See First Aid statement on back panel] [of booklet.]
- b.[See additional precautionary statements and Directions for Use in booklet.]
- c. [Read the entire label before using this product.]
- d.[See First Aid, Precautionary Statements, Directions for Use on individual packages.]

[Cheminova] [-] [Helping you] [Grow]

### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**WARNING:** May be fatal if swallowed. Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Wear appropriate protective eyewear such as goggles, face shield, or safety glasses. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

#### **FIRST AID**

This product is an organophosphate and a cholinesterase inhibitor.

**IF SWALLOWED:** Immediately call a poison control center or doctor.

Do not induce vomiting unless told to do so by a poison control center or doctor.

Do not give **any** liquid to the person.

Do not give anything by mouth to an unconscious person.

**IF IN EYES:** Hold eye open and rinse slowly and gently with water for 15-20 minutes.

Remove contact lenses, if present, after the first 5 minutes, then continue rinsing

eye.

Call a poison control center or doctor for treatment advice.

IF ON SKIN

OR CLOTHING: Take off contaminated clothing.

Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

**IF INHALED**: Move person to fresh air.

If person is not breathing, call 911 or an ambulance, then give artificial respiration,

preferably by mouth-to-mouth, if possible.

Call a poison control center or doctor for further treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-866-303-6950 for emergency medical treatment information.

**NOTE TO PHYSICIAN** – Malathion is a cholinesterase inhibitor affecting the central and peripheral nervous systems and producing cardiac and respiratory depression. Antidote: Administer atropine sulphate in large doses, TWO to FOUR mg intravenously or intramuscularly as soon as cyanosis is overcome. Repeat at 5 to 10 minute intervals until signs of atropinization appear. 2-PAM chloride is a pharmacological antidote and may be administered as an adjunct to, but not a substitute for, atropine, which is a symptomatic and often lifesaving antidote. DO NOT GIVE MORPHINE OR TRANQUILIZERS. At first sign of pulmonary edema, the patient should be given supplemental oxygen

and treated symptomatically. Continued absorption of malathion may occur and relapse may occur after initial improvement. VERY CLOSE SUPERVISION OF THE PATIENT IS INDICATED FOR AT LEAST 48 HOURS.

### PERSONAL PROTECTIVE EQUIPMENT

Some materials that are chemical-resistant to this product are: barrier laminate, butyl rubber  $\geq$  14 mils, nitrile rubber  $\geq$  14 mils, or Viton  $\geq$  14 mils. If you want more options, follow the instructions for category F on an EPA chemical-resistance category selection chart.

For all formulations and use patterns – mixers, loaders, applicators, flaggers and other handlers must wear:

- Long sleeved shirt and long pants,
- Shoes plus socks,
- Chemical resistant gloves (except when operating motorized equipment, e.g. pilots, truck/tractor drivers),
- Chemical resistant hat. (Only required for applicators for all airblast applications)

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

#### **USER SAFETY RECOMMENDATIONS**

User should:

- •Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- •Remove clothing/PPE 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.

#### **ENGINEERING CONTROLS STATEMENTS**

Pilots must use an enclosed cockpit in a manner that is consistent with the WPS for Agricultural Pesticides [40 CFR 170.240(d)(6)]. Pilots must wear PPE required on this labeling for applicators (except when operating motorized equipment, e.g., pilots, truck/tractor drivers).

### **ENVIRONMENTAL HAZARDS**

This pesticide is extremely toxic to fish and aquatic organisms, including invertebrates, and toxic to wildlife.

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

This product may contaminate water through drift of spray in wind. This product has a high potential for runoff after application. Use care when applying in or to an area which is adjacent to any body of water, and do not apply when weather conditions favor drift from target area. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. A level, well maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from rainfall-runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when

disposing of equipment washwater or rinsate. To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters.

Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas.

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

#### PHYSICAL OR CHEMICAL HAZARDS

Combustible. Do not use or store near heat or open flame.

### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal

**PESTICIDE STORAGE:** [The product] [approved ABN] should be stored in the original unopened container in a secure, dry place. Do not contaminate with other pesticides or fertilizers. [The product] [approved ABN] should never be heated above 55°C (131°F), and should not be stored for long periods of time at a temperature in excess of 25°C (77°F).

**PESTICIDE DISPOSAL:** To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

### **CONTAINER HANDLING:**

**Refillable container:** Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the re-filler. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

**Non-refillable container. [equal to or less than 5 gallons]** Do not reuse or refill this container. Offer for recycling if available. Triple rinse container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Non-refillable container. [greater than 5 gallons] Do not reuse or refill this container. Offer for recycling if available. Triple rinse promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank and store rinsate for later use or disposal. Repeat this procedure two more times.

### **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or tribe, consult the agency responsible for pesticide regulation.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of the product that are covered by the Worker Protection Standard.

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.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) The REI for each crop is listed in the directions for use associated with each crop.

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, butyl rubber, nitrile rubber, or Viton
- Shoes plus socks.

#### **General Information**

[Malathion 851 g/L + Gamma-cyhalothrin 12.8 g/L EC] [Approved ABN] [insecticide] controls insects by contact and ingestion. [Malathion 851 g/L + Gamma-cyhalothrin 12.8 g/L EC] [Approved ABN] is for the control of insect pests in alfalfa, broccoli, broccoli raab (rapini), Brussels sprouts, Chinese broccoli, corn (field, pop, sweet and seed), cotton, eggplant, grasses (forage and hay), kohlrabi, lettuce (head and leaf), okra, pecan, peppers, rice and wild rice, small grains (barley, oats, rye, wheat), tomatillo, tomato, and walnut.

**IMPORTANT**: Spray droplets of undiluted Malathion 851 g/L + Gamma-cyhalothrin 12.8 g/L EC will permanently damage automobile paint unless all the conditions described and specified in this label are met. If accidental exposure does occur, the vehicle should be washed at once.

### **Resistance Management**

Some insects are known to develop resistance to products used repeatedly for control. Because the development of resistance cannot be predicted, the use of this product should conform to resistance management strategies established for the use area. Consult your local or State agricultural authorities for details.

If resistance to this product develops in your area, this product, or other products with similar modes of action, may not provide adequate control. If poor performance cannot be attributed to improper application or extreme weather conditions, a resistant strain of insect may be present. If you experience difficulty with control and resistance is a reasonable cause, immediately consult your local company representative or agricultural advisor for the best alternative method of control for your area.

#### **Buffer Zones**

### **Vegetative Buffer Strip**

Construct and maintain a minimum 10-foot-wide vegetative filter strip of grass or other permanent vegetation between the field edge and down gradient aquatic habitat (such as, but not limited to, lakes; reservoirs; rivers; permanent streams; marshes or natural ponds; estuaries; and commercial fish farm ponds). Only apply products containing gamma-cyhalothrin onto fields where a maintained vegetative buffer strip of at least 10 feet exists between the field and down gradient aquatic habitat.

For guidance, refer to the following publication for information on constructing and maintaining effective buffers: *Conservation Buffers to Reduce Pesticide Losses. Natural Resources Conservation Services.* USDA, NRCS. 2000. Fort Worth, Texas. 21pp.

http://www.nrcs.usda.gov/Internet/FSE\_DOCUMENTS/nrcs143\_023819.pdf

### Buffer Zone for Ground Application (groundboom, overhead chemigation, or airblast)

Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds).

### **Buffer Zone for Aerial Application**

Do not apply within 150 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds).

In the State of New York, a 25 ft. vegetated non-cropped buffer strip untraversed by drainage tiles must be maintained between a treated field and a coastal salt marsh or stream that drains into a coastal salt marsh, for both aerial and ground application. For aerial applications, the 25 ft. vegetated non-cropped buffer strip for runoff protection would be part of the larger 150 ft. buffer strip required for spray drift.

### **Spray Drift Requirements**

Observe the following precautions when spraying in the vicinity of aquatic areas such as lakes; reservoirs; rivers; permanent streams, marshes, or natural ponds; estuaries; and commercial fish farm ponds.

### Wind Direction and Speed

Only apply this product if the wind direction favors on-target deposition. Do not apply when the wind velocity exceeds 10 mph.

Make aerial or ground applications when the wind velocity favors on target product deposition (approximately 3 to 10 mph). Do not apply when wind velocity exceeds 10 mph. For all non-aerial applications, wind speed must be measured adjacent to the application site on the upwind side, immediately prior to application.

### **Temperature Inversion**

Do not make aerial or ground applications into areas of temperature inversions. Inversions are characterized by stable air and increasing temperatures with increasing distance above the ground. Mist or fog may indicate the presence of an inversion in humid areas. Where permissible by local regulations, the applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.

### **Droplet Size**

Use only medium or coarse spray nozzles (for ground and aerial application) according to ASAE (S572) definition for standard nozzles. In conditions of low humidity and high temperatures, applicators should use a coarser droplet size.

### **Additional Requirements for Ground Applications**

For ground boom applications, apply with nozzle height of no more than 4 feet above the ground or crop canopy.

For airblast applications, turn off outward pointing nozzles at row ends and when spraying the outer two rows. To minimize spray loss over the top in orchard applications, spray must be directed into the canopy.

### **Additional Requirements for Aerial Applications**

For aerial applications, the spray boom should be mounted on the aircraft as to minimize drift caused by wingtip or rotor vortices. The minimum practical boom length should be used and must not exceed 75% of the wing span or 80% rotor diameter. Aerial applicators must consider flight speed and nozzle orientation in determining droplet size.

Spray must be released at the lowest height consistent with pest control and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety. When applications are made with a cross-wind, the swath will be displaced downwind. The applicator must compensate for this displacement at the downwind edge of the application area by adjusting the path of the aircraft upwind. Apply only when weather conditions are favorable. Wind and rising air currents may cause undesirable spray drift and reduce insect control.

**Shielded Sprayers:** Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product.

Air Assisted (Air Blast) Field Crop Sprayers: It is the responsibility of the applicator to determine that a sprayer is suitable for the intended application, is configured properly, and that drift is not occurring.

**Note:** Air assisted field sprayers can affect product performance by affecting spray coverage and canopy penetration. Consult the application equipment manufacturer and/or State Extension Service.

Air Assisted (Air Blast) Orchard/Tree Nursery: In addition to the general drift management principles already described, the following specific practices will further reduce the potential for drift:

- Adjust deflectors and aiming devices so that spray is only directed into the canopy.
- Spray must be shut off during row turns.
- Block off upward pointed nozzles when there is no over-hanging canopy.
- Use only enough air volume to penetrate the canopy and provide good coverage.
- **Do not** allow spray to go beyond the edge of the cultivated area. Spray the outside downwind row(s) only from outside the planting.

#### **Mixing Directions**

To prepare the spray, add a portion of the required amount of water to the spray tank and the spray tank agitator operating add [Malathion 851 g/L + Gamma-cyhalothrin 12.8 g/L EC] [Approved ABN]. Complete filling the tank with the balance of water needed. Maintain sufficient agitation during both mixing and application to ensure uniformity of the spray mixture.

[Malathion 851 g/L + Gamma-cyhalothrin 12.8 g/L EC] [Approved ABN] is compatible with insecticides,

miticides, and fungicides and non-pressure fertilizer solutions commonly recommended, except for alkaline materials such as Bordeaux mixture and lime. It is always recommended that a small jar compatibility test be run prior to tank mixing. Prepare tank mixtures in the same manner as recommended above for use of [Malathion 851 g/L + Gamma-cyhalothrin 12.8 g/L EC] [Approved ABN] alone. When tank mixing [Malathion 851 g/L + Gamma-cyhalothrin 12.8 g/L EC] [Approved ABN] with herbicides, add wettable powders first, flowables second, and emulsifiable concentrates last. When a fertilizer solution is involved, it is strongly recommended that a fertilizer pesticide compatibility agent such as Unite or Compex be used. Maintain constant agitation during both mixing and application to ensure uniformity of the spray mixture. Do not allow spray mixtures to stand overnight.

### Chemigation

Apply [Malathion 851 g/L + Gamma-cyhalothrin 12.8 g/L EC] [Approved ABN] at rates and timing described elsewhere in this label. As local recommendations differ, consult your local State Extension Service or other local experts for recommendations on adjuvant or diluent types (see Tank Mix Application), rates, and mixing instructions. These recommendations should be proven, through university and extension field trials, to be effective with Declare applied by chemigation.

### **Sprinkler Irrigation Application**

Check the irrigation system to ensure uniform application of water to all areas. Thorough coverage of foliage is required for good control. Good agitation in the pesticide supply tank should be maintained prior to and during the entire application period.

Apply by injecting the specified rate of [Malathion 851 g/L + Gamma-cyhalothrin 12.8 g/L EC] [Approved ABN] into the irrigation system using a metering device that will introduce a constant flow and by distributing the product to the target area in 0.1 to 0.2 acre-inch of water. Use the least amount of water required for proper distribution and coverage. It is recommended that the product be injected into the center of the main irrigation line ahead of at least one right angle turn in the line to ensure adequate dispersion or mixing in the irrigation water. Once the application is completed, flush the entire irrigation and injection system with clean water before stopping the system. In addition to the above recommendations, if application is being made during a normal irrigation set of a stationary sprinkler, the specified rate of [Malathion 851 g/L + Gamma-cyhalothrin 12.8 g/L EC] [Approved ABN] for the area covered should be injected into the system only during the end of the irrigation set for sufficient time to provide adequate coverage and product distribution.

Do not apply [Malathion 851 g/L + Gamma-cyhalothrin 12.8 g/L EC] [Approved ABN] through an irrigation system connected to a public water system. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

### **Use Precautions—Sprinkler Irrigation Application**

- 1. Apply this product only through sprinkler irrigation systems including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move. **Do not** apply this product through any other type of irrigation system.
- 2. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
- 3. If you have any questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts.
- 4. **Do not** connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water

- systems are in place.
- 5. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.
- 6. The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water-source contamination from backflow.
- 7. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back through the injection pump.
- 8. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 9. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 10. The irrigation line or water pump must include a functional pressure switch that will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 11. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump), effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- 12. Any alternatives to the above-required safety devices must conform to the list of EPA- or state agency-approved alternative devices.
- 13. **Do not** apply when wind speed favors drift beyond the area intended for treatment.
- 14. **Do not** apply through chemigation systems connected to public water systems.

| Rate Conversion Chart                                |    |       |       |  |  |  |  |
|--|----|-------|-------|--|--|--|--|
| lb.ai/acre fl.oz./acre pint/acre treated acres/gallo |    |       |       |  |  |  |  |
| 0.333 Malathion                                      | 6  | 0.375 | 21.3  |  |  |  |  |
| 0.005 Gamma-cyhalothrin                              |    |       |       |  |  |  |  |
| 0.499 Malathion                                      | 9  | 0.563 | 14.2  |  |  |  |  |
| 0.008 Gamma-cyhalothrin                              |    |       |       |  |  |  |  |
| 0.666 Malathion                                      | 12 | 0.750 | 10.67 |  |  |  |  |
| 0.010 Gamma-cyhalothrin                              |    |       |       |  |  |  |  |
| 0.832 Malathion                                      | 15 | 0.938 | 8.5   |  |  |  |  |
| 0.013 Gamma-cyhalothrin                              |    |       |       |  |  |  |  |
| 0.998 Malathion                                      | 18 | 1.125 | 7.1   |  |  |  |  |
| 0.015 Gamma-cyhalothrin                              |    |       |       |  |  |  |  |
| 1.331 Malathion                                      | 24 | 1.500 | 5.33  |  |  |  |  |
| 0.020 Gamma-cyhalothrin                              |    |       |       |  |  |  |  |

#### **USE DIRECTIONS**

[Specific directions for use for labeled uses of [Malathion 851 g/L + Gamma-cyhalothrin 12.8 g/L EC] [Approved ABN] are provided in the following tables [(crops and/or use sites are listed alphabetically)]:]

Initial and residual insect control is contingent upon thorough crop coverage. Apply with ground or air equipment. Apply in a minimum of 2 gallons of water per acre by air (10 gallons of water per acre for pecans and walnuts by air) or a minimum of 10 gallons of water per acre by ground unless otherwise specified in this label. When foliage is dense or pest pressure is high (heavier insect or egg pressure, larger larval stages), use of higher application volumes and/or higher label use rates may improve initial and residual control.

#### Alfalfa

| Fl.oz.<br>/Acre | Max. Single App.<br>Rate<br>(lb.ai/A) | Max. # of<br>App. per<br>year | Min. App.<br>Interval (days) | Min. Pre-<br>Harvest Interval<br>(days) | Restricted<br>Entry Interval |
|-----------------|---------------------------------------|-------------------------------|------------------------------|---|------------------------------|
| 12-18           | 0.998 lb.ai/A                         | 4                             | 14                           | 1 day – forage                          | 24 hours                     |
|                 | malathion                             | (2/cutting)                   |                              | 7 days – hay                            |                              |
|                 | 0.015 lb.ai/A                         |                               |                              |   |                              |
|                 | gamma-cyhalothrin                     |                               |                              |   |                              |

**Pests Controlled:** alfalfa caterpillar, cutworm spp., green cloverworm, leafhopper spp., looper spp., threecornered alfalfa hopper, velvetbean caterpillar, webworm spp. alfalfa seed chalcid (adult), alfalfa weevil, armyworm, bean leaf beetle (adult), blister beetle spp., blue alfalfa aphid, clover leaf weevil spp., clover root borer (adult), clover root curculio spp. (adult), clover stem borer (adult), corn earworm, cowpea aphid, cowpea curculio (adult), cowpea weevil (adult), cucumber beetle spp. (adult), Egyptian alfalfa weevil, fall armyworm<sup>(1)</sup>, grape colaspis (adult), grasshopper spp., green June beetle (adult), green peach aphid<sup>(3)</sup>, Japanese beetle (adult), meadow spittlebug, Mexican bean beetle, pea aphid, pea weevil (adult), plant bug spp., including lygus spp.<sup>(3)</sup>, spittlebugs, spotted alfalfa aphid, stink bug spp., sweet clover weevil (adult), tephritid fruit fly, thrips spp.<sup>(4)</sup>, western yellowstriped armyworm, whitefringed beetle spp. (adult), yellowstriped army worm

| Fl.oz.  | Max. Single App.    | Max. # of                    | Min. App.                       | Min. Pre-             | Restricted     |
|---------|---------------------|------------------------------|---------------------------------|-----------------------|----------------|
| /Acre   | Rate                | App. per                     | Interval (days)                 | Harvest Interval      | Entry Interval |
|         | (lb.ai/A)           | year                         |                                 | (days)                |                |
| 18      | 0.998 lb.ai/A       | 4                            | 14                              | 1 day – forage        | 24 hours       |
|         | malathion           | (2/cutting)                  |                                 | 7 days – hay          |                |
|         | 0.015 lb.ai/A       |                              |                                 |                       |                |
|         | gamma-cyhalothrin   |                              |                                 |                       |                |
| Docto ( | Controlled boot orm | $n_{\text{torm}}(1)(3)$ blot | ob loofminor <sup>(3)</sup> oni | idar mitaa(2) vatab b | ughid          |

Pests Controlled: beet armyworm<sup>(1)(3)</sup>, blotch leafminer<sup>(3)</sup>, spider mites<sup>(2)</sup>, vetch buchid

### **Application Directions**

• Timing of applications should be based on insect infestations reaching the economic thresholds.

Use higher rates for large larvae.

<sup>&</sup>lt;sup>2</sup> Suppression only.

<sup>&</sup>lt;sup>3</sup> See resistance statement under Precautions and Restrictions.

<sup>&</sup>lt;sup>4</sup> Does not include western flower thrips.

Repeat application may be required at a 14 day interval.

- Apply with ground or air equipment, using sufficient water to obtain full coverage of foliage. When
  foliage is dense and/or pest populations are high, 5 to 10 gallons per acre by air or 20 gallons per
  acre by ground and higher label use rates are recommended. Use higher rates in recommended
  use rate range for increased residual control.
- Do not apply when bees are actively foraging by applying during the early morning or during the
  evening hours. Be aware of bee hazard resulting from a cool evening and/or morning dew. It may
  be advisable to remove bee shelters during and for 2 to 3 days following application. Do not apply
  to bee shelters.
- For cutworm control, [Malathion 851 g/L + Gamma-cyhalothrin 12.8 g/L EC] [Approved ABN] may be applied after planting.
- **Do not** apply more than 18 fl oz. per acre per cutting. (0.998 lb.ai/A malathion and 0.015 lb.ai/A gamma-cyhalothrin).
- **Do not** apply more than 72 fl oz. per acre per year. (3.994 lb.ai/A malathion and 0.060 lb.ai/A gamma-cyhalothrin).

### Broccoli, Broccoli raab (rapini), Brussel sprouts, Chinese broccoli

| Fl.oz.<br>/Acre | Max. Single App.<br>Rate<br>(lb.ai/A)                            | Max. # of<br>App. per<br>year | Min. App.<br>Interval (days) | Min. Pre-Harvest<br>Interval (days) | Restricted<br>Entry Interval |
|-----------------|--|-------------------------------|------------------------------|-------------------------------------|------------------------------|
| 12-18           | 0.998 lb.ai/A<br>malathion<br>0.015 lb.ai/A<br>gamma-cyhalothrin | 2                             | 7                            | 2                                   | 2 days                       |

**Pests Controlled:** alfalfa looper, cabbage looper, cabbage webworm, cutworm spp. imported cabbageworm, southern cabbageworm

| Fl.oz.<br>/Acre | Max. Single App.<br>Rate<br>(lb.ai/A)                            | Max. # of<br>App. per<br>year | Min. App.<br>Interval (days) | Min. Pre-Harvest<br>Interval (days) | Restricted<br>Entry Interval |
|-----------------|--|-------------------------------|------------------------------|-------------------------------------|------------------------------|
| 15-18           | 0.998 lb.ai/A<br>malathion<br>0.015 lb.ai/A<br>gamma-cyhalothrin | 2                             | 7                            | 2                                   | 2 days                       |

**Pests Controlled:** aphid spp. (2)(3), armyworm, beet armyworm(1)(3), corn earworm, diamondback moth, fall armyworm(1), flea beetle spp., Japanese beetle (adult), leafhopper spp., meadow spittlebug, plant bug spp. Including lygus spp. (3), spider mite spp. (2), stink bug spp., thrips spp. (2), vegetable weevil (adult), whitefly spp. (2)(3), yellowstriped armyworm

- Timing of application should be based upon insect infestations reaching the economic thresholds. Repeat application may be required at a 7 day interval.
- For cutworm control, [Malathion 851 g/L + Gamma-cyhalothrin 12.8 g/L EC] [Approved ABN] may be applied after planting.
- **Do not** apply more than 18 fl oz. per acre per application. (0.998 lb.ai/A malathion and 0.015 lb.ai/A gamma-cyhalothrin).
- **Do not** apply more than 36 fl oz. per acre per year. (1.997 lb.ai/A malathion and 0.030 lb.ai/A gamma-cyhalothrin).

<sup>&</sup>lt;sup>1</sup>For control of first and second instars only.

<sup>&</sup>lt;sup>2</sup>Suppression only

<sup>&</sup>lt;sup>3</sup>See resistance statement under Precautions and Restrictions.

### Corn (Field and Seed)

| Fl.oz.<br>/Acre | Max. Single App.<br>Rate<br>(lb.ai/A)                            | Max. # of<br>App. per<br>year | Min. App.<br>Interval (days) | Min. Pre-Harvest<br>Interval (days) | Restricted<br>Entry Interval                                    |  |  |
|-----------------|--|-------------------------------|------------------------------|-------------------------------------|---|--|--|
| 6-9             | 0.499 lb.ai/A<br>malathion<br>0.008 lb.ai/A<br>gamma-cyhalothrin | 2                             | 7                            | 21                                  | 3 days<br>detasselling,<br>24 hours for all<br>other activities |  |  |
| Pests (         | Pests Controlled: cutworm app (selected states)**                |                               |                              |                                     |   |  |  |

| Fl.oz.<br>/Acre | Max. Single App.<br>Rate<br>(lb.ai/A)                            | Max. # of<br>App. per<br>year | Min. App.<br>Interval<br>(days) | Min. Pre-Harvest<br>Interval (days) | Restricted<br>Entry Interval                                    |
|-----------------|--|-------------------------------|---------------------------------|-------------------------------------|---|
| 9-15            | 0.832 lb.ai/A<br>malathion<br>0.013 lb.ai/A<br>gamma-cyhalothrin | 2                             | 7                               | 21                                  | 3 days<br>detasselling,<br>24 hours for all<br>other activities |

**Pests Controlled:** corn earworm<sup>(1)</sup>, cutworm spp., green cloverworm, meadow spittlebug, western bean cutworm<sup>(1)</sup>

| Fl.oz.<br>/Acre | Max. Single App.<br>Rate<br>(lb.ai/A)                            | Max. # of<br>App. per<br>year | Min. App.<br>Interval<br>(days) | Min. Pre-Harvest<br>Interval (days) | Restricted<br>Entry Interval                                    |
|-----------------|--|-------------------------------|---------------------------------|-------------------------------------|---|
| 12-18           | 0.998 lb.ai/A<br>malathion<br>0.015 lb.ai/A<br>gamma-cyhalothrin | 2                             | 7                               | 21                                  | 3 days<br>detasselling,<br>24 hours for all<br>other activities |

**Pests Controlled:** alfalfa weevil (adult) (Iowa, Kansas, Missouri, Nebraska), armyworm<sup>(2)</sup>, bean leaf beetle, cereal leaf beetle, corn leaf aphid<sup>(3)</sup>, English grain aphid<sup>(3)</sup>, European corn borer<sup>(1)</sup>, fall armyworm<sup>(2)</sup>, flea beetle spp., grasshopper spp., hop vine borer<sup>(1)</sup>, hornworm spp. (Iowa, Kansas, Missouri, Nebraska), Japanese beetle (adult), Lesser cornstalk borer<sup>(1)</sup>, Mexican corn rootworm beetle (adult), northern corn rootworm beetle (adult), oat bird-cherry aphid<sup>(3)</sup>, sap beetle (adult), southern corn rootworm beetle (adult), southwestern corn borer<sup>(1)</sup>, stalk borer<sup>(1)</sup>, stink bug spp., tobacco budworm<sup>(1)(4)</sup>, webworm spp., western corn rootworm beetle (adult), yellowstriped armyworm<sup>(2)</sup>

| Fl.oz.<br>/Acre | Max. Single App.<br>Rate<br>(lb.ai/A)                            | Max. # of<br>App. per<br>year | Min. App.<br>Interval<br>(days) | Min. Pre-Harvest<br>Interval (days) | Restricted<br>Entry Interval                                    |
|-----------------|--|-------------------------------|---------------------------------|-------------------------------------|---|
| 18              | 0.998 lb.ai/A<br>malathion<br>0.015 lb.ai/A<br>gamma-cyhalothrin | 2                             | 7                               | 21                                  | 3 days<br>detasselling,<br>24 hours for all<br>other activities |

**Pests Controlled:** beet armyworm<sup>(2)(4)</sup>, chinch bug, greenbug<sup>(3)(4)</sup>, leafhopper, Mexican rice borer<sup>(1)</sup>, rice stalk borer<sup>(1)</sup>, southern corn leaf beetle (Myochrous denticollis<sup>(3)(5)</sup>), sugarcane borer, thrips

<sup>\*\*</sup>Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, Missouri (only in counties: Bollinger, Butler, Cape Girardeau, Dunklin, Madison, Mississippi, New Madrid, Pemiscot, Ripley, Scott, Stoddard, Wayne), New Mexico, North Carolina, Oklahoma, South Carolina, Tennessee, and Virginia

- Timing of application should be based upon insect infestations reaching the economic thresholds. Repeat application may be required at a 7 day interval.
- For chinch bug control, begin applications when bugs migrate from small grains or grass weeds to small corn. Direct spray to the base of the corn plants. Malathion 851 g/L + Gamma-cyhalothrin 12.8 g/L EC may only suppress heavy infestations and/or subsequent migrations.
- For control of adult corn rootworm beetles (Diabrotica species) as part of an aerial-applied corn rootworm control program, use upper end of rate range at 18 fl oz per acre.
- Do not allow livestock to graze in treated areas or harvest treated corn forage as food for meat or dairy animals within 1 day after last treatment. Do not feed treated corn fodder or silage to meat or dairy animals within 21 days after the last treatment.
- For cutworm control, [Malathion 851 g/L + Gamma-cyhalothrin 12.8 g/L EC] [Approved ABN] may be applied after planting.
- **Do not** apply more than 18 fl oz. per acre per application. (0.998 lb.ai/A malathion and 0.015 lb.ai/A gamma-cyhalothrin).
- **Do not** apply more than 36 fl oz. per acre per year. (1.997 lb.ai/A malathion and 0.030 lb.ai/A gamma-cyhalothrin).

<sup>&</sup>lt;sup>1</sup>For control before larvae bore into the plant stalk or ear.

<sup>&</sup>lt;sup>2</sup>Use higher rates for large larvae.

<sup>&</sup>lt;sup>3</sup>Suppression only

<sup>&</sup>lt;sup>4</sup> See resistance statement under Precautions and Restrictions.

<sup>&</sup>lt;sup>5</sup>In Illinois, Kansas, and Missouri for field and seed corn, may also be applied through chemigation equipment.

### Corn (Pop)

| Fl.oz.<br>/Acre | Max. Single App.<br>Rate<br>(lb.ai/A)                            | Max. # of<br>App. per<br>year | Min. App.<br>Interval<br>(days) | Min. Pre-Harvest<br>Interval (days) | Restricted<br>Entry Interval                                    |  |  |  |
|-----------------|--|-------------------------------|---------------------------------|-------------------------------------|---|--|--|--|
| 6-9             | 0.499 lb.ai/A<br>malathion<br>0.008 lb.ai/A<br>gamma-cyhalothrin | 2                             | 7                               | 21                                  | 3 days<br>detasselling,<br>24 hours for all<br>other activities |  |  |  |
| Pests (         | Pests Controlled: cutworm app (selected states)**                |                               |                                 |                                     |   |  |  |  |

| Fl.oz.<br>/Acre | Max. Single App.<br>Rate<br>(lb.ai/A)                            | Max. # of<br>App. per<br>year | Min. App.<br>Interval<br>(days) | Min. Pre-Harvest<br>Interval (days) | Restricted<br>Entry Interval                                    |
|-----------------|--|-------------------------------|---------------------------------|-------------------------------------|---|
| 9-15            | 0.832 lb.ai/A<br>malathion<br>0.013 lb.ai/A<br>gamma-cyhalothrin | 2                             | 7                               | 21                                  | 3 days<br>detasselling,<br>24 hours for all<br>other activities |

**Pests Controlled:** corn earworm<sup>(1)</sup>, cutworm spp., green cloverworm, meadow spittlebug, western bean cutworm<sup>(1)</sup>

| Fl.oz.<br>/Acre | Max. Single App.<br>Rate<br>(lb.ai/A)                            | Max. # of<br>App. per<br>year | Min. App.<br>Interval<br>(days) | Min. Pre-Harvest<br>Interval (days) | Restricted<br>Entry Interval                                    |
|-----------------|--|-------------------------------|---------------------------------|-------------------------------------|---|
| 12-18           | 0.998 lb.ai/A<br>malathion<br>0.015 lb.ai/A<br>gamma-cyhalothrin | 2                             | 7                               | 21                                  | 3 days<br>detasselling,<br>24 hours for all<br>other activities |

**Pests Controlled:** alfalfa weevil (adult) (Iowa, Kansas, Missouri, Nebraska), armyworm<sup>(2)</sup>, bean leaf beetle, cereal leaf beetle, corn leaf aphid<sup>(3)</sup>, English grain aphid<sup>(3)</sup>, European corn borer <sup>(1)</sup>, fall armyworm<sup>(2)</sup>, flea beetle spp., grasshopper spp., hop vine borer<sup>(1)</sup>, hornworm spp. (Iowa, Kansas, Missouri, Nebraska), Japanese beetle (adult), lesser cornstalk borer<sup>(1)</sup>, Mexican corn rootworm beetle (adult), northern corn rootworm beetle (adult), oat bird-cherry aphid<sup>(3)</sup>, sap beetle (adult), southern corn rootworm beetle (adult), southwestern corn borer<sup>(1)</sup>, stalk borer<sup>(1)</sup>, stink bug spp., tobacco budworm<sup>(1)(4)</sup>, webworm spp., western corn rootworm beetle (adult), yellowstriped armyworm<sup>(2)</sup>

| Fl.oz.<br>/Acre | Max. Single App.<br>Rate<br>(lb.ai/A)                            | Max. # of<br>App. per<br>year | Min. App.<br>Interval<br>(days) | Min. Pre-Harvest<br>Interval (days) | Restricted<br>Entry Interval                                    |
|-----------------|--|-------------------------------|---------------------------------|-------------------------------------|---|
| 18              | 0.998 lb.ai/A<br>malathion<br>0.015 lb.ai/A<br>gamma-cyhalothrin | 2                             | 7                               | 21                                  | 3 days<br>detasselling,<br>24 hours for all<br>other activities |

**Pests Controlled:** beet armyworm<sup>(2)(4)</sup>, chinch bug, greenbug<sup>(3)(4)</sup>, leafhopper, Mexican rice borer<sup>(1)</sup>, rice stalk borer<sup>(1)</sup>, southern corn leaf beetle (Myochrous denticollis<sup>(3)(5)</sup>), sugarcane borer, thrips

<sup>\*\*</sup>Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, Missouri (only in counties: Bollinger, Butler, Cape Girardeau, Dunklin, Madison, Mississippi, New Madrid, Pemiscot, Ripley, Scott, Stoddard, Wayne), New Mexico, North Carolina, Oklahoma, South Carolina, Tennessee, and Virginia

- Timing of application should be based upon insect infestations reaching the economic thresholds. Repeat application may be required at a 7 day interval.
- For chinch bug control, begin applications when bugs migrate from small grains or grass weeds to small corn. Direct spray to the base of the corn plants. Malathion 851 g/L + Gamma-cyhalothrin 12.8 g/L EC may only suppress heavy infestations and/or subsequent migrations.
- For control of adult corn rootworm beetles (Diabrotica species) as part of an aerial-applied corn rootworm control program, use upper end of rate range at 18 fl oz per acre.
- Do not allow livestock to graze in treated areas or harvest treated corn forage as food for meat or dairy animals within 1 day after last treatment. Do not feed treated corn fodder or silage to meat or dairy animals within 21 days after the last treatment.
- For cutworm control, [Malathion 851 g/L + Gamma-cyhalothrin 12.8 g/L EC] [Approved ABN] may be applied after planting.
- **Do not** apply more than 18 fl oz. per acre per application. (0.998 lb.ai/A malathion and 0.015 lb.ai/A gamma-cyhalothrin).
- **Do not** apply more than 36 fl oz. per acre per year. (1.997 lb.ai/A malathion and 0.030 lb.ai/A gamma-cyhalothrin).

<sup>&</sup>lt;sup>1</sup>For control before larvae bore into the plant stalk or ear.

<sup>&</sup>lt;sup>2</sup>Use higher rates for large larvae.

<sup>&</sup>lt;sup>3</sup>Suppression only

<sup>&</sup>lt;sup>4</sup> See resistance statement under Precautions and Restrictions

<sup>&</sup>lt;sup>5</sup>In Illinois, Kansas, and Missouri for field and seed corn, may also be applied through chemigation equipment.

### Corn (Sweet)

| Fl.oz.<br>/Acre | Max. Single App.<br>Rate<br>(lb.ai/A)                            | Max. # of<br>App. per<br>year | Min. App.<br>Interval<br>(days) | Min. Pre-Harvest<br>Interval (days) | Restricted<br>Entry Interval                                    |
|-----------------|--|-------------------------------|---------------------------------|-------------------------------------|---|
| 9-15            | 0.832 lb.ai/A<br>malathion<br>0.013 lb.ai/A<br>gamma-cyhalothrin | 2                             | 7                               | 7                                   | 3 days<br>detasselling,<br>24 hours for all<br>other activities |
| Pests (         | Controlled: Corn eary  | /orm (Idaho Ο                 | regon and Wash                  | nington – grown for pr              | ocessina)   |

| Fl.oz.<br>/Acre | Max. Single App.<br>Rate<br>(lb.ai/A)                            | Max. # of<br>App. per<br>year | Min. App.<br>Interval<br>(days) | Min. Pre-Harvest<br>Interval (days) | Restricted<br>Entry Interval                                    |
|-----------------|--|-------------------------------|---------------------------------|-------------------------------------|---|
| 9-15            | 0.832 lb.ai/A<br>malathion<br>0.013 lb.ai/A<br>gamma-cyhalothrin | 2                             | 7                               | 7                                   | 3 days<br>detasselling,<br>24 hours for all<br>other activities |

**Pests Controlled:** aphid spp. <sup>(2)(3)</sup>, aster leafhopper, beet armyworm <sup>(1)(3)</sup>, chinch bug, common cornstalk borer, corn earworm, cutworm spp., European corn borer, fall armyworm <sup>(1)</sup>, flea beetle spp., grasshopper spp., Japanese beetle (adult), Mexican corn rootworm beetle (adult), northern corn rootworm beetle (adult), sap beetle (adult), southern armyworm <sup>(1)</sup>, southern corn rootworm beetle (adult), southwestern corn borer, spider mite spp. <sup>(2)</sup>, stink bug spp., tarnished plant bug, webworm spp., western bean cutworm, western corn rootworm beetle (adult), yellowstriped armyworm <sup>(1)</sup>

| Fl.oz.<br>/Acre | Max. Single App.<br>Rate<br>(lb.ai/A)                            | Max. # of<br>App. per<br>year | Min. App.<br>Interval<br>(days) | Min. Pre-Harvest<br>Interval (days) | Restricted<br>Entry Interval                                    |
|-----------------|--|-------------------------------|---------------------------------|-------------------------------------|---|
| 18              | 0.998 lb.ai/A<br>malathion<br>0.015 lb.ai/A<br>gamma-cyhalothrin | 2                             | 7                               | 7                                   | 3 days<br>detasselling,<br>24 hours for all<br>other activities |

**Pests Controlled:** corn silkfly (adult)<sup>(2)</sup>, southern corn leaf beetle (Myochrous denticollis<sup>(4)</sup>), leafhopper, thrips

- Timing of application should be based upon insect infestations reaching the economic thresholds. Repeat application may be required at a 7 day interval.
- May be applied through chemigation in Illinois, Kansas, and Missouri.
- For control of adult corn rootworm beetles (Diabrotica species) as part of an aerial-applied corn rootworm control program, use a minimum of 12 fl oz per acre.
- Do not allow livestock to graze in treated areas or harvest treated corn forage as food for meat or dairy animals within 1 day after last treatment. Do not feed treated corn fodder or silage to meat or dairy animals within 21 days after the last treatment.

<sup>&</sup>lt;sup>1</sup>Use higher rates for large larvae.

<sup>&</sup>lt;sup>2</sup>Suppression only.

<sup>&</sup>lt;sup>3</sup>See resistance statement under Precautions and Restrictions.

<sup>&</sup>lt;sup>4</sup>Use in Illinois, Kansas, and Missouri. May also be applied through chemigation equipment.

- For cutworm control, [Malathion 851 g/L + Gamma-cyhalothrin 12.8 g/L EC] [Approved ABN] may be applied after planting.
- **Do not** apply more than 18 fl oz. per acre per application. (0.998 lb.ai/A malathion and 0.015 lb.ai/A gamma-cyhalothrin).
- **Do not** apply more than 36 fl oz. per acre per year. (1.997 lb.ai/A malathion and 0.030 lb.ai/A gamma-cyhalothrin).

#### Cotton

| Fl.oz.<br>/Acre | Max. Single App.<br>Rate<br>(lb.ai/A)                            | Max. # of<br>App. per<br>year | Min. App.<br>Interval (days) | Min. Pre-<br>Harvest Interval<br>(days) | Restricted<br>Entry Interval |
|-----------------|--|-------------------------------|------------------------------|---|------------------------------|
| 6               | 0.333 lb.ai/A<br>malathion<br>0.005 lb.ai/A<br>gamma-cyhalothrin | 3                             | 7                            | 21                                      | 2 days                       |

**Pests Controlled:** For use in selected states\*\* up to 4 weeks after cotton emergence only. cutworm spp., thrips

| Fl.oz.<br>/Acre | Max. Single App.<br>Rate<br>(lb.ai/A)                            | Max. # of<br>App. per<br>year | Min. App.<br>Interval (days) | Min. Pre-<br>Harvest Interval<br>(days) | Restricted<br>Entry Interval |
|-----------------|--|-------------------------------|------------------------------|---|------------------------------|
| 9-12            | 0.666 lb.ai/A<br>malathion<br>0.010 lb.ai/A<br>gamma-cyhalothrin | 3                             | 7                            | 21                                      | 2 days                       |
| Pests Co        | ontrolled: cutworm sp  | p., soybean t                 | thrips, tobacco thri         | ips                                     |                              |

| Fl.oz.<br>/Acre | Max. Single App.<br>Rate<br>(lb.ai/A)                            | Max. # of<br>App. per<br>year | Min. App.<br>Interval (days) | Min. Pre-<br>Harvest Interval<br>(days) | Restricted<br>Entry Interval |
|-----------------|--|-------------------------------|------------------------------|---|------------------------------|
| 12-18           | 0.998 lb.ai/A<br>malathion<br>0.015 lb.ai/A<br>gamma-cyhalothrin | 3                             | 7                            | 21                                      | 2 days                       |

**Pests Controlled:** brown cotton leafworm, cabbage looper, cotton fleahopper, cotton leafperforator, cotton leafworm, grasshoppers, Lygus bug spp. (3), pink bollworm (adult), saltmarsh caterpillar

| Fl.oz.<br>/Acre | Max. Single App.<br>Rate<br>(lb.ai/A)                            | Max. # of<br>App. per<br>year | Min. App.<br>Interval (days) | Min. Pre-<br>Harvest Interval<br>(days) | Restricted<br>Entry Interval |
|-----------------|--|-------------------------------|------------------------------|---|------------------------------|
| 15-24           | 1.331 lb.ai/A<br>malathion<br>0.020 lb.ai/A<br>gamma-cyhalothrin | 3                             | 7                            | 21                                      | 2 days                       |

**Pests Controlled:** banded wing whitefly<sup>(2)(3)</sup>, beet armyworm<sup>(1)(3)</sup>, boll weevil, brown stink bug, cotton aphid<sup>(2)(3)</sup>, cotton bollworm, European corn borer, fall armyworm, green stink bug, southern green stink bug, sweet potato whitefly<sup>(2)(3)</sup>, tobacco budworm<sup>(3)</sup>

<sup>\*\*</sup>Use in Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, Missouri, New Mexico, North Carolina, Oklahoma, South Carolina, Tennessee, and Virginia.

<sup>&</sup>lt;sup>1</sup> For control of first and second instars only.

<sup>&</sup>lt;sup>2</sup>Suppression only

<sup>&</sup>lt;sup>3</sup>See resistance statement under Precautions and Restrictions

- Timing of application should be based upon insect infestations reaching the economic thresholds. Repeat application may be required at a 7 day interval.
- Under light bollworm/budworm infestations levels, 12 fl.oz of product per acre may be applied in conjunction with intense field monitoring.
- When applied according to label directions for control of cotton bollworm and tobacco budworm.
   Malathion 851 g/L + Gamma-cyhalothrin 12.8 g/L EC also provides ovicidal control of unhatched Heliothis spp. eggs.
- Do not graze livestock in treated areas.
- For cutworm control, [Malathion 851 g/L + Gamma-cyhalothrin 12.8 g/L EC] [Approved ABN] may be applied after planting.
- Do not make more than a total of 10 synthetic pyrethroid applications (of one product or combination of products) to a cotton crop in one growing season.
- **Do not** apply more than 24 fl oz. per acre per application (1.331 lb.ai/A malathion and 0.020 lb.ai/A gamma-cyhalothrin).
- **Do not** apply more than 72 fl oz. per acre per year (3.994 lb.ai/A malathion and 0.060 lb.ai/A gamma-cyhalothrin).

### **Eggplant**

| Fl.oz.<br>/Acre | Max. Single App.<br>Rate<br>(lb.ai/A)                            | Max. # of<br>App. per<br>year | Min. App.<br>Interval (days) | Min. Pre-<br>Harvest<br>Interval (days) | Restricted<br>Entry Interval |
|-----------------|--|-------------------------------|------------------------------|---|------------------------------|
| 9-15            | 0.832 lb.ai/A<br>malathion<br>0.013 lb.ai/A<br>gamma-cyhalothrin | 4                             | 5                            | 5                                       | 24 hours                     |
| Pests Co        | ontrolled: cabbage lo  | oper. cutworm                 | spp., hornworm sp            | D                                       |                              |

| Fl.oz. | Max. Single App.   | Max. # of        | Min. App.       | Min. Pre-                  | Restricted     |
|--------|--|------------------|-----------------|----------------------------|----------------|
| /Acre  | Rate<br>(lb.ai/A)  | App. per<br>year | Interval (days) | Harvest<br>Interval (days) | Entry Interval |
| 12-18  | 0.998 lb.ai/A<br>malathion<br>0.015 lb.ai/A<br>gamma-cyhalothrin | 4                | 5               | 5                          | 24 hours       |

**Pests Controlled:** aphid spp.<sup>(2)(3)</sup>, beet armyworm<sup>(1)(3)</sup>, blister beetle spp., Colorado potato beetle<sup>(3)</sup>, cucumber beetle spp. (adult), European corn borer<sup>(4)</sup>, fall armyworm, flea beetle spp., grasshopper spp., Japanese beetle (adult), lace bugs, leafhopper spp., leafminer spp.<sup>(2)</sup>, meadow spittlebug, pepper weevil (adult)<sup>(2)</sup>, plant bug spp., southern armyworm<sup>(1)</sup>, spider mite spp.<sup>(2)</sup>, stalk borer<sup>(4)</sup>, stink bug spp., tephritid fruit fly, thrips<sup>(3)(5)</sup>, tobacco budworm<sup>(3)</sup>, tomato fruitworm, tomato pinworm, tomato psyllid<sup>(2)(3)</sup>, vegetable weevil (adult), whitefly spp.<sup>(2)(3)</sup>, yellowstriped armyworm<sup>(1)</sup>

- Timing of application should be based upon insect infestations reaching the economic thresholds.
   Repeat application may be required at a 5 day interval.
- For cutworm control, [Malathion 851 g/L + Gamma-cyhalothrin 12.8 g/L EC] [Approved ABN] may be applied after planting.
- **Do not** apply more than 18 fl oz. per acre per application. (0.998 lb.ai/A malathion and 0.015 lb.ai/A gamma-cyhalothrin).
- **Do not** apply more than 72 fl oz. per acre per year. (3.994 lb.ai/A malathion and 0.060 lb.ai/A gamma-cyhalothrin).

<sup>&</sup>lt;sup>1</sup>For control of first and second instars only.

<sup>&</sup>lt;sup>2</sup>Suppression only

<sup>&</sup>lt;sup>3</sup>See resistance statement under Precautions and Restrictions.

<sup>&</sup>lt;sup>4</sup>For control before larvae bore into the plant stalk or fruit.

<sup>&</sup>lt;sup>5</sup>Does not include western flower thrips.

### Grass Forage, and Hay (Pasture and Rangeland grass, grass grown for hay or silage)

| Fl.oz.<br>/Acre | Max. Single App.<br>Rate<br>(lb.ai/A)                            | Max. # of<br>App. per<br>year | Min. App.<br>Interval<br>(days) | Min. Pre-Harvest<br>Interval (days)                   | Restricted<br>Entry Interval |
|-----------------|--|-------------------------------|---------------------------------|---|------------------------------|
| 9-15            | 0.832 lb.ai/A<br>malathion<br>0.013 lb.ai/A<br>gamma-cyhalothrin | 3<br>(1 / cutting)            | 30                              | 0 days for grazing<br>or forage<br>7 days for dry hay | 24 hours                     |

**Pests Controlled:** army cutworm, cutworm species, European (Essex) skipper, range caterpillar, striped grass looper

| Fl.oz.<br>/Acre | Max. Single App.<br>Rate<br>(lb.ai/A)                            | Max. # of<br>App. per<br>year | Min. App.<br>Interval<br>(days) | Min. Pre-Harvest<br>Interval (days)                   | Restricted<br>Entry Interval |
|-----------------|--|-------------------------------|---------------------------------|---|------------------------------|
| 12-18           | 0.998 lb.ai/A<br>malathion<br>0.015 lb.ai/A<br>gamma-cyhalothrin | 3<br>(1 / cutting)            | 30                              | 0 days for grazing<br>or forage<br>7 days for dry hay | 24 hours                     |

**Pests Controlled:** beet armyworm, billbug species<sup>(1)</sup>, bird cherry-oat aphid<sup>(2)</sup>, black grass bug, black turfgrass beetle (adult), blue stem midge, cereal leaf beetle, chinch bug, crane fly species, cricket species, English grain aphid<sup>(2)</sup>, fall armyworm, flea beetle species, grass mealybug, grass sawfly (adult), grasshopper species, green June beetle, greenbug<sup>(2)(3)</sup>, Japanese beetle (adult), katydid species, leafhopper species, mite species<sup>(1)</sup>, Russian wheat aphid<sup>(2)</sup>, southern armyworm, spittlebug species, stink bug species, sugarcane aphid, thrips species, true armyworm, yellowstriped armyworm

- Timing of application should be based upon insect infestations reaching the economic thresholds (with one application per cutting).
- Use higher application volumes and rates when foliage is dense, pest populations are high, larvae are large, or weather conditions are adverse. Use higher rates for longer residual.
- For chinch bug control, Malathion 851 g/L + Gamma-cyhalothrin 12.8 g/L EC insecticide may only suppress heavy infestations or migrations. In this situation, a second application using an alternative chemistry may be needed.
- Pasture and rangeland grass may be used for grazing or cut for forage 0 day after application. Do
  not cut grass to be dried and harvested for hay until 7 days after the last application. Grass grown
  for seed: Straw, hay, and mature seed (seed screenings) may be used as feed 7 days after the last
  application. Regrowth of grass for seed may be used for grazing, cut for forage or cut to be dried
  and harvested for hay.
- For cutworm control, [Malathion 851 g/L + Gamma-cyhalothrin 12.8 g/L EC] [Approved ABN] may be applied after planting.
- **Do not** apply more than 18 fl oz. per acre per application. (0.998 lb.ai/A malathion and 0.015 lb.ai/A gamma-cyhalothrin).
- **Do not** apply more than 54 fl oz. per acre per year. (2.995 lb.ai/A malathion and 0.045 lb.ai/A gamma-cyhalothrin).

<sup>&</sup>lt;sup>1</sup>Suppression only.

<sup>&</sup>lt;sup>2</sup>Best control is obtained before insects begin to roll leaves.

<sup>&</sup>lt;sup>3</sup>See resistance statement under Precautions and Restrictions.

#### Kohlrabi

| Fl.oz.<br>/Acre | Max. Single App.<br>Rate<br>(lb.ai/A)                            | Max. # of<br>App. per<br>year | Min. App.<br>Interval<br>(days) | Min. Pre-<br>Harvest Interval<br>(days) | Restricted<br>Entry Interval |
|-----------------|--|-------------------------------|---------------------------------|---|------------------------------|
| 12-18           | 0.998 lb.ai/A<br>malathion<br>0.015 lb.ai/A<br>gamma-cyhalothrin | 2                             | 7                               | 7                                       | 2 days                       |

**Pests Controlled:** alfalfa looper, cabbage looper, cabbage webworm, cutworm spp. imported cabbageworm, southern cabbageworm

| Fl.oz.<br>/Acre | Max. Single App.<br>Rate<br>(lb.ai/A)                            | Max. # of<br>App. per<br>year | Min. App.<br>Interval<br>(days) | Min. Pre-<br>Harvest Interval<br>(days) | Restricted<br>Entry Interval |
|-----------------|--|-------------------------------|---------------------------------|---|------------------------------|
| 15-18           | 0.998 lb.ai/A<br>malathion<br>0.015 lb.ai/A<br>gamma-cyhalothrin | 2                             | 7                               | 7                                       | 2 days                       |

**Pests Controlled:** aphid spp. (2)(3), armyworm, beet armyworm(1)(3), corn earworm, diamondback moth, fall armyworm(1), flea beetle spp., Japanese beetle (adult), leafhopper spp., meadow spittlebug, plant bug spp. including lygus spp. (3), spider mite spp. (2), stink bug spp., thrips spp. (2), vegetable weevil (adult), whitefly spp. (2)(3), yellowstriped armyworm

- Timing of application should be based upon insect infestations reaching the economic thresholds. Repeat application may be required at a 7 day interval.
- For cutworm control, [Malathion 851 g/L + Gamma-cyhalothrin 12.8 g/L EC] [Approved ABN] may be applied after planting.
- **Do not** apply more than 18 fl oz. per acre per application. (0.998 lb.ai/A malathion and 0.015 lb.ai/A gamma-cyhalothrin).
- **Do not** apply more than 36 fl oz. per acre per year. (1.997 lb.ai/A malathion and 0.030 lb.ai/A gamma-cyhalothrin).

<sup>&</sup>lt;sup>1</sup>For control of first and second instars only.

<sup>&</sup>lt;sup>2</sup>Suppression only

<sup>&</sup>lt;sup>3</sup>See resistance statement under Precautions and Restrictions.

### **Lettuce (Head and Leaf)**

| Fl.oz.<br>/Acre | Max. Single App.<br>Rate<br>(lb.ai/A)                            | Max. # of<br>App. per<br>year | Min. App.<br>Interval (days)                           | Min. Pre-<br>Harvest<br>Interval (days) | Restricted<br>Entry Interval |
|-----------------|--|-------------------------------|--|---|------------------------------|
| 9-15            | 0.832 lb.ai/A<br>malathion<br>0.013 lb.ai/A<br>gamma-cyhalothrin | 2                             | 5 days for leaf<br>lettuce, 6 days<br>for head lettuce | 14                                      | 24 hours                     |

**Pests Controlled:** alfalfa looper, cabbage looper, cutworm spp., green cloverworm, imported cabbage worm, saltmarsh caterpillar

| Fl.oz.<br>/Acre | Max. Single App.<br>Rate<br>(lb.ai/A)                            | Max. # of<br>App. per<br>year | Min. App.<br>Interval (days)                           | Min. Pre-<br>Harvest<br>Interval (days) | Restricted<br>Entry Interval |
|-----------------|--|-------------------------------|--|---|------------------------------|
| 12-18 fl<br>oz  | 0.998 lb.ai/A<br>malathion<br>0.015 lb.ai/A<br>gamma-cyhalothrin | 2                             | 5 days for leaf<br>lettuce, 6 days<br>for head lettuce | 14                                      | 24 hours                     |

**Pests Controlled:** aphid spp. (2)(3), armyworm, beet armyworm(1)(3), corn earworm, diamondback moth (3), European corn borer, fall armyworm, flea beetle spp., grasshopper spp., Japanese beetle (adult), leafhopper spp., meadow spittlebug, plant bug spp., including Lygus spp. (3), southern armyworm, spider mite spp. (2), stink bug spp., tobacco budworm (3), vegetable weevil (adult), whitefly spp. (2)(3)

- Timing of application should be based upon insect infestations reaching the economic thresholds.
   Repeat application may be required at a 5 day interval for leaf lettuce and a 6 day interval for head lettuce.
- For cutworm control, [Malathion 851 g/L + Gamma-cyhalothrin 12.8 g/L EC] [Approved ABN] may be applied after planting.
- **Do not** apply more than 18 fl oz. per acre per application. (0.998 lb.ai/A malathion and 0.015 lb.ai/A gamma-cyhalothrin).
- **Do not** apply more than 36 fl oz. per acre per year. (1.997 lb.ai/A malathion and 0.030 lb.ai/A gamma-cyhalothrin).

<sup>&</sup>lt;sup>1</sup>For control of first and second instars only.

<sup>&</sup>lt;sup>2</sup>Suppression only

<sup>&</sup>lt;sup>3</sup>See resistance statement under Precautions and Restrictions.

#### Okra

| Fl.oz.<br>/Acre | Max. Single App.<br>Rate<br>(lb.ai/A)                            | Max. # of App.<br>per year | Min. App.<br>Interval (days) | Min. Pre-<br>Harvest<br>Interval (days) | Restricted<br>Entry<br>Interval |
|-----------------|--|----------------------------|------------------------------|---|---------------------------------|
| 9-15            | 0.832 lb.ai/A<br>malathion<br>0.013 lb.ai/A<br>gamma-cyhalothrin | 5                          | 7                            | 5                                       | 24 hours                        |
| Pests Co        | ontrolled: cabbage lo  | oper, cutworm spr          | hornworm spp                 |   |                                 |

| Fl.oz.<br>/Acre | Max. Single App.<br>Rate<br>(lb.ai/A)                            | Max. # of App.<br>per year | Min. App.<br>Interval (days) | Min. Pre-<br>Harvest<br>Interval (days) | Restricted<br>Entry<br>Interval |
|-----------------|--|----------------------------|------------------------------|---|---------------------------------|
| 12-18           | 0.998 lb.ai/A<br>malathion<br>0.015 lb.ai/A<br>gamma-cyhalothrin | 5                          | 7                            | 5                                       | 24 hours                        |

**Pests Controlled:** aphid spp.<sup>(2)(3)</sup>, beet armyworm<sup>(1)(3)</sup>, blister beetle spp., Colorado potato beetle<sup>(3)</sup>, cucumber beetle spp. (adult), European corn borer<sup>(4)</sup>, fall armyworm, flea beetle spp., grasshopper spp., Japanese beetle (adult), lace bugs, leafhopper spp., leafminer spp.<sup>(2)</sup>, meadow spittlebug, pepper weevil (adult)<sup>(2)</sup>, plant bug spp., southern armyworm<sup>(1)</sup>, spider mite spp.<sup>(2)</sup>, stalk borer<sup>(4)</sup>, stink bug spp., tephritid fruit fly, thrips<sup>(3)(5)</sup>, tobacco budworm<sup>(3)</sup>, tomato fruitworm, tomato pinworm, tomato psyllid<sup>(2)(3)</sup>, vegetable weevil (adult), whitefly spp.<sup>(2)(3)</sup>, yellowstriped armyworm<sup>(1)</sup>

- Timing of application should be based upon insect infestations reaching the economic thresholds. Repeat application may be required at a 7 day interval.
- For cutworm control, [Malathion 851 g/L + Gamma-cyhalothrin 12.8 g/L EC] [Approved ABN] may be applied after planting.
- **Do not** apply more than 18 fl oz. per acre per application. (0.998 lb.ai/A malathion and 0.015 lb.ai/A gamma-cyhalothrin).
- **Do not** apply more than 90 fl oz. per acre per year. (4.992 lb.ai/A malathion and 0.075 lb.ai/A gamma-cyhalothrin).

<sup>&</sup>lt;sup>1</sup>For control of first and second instars only.

<sup>&</sup>lt;sup>2</sup>Suppression only.

<sup>&</sup>lt;sup>3</sup>See resistance statement under Precautions and Restrictions

#### **Pecans**

| Fl.oz.<br>/Acre | Max. Single App.<br>Rate<br>(Ib.ai/A)                            | Max. # of App.<br>per year | Min. App.<br>Interval (days) | Min. Pre-<br>Harvest<br>Interval<br>(days) | Restricted<br>Entry<br>Interval |
|-----------------|--|----------------------------|------------------------------|--|---------------------------------|
| 12-24           | 1.331 lb.ai/A<br>malathion<br>0.020 lb.ai/A<br>gamma-cyhalothrin | 2                          | 7                            | 14   | 24 hours                        |

**Pests Controlled:** hickory shuckworm, pecan aphid spp., pecan bud moth (adult), pecan casebearer spp., pecan phylloxera spp., pecan spittlebug, pecan weevil, stinkbug spp., tephritid fruit fly

- Timing of application should be based upon insect infestations reaching the economic thresholds. Repeat application may be required at a 7 day interval.
- **Do not** apply more than 24 fl oz. per acre per application. (1.331 lb.ai/A malathion and 0.020 lb.ai/A gamma-cyhalothrin).
- **Do not** apply more than 48 fl oz. per acre per year. (2.663 lb.ai/A malathion and 0.040 lb.ai/A gamma-cyhalothrin).

### Peppers (Bell and Non-bell)

| Fl.oz.<br>/Acre | Max. Single App.<br>Rate<br>(lb.ai/A)                            | Max. # of App.<br>per year | Min. App.<br>Interval<br>(days) | Min. Pre-<br>Harvest<br>Interval (days) | Restricted<br>Entry<br>Interval |
|-----------------|--|----------------------------|---------------------------------|---|---------------------------------|
| 9-15            | 0.832 lb.ai/A<br>malathion<br>0.013 lb.ai/A<br>gamma-cyhalothrin | 2                          | 5                               | 5                                       | 24 hours                        |

**Pests Controlled:** Cabbage looper, Cutworm spp., Hornworm spp.

| Fl.oz.<br>/Acre | Max. Single App.<br>Rate<br>(lb.ai/A)                            | Max. # of App.<br>per year | Min. App.<br>Interval<br>(days) | Min. Pre-<br>Harvest<br>Interval (days) | Restricted<br>Entry<br>Interval |
|-----------------|--|----------------------------|---------------------------------|---|---------------------------------|
| 12-18           | 0.998 lb.ai/A<br>malathion<br>0.015 lb.ai/A<br>gamma-cyhalothrin | 2                          | 5                               | 5                                       | 24 hours                        |

**Pests Controlled:** aphid spp. <sup>(2)(3)</sup>, beet armyworm <sup>(1)(3)</sup>, blister beetle spp., Colorado potato beetle sp, (adult), European corn borer <sup>(4)</sup>, fall armyworm, flea beetle spp., grasshopper spp., Japanese beetle (adult), leafhopper spp., leafminer spp. <sup>(2)</sup>, meadow spittlebug, pepper weevil (adult) <sup>(2)</sup>, plant bug spp., southern armyworm <sup>(1)</sup>, spider mite spp. <sup>(2)</sup>, stalk borer <sup>(4)</sup>, stink bug spp., tephritid fruit fly, thrips <sup>(3)(5)</sup>, tobacco budworm <sup>(3)</sup>, tomato fruitworm, tomato pinworm, tomato psyllid <sup>(2)(3)</sup>, vegetable weevil (adult), whitefly spp. <sup>(2)(3)</sup>, yellowstriped armyworm <sup>(1)</sup>

- Timing of application should be based upon insect infestations reaching the economic thresholds. Repeat application may be required at a 5 day interval.
- For cutworm control, [Malathion 851 g/L + Gamma-cyhalothrin 12.8 g/L EC] [Approved ABN] may be applied after planting.
- **Do not** apply more than 18 fl oz. per acre per application. (0.998 lb.ai/A malathion and 0.015 lb.ai/A gamma-cyhalothrin).
- **Do not** apply more than 72 fl oz. per acre per year. (3.994 lb.ai/A malathion and 0.060 lb.ai/A gamma-cyhalothrin).

<sup>&</sup>lt;sup>1</sup>For control of first and second instars only.

<sup>&</sup>lt;sup>2</sup>Suppression only

<sup>&</sup>lt;sup>3</sup>See resistance statement under Precautions and Restrictions.

<sup>&</sup>lt;sup>4</sup>For control before larvae bore into the plant stalk or fruit.

<sup>&</sup>lt;sup>5</sup>Does not include western flower thrips.

#### Rice and Wild Rice

| Fl.oz.<br>/Acre | Max. Single App.<br>Rate<br>(lb.ai/A)                            | Max. # of App.<br>per year | Min. App.<br>Interval<br>(days) | Min. Pre-Harvest<br>Interval (days)                      | Restricted<br>Entry<br>Interval |
|-----------------|--|----------------------------|---------------------------------|--|---------------------------------|
| 15-22           | 1.220 lb.ai/A<br>malathion<br>0.018 lb.ai/A<br>gamma-cyhalothrin | 2                          | 7                               | For Rice 21 days<br>For Wild Rice 7 days<br>in Minnesota | 24 hours                        |

**Pests Controlled:** bird cherry-oat aphid, chinch bug, fall armyworm, grasshopper spp., greenbug, leafhopper spp., rice stink bug, rice water weevil (adult), riceworm, sharpshooter spp., true armyworm, yellowstriped armyworm, yellow sugarcane aphid

| Fl.oz.<br>/Acre | Max. Single App.<br>Rate<br>(lb.ai/A)                            | Max. # of App.<br>per year | Min. App.<br>Interval<br>(days) | Min. Pre-Harvest<br>Interval (days)                      | Restricted<br>Entry<br>Interval |
|-----------------|--|----------------------------|---------------------------------|--|---------------------------------|
| 18-22           | 1.220 lb.ai/A<br>malathion<br>0.018 lb.ai/A<br>gamma-cyhalothrin | 2                          | 7                               | For Rice 21 days<br>For Wild Rice 7 days<br>in Minnesota | 24 hours                        |

**Pests Controlled:** rice water weevil (wet-seeded rice in California)<sup>(1)</sup>, European corn borer<sup>(2)</sup>, Mexican rice borer<sup>(2)</sup>, rice leafminers, rice seed midge, rice stalk borer<sup>(2)</sup>, sugarcane borer<sup>(2)</sup>

- Timing of application should be based upon insect infestations reaching the economic thresholds. Repeat application may be required at a 21 day interval (except in MN for wild rice which is 7 days).
- Do not apply propanil within 15 days of Malathion 851 g/L + Gamma-cyhalothrin 12.8 g/L EC treatment.
- For control of rice water weevil in dry seeded rice, make a foliar application as indicated by scouting
  for the presence of adults and/or feeding scars, usually within a time-frame of 0 to 5 days after
  permanent flood establishment. Do not exceed 10 days from starting permanent flood until
  insecticide application unless scouting indicates weevils have not been previously present. Adults
  may also be treated at later stages of rice development to reduce overwintering populations.
- Treat for leafminers shortly after first rice blades appear on surface of the water.
- For leafminers, apply when the eggs and larvae are abundant on the seedling rice.
- For control of rice water weevil in water-seeded rice, make the first foliar application after pinpoint flood as indicated by scouting for the presence of adults and/or feeding scars usually when rice has emerged 0.5 inch above the waterline. Under conditions of prolonged migration into the field, start field scouting for rice water weevil adults and/or feeding scars 3 to 5 days after the initial treatment and, if needed, apply a second application within 7 to 10 days of the first application. Adults may also be treated at later stages of rice development to reduce over-wintering populations.
- For control of stem borers, scout fields, when rice growth is near panicle differentiation, for early symptoms of damaging populations exhibited as discoloration (orange-tan) around the junction of the leaf sheath and blade which is caused by feeding of young larvae within the sheath.
   Applications must be made before larvae bore into rice stems. Make the first application at panicle differentiation to 2 inch panicle for partial control. Make the second application at boot to heading for maximum control. All rice varieties are susceptible to stem borer damage, but Cocodrie and

<sup>&</sup>lt;sup>1</sup>See "Application Directions below for application information.

<sup>&</sup>lt;sup>2</sup>For control before larvae bore into the plant stalk.

Priscilla are particularly susceptible.

- Greenbug is known to have many biotypes. Malathion 851 g/L + Gamma-cyhalothrin 12.8 g/L EC may provide only suppression. If satisfactory control is not achieved with the first application of Malathion 851 g/L + Gamma-cyhalothrin 12.8 g/L EC, a resistant biotype may be present. Use alternate chemistry for control.
- **Do not** release flood water within 7 days of an application.
- Do not use treated rice fields for the aquaculture of edible fish and crustaceans.
- Applications may not be made around bodies of water where fish or shellfish are grown and/or harvested.
- Broadcast use only over intermittently flooded areas.
- **Do not** apply as an ultra-low volume (ULV) spray.
- **Do not** apply more than 22 fl oz. per acre per application. (1.220 lb.ai/A malathion and 0.018 lb.ai/A gamma-cyhalothrin).
- **Do not** apply more than 44 fl oz. per acre per year. (2.441 lb.ai/A malathion and 0.037 lb.ai/A gamma-cyhalothrin).

# Small Grains (barley, oats, rye, spring wheat, winter wheat)

| Fl.oz.<br>/Acre | Max. Single App.<br>Rate<br>(lb.ai/A)                            | Max. # of<br>App. per<br>year | Min. App.<br>Interval (days) | Min. Pre-<br>Harvest Interval<br>(days) | Restricted<br>Entry<br>Interval |  |  |  |
|-----------------|--|-------------------------------|------------------------------|---|---------------------------------|--|--|--|
| 9-15            | 0.832 lb.ai/A<br>malathion<br>0.013 lb.ai/A<br>gamma-cyhalothrin | 2                             | 7                            | 30                                      | 24 hours                        |  |  |  |
| Pests Co        | Pests Controlled: army cutworm, cutworm spp.                     |                               |                              |   |                                 |  |  |  |

| Fl.oz.<br>/Acre | Max. Single App.<br>Rate<br>(lb.ai/A)                            | Max. # of<br>App. per<br>year | Min. App.<br>Interval (days) | Min. Pre-<br>Harvest Interval<br>(days) | Restricted<br>Entry<br>Interval |
|-----------------|--|-------------------------------|------------------------------|---|---------------------------------|
| 12-18           | 0.998 lb.ai/A<br>malathion<br>0.015 lb.ai/A<br>gamma-cyhalothrin | 2                             | 7                            | 30                                      | 24 hours                        |

**Pests Controlled:** armyworm, cereal leaf beetle, English grain aphid<sup>(1)</sup>, fall armyworm, flea beetle spp., grasshopper spp., Hessian fly<sup>(4)</sup>, oat bird-cherry aphid<sup>(1)</sup>, orange blossom wheat midge, Russian wheat aphid<sup>(1)</sup>, stink bug spp., yellowstriped armyworm

| Fl.oz.<br>/Acre | Max. Single App.<br>Rate<br>(lb.ai/A)                            | Max. # of<br>App. per<br>year | Min. App.<br>Interval (days) | Min. Pre-<br>Harvest Interval<br>(days) | Restricted<br>Entry<br>Interval |
|-----------------|--|-------------------------------|------------------------------|---|---------------------------------|
| 15-18           | 0.998 lb.ai/A<br>malathion<br>0.015 lb.ai/A<br>gamma-cyhalothrin | 2                             | 7                            | 30                                      | 24 hours                        |
| Pests Co        | ontrolled: grass sawfly  | у                             |                              |   |                                 |

| Fl.oz.<br>/Acre | Max. Single App.<br>Rate<br>(Ib.ai/A)                            | Max. # of<br>App. per<br>year | Min. App.<br>Interval (days)                    | Min. Pre-<br>Harvest Interval<br>(days) | Restricted<br>Entry<br>Interval |
|-----------------|--|-------------------------------|---|---|---------------------------------|
| 18              | 0.998 lb.ai/A<br>malathion<br>0.015 lb.ai/A<br>gamma-cyhalothrin | 2                             | 7   | 30                                      | 24 hours                        |
| Pests Co        | ontrolled: Chinch bug  | . Corn leaf aphi              | d <sup>(1)</sup> , Greenbug <sup>(1)(3)</sup> , | Mite spp. (2)                           |                                 |

| Fl.oz.<br>/Acre | Max. Single App.<br>Rate<br>(lb.ai/A)                            | Max. # of<br>App. per<br>year | Min. App.<br>Interval (days) | Min. Pre-<br>Harvest Interval<br>(days) | Restricted<br>Entry<br>Interval |
|-----------------|--|-------------------------------|------------------------------|---|---------------------------------|
| 12-18           | 0.998 lb.ai/A<br>malathion<br>0.015 lb.ai/A<br>gamma-cyhalothrin | 2                             | 7                            | 30                                      | 24 hours                        |
| Pests Co        | ontrolled: wheat stem  | maggot <sup>(5)</sup>         |                              |   |                                 |

For Spring and Winter Wheat in Colorado, Kansas, Minnesota, Montana, North Dakota, South

### Dakota, Wyoming

| Fl.oz.<br>/Acre | Max. Single App.<br>Rate<br>(lb.ai/A)                            | Max. # of<br>App. per<br>year | Min. App.<br>Interval (days) | Min. Pre-<br>Harvest Interval<br>(days) | Restricted<br>Entry<br>Interval |
|-----------------|--|-------------------------------|------------------------------|---|---------------------------------|
| 6-15            | 0.832 lb.ai/A<br>malathion<br>0.013 lb.ai/A<br>gamma-cyhalothrin | 2                             | 7                            | 30                                      | 24 hours                        |

Pests Controlled: army cutworm

For Spring and Winter Wheat in Colorado, Kansas, Nebraska, and South Dakota

- Timing of application should be based upon insect infestations reaching the economic thresholds. Repeat application may be required at a 7 day interval.
- For chinch bug control, repeat applications at 7-day intervals if needed. Malathion 851 g/L + Gamma-cyhalothrin 12.8 g/L EC may only suppress heavy infestations and/or migrations.
- Greenbug is known to have many biotypes. Greenbug is known to have many biotypes. Malathion 851 g/L + Gamma-cyhalothrin 12.8 g/L EC may provide only suppression. If satisfactory control is not achieved with the first application of Malathion 851 g/L + Gamma-cyhalothrin 12.8 g/L EC, a resistant biotype may be present. Use alternate chemistry for control.
- Do not allow livestock to graze in treated areas or harvest treated wheat forage as feed for meat or dairy animals within 7 days after last treatment. Do not feed treated straw to meat or dairy animals within 30 days after the last treatment.
- For cutworm control, [Malathion 851 g/L + Gamma-cyhalothrin 12.8 g/L EC] [Approved ABN] may be applied after planting.
- **Do not** apply more than 18 fl oz. per acre per application. (0.998 lb.ai/A malathion and 0.015 lb.ai/A gamma-cyhalothrin).
- **Do not** apply more than 36 fl oz. per acre per year. (1.997 lb.ai/A malathion and 0.030 lb.ai/A gamma-cyhalothrin).

<sup>&</sup>lt;sup>1</sup>Best control obtained before insects begin to roll leaves. Once wheat has started to boot, Malathion 851 g/L + Gamma-cyhalothrin 12.8 g/L EC may provide suppression only. Higher rates and increased coverage will be necessary.

<sup>&</sup>lt;sup>2</sup>Suppression only.

<sup>&</sup>lt;sup>3</sup>See resistance statement under Precautions and Restrictions

<sup>&</sup>lt;sup>4</sup>Make applications when adults emerge.

<sup>&</sup>lt;sup>5</sup>Apply from 5-leaf to flag leaf stages of wheat for suppression/control. Time application to control adult flies and maggots on the leaves and stems before maggots bore into stem. Use higher rates for heavier populations and adverse application conditions.

### **Tomatoes, Tomatillo**

| Fl.oz.<br>/Acre | Max. Single App.<br>Rate<br>(lb.ai/A)                            | Max. # of<br>App. per<br>year | Min. App.<br>Interval (days) | Min. Pre-Harvest<br>Interval (days) | Restricted<br>Entry<br>Interval |
|-----------------|--|-------------------------------|------------------------------|-------------------------------------|---------------------------------|
| 9-15            | 0.832 lb.ai/A<br>malathion<br>0.013 lb.ai/A<br>gamma-cyhalothrin | 4                             | 5                            | 5                                   | 24 hours                        |
| Pests Co        | ontrolled: cabbage loc   | oper cutworm                  | spp hornworms                | spp                                 |                                 |

| Fl.oz.<br>/Acre | Max. Single App.<br>Rate<br>(lb.ai/A)                            | Max. # of<br>App. per<br>year | Min. App.<br>Interval (days) | Min. Pre-Harvest<br>Interval (days) | Restricted<br>Entry<br>Interval |
|-----------------|--|-------------------------------|------------------------------|-------------------------------------|---------------------------------|
| 12-18           | 0.998 lb.ai/A<br>malathion<br>0.015 lb.ai/A<br>gamma-cyhalothrin | 4                             | 5                            | 5                                   | 24 hours                        |

**Pests Controlled:** aphid spp. (2)(3), beet armyworm (1)(3), blister beetle spp., Colorado potato beetle sp., cucumber beetle spp. (adult), European corn borer (4), fall armyworm, flea beetle spp., grasshopper spp., Japanese beetle (adult), leafhopper spp., leafminer spp. (2), meadow spittlebug, pepper weevil (adult) (2), plant bug spp., southern armyworm (1), spider mite spp. (2), stalk borer (4), stink bug spp., thrips (3)(5), tobacco budworm (3), tomato fruitworm, tomato pinworm, tomato psyllid (2)(3), vegetable weevil (adult), whitefly spp. (2)(3), yellowstriped armyworm (1)

- Timing of application should be based upon insect infestations reaching the economic thresholds. Repeat application may be required at a 5 day interval.
- For cutworm control, [Malathion 851 g/L + Gamma-cyhalothrin 12.8 g/L EC] [Approved ABN] may be applied after planting.
- **Do not** apply more than 18 fl oz. per acre per application. (0.998 lb.ai/A malathion and 0.015 lb.ai/A gamma-cyhalothrin).
- **Do not** apply more than 72 fl oz. per acre per year. (3.994 lb.ai/A malathion and 0.060 lb.ai/A gamma-cyhalothrin).

<sup>&</sup>lt;sup>1</sup>For control of first and second instars only.

<sup>&</sup>lt;sup>2</sup>Suppression only

<sup>&</sup>lt;sup>3</sup>See resistance statement under Precautions and Restrictions.

<sup>&</sup>lt;sup>4</sup>For control before larvae bore into the plant stalk or fruit.

<sup>&</sup>lt;sup>5</sup>Does not include western flower thrips.

#### **Walnuts**

| Fl.oz.<br>/Acre | Max. Single App.<br>Rate<br>(lb.ai/A)                            | Max. # of App.<br>per year | Min. App.<br>Interval (days) | Min. Pre-<br>Harvest Interval<br>(days) | Restricted<br>Entry<br>Interval |
|-----------------|--|----------------------------|------------------------------|---|---------------------------------|
| 12-24           | 1.331 lb.ai/A<br>malathion<br>0.020 lb.ai/A<br>gamma-cyhalothrin | 3                          | 7                            | 14                                      | 24 hours                        |

**Pests Controlled:** ants (excluding pharaoh ants, fire ants, and harvester ants), chinch bug, codling moth, filbertworm, leaffooted bug, leafroller spp., navel orangeworm, peach twig borer, plant bug spp., stink bug spp., walnut aphid, walnut husk fly spp.

- Timing of application should be based upon insect infestations reaching the economic thresholds. Repeat application may be required at a 7 day interval.
- **Do not** apply more than 18 fl oz. per acre per application. (0.998 lb.ai/A malathion and 0.015 lb.ai/A gamma-cyhalothrin).
- **Do not** apply more than 72 fl oz. per acre per year. (3.994 lb.ai/A malathion and 0.060 lb.ai/A gamma-cyhalothrin).

#### WARRANTY DISCLAIMER

Cheminova warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, CHEMINOVA MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

### **INHERENT RISKS OF USE**

It is impossible to eliminate all risks associated with use of this product. Crop injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Cheminova or the Seller. All such risks shall be assumed by Buyer and User. Buyer and User agree to hold Cheminova and the Seller harmless for any claims related to such factors.

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To the extent consistent with applicable law, the exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to one of the following, at Cheminova's election:

- (1) Refund of purchase price paid by buyer or user for product bought, or
- (2) Replacement of amount of product used.

To the extent consistent with applicable law, Cheminova shall not be liable for consequential, incidental, or special damages or losses in any matter.

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