Insect Control with SYSTEMAXX

# **Kills Borers & Miners**

Soil drench application provides **YEAR-LONG** insect control for trees & shrubs

## **Prevents new infestations**

ACTIVE INGREDIENT:

NOT FOR SALE, USE OR DISTRIBUTION IN or INTO

Nassau, Suffolk, Kings or Queens Counties, New York.

Keep Out Of Reach Of Children

TRUSTED SINCE 1926

Emerald Ash Borer Lonahorned Beetle

Mix & pour at the tree base



# Tree & Shrub

Insect Control with SYSTEMAXX

- √ This concentrate dissolves in water allowing the insecticide to move through the root zone. Once in the roots, the insecticide moves up through the tree or shrub providing protection from insects. This product will also provide protection for new growth
- √ Provides up to 12 months of systemic protection against listed insects
- √ Cannot be washed off by rain or water
- √ Kills insects and prevents new infestations

For Outdoor Residential Use Only.

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EPA Est. No. 4-NY-1 EPA Reg. No. 53883-205-4
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#### **DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Shake well before using. For outdoor foliar applications, follow these directions to protect pollinators:

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

#### RESTRICTIONS FOR ALL USES:

- Do not allow children and pets to re-enter the treated area until after the spray has dried
- Do not spray the product into fish pools, ponds, streams, or lakes.
- Do not allow this product to contact plants in bloom if bees are foraging in the treatment area.
- Regardless of application method, do not apply more than 9.4 oz. Imidacloprid per 1.000 sq. ft. per year.
- Do not apply this product, by any application method to linden, basswood, or other Tilia species.

Read and follow all label directions.

#### ESTABLISHED ORNAMENTALS IN RESIDENTIAL AREAS

This product is for use on outdoor trees, shrubs and groundcovers in landscape plantings as listed in the table below:

#### RESTRICTIONS FOR ORNAMENTALS:

- · Do not apply to soil that is frozen or waterlogged.
- · Keep people and pets off treated area until it has dried.
- Do not apply this product, by any application method to linden, basswood, or other Tilia species.
- · Do not apply this product while bees are foraging.
- Do not apply to plants that are blooming. Only apply after all flower petals have fallen
  off.
- Do not apply more than 9.4 oz. of Imidacloprid per 1,000 sq. ft. per year.

| Landscape Plantings (Not for this Use in California) | Types of Plants (Not for this use in California)   |
|--|--|
| Roses, flowers, bedding plants and flowering shrubs  | Azalea, begonia, camellia, cherry laurel, geranium, gardenia, hydrangea, impatiens, ligustrum, peonies, primrose, tea roses, salvia, zinnias and similar herbaceous plants |
| Evergreen and leafy shrubs and woody ornamentals     | Arborvitae, boxwood, cotoneaster, euonymus, holly, juniper, laurel, privet, spruce yews and similar plants   |
| Groundcovers   | English ivy, Dichondra, ivy, pachysandra, vinca and other similar plants   |

This product is for use to kill the pests listed in the table on outdoor trees and shrubs.

| Pests Controlled   |  |  |
|--|--|--|
| Adelgids Aphids Black Vine Weevil Larvae Borers: Roundheaded Borers (incl. Eucalyptus Longhorned Borers and Asian Longhorned Beetles) Flatheaded Borers (incl. Bronze Birch, Alder Borers, and Emerald Ash Borers) Japanese Beetles (Adult) Lacebugs Leaf Beetles (incl. Elm Leaf Beetles and Viburnum Leaf Beetles) | Leafhoppers (incl. Glassy-winged<br>Sharpshooters)<br>Leafminers (incl. Birch Leafminers)<br>Mealybugs<br>Pine Tip Moth Larvae<br>Psyllids<br>Royal Palm Bugs<br>Sawfly Larvae<br>Scales (incl. Armored Scale<br>(suppression) and Soft Scale)<br>Thrips (suppression)<br>Whiteflies |  |

Foliar Applications (Not for this Use in California)
Use this product as a foliar spray to provide contact control of larvae, nymphs or adults of the following insect pests: adelgids, aphids, Japanese beetles, lace bugs, leaf beetles (including elm leaf beetles and viburnum leaf beetles), leafhoppers (including glassy-winged sharpshooter), mealybugs, psyllids, sawfly larvae, thrips (suppression) and whiteflies.

#### **Application Instructions**

Apply when insects first appear and before high pest populations are established, prior to blooming or after all flower petals have fallen off. Retreat when re-infestation occurs, when high pest pressure is observed or repeat applications on an as-needed basis with 10-14 day intervals between applications, not to exceed the maximum rate.

#### How to Apply

Foliar applications with water must be made as a thorough cover spray to provide uniform distribution. Make application prior to blooming or after all flower petals have fallen off. Spray to wet all foliage (leaves, stems and branches). Target the undersides of the leaves and try to penetrate dense foliage with the spray droplets.

#### **Hand-Operated Sprayers**

Including backpack, compression, knapsack or tank type sprayers.

For foliar applications mix 1.5 tsp of this product per 1 gallon of water.

#### SOIL DRENCH TO INDIVIDUAL TREES AND SHRUBS

This product quickly dissolves in water allowing the insecticide to move through the soil into the root zone. Once in the roots, the insecticide moves up through the tree or shrub providing year-long insect control. This product will also provide control to new growth. Drench applications to individual trees will control pests listed below:

| Pests Controlled   |   |  |  |
|--|---|--|--|
| Adelgids Aphids Armored scales (suppression) Black Vine Weevil Larvae Borers: Roundheaded Borers (incl. Eucalyptus Longhorned Borers and Asian Longhorned Beetles) | Flatheaded Borers (incl.<br>Bronze Birch, Alder<br>Borers, and Emerald Ash<br>Borers)<br>Japanese Beetles (adult)<br>Lacebugs<br>Elm Leaf Beetles<br>Viburnum Leaf Beetles<br>Leafhoppers<br>Leafminers | Mealybugs Pine Tip Moth Larvae Psyllids Royal Palm Bugs Sawfly Larvae Soft Scale (suppression) Thrips (suppression) White grub larvae (Not for Use in California) Whiteflies |  |

For best results, use this product as part of a preventative treatment program before insect damage occurs. Use one soil drench treatment per year during early spring to early fall. This product can be applied anytime except when the ground is saturated or frozen. These conditions will make movement of the product down into the root zone difficult. When applying this product during dry periods, generously water the tree or shrub the night before treatment.

NOTE: For insect control, the insecticide must move throughout the tree or shrub. The time it takes to do this will depend on the size of the plant that is treated (one week to three months for very large trees). For this reason, soil drenches should occur 2-3 months before the expected pest infestation. Trees that are already heavily infested may not survive due to the existing pest damage and the resulting stress.

#### Application Instructions

Soil Drench: Refer to the directions in the "TREES" section.

#### TREES

#### Determining Amount of this product to Use

Measure the circumference (distance around the tree trunk) in inches at chest height or at 4.5 feet from the soil using a flexible tape. Or, measure the diameter of the tree trunk in inches at chest height or at 4.5 feet from the soil.

Mix 1 oz. of this product per inch of circumference of the tree trunk to one (1) gallon of water. Refer to the mixing chart for the amounts of this product needed.

#### RESTRICTIONS FOR TREES:

- Do not apply this product, by any application method to linden, basswood, or other *Tilia* species.
- Do not apply more than 3.2 gallons of this product per acre per year.

#### How to Apply

Apply the solution to the root zone as a band around the base of the tree. Apply one (1) gallon of solution in a circular band from the base of the tree outward for two (2) feet. For trees with trunk diameters more than 16 inches at chest height, apply two (2) gallons of solution in a circular band from the base of the tree outward for three to four (3-4) feet.

Do not irrigate immediately after a soil drench application. Depending on the size and vigor of the tree, the uptake period may vary from one week to three months for larger trees. Insect control will be achieved when the uptake and translocation from the roots to all plant parts (leaves) has occurred.

| Tree Trunk<br>Circumference<br>(inches) | Tree<br>Diameter<br>(inches) | Amount of this product (fl. oz.) | Volume of<br>Water<br>(gallons) | Band Width of Circular<br>Area Around Base of<br>Tree (outward feet) |
|---|------------------------------|----------------------------------|---------------------------------|--|
| 8                                       | 2                            | 8                                | 1                               | 2'   |
| 10                                      | 3                            | 10                               | 1                               | 2'   |
| 15                                      | 5                            | 15                               | 1                               | 2'   |
| 20                                      | 6                            | 20                               | 1                               | 2'   |
| 25                                      | 8                            | 25                               | 1                               | 2'   |
| 30                                      | 10                           | 30                               | 1                               | 2'   |

# SOIL DRENCH TO APPLE, PEAR, PEACH, PLUM. CHERRY AND PECAN TREES (Not for Use in California)

This product quickly dissolves in water allowing the insecticide to move through the soil into the root zone. Once in the roots, the insecticide moves up through the tree or shrub providing year-long insect protection. This product will also provide protection to new growth. Drench applications to individual trees will control aphids, borers, leafhoppers, lace buos. mealybuos, scale insects, and other larvae as listed above.

For insect control, the insecticide must move throughout the tree or shrub. The time it takes to do this will depend on the size of the plant that is treated (one week to three months for very large trees). For this reason, apply soil drenches 2-3 months before the expected pest infestation.

For best results, use this product as part of a preventative treatment program before insect damage occurs. Use one soil drench treatment per year during early spring to early fall. This product can be applied anytime except when the ground is saturated or frozen. These conditions will make movement of the product down into the root zone difficult

When applying this product during dry periods, generously water the tree or shrub the night before treatment.

#### RESTRICTIONS:

- Do not apply pre-bloom or during bloom or when bees are foraging.
- Do not apply to soil that is frozen or waterlogged.
- For apple, pear, peach, plum and cherry A. Allow twenty-one (21) days between the final application and harvest. B. Do not apply more than 3 gallons of this product per acre per year.
- For pecans A. Allow seven (7) days between the final application and harvest. B. Do not apply more than 3.2 gallons of this product per acre per year.

Trees that are already heavily infested may not survive due to the existing pest damage and the resulting stress.

#### Determining Amount of This Product to Use

Measure the circumference (distance around the tree trunk) in inches at chest height or at 4.5 feet from the soil using a flexible tape. Or, measure the diameter of the tree trunk in inches at chest height or at 4.5 feet from the soil.

Mix 1 oz. of this product per inch of circumference of the tree trunk to one (1) gallon of water. Refer to the mixing chart for the amounts of this product needed.

#### How to Apply

Apply the solution to the root zone as a band around the base of the tree. Apply one (1) gallon of solution in a circular band from the base of the tree outward for two (2) feet. For trees with trunk diameters more than 16 inches at chest height, apply two (2) gallons of solution in a circular band from the base of the tree outward for three to four (3-4) feet.

Do not irrigate immediately after a soil drench application. Depending on the size and vigor of the tree, the uptake period may vary from one week to three months for larger trees.

| Tree Trunk<br>Circumference<br>(inches) | Tree<br>Diameter<br>(inches) | Amount of<br>this product<br>(fl. oz.) | Volume of<br>Water<br>(gallons) | Band Width of Circular<br>Area Around Base of<br>Tree (outward feet) |
|---|------------------------------|--|---------------------------------|--|
| 8                                       | 2                            | 8                                      | 1                               | 2'   |
| 10                                      | 3                            | 10                                     | 1                               | 2'   |
| 15                                      | 5                            | 15                                     | 1                               | 2'   |
| 20                                      | 6                            | 20                                     | 1                               | 2'   |
| 25                                      | 8                            | 25                                     | 1                               | 2'   |
| 30                                      | 10                           | 30                                     | 1                               | 2'   |

#### SHRUBS

#### **Determining Amount of this product to Use**

Measure the height of the shrub to the nearest foot. Round any inches down to the nearest foot if less than 6" and up to the nearest foot if greater than 6".

 ${\rm Mix}~3~{\rm oz.}$  of this product per foot of shrub height to one (1) gallon of water. Refer to table for additional mixing instructions.

#### RESTRICTIONS FOR SHRUBS:

• Do not apply more than 3.2 gallons of this product per acre per year.

#### How to Apply

Apply the solution to the root zone as a band around the base of the shrub. Apply one (1) gallon of solution in a circular band from the base of the shrub outward for one (1) foot. For shrubs taller than 3 feet, apply one (1) gallon of solution in a circular band from the base of the shrub outward for two (2) feet.

Do not irrigate immediately after a soil drench application.

| Shrub Height (feet) | Amount of this product (fl. oz.) | Volume of<br>Water<br>(gallons) | Band Width of Circular Area<br>Around Base of Shrub<br>(outward feet) |
|---------------------|----------------------------------|---------------------------------|---|
| 2                   | 6                                | 1                               | 1'  |
| 3                   | 9                                | 1                               | 1'  |
| 4                   | 12                               | 1                               | 2'  |
| 5                   | 15                               | 1                               | 2'  |
| 6                   | 18                               | 1                               | 2'  |
| 7                   | 21                               | 1                               | 2'  |
| 8                   | 24                               | 1                               | 2'  |

### STORAGE AND DISPOSAL

Pesticide Storage: Store in original container in a cool, dry place, out of the reach of children, preferably a locked storage cabinet. Protect from freezing. Pesticide Disposal and Container Handling: If empty: Nonrefillable container. Do not reuse or refill this container. Rinse the empty product container thoroughly and disperse the rinse water at application site. Offer for recycling if available. If recycling is not available: then dispose of container in sanitary landfill or, if allowed by State and local authorities, by burning. If burned, stay out of smoke. If partly filled: It is best to use all of the product in accordance with label directions. If it is necessary to dispose of unused product, please call your local solid waste agency. Never place unused product down any indoor or outdoor drain.

#### FIRST AID

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 National Pesticide Information Center at 1-800-858-7378 for emergency medical treatment information.

#### 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 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 the poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

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

#### HAZARD TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Causes 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. Remove and wash contaminated clothing before reuse.

#### **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to aquatic invertebrates. Do not apply directly to lakes, streams or ponds. Do not dump rinse water into sewers or other bodies of water. This pesticide is highly toxic to bees exposed to direct treatment or residues on blooming plants or weeds. Do not apply this product or allow it to drift to blooming plants or weeds when bees are foraging. Apply this product only as specified on this label.

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#### 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

#### 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, because of manner of use and other factors beyond Bonide Products, LLC's control it is impossible for Bonide Products, LLC to eliminate all risks associated with the use of this product. As a result, crop injury or ineffectiveness is always possible. All such risks shall be assumed by the user or buyer.

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