

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

August 26, 2019

Susan Stracquatanio Agent for Arborjet, Inc. 12510 Prosperity Drive, Suite 160 Silver Spring, Maryland 20904

Subject: Label Amendment – Addition of Spotted Lanternfly and corresponding application instructions Product Name: Ima-Jet EPA Registration Number: 74578-1 Application Date: 1/29/2019 Decision Number: 548265

Dear Ms. Stracquatanio:

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.

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

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with FIFRA section 6. If you have any questions, please contact Scott Campbell at Campbell.Scott@epa.gov or at (703) 347-0479.

Sincerely,

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

Enclosure: Stamped label

# ACCEPTED

## Aug 26, 2019

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 74578-1





## [Systemic Insecticide for Micro-Infusion] [Arboriculture in Motion]

Microinjectable Systemic Insecticide for use with the Arborjet Injection System in the Management of Specific Insect Pests of Forests, Trees, Landscape Ornamentals & Interior Plantscapes

Active Ingredient:	
Imidacloprid, 1-[(6-chloro-3-pyridinyl)methyl]-N-nitro-2-imidazolidinimine	5%
Other Ingredients	95%
Total	100%

STOP—read the entire label before use.

## **KEEP OUT OF REACH OF CHILDREN**

## CAUTION

Precaución al usuario: Si usted no puede leer o entender inglés, no use este producto hasta que la etiqueta le haya sido explicada ampliamente. To the user: If you cannot read or understand English, do not use this product until the label has been fully explained to you. [See attached leaflet for First Aid.]

FIRST AID			
If Swallowed	<ul> <li>Call Poison Control Center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to by the poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>		
lf on Skin or Clothing	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a Poison Control Center or doctor for treatment advice.</li> </ul>		
If in Eyes	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a Poison Control Center or doctor for treatment advice.</li> </ul>		
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact the Infotrac Chemical Emergency Response System at 1-800-535-5053			

Note to Physician: No specific antidote is available. Treat the patient symptomatically.

Manufactured by:

Arborjet, Inc. 99 Blueberry Hill Road Woburn, MA 01801 Phone: 781 935-9070

EPA Reg. No. 74578-1 EPA Est. No. 74578-MA-001

Net Contents:

[See individual container]

### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION:** Harmful if swallowed. Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

#### **Personal Protective Equipment (PPE):**

Wear long-sleeved shirt and long pants, socks, shoes, and chemical resistant gloves. Remove and wash contaminated clothing before reuse.

#### **ENVIRONMENTAL HAZARDS**

This pesticide is highly toxic to fish and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate. This product is highly toxic to honeybees exposed to direct treatment or residues on blooming trees and shrubs.

#### PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame. Do not mix or allow coming in contact with oxidizing agents. Hazardous chemical reaction may occur.

#### **DIRECTIONS FOR USE**

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

**IMPORTANT:** Read the entire label before use. Failure to follow label directions may result in poor control or plant injury. Failure to follow label directions may cause injury to people, animals and environment. [See attached leaflet for complete directions for use.]

Do not apply this product, by any application method, to linden, basswood or other *Tilia* species in the State of Oregon.

#### APPLICATION TO TREES AND ORNAMENTALS

IMA-jet is a systemic insecticide used to control a variety of insect pests of ornamental or forest trees. Pests controlled include aphids, whiteflies, soft scales, adelgids, gall forming wasps, leafhoppers, lace bugs, mealybugs, psyllids, serpentine leafminers, sawflies, thrips and leaf feeding beetles. Use IMA-jet as directed in trees in residential, business and commercial areas, golf courses, airports, cemeteries, parks, street trees, playgrounds, athletic fields, commercial forestry production, seed orchard trees, nurseries, and in private, municipal, state, federal, county and local recreational forests.

#### When to Treat

For optimum results, apply IMA-jet prior to infestation. Also apply when insects are infesting and feeding upon the tree. IMA-jet insecticide moves upward into the tree's canopy from the application sites. Systemic activity occurs only after the active ingredient is translocated upward in the tree. This product must be applied below the bark into the sapwood (i.e., the vascular) tissues. In the case of severe infestation, use the highest label rate for the targeted pest. In trees larger than 24" use the highest rate listed for that insect pest. Dosages are designed for insect control and retreatment is generally not necessary during the year after initial treatment. Monitor insect activity to establish a damage threshold for retreatment. Repeat applications as necessary.

The need for an application can be based on historical monitoring of the site, previous records or experiences, current season adult trapping and other methods. Due to potential foliar injury or poor (i.e., slow) uptake, do not apply to trees stressed by drought or extreme heat.

#### **Basic Injection Procedure**

This product must be placed into the tree's sapwood, the conductive tissue that moves water to the canopy. Make applications around the base of the tree. Inject into tree roots exposing them by careful excavation or, alternatively into the trunk flare or tissue immediately above the trunk flare, locating the injection site in the first few xylem (i.e., sapwood) elements. Drill holes through the bark and into the sapwood a minimum of 3/8" deep. When using the Arborjet Arborplug, drill a minimum of 5/8" deep into the sapwood.

#### **Calculating Application Rate**

The dosages and number of application sites are based on tree diameter.

To determine the application/dose rate per tree:

- Measure the tree diameter in inches at chest height (54" from ground) to find the Diameter at Breast Height (DBH). (If measuring tree circumference, divide circumference by 3 to obtain the DBH in inches.)
- 2) Calculate the number of injection sites by dividing the DBH in inches by 2.
- 3) Multiply the tree DBH by the dosage rate (see table below for appropriate dosage rate) to calculate the total dose in milliliters per tree.
- 4) Divide the total dose by the number of injection sites to determine required dosage per injection site.

**Example**: For a tree with a DBH of 12 inches (or circumference of 36 inches) and 8 mL dosage rate:

- 1) DBH = 12" (circumference  $36" \div 3 = 12"$ )
- 2) Divide DBH of 12" by 2 = 6 injection sites.
- 3) Multiply DBH of 12 by 8 mL = 96 mL total dose per tree.
- 4) Divide 96 mL by 6 injection sites = 16 mL per injection site to deliver the required dosage.

To apply the highest dosage rate to trees as specified in the table, "Applications for Use in Listed Trees and Ornamentals and Forest and Woodlands Areas," it may be necessary to increase the number of injection sites applied. In the example given in "Calculating Application Rate", if the total dose per tree applied is less than the calculated 96 mLs, the remaining dosage should be placed into a new injection site. Do not place injection sites closer than 2" apart. Treat Cycads (i.e., gymnosperms) using this method of application. In resinous conifers (such as pine and spruce), start the injection immediately after drilling. A prolonged delay may reduce uptake on account of resin flow. In palms (i.e., monocots), only one injection site is required: locate the application site 1-3' from the soil level and drill 4" deep into the stem.

#### **Application Equipment**

IMA-jet is designed for use with the Arborjet Tree Injection Systems or with other tree injection devices that meet the label requirements and are chemically resistant. For all injection systems, read carefully and follow manufacturer's directions for use.

#### Restrictions

Use as formulated. Do not mix with water. Keep children and pets away from treatment area until injection and uptake are complete. This product is not to be used on trees that will produce food within the year following treatment. Do not use on syrup-producing sugar maples where sap is harvested. [Readers Note: Restrictions may be listed in bullet form]

For	flowering trees, make applications post bloom	Woodland Areas				
For trees less than 12" in diameter, use the lower rate for the targeted pest. If trees are severely infested, use the highest label rate specified for control of the targeted pest. For trees larger than 24" diameter, always use the highest label rate for the targeted pest.						
Сгор	Pest	Dosage				
Trees & Ornamentals: Trees Shrubs Evergreens Interior Plantscapes Palms Forest areas: Non-urban Forests, Tree Plantations, Planted Christmas Trees, Parks, Rural Shelter Belts, Rangeland Trees and Woodland Trees including Conifers	Adelgids (including Hemlock Woolly Adelgid*) Aphids Gall Wasps (including Erythrina Gall Wasp) Lacebugs Leafhoppers Leaf miners Mealybugs Psyllids Soft scales Thrips Whiteflies	2.0 – 4.0 mL IMA-jet Systemic Insecticide per inch of cumulative trunk diameter at breast height (54" from the ground). Space injection holes approximately 6" apart around the circumference of the tree.				
Trees & Ornamentals: Trees Shrubs Evergreens Interior Plantscapes Palms Forest areas: Non-urban Forests, Tree Plantations, Planted Christmas Trees, Parks, Rural Shelter Belts, Rangeland Trees and Woodland Trees including Conifers	Adelgids (including Hemlock Woolly Adelgid*) Gall Wasps (including Erythrina Gall Wasp) Flatheaded Borers (including Bronze birch borer, Emerald ash borer) adults Japanese Beetles (adults) Leaf Beetles (including elm leaf beetle) Leaf bugs (including leaf footed seed bugs) Leaf miners Pine tip moth larvae Roundheaded Borers (including Eucalyptus longhorned borer) Royal palm bug Sawfly larvae Soft scales Thrips Whiteflies	4.0 – 8.0 mL IMA-jet Systemic Insecticide per inch of cumulative trunk diameter at breast height (54" from the ground). Space injection holes approximately 6" apart around the circumference of the tree.				
Host Trees: including Tree of Heaven, Birch, Black Walnut, Willow, Black Gum, Oak, Maple, Beech, Dogwood, Sassafras, Sweetgum, Elm, Crabapple, Serviceberry, Pine, Poplar, Tulip Poplar, Hickory, White Ash & Sycamore Landscape & Forest areas: Urban & Non-urban Forests, Trees in Plantations, Parks, Rural Shelter Belts,	Spotted Lanternfly	4.0 – 8.0 mL IMA-jet Systemic Insecticide per inch of cumulative trunk diameter at breast height (54" from the ground). Space injection holes 4 to 6" apart, around the circumference of the tree. Make applications when insects begin to feed on trees, typically at the 3 <sup>rd</sup> instar stage, from early July through October				

\*IMA-jet provides 1-2 years of residual control of Hemlock Woolly Adelgid. Trees infested with Hemlock Woolly Adelgid might require two applications before significant control is seen.

For use under USDA Supervision Only					
Host Trees	Pest	DBH Range	Dose Rate mL/DBH"		
Elm, Maple, Birch, Willow, Box Elder, Horsechestnut, Buckeye, European Mountain Ash, Ash, Poplar, Albizia, London Plane, Hackberry and Sycamore	Asian Longhorned Beetle	2 - 23" 24" +	4.0 mL 8.0 mL		

#### ARBORJET MICRO-INFUSION<sup>™</sup> PROCEDURES

#### Basic Arborjet Micro-Infusion<sup>™</sup> Procedures:

- 1. Determine the dosage based on target pest and tree diameter.
- 2. Pour concentrate into the medicament bottle and cap.
- For Tree I.V.: pressurize the contents from 25 to 60 PSI and prime the lines by opening each injector valve slowly to purge the air; close the valve when liquid begins to flow, or For Hydraulic Device: pressurize the contents to 15 PSI and prime the lines by depressing the
- trigger and pulling back slowly on the dose-sizer.Determine the number and placement of injection sites around the base of the tree. Drill through the bark then 5/8" into the sapwood using the appropriate sized drill bit. For best results, use clean and sharp Brad point drill bits.
- 5. Insert the Arborplug<sup>™</sup> using the set tool and mallet. Use the #4 Arborplug (3/8" d) for most applications, including conifers. In hardwoods, you may also use smaller diameter Arborplugs including the #3 (9/32" d). Insert the VIPER needle into the Arborplug. <u>To start the Tree I.V. infusion</u>, open the needle valve. Close the valve and remove the VIPER needle upon completion of infusion. <u>To inject with the Hydraulic Device</u>, depress the trigger to apply the dose.

#### Alternative Arborjet STINGER Procedure:

6. Alternatively, insert the #2 (7/32" drill bit) STINGER injector tip 5/8" deep into the sapwood in the predrilled hole with a hand push or by gently tapping the injector tip into the sapwood with a mallet. Remove STINGERS upon completion of infusion process by pulling and twisting out counter-clockwise. Use a cleaner or an EPA registered disinfectant between trees when using the reusable STINGER tips.

#### **INJECTION PROCEDURES for M3 INJECTOR**

Use root flare injections—IMA-jet Infusible Insecticide can be used with a variety of refillable tree infusion devices. For all injection devices, read carefully and follow all manufacturer use directions.

#### Installation and Application using the Rainbow Treecare Scientific Advancement M3 injector:

- 1. Examine the tree for the presence of root flare. If flares are not visible, excavate the root collar. Make Infusion sites 5-10 inches below the top of the root flare.
- 2. Thoroughly brush all dirt from the tree. A dirty root flare will dull the drill bit and increase uptake time.
- 3. Lay the injectors around the tree to select injection sites. The application rate is 1 injection site for every 2 diameter inches (approximately 1 injection site every 6 inches) evenly spaced around the root-flares. Using a 11/64" or 3/16" (4.5 to 5 cm) HIGH HELIX drill bit, drill a hole at a downward angle into each selected buttress root flare above the soil line. Drill to a depth of 1 to 1.5 cm (3/8 to 1/2") into healthy xylem tissue.
- 4. Insert the injector tip into the hole and seat firmly with hand pressure.
- 5. Close the control valve.

- 6. Inject treatment liquid into the M3 injector reservoir through the black duckbill (filling) valve.
- 7. Inject air into the M3 injector reservoir through the filling valve. Do not inject more than 25 cc of air. Note: Care must be taken when pressurizing the capsule. If the tool used to pressurize the capsule passes all of the way through the duckbill, the duckbill will not close and the capsule will not be pressurized.
- 8. Open the control valve just to the point where the liquid starts to flow into the tree.
- Check for leaks. If leaks are found close the valve, seat firmly into the tree and re-open the valve. If leaks
  persist the problem may be too shallow of a hole, close the valve, remove the injector and re-drill to a
  deeper depth.
- 10. Uptake usually occurs within minutes. When all of the treatment liquid is out of the injector, a wash solution of water can be injected into the M3 injector and it can be re-pressurized or the M3 injector can be closed and removed from the tree. Wash solutions are not compatible with all formulations. Check for compatibility prior to rinsing the M3 injector into the tree.
- 11. Remove the M3 injector from the tree and store properly for reuse.

#### Insecticide Resistance Management

For resistance management, IMA-jet contains a Group 4A insecticide. Any insect population may contain individuals naturally resistant to IMA-jet and other Group 4A insecticides. The resistant individuals may dominate the insect population if this group of insecticides is used repeatedly in the same sites. Appropriate resistance-management strategies should be followed.

To delay insecticide/acaricide resistance, take the following steps:

- Rotate the use of IMA-jet or other Group 4A insecticide within a growing season, or among growing seasons, with different groups that control the same pests.
- Adopt an integrated pest management program for insecticides use that includes scouting, uses historical information related to pesticide use, record keeping, and which considers cultural, biological and other chemical control practices.
- Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local university specialist or certified pest control advisor.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area.

## STORAGE AND DISPOSAL

[See attached leaflet for storage and disposal.]

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

PESTICIDE STORAGE: Store bottles in a cool, dry place above 45° F. Store in original container out of reach of children, preferably in a locked storage area.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available, or puncture and dispose of empty bottle in a sanitary landfill.

#### NOTICE OF WARRANTY

ARBORJET, Inc. makes no warranty of fitness of this product for any other purpose, beyond its uses under normal conditions in keeping with the statements made on this label. The buyer accepts and understands that failure to follow label directions is the responsibility of the buyer.