

#### U.S. ENVIRONMENTAL PROTECTION AGENCY

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

82074-11

EPA Reg. Number:

Date of Issuance:

1-11

3/30/16

NOTICE OF PESTICIDE:

X Registration
Reregistration
(under FIFRA, as amended)

Term of Issuance: Conditional

Name of Pesticide Product:

Sphynx

Name and Address of Registrant (include ZIP Code):

Janice E. Asato LAM International Corporation c/o Technology Sciences Group Inc. (TSG) 1150 18<sup>th</sup> Street, NW, Suite 1000 Washington, DC 20036

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

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

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

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

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

Signature of Approving Official:

Date:

3/30/16

Kable Bo Davis, Product Manager 03

Invertebrate & Vertebrate Branch 1, Registration Division (7505P)

EPA Form 8570-6

- 2. You are required to comply with the data requirements described in the DCI Order identified below:
  - a. Pyrethrins GDCI-069001-1290
  - b. Pyrethrins GDCI-069001-27992

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

Division: <a href="http://iaspub.epa.gov/apex/pesticides/f?p=chemicalsearch:1">http://iaspub.epa.gov/apex/pesticides/f?p=chemicalsearch:1</a>

- 3. The data requirements for storage stability and corrosion characteristics (Guidelines 830.6317 and 830.6320) are not satisfied. A one year study is required to satisfy these data requirements. You have 18 months from the date of registration to provide these data.
- 4. Make the following label changes before you release the product for shipment:
  - Revise the EPA Registration Number to read, "EPA Reg. No. 82074-11."
- 5. Submit one copy of the final printed label for the record before you release the product for shipment.

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.

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

• Basic CSF dated 01/07/2016

If you have any questions, you may contact Julie Breeden at 703-347-0511 or via email at Breeden.Julie@epa.gov.

Enclosure



## **MASTER LABEL**

SUB-LABEL A: Agricultural

SUB-LABEL B: Gardening / Residential SUB-LABEL C: Greenhouse Use

## **ACTIVE INGREDIENTS:**

Pyrethrins	1.40%
Azadirachtin	1.20%
OTHER INGREDIENTS	<u>97.40%</u>
TOTAL	100.00%

Contains 0.10 lbs of azadirachtin and 0.11 lbs of pyrethrins per gallon.

## KEEP OUT OF REACH OF CHILDREN **CAUTION PRECAUCIÓN**

## LAM INTERNATIONAL CORPORATION

117 S. Parkmont; P.O. Box 4109-Butte, MT 59702; Ph. (406)782-2386; Fax: (406)782-9912

EPA Reg. No. 82074-XX EPA Est. Number 65626-MT-02

Net Contents: \_\_\_\_\_

## ACCEPTED

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 82074-11



## SUB-LABEL A:

## **AGRICULTURAL**

Not for Residential Use



## **ACTIVE INGREDIENTS:**

Pyrethrins	1.40%
Azadirachtin	1.20%
OTHER INGREDIENTS	<u>97.40%</u>
TOTAL	100.00%

Contains 0.10 lbs of azadirachtin and 0.11 lbs of pyrethrins per gallon.

# KEEP OUT OF REACH OF CHILDREN CAUTION PRECAUCIÓN

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

	FIRST AID
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>
IF 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 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 do so by the poison control center or doctor</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
	or label with you when calling a poison control center or doctor, or going for treatment. For call emergencies or pesticide incidents, call 1-888-740-8712.

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EPA Reg. No. 82074-XX EPA Est. Number 65626-MT-02

Net Conter	nts:

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

## CAUTION

Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash hands thoroughly with plenty of soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Wear protective eyewear. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wear long-sleeved shirt and long pants, socks, shoes and chemical-resistant gloves (such as barrier laminate, nitrile rubber, neoprene rubber, or viton).

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are made of barrier laminate, nitrile or neoprene rubber or viton. Mixers, loaders, applicators, and other handlers must wear the following:

- Long-sleeved shirt
- Long pants
- Shoes and socks
- Chemical-resistant gloves

In addition to the above PPE, applicators using hand held foggers in an enclosed area must wear a half-face, full-face, or hood-style NIOSH approved respirator with:

- A NIOSH approved particulate filter with any R or P filter with NIOSH approval number prefix TC-84A
- A NIOSH approved powered air purifying respirator with an HE filter with NIOSH approval number prefix TC-21C

See engineering controls for additional requirements.

#### USER SAFETY RECOMMENDATIONS

#### Users 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

## **ENGINEERING CONTROLS**

Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)].

Human flagging is prohibited. Flagging to support aerial application is limited to use of Global Positioning System (GPS) or mechanical flaggers.

#### **ENVIRONMENTAL HAZARDS**

This product is toxic to aquatic organisms, including fish and invertebrates. Drift and run-off may be hazardous to aquatic organisms in water adjacent to treated areas. This product may contaminate water through run-off. This product has a potential for run-off for several weeks after application. Poorly draining soils and soils with shallow water tables are more prone to produce run-off that contains this product.

This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are foraging the treatment area. 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 wash-waters or rinsate. See Directions for Use for additional precautions and restrictions.

#### PHYSICAL OR CHEMICAL HAZARDS

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

#### DIRECTIONS FOR USE

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

#### **RESTRICTIONS**

- Apply this product only as specified on this label.
- Not for indoor use except in greenhouses
- Not for use in residential misting systems
- Do not contaminate food or feedstuffs.
- Do not apply this product in a way that will contact workers or other persons, either directly or through spraydrift.
- Do not enter or allow others to enter until sprays have dried.
- Do not remain in treated area. Exit area immediately and remain outside the treated area until vapors, mists and aerosols have dispersed.
- Only protected handlers may be in the area during application.
- Do not wet plants to the point of runoff or drip.
- Do not apply directly to or near water, storm drains or drainage ditches. Do not apply when windy. To prevent product run-off, do not over water the treated area(s) or apply when heavy rain is expected. Rinse applicator over lawn or garden area only.
- Do not apply more than 1 time per day.
- Do not apply more than 10 times per season.
- Do not reapply within 3 days except under extreme pest pressure.
- In case of extreme pest pressure, do not reapply within 24 hours.

## SPRAY DRIFT MANAGEMENT FOR AGRICULTURAL CROPS

Avoiding spray drift at the application site is the responsibility of the applicator and the grower. The interactions of many equipment and weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions. Do not apply at wind speeds greater than 10 mph at the application site. Do not make any type of application into temperature inversions. Apply as a medium or coarse spray (ASABE standard 572).

#### Additional requirements for aerial applications:

Do not release spray at a height greater than 10 feet above the ground or crop canopy.

The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.

Aerial applicators must consider flight speed and nozzle orientation in determining droplet size.

When applications are made with a cross-wind, the swath will be displaced downwind. The applicator must compensate for this displacement at the downwind edge of the application area by adjusting the path of the aircraft upwind.

## Additional requirements for ground applications:

Do not release spray at a height greater than 4 feet above the ground or crop canopy.

## Additional requirements for airblast applications:

Direct sprays into the canopy.

Turn off outward pointing nozzles at row ends and when spraying outerrows.

## PESTICIDE RESISTANCE MANAGEMENT

SPHYNX Insecticide contains a Group 3A insecticide. Insect biotypes with acquired resistance to Group 3A may eventually dominate the insect population if Group 3A insecticides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by SPHYNX or other Group 3A insecticides.

To delay insecticide resistance consider:

- Avoiding the consecutive use of SPHYNX or other group 3A insecticides that have a similar target site of action, on the same insect species.
- Using tank mixtures or premixes with insecticides from a different target site of action Group as long as the involved products are all registered for the same use and have different sites of action.
- Basing insecticide use on a comprehensive IPM program.
- Monitoring treated insect population for loss of field efficacy.
- Contacting your local extension specialist, certified crop advisors, and/or manufacturer for insecticide resistance management and or IPM recommendations for the specific site and resistance pest problems.

#### AGRICULTURAL USE REQUIREMENTS

Do not apply this product in a way that will contact workers or other persons either directly or through spray drift. Only protected handlers may be in the area during application.

For any requirements specific to your state or Tribe, consult the State or Tribal Agency responsible for pesticide regulation.

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.

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

Coveralls:

Chemical-resistant gloves, such as Barrier Laminate, Nitrile Rubber, Neoprene Rubber, 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 unprotected persons out of treated areas until sprays have dried.

Wear protective clothing when using or handling this product to help avoid exposure to eyes and skin. Gloves, a long-sleeved shirt and long pants are recommended.

Allow spray to dry before allowing adults, children, or pets in treated areas.

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

## **DIRECTIONS**

**Phytotoxicity:** SPHYNX has been evaluated for phytotoxicity on a wide range of plants. However, since testing on all varieties of all plants is not feasible, nor is testing of all possible combinations or sequences of pesticide sprays including fertilizers, surfactants and adjuvants, before making tank mix combinations with SPHYNX, or before making widespread applications, it is recommended to treat a limited number of plants and observe for phytotoxicity over a 10-day period. It is further recommended that spray equipment used to apply SPHYNX be thoroughly cleaned before use.

**Mode of Action:** SPHYNX kills target pests quickly by contact or ingestion. It also kills listed insects by interfering with the molting process and as an adulticide. It is effective on all larva stages, pupae, and adults.

**pH:** The pH should be adjusted to a pH of 5.5-7.0.

Honey Bees: To avoid possible harm to honey bees, apply in early morning or late evening hours.

#### **RATE CHART:**

		Most commonly used rate	Rates for treating high populations of adults and/or hard to kill insects	
SPHYNX	<b>1 Pint per acre</b> 16 fl. oz. (473 ml)	<b>2 Pints per acre</b> 32 fl. oz. (946 ml)	<b>3 Pints per acre</b> 48 fl. oz. (1.42 L)	<b>3.5 Pints per acre</b> 56 fl. oz. (1.66 L)
Acres per Quart	2	1	0.67	0.57
Acres per Gallon	8	4	2.7	2.3

For growing field crop and orchard applications, do not exceed the maximum application rate of 0.050 lb. Pyrethrins / Acre (equivalent to 59 fl. oz. of SPHYNX / Acre) or .0012 lb. Pyrethrins / 1,000 sq. ft. (equivalent to 1.42 fl. oz. SPHYNX / 1,000 sq. ft.).

For surface applications to greenhouse grown crops do not exceed the maximum application rate of 0.050 lb. Pyrethrins / Acre (equivalent to 59 fl. oz. of SPHYNX / Acre) or .0012 lb. Pyrethrins / 1,000 sq. ft. (equivalent to 1.42 fl. oz. of SPHYNX / 1,000 sq. ft.).

For space spray applications to greenhouse grown crops do not exceed the maximum application rate of .00014 lb. Pyrethrins / 1,000 cu. ft. (equivalent to 0.17 fl. oz. or 5.0 mls of SPHYNX / 1,000 cu.ft.).

## **DILUTION RATES**

CONVENTIONAL EQUIPMENT: In sufficient water for thorough coverage. Dilution in a minimum of 30 gallons (114 L) of water per

acre is recommended

HAND SPRAYER: 1-2 fluid ounces (30-60 ml) of SPHYNX per gallon (3.8 L) of water

**AERIAL APPLICATION:** This product may be applied by air at the rate of 16-56 fluid ounces (473 mL-1.9 L) per acre in a

minimum of 25 gallons (95 L) of water

GREENHOUSE: Dilute 53-107 fl. oz. (1567-3164 ml) with 100 gallons (378.54 L) of water for applications with

conventional hydraulic sprayers, or 1 to 2 fl. oz. (30-60 ml) per one gallon (3.8 L) of water, or applications with compressed sprayers. Use 2.3 gallons (8.71 L) of spray solution per 1,000 square

feet (93 m<sup>2</sup>).

## MIXING DIRECTIONS

## **USED ALONE:**

- Mix only enough for immediate use.
- Shake SPHYNX well before using.
- Dilute SPHYNX in sufficient water to obtain thorough coverage.
- Fill clean spray tank 1/2 to 3/4 of the water to be sprayed and begin agitation.
- Add the appropriate amount of SPHYNX to the spray tank.
- Fill the tank with the remaining water and agitate thoroughly.
- Adjust spray solution to pH of 5.5-7.0, if outside of that range.
- · Apply product promptly after mixing.
- Complete coverage of all leaf surfaces is essential for optimum results.
- If the mixture is not applied immediately after mixing, agitate before application.

#### **USED IN A TANK MIX:**

- This product may be tank mixed with most other insecticides, acaricides, fungicides, adjuvants, foliar fertilizers, and wetting agents.
- This application should conform to accepted use precautions and directions for all products in tank mix.
- Tank mix applications must be made in accordance with the more restrictive of label limitations and precautions. No label
  application rates may be exceeded. This product cannot be mixed with any product with label prohibitions against such
  mixing.

**COMPATIBILITY:** Since variation in climatic conditions, cultural practices and other factors can affect compatibility, prior to tank-mixing, a compatibility test should be conducted using the proper proportions of products and water to ensure the physical compatibility of the mixture. To test for compatibility, mix a small amount of each product to the appropriate proportions in a small jar.

#### APPLICATION DIRECTIONS:

Spraying should begin when listed insects first appear. Do not wait until plants are heavily infested. Repeat application as required to maintain effective kill, but not more than every 5-7 days. For foliar application, apply SPHYNX in sufficient spray volume and with adequate spray pressure to ensure complete and thorough coverage of all plant surfaces including both the top and bottom of leaves. Do not wet plants to the point of runoff or drip. Do not apply when wind speed favors drift beyond the area intended for treatment. When pest pressure is extreme or plant canopy is dense, use higher rates and do not reapply within 24 hours. If possible, apply in the early morning or evening hours. The reduced UV exposure and lower temperatures will increase the performance and reduce the impact on pollinators.

SPHYNX may be applied using any powered or manual pesticide application equipment including: high volume, low volume, ultra-low volume, electrostatic, fogging and chemigation. Follow the original manufacturer's instructions when using these types of equipment.

#### SOIL DRENCH DIRECTIONS:

Apply SPHYNX as a drench to soil or non-soil media to kill soil-borne insect larvae (e.g. Fungus Gnats). Apply SPHYNX in sufficient water and for sufficient duration so as to distribute the application rate evenly to the entire treated area. Apply to moderately moist soils.

Use volumes that thoroughly wet the soil, but do not cause significant surface runoff or excessive drip from pots.

## **CHEMIGATION DIRECTIONS:**

Apply this product only through sprinkler (including center pivot, lateral move, end tow, side [wheel] roll, traveler, big gun, solid set, or hand move) irrigation systems. Do not apply this product through any other type of irrigation system.

- Plant injury, lack of effectiveness, or illegal pesticide residues in the plant can result from non-uniform distribution of treated water.
- If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.
- 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 the operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

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. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. 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. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the pump motor stops. The irrigation line or water pump must include a functional pressure valve which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

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.

Do not apply when wind speed favors drift beyond the area intended for treatment. Constant agitation must be maintained in the chemical supply tank during the entire period of insecticide application.

Greater accuracy in calibration and distribution will be achieved by injecting a larger volume of more dilute suspension per unit of time.

#### **INSECTS CONTROLLED**

SPHYNX is labeled for the control of insects including:

**Aphids including:** Apple Aphids, Alfalfa Aphids, Artichoke Aphids, Bean Aphids, Black Maringed Aphids, Black Bean Aphids, Black Peach Aphids, Blue Alfalfa Aphids, Cabbage Aphids, Cotton / Melon Aphids, Cowpea Aphids, European Asparagus Aphids, Filbert Aphids, Foxglove Aphids, Green Peach Aphids, Lettuce Aphids, Lettuce Root Aphids, Melon Aphids, Pea Aphids, Potato Aphids, Rose Aphids, Spotted Alfalfa Aphids, Willow Carrot Aphids

Armyworms, Caterpillars and Loopers including: Alfalfa Caterpillars Artichoke Plume Moths, Bagworms, Beet Armyworms, Black Cutworms, Budworms, Cabbage Loopers, Cankerworms, Carpenterworms, Citrus Cutworms, Corn Earworms, Cross-striped cabbageworms, Cutworms, Diamondback moths, Eastern Tent Caterpillars, Fall Armyworms, Fall Cankerworms, FallWebworms, Filbert Worms, Fireworms, Forest Tent Caterpillars, Garden Webworms, Grapefruit Worms, Grape Leaf Skeletonizers, Green Fruit Worms, Hickory Shuckworms, Hornworms, Imported Cabbageworms, Lawn Armyworms, Lesser Webworm, Loopers, Melonworms, Navel Orangeworms, Oriental Fruit Moths, Pecan Nut Case bearers, Rindworms, Sod Webworms, Southern Armyworms, Soybean Loopers, Saltmarsh Caterpillars, Tent Caterpillars, Tobacco Budworms, Tomato Hornworms, Tomato Fruitworms, Tomato Pinworms, Yellow striped, Armyworms, Walnut Caterpillars Webworms, Western Yellow-Striped Armyworms, Western Grapeleaf Skeletonizers.

Beetles and Weevils including: Alfalfa Weevils, Asparagus Beetles, Bean Beetles, Bean Leaf Beetles, Black Vine Weevils, Blister Beetles, Boll Weevils, Carrot Weevils, Chestnut Weevils Clover Weevils Colorado Potato Beetles, 12-Spotted Cucumber Beetles, Cucumber Beetles, Darkling Beetles (lesser meal worms), Egyptian Alfalfa Weevils, Elm Leaf Beetles, Flea Beetles, Fuller Rose Beetles, Grape Bud Beetles, Japanese Beetles, June Beetles, Mexican Bean Beetles, Navel Orangeworms (NOW), Pecan Weevils, Pink Bollworms, Potato Flea Beetles, Rice Weevils, Rose Chafers, Saw-Toothed Grain Beetles, Strawberry Beetles, Twig Girdlers, All other beetles and weevils.

**Leafrollers including:** Blueberry Leafrollers, Filbert Leafrollers, Fruit Tree Leafrollers, Grape Leafrollers, Oblique Banded Leafrollers, Omnivorous Leafrollers, Orange Tortrix, Western Avocado Leafrollers.

**Borers such as:** European Corn Borers, Pacific Flatheaded Borers, Peach Tree Borers, Peach Twig Borers, Squash Vine Borers, Shotbole Borers, Branch and Twig Borers.

Flies: Australian Sod Flies, Caribbean Fruit Flies, Crane Flies, Fruit Flies, Fungus Gnats, Hessian Flies, Mediterranean Fruit Flies, Melon Flies, Mushroom Flies, Oriental Fruit Flies, Olive Fruit Flies, Sawflies, Shore Flies, Vinegar Flies, Walnut Husk Flies.

**Leafhoppers & Sharpshooters:** Aster Leafhoppers, Beet Leafhoppers, Glassy-winged Sharpshooters, Grape Leafhoppers, Potato Leafhoppers, Variegated Leafhoppers, Three-Cornered Alfalfa hoppers.

Leafminers: Citrus Leafminers, Holly Leafminers, Serpentine Leafminers, Vegetable Leafminers.

**Midges (plant pests):** Millipedes, Onion Maggots, Plant Bugs, Proba Bugs, Scale Insects, Silverfish, Skippers, Soft Scales, Spider Mites, Sowbugs, Spiders (except Black Widow and Brown Recluse Spiders), Springtails, Squash Bugs, Stink Bugs, Tarnished Plant Bugs, Spittle Bugs, Wire worms, European Chafers, Northern Masked Chafers, Southern Masked Chafers, Western Boxelder Bugs.

**Moths:** Artichoke Plume Moths, Codling Moths, Diamondback Moths, European Pine Tip Moths, Grape Berry Moths, Gypsy Moths (adult & larvae), Indian Meal Moths, Mediterranean Flour Moths, Pine Tip Moths, Tussock Moths

Whiteflies: Greenhouse Whiteflies, Silverleaf Whiteflies, Sweetpotato Whiteflies,

Other: Ants (except Pharaoh, Harvester, Carpenter and Fire Ants), Apple Maggots, Billbugs, Brown Marmorated Stinkbugs, Cabbage Maggots, Clover Mites, Cutworms, Crickets, Dichondra Flea Beetles, Earwigs, Firebrats, False Chinch Bugs, Garden Symphylan, Garden Tortrix, Glassy Winged Sharpshooters, Grasshoppers, Harlequin Bugs, Grape Phylloxera, Katydids, Leaffooted Plant Bug, Lace Bugs, Leaf tiers, Lice, Lygus, Lace bug, Mealybugs (all)

Psyllids: Pear Psylla

**Thrips:** Avocado thrips, Citrus Thrips, Flower Thrips, Greenhouse Thrips, Thrips Palmi, Northern Masked Chafers, Southern Masked Chafers, Western Flower Thrips

## FOR USE ON GROWING CROPS (OUTDOORS AND IN GREENHOUSES):

ROOT AND TUBER VEGETABLES: Including: Arracacha, Arrowroot, Purple Arrowroot, Japanese Artichokes, Jerusalem Artichokes, Garden Beets, Sugar Beets, Edible Burdock, Edible Canna, Carrots, Cassava (bitter or sweet), Celeriac, Celery Root, Chayote (root), Chervil (turnip rooted), Chicory, Chufa, Dasheen (Taro), Ginger, Ginseng, Horseradish, Jicama, Leren, Parsley (turnip rooted), Parsnips, Potatoes, Radishes, Japanese Radishes (Daikon), Rutabaga, Salsify (oyster plant, black, Spanish), Skirret, Sweet Potatoes, Tanier, Turmeric, Turnips, Yam Beans (jicama, manioc pea), Yams (true).

**LEAVES OF ROOT AND TUBER VEGETABLES:** Including: Garden Beets, Sugar Beets, Edible Burdock, Carrots, Cassava (bitter and sweet), Celeriac (celery root), Chervil (turnip-rooted), Chicory, Dasheen (Taro), Parsnips, Radishes, Oriental Radishes (Daikon), Rutabaga, Salsify (black), Sweet Potatoes, Tanier, Turnips, Yams (true).

BULB VEGETABLES: Including: Garlic, Great-headed Garlic, Leeks, Onions (bulb and green), Shallots, Welch.

**LEAFY VEGETABLES:** Including: Amaranth (Leafy Amaranth, Chinese Spinach, Tampala), Arugula, Cardoon, Celery, Chinese Celery, Celtuce, Chervil, Corn Salad, Chrysanthemum (edible-leaved), Chrysanthemum (garland), Cress (garden, water), Upland Cress (yellow rocket, winter cress), Dandelion, Dock (sorrel), Endive (escarole), Fennel (Florence), Leeks, Lettuce (head and leafy), Mustard Greens, Orach, Parsley, Purslane (garden & winter), Radicchio, Rhubarb, Spinach, Fine Spinach (Malabar, Ceylon), Spinach (New Zealand), Swiss Chard, Turnip Greens, Watercress.

**BRASSICA (COLE) LEAFY VEGETABLES:** Including: Broccoli, Chinese Broccoli (Gai Lan), Broccoli raab (Rapini), Brussels Sprouts, Cabbage, Chinese Cabbage (Bok Choy), Chinese Cabbage (Napa), Chinese Mustard Cabbage (Gai Choy), Cauliflower, Cavalo broccolo, Collards, Kale (Flowering, Chinese), Kohlrabi, Mizuna, Mustard Greens, Mustard Spinach, Rape Greens.

LEGUME VEGETABLES (SUCCULENT OR DRIED): Including: Adzuki Beans, Field Beans, Kidney Beans, Lima Beans, Moth Beans, Mung Beans, Navy Beans, Pinto Beans, Rice Beans, Runner Beans, Snap Beans, Tepary Beans, Urd Beans, Wax Beans, Asparagus Beans, Black-eyed Peas, Catjang, Chinese Longbeans, Cowpeas, Crowder Peas, Southern Peas, Yard-Longbeans, Broad Beans, (Fava Beans), Chick Peas (Garbanzo Beans), Guar, Jackbean (Sword Bean), Lablab Bean (Hyacinth Bean), Lentils, Peas (Garden Peas, Field Peas, Sugar Snap Peas, English Pea, Snow Pea), Pigeon Peas, Soybeans, Sweet Lupin Beans, White Lupin Beans, White Sweet Lupin, Sword Bean.

**FOLIAGE OF LEGUME VEGETABLES:** Including: Plant part of any legume vegetable included in the legume vegetable group that will be used as animal feed including any variety of Beans, Field Peas, Soybeans.

**FRUITING VEGETABLES:** Including: Eggplant, Ground Cherry, Okra, Pepinos, Pepper (Bell Pepper, Chili Pepper, Cooking Peppers, Pimentos, Sweet Peppers), Tomatillo, Tomatoes.

**CUCURBIT VEGETABLES:** Including: Balsam Apple, Balsam Pear (Bitter Melon), Chayote (fruit), Chinese Waxgourd (Chinese preserving melon), Chinese Cucumber, Citron Melon, Cucumber, Gherkin, Edible Gourds, Mangoes, Melons (including hybrids, Cantaloupe, Casaba, Charentais, Crenshaw, Golden Pershaw Melon, Honeydew Melons, Honey Balls, Mango Melon, Muskmelon, Persian Melon, Pineapple Melon, Santa Claus Melon, Snake Melon, Pumpkin, Squash (summer & winter), Watermelon (OP & hybrids, seeded and seedless).

**CITRUS FRUITS:** Including: Calamondin, Citrus Citron, Citrus Hybrids, Grapefruit, Kumquats, Lemons, Limes, Mandarin (Tangerine), Orange (sweet & sour), Pummelo, Satsuma Mandarin, (Citrus spp. Includes Chironja, Tangelos, Tangors), Unique Fruit, White Sapote.

POME FRUITS: Apple, Crabapple, Loquat, Mayhaw, Oriental Pear, Pear, Quince.

**STONE FRUITS:** Apricot, Cherry (sweet & sour), Nectarine, Peach, Plum, Prune, Chickasaw Plum, Damson Plum, Japanese Plum, Plumcot.

**SMALL FRUITS AND BERRIES:** Blackberry, Blueberry, Boysenberries, Cranberry, Currant, Dewberry, Elderberry, Gooseberry, Guava, Grape, Huckleberry, Loganberry, Olallie Berry, Raspberry (black & red), Strawberry, Youngberry.

**TREE NUTS:** Almond, Beech Nut, Brazil Nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert (hazelnut), Hickory nut, Macadamia Nut (Bush Nut), Pecan, Pistachio, Walnut (Black, English, Persian).

TROPICAL FRUITS: Papaya, Black Sapote, Canistel, Mango, Sapodilla, Star Apple, Guava, Biriba.

**CEREAL GRAINS:** Barley, Buckwheat, Corn (sweet and field), Millet, Proso, Oats, Pearl Millet, Popcorn, Rice, Rye, Sorghum (Milo), Teosine, Triticale, Wheat, Wild Rice.

**FORAGE, FODDER AND STRAW OF CEREAL GRAINS:** Barley; buckwheat; corn (sweet and field); millet; proso; oats; pearl; popcorn; rice; rye; sorghum (milo); teosine; triticale; wheat; wild rice.

**GRASSES FOR SEED, FORAGE, FODDER AND HAY**: any grass (all Gramineacea), (green or cured), except sugarcane and those listed in the cereal grains group) that will be fed to or grazed by livestock, all Pasture and Range Grasses and Grasses grown for hay and silage, Sudangrass, Bermuda Grass, Bluegrass, Bromegrass, Fescue, Orchard, Timothy.

NON-GRASS ANIMAL FEEDS: Alfalfa, Velvet Bean, Clover (White, Ladino, Red), Kudzu, Lespedeza, Lupine, Sainfoin, Trefoil, Crown Vetch, Milk Vetch.

HERBS AND SPICES: Allspice, Angelica, Anise (anise seed), Anise [star], Annatto (seed), Balm (lemon balm), Basil, Borage, Burnet, Chamomile, Caper buds, Caraway, Caraway [black], Cardamom, Cassia bark, Cassia buds, Catnip, Celery seed, Chervil (dried), Chicory, Chive, Chive [Chinese], Cinnamon, Clary, Clove buds, Coriander (cilantro or Chinese parsley) (leaf), Coriander (cilantro) (seed), Costmary, Cilantro (leaf), Cilantro (seed), Cumin, Curry (leaf), Dandelion, Dill (dillweed), Dill (seed), Fennel (common), Fennel [Florence] (seed), Fenugreek, Grains of paradise, Horehound, Hyssop, Juniper berry, Lavender, Lemongrass, Lovage (leaf), Lovage (seed), Mace, Marigold, Marjoram (includes sweet or annual marjoram, wild marjoram or oregano, and pot marjoram), Mint, Mustard (seed), Nasturtium, Nutmeg, Oregano, Mint, Paprika, Parsley (dried), Pennyroyal, Pepper [black], Pepper [white], Peppermint, Poppy (seed), Rosemary, Rue, Saffron, Sage, Savory [summer and winter], Sweet bay (bay leaf), Tansy, Tarragon, Thyme, Vanilla, Wintergreen, Woodruff, Wormwood.

OIL SEED GROUP: Cottonseed, Jojoba.

ADDITIONAL CROPS: Acerola, Artichoke, Asparagus, Avocado, Atemoya, Bananas, Barbados Cherry, Birdseed, Cacao, Canistel, Carob, Cherimoya, Cocoa, Coffee, Custard Apple, Dates, Durian (Jackfruit), Edible Flowers, Feijoa, Figs, Globe Artichoke, Guayule, Hops, Jaboticaba, Llama, Longan, Lychee, Mangoes, Mamey Sapote, Mushroom, Okra, Olives, Palm, Papaya, Passion fruit, Peanuts, Persimmon, Pineapple, Pomegranate, Pulasan, Rambutan, Safflowers, Sapodilla, Sesame, Soursop and Biriba, Spanish Lime, Star Apple, Sugar Cane, Star Fruit, Sugar Apple, Sunflower, Tamarillo, Tea, Tobacco, Water chestnut and Wax Jambu.

## STORAGE AND DISPOSAL:

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

PESTICIDE STORAGE: Store in a cool, dry place away from heat or open flame in an area that is inaccessible to children and animals.

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

<u>CONTAINER HANDLING</u>: Nonrefillable 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 1/4 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 reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

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 a 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. Offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

#### **CONDITIONS OF SALE**

This product conforms to the description set forth on this label and is reasonably fit for the purposes described herein when used according to the label directions and specified conditions. The manufacturer disclaims any and all other express or implied warranties of merchantability and fitness for particular purpose. To the extent consistent with applicable law, buyers and users shall assume all risk and responsibility for potential loss or damage if this product is used, stored, handled or applied in a manner inconsistent with this labeling. To the extent permitted by law, manufacturer shall not be liable for more than the purchase price for the quantity involved including incidental, consequential or special damages.



## **SUB-LABEL B:**

## For Gardening / Residential Use



## **ACTIVE INGREDIENTS:**

Pyrethrins	1.40%
Azadirachtin	1.20%
OTHER INGREDIENTS	<u>97.40%</u>
TOTAL	100.00%

Contains 0.10 lbs of azadirachtin and 0.11 lbs of pyrethrins per gallon.

# KEEP OUT OF REACH OF CHILDREN CAUTION PRECAUCIÓN

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

	FIRST AID
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>
IF 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 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 do so by the poison control center or doctor</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
	or label with you when calling a poison control center or doctor, or going for treatment. For eat emergencies or pesticide incidents, call 1-888-740-8712.

## LAM INTERNATIONAL CORPORATION

117 S. Parkmont; P.O. Box 4109-Butte, MT 59702; Ph: (406)782-2386; Fax: (406)782-9912

EPA Reg. No. 82074-XX EPA Est. Number 65626-MT-02

Ν	let	Contents:	

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

## CAUTION

Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash hands thoroughly with plenty of soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Wear protective eyewear. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wear long-sleeved shirt and long pants, socks, shoes and chemical-resistant gloves (such as barrier laminate, nitrile rubber, neoprene rubber, or viton).

#### **ENVIRONMENTAL HAZARDS**

To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters, or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area.

This product is toxic to aquatic organisms, including fish and invertebrates. Drift and run-off may be hazardous to aquatic organisms in water adjacent to treated areas. This product may contaminate water through run-off. This product has a potential for run-off for several weeks after application. Poorly draining soils and soils with shallow water tables are more prone to produce run-off that contains this product.

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

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 wash-waters or rinsate. See Directions for Use for additional precautions and restrictions.

#### PHYSICAL OR CHEMICAL HAZARDS

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

#### **DIRECTIONS FOR USE**

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

#### **RESTRICTIONS:**

- Apply this product only as specified on this label.
- Do not contaminate food or feedstuffs.
- Do not apply this product in a way that will contact workers or other persons, either directly or through spraydrift.
- Do not allow adults, children, or pets to enter the treated area until sprays have dried.
- Do not remain in treated area. Exit area immediately and remain outside the treated area until vapors, mists and aerosols have dispersed.
- Do not wet plants to the point of runoff or drip.
- Do not apply directly to or near water, storm drains or drainage ditches. Do not apply when windy.
- Rinse applicator over lawn or garden area only.
- To avoid possible harm to honey bees, it is advisable to apply in the early morning or late evening hours.
- Do not apply more than 1 time per day.
- Do not apply more than 10 times per season.
- In case of extreme pest pressure, do not reapply within 24 hours.
- Do not reapply within 3 days except under extreme pest pressure.
- Do not make applications during rain.
- Not for use in indoor or outdoor residential misting systems.

#### **DIRECTIONS**

**Phytotoxicity:** AZERA® GARDENING has been evaluated for phytotoxicity on a wide range of plants. However, since testing on all varieties of all plants is not feasible, nor is testing of all possible combinations or sequences of pesticide sprays including fertilizers, surfactants and adjuvants, before making tank mix combinations with AZERA® GARDENING, or before making widespread applications, it is recommended to treat a limited number of plants and observe for phytotoxicity over a 10-day period. It is further recommended that spray equipment used to apply MGK - 2905 be thoroughly cleaned before use.

**Mode of Action:** AZERA® GARDENING kills target pests quickly by contact or ingestion. It also kills listed insects by interfering with the molting process and as a adulticide. It is effective on all larva stages, pupae, and adults.

pH: The pH should be adjusted to a pH of 5.5-7.0.

Honey Bees: To avoid possible harm to honey bees, it is advisable to apply in early morning or late evening hours.

## **RATE CHART:**

		Most commonly used rate	Rates for treating high populations of adults and/or hard to kill insects	
SPHYNX	<b>1 Pint per acre</b> 16 fl. oz. (473 ml)	<b>2 Pints per acre</b> 32 fl. oz. (946 ml)	<b>3 Pints per acre</b> 48 fl. oz. (1.42 L)	<b>3.5 Pints per acre</b> 56 fl. oz. (1.66 L)
Acres per Quart	2	1	0.67	0.57
Acres per Gallon	8	4	2.7	2.3

#### **DILUTION RATES**

**CONVENTIONAL EQUIPMENT:** In sufficient water for thorough coverage. Dilution in a minimum of 30 gallons (114 L) of water per

acre is recommended

HAND SPRAYER: 1-2 fluid ounces (30-60 ml) of SPHYNX per gallon (3.8 L) of water

**GREENHOUSE:** Dilute 53-107 fl. oz. (1567-3164 ml) with 100 gallons (378.54 L) of water for applications with

conventional hydraulic sprayers, or 1 to 2 fl. oz. (30-60 ml) per one gallon (3.8 L) of water, or applications with compressed sprayers. Use 2.3 gallons (8.71 L) of spray solution per 1,000 square

feet (93 m<sup>2</sup>).

## **MIXING DIRECTIONS**

#### **USED ALONE:**

- Mix only enough for immediate use.
- · Shake SPHYNX well before using.
- Dilute SPHYNX in sufficient water to obtain thorough coverage.
- Fill clean spray tank 1/2 to 3/4 of the water to be sprayed and begin agitation.
- Add the appropriate amount of SPHYNX to the spray tank.
- Fill the tank with the remaining water and agitate thoroughly.
- Adjust spray solution to pH of 5.5-7.0, if outside of that range.
- Apply product promptly after mixing.
- Complete coverage of all leaf surfaces is essential for optimum results.
- If the mixture is not applied immediately after mixing, agitate before application.

## **APPLICATION DIRECTIONS:**

Spraying should begin when listed insects first appear. Do not wait until plants are heavily infested. Repeat application as required to maintain effective kill, but not more than every 5-7 days. For foliar application, apply SPHYNX in sufficient spray volume and with adequate spray pressure to ensure complete and thorough coverage of all plant surfaces including both the top and bottom of leaves. Do not wet plants to the point of runoff or drip. Do not apply when wind speed favors drift beyond the area intended for treatment. When pest pressure is extreme or plant canopy is dense, use higher rates and do not reapply within 24 hours. If possible, apply in the early morning or evening hours. The reduced UV exposure and lower temperatures will increase the performance and reduce the impact on pollinators.

#### INSECTS CONTROLLED

SPHYNX is labeled for the control of insects including:

**Aphids including:** Apple Aphids, Alfalfa Aphids, Artichoke Aphids, Bean Aphids, Black Maringed Aphids, Black Bean Aphids, Black Peach Aphids, Blue Alfalfa Aphids, Cabbage Aphids, Cotton / Melon Aphids, Cowpea Aphids, European Asparagus Aphids, Filbert Aphids, Foxglove Aphids, Green Peach Aphids, Lettuce Aphids, Lettuce Root Aphids, Melon Aphids, Pea Aphids, Potato Aphids, Rose Aphids, Spotted Alfalfa Aphids, Willow Carrot Aphids

Armyworms, Caterpillars and Loopers including: Alfalfa Caterpillars Artichoke Plume Moths, Bagworms, Beet Armyworms, Black Cutworms, Budworms, Cabbage Loopers, Cankerworms, Carpenterworms, Citrus Cutworms, Corn Earworms, Cross-striped cabbageworms, Cutworms, Diamondback moths, Eastern Tent Caterpillars, Fall Armyworms, Fall Cankerworms, FallWebworms, Filbert Worms, Fireworms, Forest Tent Caterpillars, Garden Webworms, Grapefruit Worms, Grape Leaf Skeletonizers, Green Fruit Worms, Hickory Shuckworms, Hornworms, Imported Cabbageworms, Lawn Armyworms, Lesser Webworm, Loopers, Melonworms, Navel Orangeworms, Oriental Fruit Moths, Pecan Nut Case bearers, Rindworms, Sod Webworms, Southern Armyworms, Soybean Loopers, Saltmarsh Caterpillars, Tent Caterpillars, Tobacco Budworms, Tomato Hornworms, Tomato Fruitworms, Tomato Pinworms, Yellow striped, Armyworms, Walnut Caterpillars Webworms, Western Yellow-Striped Armyworms, Western Grapeleaf Skeletonizers.

Beetles and Weevils including: Alfalfa Weevils, Asparagus Beetles, Bean Beetles, Bean Leaf Beetles, Black Vine Weevils, Blister Beetles, Boll Weevils, Carrot Weevils, Chestnut Weevils Clover Weevils Colorado Potato Beetles, 12-Spotted Cucumber Beetles, Cucumber Beetles, Darkling Beetles (lesser meal worms), Egyptian Alfalfa Weevils, Elm Leaf Beetles, Flea Beetles, Fuller Rose Beetles, Grape Bud Beetles, Japanese Beetles, June Beetles, Mexican Bean Beetles, Navel Orangeworms (NOW), Pecan Weevils, Pink Bollworms, Potato Flea Beetles, Rice Weevils, Rose Chafers, Saw-Toothed Grain Beetles, Strawberry Beetles, Twig Girdlers, All other beetles and weevils.

**Leafrollers including:** Blueberry Leafrollers, Filbert Leafrollers, Fruit Tree Leafrollers, Grape Leafrollers, Oblique Banded Leafrollers, Omnivorous Leafrollers, Orange Tortrix, Western Avocado Leafrollers.

**Borers such as:** European Corn Borers, Pacific Flatheaded Borers, Peach Tree Borers, Peach Twig Borers, Squash Vine Borers, Shotbole Borers, Branch and Twig Borers.

Flies: Australian Sod Flies, Caribbean Fruit Flies, Crane Flies, Fruit Flies, Fungus Gnats, Hessian Flies, Mediterranean Fruit Flies, Melon Flies, Mushroom Flies, Oriental Fruit Flies, Olive Fruit Flies, Sawflies, Shore Flies, Vinegar Flies, Walnut Husk Flies.

**Leafhoppers & Sharpshooters:** Aster Leafhoppers, Beet Leafhoppers, Glassy-winged Sharpshooters, Grape Leafhoppers, Potato Leafhoppers, Variegated Leafhoppers, Three-Cornered Alfalfa hoppers.

Leafminers: Citrus Leafminers, Holly Leafminers, Serpentine Leafminers, Vegetable Leafminers.

**Midges (plant pests):** Millipedes, Onion Maggots, Plant Bugs, Proba Bugs, Scale Insects, Silverfish, Skippers, Soft Scales, Spider Mites, Sowbugs, Spiders (except Black Widow and Brown Recluse Spiders), Springtails, Squash Bugs, Stink Bugs, Tarnished Plant Bugs, Spittle Bugs, Wire worms, European Chafers, Northern Masked Chafers, Southern Masked Chafers, Western Boxelder Bugs.

**Moths:** Artichoke Plume Moths, Codling Moths, Diamondback Moths, European Pine Tip Moths, Grape Berry Moths, Gypsy Moths (adult & larvae), Indian Meal Moths, Mediterranean Flour Moths, Pine Tip Moths, Tussock Moths

Whiteflies: Greenhouse Whiteflies, Silverleaf Whiteflies, Sweetpotato Whiteflies,

Other: Ants (except Pharaoh, Harvester, Carpenter and Fire Ants), Apple Maggots, Billbugs, Brown Marmorated Stinkbugs, Cabbage Maggots, Clover Mites, Cutworms, Crickets, Dichondra Flea Beetles, Earwigs, Firebrats, False Chinch Bugs, Garden Symphylan, Garden Tortrix, Glassy Winged Sharpshooters, Grasshoppers, Harlequin Bugs, Grape Phylloxera, Katydids, Leaffooted Plant Bug, Lace Bugs, Leaf tiers, Lice, Lygus, Lace bug, Mealybugs (all)

Psyllids: Pear Psylla

**Thrips:** Avocado thrips, Citrus Thrips, Flower Thrips, Greenhouse Thrips, Thrips Palmi, Northern Masked Chafers, Southern Masked Chafers, Western Flower Thrips

#### FOR USE ON VEGETABLES, FRUITS, HERBS, AND SPICES IN RESIDENTIAL GARDENS:

ROOT AND TUBER VEGETABLES: Including: Arracacha, Arrowroot, Purple Arrowroot, Japanese Artichokes, Jerusalem Artichokes, Garden Beets, Sugar Beets, Edible Burdock, Edible Canna, Carrots, Cassava (bitter or sweet), Celeriac, Celery Root, Chayote (root), Chervil (turnip rooted), Chicory, Chufa, Dasheen (Taro), Ginger, Ginseng, Horseradish, Jicama, Leren, Parsley (turnip rooted), Parsnips, Potatoes, Radishes, Japanese Radishes (Daikon), Rutabaga, Salsify (oyster plant, black, Spanish), Skirret, Sweet Potatoes, Tanier, Turmeric, Turnips, Yam Beans (jicama, manioc pea), Yams (true).

**LEAVES OF ROOT AND TUBER VEGETABLES:** Including: Garden Beets, Sugar Beets, Edible Burdock, Carrots, Cassava (bitter and sweet), Celeriac (celery root), Chervil (turnip-rooted), Chicory, Dasheen (Taro), Parsnips, Radishes, Oriental Radishes (Daikon), Rutabaga, Salsify (black), Sweet Potatoes, Tanier, Turnips, Yams (true).

BULB VEGETABLES: Including: Garlic, Great-headed Garlic, Leeks, Onions (bulb and green), Shallots, Welch.

**LEAFY VEGETABLES:** Including: Amaranth (Leafy Amaranth, Chinese Spinach, Tampala), Arugula, Cardoon, Celery, Chinese Celery, Celtuce, Chervil, Corn Salad, Chrysanthemum (edible-leaved), Chrysanthemum (garland), Cress (garden, water), Upland Cress (yellow rocket, winter cress), Dandelion, Dock (sorrel), Endive (escarole), Fennel (Florence), Leeks, Lettuce (head and leafy), Mustard Greens, Orach, Parsley, Purslane (garden & winter), Radicchio, Rhubarb, Spinach, Fine Spinach (Malabar, Ceylon), Spinach (New Zealand), Swiss Chard, Turnip Greens, Watercress.

BRASSICA (COLE) LEAFY VEGETABLES: Including: Broccoli, Chinese Broccoli (Gai Lan), Broccoli raab (Rapini), Brussels Sprouts, Cabbage, Chinese Cabbage (Bok Choy), Chinese Cabbage (Napa), Chinese Mustard Cabbage (Gai Choy), Cauliflower, Cavalo broccolo, Collards, Kale (Flowering, Chinese), Kohlrabi, Mizuna, Mustard Greens, Mustard Spinach, Rape Greens.

**LEGUME VEGETABLES (SUCCULENT OR DRIED):** Including: Adzuki Beans, Field Beans, Kidney Beans, Lima Beans, Moth Beans, Mung Beans, Navy Beans, Pinto Beans, Rice Beans, Runner Beans, Snap Beans, Tepary Beans, Urd Beans, Wax Beans, Asparagus Beans, Black-eyed Peas, Catjang, Chinese Longbeans, Cowpeas, Crowder Peas, Southern Peas, Yard-Longbeans, Broad Beans, (Fava Beans), Chick Peas (Garbanzo Beans), Guar, Jackbean (Sword Bean), Lablab Bean (Hyacinth Bean), Lentils, Peas (Garden Peas, Field Peas, Sugar Snap Peas, English Pea, Snow Pea), Pigeon Peas, Soybeans, Sweet Lupin Beans, White Lupin Beans, White Sweet Lupin, Sword Bean.

**FOLIAGE OF LEGUME VEGETABLES:** Including: Plant part of any legume vegetable included in the legume vegetable group that will be used as animal feed including any variety of Beans, Field Peas, Soybeans.

**FRUITING VEGETABLES:** Including: Eggplant, Ground Cherry, Okra, Pepinos, Pepper (Bell Pepper, Chili Pepper, Cooking Peppers, Pimentos, Sweet Peppers), Tomatillo, Tomatoes.

**CUCURBIT VEGETABLES:** Including: Balsam Apple, Balsam Pear (Bitter Melon), Chayote (fruit), Chinese Waxgourd (Chinese preserving melon), Chinese Cucumber, Citron Melon, Cucumber, Gherkin, Edible Gourds, Mangoes, Melons (including hybrids, Cantaloupe, Casaba, Charentais, Crenshaw, Golden Pershaw Melon, Honeydew Melons, Honey Balls, Mango Melon, Muskmelon, Persian Melon, Pineapple Melon, Santa Claus Melon, Snake Melon, Pumpkin, Squash (summer & winter), Watermelon (OP & hybrids, seeded and seedless).

**CITRUS FRUITS:** Including: Calamondin, Citrus Citron, Citrus Hybrids, Grapefruit, Kumquats, Lemons, Limes, Mandarin (Tangerine), Orange (sweet & sour), Pummelo, Satsuma Mandarin, (Citrus spp. Includes Chironja, Tangelos, Tangors), Unique Fruit, White Sapote.

POME FRUITS: Apple, Crabapple, Loquat, Mayhaw, Oriental Pear, Pear, Quince.

**STONE FRUITS:** Apricot, Cherry (sweet & sour), Nectarine, Peach, Plum, Prune, Chickasaw Plum, Damson Plum, Japanese Plum, Plumcot.

**SMALL FRUITS AND BERRIES:** Blackberry, Blueberry, Boysenberries, Cranberry, Currant, Dewberry, Elderberry, Gooseberry, Guava, Grape, Huckleberry, Loganberry, Olallie Berry, Raspberry (black & red), Strawberry, Youngberry.

**TREE NUTS:** Almond, Beech Nut, Brazil Nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert (hazelnut), Hickory nut, Macadamia Nut (Bush Nut), Pecan, Pistachio, Walnut (Black, English, Persian).

TROPICAL FRUITS: Papaya, Black Sapote, Canistel, Mango, Sapodilla, Star Apple, Guava, Biriba.

**CEREAL GRAINS:** Barley, Buckwheat, Corn (sweet and field), Millet, Proso, Oats, Pearl Millet, Popcorn, Rice, Rye, Sorghum (Milo), Teosine, Triticale, Wheat, Wild Rice.

**FORAGE, FODDER AND STRAW OF CEREAL GRAINS:** Barley; buckwheat; corn (sweet and field); millet; proso; oats; pearl; popcorn; rice; rye; sorghum (milo); teosine; triticale; wheat; wild rice.

**GRASSES FOR SEED, FORAGE, FODDER AND HAY**: any grass (all Gramineacea), (green or cured), except sugarcane and those listed in the cereal grains group) that will be fed to or grazed by livestock, all Pasture and Range Grasses and Grasses grown for hay and silage, Sudangrass, Bermuda Grass, Bluegrass, Bromegrass, Fescue, Orchard, Timothy.

**NON-GRASS ANIMAL FEEDS:** Alfalfa, Velvet Bean, Clover (White, Ladino, Red), Kudzu, Lespedeza, Lupine, Sainfoin, Trefoil, Crown Vetch, Milk Vetch.

HERBS AND SPICES: Allspice, Angelica, Anise (anise seed), Anise [star], Annatto (seed), Balm (lemon balm), Basil, Borage, Burnet, Chamomile, Caper buds, Caraway, Caraway [black], Cardamom, Cassia bark, Cassia buds, Catnip, Celery seed, Chervil (dried), Chicory, Chive, Chive [Chinese], Cinnamon, Clary, Clove buds, Coriander (cilantro or Chinese parsley) (leaf), Coriander (cilantro) (seed), Costmary, Cilantro (leaf), Cilantro (seed), Cumin, Curry (leaf), Dandelion, Dill (dillweed), Dill (seed), Fennel (common), Fennel [Florence] (seed), Fenugreek, Grains of paradise, Horehound, Hyssop, Juniper berry, Lavender, Lemongrass, Lovage (leaf), Lovage (seed), Mace, Marigold, Marjoram (includes sweet or annual marjoram, wild marjoram or oregano, and pot marjoram), Mint, Mustard (seed), Nasturtium, Nutmeg, Oregano, Mint, Paprika, Parsley (dried), Pennyroyal, Pepper [black], Pepper [white], Peppermint, Poppy (seed), Rosemary, Rue, Saffron, Sage, Savory [summer and winter], Sweet bay (bay leaf), Tansy, Tarragon, Thyme, Vanilla, Wintergreen, Woodruff, Wormwood.

OIL SEED GROUP: Cottonseed, Jojoba.

ADDITIONAL CROPS: Acerola, Artichoke, Asparagus, Avocado, Atemoya, Bananas, Barbados Cherry, Birdseed, Cacao, Canistel, Carob, Cherimoya, Cocoa, Coffee, Custard Apple, Dates, Durian (Jackfruit), Edible Flowers, Feijoa, Figs, Globe Artichoke, Guayule, Hops, Jaboticaba, Llama, Longan, Lychee, Mangoes, Mamey Sapote, Mushroom, Okra, Olives, Palm, Papaya, Passion fruit, Peanuts, Persimmon, Pineapple, Pomegranate, Pulasan, Rambutan, Safflowers, Sapodilla, Sesame, Soursop and Biriba, Spanish Lime, Star Apple, Sugar Cane, Star Fruit, Sugar Apple, Sunflower, Tamarillo, Tea, Tobacco, Water chestnut and Wax Jambu.

## FOR USE ON GROWING PLANTS (OUTDOORS):

BEDDING PLANTS, FLOWERS, POTTED PLANTS AND FOLIAGE: Actinopteris, Aglaonema, Allamanda, Algerian Ivy, Alocasia, Anthurium, Aphelandra, Artemisia, Aster, Aucuba Illex, Azalea, Baby's Breath, Begonia, Bougainvillea, Boston Fern, Boxwood, Brachycome, Cacti, Calabrese, Caladium, Calla, Calathea, Calendula, Carnation, Chrysanthemum, Coleus, Columbine, Dahlia, Daisy, Daylily, Delphinium, Dianthus, Dieffenbachia, Dusty Miller, Easter Lily, English Ivy, Euphorbia, Fern, Ficus, Foxglove, Freesia, Fuchsia, Gaillardia, Gardenia, Geranium, Gerbera, Gladioli, Gypsophila, Hedera, Hibiscus, Impatiens, Iris, Lily, Mandevilla, Marigold, Nasturtium, Pansy, Pelargonium, Peony, Peperomia, Petunia, Philodendron, Phlox, Photinia, Pittosporum, Pinks, Poinsettia, Pothos, Portulaca, Rosemary, Rose, Rubber plant, Salvia, Schefflera, Sedum, Sempervivum, Snapdragon, Spathiphyllum, Stock, Syngonium, Verbena, Vinca, Wander Jew, Zinnia.

ORNAMENTALS: African Violet, Ageratum, Arborvitae, Aster, Aucuba Illex, Azalea, Begonia, Boxwood, Cacti, Calceolaria, Calendula, Calla, Camellia, Carnation, Ceanothus, Chrysanthemum, Cineraria, Coleus, Cotoneaster, Cyclamen, Cypress, Daffodil, Dahlia, Delphinium, Dogwood, Elm, Eucalyptus, Fern, Ficus, Foliage Plants, Fuchsia, Gardenia, Geranium, Gladiolus, Gloxinia, Gypsophila, Holly, Hyacinth, Hydrangea, Iris, Ivy, Lily, Maidenhair Fern, Marigold, Narcissus, Orchid, Palm, Pansy, Peony, Pelargonium, Petunia, Philodendron, Phlox, Photinia, Pine, Pyracantha, Rhododendron, Roses, Rubber Plant, Snapdragon, Stock, Sweet Pea, Tulips, Viburnum, Wandering Jew, White Cedar, White Pine, Yew, Yucca, Zinnia

TREES AND SHRUBS: Andromeda, Arborvitae, Ash, Austrian Pine, Azalea, Beech, Birch, Birds Nest Spruce, Blue Spruce, Boxwood, Butternut, Cedar, Chamaecyparis, Cherry, Crabapple, Cotoneaster, Cyprus, Dogwood, Douglas Fir, Elm, Euonymus, Fir, Firethorn, Forsythia, Hackberry, Hawthorn, Hemlock, Hickory, Holly, Honey Locust, Horse Chestnut, Juniper, Larch, Laurel, Lilac, Linden, London Plane, Magnolia, Mandevilla, Maple, Mimosa, Mountain Ash, Myrtle, Oak, Pachysandra, Peach, Pine, Planetree, Poplar, Privet, Quince, Spruce, Sycamore, Tulip Tree, Viburnum, Willow.

TURF GRASS: Residential Yards and other Recreational Turf Areas.

#### STORAGE AND DISPOSAL:

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

PESTICIDE STORAGE: Store in a cool, dry place away from heat or open flame in an area that is inaccessible to children and animals.

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

CONTAINER HANDLING: Nonrefillable container. Do not reuse or refill this container.

If empty: Offer for recycling, if available.

If partially filled: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

#### **CONDITIONS OF SALE**

This product conforms to the description set forth on this label and is reasonably fit for the purposes described herein when used according to the label directions and specified conditions. The manufacturer disclaims any and all other express or implied warranties of merchantability and fitness for particular purpose. To the extent consistent with applicable law, buyers and users shall assume all risk and responsibility for potential loss or damage if this product is used, stored, handled or applied in a manner inconsistent with this labeling. To the extent permitted by law, manufacturer shall not be liable for more than the purchase price for the quantity involved including incidental, consequential or special damages.



## **SUB-LABEL C:**

## For Greenhouse Use



## **ACTIVE INGREDIENTS:**

Pyrethrins	1.40%
Azadirachtin	1.20%
OTHER INGREDIENTS	<u>97.40%</u>
TOTAL	100.00%

Contains 0.10 lbs of azadirachtin and 0.11 lbs of pyrethrins per gallon.

## KEEP OUT OF REACH OF CHILDREN **CAUTION PRECAUCIÓN**

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

FIRST AID		
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>	
IF 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 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 do so by the poison control center or doctor</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>	

information regarding medical emergencies or pesticide incidents, call 1-888-740-8712.

## LAM INTERNATIONAL CORPORATION

117 S. Parkmont; P.O. Box 4109-Butte, MT 59702; Ph: (406)782-2386; Fax: (406)782-9912

EPA Reg. No. 82074-XX EPA Est. Number 65626-MT-02

Net Conter	its:

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

## CAUTION

Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash hands thoroughly with plenty of soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Wear protective eyewear. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wear long-sleeved shirt and long pants, socks, shoes and chemical-resistant gloves (such as barrier laminate, nitrile rubber, neoprene rubber, or viton).

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are made of barrier laminate, nitrile or neoprene rubber or viton. Mixers, loaders, applicators, and other handlers must wear the following:

- Long-sleeved shirt
- Long pants
- Shoes and socks
- Chemical-resistant gloves

In addition to the above PPE, applicators using hand held foggers in an enclosed area must wear a half-face, full-face, or hood-style NIOSH approved respirator with:

- A NIOSH approved particulate filter with any R or P filter with NIOSH approval number prefix TC-84A
- A NIOSH approved powered air purifying respirator with an HE filter with NIOSH approval number prefix TC-21C

## **USER SAFETY RECOMMENDATIONS**

#### Users 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 toxic to aquatic organisms, including fish and invertebrates. Drift and run-off may be hazardous to aquatic organisms in water adjacent to treated areas. This product may contaminate water through run-off. This product has a potential for run-off for several weeks after application. Poorly draining soils and soils with shallow water tables are more prone to produce run-off that contains this product.

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

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 wash-waters or rinsate. See Directions for Use for additional precautions and restrictions.

#### PHYSICAL OR CHEMICAL HAZARDS

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

#### **DIRECTIONS FOR USE**

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

#### **RESTRICTIONS**

- Apply this product only as specified on this label.
- Do not contaminate food or feedstuffs.
- Do not apply this product in a way that will contact workers or other persons, either directly or through spray drift.
- Do not enter or allow others to enter until sprays have dried.
- Do not remain in treated area. Exit area immediately and remain outside the treated area until vapors, mists and aerosols have dispersed.
- Only protected handlers may be in the area during application.
- Do not wet plants to the point of runoff or drip.
- Do not apply directly to or near water, storm drains or drainage ditches. Do not apply when windy. To prevent product run-off, do not over water the treated area(s) or apply when heavy rain is expected. Rinse applicator over lawn or garden area only.
- Do not apply more than 1 time per day.
- Do not apply more than 10 times per season.
- Do not reapply within 3 days except under extreme pest pressure.
- In case of extreme pest pressure, do not reapply within 24 hours.
- Not for indoor use except in greenhouses
- Not for use in outdoor residential misting systems.

## PESTICIDE RESISTANCE MANAGEMENT

SPHYNX Insecticide contains a Group 3A insecticide. Insect biotypes with acquired resistance to Group 3A may eventually dominate the insect population if Group 3A insecticides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by SPHYNX or other Group 3A insecticides.

To delay insecticide resistance consider:

- Avoiding the consecutive use of SPHYNX or other group 3A insecticides that have a similar target site of action, on the same insect species.
- Using tank mixtures or premixes with insecticides from a different target site of action Group as long as the involved products are all registered for the same use and have different sites of action.
- Basing insecticide use on a comprehensive IPM program.
- Monitoring treated insect population for loss of field efficacy.
- Contacting your local extension specialist, certified crop advisors, and/or manufacturer for insecticide resistance management and or IPM recommendations for the specific site and resistance pest problems.

## AGRICULTURAL USE REQUIREMENTS

Do not apply this product in a way that will contact workers or other persons, either directly or through spray drift. Only protected handlers may be in the area during application.

For any requirements specific to your state or Tribe, consult the State or Tribal Agency responsible for pesticide regulation.

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.

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

Coveralls:

Chemical-resistant gloves, such as Barrier Laminate, Nitrile Rubber, Neoprene Rubber, 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 unprotected persons out of treated areas until sprays have dried.

Wear protective clothing when using or handling this product to help avoid exposure to eyes and skin. Gloves, a long-sleeved shirt and long pants are recommended.

Allow spray to dry before allowing adults, children, or pets in treated areas.

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

#### **DIRECTIONS**

**Phytotoxicity:** SPHYNX has been evaluated for phytotoxicity on a wide range of plants. However, since testing on all varieties of all plants is not feasible, nor is testing of all possible combinations or sequences of pesticide sprays including fertilizers, surfactants and adjuvants, before making tank mix combinations with SPHYNX, or before making widespread applications, it is recommended to treat a limited number of plants and observe for phytotoxicity over a 10-day period. It is further recommended that spray equipment used to apply SPHYNX be thoroughly cleaned before use.

**Mode of Action:** SPHYNX kills target pests quickly by contact or ingestion. It also kills listed insects by interfering with the molting process and as an adulticide. It is effective on all larva stages, pupae, and adults.

pH: The pH should be adjusted to a pH of 5.5-7.0.

Honey Bees: To avoid possible harm to honey bees, apply in early morning or late evening hours.

## **RATE CHART:**

		Most commonly used rate	Rates for treating high populations of adults and/or hard to kill insects	
SPHYNX	<b>1 Pint per acre</b> 16 fl. oz. (473 ml)	<b>2 Pints per acre</b> 32 fl. oz. (946 ml)	<b>3 Pints per acre</b> 48 fl. oz. (1.42 L)	<b>3.5 Pints per acre</b> 56 fl. oz. (1.66 L)
Acres per Quart	2	1	0.67	0.57
Acres per Gallon	8	4	2.7	2.3

For surface applications to greenhouse grown crops do not exceed the maximum application rate of 0.050 lb. Pyrethrins / Acre (equivalent to 59 fl. oz. of SPHYNX / Acre) or .0012 lb. Pyrethrins / 1,000 sq. ft. (equivalent to 1.42 fl. oz. of SPHYNX / 1,000 sq. ft.).

For space spray applications to greenhouse grown crops do not exceed the maximum application rate of .00014 lb. pyrethrins / 1,000 cu. ft. (equivalent to 0.17 fl. oz. or 5.0 mls of SPHYNX / 1,000 cu.ft.).

#### **DILUTION RATES**

CONVENTIONAL EQUIPMENT: In sufficient water for thorough coverage. Dilution in a minimum of 30 gallons (114 L) of water per

acre is recommended

HAND SPRAYER: 1-2 fluid ounces (30-60 ml) of SPHYNX per gallon (3.8 L) of water

**GREENHOUSE:** Dilute 53-107 fl. oz. (1567-3164 ml) with 100 gallons (378.54 L) of water for applications with

conventional hydraulic sprayers, or 1 to 2 fl. oz. (30-60 ml) per one gallon (3.8 L) of water, or applications with compressed sprayers. Use 2.3 gallons (8.71 L) of spray solution per 1,000 square

feet (93 m<sup>2</sup>).

#### MIXING DIRECTIONS

#### **USED ALONE:**

- Mix only enough for immediate use.
- Shake SPHYNX well before using.
- Dilute SPHYNX in sufficient water to obtain thorough coverage.
- Fill clean spray tank 1/2 to 3/4 of the water to be sprayed and begin agitation.
- Add the appropriate amount of SPHYNX to the spray tank.
- Fill the tank with the remaining water and agitate thoroughly.
- Adjust spray solution to pH of 5.5-7.0, if outside of that range.
- · Apply product promptly after mixing.
- Complete coverage of all leaf surfaces is essential for optimum results.
- If the mixture is not applied immediately after mixing, agitate before application.

#### **USED IN A TANK MIX:**

- This product may be tank mixed with most other insecticides, acaricides, fungicides, adjuvants, foliar fertilizers, and wetting
  agents.
- This application should conform to accepted use precautions and directions for all products in tank mix.
- Tank mix applications must be made in accordance with the more restrictive of label limitations and precautions. No label application rates may be exceeded. This product cannot be mixed with any product with label prohibitions against such mixing.

**COMPATIBILITY:** Since variation in climatic conditions, cultural practices and other factors can affect compatibility, prior to tankmixing, a compatibility test should be conducted using the proper proportions of products and water to ensure the physical compatibility of the mixture. To test for compatibility, mix a small amount of each product to the appropriate proportions in a small jar.

#### **APPLICATION DIRECTIONS:**

Spraying should begin when listed insects first appear. Do not wait until plants are heavily infested. Repeat application as required to maintain effective kill, but not more than every 5-7 days. For foliar application, apply SPHYNX in sufficient spray volume and with adequate spray pressure to ensure complete and thorough coverage of all plant surfaces including both the top and bottom of leaves. Do not wet plants to the point of runoff or drip. Do not apply when wind speed favors drift beyond the area intended for treatment. When pest pressure is extreme or plant canopy is dense, use higher rates and do not reapply within 24 hours. If possible, apply in the early morning or evening hours. The reduced UV exposure and lower temperatures will increase the performance and reduce the impact on pollinators.

SPHYNX may be applied using any powered or manual pesticide application equipment including: high volume, low volume, ultra-low volume, electrostatic, fogging. Follow the original manufacturer's instructions when using these types of equipment.

## SOIL DRENCH DIRECTIONS:

Apply SPHYNX as a drench to soil or non-soil media to kill soil-borne insect larvae (e.g. Fungus Gnats). Apply SPHYNX in sufficient water and for sufficient duration so as to distribute the application rate evenly to the entire treated area. Apply to moderately moist soils.

Use volumes that thoroughly wet the soil, but do not cause significant surface runoff or excessive drip from pots.

#### **INSECTS CONTROLLED**

SPHYNX is labeled for the control of insects including:

**Aphids including:** Apple Aphids, Alfalfa Aphids, Artichoke Aphids, Bean Aphids, Black Maringed Aphids, Black Bean Aphids, Black Peach Aphids, Blue Alfalfa Aphids, Cabbage Aphids, Cotton / Melon Aphids, Cowpea Aphids, European Asparagus Aphids, Filbert Aphids, Foxglove Aphids, Green Peach Aphids, Lettuce Aphids, Lettuce Root Aphids, Melon Aphids, Pea Aphids, Potato Aphids, Rose Aphids, Spotted Alfalfa Aphids, Willow Carrot Aphids

Armyworms, Caterpillars and Loopers including: Alfalfa Caterpillars Artichoke Plume Moths, Bagworms, Beet Armyworms, Black Cutworms, Budworms, Cabbage Loopers, Cankerworms, Carpenterworms, Citrus Cutworms, Corn Earworms, Cross-striped cabbageworms, Cutworms, Diamondback moths, Eastern Tent Caterpillars, Fall Armyworms, Fall Cankerworms, FallWebworms, Filbert Worms, Fireworms, Forest Tent Caterpillars, Garden Webworms, Grapefruit Worms, Grape Leaf Skeletonizers, Green Fruit Worms, Hickory Shuckworms, Hornworms, Imported Cabbageworms, Lawn Armyworms, Lesser Webworm, Loopers, Melonworms,

Navel Orangeworms, Oriental Fruit Moths, Pecan Nut Case bearers, Rindworms, Sod Webworms, Southern Armyworms, Soybean Loopers, Saltmarsh Caterpillars, Tent Caterpillars, Tobacco Budworms, Tomato Hornworms, Tomato Fruitworms, Tomato Pinworms, Yellow striped, Armyworms, Walnut Caterpillars Webworms, Western Yellow-Striped Armyworms, Western Grapeleaf Skeletonizers.

Beetles and Weevils including: Alfalfa Weevils, Asparagus Beetles, Bean Beetles, Bean Leaf Beetles, Black Vine Weevils, Blister Beetles, Boll Weevils, Carrot Weevils, Chestnut Weevils Clover Weevils Colorado Potato Beetles, 12-Spotted Cucumber Beetles, Cucumber Beetles, Darkling Beetles (lesser meal worms), Egyptian Alfalfa Weevils, Elm Leaf Beetles, Flea Beetles, Fuller Rose Beetles, Grape Bud Beetles, Japanese Beetles, June Beetles, Mexican Bean Beetles, Navel Orangeworms (NOW), Pecan Weevils, Pink Bollworms, Potato Flea Beetles, Rice Weevils, Rose Chafers, Saw-Toothed Grain Beetles, Strawberry Beetles, Twig Girdlers, All other beetles and weevils.

**Leafrollers including:** Blueberry Leafrollers, Filbert Leafrollers, Fruit Tree Leafrollers, Grape Leafrollers, Oblique Banded Leafrollers, Omnivorous Leafrollers, Orange Tortrix, Western Avocado Leafrollers.

**Borers such as:** European Corn Borers, Pacific Flatheaded Borers, Peach Tree Borers, Peach Twig Borers, Squash Vine Borers, Shotbole Borers, Branch and Twig Borers.

Flies: Australian Sod Flies, Caribbean Fruit Flies, Crane Flies, Fruit Flies, Fungus Gnats, Hessian Flies, Mediterranean Fruit Flies, Melon Flies, Mushroom Flies, Oriental Fruit Flies, Olive Fruit Flies, Sawflies, Shore Flies, Vinegar Flies, Walnut Husk Flies.

**Leafhoppers & Sharpshooters:** Aster Leafhoppers, Beet Leafhoppers, Glassy-winged Sharpshooters, Grape Leafhoppers, Potato Leafhoppers, Variegated Leafhoppers, Three-Cornered Alfalfahoppers.

Leafminers: Citrus Leafminers, Holly Leafminers, Serpentine Leafminers, Vegetable Leafminers.

**Midges (plant pests):** Millipedes, Onion Maggots, Plant Bugs, Proba Bugs, Scale Insects, Silverfish, Skippers, Soft Scales, Spider Mites, Sowbugs, Spiders (except Black Widow and Brown Recluse Spiders), Springtails, Squash Bugs, Stink Bugs, Tarnished Plant Bugs, Spittle Bugs, Wire worms, European Chafers, Northern Masked Chafers, Southern Masked Chafers, Western Boxelder Bugs.

**Moths:** Artichoke Plume Moths, Codling Moths, Diamondback Moths, European Pine Tip Moths, Grape Berry Moths, Gypsy Moths (adult & larvae), Indian Meal Moths, Mediterranean Flour Moths, Pine Tip Moths, Tussock Moths

Whiteflies: Greenhouse Whiteflies, Silverleaf Whiteflies, Sweetpotato Whiteflies,

Other: Ants (except Pharaoh, Harvester, Carpenter and Fire Ants), Apple Maggots, Billbugs, Brown Marmorated Stinkbugs, Cabbage Maggots, Clover Mites, Cutworms, Crickets, Dichondra Flea Beetles, Earwigs, Firebrats, False Chinch Bugs, Garden Symphylan, Garden Tortrix, Glassy Winged Sharpshooters, Grasshoppers, Harlequin Bugs, Grape Phylloxera, Katydids, Leaffooted Plant Bug, Lace Bugs, Leaf tiers, Lice, Lygus, Mealybugs (all)

Psyllids: Pear Psylla

**Thrips:** Avocado thrips, Citrus Thrips, Flower Thrips, Greenhouse Thrips, Thrips Palmi, Northern Masked Chafers, Southern Masked Chafers, Western Flower Thrips

#### FOR USE ON GROWING CROPS IN GREENHOUSES:

ROOT AND TUBER VEGETABLES: Including: Arracacha, Arrowroot, Purple Arrowroot, Japanese Artichokes, Jerusalem Artichokes, Garden Beets, Sugar Beets, Edible Burdock, Edible Canna, Carrots, Cassava (bitter or sweet), Celeriac, Celery Root, Chayote (root), Chervil (turnip rooted), Chicory, Chufa, Dasheen (Taro), Ginger, Ginseng, Horseradish, Jicama, Leren, Parsley (turnip rooted), Parsnips, Potatoes, Radishes, Japanese Radishes (Daikon), Rutabaga, Salsify (oyster plant, black, Spanish), Skirret, Sweet Potatoes, Tanier, Turmeric, Turnips, Yam Beans (jicama, manioc pea), Yams (true).

**LEAVES OF ROOT AND TUBER VEGETABLES:** Including: Garden Beets, Sugar Beets, Edible Burdock, Carrots, Cassava (bitter and sweet), Celeriac (celery root), Chervil (turnip-rooted), Chicory, Dasheen (Taro), Parsnips, Radishes, Oriental Radishes (Daikon), Rutabaga, Salsify (black), Sweet Potatoes, Tanier, Turnips, Yams (true).

BULB VEGETABLES: Including: Garlic, Great-headed Garlic, Leeks, Onions (bulb and green), Shallots, Welch.

**LEAFY VEGETABLES:** Including: Amaranth (Leafy Amaranth, Chinese Spinach, Tampala), Arugula, Cardoon, Celery, Chinese Celery, Celtuce, Chervil, Corn Salad, Chrysanthemum (edible-leaved), Chrysanthemum (garland), Cress (garden, water), Upland Cress (yellow rocket, winter cress), Dandelion, Dock (sorrel), Endive (escarole), Fennel (Florence), Leeks, Lettuce (head and leafy), Mustard Greens,

Orach, Parsley, Purslane (garden & winter), Radicchio, Rhubarb, Spinach, Fine Spinach (Malabar, Ceylon), Spinach (New Zealand), Swiss Chard, Turnip Greens, Watercress.

**BRASSICA (COLE) LEAFY VEGETABLES:** Including: Broccoli, Chinese Broccoli (Gai Lan), Broccoli raab (Rapini), Brussels Sprouts, Cabbage, Chinese Cabbage (Bok Choy), Chinese Cabbage (Napa), Chinese Mustard Cabbage (Gai Choy), Cauliflower, Cavalo broccolo, Collards, Kale (Flowering, Chinese), Kohlrabi, Mizuna, Mustard Greens, Mustard Spinach, Rape Greens.

LEGUME VEGETABLES (SUCCULENT OR DRIED): Including: Adzuki Beans, Field Beans, Kidney Beans, Lima Beans, Moth Beans, Mung Beans, Navy Beans, Pinto Beans, Rice Beans, Runner Beans, Snap Beans, Tepary Beans, Urd Beans, Wax Beans, Asparagus Beans, Black-eyed Peas, Catjang, Chinese Longbeans, Cowpeas, Crowder Peas, Southern Peas, Yard-Longbeans, Broad Beans, (Fava Beans), Chick Peas (Garbanzo Beans), Guar, Jackbean (Sword Bean), Lablab Bean (Hyacinth Bean), Lentils, Peas (Garden Peas, Field Peas, Sugar Snap Peas, English Pea, Snow Pea), Pigeon Peas, Soybeans, Sweet Lupin Beans, White Lupin Beans, White Sweet Lupin, Sword Bean.

**FOLIAGE OF LEGUME VEGETABLES:** Including: Plant part of any legume vegetable included in the legume vegetable group that will be used as animal feed including any variety of Beans, Field Peas, Soybeans.

**FRUITING VEGETABLES:** Including: Eggplant, Ground Cherry, Okra, Pepinos, Pepper (Bell Pepper, Chili Pepper, Cooking Peppers, Pimentos, Sweet Peppers), Tomatillo, Tomatoes.

**CUCURBIT VEGETABLES:** Including: Balsam Apple, Balsam Pear (Bitter Melon), Chayote (fruit), Chinese Waxgourd (Chinese preserving melon), Chinese Cucumber, Citron Melon, Cucumber, Gherkin, Edible Gourds, Mangoes, Melons (including hybrids, Cantaloupe, Casaba, Charentais, Crenshaw, Golden Pershaw Melon, Honeydew Melons, Honey Balls, Mango Melon, Muskmelon, Persian Melon, Pineapple Melon, Santa Claus Melon, Snake Melon, Pumpkin, Squash (summer & winter), Watermelon (OP & hybrids, seeded and seedless).

**CITRUS FRUITS:** Including: Calamondin, Citrus Citron, Citrus Hybrids, Grapefruit, Kumquats, Lemons, Limes, Mandarin (Tangerine), Orange (sweet & sour), Pummelo, Satsuma Mandarin, (Citrus spp. Includes Chironja, Tangelos, Tangors), Unique Fruit, White Sapote.

POME FRUITS: Apple, Crabapple, Loquat, Mayhaw, Oriental Pear, Pear, Quince.

**STONE FRUITS:** Apricot, Cherry (sweet & sour), Nectarine, Peach, Plum, Prune, Chickasaw Plum, Damson Plum, Japanese Plum, Plumcot.

**SMALL FRUITS AND BERRIES:** Blackberry, Blueberry, Boysenberries, Cranberry, Currant, Dewberry, Elderberry, Gooseberry, Guava, Grape, Huckleberry, Loganberry, Olallie Berry, Raspberry (black & red), Strawberry, Youngberry.

**TREE NUTS:** Almond, Beech Nut, Brazil Nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert (hazelnut), Hickory nut, Macadamia Nut (Bush Nut), Pecan, Pistachio, Walnut (Black, English, Persian).

TROPICAL FRUITS: Papaya, Black Sapote, Canistel, Mango, Sapodilla, Star Apple, Guava, Biriba.

**CEREAL GRAINS:** Barley, Buckwheat, Corn (sweet and field), Millet, Proso, Oats, Pearl Millet, Popcorn, Rice, Rye, Sorghum (Milo), Teosine, Triticale, Wheat, Wild Rice.

**FORAGE, FODDER AND STRAW OF CEREAL GRAINS:** Barley; buckwheat; corn (sweet and field); millet; proso; oats; pearl; popcorn; rice; rye; sorghum (milo); teosine; triticale; wheat; wild rice.

**GRASSES FOR SEED, FORAGE, FODDER AND HAY**: any grass (all Gramineacea), (green or cured), except sugarcane and those listed in the cereal grains group) that will be fed to or grazed by livestock, all Pasture and Range Grasses and Grasses grown for hay and silage, Sudangrass, Bermuda Grass, Bluegrass, Bromegrass, Fescue, Orchard, Timothy.

**NON-GRASS ANIMAL FEEDS:** Alfalfa, Velvet Bean, Clover (White, Ladino, Red), Kudzu, Lespedeza, Lupine, Sainfoin, Trefoil, Crown Vetch, Milk Vetch.

HERBS AND SPICES: Allspice, Angelica, Anise (anise seed), Anise [star], Annatto (seed), Balm (lemon balm), Basil, Borage, Burnet, Chamomile, Caper buds, Caraway, Caraway [black], Cardamom, Cassia bark, Cassia buds, Catnip, Celery seed, Chervil (dried), Chicory, Chive, Chive [Chinese], Cinnamon, Clary, Clove buds, Coriander (cilantro or Chinese parsley) (leaf), Coriander (cilantro) (seed), Costmary, Cilantro (leaf), Cilantro (seed), Cumin, Curry (leaf), Dandelion, Dill (dillweed), Dill (seed), Fennel (common), Fennel [Florence] (seed), Fenugreek, Grains of paradise, Horehound, Hyssop, Juniper berry, Lavender, Lemongrass, Lovage (leaf), Lovage (seed), Mace, Marigold, Marjoram (includes sweet or annual marjoram, wild marjoram or oregano, and pot marjoram), Mint, Mustard

(seed), Nasturtium, Nutmeg, Oregano, Mint, Paprika, Parsley (dried), Pennyroyal, Pepper [black], Pepper [white], Peppermint, Poppy (seed), Rosemary, Rue, Saffron, Sage, Savory [summer and winter], Sweet bay (bay leaf), Tansy, Tarragon, Thyme, Vanilla, Wintergreen, Woodruff, Wormwood.

OIL SEED GROUP: Cottonseed, Jojoba.

ADDITIONAL CROPS: Acerola, Artichoke, Asparagus, Avocado, Atemoya, Bananas, Barbados Cherry, Birdseed, Cacao, Canistel, Carob, Cherimoya, Cocoa, Coffee, Custard Apple, Dates, Durian (Jackfruit), Edible Flowers, Feijoa, Figs, Globe Artichoke, Guayule, Hops, Jaboticaba, Llama, Longan, Lychee, Mangoes, Mamey Sapote, Mushroom, Okra, Olives, Palm, Papaya, Passion fruit, Peanuts, Persimmon, Pineapple, Pomegranate, Pulasan, Rambutan, Safflowers, Sapodilla, Sesame, Soursop and Biriba, Spanish Lime, Star Apple, Sugar Cane, Star Fruit, Sugar Apple, Sunflower, Tamarillo, Tea, Tobacco, Water chestnut and Wax Jambu.

#### STORAGE AND DISPOSAL:

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

PESTICIDE STORAGE: Store in a cool, dry place away from heat or open flame in an area that is inaccessible to children and animals.

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

<u>CONTAINER HANDLING</u>: Nonrefillable 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 1/4 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 reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Pressure rinse as follows: Empty the remaining contents into application equipment or mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or a 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. Offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

#### **CONDITIONS OF SALE**

This product conforms to the description set forth on this label and is reasonably fit for the purposes described herein when used according to the label directions and specified conditions. The manufacturer disclaims any and all other express or implied warranties of merchantability and fitness for particular purpose. To the extent consistent with applicable law, buyers and users shall assume all risk and responsibility for potential loss or damage if this product is used, stored, handled or applied in a manner inconsistent with this labeling. To the extent permitted by law, manufacturer shall not be liable for more than the purchase price for the quantity involved including incidental, consequential or special damages.