DISCUS® L

GROUP	3	4A	INSECTICIDE

INSECTICIDE SPECIMEN LABEL

FOR BROAD-SPECTRUM FOLIAR AND SYSTEMIC INSECT CONTROL ON ORNAMENTALS AND NON-BEARING FRUIT AND NUT TREES IN GREENHOUSES AND NURSERIES

ACTIVE INGREDIENT:	% BY WT.
Cyfluthrin	0.70%
Imidacloprid	2.94%
OTHER INGREDIENTS:	96.36%
TOTAL:	100.00%

EPA Est. indicated by third and fourth digits of the batch number on this package.

EPA Reg. No. 59807-18 **(65) = 432-TX-1 (03) = 3125-MO-1**

0.262 Pounds ai imidacloprid/gallon
Imidacloprid CAS # 138267-41-3

0.062 Pounds ai cyfluthrin/gallon
Cyfluthrin CAS # 68359-37-5

STOP-READ THIS ENTIRE LABEL BEFORE USE

KEEP OUT OF REACH OF CHILDREN

CAUTION

PRECAUCION AL CONSUMIDOR: Si usted no lee ingles, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.

(TO THE USER: If you cannot read English, do not use this product until the label has been fully explained to you.)

For TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-434-9300

For MEDICAL (24 hours a day) and PRODUCT USE Information Call 1-800-356-4647

FIRST AID	
IF SWALLOWED:	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
IF IN EYES:	• Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
IF ON SKIN OR CLOTHING:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 - 20 minutes. • Call a poison control center or doctor for treatment advice.

FIRST AID *continued*	
IF INHALED:	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
NOTE TO PHYSICIAN: No specific antidote is available. Treat the patient symptomatically.	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Causes moderate eye irritation. Harmful if swallowed, inhaled, or absorbed through skin. Avoid contact with skin, eyes, or clothing. Avoid breathing vapor or spray mist.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical resistant gloves made out of: barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene ≥ 14 mils, natural rubber ≥ 14 mils, polyethylene, polyvinyl chloride (PVC) ≥ 14 mils, or viton ≥ 14 mils
- Shoes plus socks

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

Net Contents: 1 Gallon (3.78 L)

ohp Partners with solutions

ENGINEERING CONTROLS STATEMENT

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirement 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 if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

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

This pesticide 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. Additional information may be obtained by consulting your Cooperation Extension Service.

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

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.
- 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.
- 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: www.npic.orst.edu or directly to EPA at: beekill@epa.gov

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. For best results read and follow all label directions.

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.

SEE INDIVIDUAL CROPS FOR SPECIFIC POLLINATOR PROTECTION APPLICATION RESTRICTIONS. IF NONE EXIST UNDER THE SPECIFIC CROP, FOR OUTDOOR FOLIAR APPLICATIONS, FOLLOW THESE APPLICATION DIRECTIONS FOR FOOD/FEED CROPS AND COMMERCIALLY GROWN ORNAMENTALS THAT ARE ATTRACTIVE TO POLLINATORS.

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.**

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 entry into treated areas during the restricted entry interval of 12 hours.

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

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

Read and follow these directions, when using: Shake well before use

USE INFORMATION

When used at prescribed rates and as directed under Directions for Use, **DISCUS L** will control designated pests on non-bearing fruit and nut trees (Non-bearing fruit and nut trees are those trees that will not bear fruit or nuts for one year after application.), shrubs, foliage plants and flowers in greenhouses and field and container nurseries. Shake or agitate the concentrate before mixing, and add the appropriate amount of product when filling the spray tank with water.

APPLICATION:

DISCUS L is a systemic product and will be translocated upward into the plant system. To assure optimum effectiveness, 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, chemigation* and broadcast sprays. When making soil applications to plants with woody stems, systemic activity will be delayed until the active ingredient is translocated throughout the plant. For this reason, make applications prior to anticipated pest infestation to achieve optimum levels of control. For outdoor ornamentals, broadcast applications cannot exceed a total of 224 fl. oz. (0.62 lb. of active ingredient) per acre per calendar year. **BARK MEDIA:** Media with 30% or more bark content may confer a shorter period of protection when treated with **DISCUS L**.

* When applied to soil: For use only on nursery ornamentals using soil drenches, micro-irrigation, drip irrigation, overhead irrigation, or hand-held or motorized calibration irrigation equipment.

RESISTANCE MANAGEMENT

Some insects are known to develop resistance to insecticides after repeated use. As with any insecticide, the use of this product should conform to resistance management strategies established for the use area.

DISCUS L contains both Group 3 and Group 4A insecticides. Insect biotypes with acquired or inherent tolerance to these types of products may eventually dominate the insect population if Group 3 and/or Group 4A products are used repeatedly as the predominate method of control for targeted species. This may eventually result in partial or total loss of control of those biotypes by **DISCUS L** and/or other Group 3 and 4A products.

For resistance management purposes, a foliar application of any neonicotinoid insecticide following a **DISCUS L** soil application in the same crop is not recommended.

Application Equipment For Ornamentals

DISCUS L mixes readily with water and may be used in many types of application equipment. Mix product with the required amount of water and apply as directed dependent upon the selected use pattern.

When making foliar applications on hard to wet foliage such as holly, pine, or ivy, the addition of a spreader/ sticker is recommended. If concentrate or mist type spray equipment is used, use an equivalent amount of product on the area sprayed, as would be used in a dilute application.

DISCUS L has been found to be compatible with commonly used fungicides, miticides, liquid fertilizers, and compatibility using the correct proportion of products in a small jar test if local experience is unavailable.

APPLICATION THROUGH IRRIGATION SYSTEMS

DISCUS L is to be applied at rates prescribed on the label either alone or in tank mixtures with other pesticides and chemicals registered for application through irrigation systems. The normal dilution ratio is 1:100 to 1:200, depending on the system. Always meter the product into the irrigation water during the first part of the irrigation cycle. The product may be mixed separately prior to injection. Agitation may be necessary if the mixture is allowed to stand more than 24 hours.

Remove scale, pesticide residue and other foreign matter from the tank and entire irrigation system.

Apply **DISCUS L** only through microirrigation (individual spaghetti tubes), drip irrigation, overhead irrigation, 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.

If you have any questions about calibration, contact your State Extension Service specialist, equipment manufacturers or other experts in this area.

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.

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 when the need arise.

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, discharge water from the public water system 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 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 material that is 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.

COMPATIBILITY: DISCUS L is compatible with all commonly used fungicides, miticides, liquid fertilizers and other insecticides. Check physical compatibility using the correct proportion of products in a small jar if local experience is unavailable.

APPLICATION TO GRASSY AREAS IN NURSERIES

DISCUS L can be used for the control of soil inhabiting pests of grassy areas of nurseries, such as Northern and Southern masked chafers, *Cyclocephala borealis*, C. *immaculata*, and/or C. *lurida*; Asiatic garden beetle, *Maladera castanea*; European chafer, *Rhizotrogus majalis*; Green June beetle, *Cotinis nitida*; May or June beetle, *Phyllophaga* spp.; Japanese beetle, *Popillia japonica*; Oriental beetle, *Anomala orientalis*; Billbugs, *Sphenophorus* spp.; Black turfgrass ataenius, *Ataenius spretulus*; *Aphodius* spp. and mole crickets, *Scapteriscus* spp. **DISCUS L** can be used as directed on nursery grass in sites such as under or around field or container grown plants, on roadways or other grassy areas in or around nurseries. **Discus L** cannot be used on commercial sod farms.

The active ingredient in **DISCUS L** 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. Optimum control will be achieved when applications are made prior to egg hatch of the target pests, followed by sufficient irrigation or rainfall to move the active ingredient through the thatch.

Do not apply **DISCUS L** to soils which are water logged or saturated. Adequate distribution of the active ingredient cannot be achieved when these conditions exist. The treated grassy area must be in such a condition that the rainfall or irrigation will penetrate vertically in the soil profile. Do not apply more than 244 fl. oz. of **DISCUS L** (0.5 lb. of Imidaclopid + 0.12 lb. of Cyfluthrin) per acre per calendar year.

Application Equipment for Use on Grassy Areas in Nurseries: Apply **DISCUS L** 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 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.

DIRECTIONS FOR FOLIAR APPLICATION TO GRASSY AREAS OF NURSERIES

SITE	PEST	DOSAGE	INSTRUCTIONS
Grassy areas of Field & Forest Nurseries	Ants Armyworms Billbugs Crickets Cutworms Earwigs Grasshoppers Hyperodes weevil (adult) Japanese beetle (adult) Mole crickets Sod webworms Ticks (including deer ticks) Weevils	3.4 – 5.6 fl. oz. per 1,000 sq. ft. or 1.14 - 1.91 gallon/ acre or 0.37 - 0.62 lb. AI/A	Use the low rate for light infestation or for insects easier to control, and the higher specified rate within the rate range for heavy infestations or insects more difficult to control. Set spray equipment to dispense a coarse, large droplet. Be sure to use plenty of water to apply product evenly over soil or turf. Do not wet the foliage within one hour after applying. To avoid serious damage to plants, eliminate pests early in the season before they multiply. Mow grass after sufficient irrigation or rainfall has occurred so that uniformity of application will not be affected.

DIRECTIONS FOR FOLIAR APPLICATION TO GRASSY AREAS OF NURSERIES *continued*			
SITE	**PEST**	**DOSAGE**	**INSTRUCTIONS**
Grassy areas of Field & Forest Nurseries	**White Grub larvae** (such as: Japanese Beetle, Masked Chafers, European Chafer, Oriental Beetle, Asiatic Garden Beetle)	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. Use 14 fl. oz. (415 ml) to 17 fl. oz. (502 ml) per 3,000 sq. ft. or For grub control in areas of turf, apply as a broadcast application Use 14 fl. oz. (415 ml) to 17 fl. oz. (502 ml) per 3,000 sq. ft.	Mow vegetation in the area to be treated to a height of 3 inches or less prior to application. Mowing to the lowest possible height will insure greater consistency of control. Apply May through mid-August. For optimum control, treatment must be followed by rainfall or irrigation. Do not use less than 2 gallons of spray volume per 1,000 square feet. Mow grass after sufficient irrigation or rainfall has occurred so that uniformity of application will not be affected.

RESTRICTIONS:

- Do not apply more than 244 fl. oz. of **DISCUS L** (0.5 lb. of Imidaclopid + 0.12 lb. of Cyfluthrin) per acre per calendar year.
- Do not allow this product to contact plants in bloom while bees are foraging the treatment area.
- Do not graze treated areas or use clippings for treated areas for feed or forage.
- Avoid runoff or puddling of irrigation water following application.
- Do not apply **DISCUS L** to soils which are water logged or saturated, which will not allow penetration into the root zone of the plants.

DIRECTIONS FOR FOLIAR APPLICATIONS TO ORNAMENTALS GROWN IN NURSERIES AND GREENHOUSES

For foliar insect control in greenhouses in and around field-grown nurseries and container stocks, and outdoor ornamentals, and ornamentals grown in flats, benches or beds.

CROP	PEST	DOSAGE	INSTRUCTIONS
Shrubs **Evergreens** **Flowers** **Foliage Plants** **Groundcovers** **Trees - Non-bearing Fruit and Nut Trees** (Non-bearing fruit and nut trees are those trees that will not bear fruit or nuts for one year after application.)	Adelgids Aphids Japanese beetles (adult) Lace bugs Leaf-feeding Beetles (including elm and viburnum leaf beetles) Leafhoppers (including Glassy Winged Sharpshooter) Leafminers Mealybugs Pine Tip moths Psyllids Rose Midges Rose Slugs Sawfly larvae Scale insects (crawler stages) Thrips (Suppression) Weevil Complex (including Strawberry Root weevil) Whiteflies	25 fl. oz./100 gallons of water. (1/4 fl. oz. per gallon of water)	**Foliar applications:** Start treatments prior to establishment of high pest population and reapply on an as needed basis. Apply when pests first appear or when damage is first noticed. Spray thoroughly. Reapply at 14-28 days, if needed. The addition of a spreader sticker may enhance effect. Phytotoxicity has not been a problem with **DISCUS L**. If information concerning specific cultivars under local environmental conditions is not available, then it is advised to pre-spray a selection of plants and observe them for phytotoxicity for a minimum of seven days before making widespread applications. Make applications to flowering plants during times when pollinating insects are not present, such as early morning or late evening.

continued next page

DIRECTIONS FOR FOLIAR APPLICATIONS TO ORNAMENTALS GROWN IN NURSERIES AND GREENHOUSES *continued*

For foliar insect control in greenhouses in and around field-grown nurseries and container stocks, and outdoor ornamentals, and ornamentals grown in flats, benches or beds.

CROP	PEST	DOSAGE	INSTRUCTIONS
Shrubs **Evergreens** **Flowers** **Foliage Plants** **Groundcovers** **Trees - Non-bearing Fruit and Nut Trees** (Non-bearing fruit and nut trees are those trees that will not bear fruit or nuts for one year after application.)	Ants Armyworms Azalea caterpillars Bagworms Boxelder bugs California oakworms Cankerworms Cutworms Clover mites Elm leaf beetles Elm spanworms Fungus gnats (adults) Grasshoppers Gypsy moth larvae Leaf-feeding Caterpillars Oleander moth larvae Pillbugs Pine Shoot moths Plant bugs Redhumped caterpillars Spittle bugs Striped oakworms Tent Caterpillars Tussock moth larvae Walnut caterpillars Webworms Yellownecked caterpillars	50 fl. oz./100 gallons of water. (1/2 fl. oz. per gallon of water)	**Foliar applications:** Start treatments prior to establishment of high pest population and reapply on an as needed basis. Apply when pests first appear or when damage is first noticed. Spray thoroughly. Reapply at 14-28 days, if needed. The addition of a spreader sticker may enhance effect. Phytotoxicity has not been a problem with **DISCUS L**. If information concerning specific cultivars under local environmental conditions is not available, then it is advised to pre-spray a selection of plants and observe them for phytotoxicity for a minimum of seven days before making widespread applications. Make applications to flowering plants during times when pollinating insects are not present, such as early morning or late evening.

RESTRICTIONS FOR OUTDOOR USE:

- **Follow application restrictions FOR COMMERCIALLY GROWN ORNAMENTALS NOT UNDER CONTRACT FOR POLLINATION SERVICES BUT ARE ATTRACTIVE TO POLLINATORS indicated on page 2 to protect bees and other insect pollinators.**
- Do not apply more than 244 fl. oz. of **DISCUS L** (0.5 lb. of Imidaclopid + 0.12 lb. of Cyfluthrin) per acre per calendar year.
- Do not apply this product, by any application method, to linden, basswood, or other Tilia species.

DIRECTIONS FOR SOIL DRENCH AND SOIL INJECTION FOR ORNAMENTAL TREES, NON-BEARING FRUIT AND NUT TREES, AND SHRUBS GROWN IN NURSERIES AND GREENHOUSES

For systemic and contact/ingestion insect control in and around field grown nurseries, outdoor containerized ornamentals, ornamentals grown in greenhouses, and ornamentals grown in flats, benches or beds.

PESTS	CROP	DOSAGE	INSTRUCTIONS
Adelgids Aphids Armored Scale (suppression) Borers[1]: Eucalyptus long-horned borers Flatheaded borers (including bronze birch and alder borers) Fungus Gnats (larvae only[2]) Japanese beetles (adults) Lace bugs Leaf beetles (including elm and viburnum leaf beetles) Leafhoppers (including glassy-winged sharpshooter) Leafminers Mealybugs Pine Tip moth larvae Psyllids Root mealybugs Root weevil complex (such as Apopka weevil, black vine weevil, Citrus root weevil[3]) Royal palm bugs Rose midge Sawfly larvae Soft Scale Thrips (suppression)[4] Whiteflies	Shrubs Evergreens Flowers Foliage plants Ground covers Ornamental Trees Non-bearing Fruit and Nut Trees (Non-bearing fruit and nut trees are those trees that will not bear fruit or nuts for one year after application.)	3.4 to 5.6 fl. oz./1,000 ft.[2] or 1.14 to 1.91 gal/A	Flats: Use sufficient volume to wet most of the potting medium without loss of liquid from the bottom of the container. Use higher specified rate within the rate range for borer control and with high pest populations.
	Ornamental Trees Non-bearing Fruit and Nut Trees Shrubs	0.75 to 1.5 fl. oz. (22 - 44 ml) per inch of trunk diameter breast height (D.B.H.) or per foot of shrub height (F.S.H.)	**Soil Injection:** Apply with evenly spaced injection holes around the base of the plant. 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. For optimum control, keep the treated area moist for 7 to 10 days. Do not use less than 4 holes per plant (tree/shrub). **No soil injection Applications allowed in Nassau or Suffolk Counties of New York.** **Soil Drench:** Uniformly apply the dosage in a minimum of 10 gallons of water per 1,000 sq. ft. as a drench around the base of plants, directed at the root zone. Remove plastic or any other barrier that will stop solution from reaching the root zone.
	GROUND TREATMENT PRE-PLANTING FOR FLOWERS AND GROUND-COVERS	3.4 to 5.6 fl. oz. /1,000 ft.[2] or 1.14 to 1.91 gal/A	Apply as a broadcast treatment and incorporate into the soil before planting.

RESTRICTIONS FOR OUTDOOR USE:

- Do not apply more than 244 fl. oz. of **DISCUS L** (0.5 lb. of Imidaclopid + 0.12 lb. of Cyfluthrin) per acre per calendar year.
- Do not apply to soils which are water-logged or saturated, which will not allow the penetration of the insecticide into the root zone of the plants
- Do not apply this product, by any application method, to linden, basswood, or other Tilia species.

[1] **Borers:** for control of specified borer. Application to trees already heavily infested may not prevent the eventual loss of the trees due to existing pest damage and tree stress.

[2] **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 **DISCUS L** from a healthy root system translocating the active ingredient up into the plant.

[3] **Citrus Root Weevil:** For use on non-bearing citrus nursery stock.

[4] **Thrips** suppression on foliage only. Thrips in buds and flowers will not be suppressed.

DIRECTIONS FOR DRENCH AND IRRIGATION APPLICATIONS

For use only on greenhouse and nursery ornamentals and vegetable transplants using soil drenches, micro-irrigation, drip irrigation, overhead irrigation, ebb and flood irrigation, or hand-held or motorized calibrated irrigation equipment.

PESTS	USE PATTERN		DOSAGE		INSTRUCTIONS
Adelgids Aphids Fungus Gnats[1] (larvae only) Japanese Beetles (adults) Lacebugs Leaf beetles (including elm and viburnum leaf beetles) Leafhoppers (including glassy-winged sharpshooter) Leafminers Mealybugs Psyllids Root mealybugs[2] Root Weevil Complex (Such as Apopka Weevil, Black Vine Weevil, Citrus Root Weevil)[3] Soft Scale Thrips (suppression)[4] Whiteflies White Grub larvae (such as Japanese Beetle, Masked Chafers, European Chafer, Oriental Beetle, Asiatic Garden Beetle)	Plants in Containers	Herbaceous Species	Container size (inches)	No. pots treated with 14 fl. oz. (415 ml)	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 avoid loss of active ingredient due to leaching.
			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	
		Woody Perennials	2	2,000	
			3	1,350	
			4	1,000	
			5	800	
			6	650	
			7	550	
			8	500	
			9	450	
			10	400	
			11	350	
			12	300	
		Herbaceous Species	Use the above woody perennial rates		
	Ornamental plants grown in flats, benches, or beds		14 fl. oz. (415 ml) per 3,000 square feet		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 sq. ft. Apply as a broadcast treatment and incorporate into the medium before planting or apply after plants are established. If application is made to established plants, optimum control will be attained if areas are lightly irrigated after application. Allow no leaching or runout for 10 days after application.

RESTRICTIONS:

- 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.
- Do not apply to soils which are water-logged or saturated, which will not allow the penetration of the insecticide into the root zone of the plants
- On plants with a production cycle of less than one year, application is not to 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, application may not exceed once a year.

DIRECTIONS FOR DRENCH AND IRRIGATION APPLICATIONS *continued*

RESTRICTIONS: *continued*

For Outdoor Uses:

- **Follow application restrictions FOR COMMERCIALLY GROWN ORNAMENTALS NOT UNDER CONTRACT FOR POLLINATION SERVICES BUT ARE ATTRACTIVE TO POLLINATORS indicated on page 2 to protect bees and other insect pollinators.**
- Do not apply more than 244 fl. oz. of **DISCUS L** (0.5 lb. of Imidaclopid + 0.12 lb. of Cyfluthrin) per acre per calendar year.
- Do not apply this product, by any application method, to linden, basswood, or other Tilia species.

[1] **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 **DISCUS L** from a healthy root system translocating the active ingredient up into the plant.

[2] **Root Mealybug** control will require a thorough drenching of containerized media. Coverage is essential for control while minimizing the amount of leachate. Rate: 14 fl. oz. (415 ml) in 150 gallons of water.

[3] **Citrus Root Weevil:** For use on non-bearing citrus nursery stock.

[4] **Thrips** suppression on foliage only. Thrips in buds and flowers will not be suppressed.

DIRECTIONS FOR DRENCH AND IRRIGATION APPLICATIONS TO NURSERY ORNAMENTAL CONTAINERIZED PLANTS

PEST	USE PATTERN	DOSAGE		INSTRUCTIONS
Adelgids Aphids Armored Scale (suppression) Borers:[1] Eucalyptus longhorned borers Flathead borers (including bronze birch and alder borers) Fungus Gnats (larvae only[2]) Japanese Beetle (adult) Lacebugs Leaf beetles (including elm and viburnum leaf beetles) Leafhoppers (including glassy winged sharpshooter) Leafminers Mealybugs Pine Tip moth larvae Psyllids Root Mealybugs[3] Root Weevil Complex (such as: Apopka Weevil, Black Vine Weevil, Citrus Root Weevil[4]) Soft Scale Thrips (suppression)[5] Whiteflies **White Grub larvae** (such as: Japanese Beetle, Masked Chafers, European Chafer, Oriental Beetle, Asiatic Garden Beetle)	Containerized plants	Container Size	No. pots treated with 14 fl. oz. (415 ml)	Use 14 fl. oz. (415 ml) of product in an appropriate amount of water to avoid leaching to treat the number of pots based on pot size in the table below. Apply in sufficient water to wet the potting medium. For optimum control, make applications prior to egg hatch of the target pest. Irrigate moderately for about 10 days after application allowing the active ingredient to move into the plant. Do not allow leaching at this time. For trees and shrubs in containers greater than 20 gallons, use the rates per inch of trunk diameter or foot of shrub height.
		1 gallon	340 to 244	
		2 gallon	280 to 210	
		3 gallon	220 to 165	
		5 gallon	160 to 110	
		7 gallon	100 to 75	
		10 gallon	60 to 45	
		15 gallon	40 to 30	
		20 gallon	20 to 15	

RESTRICTIONS FOR OUTDOOR ORNAMENTALS:

- **Follow application restrictions FOR COMMERCIALLY GROWN ORNAMENTALS NOT UNDER CONTRACT FOR POLLINATION SERVICES BUT ARE ATTRACTIVE TO POLLINATORS indicated on page 2 to protect bees and other insect pollinators.**
- Do not apply more than 244 fl. oz. of **DISCUS L** (0.5 lb. of Imidaclopid + 0.12 lb. of Cyfluthrin) per acre per calendar year.
- Do not apply to soils which are water-logged or saturated, which will not allow the penetration of the insecticide into the root zone of the plants
- On plants with a production cycle of less than one year, application is not to 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, application may not exceed once a year.
- Do not apply this product, by any application method, to linden, basswood, or other Tilia species.

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

[2] **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 **DISCUS L** through root system by translocating the active ingredient up into the plant.

[3] **Root Mealybug** control will require a thorough drench of containerized media. Coverage is essential for control while minimizing the amount of leachate. Rate: 14 fl. oz./150 gallons of water.

[4] **Citrus Root Weevil:** For use on non-bearing citrus nursery stock.

[5] **Thrips** suppression on foliage only. Thrips in buds and flowers will not be suppressed.

STORAGE AND DISPOSAL

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

Storage: Store in cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original containers and out of the reach of children, preferably in a locked storage area.

Handle and open container in a manner as to prevent spillage. If the container is leaking or material spilled for any reason or cause, carefully sweep material into a pile. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Dispose of pesticide as directed above. In spill or leak incidents, keep unauthorized people away.

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

Container Handling: Non-refillable container. Do not reuse or refill this container. Triple 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.

Offer for recycling, if available or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of liability before using this product.

If terms are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following conditions, disclaimer of warranties and limitations of liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of OHP, Inc. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, OHP, INC. MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of OHP, Inc. is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, OHP, INC. DISCLAIMS ANY liability whatsoever for special, incidental or consequential damages, resulting from the use or handling of this product.

LIMITATIONS OF LIABILITY: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT OHP, INC. ELECTION, THE REPLACEMENT OF PRODUCT.

Discus is a registered trademark of OHP, Inc.

Produced for:
OHP, Inc.
PO Box 746
Bluffton, SC 29910-0746
(800) 356-4647

OHP 982420 ESL070716 REV030917