

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON. DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

January 14, 2015

Cheryl Wagner
Agent for Rotam Agrochemical Co. Ltd.
Rotam Agrochemical Co. Ltd.
c/o Wagner Regulatory Associated, Inc.
P.O. Box 640
Hockessin, DE 19707

Subject: Label Amendment – Amendment to revise Citrus Use

Product Name: Rotam Imidacloprid 75WP Insecticide

EPA Registration Number: 83100-26

Application Date: 7/18/2014 Decision Number: 493265

Dear Ms. Wagner:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

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Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. If you have any questions, please contact Dr. Debra Rate by phone at (703) 306-0309, or via email at rate.debra@epa.gov.

Sincerely,

Venus Eagle, Product Manager 01 Invertebrate & Vertebrate Branch 3 Registration Division (7505P) Office of Pesticide Programs

Enclosure

## **Master label consisting of:**

Pages 1 - 26: Sub-Label A [Nursery, Greenhouse, and Landscape Ornamentals, Turf (Wettable powder – WP)]
Pages 27-45: Sub-Label B [Nursery, Greenhouse, and Landscape Ornamentals, Turf (Water Soluble Packaging – WSP)]

## Rotam Imidacloprid 75WP Insecticide

For foliar and systemic insect control on turfgrass, nursery, greenhouse, commercial and residential landscape ornamentals, on fruit and nut trees, and on Ornamental and vegetable plants in greenhouses, nurseries and interior plantscapes. For use on certain pests on ornamental trees and shrubs in state, national, and private wooded and forested areas with restricted applications in certain counties of New York State.

#### **ACTIVE INGREDIENT:**

Imidacloprid, 1-[(6-Chloro-3-pyridinyl)methyl]-N-nit	ro-2-imidazolidinimine
OTHER INGREDIENTS:	
Total:	
EPA Reg. No. 83100-26	EPA Est. No.

## KEEP OUT OF REACH OF CHILDREN CAUTION

PRECAUCION AL USUARIO: Si usted no puede leer o entender ingles, no use este producto hasta que la etiqueta le haya sido explicada ampliamente. (If you cannot read or understand English, do not use this product until the label has been fully explained to you.)

#### Manufactured by:

Rotam Agrochemical Company Ltd 26/F, E-Trade Plaza 24 Lee Chung Street Chaiwan, Hong Kong

**NET CONTENTS:** Gallons

ACCEPTED

01/14/2015

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 2010.00

83100-26

# TABLE OF CONTENTS [TO BE ADDED]

	FIRST AID		
IF	Call a poison control center or doctor immediately for treatment advice.		
SWALLOWED	<ul> <li>Have person sip a glass of water if able to swallow.</li> </ul>		
	<ul> <li>Do not induce vomiting unless told to do so by a poison control center or doctor.</li> </ul>		
	<ul> <li>Do not give anything by mouth to an unconscious person.</li> </ul>		
IF ON SKIN	Take off contaminated clothing.		
	<ul> <li>Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> </ul>		
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>		
IF IN EYES	• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.		
<ul> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> </ul>			
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>		
In case of emergency call your local poison control center for assistance. Have a product container or label with you when			
calling a poison control center or doctor, or going for treatment.			
<b>Note To Physician:</b> No specific antidote is available. Treat the patient symptomatically.			

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION:** Harmful if swallowed, inhaled, or absorbed through skin. Causes eye irritation. Avoid contact with skin, eyes, or clothing. Avoid breathing dust or vapor. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. Keep children or pets off treated area until spray is dry.

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

## **Applicators and Other Handlers Must Wear:**

- Long-sleeved shirt and long pants
- Chemical resistant gloves made of any waterproof material such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride (PVC) or Viton
- . Shoes plus socks

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

#### **Engineering controls statements:**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

#### USER SAFETY RECOMMENDATIONS

#### **User should:**

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

## **ENVIRONMENTAL HAZARDS**

This product is highly toxic to aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

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

This chemical demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

Do not formulate this product into other end-use products.

## PROTECTION OF POLLINATORS



## **APPLICATION RESTRICTIONS** EXIST FOR

THIS PRODUCT BECAUSE OF RISK TO BEES AND OTHER INSECT POLLINATORS. FOLLOW APPLICATION RESTRICTIONS FOUND IN THE DIRECTIONS FOR USE TO PROTECT POLLINATORS.

Look for the bee hazard icon in the Directions for Use for each application site for specific use restrictions and instructions to protect bees and other insect pollinators.

## This product can kill bees and other insect pollinators.

Bees and other insect pollinators will forage on plants when they flower, shed pollen, or produce nectar.

Bees and other insect pollinators can be exposed to this pesticide from:

- Direct contact during foliar applications, or contact with residues on plant surfaces after foliar applications.
- o Ingestion of residues in nectar and pollen when the pesticide is applied as a seed treatment, soil, tree injection, as well as foliar applications.

When Using This Product Take Steps To:

- o Minimize exposure of this product to bees and other insect pollinators when they are foraging on pollinator attractive plants around the application site.
- o Minimize drift of this product on to beehives or to off-site pollinator attractive habitat. Drift of this product onto beehives or off-site to pollinator attractive habitat can result in bee kills.

Information on protecting bees and other insect pollinators may be found at the Pesticide Environmental Stewardship website at:

http://pesticidestewardship.org/PollinatorProtection/Pages/default.aspx

Pesticide incidents (for example, bee kills) should immediately be reported to the state/tribal lead agency. For contact information for your state, go to: www.aapco.org/officials.html. Pesticide incidents should also be reported to the National Pesticide Information Center at: <a href="www.npic.orst.edu">www.npic.orst.edu</a> or directly to EPA at: <a href="mailto:beekill@epa.gov">beekill@epa.gov</a>

## **DIRECTIONS FOR USE**

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

See individual crops for specific pollinator protection application restrictions. If none exist under the specific crop, for foliar applications, follow these application directions for food/feed & commercially grown ornamentals that are attractive to pollinators and non-agricultural uses.

# 1. FOR FOOD/FEED CROPS AND COMMERCIALLY GROWN ORNAMENTALS NOT UNDER CONTRACT FOR POLLINATION SERVICES BUT ARE ATTRACTIVE TO POLLINATORS

Do not apply this product while bees are foraging. Do not apply this product until flowering is complete and all petals have fallen unless one of the following conditions is met:

- The application is made to the target site after sunset
- The application is made to the target site when temperatures are below 55°F
- The application is made in accordance with a government-initiated public health response
- The application is made in accordance with an active state-administered apiary registry program where beekeepers are notified no less than 48-hours prior to the time of the planned application so that the bees can be removed, covered or otherwise protected prior to spraying
- The application is made due to an imminent threat of significant crop loss, and a documented determination consistent with an IPM plan or predetermined economic threshold is met. Every effort should be made to notify beekeepers no less than 48-hours prior to the time of the planned application so that the bees can be removed, covered or otherwise protected prior to spraying.



## 2. Non-Agricultural Uses:

Do not apply while bees are foraging. Do not apply this product to plants that are flowering. Only apply after all flower petals have fallen off.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

## AGRICULTURAL USE REQUIREMENTS

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

**Do not** enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours. **Exception:** If the product is applied by drenching, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls
- Chemical resistant gloves made of any waterproof material such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinyl chloride (PVC) or Viton
- Shoes plus socks

## NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Keep children and pets off treated area until dry.

OBEY THE FOLLOWING PRECAUTIONS WHEN MIXING AND APPLYING IN THE VICINITY OF AQUATIC AREAS SUCH AS LAKES, RESERVOIRS, RIVERS, PERMANENT STREAMS, MARSHES OR NATURAL PONDS, ESTUARIES, AND COMMERCIAL FISH PONDS.

#### **RUNOFF MANAGEMENT**

DO NOT cultivate within 10 feet of the aquatic areas to allow growth of vegetative filter strip. When used on erodible soils, use best management practices for minimizing runoff. Consult your local Natural Resources Conservation Service for recommendations in your use area.

## **ENDANGERED SPECIES NOTICE**

Under the Endangered Species Act, it is a Federal Offense to use any pesticide in a manner that results in the death of a member of an endangered species. Consult your local county bulletin, County Extension Agent, or Pesticide State Lead Agency for information concerning endangered species in your area.

## RESISTANCE MANAGEMENT

Certain insects may develop resistance to insecticides after repeated use. Use different resistance management practices such as rotating classes of insecticides to help delay or minimize insect resistance.

This product contains the active ingredient imidacloprid, which is a Group 4A insecticide. Repeated use of Group 4A insecticides may lead to insect pests that become resistant to imidacloprid or other neonicotinoids (Group 4A) insecticides.

To reduce the chances of development of resistance to Group 4A insecticides, do not make more than three (3) consecutive foliar applications of this product and/or other Group 4A insecticides with similar modes of action. In addition, Rotam strongly recommends the use of other insecticides with a different mode of action prior to or after application of this product. This strategy of insecticide rotation in concert with other IPM practices is considered an effective way to delay or minimize an insect's ability to develop resistance to this class of chemistry.

Some Group 4A neonicotinoid products used as foliar treatments include the active ingredients thiamethoxam (found in

Actara® and Centric®), acetamiprid (found in Assail® and Intruder<sup>TM</sup>), thiacloprid (found in Calypso®), and imidacloprid (found in Leverage®, Provado®, and Trimax<sup>TM</sup>). Some 4A Group neonicotinoid products used as soil treatment include thiamethoxam (found in Platinum®) and imidacloprid (found in Admire®).

Additional information on insect resistance management may be obtained from your local extension specialist, certified crop advisor and/or product manufacturer, or from the Insecticide Resistance Action Committee (IRAC) on the web at <a href="http://irac-online.org/">http://irac-online.org/</a>.

#### SPRAY DRIFT MANAGEMENT

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

## **Mixing and Loading Requirements**

To avoid potential contamination of groundwater, use a properly designed and maintained containment pad for mixing and loading of any pesticide into application equipment. If containment pad is not used, maintain a minimum distance of 25 feet between mixing and loading areas and potential surface to groundwater conduits such as field sumps, uncased well heads, sinkholes, or field drains.

## **Importance of Droplet Size**

An important factor influencing drift is droplet size. Small droplets (<150-200 microns) drift to a greater extent than large droplets. Within typical equipment specifications, make applications to deliver the largest droplet spectrum that provides sufficient control and coverage. Formation of very small droplets may be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible and by avoiding excessive spray boom pressure. Release the spray at the lowest possible height consistent with good pest control and flight safety. DO NOT make applications more than 10 feet above the crop canopy.

## **Wind Speed Restrictions**

Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size, canopy and equipment specifications determine drift potential at any given wind speed. DO NOT apply when winds are greater than 15 mph and avoid gusty and windless conditions. Risk of exposure to sensitive aquatic areas can be reduced by avoiding applications when wind direction is toward the aquatic area.

## **Restrictions During Temperature Inversions**

Because the potential for spray drift is high during temperature inversions, DO NOT make ground applications during temperature inversions. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however if fog is not present, inversions can also be identified by the movement of smoke from a ground source. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical mixing.

#### Airblast (Air Assist)

Airblast sprayers carry droplets into the canopy of trees/vines via a radially, or laterally directed air stream. Follow the specified drift management practices:

- Adjust deflectors and aiming devices so that spray is only directed into the canopy;
- Block off upward pointed nozzles when there is no overhanging canopy:
- Use only enough air volume to penetrate the canopy and provide good coverage;
- DO NOT allow the spray to go beyond the edge of the cultivated area (i.e., turn off sprayer when turning at end rows);
- Only spray inward, toward the orchard or vineyard, for applications to the outside rows.

## **No-Spray Zone Requirements for Foliar Applications**

DO NOT apply by ground within 25 feet lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries and commercial fish farm ponds.

## **USE INFORMATION**

Thorough uniform coverage is necessary to achieve optimal control. A spray adjuvant may be used to improve coverage. This product may not knockdown established and heavy insect populations. Two applications may be required to achieve control; retreat if needed and as directed on this label. Tank mix this product with other insecticides as recommended for knockdown of pests or for improved control of other pests.

#### **USE RESTRICTIONS (All Uses)**

- DO NOT apply this product, by any application method, to linden, basswood or other *Tilia* species in the state of Oregon.
- DO NOT allow this product to contact plants in bloom if bees are foraging the treatment area.
- DO NOT make a foliar application of any chloronicotinyl insecticide for resistance management purposes following a soil application of this product on the same crop.
- DO NOT use this product on commercial sod farms.
- DO NOT allow livestock to graze in treated areas or use clippings from treated areas for feed or forage unless specified otherwise on this label.
- DO NOT apply this product to soils that are waterlogged or saturated.
- DO NOT allow runoff or puddling of irrigation water following application.
- DO NOT allow leachate to run off for the first 10 days after application or reduced efficacy may result.
- DO NOT exceed the total 8.6 oz. of this product (0.4 lb. of active ingredient)/Acre per year specified for the uses indicated on this label.

#### ROTATION CROPS RESTRICTIONS

Crops which are listed on imidacloprid labels or crops that have existing tolerances for imidacloprid may be planted in treated areas as soon as practical after the last imidacloprid application. Crops that are not found on an imidacloprid label, or crops that do not have existing tolerances for imidacloprid, may not be planted in treated areas for 12-months after the last application.

Refer to the table below for plantback intervals for different crops. Note that if cover crops are planted any time after an application of this product, those crops may not be grazed or harvested for food or feed.

Crops	Plantback Interval
All crops on this label, plus the following crops not on this label: barley, canola, corn (field,	No restrictions
sweet and pop), rapeseed, sorghum, sugar beet, and wheat	
Cereals (including buckwheat, millet, oats, rice, rye, and triticale), soybeans, and safflower	30 days
Onion and bulb vegetables	10 months
All other crops	12 months

#### PREPARATION OF TANK MIXES

This product is a wettable powder formulation that contains imidacloprid, a systemic insecticide and readily dissolves in water.

## **How to Prepare Spray Solutions**

- 1. Fill the spray tank with 1/4 to 1/3 of the required amount of clear water and begin agitation.
- 2. Add the specified amount of this product. Allow this product to be mixed thoroughly to provide a uniform spray solution.
- 3. Fill the tank with the remaining water needed. Maintain sufficient agitation during mixing and application.

If this product is to be tank mixed with other pesticides and/or fertilizer solutions, check the compatibility (refer to the Tank Mix Compatibility section below) before adding to the spray tank. Use the following order of addition:

- 1. ROTAM IMIDACLOPRID 75WP INSECTICIDE
- 2. Other wettable powders or wettable granules
- 3. Flowables or suspension concentrates
- 4. Emulsifiable concentrates

Run agitator as each component is added. Add the next component only after the previous one is thoroughly mixed. Add the remaining quantity of water as the final step. To ensure a uniform spray mixture, maintain constant agitation during

both mixing and application.

#### **Tank Mix Compatibility**

This product has been found to be compatible with commonly used liquid fertilizers, fungicides and insecticides. Before preparing tank mixtures with this product, especially if compatibility is not known, carry out the following small jar test using the desired tank mix partners.

- 1. Add proportionate amount of each component in the appropriate order to a pint or a quart jar;
- 2. Replace the cap, shake for 5 minutes, and allow the mixture to settle for 5 minutes.
- 3. Observe the jar for signs indicating an incompatible mixture. If the contents can be re-mixed by shaking and readily re-suspends, it is considered compatible. If the mixture separates out, foams, or forms a gel or lumps, then the mixture is not compatible.

#### APPLICATION THROUGH IRRIGATION SYSTEMS (CHEMIGATION)

Apply this product at rates specified on this label either alone or in tank mixture with other pesticides and chemicals registered for application through irrigation systems. The normal dilution ratio is 1:10 to 1:20, depending on the system. Always meter the product into the irrigation water during the first part of the irrigation cycle. Mix the product separately prior to injection. Agitate as necessary if the mixture is allowed to stand more than 24 hours.

- 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.
- Apply this product only through micro-irrigation (individual spaghetti tube), drip irrigation, overhead irrigation, and ebb and flood or hand-held or motorized calibrated irrigation equipment. DO NOT apply this product through any other type of irrigation system. Crop injury or lack of effectiveness can result from non-uniform distribution of treated water.
- Be sure to remove scale, pesticide residue and other foreign matter from the tank and entire irrigation system prior to application.
- A person knowledgeable of the chemigation system and responsible for its operation, or a person who is under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.
- If you have any questions about calibration, contact State Extension Service specialists, equipment manufacturers or other experts.

## SAFETY DEVICES FOR IRRIGATION SYSTEMS CONNECTED TO PUBLIC WATER SUPPLIES:

If the source of water for your irrigation system is a public water supply, follow the instructions below.

- 1. 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.
- 2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- 3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 4. The pesticide injection pipeline must 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.
- 5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6. 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.
- 7. DO NOT apply when wind speed favors drift beyond the area intended for treatment.

## SAFETY DEVICES FOR IRRIGATION SYSTEMS NOT CONNECTED TO A PUBLIC WATER SUPPLY:

- 1. 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.
- 2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 3. 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.
- 4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where the pesticide distribution is adversely affected.
- 6. 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.
- 7. DO NOT apply when wind speed favors drift beyond the area intended for treatment.

#### TURFGRASS APPLICATIONS

ROTAM IMIDACLOPRID 75 WP INSECTICIDE can be used for the control of listed soil inhabiting pests as directed on turfgrass.

The active ingredient in ROTAM IMIDACLOPRID 75 WP INSECTICIDE has sufficient residual activity so that applications can be made preceding the egg laying activity of the target pests. The need for an application can be based on historical monitoring of the site, previous records or experiences, current season adult trapping or other methods.

TURFGRASS APPLICATIONS: around airports, athletic fields, cemeteries, golf courses, homes and multi-family		
residential buildings, office buildings and office parks, public parks and playground areas, and shopping centers		
TARGET PEST RATE: Rotam Imidacloprid 75WP Insecticide		
Annual bluegrass weevil	6.4 to 8.6 oz. per acre	
Asiatic garden beetle	or	
Billbug	3 to 4 level teaspoons per 1,000 sq. ft.	
Black turfgrass ataeniusEuropean chafer		
European Crane Fly		
Green June beetle		
Japanese beetle		
May or June Beetles		
Northern masked chafer		
Oriental beetle		
Phyllophaga spp.		
Southern masked chafer		
For Suppression of:	8.6 oz. per acre	
Chinchbug <sup>2</sup>	or	
Cutworms	4 level teaspoons per 1,000 sq. ft.	
For Control of:		
Mole Crickets <sup>1</sup>		

#### **APPLICATION INSTRUCTIONS:**

The use of accurately calibrated equipment normally used for the application of turfgrass insecticides is required. Use equipment which will produce a uniform, coarse droplet spray, using a low pressure setting to eliminate off target drift. Check calibration periodically to ensure that equipment is working properly. Make applications prior to egg hatch of the target pests, followed by sufficient irrigation or rainfall to move the active ingredient through the thatch. Apply this product in sufficient water to provide adequate distribution in the treated area. Irrigation or rainfall must occur within 24 hours after application to move the active ingredient through the thatch. Wait until after sufficient rainfall or irrigation has occurred to mow the grass.

#### Remarks:

Annual Bluegrass weevil, Billbugs, European Crane Fly, and Grubs: For best results, make applications before egg

hatch.

<sup>1</sup>Mole Crickets: Make applications before or during the peak egg hatching period, this product may be applied with a curative insecticide when adults or large nymphs are present and actively tunneling,

<sup>2</sup>Chinchbugs: Make applications before hatching of first instar nymphs.

#### **RESTRICTIONS:**

- Do not apply more than 8.6 oz. (0.4 lb. of active ingredient) per acre per year.
- Do not mow turf or lawn area until after sufficient irrigation or rainfall has occurred so that uniformity of application will not be affected.
- DO NOT make applications when turfgrass areas are waterlogged or the soil is saturated with water. Adequate distribution of the active ingredient cannot be achieved when these conditions exist. The treated turf area must be in such a condition that the rainfall or irrigation will penetrate vertically in the soil profile.
- Keep children and pets off treated area until dry.
- Do not allow product to contact plants in bloom if bees are foraging the treatment area.

#### Note:

1 level teaspoon = 1.4 grams (0.05 oz.) ROTAM IMIDACLOPRID 75 WP Insecticide

3 level teaspoons = 1 level tablespoon

#### LANDSCAPE ORNAMENTAL APPLICATIONS

ROTAM IMIDACLOPRID 75 WP Insecticide is for use on ornamentals in commercial and residential landscapes and interior plantscapes to control or suppress listed insects. ROTAM IMIDACLOPRID 75 WP INSECTICIDE is a systemic product and will be translocated upward into the plant system from root uptake. The product must be placed where the growing portion of the target plant can absorb the active ingredient. The addition of a nitrogen containing fertilizer, where applicable, into the solution may enhance the uptake of the active ingredient. Application can be made by foliar application or soil applications, including soil injection, drenches, and broadcast sprays. Foliar applications offer locally systemic activity against insect pests.

**Woody Perennials:** When making soil applications to plants with woody stems, systemic activity will be delayed until the active ingredient is translocated throughout the plant. In some cases, this translocation delay could take 60 days or longer. For this reason, applications should be made prior to anticipated pest infestation to achieve optimum levels of control.

**Bark Media:** Treatments of this product to media with 30 - 50% or more bark content may confer a shorter period of protection.

**Ant Management Programs:** Use ROTAM IMIDACLOPRID 75 WP Insecticide to control aphids, scale insects, mealybugs and other sucking pests on ornamentals to limit the honeydew available as a food source for ant populations. ROTAM IMIDACLOPRID 75 WP INSECTICIDE applications can be then be supplemented with residual sprays, bait placements or other ant control tactics to further reduce the pest population.

ORNAMENTAL TREES, SHRUBS, EVERGREENS, FLOWERS, FOLIAGE PLANTS, GROUNDCOVERS, INTERIOR PLANTSCAPES, NON-BEARING FRUIT AND NUT TREES, VEGETABLE PLANTS (intended for resale only) (in and around the perimeter of industrial and commercial buildings and residential areas and state, national, and private wooded and forested areas for the insect pests listed below)

FOLIAR APPLICATIONS		
PEST RATE		RATE
Adelgids	Level meas	sure Water
Aphids	0.25 tsp	. 2.5 gals.
Japanese beetles (adults)	0.5 tsp.	5 gals.
Lace bugs	1 tsp.	10 gals.
Leaf beetles (including elm and viburnum leaf beetles)	2.5 tsp.	25 gals.
Leafhoppers (including glassywinged sharpshooter)	5 tsp.	50 gals.
Leafminers	3 Tbsp. + 1	tsp. 100 gals.
Mealybugs		
Psyllids		

Sawfly larvae	
Thrips (suppression)	
Whiteflies	

## **Foliar Application Instructions:**

Start treatments prior to establishment of high pest populations and reapply on an as needed basis. Mix required amount of product in sufficient water to uniformly and accurately cover the area being treated. Foliar applications will provide systemic activity against target pests. If plants (such as holly, pine or ivy) have foliage that is difficult to wet, Rotam recommends this product be applied with a spreader/sticker.

#### **RESTRICTION:**

DO NOT apply this product, by any application method, to linden, basswood or other *Tilia* species in the state of Oregon.

#### Note:

1 level teaspoon = 1.4 grams ROTAM IMIDACLOPRID 75 WP Insecticide

3 level teaspoons = 1 level tablespoon

5 level teaspoons – 1 level tablespoon		
SOIL (BROADCAST) APPLICATIONS		
PEST RATE		
White grub larvae (such as Japanese beetle larvae, Chafers, <i>Phyllophaga</i> spp. Asiatic	3 to 4 tsp. per 1,000 sq. ft.	
garden beetle, Oriental beetle)		

## **Soil Application Instructions:**

Mix the specified amount of this product in a sufficient volume of water to uniformly cover the treatment area. Apply in a minimum of 2 gallons of water per 1,000 sq. ft. After application, irrigate the treated areas to incorporate this product into the soil.

## **RESTRICTION:**

Do not exceed a total of 8.6 oz. (0.4 lb. of active ingredient) per acre per year.

#### Note:

1 level teaspoon = 1.4 grams ROTAM IMIDACLOPRID 75 WP Insecticide

3 level teaspoons = 1 level tablespoon

ORNAMENTAL TREES, SHRUBS, FLOWERS AND GROUNDCOVERS (in and around the perimeter of

industrial and commercial buildings and residential areas, and state, national, and private wooded and forested			
areas to control the insect pests listed below)			
PEST CONTROLLED:			
Adelgids	Eucalyptus lon	g horned borer	Pine tip moth larvae
Alder Borer	Flatheaded bor	ers (including bronze birch and alder)	Psyllids
Aphids	Japanese beetle	es	Royal palm bugs
Asian longhorned beetle	Lace bugs		Sawfly larvae*
Armored scales (suppression)	Leaf beetles (in	ncluding elm and viburnum leaf beetles)	Soft scales
Black vine weevil larvae	Leafhoppers (i	ncluding glassy winged sharpshooter)	Thrips (suppression)
Bronze birch borer	Leafminers		White grub larvae
Emerald ash borer	Mealybugs		Whiteflies
USE RATE	USE RATE APPLICATION SITE		N SITE
TREES			
Diameter at Breast Height (DBH) is measured <b>Soil Injection:</b>			
at 4.5 feet from the ground.		<b>Grid Application:</b> Space holes on 2.5-f	oot centers, in a grid pattern,
extending to the drip line of the tree.			
Use the following rates as a function of tree Circle Application: Apply in holes evenly spaced in circles, (use		nly spaced in circles, (use more	
diameter at breast height (DBH)	diameter at breast height (DBH): than one circle dependent upon the size of the tree) beneath the dri		of the tree) beneath the drip line
Apply 0.7 - 2.8 tsp. (0.035 - 0.14	y 0.7 - 2.8 tsp. (0.035 - 0.14 oz.). per inch of the tree extending in from that line.		
of trunk diameter (DBH)	ftrunk diameter (DBH)  Basal Application: Space injection holes evenly around the base of the		es evenly around the base of the
	tree trunk no more than 6 to 12 inches out from the base.		ut from the base.
You may use the higher rate 2.1 - 2.8 tsp. (0.10   Mix required dosage in sufficient water to inject an equal amount of		to inject an equal amount of	
- 0.14 oz.) only for trees >15 inches (DBH) to solution in each hole. Maintain a low pressure and use sufficient		essure and use sufficient	

control: Asian longhorned beetle, Emerald ash borer, Eucalyptus longhorned borer, Bronze birch borer, and Alder borer

## **RESTRICTIONS:**

- DO NOT apply more than 8.6 oz. (0.4 lb. of active ingredient) per acre per year.
- DO NOT apply this product, by any application method, to linden, basswood or other *Tilia* species in the state of Oregon.

solution for distribution of the liquid into the treatment zone.

Keep the treated area moist for 7 to 10 days.

Do not use less than 4 holes per tree.

NEW YORK SPECIFIC RESTRICTION: No Soil Injection Applications Allowed in Nassau or Suffolk Counties of New York.

**Soil Drench:** Uniformly apply the dosage in no less than 10 gallons of water per 1,000 square feet as a drench around the base of the tree, directed to the root zone. Remove plastic or any other barrier that will stop solution from reaching the root zone.

**For Control of Specified Borers:** Application to trees already heavily infested may not prevent the eventual loss of the trees due to existing pest damage and tree stress.

## **SHRUBS**

Apply 0.7 to 1.5 level teaspoons ROTAM IMIDACLOPRID 75 WP INSECTICIDE per foot of shrub height or 1.0 to 2.0 oz. per 30 cumulative feet of shrub height.

**Soil Injection:** Apply to individual plants using dosage indicated. Mix required dosage in sufficient water to inject an equal amount of solution in each hole. Maintain a low pressure and use sufficient solution for distribution of the liquid into the treatment zone.

Keep the treated area moist for 7 to 10 days.

Do not use less than 4 holes per shrub.

NEW YORK SPECIFIC RESTRICTION: No Soil Injection Applications Allowed in Nassau or Suffolk Counties of New York.

**Soil Drench:** Uniformly apply the dosage in no less than 10 gallons of water per 1,000 square feet as a drench around the base of the shrub, directed to the root zone. Remove plastic or any other barrier that will stop solution from reaching the root zone.

**For Control of Specified Borers:** Application to trees already heavily infested may not prevent the eventual loss of the trees due to existing pest damage and tree stress.

## FLOWERS AND GROUNDCOVERS

3 to 4 level teaspoons ROTAM IMIDACLOPRID 75 WP INSECTICIDE per 1,000 sq. ft.

Apply as a broadcast soil treatment and incorporate into the soil before planting or apply after plants are established prior to bloom or after all petals have fallen off. If application is made to established plants irrigate thoroughly after application.

## **RESTRICTIONS:**

- Do not exceed a total of 8.6 oz. (0.4 lb. of active ingredient) per acre per year.
- DO NOT harvest or consume fruits or nuts from trees that have been treated within 1 year.
- DO NOT apply this product, by any application method, to linden, basswood or other *Tilia* species in the state of Oregon.

#### Note:

- 1 level teaspoon = 1.4 grams ROTAM IMIDACLOPRID 75 WP Insecticide
- 3 level teaspoons = 1 level tablespoon
- \*Pine sawfly larvae feed on mature foliage beginning in early spring. Make treatments in the fall before pine sawfly emergence in spring to allow adequate time for imidacloprid translocation into mature foliage.

POME FRUITS: Apple, Crabapple, Loquat, Mayhaw, Pear, Pear (oriental), Quince (around perimeter of industrial and commercial buildings and on residential areas)		
PEST RATE		
Aphids (except Wooly apple aphid)	0.5 oz. (3 Tbsp. + 1 tsp.) per 100 gals. of water	

Leafhoppers (including glassy winged sharpshooter)	or
Leafminer	2 oz. per acre <sup>1</sup>
Mealybugs*	
San Jose scale*	

#### **APPLICATION INSTRUCTIONS:**

Apply specified dosage as foliar spray as needed after petal-fall is complete. For control of rosy apple aphid, apply prior to leafrolling caused by the pest. For first generation leafminer control, make first application as soon as petal-fall is complete. Greatest leafminer control will result from the earliest possible application. For second and succeeding generations of leafminer, optimal control is obtained from applications made early in the adult flight against egg and early instar larvae. A second application may be required 10 days later if severe pressure continues or if generations are overlapping. A single application may result in suppression only. ROTAM IMIDACLOPRID 75 WP INSECTICIDE will not control late stage larvae. For San Jose Scale, time applications to the crawler stage. Treat each generation. For late season (preharvest) control of leafhopper species, apply ROTAM IMIDACLOPRID 75 WP INSECTICIDE while most leafhoppers are in the nymphal stage. For optimal control of mealybug, insure good spray coverage of the trunk and scaffolding limbs or other resting sites of the mealybug.

<sup>1</sup>The amount of this product required per acre will depend on tree size and volume of foliage present. The rate per acre is based on a standard of 400 gallons of dilute spray solution per acre for large trees.

#### **RESTRICTIONS:**

- Do not apply more than 2 ounces per acre in a single application.
- Do not make more than 4 applications. Allow 10 or more days between applications. Allow at least 7 days between last application and harvest.

\*Not for use in California for control on pears.

PECANS* (around perimeter of industrial and commercial buildings and on residential areas)	
PEST	RATE
Yellow pecan aphid	0.5 oz. (3 Tbsp. + 1 tsp.) per 100 gals. of water
Black margined aphid	or
Pecan leaf phylloxera	2.1 oz. per acre <sup>1</sup>
Pecan spittlebug	
Pecan stem phylloxera	

## **APPLICATION INSTRUCTIONS:**

Make foliar applications as pests begin to build before populations become extreme. Two applications at a 10- to 14- day interval may be required to achieve control. Scout and retreat if needed. Thorough uniform coverage of foliage is necessary for control. Addition of an organosilicone-based spray adjuvant at a rate not to exceed the adjuvant manufacturer's labeled use rate may improve coverage.

<sup>1</sup>The amount of ROTAM IMIDACLOPRID 75 WP INSECTICIDE required per acre will depend on tree size and volume of foliage present. The rate per acre is based on a standard of 400 gallons of dilute spray solution per acre for large trees.

#### **RESTRICTIONS:**

- Do not apply more than a total of 6.3 ounces (0.3 lb. of active ingredient) of ROTAM IMIDACLOPRID 75 WP INSECTICIDE per acre per year.
- Do not make more than 3 applications. Allow 10 or more days between applications.

#### Note:

1 level teaspoon = 1.4 grams ROTAM IMIDACLOPRID 75 WP Insecticide

3 level teaspoons = 1 level tablespoon

GRAPES (around perimeter of industrial and commercial buildings and on residential areas)		
Leafhoppers (including glassy-winged sharpshooter)	0.5 oz. (3 Tbsp. + 1 tsp.) per 100 gals. of water	
Mealybugs*	or	
	1.0 oz. per acre <sup>1</sup>	
APPLICATION INSTRUCTIONS:		
<sup>1</sup> Apply specified dosage as a foliar spray using 200 gallons of water per acre.		

<sup>\*</sup>Not for use in California unless directed by state-specific 24(c) labeling.

## **RESTRICTIONS**:

Do not apply more than a total of 2.0 ounces (0.1 lb. of active ingredient) of ROTAM IMIDACLOPRID 75 WP INSECTICIDE per acre per year. Allow at least 14 days between applications. Applications may be applied up to and including day of harvest.

AVOCADO (around perimeter of industrial and commercial buildings and on residential areas)		
PEST RATE		
Aphids	0.5 oz. per 100 gals. of water	
Avacado lacebug	or	
Leafhoppers	2.0 oz./Acre <sup>1</sup>	
Whiteflies		

## APPLICATION INSTRUCTIONS:

<sup>1</sup> The amount of this product required per acre will depend on tree size and volume of foliage present. The rate per acre is based on a standard of 400 gallons of dilute spray solution per acre for large trees.

#### **RESTRICTIONS:**

- DO NOT apply more than a total of 2.0 ounces (0.1 lb. of active ingredient) of this product per acre per year.
- · Allow at least 7 days between application and harvest.

#### Application to Grassy Areas in Nurseries, Nursery, and Greenhouse grown ornamentals

Use ROTAM IMIDACLOPRID 75 WP INSECTICIDE as directed on grassy areas in nurseries, around and on nursery grown ornamentals, and in planting rows in nurseries to control listed pests. Make application prior to anticipated pest infestation to maximize control. Rainfall, irrigation and mechanical incorporation after application will aid in maximizing control.

The active ingredient in this product has sufficient residual activity so that applications can be made preceding the egg laying activity of the target pests. High levels of control can be achieved when applications are made proceeding or during the egg laying period. The need for an application can be based on historical monitoring of the site, previous records or experiences, current season adult trapping or other methods.

GRASSY AREAS (in Field & Forest Nurseries)		
PEST	DOSAGE	
Annual bluegrass weevil	3.0 - 4.0 level tsp./1,000 sq. ft.	
Asiatic garden beetle	or	
Billbugs	6.4 - 8. 6 oz./Acre	
Black turfgrass ataenius		
European chafer		
European Crane Fly		
Green June beetle		
Japanese beetle		
May or June beetle		
Northern and Southern masked chafers		
Oriental beetle		
Mole crickets <sup>1</sup>	4.0 level tsp./1,000 sq. ft.	_
cutworms (suppression)	or	
chinchbugs <sup>2</sup> (suppression)	8. 6 oz./Acre	
A DDI TO A THOSE INCOME.	0.0000000000000000000000000000000000000	

#### **APPLICATION INSTRUCTIONS:**

Apply this product in sufficient water to provide adequate distribution in the treated area. The use of accurately calibrated equipment normally used for soil application of insecticides is required. Use equipment that will produce a uniform, coarse droplet spray, using a low pressure setting to eliminate off-target drift. Check calibration periodically to ensure that equipment is working properly.

#### **Remarks:**

Annual Bluegrass weevil, Billbugs, European Crane Fly, and Grubs: For best results, make applications before egg hatch.

<sup>1</sup>Mole Crickets: Make applications before or during the peak egg hatching period, this product may be applied with a curative insecticide when adults or large nymphs are present and actively tunneling,

<sup>2</sup>Chinchbugs: Make applications before hatching of first instar nymphs.

#### **RESTRICTIONS:**

- Do not apply more than a total of 8.6 oz. (0.4 lb. of active ingredient) per acre per year.
- . Applications must not be made when grassy areas are waterlogged or the soil is saturated with water.
- Applications must not be made when grassy areas are waterlogged or the soil is saturated with water. Rainfall or irrigation must be able to vertically penetrate in the soil profile.

## **Soil Application/CITRUS (Field):**

Calamondin, Citrus citron, Citrus hybrids (includes chironja, tangelo, and tangor), Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Pummelo, Orange (sweet and sour), Satsuma mandarin, and other cultivars and/or hybrids of these.

PESTS CONTROLLED	RATE (Fluid Ounces/Acre)
Aphids, Asian citrus psyllid, Black fly,	2.1 oz./Acre
Citrus leafminer, eafhoppers/Sharpshooters,	
Mealybugs, Scales, Termites (FL only),	
Whiteflies	
PESTS / DISEASES SUPPRESSED	
Citrus nematode	2.1 oz./Acre
Symptoms of:	
Citrus tristeza virus (CTV) through vector	
control,	
Citrus yellows	
Thrips (foliage feeding thrips only)	

## **RESTRICTIONS:**

- Pre-Harvest Interval (PHI): 0 days
- DO NOT apply more than 2.1 oz. per acre in a single application.
- DO NOT make more than 4 applications per year.

## **APPLICATIONS:**

Apply specified dosage of ROTAM IMIDACLOPRID 75 WP INSECTICIDE in one of the following methods:

- 1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment. For optimum results, apply to newly planted trees or those previously trained to drip, trickle or micro-sprinkler irrigation. Soil should be lightly pre wetted to break soil surface tension prior to applications of ROTAM IMIDACLOPRID 75 WP INSECTICIDE Chemigation application can be made separate to normal irrigation but followed by 10 to 20 minutes of additional watering to move ROTAM IMIDACLOPRID 75 WP INSECTICIDE into root-zone. Allow 24 hours before initiating subsequent irrigations.
- 2. Soil surface band spray on both sides of the tree. Bands should overlap at the tree base to create a continuous band within the drip-line area of the tree, to be followed immediately with light sprinkler irrigation sufficient to move the product into the upper portion of the root-zone. This method is suitable for very coarse soils with 0.75% organic matter or less.
- 3. Drench to base of tree not exceeding one-quart total solution per tree immediately around trunk of tree and extending outward covering the entire fibrous root system of the tree. Only recommended for trees up to 8 feet tall.

ORNAMENTAL TREES (including non-bearing fruit and nut trees), SHRUBS, EVERGREENS, FLOWERS, FOLIAGE PLANTS, GROUNDCOVERS, INTERIOR PLANTSCAPES AND VEGETABLE PLANTS\* (on and around field-grown nursery and container stock, indoor and outdoor ornamentals (including both greenhouse and interior plantscapes), ornamentals and vegetable plants grown in flats, benches or beds)

FOLIAR APPLICATIONS		
PEST	RATE	
Adelgids	0.25 tsp. in 2.5 gals. water	
Aphids	0.50 tsp. in 5.0 gals. water	

	Waster laber with El A Corrections
Japanese beetles (adults)	1.0 tsp. in 10.0 gals. water
Lacebugs	2.5 tsp. in 25.0 gals. water
Leaf beetles (including elm and viburnum leaf beetles)	5.0 tsp. in 50.0 gals. water
Leafhoppers (including glassy winged sharpshooter)	3 Tbsp. + 2 tsp. per 100 gals. of water
Leafminers	
Mealybugs	
Sawfly larvae	
Thrips (suppression)	
Whiteflies	

## **Foliar Application Instructions:**

Start treatments prior to establishment of high pest populations and reapply on an as needed basis (not to exceed 0.4 lb. of active ingredient). Apply this product in a sufficient volume of water to uniformly cover the treatment area. Foliar applications will provide systemic activity against target pests. If plants (such as holly, pine or ivy) have foliage that is difficult to wet, Rotam recommends this product be applied with a spreader/sticker.

To aid in resistance management, do not foliar apply any other chloronicotinyl insecticide following a soil application of ROTAM IMIDACLOPRID 75 WP INSECTICIDE to the same crop.

#### **RESTRICTION:**

• DO NOT apply this product, by any application method, to linden, basswood or other *Tilia* species in the state of Oregon.

#### Note:

1 level teaspoon = 1.4 grams ROTAM IMIDACLOPRID 75 WP Insecticide

3 level teaspoons = 1 level tablespoon

SOIL (BROADCAST) APPLICATIONS		
PEST	RATE	
White grub larvae (such as Japanese beetle larvae,	3 to 4 level teaspoons per 1,000 sq. ft.	
Chafers, <i>Phyllophaga</i> spp., Asiatic garden beetle,		
Oriental beetle)		

#### **Broadcast Application Instructions:**

Mix required amount of product in sufficient water to uniformly and accurately cover the area being treated. Do not use less than 2 gallons of water per 1,000 sq. ft. of treatment area. Irrigate thoroughly to incorporate ROTAM Imidacloprid 75 WP Insecticide into the upper soil profile.

#### **Remarks:**

Mowing of the vegetation in the area to be treated to a height of 3 inches or less prior to application will improve the consistency of control.

#### **RESTRICTIONS:**

- DO NOT apply this product, by any application method, to linden, basswood or other *Tilia* species in the state of Oregon.
- Do not apply more than 8.6 oz. (0.4 lb. of active ingredient) per acre per year.
- DO NOT allow runoff or puddling of irrigation water following application.
- DO NOT apply this product to water-logged or saturated areas. Application of this product to water-logged or saturated areas will not allow penetration into the root zone of the plant.
- DO NOT exceed an application frequency of more than once each 16 weeks on nursery ornamentals with a production cycle of less than one (1) year.
- DO NOT exceed one (1) application per year on nursery ornamentals with a production cycle of greater than one year.
- Only for use on vegetable plants intended for resale including: Broccoli, Chinese Broccoli, Broccoli Raab,
  Brussels Sprouts, Cabbage, Chinese Cabbage, Cauliflower, Collards, Eggplant, Ground Cherry, Kale, Kohlrabi,
  Lettuce, Mustard Greens, Pepinos, Peppers, Potatoes, Rape, Greens, Sorghum, Sugar beets, Tomatillo, and
  Tomato
- DO NOT make a foliar application of this product following a soil application in the same crop for resistance management purposes.

## **Rotational Crops:**

Food Crops: Treated areas may be replanted with any crop specified on an imidacloprid label, or with any crop for which

a tolerance exists for the active ingredient.

For crops not listed on any imidacloprid label, or for crops for which no tolerances for the active ingredient have been established, a 12 month plant-back interval must be observed.

#### Note:

1 level teaspoon = 1.4 grams ROTAM IMIDACLOPRID 75 WP Insecticide

3 level teaspoons = 1 level tablespoon

## Soil Injection & Basal Drench Applications: Nursery, Greenhouse and Interiorscape Plants

## **PESTS:**

Adelgids Alder Borer Aphids

Asian Longhorned beetle Armored scales (suppression) Black vine weevil larvae

Bronze birch borer Emerald Ash borer

Eucalyptus longhorned borers

Flatheaded borers (including bronze birch and alder borer)

Japanese beetles (adults)

Lacebugs

Leaf beetles (including elm and viburnum leaf beetles) Leafhoppers (including glassy-winged sharpshooter)

Leafminers Mealybugs

Pine tip moth larvae

**Psyllids** 

Royal palm bugs Sawfly larvae\* Soft scales

Thrips (suppression) White grub larvae

Whiteflies

#### **USE RATE**

#### TREES

Diameter at Breast Height (DBH) is measured at 4.5 feet from the ground. Use the following rates as a function of tree diameter at breast height (DBH):

Apply 0.7 - 2.8 tsp. (0.035 - 0.14 oz.). per inch of trunk diameter (DBH)

You may use the higher rate 2.1 - 2.8 tsp. (0.10 - 0.14 oz.) only for trees >15 inches (DBH) to control: Asian longhorned beetle, Emerald ash borer, Eucalyptus longhorned borer, Bronze birch borer, and Alder borer

#### **RESTRICTIONS:**

- DO NOT apply more than 8.6 oz. (0.4 lb. of active ingredient) per acre per year.
- DO NOT apply this product, by any application method, to linden, basswood or other *Tilia* species in the state of Oregon.

**Soil Injection:** 

<u>Grid System</u>: Using a grid pattern, space holes on 2.5 foot centers, extending to the drip line of the tree.

APPLICATION INSTRUCTIONS

<u>Circle System</u>: Apply in holes evenly spaced in circles, (use more than one circle depending on the size of the tree) beneath the drip line of the tree extending in from that line. <u>Basal System</u>: Space injection holes evenly around the base of the tree trunk no more than 6 to 12 inches out from the base.

Mix required dosage in sufficient water to inject an equal amount of solution in each hole. Use low pressure and sufficient solution for distribution of the liquid into the treatment zone.

Keep the treated area moist for 7 to 10 days.

Use a minimum of 4 holes per tree.

NEW YORK SPECIFIC RESTRICTION: No Soil Injection Application Allowed in Nassau or Suffolk Counties of New York.

**Soil Drench:** Uniformly apply the dosage in at least 10 gallons of water per 1,000 square feet as a drench around the base of the tree. Direct to the root zone. Remove plastic or any other barrier that will stop solution from reaching the root zone.

**For Control of Specified Borers:** Application to trees already heavily infested may not prevent the eventual loss of the trees due to existing pest damage and tree stress.

SHR	SHRUBS		
0.5 to 1.5 level teaspoons Rotam Imidacloprid 75 WP	Soil Injection:		
Insecticide per foot of shrub height or 1 - 2 ounces per 30	Apply to individual plants using dosage indicated. Mix		
feet cumulative shrub height	required dosage in sufficient water to inject an equal		
	amount of solution in each hole. Maintain a low pressure		
	and use sufficient solution for distribution of the liquid into		
	the treatment zone.		
	Keep the treated area moist for 7 to 10 days.		
	Do not use less than 4 holes per shrub.		
	NEW YORK SPECIFIC RESTRICTION: No Soil		
	Injection Application Allowed in Nassau or Suffolk		
	Counties of New York.		
	<b>Soil Drench:</b> Uniformly apply the dosage in at least 10		
	gallons of water per 1,000 square feet as a drench around		
	the base of the tree, directed to the root zone. Remove		
	plastic or any other barrier that will stop solution from		
	reaching the root zone.		
FLOWERS AND GROUND COVERS			
3 to 4 level teaspoons Rotam Imidacloprid 75 WP	Apply as a broadcast soil treatment and incorporate into the		
Insecticide per 1,000 sq. ft.	soil before planting or apply after plants are established		
	prior to bloom or after all petals have fallen off. If		
	application is made to established plants, optimum control		
	will be attained if area is irrigated thoroughly after		
	application.		
	I I I		

#### **RESTRICTIONS:**

- Do not apply more than 8.6 oz. (0.4 lb. of active ingredient) per acre per year.
- DO NOT harvest or consume fruits or nuts from trees that have been treated within 1 year of application.

## Note:

1 level teaspoon = 1.4 grams ROTAM IMIDACLOPRID 75 WP Insecticide

3 level teaspoons = 1 level tablespoon

\*Pine sawfly larvae feed on mature foliage beginning in early spring. Make treatments in the fall before pine sawfly emergence in spring to allow adequate time for imidacloprid translocation into mature foliage.

FIELD AND FOREST NURSERIES			
PEST	RATE		
White Grub larvae <sup>1</sup> (such as Japanese Beetle, Masked	4.5 Tbsp. (0.67 oz.) per 1,000 ft. of row or 3,000 sq. ft.		
Chafers, European Chafer, Oriental Beetle, Asiatic Garden			
Beetle)			

## **APPLICATION INSTRUCTIONS:**

Apply May through July. For control, treatment must be followed by rainfall or irrigation. Do not use less than 2 gallons of spray volume per 1,000 square feet. Apply as a uniform band on either side of row using a band six (6) inches wider than the actual root ball diameter to be dug. Do not allow bands in adjacent rows to overlap. Mow vegetation in the area to be treated to a height of 3 inches or less before application. Mowing to the lowest possible height will provide more control.

## **RESTRICTIONS:**

- DO NOT use less than 2 gallons of spray volume per 1,000 sq. ft.
- DO NOT apply more than 8.6 oz. (0.4 lb. of active ingredient) per acre/year.
- DO NOT apply this product, by any application method, to linden, basswood or other *Tilia* species in the state of Oregon.

## Irrigation, Drench, Ebb & Flood Application

ROTAM IMIDACLOPRID 75 WP INSECTICIDE may be applied to ornamental and vegetable plants in greenhouses, nurseries and interior plantscapes using soil drenches, micro-irrigation, drip irrigation, overhead irrigation, ebb and flood irrigation or hand-held or motorized calibrated irrigation equipment. See instructions above "For Application Through Irrigation Systems".

#### **RESTRICTIONS:**

- DO NOT graze treated areas or use clippings from treated areas for feed or forage.
- DO NOT apply to soils that are water logged or saturated, which will not allow the penetration of the insecticide into the root zone of the plants.
- DO NOT allow leachate runout for the first 10 days after application, in order to retain the product and facilitate full plant uptake of the active ingredient.
- For outdoor ornamentals grown in beds or turf, DO NOT apply more than 8.6 ounces (0.4 lb. of active ingredient) per acre per year.
- On plants with a production cycle of less than one year, DO NOT exceed a frequency of more than once each 16 weeks for a particular plant. On stock plants and woody crops with a production cycle of greater than one year,
- . DO NOT exceed application once a year.

CONT	SMALL CONTAINERS  CONTAINERIZED PLANTS (SMALL CONTAINERS)			
Container sizes		of containers treated with 4.5 tbsp. (0.67 oz.)		
(inches)	Herbaceous species including vegetable plants (one or two plants per pot)	Woody perennials, Herbaceous species including vegetable plants (3 or more per pot)		
2	3,000	2,000		
3	2,000	1,350		
4	1,500	1,000		
5	1,200	800		
6	1,000	650		
7	850	550		
8	750	500		
9	675	450		
10	600	400		
11	550	350		
12	500	300		
Use sufficient volume to wet most of the potting medium without loss of liquid from the bottom of the container. Apply according to label directions. Follow application with moderate irrigation. Irrigate carefully during the next 10 days in order to prevent loss of active ingredient due to leaching.  PLANTS IN FLATS, ON BENCHES, OR IN BEDS  3 - 4 level tsp. 1 1,000 sq. ft.  Application methods:  Mix required amount in sufficient water to uniformly cover the area being treated. DO NOT use less than 2 gallons of mixture per 1,000 square feet. Apply as a broadcast treatment and incorporate into the medium before planting or apply after plants are				
	Container sizes (inches)  2 3 4 5 6 7 8 9 10 11 12 Application method Use sufficient volum bottom of the contain moderate irrigation. active ingredient due PLA 3 - 4 level tsp. 1 1,00 Application method Mix required amount NOT use less than 2	Container sizes (inches)  Number of containers treate Herbaceous species including vegetable plants (one or two plants per pot)  2 3,000 3 2,000 4 1,500 5 1,200 6 1,000 7 850 8 750 9 675 10 600 11 550 12 500  Application methods: Use sufficient volume to wet most of the potting medium bottom of the container. Apply according to label direction moderate irrigation. Irrigate carefully during the next 10 cactive ingredient due to leaching.  PLANTS IN FLATS, ON BENCHES, 3 - 4 level tsp. 1 1,000 sq. ft.  Application methods: Mix required amount in sufficient water to uniformly cov NOT use less than 2 gallons of mixture per 1,000 square in the square sufficient water of the potting medium cactive ingredient due to leaching.		

<sup>1</sup>Fungus gnat larvae in the soil will be controlled by drench or incorporation. No adult Fungus Gnat control. Other foliar insect control is achieved by the uptake of this product from a healthy root system translocating the active ingredient up into the plant.

<sup>2</sup>Root Mealybug control will require a thorough drenching of containerized media. Coverage is essential for control while minimizing the amount of leachate. Rate: 0.67 oz. (4.5 Tbsp.) in 150 gallons of water.

<sup>3</sup>Citrus Root Weevil: For use on non-bearing citrus nursery stock.

<sup>4</sup>Thrips suppression on foliage only. Thrips in buds and flowers will not be suppressed.

#### **RESTRICTIONS:**

- DO NOT apply more than 8.6 oz. (0.4 lb. of active ingredient) per acre/year.
- · For use on vegetable plants intended for resale only including: Broccoli, Chinese Broccoli, Broccoli Raab, Brussels Sprouts, Cabbage, Chinese Cabbage, Cauliflower, Collards, Eggplant, Ground Cherry, Kale, Kohlrabi, Lettuce, Mustard Greens, Pepinos, Peppers, Potatoes, Rape Greens, Sorghum, Sugarbeets, Tomatillo, and Tomato

IRRIGATION & DRENCH APPLICATIONS: ORNAMENTAL AND VEGETABLE PLANTS GROWN IN LARGE CONTAINERS		
PEST	Container Size (gallons)	# of Containers treated with 4.5 Tbsp. (0.67 oz.)
Adelgids	1	240 - 120
Aphids		
Fungus Gnats (larvae only) <sup>1</sup>		
Japanese Beetles (adults)	2	120 - 60
Lacebugs	2	120 00
Leaf beetles (including elm and viburnum leaf beetles)		
Leafhoppers (including glassy-winged sharpshooter)		
Leafminers		
Mealybugs		00.40
Psyllids	3	90 - 40
Root mealybugs <sup>2</sup>		
Root Weevil Complex: (such as Apopka Weevil,		
Black Vine Weevil, Citrus Root Weevil) <sup>3</sup>		
Soft Scales	5	65 - 30
Thrips (suppression) <sup>4</sup>	3	
Whiteflies		
White Grub larvae (such as Japanese Beetle, Masked		
Chafers, European Chafers, Oriental Beetle, Asiatic		
Garden Beetle)		

## **Application methods:**

Apply in sufficient water to wet the potting medium. Make applications prior to egg hatch of the target pest. Irrigate moderately after application to move the active ingredient into the root zone.

## Remarks:

<sup>1</sup>Fungus gnat larvae in the soil will be controlled by drench or incorporation. No adult Fungus Gnat control. Other foliar insect control is achieved by the uptake of this product from a healthy root system translocating the active ingredient up into the plant.

<sup>2</sup>Root Mealybug control will require a thorough drenching of containerized media. Coverage is essential for control while minimizing the amount of leachate. Rate: 0.67 ounces (4.5 Tbsp.) in 150 gallons of water.

<sup>3</sup>Citrus Root Weevil: For use on non-bearing citrus nursery stock.

<sup>4</sup>Thrips suppression on foliage only. Thrips in buds and flowers will not be suppressed.

#### **RESTRICTION:**

For use on vegetable plants intended for resale only including: Broccoli, Chinese Broccoli, Broccoli Raab, Brussels Sprouts, Cabbage, Chinese Cabbage, Cauliflower, Collards, Eggplant, Ground Cherry, Kale, Kohlrabi, Lettuce, Mustard Greens, Pepinos, Peppers, Potatoes, Rape Greens, Sorghum, Sugarbeets, Tomatillo, and Tomato

Leafminers

Mealybugs

Soft Scales

Whiteflies

Root mealybugs<sup>2</sup> Root Weevil Complex:

Black Vine Weevil, Citrus Root Weevil<sup>3</sup>)

Thrips (suppression)<sup>4</sup>

as Japanese Beetle,

Masked Chafers,

Garden Beetle)

European Chafers, Oriental Beetle, Asiatic

White Grub larvae (such

(such as Apopka Weevil,

**Psyllids** 

## EBB & FLOOD APPLICATIONS: ORNAMENTAL AND VEGETABLE PLANTS GROWN IN CONTAINERS

This product may be applied through ebb and flood applications to Ornamental and Vegetable Plants (intended for resale only) grown in containers. To assure accurate uptake, prior to treatment, bring a minimum of 10 plants up to a known field capacity and allow to dry out for one or two days. Re-wet these plants to determine how much water on average each plant will absorb to bring it back at field capacity. Use the volume absorbed per plant (keeping pot sizes uniform) multiplied by the number of pots being treated. Add to this volume a required minimum to flood your smallest treatment area. This will minimize the return back to the storage tank. Re-use the returned volume with subsequent irrigation or nutrients on the same plants.

		oz. (tsp.)/100 plants	
		Herbaceous species including	Woody perennials, Herbaceous
PEST	Pot sizes	vegetable plants(one or two plants	species including vegetable plants
	(inches)	per pot)	(3 or more per pot)
Adelgids	2	0.02 (0.4)	0.03 (0.6)
Aphids	3	0.03 (0.6)	0.04 (0.8)
Armored scales	4	0.04 (0.8)	0.06 (1.1)
(suppression)	5	0.05 (1.0)	0.07 (1.4)
Fungus Gnats (larvae	6	0.06 (1.1)	0.09 (1.8)
only) <sup>1</sup>	7	0.07 (1.3)	0.10 (2.1)
Japanese Beetles (adults)	8	0.075 (1.5)	0.11 (2.3)
Lacebugs	9	0.08 (1.7)	0.13 (2.5)
Leaf beetles (including	10	0.09 (1.9)	0.14 (2.9)
elm and viburnum leaf	11	0.10 (2.1)	0.16 (3.3)
beetles)	12	0.11 (2.3)	0.19 (3.8)
Leafhoppers (including	<sup>1</sup> Fungus gnat larvae in the soil will be controlled by drench or incorporation. No adult		
glassy-winged	Fungus Gnat control. Other foliar insect control is achieved by the uptake of ROTAM		
sharpshooter)	IMID A CLODDID 75 WD INCECTICIDE from a healthy good system tronglocating the active		

Fungus Gnat control. Other foliar insect control is achieved by the uptake of ROTAM IMIDACLOPRID 75 WP INSECTICIDE from a healthy root system translocating the active ingredient up into the plant.

<sup>2</sup>Root Mealybug control will require a thorough drenching of containerized media. Coverage is essential for control while minimizing the amount of leachate. Rate: 0.6 oz. in 150 gallons

<sup>3</sup>Citrus Root Weevil: For use on non-bearing citrus nursery stock.

<sup>4</sup>Thrips suppression on foliage only. Thrips in buds and flowers will not be suppressed.

#### **RESTRICTIONS:**

- Do not apply more than 8.6 oz. (0.4 lb. of active ingredient) per acre per year.
- For use on vegetable plants intended for resale only including: Broccoli, Chinese Broccoli, Broccoli Raab, Brussels Sprouts, Cabbage, Chinese Cabbage, Cauliflower, Collards, Eggplant, Ground Cherry, Kale, Kohlrabi, Lettuce, Mustard Greens, Pepinos, Peppers, Potatoes, Rape Greens, Sorghum, Sugarbeets, Tomatillo, and **Tomato**

## STORAGE AND DISPOSAL

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

**Pesticide Storage:** Store in a tightly closed container in a cool, dry place.

**Pesticide Disposal:** Pesticide spray mixture or rinsate that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Handling (Nonrefillable container): Do not reuse or refill this container. Residue Removal: Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 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. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available, or for reconditioning if appropriate, or puncture and dispose of in a sanitary landfill or by incineration. Do not burn unless allowed by state and local ordinances.

FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident, call CHEMTREC AT 1-800-424-9300

#### CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of ROTAM AGROCHEMICAL COMPANY LIMITED or Seller. All such risks shall be assumed by Buyer and User, and to the extent consistent with applicable law, buyer and user agree to hold ROTAM AGROCHEMICAL COMPANY LIMITED and Seller harmless for any claims relating to such factors.

ROTAM AGROCHEMICAL COMPANY LIMITED warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of the product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or ROTAM AGROCHEMICAL COMPANY LIMITED, and Buyer and User assume the risk of any such use. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ROTAM AGROCHEMICAL COMPANY LIMITED MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the extent consistent with applicable law, in no event shall ROTAM AGROCHEMICAL COMPANY LIMITED or Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF ROTAM AGROCHEMICAL COMPANY LIMITED AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF ROTAM AGROCHEMICAL COMPANY LIMITED OR SELLER, THE REPLACEMENT OF THE PRODUCT.

ROTAM AGROCHEMICAL COMPANY LIMITED and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by a duly authorized representative of ROTAM AGROCHEMICAL COMPANY LIMITED.

[Booklet back remaining on container when booklet is removed]

## **Rotam Imidacloprid 75WP Insecticide**

For foliar and systemic insect control on turfgrass, nursery, greenhouse, commercial and residential landscape ornamentals, and, interior plantscapes. For use on certain pests on ornamental trees and shrubs in state, national, and private wooded and forested areas with restricted applications in certain counties of New York State.

## **ACTIVE INGREDIENT:**

Imidacloprid, 1-[(6-Chloro-3-pyridinyl)methyl]-N-r	itro-2-imidazolidinimine
OTHER INGREDIENTS:	
Total:	
EPA Reg. No. 83100-26	EPA Est. No.

# KEEP OUT OF REACH OF CHILDREN CAUTION

PRECAUCION AL USUARIO: Si usted no puede leer o entender ingles, no use este producto hasta que la etiqueta le haya sido explicada ampliamente. (If you cannot read or understand English, do not use this product until the label has been fully explained to you.)

## Manufactured by:

Rotam Agrochemical Company Ltd 26/F, E-Trade Plaza 24 Lee Chung Street Chaiwan, Hong Kong

**NET CONTENTS:**\_\_\_Gallons

FIRST AID			
IF	Call a poison control center or doctor immediately for treatment advice.		
SWALLOWED	<ul> <li>Have person sip a glass of water if able to swallow.</li> </ul>		
	<ul> <li>Do not induce vomiting unless told to do so by a poison control center or doctor.</li> </ul>		
	<ul> <li>Do not give anything by mouth to an unconscious person.</li> </ul>		
IF ON SKIN	Take off contaminated clothing.		
	<ul> <li>Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> </ul>		
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>		
IF IN EYES	<ul> <li>Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> </ul>		
	• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.		
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>		
In case of emergency call your local poison control center for assistance. Have a product container or label with you when			
calling a poison co	calling a poison control center or doctor, or going for treatment.		
<b>Note To Physician:</b> No specific antidote is available. Treat the patient symptomatically.			

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION**: Harmful if swallowed, inhaled, or absorbed through skin. Causes eye irritation. Avoid contact with skin, eyes, or clothing. Avoid breathing dust or vapor. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. Keep children or pets off treated area until spray is dry.

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

## **Applicators and Other Handlers Must Wear:**

- Long-sleeved shirt and long pants
- Chemical resistant gloves made of any waterproof material such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride (PVC) or Viton
- Shoes plus socks

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

## **Engineering controls statements:**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

#### USER SAFETY RECOMMENDATIONS

#### **User should:**

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

## **ENVIRONMENTAL HAZARDS**

This product is highly toxic to aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops/plants or weeds. Do not apply this product or allow it to drift to blooming crops/plants or weeds if bees are foraging the treatment area. This chemical demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

Do not formulate this product into other end-use products.

## PROTECTION OF POLLINATORS



## **APPLICATION RESTRICTIONS** EXIST FOR

THIS PRODUCT BECAUSE OF RISK TO BEES AND OTHER INSECT POLLINATORS. FOLLOW APPLICATION RESTRICTIONS FOUND IN THE DIRECTIONS FOR USE TO PROTECT POLLINATORS.

Look for the bee hazard icon in the Directions for Use for each application site for specific use restrictions and instructions to protect bees and other insect pollinators.

## This product can kill bees and other insect pollinators.

Bees and other insect pollinators will forage on plants when they flower, shed pollen, or produce nectar.

Bees and other insect pollinators can be exposed to this pesticide from:

- o Direct contact during foliar applications, or contact with residues on plant surfaces after foliar applications.
- o Ingestion of residues in nectar and pollen when the pesticide is applied as a seed treatment, soil, tree injection, as well as foliar applications.

When Using This Product Take Steps To:

- o Minimize exposure of this product to bees and other insect pollinators when they are foraging on pollinator attractive plants around the application site.
- o Minimize drift of this product on to beehives or to off-site pollinator attractive habitat. Drift of this product onto beehives or off-site to pollinator attractive habitat can result in bee kills.

Information on protecting bees and other insect pollinators may be found at the Pesticide Environmental Stewardship website at:

http://pesticidestewardship.org/PollinatorProtection/Pages/default.aspx

Pesticide incidents (for example, bee kills) should immediately be reported to the state/tribal lead agency. For contact information for your state, go to: www.aapco.org/officials.html. Pesticide incidents should also be reported to the National Pesticide Information Center at: <a href="https://www.npic.orst.edu">www.npic.orst.edu</a> or directly to EPA at: <a href="mailto:beekill@epa.gov">beekill@epa.gov</a>

#### STORAGE AND DISPOSAL

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

**Pesticide Storage:** Store in a tightly closed container in a cool, dry place.

**Pesticide Disposal:** Pesticide spray mixture or rinsate that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Handling (Nonrefillable container): Do not reuse or refill this container. Residue Removal: Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 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. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available, or for reconditioning if appropriate, or puncture and dispose of in a sanitary landfill or by incineration. Do not burn unless allowed by state and local ordinances.

FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident, call CHEMTREC AT 1-800-424-9300

Pages 27-45: Sub-Label B [Nursery, Greenhouse, and Landscape Ornamentals, Turf (Water Soluble Packaging – WSP)]

## **Rotam Imidacloprid 75WP Insecticide**

For foliar and systemic insect control on turfgrass, nursery, greenhouse, commercial and residential landscape ornamentals, on fruit and nut trees, and on ornamental and vegetable plants in greenhouses, nurseries and interior plantscapes. For use on certain pests on ornamental trees and shrubs in state, national, and private wooded and forested areas with restricted applications in certain counties of New York State.

#### **ACTIVE INGREDIENT:**

Imidacloprid, 1-[(6-Chloro-3-pyridinyl)methyl]-N-nitro-	2-imidazolidinimine
OTHER INGREDIENTS:	
Total:	
EPA Reg. No. 83100-26	EPA Est. No.

This product contains 0.075 lb. (1.2 oz.) (34.02 grams) imidacloprid per packet.

Keep water-soluble packets in this container and store in a cool dry place but not below freezing (32°F). DO NOT remove packets from container except for immediate use.

# KEEP OUT OF REACH OF CHILDREN CAUTION

PRECAUCION AL USUARIO: Si usted no puede leer o entender ingles, no use este producto hasta que la etiqueta le haya sido explicada ampliamente. (If you cannot read or understand English, do not use this product until the label has been fully explained to you.)

## Manufactured by:

Rotam Agrochemical Company Ltd 26/F, E-Trade Plaza 24 Lee Chung Street Chaiwan, Hong Kong

**NET CONTENTS:** Gallons

# TABLE OF CONTENTS [TO BE ADDED]

FIRST AID		
IF	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> </ul>	
SWALLOWED	<ul> <li>Have person sip a glass of water if able to swallow.</li> </ul>	
	<ul> <li>Do not induce vomiting unless told to do so by a poison control center or doctor.</li> </ul>	
	<ul> <li>Do not give anything by mouth to an unconscious person.</li> </ul>	
IF ON SKIN	<ul> <li>Take off contaminated clothing or clothing</li> </ul>	
	• Rinse skin immediately with plenty of water for 15 to 20 minutes.	
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>	
IF IN EYES	<ul> <li>Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> </ul>	
	• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.	
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>	
In case of emergency call your local poison control center for assistance. Have a product container or label with you when		
calling a poison control center or doctor, or going for treatment.		
<b>Note To Physician:</b> No specific antidote is available. Treat the patient symptomatically.		

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION:** Harmful if swallowed, inhaled, or absorbed through skin. Causes eye irritation. Avoid contact with skin, eyes, or clothing. Avoid breathing dust or vapor. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. Keep children or pets off treated area until spray is dry.

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

## **Applicators and Other Handlers Must Wear:**

- Long-sleeved shirt and long pants
- Chemical resistant gloves made of any waterproof material such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride (PVC) or Viton
- Shoes plus socks

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

#### **Engineering controls statements:**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

## **USER SAFETY RECOMMENDATIONS**

## **User should:**

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

## **ENVIRONMENTAL HAZARDS**

This product is highly toxic to aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops/plants or weeds. Do not apply this product or allow it to drift to blooming crops/plants or weeds if bees are foraging the treatment area. This chemical demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

Do not formulate this product into other end-use products.

## PROTECTION OF POLLINATORS



## APPLICATION RESTRICTIONS EXIST

FOR THIS PRODUCT BECAUSE OF RISK TO BEES AND OTHER INSECT POLLINATORS. FOLLOW APPLICATION RESTRICTIONS FOUND IN THE DIRECTIONS FOR USE TO PROTECT POLLINATORS.

Look for the bee hazard icon in the Directions for Use for each application site for specific use restrictions and instructions to protect bees and other insect pollinators.

## This product can kill bees and other insect pollinators.

Bees and other insect pollinators will forage on plants when they flower, shed pollen, or produce nectar.

Bees and other insect pollinators can be exposed to this pesticide from:

- Direct contact during foliar applications, or contact with residues on plant surfaces after foliar applications.
- o Ingestion of residues in nectar and pollen when the pesticide is applied as a seed treatment, soil, tree injection, as well as foliar applications.

When Using This Product Take Steps To:

- Minimize exposure of this product to bees and other insect pollinators when they are foraging on pollinator attractive plants around the application site.
- o Minimize drift of this product on to beehives or to off-site pollinator attractive habitat. Drift of this product onto beehives or off-site to pollinator attractive habitat can result in bee kills.

Information on protecting bees and other insect pollinators may be found at the Pesticide Environmental Stewardship website at:

http://pesticidestewardship.org/PollinatorProtection/Pages/default.aspx

Pesticide incidents (for example, bee kills) should immediately be reported to the state/tribal lead agency. For contact information for your state, go to: www.aapco.org/officials.html. Pesticide incidents should also be reported to the National Pesticide Information Center at: <a href="https://www.npic.orst.edu">www.npic.orst.edu</a> or directly to EPA at: <a href="mailto:beekill@epa.gov">beekill@epa.gov</a>

## **DIRECTIONS FOR USE**

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

See individual crops for specific pollinator protection application restrictions. If none exist under the specific crop, for foliar applications, follow these application directions for food/feed & commercially grown ornamentals that are attractive to pollinators and non-agricultural uses.



## 1. FOR FOOD CROPS AND COMMERCIALLY GROWN ORNAMENTALS NOT UNDER CONTRACT FOR POLLINATION SERVICES BUT ARE ATTRACTIVE TO POLLINATORS

Do not apply this product while bees are foraging. Do not apply this product until flowering is complete and all petals have fallen unless one of the following conditions is met:

- The application is made to the target site after sunset
- The application is made to the target site when temperatures are below 55°F
- The application is made in accordance with a government-initiated public health response
- The application is made in accordance with an active state-administered apiary registry program where beekeepers are notified no less than 48-hours prior to the time of the planned application so that the bees can be removed, covered or otherwise protected prior to spraying
- The application is made due to an imminent threat of significant crop loss, and a documented determination consistent with an IPM plan or predetermined economic threshold is met. Every effort should be made to notify beekeepers no less than 48-hours prior to the time of the planned application so that the bees can be removed, covered or otherwise protected prior to spraying.



#### 2. Non-Agricultural Uses:

Do not apply while bees are foraging. Do not apply this product to plants that are flowering. Only apply after all flower petals have fallen off.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

## AGRICULTURAL USE REQUIREMENTS

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

**Do not** enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours. **Exception:** If the product is applied by drenching, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls
- Chemical resistant gloves made of any waterproof material such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinyl chloride (PVC) or Viton
- · Shoes plus socks

## NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Keep children and pets off treated area until dry.

OBSERVE THE FOLLOWING PRECAUTIONS WHEN MIXING AND APPLYING IN THE VICINITY OF AQUATIC AREAS SUCH AS LAKES, RESERVOIRS, RIVERS, PERMANENT STREAMS, MARSHES OR NATURAL PONDS, ESTUARIES, AND COMMERCIAL FISH PONDS.

#### **RUNOFF MANAGEMENT**

DO NOT cultivate within 10 feet of the aquatic areas to allow growth of vegetative filter strip. When used on erodible soils, use best management practices for minimizing runoff. Consult your local Natural Resources Conservation Service for recommendations in your use area.

#### ENDANGERED SPECIES NOTICE

Under the Endangered Species Act, it is a Federal Offense to use any pesticide in a manner that results in the death of a member of an endangered species. Consult your local county bulletin, County Extension Agent, or Pesticide State Lead Agency for information concerning endangered species in your area.

#### RESISTANCE MANAGEMENT

Certain insects may develop resistance to insecticides after repeated use. Use different resistance management practices such as rotating classes of insecticides to help delay or minimize insect resistance.

This product contains the active ingredient imidacloprid, which is a Group 4A insecticide. Repeated use of Group 4A insecticides may lead to insect pests that become resistant to imidacloprid or other neonicotinoids (Group 4A) insecticides.

To reduce the chances of development of resistance to Group 4A insecticides, do not make more than three (3) consecutive foliar applications of this product and/or other Group 4A insecticides with similar modes of action. In addition, Rotam strongly recommends the use of other insecticides with a different mode of action prior to or after application of this product. This strategy of insecticide rotation in concert with other IPM practices is considered an effective way to delay or minimize an insect's ability to develop resistance to this class of chemistry.

Some Group 4A neonicotinoid products used as foliar treatments include the active ingredients thiamethoxam (found in Actara® and Centric®), acetamiprid (found in Assail® and Intruder<sup>TM</sup>), thiacloprid (found in Calypso®), and imidacloprid (found in Leverage®, Provado®, and Trimax<sup>TM</sup>). Some 4A Group neonicotinoid products used as soil treatment include thiamethoxam (found in Platinum®) and imidacloprid (found in Admire®).

Additional information on insect resistance management may be obtained from your local extension specialist, certified crop advisor and/or product manufacturer, or from the Insecticide Resistance Action Committee (IRAC) on the web at <a href="http://irac-online.org/">http://irac-online.org/</a>.

#### SPRAY DRIFT MANAGEMENT

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

## **Mixing and Loading Requirements**

To avoid potential contamination of groundwater, use a properly designed and maintained containment pad for mixing and loading of any pesticide into application equipment. If containment pad is not used, maintain a minimum distance of 25 feet between mixing and loading areas and potential surface to groundwater conduits such as field sumps, uncased well heads, sinkholes, or field drains.

#### **Importance of Droplet Size**

An important factor influencing drift is droplet size. Small droplets (<150-200 microns) drift to a greater extent than large

droplets. Within typical equipment specifications, make applications to deliver the largest droplet spectrum that provides sufficient control and coverage. Formation of very small droplets may be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible and by avoiding excessive spray boom pressure. Release the spray at the lowest possible height consistent with good pest control and flight safety. DO NOT make applications more than 10 feet above the crop canopy.

## **Wind Speed Restrictions**

Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size, canopy and equipment specifications determine drift potential at any given wind speed. DO NOT apply when winds are greater than 15 mph and avoid gusty and windless conditions. Risk of exposure to sensitive aquatic areas can be reduced by avoiding applications when wind direction is toward the aquatic area.

## **Restrictions During Temperature Inversions**

Because the potential for spray drift is high during temperature inversions, DO NOT make ground applications during temperature inversions. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however if fog is not present, inversions can also be identified by the movement of smoke from a ground source. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical mixing.

#### Airblast (Air Assist)

Airblast sprayers carry droplets into the canopy of trees/vines via a radially, or laterally directed air stream. Follow the specified drift management practices:

- Adjust deflectors and aiming devices so that spray is only directed into the canopy;
- Block off upward pointed nozzles when there is no overhanging canopy;
- Use only enough air volume to penetrate the canopy and provide good coverage;
- DO NOT allow the spray to go beyond the edge of the cultivated area (i.e., turn off sprayer when turning at end rows);
- Only spray inward, toward the orchard or vineyard, for applications to the outside rows.

## **No-Spray Zone Requirements for Foliar Applications**

DO NOT apply by ground within 25 feet lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries and commercial fish farm ponds.

#### **USE INFORMATION**

Thorough uniform coverage is necessary to achieve optimal control. A spray adjuvant may be used to improve coverage. This product may not knockdown established and heavy insect populations. Two applications may be required to achieve control; retreat if needed and as directed on this label. Tank mix this product with other insecticides as recommended for knockdown of pests or for improved control of other pests.

## **USE RESTRICTIONS (All Uses)**

- DO NOT apply this product, by any application method, to linden, basswood or other *Tilia* species in the state of Oregon.
- DO NOT allow this product to contact plants in bloom if bees are foraging the treatment area.
- DO NOT make a foliar application of any chloronicotinyl insecticide for resistance management purposes following a soil application of this product on the same crop.
- DO NOT use product packets in a tank mix with products that contain boron or release free chlorine; the PVA packet reacts with boron or free chlorine to produce a plastic that is not soluble in water. NOTE: Normal chlorinated water is acceptable for mixing.
- DO NOT use this product on commercial sod farms.
- DO NOT allow livestock to graze in treated areas or use clippings from treated areas for feed or forage unless specified otherwise on this label.
- DO NOT apply this product to soils that are waterlogged or saturated.
- DO NOT allow runoff or puddling of irrigation water following application.
- DO NOT allow leachate to run off for the first 10 days after application or reduced efficacy may result.

• DO NOT exceed the total 5.375 packets (8.6 oz.) of this product (0.4 lb. of active ingredient)/Acre per year specified for the uses indicated on this label.

# ROTATION CROPS RESTRICTIONS

Crops which are listed on imidacloprid labels or crops that have existing tolerances for imidacloprid may be planted in treated areas as soon as practical after the last imidacloprid application. Crops that are not found on an imidacloprid label, or crops that do not have existing tolerances for imidacloprid, may not be planted in treated areas for 12-months after the last application.

Refer to the table below for plantback intervals for different crops. Note that if cover crops are planted any time after an application of this product, those crops may not be grazed or harvested for food or feed.

Crops	Plantback Interval
All crops on this label, plus the following crops not on this label: barley, canola, corn (field,	No restrictions
sweet and pop), rapeseed, sorghum, sugar beet, and wheat	
Cereals (including buckwheat, millet, oats, rice, rye, and triticale), soybeans and safflower	30 days
Onion and bulb vegetables	10 months
All other crops	12 months

#### PREPARATION OF TANK MIXES

**Handling PVA pouches:** The enclosed packets containing this product are water-soluble and will completely dissolve in water. To prevent the packets from dissolving before they are added to the spray tank, do not get the packets wet from handling with wet hands or wet gloves. The packets can break open if handled roughly. Remove the packets from the outer bag but do not open the packets. Keep unused packets sealed in the outer bag. To prepare a tank mix of this product, follow the steps below. If tank mixing this product with other components, read the section on Compatibility, below.

- 1. Fill the spray tank with 1/4 to 1/2 of the required amount of water and begin agitation.
- 2. Add the specified amount of this product in PVA packets and allow packets to fully dissolve.
- 3. Fill the tank with the remaining water needed. Maintain sufficient agitation during mixing and application.

If this product is to be tank mixed with other pesticides and/or fertilizer solutions, check the compatibility (refer to the Compatibility section below) before preparing tank mixes.

To prepare tank mixes of this product with other pesticides, use the following order of mixing:

- 1. ROTAM 75 WSP INSECTICIDE PVA packets;
- 2. Other wettable powders or wettable granules;
- 3. Flowables or suspension concentrates;
- 4. Emulsifiable concentrates.

Agitate the solution as each component is added. Add the next component only after the previous one is thoroughly mixed. If needed, add a compatibility agent when adding a fertilizer solution to the mix. Add the remaining quantity of water as the final step. To ensure a uniform spray mixture, maintain constant agitation during both mixing and application.

**Compatibility:** PVA packets that are tank mixed with products that contain boron or that release free chlorine will react to form a plastic that is insoluble in water or solvents such as alcohol, kerosene, diesel oils or gasoline. Further information is available from your local Rotam representative. Conduct the following test for compatibility of the intended tank mix partner product(s) before adding this product to the spray or mix tank:

- 1. In a pint or quart jar, add proportionate amounts of each tank mix component in the order provided in the directions above.
- 2. Replace the cap, shake for 5 minutes, and allow the mixture to settle for 5 minutes.
- 3. Observe the jar for signs indicating an incompatible mixture. If the contents can be re-mixed by shaking and readily re-suspends, it is considered compatible. If the mixture separates out, foams, or forms a gel or lumps, then the mixture is not compatible.

# APPLICATION THROUGH IRRIGATION SYSTEMS (CHEMIGATION)

Apply this product at rates specified on this label either alone or in tank mixture with other pesticides and chemicals registered for application through irrigation systems. The normal dilution ratio is 1:10 to 1:200, depending on the system. Always meter the product into the irrigation water during the first part of the irrigation cycle. Mix the product separately

prior to injection. Agitate as necessary if the mixture is allowed to stand more than 24 hours.

- 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.
- Apply this product only through micro-irrigation (individual spaghetti tube), drip irrigation, overhead irrigation, and
  ebb and flood or hand-held or motorized calibrated irrigation equipment. DO NOT apply this product through any
  other type of irrigation system. Crop injury or lack of effectiveness can result from non-uniform distribution of treated
  water.
- Be sure to remove scale, pesticide residue and other foreign matter from the tank and entire irrigation system prior to application.
- A person knowledgeable of the chemigation system and responsible for its operation, or a person who is under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.
- If you have any questions about calibration, contact State Extension Service specialists, equipment manufacturers or other experts.

# SAFETY DEVICES FOR IRRIGATION SYSTEMS CONNECTED TO PUBLIC WATER SUPPLIES:

If the source of water for your irrigation system is a public water supply, follow the instructions below.

- 1. 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.
- 2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- 3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 4. The pesticide injection pipeline must 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.
- 5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6. 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.
- 7. DO NOT apply when wind speed favors drift beyond the area intended for treatment.

# SAFETY DEVICES FOR IRRIGATION SYSTEMS NOT CONNECTED TO A PUBLIC WATER SUPPLY:

- 1. 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.
- 2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 3. 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.
- 4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where the pesticide distribution is adversely affected.
- 6. 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.
- 7. DO NOT apply when wind speed favors drift beyond the area intended for treatment.

# TURFGRASS APPLICATIONS

ROTAM IMIDACLOPRID 75 WP INSECTICIDE can be used for the control of listed soil inhabiting pests as directed on turfgrass.

The active ingredient in ROTAM IMIDACLOPRID 75 WP INSECTICIDE has sufficient residual activity so that applications can be made preceding the egg laying activity of the target pests. The need for an application can be based on historical monitoring of the site, previous records or experiences, current season adult trapping or other methods.

TURFGRASS APPLICATIONS: around airports, athletic fields, cemeteries, golf courses, homes and multi-family	
residential buildings, office buildings and office parks, public parks and playground areas, and shopping co	
PEST	RATE: Rotam Imidacloprid 75WP Insecticide
Annual bluegrass weevil	1 packet (1.6 oz.) / 8,250 - 11,000 ft. <sup>2</sup>
Asiatic garden beetle	or
Billbug	4 - 5.375 packets (6.4 - 8.6 oz. /Acre
Black turfgrass ataenius	
European chafer	
European Crane Fly	
Green June beetle	
Japanese beetle	
May or June Beetles	
Northern masked chafer	
Oriental beetle	
Phyllophaga spp.	
Southern masked chafer	
For Suppression of:	1 packet (1.6 oz.) / 8,250 ft. <sup>2</sup>
Chinchbug <sup>2</sup>	or
Cutworms	5.375 packets (8.6 oz.)/Acre
For Control of:	

#### APPLICATION INSTRUCTIONS:

The use of accurately calibrated equipment normally used for the application of turfgrass insecticides is required. Use equipment which will produce a uniform, coarse droplet spray, using a low pressure setting to eliminate off target drift. Check calibration periodically to ensure that equipment is working properly.

Make applications prior to egg hatch of the target pests, followed by sufficient irrigation or rainfall to move the active ingredient through the thatch. Apply this product in sufficient water to provide adequate distribution in the treated area. Rainfall or irrigation must occur within 24 hours of application to move this product vertically through the thatch and into the soil.

Wait until after sufficient rainfall or irrigation has occurred to mow the grass.

#### Remarks:

Mole Crickets1

Annual Bluegrass weevil, Billbugs, European Crane Fly, and Grubs: For best results, make applications before egg hatch.

<sup>1</sup>**Mole Crickets:** Make applications before or during the peak egg hatching period, this product may be applied with a curative insecticide when adults or large nymphs are present and actively tunneling,

<sup>2</sup>Chinchbugs: Make applications before hatching of first instar nymphs.

# **RESTRICTIONS:**

- Do not apply more than 5.375 packets (8.6 oz.) (0.4 lb. of active ingredient) per acre per year.
- DO NOT make applications when turfgrass areas are waterlogged or the soil is saturated with water. Adequate distribution of the active ingredient cannot be achieved when these conditions exist. The treated turf area must be in such a condition that the rainfall or irrigation will penetrate vertically in the soil profile.
- Do not mow turf or lawn area until after sufficient irrigation or rainfall has occurred so that uniformity of application will not be affected.
- Keep children and pets off treated area until dry.
- Do not allow product to contact plants in bloom if bees are foraging the treatment area.

- DO NOT graze treated areas or use clippings from treated areas for feed or forage.
- Do not allow runoff or puddling of irrigation water following application.
- DO NOT use for seed production.

# APPLICATION TO LANDSCAPE ORNAMENTALS

Use this product as directed below on ornamentals in and around commercial and residential landscapes and interior plantscapes to control or suppress listed insects.

This is a systemic product and will be translocated upward into the plant system from roof uptake. Plants absorb this product from either foliar or soil applications. Apply this product to areas where the growing portion of the target plant can absorb the active ingredient. The addition of a nitrogen containing fertilizer, where applicable, into the solution has been shown to enhance the uptake of the active ingredient. Application can be made by foliar application or soil applications; including soil injection, drenches, and broadcast sprays. Foliar applications offer locally systemic activity against insect pests.

**Woody Perennials:** When making soil applications to plants with woody stems, systemic activity will be delayed until the active ingredient is translocated throughout the plant. In some cases, this translocation delay could take 60 days or longer. For this reason, applications must be made prior to anticipated pest infestation to achieve control.

**Bark Media:** Treatments of this product to media with 30 - 50% or more bark content may confer a shorter period of protection.

**Ant Management Programs:** Use this product to control aphids, scale insects, mealybugs and other sucking pests on ornamentals to limit the honeydew available as a food source for ant populations. Applications can then be supplemented with residual sprays, bait placements or other ant control tactics to further reduce the pest population.

ORNAMENTAL TREES, SHRUBS, EVERGREENS, FLOWERS, FOLIAGE PLANTS, GROUNDCOVERS, INTERIOR PLANTSCAPES, NON-BEARING FRUIT & NUT TREES, VEGETABLE PLANTS (intended for Resale only) (in and around the perimeter of industrial and commercial buildings and residential areas, and state, national, and private wooded and forested areas for the insect pests listed below)

FOLIAR APPLICATIONS	
PEST	RATE: Rotam Imidacloprid 75WP Insecticide
Adelgids	1 packet (1.6 oz.) in 300 gals. of water
Aphids	
Japanese beetles (adult)	
Lace bugs	
Leaf beetles (including elm and viburnum leaf beetles)	
Leafhoppers (including glassywinged sharpshooter)	
Leafminers	
Mealybugs	
Sawfly larvae	
Thrips (suppression)	
Whiteflies	

# **Foliar Application Instructions:**

Apply this product in a sufficient volume of water to uniformly cover the treatment area. Foliar applications will provide systemic activity against target pests.

If plants (such as holly, pine or ivy) have foliage that is difficult to wet, Rotam recommends this product be applied with a spreader/sticker.

Time applications to occur before heavy pest populations arise; make repeat applications as necessary.

# **RESTRICTION:**

• DO NOT apply this product, by any application method, to linden, basswood or other *Tilia* species in the state of Oregon.

SOIL (BROADCAST) APPLICATIONS	
TARGET PESTS	RATE
White grub larvae (including Asiatic garden beetle, chafers,	1 packet (1.6 oz.) / 8,250 - 11,000 ft. <sup>2</sup>
Phyllophaga spp., Japanese beetle larvae, and Oriental beetle)	or
	4 - 5.375 packets (6.4 - 8.6 oz.)/Acre

# **Soil Application Instructions:**

Mix the specified amount of this product in a sufficient volume of water to uniformly cover the treatment area. Apply in a minimum of 2 gallons of water per 1,000 sq. ft. After application, irrigate the treated areas to incorporate this product into the soil.

#### **RESTRICTIONS:**

- DO NOT apply more than 5.375 packets (8.6 oz.) (0.4 lb. of active ingredient) per acre per year by broadcast application.
- DO NOT apply this product, by any application method, to linden, basswood or other *Tilia* species in the state of Oregon.

# ORNAMENTAL TREES, SHRUBS, FLOWERS AND GROUNDCOVERS (in and around the perimeter of industrial and commercial buildings and residential areas, and state, national, and private wooded and forested areas for the insect pests listed below)

For Control of: Adelgids, Alder borer, Aphids, Asian longhorned beetle, Black vine weevil larvae, Bronze birch borer, Emerald ash borer, Eucalyptus longhorned borer, Flatheaded borers (including Bronze birch and Alder), Japanese beetles, Lace bugs, Leaf beetles (including elm and viburnum leaf beetles), Leafhoppers (including glassy-winged sharpshooter), Leafminers, Mealybugs, Pine tip moth larvae, Psyllids, Royal palm bugs, Sawfly larvae\*, Soft scales, White grub larvae, Whiteflies

For Suppression of: Armored scales, Thrips		
USE RATE	APPLICATION SITE	
	EES	
Diameter at Breast Height (DBH) is measured at 4.5 feet	Soil Injection:	
from the ground.	Grid System: Holes must be spaced on 2.5 foot centers, in	
	a grid pattern, extending to the drip line of the tree.	
Use the following rates as a function of tree diameter at	<u>Circle System:</u> Apply in holes evenly spaced in circles,	
breast height (DBH):	(use more than one circle dependent upon the size of the	
Apply 1 packet (1.6 oz.) per 12 - 48 inches of trunk	tree) beneath the drip line of the tree extending in from that	
diameter (DBH).	line.	
37 1 4 11 1 4 16 1	Basal System: Space injection holes evenly around the	
You may only use the higher rate on trees >15 inches	base of the tree trunk no more than 6 to 12 inches out from	
(DBH) to control: Asian longhorned beetle, Emerald ash borer, Eucalyptus longhorned borer, Bronze birch borer,	the base. Mix required dosage in sufficient water to inject an equal amount of solution in each hole. Maintain a low	
and Alder borer.	pressure and use sufficient solution for distribution of the	
and Aider borer.	liquid into the treatment zone.	
To calculate the higher rates, divide trunk diameter by 12 -	inquia into the treatment zone.	
23 inches. Refer to example calculations below.	Keep the treated area moist for 7 to 10 days.	
T	DO NOT 1 1 11 11	
RESTRICTIONS:	DO NOT use less than 4 holes per tree.	
• DO NOT apply more than 5.375 packets (8.6 oz.)	NEW YORK SPECIFIC RESTRICTION: No Soil	
(0.4 lb. of active ingredient) per acre per year.	Injection Applications Allowed in Nassau or Suffolk	
<ul> <li>DO NOT apply this product, by any application</li> </ul>	Counties of New York.	
method, to linden, basswood or other Tilia species		
in the state of Oregon.	<b>Soil Drench:</b> Uniformly apply the dosage in no less than 10	
	gallons of water per 1,000 square feet as a drench around	
	the base of the tree, directed to the root zone. Remove	
	plastic or any other barrier that will stop solution from	
	reaching the root zone.	
	For Control of Specified Borers:	
	Application to trees already heavily infested may not	

prevent the eventual loss of the trees due to existing pest
damage and tree stress.

# **EXAMPLE CALCULATIONS:**

Example 1 (to calculate the standard rate): If you have three trees having DBH of 8, 10 & 16 inches, the total cumulative inches of trunk diameter is 34 inches (8 + 10 + 16 = 34)

 $34/48 = .708 \times 1.6 \text{ fl. oz.}$  (1 packet) = 1.13 oz. -OR-  $34/24 = 1.417 \times 1.6 \text{ fl. oz.}$  (1 packet) = 2.27 oz.

If you have a single tree with a DBH of 12 inches, the lower rate range will be:

 $12/48 = 0.25 \times 1.6 \text{ oz.}$  (1 packet) = 0.4 oz. -OR-  $12/24 = 0.5 \times 1.6 \text{ oz.}$  (1 packet) = 0.8 oz.

**Example 2 (To calculate the higher rate):** If you have three trees having DBH of 15, 20 & 25 inches, the total cumulative inches of trunk diameter is 60 inches (15 + 20 + 25 = 60)

 $60/23 = 2.6 \times 1.6 \text{ fl. oz.}$  (1 packet) = 4.17 oz. -OR-  $60/12 = 5 \times 1.6 \text{ fl. oz.}$  (1 packet) = 8 oz.

If you have a single tree with a DBH of 30 inches, the higher rate range will be:

 $30/23 = 1.3 \times 1.6 \text{ oz.}$  (1 packet) = 2.08 oz. -OR-  $30/12 = 2.5 \times 1.6 \text{ oz.}$  (1 packet) = 4.0 oz.

<b>SHRUBS</b>
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1 packet (1.6 oz.) per 24 - 48 feet cumulative shrub height	<b>Soil Injection:</b> Apply to individual plants using dosage indicated. Mix required dosage in sufficient water to inject an equal amount of solution in each hole. Maintain a low pressure and use sufficient solution for distribution of the liquid into the treatment zone.
	Keep the treated area moist for 7 to 10 days.
	DO NOT use less than 4 holes per shrub.
	NEW YORK SPECIFIC RESTRICTION: No Soil Injection Applications Allowed in Nassau or Suffolk Counties of New York.
	<b>Soil Drench:</b> Uniformly apply the dosage in no less than 10 gallons of water per 1,000 square feet as a drench around
	the base of the tree, directed to the root zone. Remove
	plastic or any other barrier that will stop solution from reaching the root zone.
	TROUND COVERS

#### FLOWERS AND GROUNDCOVERS

TEO WEND IN ID	SKOCI DEG VERD
1 packet (1.6 oz.) / 8,250 - 11,000 ft. <sup>2</sup>	Apply as a broadcast soil treatment and incorporate into the
or	soil before planting or apply after plants are established
4 - 5.375 packets (6.4 - 8.6 oz.)/Acre	prior to bloom or after all petals have fallen off. Irrigate
	immediately following application to established plants.

#### **Remarks:**

\*Pine sawfly larvae feed on mature foliage beginning in early spring. Make treatments in the fall before pine sawfly emergence in spring to allow adequate time for imidacloprid translocation into mature foliage.

# **RESTRICTIONS:**

- DO NOT apply more than 5.375 packets (8.6 ounces) (0.4 lb. of active ingredient) per acre per year.
- DO NOT harvest or consume fruits or nuts from trees that have been treated within 1 year of application.

POME FRUITS: Apple, Crabapple, Loquat, Mayhaw, Pear, Pear (oriental), Quince (around perimeter of		
industrial and commercial buildings and on residential areas)		
PEST	USE RATE	
Aphids (except Wooly apple aphid)	1 packet (1.6 oz.) in 300 Gallons of Water	
Leafhoppers (including glassy-winged sharpshooter)	or	

Leafminer Mealybugs\*

San Jose scale\*

1.3125 packets (2.1 oz.)/Acre<sup>1</sup>

<sup>\*\*</sup>Diameter at Breast Height (D.B.H.) is measured at 4.5 feet from the ground.

#### **Remarks:**

Apply specified dosage as foliar spray as needed after petal-fall is complete.

For control of Rosy apple aphid, apply prior to leafrolling caused by the pest.

For first generation leafminer control, make first application as soon as petal-fall is complete. Greatest leafminer control will result from the earliest possible application. For second and succeeding generations of leafminer, optimal control is obtained from applications made early in the adult flight against egg and early instar larvae. A second application may be required 10 days later if severe pressure continues or if generations are overlapping. A single application may result in suppression only. This product will not control late stage larvae.

For San Jose Scale, time applications to the crawler stage. Treat each generation.

For late season (preharvest) control of leafhopper species, apply this product while most leafhoppers are in the nymphal stage.

For control of mealybugs, ensure good spray coverage of the trunk and scaffolding limbs or other resting sites of the mealybugs.

<sup>1</sup>The amount of this product required per acre will depend on tree size and volume of foliage present. The rate per acre is based on a standard of 400 gallons of dilute spray solution per acre for large trees.

# **RESTRICTIONS:**

- DO NOT apply more than 1.3125 packets (2.1 oz.) per acre in a single application.
- DO NOT make more than 4 applications per year.
- · Allow 10 or more days between applications. Allow at least 7 days between last application and harvest.

\*Not for use in California for control on pears.

PECANS* (around perimeter of industrial and commercial buildings and on residential areas)	
PEST	USE RATE
Yellow pecan aphid	1 packet (1.6 oz.) in 300 gallons of water
Black margined aphid	or
Pecan leaf phylloxera	1.3125 packets (2.1 oz.)/Acre <sup>1</sup>
Pecan spittlebug	
Pecan stem phylloxera	

#### **Remarks:**

Make foliar applications as pests begin to build before populations become extreme. Two applications at a 10- to 14-day interval may be required to achieve control. Scout and retreat if needed. Thorough uniform coverage of foliage is necessary for control. Addition of an organosilicone-based spray adjuvant at a rate not to exceed the adjuvant manufacturer's specified use rate may improve coverage

<sup>1</sup>The amount of this product required per acre will depend on tree size and volume of foliage present. The rate per acre is based on a standard of 400 gallons of dilute spray solution per acre for large trees.

# **RESTRICTIONS:**

- DO NOT apply more than a total of 3.9375 packets (6.3 oz.) of this product per acre per year.
- . DO NOT make more than 3 applications per year.
- . Allow 10 or more days between applications.

\*Use on pecans not permitted in California unless otherwise directed by state-specific 24(c) labeling.

GRAPES (around perimeter of industrial and commercial buildings and on residential areas)	
PEST USE RATE	
Leafhoppers (including glassy-winged sharpshooter)	1 packet (1.6 oz.) in 300 gallons of water
Mealybugs*	or
	1.0 oz. /Acre <sup>1</sup>

#### Remarks:

<sup>1</sup>Apply specified dosage as a foliar spray using 200 gallons of water per acre.

#### **RESTRICTIONS:**

- DO NOT apply more than a total of 1.25 packets (2.0 oz.) of this product per acre per year.
- . Allow at least 14 days between applications.
- Applications may be applied up to and including day of harvest.

AVOCADO (around perimeter of industrial and commercial buildings and on residential areas)			
PEST	USE RATE		
Aphids	1 packet (1.6 oz.) in 300 gallons of water		
Avacado lacebug	or		
Leafhoppers	1.3125 packets (2.1 oz.)/Acre <sup>1</sup>		
Whiteflies			

#### **Remarks:**

<sup>1</sup>The amount of this product required per acre will depend on tree size and volume of foliage present. The rate per acre is based on a standard of 400 gallons of dilute spray solution per acre for large trees.

#### **RESTRICTIONS:**

- DO NOT apply more than a total of 1.3125 packets (2.1 oz.) of this product per acre per year.
- . Allow at least 7 days between application and harvest.

# APPLICATION TO GRASSY AREAS IN NURSERIES, NURSERY, AND GREENHOUSE GROWN ORNAMENTALS

Use this product on grassy areas in nurseries, around and on nursery grown ornamentals, and in planting rows in nurseries to control listed pests. Make application prior to anticipated pest infestation to maximize control. Rainfall, irrigation and mechanical incorporation after application will aid in maximizing control.

The active ingredient in this product has sufficient residual activity so that applications can be made preceding the egg laying activity of the target pests. High levels of control can be achieved when applications are made preceding or during the egg laying period. The need for an application can be based on historical monitoring of the site, previous records or experiences, current season adult trapping or other methods.

GRASSY AREAS (in Field & Forest Nurseries)				
PEST	DOSAGE			
For Control of:	1 packet (1.6 oz.) / 8,250 - 11,000 ft. <sup>2</sup>			
Annual bluegrass weevil	or			
Asiatic garden beetles (Maladera spp.)	4 - 5.375 packets (6.4 - 8.6 oz.)/Acre			
Billbugs				
Black turfgrass ataenius				
European chafer				
European Crane Fly				
Green June beetle				
Japanese beetle				
May or June beetles				
Northern masked chafer				
Oriental beetle ( <i>Phyllophaga</i> spp.)				
Southern masked chafer				
For Control of:	1 packet (1.6 oz.) / 8,250 ft. <sup>2</sup>			
Mole crickets	or			
For Suppression of:	5.375 packets (8.6 oz.)/Acre			
Chinchbugs				
Cutworms				

# **APPLICATION INSTRUCTIONS:**

Apply this product in sufficient water to provide adequate distribution in the treated area. The use of accurately calibrated equipment normally used for soil application of insecticides is required. Use equipment that will produce a uniform, coarse droplet spray, using a low pressure setting to eliminate off-target drift. Check calibration periodically to ensure that equipment is working properly.

#### **Remarks:**

For control of grubs, billbugs, European crane fly and annual bluegrass weevil, make application prior to egg hatch of the target pest.

For control of mole crickets make application prior to or during the peak egg hatch period. When adults or large nymphs are present and actively tunneling, this product should be accompanied by a curative insecticide.

For suppression of chinchbugs, make application prior to the hatching of the first instar nymphs.

Consult your local State Agricultural Experiment Station, or State Extension Turf Specialists for more specific information regarding timing of application.

Mowing of the vegetation in the area to be treated to a height of 3 inches or less prior to application will improve the consistency of control.

**NOTE:** Irrigation or rainfall is needed within 24 hours after application to move the active ingredient through the thatch.

#### **RESTRICTIONS:**

- DO NOT apply more than 5.375 packets (8.6 oz.) (0.4 lb. of active ingredient) per acre per year.
- DO NOT mow grassy area until after irrigation or rainfall has occurred so that uniformity of application will not be affected.
- DO NOT allow runoff or puddling of irrigation water following application.
- DO NOT apply this product to water-logged or saturated areas. Application of this product to water-logged or saturated areas will not allow penetration into the root zone of the plant.
- DO NOT graze treated areas or use clippings from treated areas for feed or forage.

# **Soil Application/CITRUS (Field):**

Calamondin, Citrus citron, Citrus hybrids (includes chironja, tangelo, and tangor), Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Pummelo, Orange (sweet and sour), Satsuma mandarin, and other cultivars and/or hybrids of these.

PESTS CONTROLLED	RATE (fluid ounces/Acre)	
Aphids, Asian citrus psyllid, Black fly,	2.1 oz./Acre (1.3125 WSP packets)	
Citrus leafminer, eafhoppers/Sharpshooters,		
Mealybugs, Scales, Termites (FL only),		
Whiteflies		
PESTS / DISEASES SUPPRESSED		
Citrus nematode	2.1 oz./Acre (1.3125 WSP packets)	
Symptoms of:		
Citrus tristeza virus (CTV) through vector		
control,		
Citrus yellows		
Thrips (foliage feeding thrips only)		

# **RESTRICTIONS:**

- Pre-Harvest Interval (PHI): 0 days
- DO NOT apply more than 2.1 oz. per acre in a single application (1.3125 WSP packets).
- DO NOT make more than 4 applications per year.

# **APPLICATIONS:**

Apply specified dosage of ROTAM IMIDACLOPRID 75 WP INSECTICIDE in one of the following methods:

- Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment. For optimum results, apply to newly planted trees or those previously trained to drip, trickle or micro-sprinkler irrigation. Soil should be lightly pre wetted to break soil surface tension prior to applications of ROTAM IMIDACLOPRID 75 WP INSECTICIDE. Chemigation application can be made separate to normal irrigation but followed by 10 to 20 minutes of additional watering to move ROTAM IMIDACLOPRID 75 WP INSECTICIDE into root-zone. Allow 24 hours before initiating subsequent irrigations.
- 2. Soil surface band spray on both sides of the tree. Bands should overlap at the tree base to create a continuous band within the drip-line area of the tree, to be followed immediately with light sprinkler irrigation sufficient to move the product into the upper portion of the root-zone. This method is suitable for very coarse soils with 0.75% organic matter or less.
- 3. Drench to base of tree not exceeding one-quart total solution per tree immediately around trunk of tree and extending outward covering the entire fibrous root system of the tree. Only recommended for trees up to 8 feet tall.

ORNAMENTAL TREES (including non-bearing fruit & nut trees), SHRUBS, EVERGREENS, FLOWERS, FOLIAGE PLANTS, GROUNDCOVERS, INTERIOR PLANTSCAPES, VEGETABLE PLANTS (on and around field-grown nursery and container stock, indoor and outdoor ornamentals (including both greenhouse and interior plantscapes) and on ornamentals grown in flats, benches or beds)

FOLIAR APPLICATIONS				
PEST	DOSAGE			
For Control of:	1 packet (1.6 oz.) in 300 gals. of water			
Adelgids				
Aphids				
Japanese beetle (adult)				
Lacebugs				
Leaf beetles (including elm and viburnum leaf beetles)				
Leafhoppers (including glassy-winged sharpshooter)				
Leafminers				
Mealybugs				
Sawfly larvae				
Whiteflies				
For Suppression of:				
Thrips				

# **Foliar Application Instructions:**

Apply this product in a sufficient volume of water to uniformly cover the treatment area. Foliar applications will provide systemic activity against target pests.

If plants (such as holly, pine or ivy) have foliage that is difficult to wet, Rotam recommends this product be applied with a spreader/sticker.

Time applications to occur before heavy pest populations arise; make repeat applications as necessary.

# **RESTRICTION:**

• DO NOT apply this product, by any application method, to linden, basswood or other *Tilia* species in the state of Oregon.

SOIL (BROADCAST) APPLICATIONS			
PEST	DOSAGE		
For Control of: White grub larvae (including Japanese	1 packet (1.6 oz.) / 8,250 - 11,000 ft. <sup>2</sup>		
beetle, Masked Chafers, European Chafer, Oriental beetle,	or		
Asiatic Garden beetle)	4 - 5.375 packets (6.4 - 8.6 oz.)/Acre		

# **Soil (Broadcast) Application Methods:**

Mix the required amount of this product in sufficient water to uniformly and accurately cover the area being treated.

DO NOT use less than 2 gallons of water per 1,000 sq. ft. of treatment area.

Irrigate thoroughly to incorporate the product into the upper soil profile. Incorporate application into the soil before planting or apply after plants are established. For applications made to established plants, irrigate thoroughly after application.

#### Remarks:

Mowing of the vegetation in the area to be treated to a height of 3 inches or less prior to application will improve the consistency of control.

# **RESTRICTIONS:**

- DO NOT apply more than 5.375 packets (8.6 oz.) (0.4 lb. of active ingredient) per acre per year.
- DO NOT allow runoff or puddling of irrigation water following application.
- DO NOT apply this product to water-logged or saturated areas. Application of this product to water-logged or saturated areas will not allow penetration into the root zone of the plant.
- DO NOT exceed an application frequency of more than once each 16 weeks on nursery ornamentals with a production cycle of less than one (1) year.
- DO NOT exceed one (1) application per year on nursery ornamentals with a production cycle of greater than one year.

- Only for use on vegetable plants intended for resale including: Broccoli, Chinese broccoli, Broccoli raab, Brussels sprouts, Cabbage, Chinese Cabbage, Cauliflower, Collards, Eggplant, Ground cherry, Kale, Kohlrabi, Lettuce, Mustard greens, Pepinos, Peppers, Potatoes, Rape greens, Sorghum, Sugarbeets, Tomatillo, and Tomato
- DO NOT make a foliar application of this product following a soil application in the same crop for resistance management purposes.

# **Rotational Crops:**

**Food Crops:** Treated areas may be replanted with any crop specified on an imidacloprid label, or with any crop for which a tolerance exists for the active ingredient.

For crops not listed on any imidacloprid label, or for crops for which no tolerances for the active ingredient have been established, a 12 month plant-back interval must be observed.

# SOIL INJECTION & BASAL DRENCH APPLICATIONS: NURSERY, GREENHOUSE AND INTERIORSCAPE PLANTS

For Control of: Adelgids, Alder borer, Aphids, Asian longhorned beetle, Black vine weevil larvae, Bronze birch borer, Emerald ash borer, Eucalyptus longhorned borer, Flatheaded borers (including Bronze birch and Alder), Japanese beetles, Lace bugs, Leaf beetles (including elm and viburnum leaf beetles), Leafhoppers (including glassy-winged sharpshooter), Leafminers, Mealybugs, Pine tip moth larvae, Psyllids, Royal palm bugs, Sawfly larvae\*, Soft scales, White grub larvae, Whiteflies

**For Suppression of:** Armored scales, Thrips

# USE RATE APPLICATION SITE TREES

Diameter at Breast Height (DBH) is measured at 4.5 feet from the ground.

Use the following rates as a function of tree diameter at breast height (DBH):

Apply 1 packet (1.6 oz.) per 12 - 48 inches of trunk diameter (DBH).

You may only use the higher rate on trees >15 inches (DBH) to control: Asian longhorned beetle, Emerald ash borer, Eucalyptus longhorned borer, Bronze birch borer, and Alder borer.

To calculate the higher rates, divide trunk diameter by 12 - 23 inches. Refer to example calculations below.

#### **RESTRICTIONS:**

- DO NOT apply more than 5.375 packets (8.6 oz.) (0.4 lb. of active ingredient) per acre per year.
- DO NOT apply this product, by any application method, to linden, basswood or other *Tilia* species in the state of Oregon.

Soil Injection:

<u>Grid System</u>: Holes must be spaced on 2.5 foot centers, in a grid pattern, extending to the drip line of the tree.

<u>Circle System</u>: Apply in holes evenly spaced in circles, (use more than one circle dependent upon the size of the tree) beneath the drip line of the tree extending in from that line.

**Basal System:** Space injection holes evenly around the base of the tree trunk no more than 6 to 12 inches out from the base. Mix required dosage in sufficient water to inject an equal amount of solution in each hole. Maintain a low pressure and use sufficient solution for distribution of the liquid into the treatment zone.

Keep the treated area moist for 7 to 10 days.

DO NOT use less than 4 holes per tree.

NEW YORK SPECIFIC RESTRICTION: No Soil Injection Applications Allowed in Nassau or Suffolk Counties of New York.

**Soil Drench:** Uniformly apply the dosage in no less than 10 gallons of water per 1,000 square feet as a drench around the base of the tree, directed to the root zone. Remove plastic or any other barrier that will stop solution from reaching the root zone.

# **For Control of Specified Borers:**

Application to trees already heavily infested may not prevent the eventual loss of the trees due to existing pest damage and tree stress.

# **EXAMPLE CALCULATIONS:**

Example 1 (to calculate the standard rate): If you have three trees having DBH of 8, 10 & 16 inches, the total

cumulative inches of trunk diameter is 34 inches (8 + 10 + 16 = 34)

 $34/48 = 0.708 \times 1.6 \text{ fl. oz.}$  (1 packet) = 1.13 oz. -OR-  $34/24 = 1.417 \times 1.6 \text{ fl. oz.}$  (1 packet) = 2.27 oz.

If you have a single tree with a DBH of 12 inches, the lower rate range will be:

 $12/48 = 0.25 \times 1.6 \text{ oz.}$  (1 packet) = 0.4 oz. -OR-  $12/24 = 0.5 \times 1.6 \text{ oz.}$  (1 packet) = 0.8 oz.

**Example 2 (To calculate the higher rate):** If you have three trees having DBH of 15, 20 & 25 inches, the total cumulative inches of trunk diameter is 60 inches (15 + 20 + 25 = 60)

 $60/23 = 2.6 \times 1.6 \text{ fl. oz.}$  (1 packet) = 4.17 oz. -OR-  $60/12 = 5 \times 1.6 \text{ fl. oz.}$  (1 packet) = 8 oz.

If you have a single tree with a DBH of 30 inches, the higher rate range will be:

 $30/23 = 1.3 \times 1.6 \text{ oz.}$  (1 packet) = 2.08 oz. -OR-  $30/12 = 2.5 \times 1.6 \text{ oz.}$  (1 packet) = 4.0 oz.

#### **SHRUBS**

1 packet (1.6 oz.) per 24 - 48 feet cumulative shrub height

**Soil Injection:** Apply to individual plants using dosage indicated. Mix required dosage in sufficient water to inject an equal amount of solution in each hole. Maintain a low pressure and use sufficient solution for distribution of the liquid into the treatment zone.

Keep the treated area moist for 7 to 10 days.

DO NOT use less than 4 holes per shrub.

NEW YORK SPECIFIC RESTRICTION: No Soil Injection Applications Allowed in Nassau or Suffolk Counties of New York.

**Soil Drench:** Uniformly apply the dosage in no less than 10 gallons of water per 1,000 square feet as a drench around the base of the tree, directed to the root zone. Remove plastic or any other barrier that will stop solution from reaching the root zone.

# FLOWERS AND GROUNDCOVERS

1 packet (1.6 oz.) / 8,250 - 11,000 ft.<sup>2</sup>

4 - 5.375 packets (6.4 - 8.5 oz.)/Acre

Apply as a broadcast soil treatment and incorporate into the soil before planting or apply after plants are established prior to bloom or after all petals have fallen off. Irrigate immediately following application to established plants.

#### Remarks:

\*Pine sawfly larvae feed on mature foliage beginning in early spring. Make treatments in the fall before pine sawfly emergence in spring to allow adequate time for imidacloprid translocation into mature foliage.

# **RESTRICTIONS:**

- DO NOT apply more than 5.375 packets (8.6 oz.) (0.4 lb. of active ingredient) per acre per year.
- DO NOT harvest or consume fruits or nuts from trees that have been treated within 1 year of application.

FIELD AND FOREST NURSERIES					
RATE					
1 packet (1.6 oz.) per	1 packet (1.6 oz.) per				
2,500 ft. of row	7,000 ft. <sup>2</sup>				
	1 packet (1.6 oz.) per				

#### **APPLICATION METHODS:**

Apply May through July. Time the treatment so that rainfall or irrigation occurs within 24 hours following the application. Apply as a uniform band on either side of the row using a band width six (6) inches wider than the actual root ball diameter to be dug. DO NOT allow bands in adjacent rows to overlap.

# **Remarks:**

Mowing of the vegetation in the area to be treated to a height of 3 inches or less prior to application will improve the

<sup>\*\*</sup>Diameter at Breast Height (D.B.H.) is measured at 4.5 feet from the ground.

consistency of control.

#### **RESTRICTIONS:**

- DO NOT use less than 2 gallons of spray volume per 1,000 ft.<sup>2</sup>
- DO NOT apply more than 5.375 packets (8.6 oz.) (0.4 lb. of active ingredient) per acre per year.
- DO NOT apply this product, by any application method, to linden, basswood or other *Tilia* species in the state of Oregon.

#### STORAGE AND DISPOSAL

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

**Pesticide Storage:** Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food and feed. Store in original container and out of the reach of children, preferably in a locked storage area. Exposure to moisture or excessive handling of water-soluble packets may cause breakage.

**Pesticide Disposal:** Pesticide spray mixture or rinsate that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**Container Handling: Nonrefillable container.** DO NOT reuse or refill this container. Outer packaging for this product is secondary packaging to contain Water soluble packaging. Thoroughly rinse any soluble powder residue from container into application equipment. Then offer for recycling if available or dispose of in a sanitary landfill.

FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident, call CHEMTREC AT 1-800-424-9300

# CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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

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

ROTAM AGROCHEMICAL COMPANY LIMITED warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of the product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or ROTAM AGROCHEMICAL COMPANY LIMITED, and to the extent consistent with applicable law, buyer and user assume the risk of any such use. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ROTAM AGROCHEMICAL COMPANY LIMITED MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

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