# RESTRICTED USE PESTICIDE

Due to Toxicity to Fish and Aquatic Organisms

For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

IMIDACLOPRID GROUP 4A INSECTICIDE BETA-CYFLUTHRIN GROUP 3A INSECTICIDE



360



Contains beta-cyfluthrin and imidacloprid, the active ingredients used in Leverage® 360 Insecticide.

For protection of listed crops from certain insects and promoting enhanced plant health and yield

ACTIVE INGREDIENTS:	(% by weight)
lmidacloprid*	21.0%
Beta-cyfluthrin**	10.5%
OTHER INGREDIENTS:	68.5%
TOTAL	100.0%

Contains 1 lb beta-cyfluthrin per gallon plus 2 lbs imidacloprid per gallon.

\* CAS# - 138261-41-3 \*\*CAS# - 1820573-27-0 **EPA Reg. No.:** 91234-292

# STOP-READ THE LABEL BEFORE USE KEEP OUT OF REACH OF CHILDREN CAIITION

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.)

See below for additional Precautionary Statements.

FIRST AID	
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 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 swallowed:	<ul> <li>Call a 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>
	HOT LINE NUMBER
Have the product container or lab emergency medical treatment inf	nel with you when calling a poison control center or doctor, or going for treatment. You may also contact SafetyCall at <b>1-844-685-9173</b> for ormation.
NOTE TO PHYSICIAN: No speci	fic antidote is available. Treat the patient symptomatically.

For Chemical Emergency: Spill, Leak, Fire, Exposure, or Accident,

Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)

Cryptonyx™ 360 is not manufactured, or distributed by Bayer CropScience, seller of Leverage® 360 Insecticide.



# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if absorbed through skin. Harmful if swallowed. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco. Wear long-sleeved shirt and long pants, socks, shoes, and chemical-resistant gloves made of barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinylchloride (PVC) or Viton. Remove contaminated clothing and wash before reuse.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and Other Handlers Must Wear:

- Long-sleeved shirt and long pants
- · Chemical-resistant gloves made of barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinylchloride (PVC) or Viton.
- Shoes plus socks

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

#### **Engineering Control Statement**

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

#### **User Safety Recommendations**

#### lisers 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 pesticide is extremely toxic to fish and aquatic invertebrates, DO NOT apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark, DO NOT apply when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. DO NOT contaminate water when disposing of equipment washwaters.

This product is highly toxic to bees exposed to direct treatment or residues in/on blooming crops or weeds. DO NOT apply this product or allow it to drift to blooming crops or weeds if bees are foraging in the treatment area. Additional information may be obtained by consulting your Cooperative Extension Service. Protect pollinating insects by following label directions intended to minimize drift and to reduce risk to these organisms.

This product is highly toxic to aquatic invertebrates.

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

#### PHYSICAL OR CHEMICAL HAZARDS

Do not mix or allow to come into contact with any oxidizing agent. Hazardous chemical reaction may occur.

#### 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.

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

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

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

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

When Using This Product Take Steps to:

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

Information on protecting bees and other insect pollinators may be found at the Pesticide Environmental Stewardship website at: http://pesticidestewardship.org/PollinatorProtection/Pages/default.aspx.

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

# **DIRECTIONS FOR USE**

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

See individual crops for specific pollinator protection application restrictions. If none exist under the specific crop, for foliar applications, follow these application directions for crops that are contracted to have pollinator services or for food/feed & commercially grown ornamentals that are attractive to pollinators.

# FOR CROPS UNDER CONTRACTED POLLINATION SERVICES

DO NOT apply this product while bees are foraging, DO NOT apply this product until flowering is complete and all petals have fallen unless the following condition has been met.

If an application must be made when managed bees are at the treatment site, the beekeeper providing the pollination services must be notified no less than 48-hours prior to the time of the planned application so that the bees can be removed, covered or otherwise protected prior to spraying.



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

DO NOT apply this product while bees are foraging.

**DO NOT** apply this product until flowering is complete and all petals have fallen unless one of the following conditions is met:

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

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

#### AGRICULTURAL USE REQUIREMENTS

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

**DO NOT** enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

For entry into treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, wear:

- Coveralls
- Chemical-resistant gloves made of barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinylchloride (PVC) or Viton
- Shoes plus socks

#### **VEGETATIVE FILTER STRIPS**

Construct and maintain a vegetative filter strip, according to the width specified below, of grass or other permanent vegetation between the field edge and nearby down gradient aquatic habitat (such as, but not limited to, lakes; reservoirs; rivers; streams; marshes or natural ponds; estuaries; and commercial fish farm ponds).

Only apply products containing beta-cyfluthrin onto fields where a maintained vegetative filter strip of at least 25 feet exists between the field edge and where a down gradient aquatic habitat exists. This minimum required width of 25 feet may be reduced or removed under the following conditions:

- For Western irrigated agriculture, a maintained vegetative filter strip of at least 10 feet wide is required. Western irrigated agriculture is defined as irrigated farmland in the following states: WA, OR, CA, ID, NV, UT, AZ, MT, WY, CO, NM, and TX (west of I-35).
  - o For Western irrigated agriculture, if a sediment control basin is present, a vegetative filter strip is not required.
- In all other areas, a vegetative filter strip with a minimum width of 25 feet is required, unless the following conditions are met. The vegetative filter strip requirement may be reduced from 25 feet to 15 feet if at least one of the following applies:
  - o The area of application is considered prime farmland (as defined in 7 CFR § 657.5).
  - o Conservation tillage is being implemented on the area of application. Conservation tillage is defined as any system that leaves at least 30% of the soil surface covered by residue after planting. Conservation tillage practices can include mulch-till, no-till, or strip-till.
  - o A functional terrace system is maintained on the area of application.
  - o Water and sediment control basins for the area of application are functional and maintained.
  - o The area of application is less than or equal to 10 acres.

For further guidance on vegetated filter strips, refer to the following publication for information on constructing and maintaining effective buffers: Conservation Buffers to Reduce Pesticide Losses. Natural Resources Conservation Services. https://www.regulations.gov/document?D=EPA-HQ-OPP-2008-0331-0175.

Cryptonyx 360 contains 2 (two) active ingredients: imidacloprid and beta-cyfluthrin.

OBSERVE THE SPRAY DRIFT PRECAUTIONS WHEN SPRAYING IN THE VICINITY OF AQUATIC AREAS SUCH AS LAKES; RESERVOIRS; RIVERS; PERMANENT STREAMS, MARSHES OR NATURAL PONDS; ESTUARIES AND COMMERCIAL FISH FARM PONDS.

Buffer Zone Requirements:

Ground Applications

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

#### Ultra Low Volume (ULV) Aerial Applications

• DO NOT apply within 450 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds). Mount the spray boom on the aircraft so as to minimize drift caused by wing tip or rotor vortices. The boom length must not exceed 75% of the wing span or rotor diameter.

#### **Non-ULV Aerial Application**

• DO NOT apply within 150 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds).

#### RESISTANCE MANAGEMENT

Cryptonyx 360 contains both Group 3A and Group 4A insecticides. Any insect population may contain individuals naturally resistant to Cryptonyx 360 and other Group 3A or Group 4A insecticides The resistant individuals may dominate the insect population if Group 3A and/or Group 4A products are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay insecticide resistance, take the following steps:

- Rotate the use of Cryptonyx 360 or other group 3A or 4A insecticides within a growing season or among growing seasons, with different groups that control the same pests. One of the active ingredients in Cryptonyx 360 is a member of the neonicotinoid chemical class. Avoid using a block of more than three consecutive applications of Cryptonyx 360 and/or other Group 4A products having the same or similar mode of action.
- Use tank mixtures with insecticides from a different group that are equally effective on the target pest when such use is permitted. DO NOT rely on the same mixture repeatedly for the same pest population. Consider any known cross-resistance issues for the targeted pests between individual components of a mixture. In addition, consider the following recommendations provided by the Insecticide Resistance Action Committee (IRAC):
  - o Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they are individually registered for use against the target species.
  - o Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management.
  - o When using mixtures, consider any known cross-resistance issues between the individual components for the targeted pests.
  - o Mixtures become less effective if resistance is already developing to one or both active ingredients, but they may still provide pest management benefits.
  - o The insect resistance management benefits of an insecticide mixture are greatest if the two components have similar periods of residual insecticidal activity. Mixtures of insecticides with unequal periods of residual insecticide activity may offer an insect resistance management benefit only for the period where both insecticides are active.
- Adopt an integrated pest management program for insecticide use that includes scouting, uses historical information related to pesticide use, crop rotation, record keeping, and which considers cultural, biological, and other chemical control practices.
- Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local university specialist or certified pest control advisor.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area.
- For further information or to report suspected resistance contact Atticus, LLC at 984-465-4800.

#### ROTATIONAL CROPS

Treated areas may be replanted with any crop specified on an imidacloprid label. There are no rotational crop restrictions based on beta-cyfluthrin.



# ROTATIONAL PLANT-BACK INTERVALS\*

#### IMMEDIATE PLANT-BACK

All crops on this label plus the following crops not on this label: barley, canola, Christmas trees, corn (field, sweet and pop), cranberry, Globe artichoke, mustard seed, rapeseed, strawberry, sorghum, sugarbeet, sunflower, tobacco, watercress, wheat and all crops from the following Crop Groups as recognized and defined by EPA. Crops contained within a particular crop group are subject to change. For information, related to specific crops please contact your Atticus, LLC representative.

BULB VEGETABLES - Crops of Crop Group 03-07

LEAFY PETIOLE VEGETABLES - Crops of Crop Subgroup 4B

LEGUME VEGETABLES - Crops of Crop Group 6 including: Edible Podded plus Succulent Shelled, Peas and Beans

CUCURBIT VEGETABLES - Crops of Crop Group 9

BUSHBERRY and CANEBERRY - Crops of Crop Group 13

HERBS - Crops of Crop Subgroup 19A

ROOT VEGETABLES - Crops of Crop Subgroup 1B

TROPICAL FRUIT - Acerola, Atemoya, Avocado, Birida, Black sapote, Canistel, Cherimoya, Custard apple, Feijoa, Llama, Jaboticaba, Guava, Longan, Lychee, Mamey sapote, Mango, Papaya, Passionfruit, Persimmon, Pulasan, Rambutan, Sapodilla, Soursop, Spanish lime, Star apple, Starfruit, Sugar apple, Wax jambu

#### 30-DAY PLANT-BACK

Cereals (buckwheat, millet, oats, rice, rye, and triticale), safflower

#### 12-MONTH PLANT-BACK

All other crops

\*Cover crops for soil building or erosion control may be planted any time, but **DO NOT** graze or harvest for food or feed.

#### MANDATORY SPRAY DRIFT MANAGEMENT

#### **Aerial Applications:**

- DO NOT release spray at a height greater than 10 ft above the ground or vegetative canopy, unless a greater application height is necessary for pilot safety.
- Applicators are required to use a medium or coarser (ASABE S572.1) droplet size.
- DO NOT apply when wind speeds exceed 15 mph at the application site. If the windspeed is greater than 10 mph, the boom length must be 65% or less of the wingspan for fixed wing aircraft and 75% or less of the rotor diameter for helicopters. Otherwise, the boom length must be 75% or less of the wingspan for fixed-wing aircraft and 90% or less of the rotor diameter for helicopters.
- For aerial applicators, if the windspeed is 10 miles per hour or less, applicators must use ½ swath displacement upwind at the downwind edge of the field. When the windspeed is between 11-15 miles per hour, applicators must use ¾ swath displacement upwind at the downwind edge of the field.
- DO NOT apply during temperature inversions.

#### **Airblast Applications:**

- Sprays must be directed into the canopy.
- Do not apply when wind speeds exceed 15 mph at the application site.
- User must turn off outward pointing nozzles at row ends and when spraying outer row.
- Do not apply during temperature inversions.

#### **Ground Boom Applications:**

- User must only apply with the nozzle height recommended by the manufacturer, but no more than 4 feet above the ground or crop canopy.
- Applicators are required to select nozzle and pressure that deliver medium or coarser droplets (ASABE S572).
- DO NOT apply when wind speeds exceed 15 miles per hour at the application site.
- DO NOT apply during temperature inversions.

# **Spray Drift Advisories**

# THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

### IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

# Controlling Droplet Size - Ground Boom

- Volume Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

## Controlling Droplet Size - Aircraft

Adjust Nozzles - Follow nozzle manufacturers' recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

## **BOOM HEIGHT - Ground Boom**

For ground equipment, the boom should remain level with the crop and have minimal bounce.

# RELEASE HEIGHT - Aircraft

Higher release heights increase the potential for spray drift.

#### SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

#### TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

# TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

#### WIND

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.

Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.



#### **FOLIAR APPLICATIONS**

Apply using properly calibrated ground sprayers, fixed- or rotary-winged aircraft or through properly designed, sprinkler-type, chemigation equipment. Thorough and uniform coverage of plants is required for pest control. Use of spray nozzles that provide medium-sized droplets are encouraged to reduce drift potential. For all aphids, apply as pest population begins to build and prior to build up of damaging levels. See general, spray drift reduction management, section below for application guidelines on all application methods.

Ground equipment applications must be made in a minimum of 10 gallons/A. A non-ionic surfactant (NIS) is specified for this use. See Adjuvant section below.

Aerial applications must be made in a minimum of 2 gallons/A. A crop-oil-concentrate (COC) is specified for this use. See Adjuvant section below.

Chemigation applications must be made as concentrated as possible. For best results apply at 100% input for center pivots or 0.10 inch (2,716 gallons) up to 0.15 inch (4,073 gallons) of water/A for other systems. See additional directions and precautions given below. Use only the highest labeled rate for chemigation applications.

#### Restrictions

DO NOT apply more than 0.5 lb imidacloprid per acre, per calendar year regardless of formulation or method of application, unless specified within a crop-specific section for a given crop.

**DO NOT** apply more than the maximum seasonal total for cyfluthrin or beta-cyfluthrin or beta-cyfluthrin or beta-cyfluthrin or beta-cyfluthrin active ingredients as outlined in the crop specific sections of this label.

Tank-mixtures: Cryptonyx 360 may be combined with foliar-applied fungicides, herbicides and insecticides/miticides. Other pesticides and fertilizers approved for use in a crop may be used in mixtures with Cryptonyx 360 provided they have been tested and shown to be compatible. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Adjuvants: The use of an adjuvant with Cryptonyx 360 may improve deposition, coverage and pest control.

- A high quality, non-ionic surfactant (NIS) is specified for ground applications.
- A crop-oil-concentrate (COC) is specified for aerial applications.
- All adjuvants regardless of their composition must be used according to the adjuvants manufacturer's use directions.
- DO NOT use petroleum-based and other non-emulsifiable oils with Cryptonyx 360.

Mixing order: When pesticide or fertilizer mixtures are needed, add products in the following order:

- Products packaged in PVA.
- Wettable powders or wettable granules.
- Cryptonyx 360, or other flowable type products.
- Emulsifiable concentrates.
- · Fertilizer or micro-nutrient solutions

Ensure good agitation as each component is added. **DO NOT** add an additional component until the previous is thoroughly mixed. If a fertilizer or micro-nutrient solution is used, a fertilizer/pesticide compatibility agent may be needed. Maintain constant agitation during both mixing and application to ensure uniformity of spray mixture.

Compatibility (jar test): Test components of an intended tank mixture before adding Cryptonyx 360 to the spray or mix tank. Add proportionate amounts of each ingredient in the appropriate order, to a pint or quart jar, cap, shake for 5 minutes, and let set for 5 minutes. Poor mixing or formation of precipitates that DO NOT readily re-disperse indicates an incompatible mixture that should not be used. For further information, contact your local Atticus, LLC representative. For all insects, base the timing of application on careful scouting and local economic thresholds.

#### SPECIFIC GUIDELINES FOR USE IN CHEMIGATION SYSTEMS

Types of Irrigation Systems: Apply Cryptonyx 360 only through sprinkler type irrigation systems. These types include; center pivot, lateral move, or solid set irrigation systems. DO NOT apply Cryptonyx 360 through any other type of irrigation system.

Injection for Chemigation: Inject the specified dosage of Cryptonyx 360 into the irrigation main, water stream: (1) through a constant flow, metering device; (2) into the center of the main line flow via a pitot tube or equivalent; (3) at a point ahead of at least one, right-angle turn in mainstream flow such that thorough mixing with the irrigation water is ensured.

Uniform Water Distribution and System Calibration: The irrigation system must provide uniform distribution of Cryptonyx 360 treated water. Crop injury, lack of effectiveness, or illegal pesticide residues in or on the crop can result from non-uniform distribution. The system must be calibrated to uniformly distribute the rates specified for chemigation application to specific crops. If you have questions about calibration, contact your State Extension Service, equipment manufacturers, or other experts.

Chemigation Monitoring: A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Required Injection and Sprinkler System Safety Devices: 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 back-flow. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection. 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 water pump motor/engine stops or in cases where there is no water pump, when water pressure decreases to the point where pesticide distribution is adversely affected. Injection 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.

Using Water from Public Water Systems: Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back flow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and to top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. The pesticide injection pipeline must contain a functional automatic quick-closing check valve to prevent the flow of fluid back toward the injection. The pesticide injection pipeline must contain a functional normally closed solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected. 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.

Chemical Supply Tank Dilution and Agitation: For injection of Cryptonyx 360 use a chemical supply tank for pre-mixing Cryptonyx 360 with water before injecting mixture into the irrigation line. Ensure dilution ratio is at least 4 parts water to 1 part Cryptonyx 360. Constant mechanical or hydraulic agitation must be maintained in the chemical supply tank during the entire period of application.

Determine the required amounts of **Cryptonyx 360** and water to mix in the tank. The amount of **Cryptonyx 360** needed equals the number of fluid ounces of **Cryptonyx 360** to be applied per acre multiplied by the number of acres to be chemigated. The amount of emulsion needed equals the gallons of emulsion delivered per hour by the injection pump, multiplied by the number of hours chemigation will take place. The amount of water needed equals the amount of emulsion needed minus the amount of **Cryptonyx 360** needed.



Cleaning the Chemical Injection System: In order to apply pesticides accurately, the chemical injection system must be kept clean; free from chemical or fertilizer residues and sediments. Refer to your owner's manual or ask your equipment supplier for the cleaning procedure for your injection system.

Flushing the Irrigation System: At the end of the application period, allow time for all lines to flush the pesticide through all nozzles before turning off irrigation water. To ensure the lines are flushed and free of pesticides, a dye indicator may be injected into the lines to mark the end of the application period.

Center-Pivot and Automatic-Move Linear Systems: Inject the specified dosage per acre continuously for one complete revolution or move of the system. The system should be run at maximum speed. Nozzles in the immediate area of control panels, chemical supply tanks, pumps and system safety devices should be plugged to prevent chemical contamination of these areas.

Solid Set and Manually Controlled Linear Systems: Injection should be during the last 30 to 60 minutes of a regular irrigation period or as a separate 30 to 60 minute application not associated with a regular irrigation.

#### POLLINATOR PROTECTION

Following best management practices can help reduce risk to terrestrial pollinators. Examples of best management practices include applying pesticides in the evening and at night when pollinators are not foraging and checking to confirm hive locations before spraying. For additional resources on pollinator best management practices, visit <a href="https://www.epa.gov/pollinator-protection/find-best-management-practices-protect-pollinators">https://www.epa.gov/pollinator-protection/find-best-management-practices-protect-pollinators</a>.

Managed pollinator protection plans are developed by states/tribes to promote communication between growers, landowners, farmers, beekeepers, pesticide users, and other pest management professionals to reduce exposure of bees to pesticides. If available, visit state plans for additional information on how to protect pollinators.

#### **How to Report Bee Kills**

It is recommended that users contact both the state lead agency and the U.S. Environmental Protection Agency to report bee kills due to pesticide application. Bee kills can be reported to EPA at beekill@epa.gov. To contact your state lead agency, see the current listing of state pesticide regulatory agencies at the National Pesticide Information Center's website: http://npic.orst.edu/reg/state agencies.html

#### FIELD CROPS

# **Applications for Cryptonyx 360**

Apply specified rate per acre as a broadcast or directed foliar spray to an infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve pest control. A spray adjuvant may be used to improve coverage.

Cryptonyx 360 may be tank mixed with other insecticides for improved control of other pests.

COTTON	
Pests Controlled	Product Rate
i cata controlleu	Fluid Ounces/Acre
Cabbage looper	2.8* - 3.2
Cotton aphid	(0.022 lb beta-cyfluthrin + 0.044 lb imidacloprid) -
Cotton leafworm	(0.025 lb beta-cyfluthrin + 0.05 lb imidacloprid)
Cotton leaf perforator	
Cutworms	
European corn borer	
Flea beetle	
Fleahopper	
Garden webworm	
Pink bollworm	
Saltmarsh caterpillar	
Southern garden leafhopper	
Thrips (foliage feeding thrips only)	
Armyworms (1st and 2nd instars)	3.2
Boll weevil	(0.025 lb beta-cyfluthrin + 0.05 lb imidacloprid)
Cotton bollworm (for ovicidal effects, use high rate)	
Grasshopper	
Tarnished plant bug	
Stink bugs	
Whitefly (other than sweetpotato whitefly)	
Pests Suppressed	Product Rate
ı esis onhhicssen	Fluid Ounces/Acre
Lygus bug	3.0 - 3.2
Sweetpotato whitefly	(0.023 lb beta-cyfluthrin + 0.047 lb imidacloprid- 0.025 beta-cyfluthrin + 0.05 lb imidacloprid)

#### RESTRICTIONS

- Pre-Harvest Interval (PHI): 14 days
- Minimum interval between applications: 7 days
- Maximum Cryptonyx 360 allowed per calendar year: 19.8 fluid ounces/Acre (0.155 lb ai/A beta-cyfluthrin, 0.31 lb ai/A imidacloprid)
- Regardless of application method, apply no more than 0.37 lbs. ai/A per calendar year of imidacloprid, including seed treatment, soil drench and foliar sprays.
- Maximum beta-cyfluthrin allowed in all forms per crop season: 0.25 lb ai/A
- Maximum cyfluthrin allowed in all forms per crop season: 0.50 lb ai/A
- Maximum beta-cyfluthrin plus cyfluthrin allowed in all forms per crop season: 0.50 lb ai/A
- DO NOT graze treated fields after application of Cryptonyx 360.
- DO NOT make more than a total of 6 synthetic pyrethroid applications (one, or combination of products) to a cotton crop in one season.

#### ADDITIONAL USE DIRECTIONS

• Cryptonyx 360 is to be applied through properly calibrated ground, aerial or chemigation application equipment.

\*Rate specified for ground sprayer application only. For aerial or chemigation applications, use the highest rate listed.



PEANUT	
Pests Controlled	Product Rate Fluid Ounces/Acre
Aphids	2.8
Armyworm (1st and 2nd instar)	(0.022 lb beta-cyfluthrin + 0.044 lb imidacloprid)
Bean leaf beetle	
Corn earworm	
Cutworms	
Grasshoppers	
Green cloverworm	
Leafhoppers	
Rednecked peanutworm	
Stink bugs	
Threecornered alfalfa hopper	
Velvetbean caterpillar	
Whiteflies	

- Pre-Harvest Interval (PHI): 14 days (minimum time between final application and threshing for seed)
- Minimum interval between applications: 10 days
- Maximum Cryptonyx 360 allowed per calendar year: 8.3 fluid ounces/Acre (0.065 lb ai/A beta-cyfluthrin, 0.13 lb ai/A imidacloprid).
- Maximum beta-cyfluthrin allowed in all forms per crop season: 0.065 lb ai/A
- Maximum cyfluthrin allowed in all forms per crop season: 0.131 lb ai/A
- Maximum beta-cyfluthrin plus cyfluthrin allowed in all forms per crop season: 0.131 lb ai/A
- Foliar spray only: maximum annual application rate is not to exceed 0.12 lbs. imidacloprid/A/calendar year.

POTATO		
	Pests Controlled	Product Rate Fluid Ounces/Acre
Aphid <sup>1</sup>		2.8
Cabbage looper		(0.022 lb beta-cyfluthrin + 0.044 lb imidacloprid)
Colorado potato beetle		
Cutworm		
European corn borer		
Flea beetle		
Potato leafhopper		
Potato psyllid		
Potato tuberworm		
Tarnished plant bug		

#### RESTRICTIONS

- Pre-Harvest Interval (PHI): 7 days
- Minimum interval between applications: 7 days
- Maximum Cryptonyx 360 allowed per calendar year: 12.8 fluid ounces/Acre (0.1 lb Al/A beta-cyfluthrin, 0.2 lb ai/A imidacloprid)
- Maximum beta-cyfluthrin allowed in all forms per crop season: 0.132 lb ai/A
- Maximum cyfluthrin allowed in all forms per crop season: 0.263 lb ai/A
- Maximum beta-cyfluthrin plus cyfluthrin allowed in all forms per crop season: 0.263 lb ai/A

# ADDITIONAL USE DIRECTIONS

• Cryptonyx 360 is to be applied through properly calibrated ground, aerial or chemigation application equipment.

<sup>1</sup>For all aphids, apply as pest population begins to build and prior to buildup of damaging levels. For aphid control in crop with dense canopy use ground application equipment which will provide thorough coverage of lower leaves.



SOYBEAN	
Pests Controlled	Product Rate Fluid Ounces/Acre
Leafhoppers	2.4 - 2.8
	(0.019 lb beta-cyfluthrin + 0.038 lb imidacloprid -
	0.022 lb beta-cyfluthrin + 0.044 lb imidacloprid)
Armyworms (1st and 2nd instars)	2.8
Aphids	(0.022 lb beta-cyfluthrin + 0.044 lb imidacloprid)
Bean leaf beetle	
Bean leaf webber	
Cabbage looper	
Corn rootworms (adult)	
Cucumber beetles (adult)	
Cutworms	
Grasshoppers	
Green cloverworm	
Japanese beetle (adult)	
June beetle (adult)	
Mexican bean beetle	
Saltmarsh caterpillar	
Silverspotted skipper	
Soybean podworm / Corn earworm	
Stink bugs	
Tarnished plant bug	
Threecornered alfalfa hopper	
Thrips (foliage feeding thrips only)	
Velvetbean caterpillar	
Whiteflies (other than sweetpotato whitefly)	

• Pre-Harvest Interval (PHI) for seed: 21 days.

Dry vines (hay) and green forage may be fed  ${\bf 15}$  days after last application.

- Minimum interval between applications: 7 days
- Maximum Cryptonyx 360 allowed per calendar year: 9.0 fluid ounces/A (0.07 lb ai/A beta-cyfluthrin, 0.14 lb ai/A imidacloprid)
- Maximum beta-cyfluthrin allowed in all forms per crop season: 0.088 lb ai/A
- Maximum cyfluthrin allowed in all forms per crop season: 0.175 lb ai/A
- Maximum beta-cyfluthrin plus cyfluthrin allowed in all forms per crop season: 0.175 lb ai/A

# ADDITIONAL USE DIRECTIONS

• Cryptonyx 360 is to be applied through properly calibrated ground, aerial or chemigation application equipment.



#### **VEGETABLE CROPS**

#### **Applications for Cryptonyx 360**

Apply specified rate per acre as a broadcast or directed foliar spray to an infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve pest control. A spray adjuvant may be used to improve coverage Cryptonyx 360 may be tank-mixed with other insecticides for improved control of other pests.

# BRASSICA LEAFY VEGETABLES<sup>1</sup>

Crops of Crop Group 5, plus Turnip greens: Broccoli, Broccoli raab (rapini), Brussels sprouts, Cabbage, Cauliflower, Cavalo broccolo, Chinese broccoli (gai lon), Chinese cabbage (bok choy), Chinese cabbage (napa), Chinese mustard cabbage (gai choy), Collards, Kale, Kohlrabi, Mizuna, Mustard greens, Mustard spinach, Rape greens, Turnip greens.

Pests Controlled	Product Rate Fluid Ounces/Acre
Alfalfa looper	3.0
Armyworms (1st and 2nd instars)	(0.023 lb beta-cyfluthrin + 0.047 lb imidacloprid)
Aphids	
Cabbage looper	
Cabbage webworm	
Corn earworm	
Cutworms	
Flea beetles	
Grasshopper	
Imported cabbageworm	
Leafhoppers	
Meadow spittlebug	
Southern cabbageworm	
Stink bugs	
Tarnished plant bug	
Thrips (except <i>Thrips palmi</i> and <i>Scirtothrips dorsalis</i> ) (Controls foliage feeding thrips only)	
Vegetable weevil (adult)	
Chilli thrips (foliage feeding thrips only)	3.0
Thrips palmi (foliage feeding thrips only)	(0.023 lb beta-cyfluthrin + 0.047 lb imidacloprid)
Whitefly (sweetpotato whitefly)	

#### RESTRICTIONS

- Pre-Harvest Interval (PHI): 7 days
- Minimum interval between applications: 7 days
- Maximum Cryptonyx 360 allowed per crop season: 12.8 fluid ounces/A (0.1 lb ai/A beta-cyfluthrin, 0.2 lb ai/A imidacloprid)
- Maximum beta-cyfluthrin allowed in all forms per crop season: 0.1 lb ai/A
- Maximum cyfluthrin allowed in all forms per crop season: 0.2 lb ai/A
- Maximum beta-cyfluthrin plus cyfluthrin allowed in all forms per crop season: 0.2 lb ai/A
- For foliar spray only: maximum annual application rate is not to exceed 0.20 lbs. imidacloprid/A/calendar year.
- For aerial applications, apply in a minimum of 5 GPA.

¹Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

#### **LEAFY GREENS**<sup>1</sup>

Crops of Group Subgroup 4A: Amaranth (leafy amaranth, Chinese spinach, tampala), Arugula (Roquette), Chervil, Chrysanthemum (edible leaved and garland), Corn salad, Cress (garden), Cress (upland, yellow rocket, winter cress), Dandelion, Dock (sorrel). Endive (escarole), Lettuce (head and leaf), Orach, Parsley, Purslane (garden and winter), Radicchio (red chicory), Spinach New Zealand and vine (Malabar spinach, Indian spinach)

Pests Controlled	Product Rate Fluid Ounces/Acre
Alfalfa looper	3.0
Armyworms (1st and 2nd instars)	(0.023 lb beta-cyfluthrin + 0.047 lb imidacloprid)
Aphids	
Cabbage looper	
Corn earworm	
Cutworms	
European corn borer	
Flea beetles	
Grasshoppers	
Green cloverworm	
Imported cabbageworm	
Leafhoppers	
Saltmarsh caterpillar	
Stink bugs	
Thrips (except <i>Thrips palmi</i> and <i>Scirtothrips dorsalis</i> )	
(Controls foliage feeding thrips only)	
Vegetable weevil (adult)	
Pests Suppressed	Product Rate Fluid Ounces/Acre
Chilli thrips (foliage feeding thrips only)	3.0
Thrips palmi (foliage feeding thrips only)	(0.023 lb beta-cyfluthrin + 0.047 lb imidacloprid)
Whitefly (sweetpotato whitefly)	

# RESTRICTIONS

- Pre-Harvest Interval (PHI): 7 days
- Minimum interval between applications: 7 days
- Maximum Cryptonyx 360 allowed per crop season: 12.8 fluid ounces/A (0.1 lb ai/A beta-cyfluthrin, 0.2 lb ai/A imidacloprid).
- Maximum beta-cyfluthrin allowed in all forms per crop season: 0.1 lb ai/A
- Maximum cyfluthrin allowed in all forms per crop season: 0.2 lb ai/A
- Maximum beta-cyfluthrin plus cyfluthrin allowed in all forms per crop season: 0.2 lb ai/A
- For aerial applications, apply in a minimum of 5 GPA.
- For foliar spray only: maximum annual application rate is not to exceed 0.20 lbs. imidacloprid/A/calendar year.

<sup>1</sup>Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.



FRUITING VEGETABLES <sup>1</sup>	
Crops of Crop Group 8: Eggplant, Ground cherry, Pepper, (Capsicum spp., Bell, Chili, Cooking, Pimento and Sweet) Tomato, Pepinos, Tomatillo	
Pests Controlled	Product Rate Fluid Ounces/Acre
Aphids	3.8 - 4.1
Beet armyworm (1st and 2nd instars)	(0.030 lb beta-cyfluthrin + 0.059 lb imidacloprid -
Cabbage looper	0.032 lb beta-cyfluthrin + 0.064 lb imidacloprid)
Colorado potato beetle	
European corn borer	
Leafhoppers	
Southern armyworm (1st and 2nd instars)	
Stink bugs	
Tarnished plant bug	
Thrips	
(Except <i>Thrips palmi</i> . Controls foliage feeding thrips only)	
Tomato fruitworm	
Tomato hornworm	
Tomato pinworm	
Variegated cutworm	
Western yellowstriped armyworm (1st and 2nd instars)	
Flea beetles	4.1 (0.032 lb beta-cyfluthrin + 0.064 lb imidacloprid)
Garden symphylan	(U.U32 lb beta-cyfluthrin + U.U64 lb imidacloprid)
Whitefly (sweetpotato whitefly)	
Pests Suppressed	Product Rate Fluid Ounces/Acre
Dipterous leafminer	(0.020 lb bate authability (0.004 lb invides and)

# Pepper weevil Thrips palmi (folia RESTRICTIONS

- Pre-Harvest Interval (PHI) for tomato: 0 day. PHI for all other fruiting vegetables included in this section: 7 days.
- Minimum interval between applications: 7 days

Thrips palmi (foliage feeding thrips only)

- Maximum Cryptonyx 360 allowed per crop season: 15.4 fluid ounces/A (0.12 lb ai/A beta-cyfluthrin, 0.24 lb ai/A imidacloprid)
- Maximum beta-cyfluthrin allowed in all forms per crop season: 0.132 lb ai/A
- · Maximum cyfluthrin allowed in all forms per crop season: 0.263 lb ai/A
- Maximum beta-cyfluthrin plus cyfluthrin allowed in all forms per crop season: 0.263 lb ai/A
- Foliar spray only: maximum annual application rate is not to exceed 0.20 lbs. imidacloprid/A/calendar year.

<sup>1</sup>Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

# ADDITIONAL USE DIRECTIONS

- For pepper weevil, apply **Cryptonyx 360** by ground equipment only, timing applications prior to damaging population becoming established. Good coverage of foliage and fruit is necessary for pest control. Incorporate applications of **Cryptonyx 360** into a full-season program, where alternations of effective products from multiple classes of chemistry and different modes of action are utilized in a blocked or windowed approach.
- For reduction of damage caused by garden symphylan, apply **Cryptonyx 360** to the entire top of the planting beds prior to transplanting. Thoroughly incorporate to a depth of approximately 4 to 6 inches. A maximum of 1 pre-transplant application is allowed per crop season



4.1 (0.032 lb beta-cyfluthrin + 0.064 lb imidacloprid)

# PEA and BEAN, DRIED SHELLED (Except Soybean)<sup>1</sup>

Crops of Crop Group 6C (Except Soybean, dry):

Dried cultivars of bean (any Lupinus spp., includes grain lupin, sweet lupin, white lupin, and white sweet lupin).

Dried cultivars of bean (any Phaseolus spp., includes field bean, kidney bean, dry lima bean, navy bean, pinto bean, tepary bean).

Dried cultivars of bean (any Vigna spp., includes adzuki bean, blackeyed pea, catjang, cowpea, Crowder pea, moth bean, mung bean, rice bean, southern pea, Urd bean).

Dried cultivars of pea (any Pisum spp., includes field pea).

Other Beans and Peas, includes broad bean (dry), chickpea (dry), guar (dry), lablab bean (dry), lentil (dry), pigeon pea (dry).

Pests Controlled	Product Rate Fluid Ounces/Acre
Alfalfa looper	2.4 - 2.8
Armyworms (1st and 2nd instars)	(0.019 lb beta-cyfluthrin + 0.038 lb imidacloprid-
Aphids	0.022 lb beta-cyfluthrin + 0.044 imidacloprid)
Bean leaf beetle	
Cabbage lopper	
Corn earworm	
Cowpea curculio	
Cucumber beetle	
Cutworms	
European corn borer	
Flea beetles	
Grasshoppers	
Green cloverworm	
Japanese beetle	
Leafhoppers	
Mexican bean beetle	
Pea leaf beetle	
Pea weevil	
Saltmarsh caterpillar	
Tarnished plant bug	
Velvetbean caterpillar	
Webworm	
Woollybear caterpillar	
	Product Rate
Pests Suppressed	Fluid Ounces/Acre
Stink bugs	2.8
Whitefly (sweetpotato whitefly)	(0.022 lb beta-cyfluthrin + 0.044 imidacloprid)
RESTRICTIONS	

#### RESTRICTIONS

- Pre-Harvest Interval (PHI): 7 days
- Minimum interval between applications: 14 days
- Maximum Cryptonyx 360 allowed per crop season: 6.4 fluid ounces/A (0.05 lb ai/A beta-cyfluthrin, 0.10 lb ai/A imidacloprid)
- Maximum beta-cyfluthrin allowed in all forms per crop season: 0.05 lb ai/A
- Maximum cyfluthrin allowed in all forms per crop season: 0.10 lb ai/A
- Maximum beta-cyfluthrin plus cyfluthrin allowed in all forms per crop season: 0.10 lb ai/A
- DO NOT feed treated vines or hay to livestock.

# ADDITIONAL USE DIRECTIONS

• Cryptonyx 360 is to be applied through properly calibrated ground, aerial or chemigation application equipment.

<sup>1</sup>Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.



CARROT AND RADISH <sup>1</sup>	
Pests Controlled	Product Rate Fluid Ounces/Acre
Aphids	2.4 - 2.8
Cabbage looper	(0.019 lb beta-cyfluthrin + 0.038 lb imidacloprid-
Carrot weevil	0.022 lb beta-cyfluthrin + 0.044 imidacloprid)
Cutworms	
European corn borer	
Flea beetles	
Leafhoppers	
Tarnished plant bug	
Pests Suppressed	Product Rate Fluid Ounces/Acre
Chilli thrips (foliage feeding thrips only)	2.8
Thrips palmi (foliage feeding thrips only)	(0.022 lb beta-cyfluthrin + 0.044 imidacloprid)
Stink bugs	
Whitefly (sweetpotato whitefly)	

- Pre-Harvest Interval (PHI): 7 days
- Minimum interval between applications: 7 days
- Maximum Cryptonyx 360 allowed per crop season:
  - o 2.8 fluid ounces/Acre (0.022 lb AI/A beta-cyfluthrin, 0.044 lb ai/A imidacloprid) on Radish;
  - o 8.3 fluid ounces/Acre (0.065 lb Al/A beta-cyfluthrin, 0.130 lb ai/A imidacloprid) on Carrot.
  - o Maximum beta-cyfluthrin allowed in all forms per crop season: 0.11 lb ai/A
- Maximum cyfluthrin allowed in all forms per crop season: 0.22 lb ai/A
- Maximum beta-cyfluthrin plus cyfluthrin allowed in all forms per crop season: 0.22 lb ai/A
- DO NOT harvest radish tops (leaves) for human consumption.

¹Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

#### TUBEROUS AND CORM VEGETABLES<sup>1</sup>

Crops of Crop Subgroup 1C: Arracacha, Arrowroot, Artichoke (Chinese and Jerusalem), Canna (edible), Cassava (bitter and sweet), Chayote (root), Chufa, Dasheen (taro), Ginger, Leren, Sweet potato, Tanier, Turmeric, Yam bean, Yam (true) (For applications on Potato see Field Crops section)

Pests Controlled	Product Rate Fluid Ounces/Acre
Aphids	2.4 - 2.8
Cabbage looper	(0.019 lb beta-cyfluthrin + 0.038 lb imidacloprid -
Carrot weevil	0.022 lb beta-cyfluthrin + 0.044 imidacloprid)
Cutworms	
European corn borer	
Flea beetles	
Leafhoppers	
Sweet potato weevil	
Tarnished plant bug	
Pests Suppressed	Product Rate
rests oupplesseu	Fluid Ounces/Acre
Chilli thrips (foliage feeding thrips only)	2.8
Thrips palmi (foliage feeding thrips only)	(0.022 lb beta-cyfluthrin + 0.044 imidacloprid)
Stink bugs	
Whitefly (sweetpotato whitefly)	

#### RESTRICTIONS

- Pre-Harvest Interval (PHI): 7 days
- Minimum interval between applications: 5 days
- Maximum Cryptonyx 360 allowed per crop season: 8.3 fluid ounces/A (0.065 lb ai/A beta-cyfluthrin, 0.13 lb ai/A imidacloprid)
- Maximum beta-cyfluthrin allowed in all forms per crop season: 0.132 lb ai/A
- Maximum cyfluthrin allowed in all forms per crop season: 0.263 lb ai/A
- Maximum beta-cyfluthrin plus cyfluthrin allowed in all forms per crop season: 0.263 lb ai/A

#### ADDITIONAL USE DIRECTIONS

• Cryptonyx 360 is to be applied through properly calibrated ground, aerial or chemigation application equipment.

 $^{1}\text{Not}$  for use on crops grown for seed unless allowed by state-specific 24(c) labeling



#### TREE AND VINE CROPS

#### **Applications for Cryptonyx 360**

Apply specified rate per acre as a broadcast or directed foliar spray to an infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve pest control. A spray adjuvant may be used to improve coverage. Cryptonyx 360 may be tank mixed with other insecticides for improved control of other pests.

Application rates within this label are based on full-size mature trees and vines. Use higher labeled rates for moderate to heavy insect pressure. Lower rates are generally adequate for smaller trees/vines or low to moderate insect pressure but require careful scouting and may require more frequent application.

#### CITRUS (California and Arizona, Only)

Crops of Crop Group 10: Calamondin, Citrus citron, Citrus hybrids (Citrus spp., includes chironja, tangelo and tangor), Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Orange (sweet and sour), Pummelo, Satsuma mandarin, and other cultivars and/or hybrids of these

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Pests Controlled	Product Rate Fluid Ounces/Acre
Leafhoppers/Sharpshooters (Glassy-winged sharpshooter)	2.4 - 3.2
	(0.019 lb beta-cyfluthrin + 0.038 lb imidacloprid -
	0.025 lb beta-cyfluthrin + 0.05 lb imidacloprid)
Foliar feeding cutworms	3.2 - 6.4
Fuller rose beetle (larvae and adults on foliage)	(0.025 beta-cyfluthrin + 0.05 lb imidacloprid -
Grasshoppers	0.05 beta-cyfluthrin + 0.1 lb imidacloprid)
Root-weevil complex (larvae and adults on foliage)	
Aphids	6.4 (0.05 beta-cyfluthrin + 0.1 lb imidacloprid)
Asian citrus psyllid	(0.03 Deta-cynothini + 0.1 ib inidaciophia)
Blackfly	
Katydid	
Leafminers	
Mealybugs	
Scales	
Whiteflies	
Pests Suppressed	Product Rate
	Fluid Ounces/Acre
Thrips (foliage feeding thrips only)	6.4
	(0.05 beta-cyfluthrin + 0.1 lb imidacloprid)

#### RESTRICTIONS

- Pre-Harvest Interval (PHI): 0 day
- Minimum interval between applications: 10 days
- Maximum Cryptonyx 360 allowed per calendar year: 6.4 fluid ounces/A (0.05 lb Al/A beta-cyfluthrin, 0.10 lb ai/A imidacloprid)
- Maximum beta-cyfluthrin allowed in all forms per crop season: 0.05 lb ai/A
- Maximum cvfluthrin allowed in all forms per crop season: 0.10 lb ai/A
- Maximum beta-cyfluthrin plus cyfluthrin allowed in all forms per crop season: 0.10 lb ai/A
- DO NOT apply during bloom or within 10 days prior to bloom or when bees are foraging.
- Cryptonyx 360 is to be applied through properly calibrated ground or aerial application equipment.
- Minimum application volume (water): 25 GPA ground, 25 GPA aerial application.

# ADDITIONAL USE DIRECTIONS

• Time applications for control of scale according to crawler stage. Two applications may be required to achieve control

#### GRAPE

Table grape, Raisin, Wine and Muscadine grape.

Pests Controlled	Product Rate Fluid Ounces/Acre
Grape leaf skeletonizer	2.4 - 3.2
Leafhoppers/Sharpshooters (Glassy-winged sharpshooter)	(0.019 lb beta-cyfluthrin + 0.038 lb imidacloprid -
Western grape leaf skeletonizer	0.025 beta-cyfluthrin + 0.05 lb imidacloprid)
Climbing cutworm	3.2 - 6.4
Grape berry moth	(0.025 beta-cyfluthrin + 0.05 lb imidacloprid -
Grape bud beetle	0.05 beta-cyfluthrin + 0.1 lb imidacloprid)
Grape cane gallmaker (adult)	
Grape flea beetle	
Grape leaffolder	
Grape leafroller	
Mealybugs (crawlers)	
Omnivorous leafroller	
Orange tortrix	
Thrips (foliage feeding thrips only)	

# RESTRICTIONS

- Pre-Harvest Interval (PHI): 3 days
- Minimum interval between applications: 14 days
- Maximum Cryptonyx 360 allowed per calendar year: 6.4 fluid ounces/A (0.05 lb ai/A beta-cyfluthrin, 0.10 lb ai/A imidacloprid)
- Maximum beta-cyfluthrin allowed in all forms per crop season: 0.1 lb ai/A
- Maximum cyfluthrin allowed in all forms per crop season: 0.2 lb ai/A
- Maximum beta-cyfluthrin plus cyfluthrin allowed in all forms per crop season: 0.2 lb ai/A
- Minimum application volume (water): 25 GPA ground, 10 GPA aerial application.

## ADDITIONAL USE DIRECTIONS

• Cryptonyx 360 is to be applied through properly calibrated application equipment.



HOPS	
Pests Controlled	Product Rate
	Fluid Ounces/Acre
Hop aphid	3.2
Hop flea beetle	(0.025 beta-cyfluthrin + 0.05 lb imidacloprid)
Hop looper	
Hop plant bug	

- Pre-Harvest Interval (PHI): 28 days
- Minimum interval between applications: 21 days
- Maximum Cryptonyx 360 allowed per calendar year: 16 fluid ounces/A (0.125 lb ai/A beta-cyfluthrin, 0.25 lb ai/A imidacloprid)
- Maximum beta-cyfluthrin allowed in all forms per crop season: 0.125 lb ai/A
- Maximum cyfluthrin allowed in all forms per crop season: 0.250 lb ai/A
- Maximum beta-cyfluthrin plus cyfluthrin allowed in all forms per crop season: 0.250 lb ai/A

#### ADDITIONAL USE DIRECTIONS

• Cryptonyx 360 is to be applied through properly calibrated ground or aerial application equipment.

#### POME FRUIT

Crops of Crop Group 11: Apple, Crabapple, Loguat, Mayhaw, Pear, Oriental pear, Quince

# RESTRICTIONS

- Pre-Harvest Interval (PHI): 7 days
- Minimum interval between applications: 14 days
- Maximum Cryptonyx 360 allowed per calendar year: 2.8 fluid ounces/A (0.022 lb ai/A beta-cyfluthrin, 0.044 lb ai/A imidacloprid)
- $\, \bullet \,$  Maximum beta-cyfluthrin allowed in all forms per crop season: 0.022 lb ai/A
- Maximum cyfluthrin allowed in all forms per crop season: 0.044 lb ai/A
- Maximum beta-cyfluthrin plus cyfluthrin allowed in all forms per crop season: 0.044 lb ai/A
- Foliar spray only: maximum annual application rate is not to exceed 0.40 lbs. imidacloprid/A/calendar year
- DO NOT apply pre-bloom or during bloom or when bees are foraging.
- Minimum application volume (water): 100 GPA ground, 10 GPA aerial application.

# ADDITIONAL USE DIRECTIONS

- Cryptonyx 360 is to be applied through properly calibrated application equipment.
- Time applications for control of scale according to crawler stage. Two applications may be required to achieve control.
- Application targeting Apple maggot must be combined with manufacturer's specified rate of a sticker.



# STONE FRUIT

Crops of Crop Group 12: Apricot, Cherry (sweet and tart), Nectarine, Peach, Plum, (Chickasaw, Damson, and Japanese), Plumcot, Prune (fresh) Product Rate **Pests Controlled** Fluid Ounces/Acre American plum borer 2.4 - 2.8(0.019 lb beta-cyfluthrin + 0.038 lb imidacloprid-**Aphids** 0.022 lb beta-cyfluthrin + 0.044 imidacloprid) Cherry fruit fly **Codling Moth** Green fruitworm Green June beetle Japanese beetle Leafhoppers/Sharpshooters (Glassy-winged sharpshooter) Lesser peach tree borer Obliquebanded leafroller Omnivorous leafroller Oriental fruit moth Peach twig borer Periodical cicada Plant bugs Plum curculio Redbanded leafroller Rose chafer San Jose scale (crawlers)

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# RESTRICTIONS

Stink bugs Western cherry fruit fly

- Pre-Harvest Interval (PHI): 7 days
- Minimum interval between applications: 14 days
- Maximum Cryptonyx 360 allowed per calendar year: 5.6 fluid ounces/A (0.044 lb ai/A beta-cyfluthrin, 0.088 lb ai/A imidacloprid)
- Maximum beta-cyfluthrin allowed in all forms per crop season: 0.044 lb ai/A
- Maximum cyfluthrin allowed in all forms per crop season: 0.088 lb ai/A
- Maximum beta-cyfluthrin plus cyfluthrin allowed in all forms per crop season: 0.088 lb ai/A
- Foliar spray: maximum annual application rate is not to exceed 0.40 lbs. imidacloprid/A/calendar year.
- DO NOT apply pre-bloom or during bloom or when bees are foraging.
- Minimum application volume (water): 50 GPA ground application, 10 GPA aerial application.

#### **ADDITIONAL USE DIRECTIONS**

- Time applications for control of scale according to crawler stage. Two applications may be required to achieve control.
- Time applications targeting aphids before pest population builds to damaging levels.
- Cryptonyx 360 is to be applied through properly calibrated application equipment.



TREE NUTS - except almond  Crops of Crop Group 14 (except Almond) and Pistacho: Beec-ut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Hazelnut (filbert), Hickory nut, Macadamia nut, Pecan, Walnut black and English		
Pests Controlled	Quapin, Hazeinut (nibert), Hickory nut, Macadamia nut, Pecan, Wainut Diack and English  Product Rate  Fluid Ounces/Acre	
Ants (on foliage) Aphids (except Black pecan aphid – see below) Codling moth Common earwig Filbertworm Hickory shuckworm Leaffooted bug Leaffooted bug Leafhoppers/ Sharpshooters (Glassy-winged sharpshooter) Navel orangeworm Obliquebanded leafroller Peach twig borer Pecan nut casebearer Pecan weevil Phylloxera sp. (leaf infestations) Spittlebugs Stink bugs	2.8 (0.022 lb beta-cyfluthrin + 0.044 imidacloprid)	
Tarnished plant bug Walnut husk fly Whiteflies		
Pests Suppressed	Product Rate Fluid Ounces/Acre	
Black pecan aphid Mealybugs	2.8 (0.022 lb beta-cyfluthrin + 0.044 imidacloprid)	

# San Jose scale RESTRICTIONS

- Pre-Harvest Interval (PHI): 14 days
- Minimum interval between applications: 14 days
- Maximum Cryptonyx 360 allowed per calendar year: 2.8 fluid ounces/A (0.022 lb ai/A beta-cyfluthrin, 0.044 lb ai/A imidacloprid)
- Maximum beta-cyfluthrin allowed in all forms per crop season: 0.022 lb ai/A
- Maximum cyfluthrin allowed in all forms per crop season: 0.044 lb Al/A
- Maximum beta-cyfluthrin plus cyfluthrin allowed in all forms per crop season: 0.044 lb ai/A
- Foliar spray: maximum annual application rate is not to exceed 0.30 lbs. imidacloprid/A/calendar year.
- DO NOT apply pre-bloom or during bloom or when bees are foraging.
- Minimum application volume (water): 100 GPA ground application, 10 GPA aerial application.

#### ADDITIONAL USE DIRECTIONS

- Time applications for control of scale according to crawler stage. Two applications may be required to achieve control.
- Time applications targeting aphids before pest population builds to damaging levels.
- Cryptonyx 360 is to be applied through properly calibrated application equipment.



# STORAGE AND DISPOSAL

DO NOT contaminate water, food or feed by storage or disposal.

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

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

For plastic containers 

5 gallons: 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. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by other procedures allowed by state and local

For plastic containers > 5 gallons: 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. Fill the container 1/4 full with water. Recap and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by other procedures allowed by state and local authorities.

#### LIMITATION OF WARRANTY AND LIABILITY

IMPORTANT: READ BEFORE USE. Read the entire Directions for Use, Conditions of Warranties and Limitations of Liability before using this product. If these terms and conditions are not acceptable, return the unopened product container at once, By using this product, user or buyer accepts the following Disclaimer of Warranties and Limitations of Liability, CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Ineffectiveness, injury, and other unintended consequences may result because of such factors as manner of use or application (including misuse), the presence of other materials, weather conditions, and other unknown factors, all of which are beyond the control of ATTICUS, LLC. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer. DISCLAIMER OF WARRANTIES: To the extent consistent with applicable law, ATTICUS, LLC makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond statements on this label. LIMITATIONS OF LIABILITY: To the extent consistent with applicable law, neither ATTICUS, LLC the manufacturer, nor the Seller shall be liable for any indirect, special, incidental or consequential damages resulting from the use, handling, application, storage, or disposal of this product. To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use, handling, application, or storage of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid.

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