87290-26 05/22/2013 1/59

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
CHEMICAL SAFETY AND
POLLUTION PREVENTION

May 22, 2013

Willowood USA, LLC
c/o Ms. Cheryl Wagner
Wagner Regulatory Associates, Inc.
P.O. Box 640
Hockessin, DE 19707

Subject: (1) Amended label to add darkling and hide beetle control in poultry houses
(2) Amended label to change the PPE selection category
Product Name: Willowood Imidacloprid 4SC
EPA Registration No.: 87290-26
EPA Decision No.: 474698
Your submissions dated January 20 and April 8, 2013; resubmission dated May 21, 2013

Dear Ms. Wagner:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, is acceptable. A stamped copy of the label is enclosed for your records. Please submit one copy of your final printed labeling before you release the product for shipment. Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). If you have any questions, please contact Julie Chao by phone at: (703) 308-8735, or by email at: chao.julie@epa.gov.

Regards,

Venus Eagle

Venus Eagle, Product Manger (01)
Insecticide-Rodenticide Branch
Registration Division (7505P)

Enclosure

Master Label consisting of:
Pages 1 – 47: Sub-Label A [Agricultural uses]
Pages 48 - 58: Sub-Label B [Seed Treatment uses]

Willowood Imidacloprid 4SC

For uses in pest management, control of listed insects that may vector diseases and maintenance of plant health.

ACTIVE INGREDIENT	**% BY WT.**
Imidacloprid:	
1-[(6-Chloro-3-pyridinyl)methyl] -N-nitro-2-imidazolidinimine	40.7%
OTHER INGREDIENTS:	59.3%
TOTAL:	100.0%

Contains 4.0 pounds of active ingredient per gallon.

Shake well before using.
STOP-Read the label before use.
KEEP OUT OF REACH OF CHILDREN
CAUTION

FIRST AID
IF SWALLOWED: • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING: • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
IF INHALED: • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
IF IN EYES: • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center, doctor, or going for treatment. For emergency information concerning this product, call the National Pesticides Information Center (NPIC) at **1-800-858-7378** seven days a week, 6:30 a.m. to 4:30 p.m. Pacific Time (NPIC Web site: www.npic.orst.edu)
NOTE TO PHYSICIAN: No specific antidote is available. Treat the patient symptomatically.

See inside booklet for additional Precautionary Statements, Directions for Use, Storage and Disposal, and Limitation of Warranty and Liability.

Manufactured For:
Willowood LLC
1600 NW GARDEN VALLEY BLVD., SUITE 120
ROSEBURG OR 97471

EPA Reg. No. 87290-26 **EPA Est. No.**

ACCEPTED
MAY 2 2 2013
Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under:

EPA. Reg. No: 87290-26

Net Contents: ___ gals.

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION. Harmful if swallowed. Harmful if absorbed through skin. Harmful if inhaled. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Avoid breathing vapor or spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical resistant to this product are listed below. More options can be obtained by following the instructions for Category C on an EPA chemical-resistance category selection chart.

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material such as nitrile rubber, butyl rubber, neoprene rubber, barrier laminate, polyethylene, polyvinyl chloride (PVC), or Viton.
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining personal protective equipment, PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

ENGINEERING CONTROLS 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

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE 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 wildlife and highly toxic to aquatic invertebrates. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

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

Ground Water Advisory

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

OBEY THE FOLLOWING PRECAUTIONS WHEN MIXING AND APPLYING IN THE VICINITY OF AQUATIC AREAS SUCH AS LAKES, RESERVOIRS, RIVERS, PERMANENT STREAMS, MARSHES OR NATURAL PONDS, ESTUARIES, AND COMMERCIAL FISH FARM PONDS.

SPRAY DRIFT MANAGEMENT

The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator is responsible for considering all of these factors when making application decisions. Avoiding spray drift is the responsibility of the applicator.

Importance of Droplet Size

An important factor influencing drift is droplet size. Small droplets (<150 - 200 microns) drift to a greater extent than large droplets. Within typical equipment specifications, applications should be made to deliver the largest droplet spectrum that provides sufficient control and coverage. Formation of very small droplets may be minimized by appropriate nozzle selection, by orienting nozzles away from the airstream as much as possible and by avoiding excessive spray boom pressure.

Wind Speed Restrictions

Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size, canopy, and equipment specifications determine drift potential at any given wind speed. Do not apply when winds are greater than 15 mph and avoid gusty and windless conditions. Risk of exposure to sensitive aquatic areas can be reduced by avoiding applications when wind direction is toward the aquatic area.

Restrictions During Temperature Inversions

Do not make aerial or ground applications during temperature inversions. Drift potential is high during temperature inversions. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source. 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 mixing.

Airblast (Air Assist) Instructions for Tree Crops and Vineyards

Airblast sprayers carry droplets into the canopy of trees/vines via a radially, or laterally directed air stream. The following specific drift management practices must be followed:

- Adjust deflectors and aiming devices so that spray is only directed into the canopy.
- Block off upward pointed nozzles when there is no overhanging canopy.
- Use only enough air volume to penetrate the canopy and provide good coverage.
- Do not allow the spray to go beyond the edge of the cultivated area (i.e., turn off sprayer when turning at end rows).
- Only spray inward, toward the orchard or vineyard, for application to the outside rows.

Mixing and Loading Requirements

To avoid potential contamination of groundwater, the use of a properly designed and maintained containment pad for mixing and loading of any pesticide into application equipment is specified. If containment pad is not used, maintain a minimum distance of 25 feet between mixing and loading area and potential surface to groundwater conduits such as field sumps, uncased well heads, sinkholes, or field drains.

For Aerial Applications

The spray boom should be mounted on the aircraft so as to minimize drift caused by wing tip vortices. The minimum practical boom length should be used, and must not exceed 75% of the wing span or rotor diameter.

No-Spray Zone Requirements for Foliar Applications

Do not apply by ground within 25 feet, or by air within 150 feet of lakes, reservoirs, rivers, permanent streams,

marshes or natural ponds, estuaries, and commercial fish farm ponds.

No-Spray Zone Requirements for Soil Applications
Do not apply within 25 feet, of lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries and commercial fish farm ponds.

Runoff Management
Do not cultivate within 10 feet of the aquatic areas to allow growth of a vegetative filter strip. When used on erodible soils, Best Management Practice for minimizing runoff should be employed. Consult your local Natural Resources Conservation Service for advice in your use area.

Endangered Species Notice
Under the Endangered Species Act, it is a federal offense to use any pesticide in a manner that results in the death of a member of an endangered species. Consult your local county bulletin, County Extension Agent, or Pesticide State Lead Agency for information concerning endangered species in your area.

Resistance Management
Some insects are known to develop resistance to insecticides after repeated use. As with any insecticide, the use of this product should conform to resistance management strategies established for the use area. Willowood Imidacloprid 4SC contains a Group 4A insecticide. Insect biotypes with acquired or inherent tolerance to Group 4A insecticides may eventually dominate the insect population if Group 4A insecticides are used repeatedly as the predominant method of control for targeted species.

The active ingredient in Willowood Imidacloprid 4SC is a member of the neonicotinoid chemical class. Avoid using a block of more than three consecutive applications of Willowood Imidacloprid 4SC and/or other Group 4A products having the same or similar mode of action. Following a neonicotinoid block of treatments, Willowood strongly encourages the rotation to a block of applications with effective products of a different mode of action before using additional applications of neonicotinoid products. Using a block rotation or windowed approach, along with other IPM practices, is considered as effective use strategy for preventing or delaying an insect pest's ability to develop resistance to this class of chemistry.

Foliar applications of Willowood Imidacloprid 4SC or other Group 4A products from the neonicotinoid chemical class should not be used on crops previously treated with a long-residual, soil-applied product from the neonicotinoid chemical class.

Other Group 4A, neonicotinoid products used as foliar treatments include: Actara, Assail, Calypso, Centric, Clutch, Couraze, Gallant, Impulse, Intruder, Leverage, Nuprid, Pasada, Provado, Trimax Pro, and Venom.
Other Group 4A, neonicotinoid products used as soil/seed treatments include Admire Pro, Advise, Alias, Belay, Couraze, Cruiser, Gaucho, Macho, Macho Max, Nuprid, Platinum, Venom, and Widow.

Contact your Cooperative Extension specialist, certified crop advisor, and/or product manufacturer for additional insect resistance management recommendations. Also, for more information on Insect Resistance Management (IRM), visit the Insecticide Resistance Action Committee (IRAC) on the web at http://www.irac-online.org/.

DIRECTIONS FOR USE

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

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 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 intervals. 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.

Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:
- Coveralls
- Chemical-resistant gloves made of any waterproof material such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyethylene, polyvinyl choride (PVC), or Viton
- Shoes plus socks

APPLICATION DIRECTIONS

Soil Application:
Direct applications of Willowood Imidacloprid 4SC into the seed or root-zone of crop. Failure to place Willowood Imidacloprid 4SC into root-zone may result in loss of control or delay in onset of activity. Apply Willowood Imidacloprid 4SC by ground application or chemigation application. For seedling flats or trays, only apply with broadcast, foliar applications or where product is intended to be washed from foliage to soil prior to drying on foliage.

Optimum activity of Willowood Imidacloprid 4SC results from applications to the root-zone of plants to be protected. The earlier Willowood Imidacloprid 4SC is available to a developing plant, the earlier the protection begins. Willowood Imidacloprid 4SC is continuously taken into the roots over a long period of time and the systemic nature of Willowood Imidacloprid 4SC allows movement from roots through the xylem tissue to all vegetative parts of the plant. This results in extended residual activity of Willowood Imidacloprid 4SC, the control of insects and the prevention and/or reduction of virus transmission or symptom expression, and plant health benefits. The rate of Willowood Imidacloprid 4SC applied affects the length of the plant protection period. Use the higher listed rates when infestations occur later in crop development, or where pest pressure is continuous. Willowood Imidacloprid 4SC will generally not control insects infesting flowers, blooms or fruit. Additional crop protection may be required for insects feeding in, or on these plant parts and for insects not listed in the crop-specific, pests controlled sections of this label. Additional, specific Willowood Imidacloprid 4SC application rates are also provided in the crop-specific sections of this label.

RESTRICTIONS:
- Do not apply with aerial application equipment
- Do not apply more than 0.5 lb. active ingredient per acre, per year regardless of formulation or method of application, unless specified within a crop-specific section for a given crop.

Foliar Application:
Do not apply Willowood Imidacloprid 4SC in enclosed structures such as greenhouses or planthouses.
Apply Willowood Imidacloprid 4SC as a directed or broadcast foliar spray. Thorough coverage of foliage is necessary without runoff for optimum insecticidal efficacy. Use adequate spray volumes, properly calibrated application equipment, and spray adjuvant if necessary to obtain thorough coverage. Failure to provide

adequate coverage and retention of Willowood Imidacloprid 4SC on leaves and fruit may result in loss of insect control or delay in onset of activity. Willowood Imidacloprid 4SC may be applied with properly calibrated ground or aerial application equipment. Minimum specified spray volumes unless otherwise specified on crop specific application sections are 10 gallons/acre by ground application and 5 gallons/acre through aerial equipment. Willowood Imidacloprid 4SC may also be applied by overhead chemigation (see additional Chemigation Directions for Use section below) if allowed in crop specific Application section.

Willowood Imidacloprid 4SC use on crops grown for production of true seed intended for private or commercial planting is not permitted unless specifically approved under state-specific 24(c) Special Local Needs labeling. As with any insecticide, care must be taken to minimize exposure of Willowood Imidacloprid 4SC to honey bees and other pollinators. Use of Willowood Imidacloprid 4SC on crops requiring bee pollination should be avoided during bloom and a minimum of 10 days prior to bloom. Additional information on Willowood Imidacloprid 4SC uses for these crops and other questions may be obtained from the Cooperative Extension Service, PCAs, consultants, or local Willowood, LLC representatives.

RESTRICTIONS:

- Do not apply to plants grown in non-soil medias such as perlite, vermiculite, rock wool or other soil-less media, or plants growing hydroponically.
- Do not apply more than 0.5 lb. active ingredient per acre, per crop season, regardless of formulation or method of application unless specified within a crop-specific Application section for a given crop.

MIXING INSTRUCTIONS

Willowood Imidacloprid 4SC is a suspension concentrate (flowable) formulation with unique qualities and should be shaken well prior to measuring/mixing. The formulation is thixotropic and after sitting for a short time reverts to a gel or thick paste consistency helping to prevent phase separation common to most "flowables". After moderate shaking, the formulation thins to a relatively non-viscous liquid which pours and measures easily with very few trapped air bubbles – another common problem of most flowables.

Willowood Imidacloprid 4SC has demonstrated easy mixing/blending in water with varying degrees of hardness and temperature. Willowood Imidacloprid 4SC has demonstrated good mixing and compatibility with many fluid fertilizers without dilution with water. However, because fertilizers vary widely in quality and composition, it is suggested that a jar test be performed (see **Compatibility Note** below) prior to full-scale mixing.

To prepare the application mixture, add a portion of the required amount of water to the tank and with agitation, add Willowood Imidacloprid 4SC. Complete filling tank with balance of water needed. Maintain sufficient agitation during both mixing and application. Willowood Imidacloprid 4SC may also be used with other pesticides and/or fertilizer solutions. Please see **Compatibility note** below. When tank mixtures of Willowood Imidacloprid 4SC and other pesticides are involved, prepare the tank mixture as described above and follow suggested Mixing Order below.

Mixing Order

When pesticide mixtures are needed, add wettable powders or wettable granules first, Willowood Imidacloprid 4SC and other flowable (suspension concentrate) products second, and emulsifiable concentrates last. Ensure good agitation as each component is added. Do not add an additional component until the previous is thoroughly mixed. If a fertilizer solution is added, a fertilizer/pesticide compatibility agent may be needed. Maintain constant agitation during both mixing and application to ensure uniformity of spray mixture. Follow the most restrictive precautions and limitations on the labeling of all products used in mixtures.

Compatibility Note

Test compatibility of the intended mixture before adding Willowood Imidacloprid 4SC 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 redisperse indicates an incompatible mixture that should not be used. For further information, contact your local Willowood

representative.

CHEMIGATION

For Soil Application: Chemigation applications of Willowood Imidacloprid 4SC may only be made to crops through chemigation systems as specified in crop-specific Application Instructions section and only through low-pressure systems unless specified for a given crop. DO NOT apply Willowood Imidacloprid 4SC through any other type of irrigation system.

For Foliar Application: Chemigation applications of Willowood Imidacloprid 4SC may be made to crops through overhead sprinkler chemigation if specified in crop-specific instruction sections. DO NOT apply Willowood Imidacloprid 4SC through any other type of irrigation system. Make foliar chemigation applications of Willowood Imidacloprid 4SC as concentrated as possible. Retention of Willowood Imidacloprid 4SC on target site of insect infestation is necessary for optimum activity. DO NOT chemigate Willowood Imidacloprid 4SC in water volumes exceeding 0.10 inch/Acre.

Water Volume
Willowood Imidacloprid 4SC chemigation applications should be made as concentrated as possible. Retention of Willowood Imidacloprid 4SC on target site of insect infestation is necessary for optimum activity. Chemigation of Willowood Imidacloprid 4SC in water volumes exceeding 0.10 inch/acre is not recommended.

Uniform Water Distribution and System Calibration:
The irrigation system must provide uniform distribution of treated water. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. The system must be calibrated to uniformly apply the rates specified. If you have questions about calibration, contact State Extension Service specialists, 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.

Drift:
Do not apply when wind speed favors drift beyond the area intended for treatment.

Required 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 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 water pump motor stops. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where 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.

Using Water from Public Water Systems:
Public water systems 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 must 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.

ROTATIONAL CROPS*

Treated areas may be replanted with any crop specified on an imidacloprid label, or any crop for which a tolerance exists for the active ingredient, as soon as practical following the last application. For crops not listed on an imidacloprid label, or for crops for which no tolerances for the active ingredient have been established, a 12-month plant-back interval must be observed.

IMMEDIATE PLANT-BACK: All crops on this label plus the following crops not on this label: barley, canola, corn (field, pop & sweet), rapeseed, sorghum, soybean, sugarbeet and wheat
30-DAY PLANT-BACK: Cereals (including 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.

FIELD CROPS

COTTON - SOIL

Pests Controlled	Rate: Fluid Ounces per 1,000 Row-Feet	Rate: Fluid Ounces per Acre
Cotton aphid, Plant bugs, Thrips, Whiteflies	0.65	8.5-10.6 (depending on row-spacing)

Restrictions:

- Pre-Harvest interval (PHI): 14 days
- Maximum Willowood Imidacloprid 4SC allowed per crop season when making soil applications: 10.6 fluid ounces/Acre (0.33 lb. AI/A)
- Regardless of formulation or method of application, apply no more than 0.5 lb. active ingredient per acre per year, including seed treatment, soil, and foliar uses.
- Do not apply more than a total of 6 applications of the active ingredient per season.
- Do not graze treated fields after any application of Willowood Imidacloprid 4SC. See **Resistance Management** section of this label.

Applications: Apply specified dosage in one of the following methods:

1. In-furrow spray during planting directed on or below seed;
2. In a narrow band directly below the eventual seed row in a bedding operation 7 or fewer days before planting;
3. Chemigation into root-zone through low-pressure drip or trickle irrigation.

COTTON- FOLIAR

Pests Controlled	Rate: Fluid Ounces per Acre
Cotton aphid, Cotton fleahopper, Bandedwinged whitefly, Plant bugs (excludes *Lygus hesperus),* Green stink bug, Southern green stink bug, Bollworm/bud worm (ovicidal effect)	1.0 – 2.0
Pests Suppressed	
Lygus bug *(Lygus hesperus),*Whiteflies (other than bandedwinged whitefly)	1.5 - 2.0

Restrictions:

- Pre-Harvest Interval (PHI): 14 days
- Minimum interval between applications: 7 days
- Maximum Willowood Imidacloprid 4SC allowed per crop season when making foliar applications: 10 fluid ounces per acre (0.31 lb. AI/A)
- Regardless of formulation or method of application, apply no more than 0.5 lb. active ingredient per acre per year, including seed treatment, soil, and foliar uses.
- Do not apply more than a total of 6 applications of the active ingredient per season.
- Do not graze treated fields after any application of Willowood Imidacloprid 4SC. See **Resistance Management** section of this label.

Applications: 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 optimum control. A spray adjuvant may be used to improve coverage. Willowood Imidacloprid 4SC may not knockdown established and heavy insect populations. Two applications may be required to achieve control. Scout fields and retreat if needed. Willowood Imidacloprid 4SC may be tank mixed with other insecticides for knockdown of pests or for improved control of other pests.

COTTON: Tank Mix Instructions

Pests Controlled (In Addition to Pests Listed Above)	Willowood Imidacloprid 4SC Rate: Fluid Ounces per Acre	Bidrin® 8* Rate: Fluid Ounces per Acre
For early season control of: Thrips	1.0 - 1.52	1.6 - 3.2
For mid to late season control of: Plant bugs, Stink bugs (including Brown stink bug), Grasshoppers, Saltmarsh caterpillar, Cotton leafperforator	1.0 - 1.52	4.0 - 8.0

* Refer to the Bidrin 8 product label for specific use directions. Follow the most restrictive precautions and limitations on the labeling of all products used in mixtures.

PEANUT - SOIL[1]

Pests Controlled	Rate: Fluid Ounces/Acre
Aphids, Leafhoppers, Whiteflies	8.0 -12.0
Pest Suppressed	
Thrips	8.0-12.0

Restrictions

- Pre-Harvest Interval (PHI): 14 days
- Maximum Willowood Imidacloprid 4SC allowed per season: 12.0 fluid ounces/Acre (0.38 lb. AI/A)

Applications: Apply specified dosage in one of the following methods:

1. In-furrow spray during planting directed on or below seed;
2. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.

Notes: Increases in Tomato spotted wilt virus (TSWV) incidence have been observed with soil applications of Willowood Imidacloprid 4SC on certain varieties of peanut. This may also be the case with other tospoviruses, or other viruses transmitted by various thrips species or perhaps, other pests. Prior to applying Willowood Imidacloprid 4SC to peanuts, Willowood recommends consultation with the State, Cooperative Extension Service, or Willowood representative, for recommendations. Growers are advised to weigh insect control benefits against potential increase in viral disease levels. In areas where TSWV or other tospovirus are endemic, growers are encouraged to use virus resistant varieties and consult the University of Georgia, Tomato spotted wilt virus index, before applying Willowood Imidacloprid 4SC.
[1]Use not permitted in California unless otherwise directed by state specific 24(c) Special Local Needs labeling.

PEANUT – FOLIAR[1]

Pests Controlled	Rate: Fluid Ounces/Acre
Aphids, Leafhoppers, Whiteflies	1.4
Pest Suppressed	
Thrips	1.4

Restrictions
- Pre-Harvest Interval (PHI): 14 days
- Maximum foliar applied Willowood Imidacloprid 4SC allowed per crop season: 4.2 fluid ounces/Acre (0.13 lb. AI/A)
- Minimum interval between foliar applications: 5 days

Application
Apply Willowood Imidacloprid 4SC through properly calibrated ground and aerial application equipment.
[1]Use not permitted in California unless otherwise directed by state specific 24(c) Special Local Needs labeling.

POTATO - SOIL

Pests Controlled	Rate: Fluid Ounces per 1,000 Row-Feet	Rate: Fluid Ounces per Acre
Aphids, Colorado potato beetle, Flea beetles, Leafhoppers, Potato psyllid	0.45 - 0.65	6.5 - 10.0
Pests/Diseases Suppressed		
Symptoms of: Potato leaf roll virus (PLRV), Potato yellows, Net necrosis, Wireworms	0.45 - 0.65	6.5 - 10.0

Restrictions:
- Maximum Willowood Imidacloprid 4SC allowed per crop season when making soil applications: 10.0 fluid ounces per acre (0.31 lb. active ingredient per acre).

Applications: Apply specified dosage in one of the following methods:
1. In-furrow spray during planting directed on seed pieces or seed potatoes;
2. Subsurface side-dress on both sides of the row covered with 3 or more inches of soil;
3. Narrow band spray at ground cracking directly over the row during hilling covered with 3 or more inches of soil;
4. Narrow band directly below the eventual seed row in a bedding operation 7 or fewer days before planting. For effective pest control or suppression, Willowood Imidacloprid 4SC applications must be placed below soil-surface and in contact with seed piece or within root-zone. For potatoes grown on highly permeable soils with shallow water table, at-plant applications of Willowood Imidacloprid 4SC may be made in a 2- to 4-inch band (width of planter shoe opening) and completely covered.

POTATO - Seed Piece Treatment

Pests Controlled	Rate: Fluid Ounces per 100 lbs. of Seed	Rate: Fluid Ounces per Acre*
Aphids, Colorado potato beetle, Flea beetles, Leafhoppers, Potato psyllid, Wireworms (seed-piece protection)	0.2 - 0.4	4.0 - 8.0
Pests/Diseases Suppressed	**Rate: Fluid Ounces per 1,000 Row-Feet**	**Rate: Fluid Ounces per Acre**
Symptoms of: Potato leaf roll virus (PLRV), Potato yellows, Net necrosis	0.4	8.0

Restrictions:

- Maximum Willowood Imidacloprid 4SC allowed per crop season when making seed piece treatment applications: 10.0 fluid ounces per acre (0.31 lb. active ingredient per acre).
- Do not use treated seed-pieces for food, feed, or fodder.
- Do not apply any subsequent application of Willowood Imidacloprid 4SC or other imidacloprid product (in-furrow) following a Willowood Imidacloprid 4SC seed-piece treatment.

Application: Apply specified dosage as a diluted spray onto seed-pieces using a shielded spray system. Dilute with 3 parts water, or less, to 1 part Willowood Imidacloprid 4SC. Agitate or stir spray solution as needed. Fungicidal or inert absorbent dusts may be applied after Willowood Imidacloprid 4SC application. Apply only in areas with adequate ventilation or in areas that are equipped to remove spray mist or dust. Plant seed pieces as soon as possible after treating avoiding prolonged exposure of Willowood Imidacloprid 4SC treated seed-pieces to sunlight and in accordance with the direction of your local Extension service.

POTATO - FOLIAR

Pests Controlled	Rate: Fluid Ounces per Acre
Aphids, Colorado potato beetle, Flea beetles, Leafhoppers, Psyllids	1.5

Restrictions:

- Minimum Interval between applications: 7 days
- Maximum Willowood Imidacloprid 4SC allowed per crop season when making foliar applications: 6.4 fluid ounces per acre (0.2 lb. AI/A)

Applications: 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 optimum control. A spray adjuvant may be used to improve coverage. Willowood Imidacloprid 4SC may not knockdown established and heavy insect populations. Two applications may be required to achieve control. Scout fields and retreat if needed. Willowood Imidacloprid 4SC maybe tank mixed with other insecticides as specified for knockdown of pests or for improved control of other pests.

SOYBEANS[1] - FOLIAR

Pests Controlled	Rate: Fluid Ounces per Acre
Aphids, Bean leaf beetle, Cucumber beetles/Rootworm adults, Japanese beetle (adults), Leafhoppers, Whiteflies	1.5

Restrictions:
- Pre-harvest Interval (PHI): 21 days
- Minimum interval between applications: 7 days
- Maximum Willowood Imidacloprid 4SC allowed per crop season: 4.5 fl. oz./acre (0.14 lb. AI/A)

Applications: Apply Willowood Imidacloprid 4SC through properly calibrated ground and aerial application equipment.

[1]Not for use in California unless accompanied by approved state specific 24(c) Special Local Needs labeling.

TOBACCO- TRAY DRENCH/SOIL

Pests Controlled	Rate: Fluid Ounces per 1,000 Plants (as Seedling Tray Drench)	Rate: Fluid Ounces per 1,000 Plants (In-Furrow or Transplant-Water)
Aphids, Flea beetles	0.5	0.7
Mole crickets, Whiteflies, Wireworms	0.7 - 1.4	0.9 -1.4
Pests/Disease Suppressed		
Cutworms Symptoms of: Tomato spotted wilt virus (TSWV)	0.7 - 1.4	0.9 -1.4

Restrictions:
- Pre-Harvest Interval (PHI): 14 days
- Maximum Willowood Imidacloprid 4SC allowed per crop year: 16.0 fluid ounces per acre (0.5 lb. AI/A).

Applications: Apply specified dosage in one of the following methods:

1. Uniform, broadcast foliar spray to seedlings in trays (tray drench) not more than 7 days prior to transplanting followed immediately by overhead irrigation to wash Willowood Imidacloprid 4SC from foliage into potting media. Failure to wash Willowood Imidacloprid 4SC from foliage may result in a reduction in pest control. Handle transplants carefully during setting to avoid dislodging treated potting media from root;
2. In-furrow spray or transplant-water drench during setting;
3. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.

Important Note: Proper tray drench applications of Willowood Imidacloprid 4SC have been shown to be the most efficacious method of application. However, the specified rate of Willowood Imidacloprid 4SC may be applied as combination of the tray drench in the planthouse and/or transplant-water drench in field. Adverse growing conditions may cause a delay in uptake of Willowood Imidacloprid 4SC into the plant and a delay in control.

TOBACCO - FOLIAR

Pests Controlled	Rate: Fluid Ounces per Acre
Aphids	0.8 - 1.6
Flea beetles, Japanese beetle	1.6

Restrictions:
- Pre-Harvest Interval (PHI): 14 days
- Minimum interval between applications: 7 days
- Maximum Willowood Imidacloprid 4SC allowed per crop season: 9.0 fluid ounces per acre (0.28 lb. AI/A)

Applications: 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 optimum control. A spray adjuvant may be used to improve coverage. Willowood Imidacloprid 4SC may not knockdown established and heavy insect populations. Two applications may be required to achieve control. Scout fields and retreat if needed. Willowood Imidacloprid 4SC maybe tank mixed with other insecticides for knockdown of pests or for improved control of other pests.

VEGETABLE AND SMALL FRUIT CROPS

CUCURBIT VEGETABLES[1] - SOIL

Crops of Crop Group 9 Including: Chayote (fruit), Chinese waxgourd (Chinese preserving melon), Citron melon, Cuban pumpkin, Cucumber, Gherkin, Gourd (edible, includes hyotan, cucuzza, hechima, Chinese okra), *Momordica* spp. (includes balsam apple, balsam pear, bitter melon, Chinese cucumber), Muskmelon (hybrids and/or cultivars of *Cucumis melo* including true cantaloupe, cantaloupe, casaba, Crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, snake melon, and Winter melon), Pumpkin, Squash (includes summer squash types such as: butternut squash, calabaza, crookneck squash, Hubbard squash, scallop squash, straightneck squash, vegetable marrow and zucchini, and winter squash types such as acorn squash and spaghetti squash), Watermelon (includes hybrids and/or varieties of *Citrullus lanatus)*

Field Application Instructions (See Planthouse Table for Additional Instructions)	
Pests Controlled	**Rate: Fluid Ounces per Acre**
Aphids, Cucumber beetles, Leafhoppers, Thrips (foliage feeding thrips only), Whiteflies	8.0-12.0
Diseases Suppressed	
Bacterial wilt (as vectored by various cucumber beetles), Leaf silvering resulting from whitefly feeding	8.0-12.0

Restrictions:
- Pre-Harvest Interval (PHI): 21 days
- Maximum Willowood Imidacloprid 4SC allowed per season when making soil applications: 12.0 fluid ounces per acre (0.38 lb. AI/A).

Applications: Apply in one of the following methods:
1. Chemigation into root-zone through low- pressure drip, trickle, micro-sprinkler, or equivalent equipment;
2. In-furrow spray directed on or below seed;
3. Narrow (2" or less) surface band spray over seed-line during planting incorporated to a depth of 1 to 1-1/2 inches with sufficient irrigation within 24 hours of application;
4. Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting;
5. Post-seeding drench, transplant-water drench, or hill drench;
6. Subsurface side-dress on both sides of each row. Willowood Imidacloprid 4SC must be incorporated into root-zone.

[1]Not for use on crops grown for seed unless allowed by state specific 24(c) Special Local Needs labeling.

CUCURBIT VEGETABLES: Planthouse Application Instructions[1]	
Pests Controlled	**Rate: Fluid Ounces per 1,000 Plants**
Aphids, Whiteflies	0.05

Restrictions:
- Maximum amount Willowood Imidacloprid 4SC applied in the planthouse: 0.05 fluid ounces (0.00156 lb. active ingredient per 1,000 plants).
- Maximum number Willowood Imidacloprid 4SC applications in planthouse: 1

Applications: Apply specified dosage to seedlings in trays in the planthouse, targeting soil media (tray drench), not more than 7 days prior to transplanting, in one of the following methods:

1. Uniform, broadcast high-volume foliar spray, followed immediately by sufficient overhead irrigation to wash Willowood Imidacloprid 4SC from foliage into potting media without loss of gravitational liquid from the bottom of the tray. Failure to wash Willowood Imidacloprid 4SC from foliage may result in reduced pest control;
2. Injection into overhead irrigation system, using adequate volume to thoroughly saturate soil media without loss of gravitational solution from the bottom of the tray.

The application made in the planthouse will only provide short-term protection and is not intended as a substitution for a field application. An additional field application must be made within 2 weeks following transplanting to provide continuous protection. Applications of higher rates or increased number of applications in planthouse may result in significant plant injury. Handle transplants carefully during setting to avoid dislodging treated potting media from roots.

Important Note: Not all varieties of cucurbit vegetables have been tested for tolerance to Willowood Imidacloprid 4SC applied to seedling flats. Treat a small number of plants to confirm tolerance for 7 days prior to treating entire planthouse.

[1]Use not permitted in California unless otherwise directed by state specific 24(c) Special Local Needs labeling.

BULB VEGETABLE[1] - SOIL

Crops of Crop Group 3-07 Including: Chive (fresh leaves), Chinese chive (fresh leaves), Daylily (bulb), Elegans hosta, Fritillaria (bulb and leaves), Garlic (common group, great-headed group, serpent group), Kurrat group, Leek group (including common, lady's and wild), Lily (bulb), Onion (bulb and green leaves including: common group, Beltsville bunching, Chinese bulb, fresh, green, macrostem, Pearl group, potato onion group, tree onion-tops, Welsh-tops), Shallot, plus cultivars, varieties, and/or hybrids of these

Pests Controlled	Rate: Fluid Ounces/Acre
Thrips (foliage feeding thrips only)	16.0

Restrictions
- Pre-Harvest Interval (PHI): 21 days
- Maximum Willowood Imidacloprid 4SC allowed per crop year: 16.0 fluid ounces/Acre (0.5 lb. AI/A)

Applications: Apply specified dosage in one of the following methods:
1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
2. In-furrow spray directed on or below seed;
3. Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting;
4. Post-seeding drench, transplant-water drench, or hill drench.

Applications made to higher organic matter soils may result in reduced or shortened activity on pest.

[1]Not for use on crops grown for seed unless allowed by state specific 24(c) Special Local Needs labeling.

GREENHOUSE VEGETABLES[1] - SOIL
(Mature Plants in Production Greenhouses - Cucumber, Tomato only)

Pests Controlled	Rate: Fluid Ounces per 1,000 Plants
Aphids, Whiteflies	0.7

Restrictions:
- Pre-Harvest Interval (PHI): 0 day
- Maximum number Willowood Imidacloprid 4SC applications per crop season when making soil applications: 1

Applications: Apply specified dosage in a minimum of 16 gallons of water for tomatoes and 21 gallons of water for cucumbers using soil drenches, micro-irrigation, drip irrigation, or hand-held or motorized calibrated irrigation equipment. Make application only to plants grown in field-type soils, potting media, or mixtures thereof. Do not apply to plants grown in non-soil medias such as perlite, vermiculite, rock wool or other soil-less media, or plants growing hydroponically. Do not apply to immature plants since phytotoxicity may occur.
Make application when infestation pressure surpasses threshold and beneficials are not able to maintain pest populations below damage thresholds. Repellency of bumble bee pollinators and negative effects on some beneficials (*Orius* spp.) can occur when Willowood Imidacloprid 4SC is applied.
Many varieties of vegetables have been tested for tolerance to Willowood Imidacloprid 4SC and show good safety. However, certain varieties may show more sensitivity to Willowood Imidacloprid 4SC. Treat a few plants before treating the whole greenhouse.
[1] Not for use on crops grown for seed unless allowed by state specific 24(c) Special Local Needs labeling.

FRUITING VEGETABLES[1] - SOIL
Crops of Crop Group 8 plus Okra Including: Eggplant, Ground cherry, Okra, Pepper (including bell, chili, cooking, pimento, and sweet), Tomato, Pepinos, Tomatillo

Field Application Instructions. See Details Below for Additional Plant-House Instructions.	
Pests Controlled	**Rate: Fluid Ounces per Acre**
Aphids, Colorado potato beetle, Flea beetles, Leafhoppers, Thrips (foliage feeding thrips only), Whiteflies	Okra and Pepper: 8.0-16.0 Other Crops: 8.0-12.0
Diseases Suppressed	
Symptoms of: Tomato mottle virus, Tomato spotted wilt virus, Tomato yellow leaf curl virus	Okra and Pepper: 8.0-16.0 Other Crops: 8.0-12.0

Restrictions:
- Pre-Harvest Interval (PHI): 21 days
- Maximum Willowood Imidacloprid 4SC allowed on pepper and okra crops per year when making soil applications: 16.0 fluid ounces/Acre (0.5 lb. AI/A)
- Maximum Willowood Imidacloprid 4SC allowed on other fruiting vegetable crops per season when making soil applications: 12.0 fluid ounces/Acre (0.38 lb. AI/A)

Applications: Apply specified dosage in one of the following methods:
1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment;
2. In-furrow spray directed on or below seed;
3. Narrow (2" or less) surface band spray over seed-line during planting incorporated to a depth of 1 to 1-1/2 inches with sufficient irrigation within 24 hours of application;
4. Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting;
5. Post-seeding drench, transplant-water drench, or hill drench;
6. Subsurface side-dress on both sides of each row. Willowood Imidacloprid 4SC must be incorporated into root-zone.

[1]Not for use on crops grown for seed unless allowed by state specific 24(c) Special Local Needs labeling.

FRUITING VEGETABLES : Planthouse Application Instructions[1]	
Pests Controlled	**Rate: Fluid Ounces 1,000 Plants**
Aphids, Whiteflies	0.05

Restrictions:
- Maximum amount Willowood Imidacloprid 4SC applied in the planthouse: 0.05 fluid ounces (0.00156 lb. AI) per 1,000 plants.
- Maximum number Willowood Imidacloprid 4SC applications in planthouse: 1

Applications: Apply specified dosage to seedlings in trays in the planthouse, targeting soil media (tray drench), not more than 7 days prior to transplanting, in one of the following manners:
1. Uniform, broadcast high-volume foliar spray, followed immediately by sufficient overhead irrigation to wash Willowood Imidacloprid 4SC from foliage into potting media without loss of gravitational liquid from the bottom of the tray. Failure to wash Willowood Imidacloprid 4SC from foliage may result in reduced pest control;
2. Injection into overhead irrigation system, using adequate volume to thoroughly saturate soil media without loss of gravitational solution from the bottom of the tray.

The application made in the planthouse will only provide short-term protection and is not intended as a substitution for a field application. An additional field application must be made within 2 weeks following transplanting to provide continuous protection. Applications of higher rates or increased number of applications in planthouse may result in significant plant injury. Handle transplants carefully during setting to avoid dislodging treated potting media from roots.

Important Note: Not all varieties of fruiting vegetables have been tested for tolerance to Willowood Imidacloprid 4SC applied to seedling flats. Treat a small number of plants to confirm tolerance for 7 days prior to treating entire planthouse.

FRUITING VEGETABLES[1] - FOLIAR

Crops of Group 8 plus Okra, Including: Eggplant, Ground cherry, Okra, Pepper (including bell, chili, cooking, pimento, and sweet), Tomato, Pepinos, Tomatillo

Pests Controlled	Rate: Fluid Ounces/Acre
Pepper weevil (Pepper only)	2.5
Aphids, Colorado potato beetle, Leafhoppers, Whiteflies	1.5-2.5

Restrictions:

- Pre-Harvest Interval (PHI): 0 days
- Minimum interval between applications: 5 days
- Maximum Willowood Imidacloprid 4SC allowed per crop season when making foliar applications: 7.7 fluid ounces per acre (0.24 lb. AI/A)

Applications: Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. A spray adjuvant may be used to improve coverage. Willowood Imidacloprid 4SC may not knockdown established and heavy insect populations. Two applications may be required to achieve control. Scout fields and retreat if needed. Willowood Imidacloprid 4SC may be tank mixed with other insecticides for knockdown of pests or for improved control of other pests. For pepper weevil, apply specified dosage of Willowood Imidacloprid 4SC by ground equipment only, timing applications prior to a damaging population becoming established. Good coverage of foliage and fruit is necessary for optimum control. Applications of Willowood Imidacloprid 4SC must be incorporated 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 additional information, please contact your Willowood LLC representative, Extension Specialist or crop advisor.
When targeting adult whiteflies, use higher rates within the listed rate range.

[1] Not for use on crops grown for seed unless allowed by state specific 24(c) Special Local Needs labeling.

GLOBE ARTICHOKE - SOIL

Pests Controlled	Rate: Fluid Ounces per Acre
Aphids, Leafhoppers	8.0 – 16.0

Restrictions:

- Pre-Harvest Interval (PHI): 7 days
- Maximum Willowood Imidacloprid 4SC allowed per crop year when making soil applications: 16 fluid ounces per acre (0.5 lb. AI/A).

Applications: Apply specified dosage in one of the following methods:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
2. In-furrow spray at planting directed on or below seed.

GLOBE ARTICHOKE - FOLIAR

Pests Controlled	Rate: Fluid Ounces per Acre
Aphids, Leafhoppers	1.6-4.0

Restrictions:
- Pre-Harvest Interval (PHI): 7 days
- Minimum interval between applications: 14 days
- Maximum Willowood Imidacloprid 4SC allowed per crop year when making foliar applications: 16 fluid ounces per acre (0.5 lb. AI/A)

Applications: Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. A spray adjuvant may be used to improve coverage. Willowood Imidacloprid 4SC may not knockdown established and heavy insect populations. Two applications may be required to achieve control. Scout fields and retreat if needed. Willowood Imidacloprid 4SC may be tank mixed with other insecticides for knockdown of pests or for improved control of other pests.

HERBS[1]- SOIL

Crops of Crop Subgroup 19A Including: Angelica, Balm (lemon balm), Basil (fresh and dried), Borage, Bumet, Chamomile, Catnip, Chervil (dried), Chinese chive, Chive, Clary, Coriander (cilantro or Chinese parsley leaves), Costmary, Cilantro (leaf), Curry (leaf), Dillweed, Horehound, Hyssop, Lavender, Lemongrass, Lovage (leaf), Marigold, Marjoram, Nasturtium, Parsley (dried), Pennyroyal, Rosemary, Rue, Sage, Savory (summer and winter), Sweet bay (bay leaf), Tansy, Tarragon, Thyme, Wintergreen, Woodruff, Wormwood

Pests Controlled	Rate: Fluid Ounces per Acre
Aphids, Flea beetles, Leafhoppers, Whiteflies	8.0-12.0
Pests Suppressed	
Thrips (foliage feeding thrips only)	8.0-12.0

Restrictions:
- Pre-Harvest Interval (PHI): 14 days
- Maximum Willowood Imidacloprid 4SC per season when making soil applications: 12.0 fluid ounces/Acre (0.38 lb. AI/A)

Applications: Apply specified dosage in one of the following methods:
1. *In-furrow spray during planting directed on or below seed;*
2. In-furrow spray or transplant-water drench during setting or transplanting;
3. Shanked-into or below eventual seed-line;
4. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.

Notes: Not all crops and/or varieties listed above have been tested for phytotoxic effects. Without specific knowledge about a particular crop and variety, treat only small areas or numbers of plants and evaluate effectiveness prior to commercial use.

HERBS[1]- FOLIAR

Crops of Crop Subgroup 19A including: Angelica, Balm (lemon balm), Basil (fresh and dried), Borage, Bumet, Chamomile, Catnip, Chervil (dried), Chinese chive, Chive, Clary, Coriander (cilantro or Chinese parsley leaves), Costmary, Cilantro (leaf), Curry (leaf), Dillweed, Horehound, Hyssop, Lavender, Lemongrass, Lovage (leaf), Marigold, Marjoram, Nasturtium, Parsley (dried), Pennyroyal, Rosemary, Rue, Sage, Savory (summer and winter), Sweet bay (bay leaf), Tansy, Tarragon, Thyme, Wintergreen, Woodruff, Wormwood

Pests Controlled	Rate: Fluid Ounces per Acre
Aphids, Flea beetles, Leafhoppers, Whiteflies	1.4

Restrictions:
• Pre-Harvest Interval (PHI): 7 days
• Minimum interval between applications: 5 days
• Maximum Willowood Imidacloprid 4SC allowed per season when making foliar applications: 4.2 fluid ounces per acre (0.13 lb. AI/A).

Applications: Apply Willowood Imidacloprid 4SC through properly calibrated ground and aerial application equipment. Thorough coverage with direct contact of the spray material to the target pests is required for optimum control.

Note: Not all crops and/or varieties listed above have been tested for phytotoxic effects. Without specific knowledge about a particular crop and variety, treat only small areas or numbers of plants and evaluate effectiveness prior to commercial use.

BRASSICA (COLE) LEAFY VEGETABLES[1] - SOIL
Crops of Crop Group 5 Including: Broccoli, Broccoli raab (rapini), Brussels sprouts, Cabbage, Cauliflower, Cavalo broccoli, Chinese (gai lan) broccoli, Chinese (bok choy) cabbage, Chinese (napa) cabbage, Chinese mustard (gai choy) cabbage, Collards, Kale, Kohlrabi, Mizuna, Mustard greens, Mustard spinach, Rape greens, Turnip tops (leaves)

Pests Controlled	Rate: Fluid Ounces per Acre (on 36-Inch Rows)
Aphids, Leafhoppers, Thrips (foliage feeding thrips only), Whiteflies	5.0-12.0

Restrictions:
• Pre-Harvest Interval (PHI): 21 days
• Maximum Willowood Imidacloprid 4SC allowed per season when making soil applications: 12.0 fluid ounces/Acre (0.38 lb. AI/A).

Applications: Apply specified dosage in one of the following methods:
1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment;
2. In-furrow spray directed on or below seed;
3. Narrow (2 inches or less) surface band spray over seed-line during planting incorporated to a depth of 1 to 1-1/2 inches with sufficient irrigation within 24 hours of application;
4. Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting;
5. Post-seeding drench, transplant-water drench, or hill drench;
6. Subsurface side-dress on both sides of each row. Willowood Imidacloprid 4SC must be incorporated into root-zone.

[1] Not for use on crops grown for seed unless allowed by state specific 24(c) Special Local Needs labeling.

BRASSICA (COLE) LEAFY VEGETABLES [1] - FOLIAR

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

Pests Controlled	Rate: Fluid Ounces per Acre
Aphids, Fleabeetles, Leafhoppers, Whiteflies	1.5

Restrictions:
- Pre-Harvest Interval (PHI): 7 days
- Minimum interval between applications: 5 days
- Maximum Willowood Imidacloprid 4SC allowed per crop season when making foliar applications: 7.7 fluid ounces/Acre (0.24 lb. AI/A).

Applications: Apply specified rate per acre as a broadcast or directed foliar spray through properly calibrated ground, aerial or chemigation application equipment to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. A spray adjuvant may be used to improve coverage. Willowood Imidacloprid 4SC may not knockdown established and heavy insect populations. Two applications may be required to achieve control. Scout fields and retreat if needed. Willowood Imidacloprid 4SC may be tank mixed with other insecticides for knockdown of pests or for improved control of other pests.

[1] Not for use on crops grown for seed unless allowed by state specific 24(c) Special Local Needs labeling.

LEAFY VEGETABLES [1] - SOIL

Crops of Crop Subgroup 4A plus Watercress Including: Amaranth (leafy amaranth, Chinese spinach, tampala), Arugula (Roquette), Chervil, Chrysanthemum (edible leaved and garland), Cilantro, 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 (including New Zealand and vine (Malabar spinach, Indian spinach)), Watercress (commercial production only, applications must not be made to native cress growing in streams or other bodies of water), Watercress (upland)

Pests Controlled	Rate: Fluid Ounces per Acre (on 36-Inch Rows)
Aphids, Leafhoppers, Thrips (foliage feeding thrips only), Whiteflies	5.0-12.0

Restrictions:
• Pre-Harvest Interval (PHI): 21 days
• Maximum Willowood Imidacloprid 4SC allowed per season when making soil applications: 12.0 fluid ounces per acre (0.38 lb. AI/A)

Applications: Apply specified dosage in one of the following methods:
1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment;
2. In-furrow spray directed on or below seed;
3. Narrow (2 inches or less) surface band spray over seed-line during planting incorporated to a depth of 1 to 1-1/2 inches with sufficient irrigation within 24 hours of application;
4. Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting;
5. Post-seeding drench, transplant-water drench, or hill drench;
6. Subsurface side-dress on both sides of each row. Willowood Imidacloprid 4SC must be incorporated into root-zone.

[1] Not for use on crops grown for seed unless allowed by state specific 24(c) Special Local Needs labeling.

Leafy Vegetables[1] - FOLIAR
Crops of Crop Subgroup 4A plus Watercress Including: Amaranth (leafy amaranth, Chinese spinach, tampala), Arugula (Roquette), Chervil, Chrysanthemum (edible leaved and garland), Cilantro, 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 (including New Zealand and vine (Malabar spinach, Indian spinach), Watercress (commercial production only, applications must not be made to native cress growing in streams or other bodies of water), Watercress (upland)

Pests Controlled	Rate: Fluid Ounces per Acre
Aphids, Flea beetles, Leafhoppers, Whiteflies	1.5

Restrictions:
• Pre-Harvest Interval (PHI): 7 days
• Minimum interval between applications: 5 days
• Maximum Willowood Imidacloprid 4SC allowed per crop season when making foliar applications: 7.7 fluid ounces per acre (0.24 lb. AI/A)

Applications: Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. A spray adjuvant may be used to improve coverage. Willowood Imidacloprid 4SC may not knockdown established and heavy insect populations. Two applications may be required to achieve control. Scout fields and retreat if needed. Willowood Imidacloprid 4SC may be tank mixed with other insecticides for knockdown of pests or for improved control of other pests.
For applications made to watercress, production fields must be drained of water at least 24 hours prior to application and water must not be reapplied to the field for a minimum of 24 hours following the applications.
Applications must be made to fully leafed-up canopies only.
[1] Not for use on crops grown for seed unless allowed by state specific 24(c) Special Local Needs labeling.

LEAFY PETIOLE VEGETABLES [1] - SOIL
Crops of Crop Subgroup 4B Including: Cardoon, Celery, Celtuce, Chinese celery (fresh leaves and stalk only), Florence fennel (including sweet anise, sweet fennel, Finocchio), Rhubarb, Swiss chard

Pests Controlled	Rate: Fluid Ounces per Acre
Aphids, Leafhoppers, Thrips (foliage feeding thrips only), Whiteflies	5.0-12.0

Restrictions:
• Pre-Harvest Interval (PHI): 45 days
• Maximum Willowood Imidacloprid 4SC allowed per season when making soil applications: 12.0 fluid ounces/Acre (0.38 lb. AI/A)

Applications: Apply specified dosage in one of the following methods:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment;
2. In-furrow spray directed on or below seed;
3. Narrow (2 inches or less) surface band spray over seed-line during planting incorporated to a depth of 1 to 1-1/2 inches with sufficient irrigation within 24 hours of application;
4. Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting;
5. Post-seeding drench, transplant-water drench, or hill drench;
6. Subsurface side-dress on both sides of each row. Willowood Imidacloprid 4SC must be incorporated into root-zone.

[1] Not for use on crops grown for seed unless allowed by state specific 24(c) Special Local Needs labeling.

LEGUME VEGETABLES[1] Except Soybean, Dry - SOIL
Crops of Crop Group 6 Including: Edible Podded and Succulent Shelled Pea and Bean and Dried Shelled Pea and Bean
Bean *(Lupinus* spp., includes grain lupin, sweet lupin, white lupin, and white sweet lupin)
Bean *(Phaseolus* spp., includes field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean)
Bean *(Vigna* spp., includes adzuki bean, asparagus bean, blackeyed pea, cat-jang, Chinese longbean, cowpea, Crowder pea, moth bean, mung bean, rice bean, Southern pea, urd bean, yardlong bean)
Pea *(Pisum* spp., includes dwarf pea, edible-pod pea, English pea, field pea, garden pea, green pea, snow pea, sugar snap pea)
Other Beans and Peas [Broad bean (fava), Chickpea (garbanzo bean), Guar, Jackbean, Lablab bean (hyacinth bean), Lentil, Pigeon pea, Soybean (immature seed), Sword bean]

Pests Controlled	Rate: Fluid Ounces per Acre
Aphids, Leafhoppers, Thrips (foliage feeding thrips only), Whiteflies	8.0-12.0
Diseases Suppressed	
Symptoms of: Bean common mosaic virus (BCMV), Bean golden mosaic virus (BGMV), Beet curly top hybrigeminivirus (BCTV)	8.0-12.0

Restrictions:
• Pre-Harvest Interval (PHI): 21 days
• Maximum Willowood Imidacloprid 4SC allowed per crop season when making soil applications: 12.0 fluid ounces/Acre (0.38 lb. AI/A).

Applications: Apply specified dosage in one of the following methods:
1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment;
2. In-furrow spray at planting directed on or below seed;
3. In a narrow (2 inches or less) surface band over seed-line during planting incorporated to a depth of 1 to 1-1/2 inches with sufficient irrigation with 24 hours following application;
4. In a narrow band directly below the eventual seed row in a bedding operation 7 or fewer days before planting;
5. As a post-seeding drench, transplant drench, or hill drench.

[1] Not for use on crops grown for seed unless allowed by state specific 24(c) Special Local Needs labeling.

LEGUME VEGETABLES[1] Except Soybean, Dry - FOLIAR
Crops of Crop Group 6 including: Edible Podded and Succulent Shelled Pea and Bean and Dried Shelled Pea and Bean
Bean *(Lupinus* spp., includes grain lupin, sweet lupin, white lupin, and white sweet lupin)
Bean *(Phaseolus* spp., includes field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean)
Bean *(Vigna* spp., includes adzuki bean, asparagus bean, blackeyed pea, cat-jang, Chinese longbean, cowpea, Crowder pea, moth bean, mung bean, rice bean, Southern pea, urd bean, yardlong bean)
Pea *(Pisum* spp., includes dwarf pea, edible-pod pea, English pea, field pea, garden pea, green pea, snow pea, sugar snap pea)
Other Beans and Peas [Broad bean (fava), Chickpea (garbanzo bean), Guar, Jackbean, Lablab bean (hyacinth bean), Lentil, Pigeon pea, Soybean (immature seed), Sword bean]

Pests Controlled	Rate: Fluid Ounces per Acre
Aphids, Leafhoppers, Whiteflies	1.4

Restrictions:
• Pre-Harvest Interval (PHI): 7 days
• Minimum interval between applications: 7 days
• Maximum Willowood Imidacloprid 4SC allowed per crop season when making foliar applications: 4.2 fluid ounces per acre (0.13 lb. AI/A)

Applications: Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. A spray adjuvant may be used to improve coverage. Willowood Imidacloprid 4SC may not knockdown established and heavy insect populations. Two applications may be required to achieve control. Scout fields and retreat if needed. Willowood Imidacloprid 4SC may be tank mixed with other insecticides for knockdown of pests or for improved control of other pests.

[1] Not for use on crops grown for seed unless allowed by state specific 24(c) Special Local Needs labeling.

ROOT VEGETABLES [1] - SOIL
Crops of Crop Subgroup 1B Except Sugarbeet plus Kava Including: Beet (garden)[2], Burdock (edible)[2], Carrot[2], Celeriac[2], Chervil (turnip-rooted)[2], Chicory[2], Ginseng, Horseradish, Kava[2,3], Parsley (turnip-rooted), Parsnip[2], Radish[2], Oriental radish (diakon)[2], Rutabaga[2], Salsify (oyster plant), Salsify (black)[2], Salsify (Spanish), Skirret, and Turnip[2]

Pests Controlled	Rate: Fluid Ounces per 1,000 Row-Feet	Rate: Fluid Ounces per Acre
Aphids, Flea beetles, Leafhoppers, Thrips (foliage feeding thrips only), Whiteflies	0.4-0.9	5.0-12.0

Restrictions:
- Pre-Harvest Interval (PHI): 21 days
- Maximum Willowood Imidacloprid 4SC allowed per crop season when making soil applications: 12.0 fluid ounces/Acre (0.38 lb. AI/A)
- Maximum Willowood Imidacloprid 4SC soil applications per crop season: 1

Application: Apply specified dosage in one of the following methods:
1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment;
2. In-furrow spray (rate specified per 1,000 row-feet) or, shanked-in 1 to 2 inches below seed depth during planting;
3. In a narrow (2 inches or less) band directly (1 to 2 inches) below the eventual seed row in a bedding operation 14 or fewer days before planting.

The rate applied affects the length of control. Use higher rates within the listed rate range where infestations occur later in crop development, or where pest pressure is continuous. Willowood Imidacloprid 4SC rates less than 0.7 fluid ounces/1,000 row-feet will not provide adequate residual pest control. Willowood Imidacloprid 4SC treated crops grown on very high organic matter soils (muck) may also require additional pest management control.

[1] Not for use on crops grown for seed unless allowed by a state specific 24(c) Special Local Needs labeling.
[2] Tops or greens from these crops may be utilized for food or feed.
[3] Not permitted for use in CA unless otherwise directed by state specific 24(c) Special Local Needs labeling.

ROOT VEGETABLES[1] - FOLIAR

Crops of Crop Subgroup 1B Except Sugarbeet plus Kava Including: Beet (garden)[2], Burdock (edible)[2], Carrot[2], Celeriac[2], Chervil (turnip-rooted)[2], Chicory[2], Ginseng, Horseradish, Kava[2,3], Parsley (turnip-rooted), Parsnip[2], Radish[2], Oriental radish (diakon)[2], Rutabaga[2], Salsify (oyster plant), Salsify (black)[2], Salsify (Spanish), Skirret, Turnip[2]

Pests Controlled	Rate: Fluid Ounces per Acre
Aphids, Flea beetles, Leafhoppers, Whiteflies	1.4

Restrictions:
- Pre-Harvest Interval (PHI): 7 days
- Minimum interval between applications: 5 days
- Maximum Willowood Imidacloprid 4SC allowed per crop season when making foliar applications: 1.4 fluid ounces per acre (0.44 lb. AI/A) on Radish, 4.2 fluid ounces per acre (0.13 lb. AI/A) on other crops.
- Maximum Willowood Imidacloprid 4SC application(s) per crop season: 1 on radish, 3 on all other crops.

Applications: Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. A spray adjuvant may be used to improve coverage. Willowood Imidacloprid 4SC may not knockdown established and heavy insect populations. Two applications may be required to achieve control. Scout fields and retreat if needed. Willowood Imidacloprid 4SC may be tank mixed with other insecticides for knockdown of pests or for improved control of other pests.

[1] Not for use on crops grown for seed unless allowed by state specific 24(c) Special Local Needs labeling.
[2] Tops or greens from these crops may be utilized for food or feed.
[3] Not permitted for use in CA unless otherwise directed by state specific 24(c) Special Local Needs labeling.

TUBEROUS and CORM VEGETABLES[1] - SOIL

Crops of Crop Subgroup 1C Including: Arracacha, Arrowroot, Artichoke (Chinese and Jerusalem), Canna (edible, Queensland arrowroot), Cassava (bitter and sweet)[2], Chayote (root), Chufa, Dasheen (taro)[2], Ginger, Leren, Sweet potato, Tanier (cocoyam)[2], Turmeric, Yam bean (jicama, manioc pea), Yam (true)[2] (For specified applications on potato see Field Crops section)

Pests Controlled	Rate: Fluid Ounces per 1,000 Row-Feet	Rate: Fluid Ounces per Acre
Aphids, Flea beetles, Leafhoppers, Thrips (foliage feeding thrips only), Whiteflies	0.4-0.9	5.0-12.0

Restrictions:
- Pre-Harvest Interval (PHI) from planting application: 3 days (leaves); 125 days (corms).
- Maximum Willowood Imidacloprid 4SC allowed per crop season when making soil applications: 12.0 fluid ounces/Acre (0.38 lb. AI/A).
- Maximum Willowood Imidacloprid 4SC soil applications per crop season: 1

Applications: Apply specified dosage in one of the following methods:
1. In-furrow spray (rate specified per 1,000 row-feet) over planting materials (hulis) or shanked-in 1 to 2 inches below hulis depth at planting;
2. Side-dress not more than 0.3 fluid ounces/1,000 row-feet no later than 45 days after planting. Observe the same PHI as above.

The rate applied affects the length of control. Use higher rates within the listed rate range where infestations occur late in crop development, or where pest pressure is continuous. Willowood Imidacloprid 4SC rates less than 0.35 fluid ounces/1,000 row-feet may not provide adequate residual pest control. Willowood Imidacloprid 4SC treated crops grown on very high organic matter soils (muck) may also require additional pest management control.

[1] Not for use on crops grown for seed unless allowed by state specific 24(c) Special Local Needs labeling.

TUBEROUS and CORM VEGETABLES[1] - FOLIAR

Crops of Crop Subgroup 1C Including: Arracacha, Arrowroot, Artichoke (Chinese and Jerusalem), Canna (edible, Queensland arrowroot), Cassava (bitter and sweet)[2], Chayote (root), Chufa, Dasheen (taro)[2], Ginger, Leren, Sweetpotato[2], Tanier (cocoyam)[2], Turmeric, Yam bean (jicama, manioc pea), Yam (true)[2] (For specified applications on potato see Field Crops section)

Pests Controlled	Rate: Fluid Ounces per Acre
Aphids, Flea beetles, Leafhoppers, Whiteflies	1.4

Restrictions:
- Pre-Harvest Interval (PHI): 7 days
- Minimum interval between applications: 5 days
- Maximum Willowood Imidacloprid 4SC allowed per crop season: 4.2 fluid ounces per acre (0.13 lb. AI/A)
- Maximum Willowood Imidacloprid 4SC application(s) per crop season: 3

Applications: Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. A spray adjuvant may be used to improve coverage. Willowood Imidacloprid 4SC may not knockdown established and heavy insect populations. Two applications may be required to achieve control. Scout fields and retreat if needed. Willowood Imidacloprid 4SC may be tank mixed with other insecticides for knockdown of pests or for improved control of other pests.

[1] Not for use on crops grown for seed unless allowed by state specific 24(c) Special Local Needs labeling.

[2] Tops or greens from these crops may be utilized for food or feed.

STRAWBERRY[1] - SOIL

Annual and Perennial Crops	
Pests Controlled	**Rate: Fluid Ounces per Acre**
Aphids, Whiteflies	12.0-16.0

Restrictions:
- Pre-Harvest Interval (PHI): 14 days
- Maximum Willowood Imidacloprid 4SC allowed per crop year when making soil applications: 16.0 fluid ounces/Acre (0.50 lb. AI/A).
- Do not apply immediately prior to bud opening or during bloom or when bees are actively foraging.

Applications: Apply specified dosage in one of the following methods:
1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment after plants are established or on perennial crops in early spring prior to bud opening;
2. As a plant material or plant hole treatment just prior to, or during transplanting;
3. As a band spray over-the-row in a minimum of 20 gallons of water per acre, followed immediately by overhead irrigation to incorporate product into root-zone. Plastic or other mulches that limit movement of Willowood Imidacloprid 4SC into root zone are not permitted.

The rate applied affects the length of control. Use higher rates within the listed rate range where infestations may occur later in crop development or where pest pressure is continuous.
[1]Do not use both soil application methods on the same crop in the same season.

STRAWBERRY[1]: Post-Harvest Use on Perennial Crops	
Pests Controlled	**Rate: Fluid Ounces per Acre**
White grub complex (grubs of Asiatic garden beetle, European and Masked chafer, Japanese beetle, Oriental beetle)	8.0-12.0

Restrictions:
- Pre-Harvest Interval (PHI): 14 days
- Maximum Willowood Imidacloprid 4SC allowed per season when making soil applications: 12.0 fluid ounces per acre (0.38 lb. AI/A).

Applications: Apply a single application post harvest to coincide with renovation of strawberry fields and during active egg-laying period of beetles. Apply specified dosage of Willowood Imidacloprid 4SC in one of the following methods:
1. As a ground spray via boom or backpack sprayer in a minimum of 20 gallons of water per acre;
2. As a row-band spray using an adjusted amount of product based on the treated row band area in proportion to the amount required per full acre. Make the bandwidth equivalent to the width of the anticipated fruiting bed;
3. As a chemigation application with 600 to 1,000 gallons of water followed by 0.1 to 0.25 inches irrigation.

All soil-surface applications must be followed by 0.25 inches of rainfall or overhead irrigation water per acre within 2 hours of application. Failure to adequately incorporate Willowood Imidacloprid 4SC into egg-deposition zone may result in decreased activity.

STRAWBERRY - FOLIAR

Pests Controlled	Rate: Fluid Ounces per Acre
Aphids, Spittlebugs, Whiteflies	1.5

Restrictions:
- Pre-Harvest Interval (PHI): 7 days
- Minimum interval between applications: 5 days
- Maximum Willowood Imidacloprid 4SC allowed per crop season when making foliar applications: 4.5 fluid ounces per acre (0.14 lb. AI/A).
- Do not apply during bloom or within 10 days prior to bloom or when bees are actively foraging.

Applications: Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. A spray adjuvant may be used to improve coverage. Willowood Imidacloprid 4SC may not knockdown established and heavy insect populations. Two applications may be required to achieve control. Scout fields and retreat if needed. Willowood Imidacloprid 4SC may be tank mixed with other insecticides for knockdown of pests or for improved control of other pests.

SUGARBEET[1] – SOIL (For use only in CA)

Pests Controlled	Rate: Fluid Ounces per Acre
Aphids, Leafhoppers, Whiteflies, Flea beetles	3.0-6.0
Diseases Suppressed	
Symptoms of: Western yellows/Beet curly top hybrigeminivirus (BCTV)	3.0-6.0

Restrictions:
- Maximum Willowood Imidacloprid 4SC allowed per crop season when making soil applications: 6.0 fluid ounces/Acre (0.18 lb. AI/A).
- Do not apply immediately prior to bud opening or during bloom or when bees are actively foraging.

Applications: Apply specified dosage in the following method:
1. Apply specified dosage in sufficient carrier volume to insure uniform application. Apply directly below each seed furrow either during the bedding operation immediately prior to planting or at the time of planting.

The low rate may be applied to aid establishment of stands in whitefly areas, or for early season control of the other pests listed.

[1] Not for use on crops grown for seed unless allowed by state specific 24(c) Special Local Needs labeling.

TREE, BUSH, and VINE CROPS

BANANA and PLANTAIN[1] - SOIL

Pests Controlled	Rate: Fluid ounces per acre
Aphids, Leafhoppers	8.0-16.0
Pests Suppressed	
Scales	8.0-16.0

Restrictions:
• Pre-Harvest Interval (PHI): 0 day
• Maximum Willowood Imidacloprid 4SC allowed per crop year when making soil applications: 16.0 fluid ounces per Acre (0.5 lb AI/A)
Applications: Apply specified dosage in the following method:
1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.
[1] Use not permitted in CA unless otherwise directed by state specific 24(c) Special Local Needs labeling.

BANANA and PLANTAIN[1] - FOLIAR

Pests Controlled	Rate: Fluid Ounces per Acre
Aphids, Leafhoppers, Thrips	3.2

Restrictions:
• Pre-Harvest Interval (PHI): 0 days
• Minimum interval between applications: 14 days
• Maximum Willowood Imidacloprid 4SC allowed per crop year when making foliar applications: 16.0 fluid ounces per acre (0.5 lb. AI/A)

Applications: Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Apply Willowood Imidacloprid 4SC through properly calibrated ground or aerial application equipment. Thorough uniform coverage is necessary to achieve optimum control. A spray adjuvant may be used to improve coverage. Willowood Imidacloprid 4SC may not knockdown established and heavy insect populations. Two applications may be required to achieve control. Scout fields and retreat if needed. Willowood Imidacloprid 4SC may be tank mixed with other insecticides for knockdown of pests or from improved control of other pests. Aerial application of Willowood Imidacloprid 4SC may result in slower activity and reduced control relative to results from ground application.
[1] Use not permitted in California unless otherwise directed by state specific 24(c) Special Local Needs labeling.

BUSHBERRY- SOIL

Crops of Crop Subgroup 13B Including: Blueberry, Currant, Elderberry, Gooseberry, Huckleberry, Juneberry, Lingonberry, Salal

Pests Controlled	Rate: Fluid Ounces per Acre
Japanese beetle (adults, feeding on foliage), White grub complex (grubs of Asiatic garden beetle, European and Masked chafer, Japanese beetle and Oriental beetle)	8.0-16.0

Restrictions:
• Pre-Harvest Interval (PHI): 7 days
• Maximum Willowood Imidacloprid 4SC allowed per year when making soil applications: 16.0 fluid ounces/Acre (0.5 lb. AI/A).
• Do not apply pre-bloom or during bloom or when bees are actively foraging.

Applications: Apply specified dosage in one of the following methods:
1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment;
2. 18-inch band on each side of the row followed by irrigation immediately after application.

For optimal grub control, apply Willowood Imidacloprid 4SC to control 1st or 2nd instar larvae. Application may be made post-bloom up to 7 days prior to harvest, or post-harvest until October 1st. For optimum control of Japanese beetle larvae, make applications from June 1 to July 15.
Application to grass covered rows, row middles, drive lanes, headlands, and other grassy areas in and around the berry field will control resident grub populations. Applications directed to the root-zone will help protect berry plant roots from grub feeding.
Apply Willowood Imidacloprid 4SC to moist soil. If necessary, apply one hour of irrigation water immediately before application of Willowood Imidacloprid 4SC. To ensure maximum efficacy of soil surface spray, 1/2 to 1 inch of irrigation water or rainfall needs be applied or received within 24 hours of application of Willowood Imidacloprid 4SC to facilitate movement into the soil and into the root-zone.

BUSHBERRY - FOLIAR
Crops of Crop Subgroup 13B Including: Blueberry, Currant, Elderberry, Gooseberry, Huckleberry, Juneberry, Lingonberry, Salal

Pests Controlled	Rate: Fluid Ounces per Acre
Aphids, Leafhoppers/Sharpshooters	1.2-1.6
Blueberry maggot, Japanese beetle (adults), Thrips (foliage feeding thrips only)	2.4-3.2

Restrictions:
• Pre-Harvest Interval (PHI): 3 days
• Minimum interval between applications: 7 days
• Maximum Willowood Imidacloprid 4SC allowed per crop year when making foliar applications: 16 fluid ounces per acre (0.5 lb. AI/A per acre).
• Maximum number of Willowood Imidacloprid 4SC applications per crop season when making foliar applications: 5
• Minimum application volume (water): 20.0 GPA - ground, 5.0 GPA - aerial.
• Do not apply pre-bloom or during bloom or when bees are actively foraging.

Applications: Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. A spray adjuvant may be used to improve coverage. Willowood Imidacloprid 4SC may not knockdown established and heavy insect populations. Two applications may be required to achieve control. Scout fields and retreat if needed. Willowood Imidacloprid 4SC may be tank mixed with other insecticides for knockdown of pests or from improved control of other pests. Aerial application of Willowood Imidacloprid 4SC may result in slower activity and reduced control relative to results from ground application. For tree and vine crops, application rates are based on full-size, mature trees or vines.

CANEBERRY – SOIL
Crops of Crop Subgroup 13A Including:
Blackberry *(Rubus eubatus,* including bingleberry, black satin berry, boysenberry, Cherokee blackberry, Chesterberry, Cheyenne blackberry, coryberry, darrowberry, dewberry, Dirksen thornless berry, Himalayaberry, hullberry, Lavacaberry, Loganberry, lowberry, Lucretiaberry, mammoth blackberry, marionberry, nectar-berry, olallieberry, Oregon evergreen berry, phenomenalberry, rangeberry, ravenberry, rossberry, Shawnee blackberry, youngberry, and varieties and/or hybrids of these)
Raspberry (black and red, *Rubus occidentalis, Rubus strigosus, Rubus idaeus)*

Pests Controlled	Rate: Fluid Ounces per Acre
Aphids, Leafhoppers, Whiteflies	8.0-16.0
Rednecked cane borer	12.0-16.0
Pests Suppressed	
Thrips (foliage feeding thrips only)	8.0-16.0
Restrictions: • Pre-Harvest Interval (PHI): 7 days • Maximum Willowood Imidacloprid 4SC allowed per year: 16.0 fluid ounces/Acre (0.5 lb. AI/A) • Do not apply pre-bloom or during bloom or when bees are actively foraging. **Soil Application:** Apply specified dosage in one of the following methods: 1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment; 2. Basal, soil drench in a minimum of 500 gallons solution per acre.	

CANEBERRY – FOLIAR
Crops of Crop Subgroup 13A Including:
Blackberry *(Rubus eubatus,* including bingleberry, black satin berry, boysenberry, Cherokee blackberry, Chesterberry, Cheyenne blackberry, coryberry, darrowberry, dewberry, Dirksen thornless berry, Himalayaberry, hullberry, Lavacaberry, Loganberry, lowberry, Lucretiaberry, mammoth blackberry, marionberry, nectar-berry, olallieberry, Oregon evergreen berry, phenomenalberry, rangeberry, ravenberry, rossberry, Shawnee blackberry, youngberry, and varieties and/or hybrids of these)
Raspberry (black and red, *Rubus occidentalis, Rubus strigosus, Rubus idaeus)*

Pests Controlled	Rate: Fluid Ounces per Acre
Aphids, Leafhoppers, Thrips (foliage feeding thrips only)	3.2
Restrictions: • Pre-Harvest Interval (PHI): 3 days • Minimum interval between applications: 7 days • Maximum Willowood Imidacloprid 4SC allowed per season: 9.6 fluid ounces/Acre (0.3 lb AI/A). • Do not apply pre-bloom or during bloom or when bees are actively foraging.	

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

Pests Controlled	Rate: Ml/Ft^3 Container Media
Aphid, Asian citrus psyllid, Blackfly, Citrus leafminer, Leafhoppers/Sharpshooters, Mealybugs, Scales, Whiteflies	0.38 – 0.58
Citrus root weevil (larval complex)	0.62-1.2

Pests Suppressed	
Citrus thrips (foliage feeding thrips only)	1.25

Application: Determine volume of container and calculate dosage necessary to treat container. Apply calculated dosage of Willowood Imidacloprid 4SC per container as a soil drench or through low-pressure drip or trickle irrigation water. Use sufficient carrier volume to ensure thorough uniform distribution throughout the media without loss of gravitational water from the container. For optimal results, treat at planting prior to insect infestation. Retreat if necessary. For control of larvae of the citrus root weevil complex, application should be made prior to neonate larvae entering potting media. Utilize higher dosage within the listed rate range for heavy infestations.

CITRUS (Field) - SOIL

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

Pests Controlled	Rate: Fluid Ounces per Acre
Aphids, Asian citrus psyllid, Blackfly, Citrus leafminer, Leafhoppers/Sharpshooters, Mealybugs, Scales, Termites (FL only), Whiteflies	8.0-16.0
Pests/Diseases Suppressed	
Citrus nematode, Symptoms of: Citrus tristeza virus (CTV) through vector control, Citrus yellows, Thrips (foliage feeding thrips only)	16.0

Restrictions:

- Pre-Harvest Interval (PHI): 0 days
- Maximum Willowood Imidacloprid 4SC allowed per year when making soil applications: 16.0 fluid ounces/Acre (0.5 lb. AI/A)

Applications: Apply specified dosage in one of the following methods:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment. For optimum results, apply to newly planted trees or those previously trained to drip, trickle or micro-sprinkler irrigation. Soil should be lightly pre-wetted to break soil surface tension prior to applications of Willowood Imidacloprid 4SC. Chemigation application can be made separate to normal irrigation but followed by 10 to 20 minutes of additional watering to move Willowood Imidacloprid 4SC into root-zone. Allow 24 hours before initiating subsequent irrigations;
2. Soil surface band spray on both sides of the tree. Overlap bands at the tree base to create a continuous band within the drip-line area of the tree, to be followed immediately with light sprinkler irrigation sufficient to move the product into the upper portion of the root-zone. This method is suitable for very coarse soils with 0.75% organic matter or less;
3. Drench to base of tree not exceeding one-quart total solution per tree immediately around trunk of tree and extending outward covering the entire fibrous root system of the tree. For use on trees up to 8 feet tall;
4. For control of existing termite infestations, apply specified dosage in 1 to 4 quarts of total solution volume, depending on size of tree, as a drench application to the basal portion of the tree trunk and surrounding soil in the immediate vicinity of the tree trunk;
5. For suppression of citrus nematode, apply specified dosage through low-pressure chemigation or soil surface band spray only, ensuring complete coverage of the root system and utilizing application directions stated above for the respective application method. Repeated and regular use of Willowood Imidacloprid 4SC over several consecutive growing seasons provides the greatest degree of nematode suppression and yields the greatest plant response.

CITRUS (Field) – FOLIAR

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

Pests Controlled	Rate: Fluid Ounces per Acre
Aphids, Asian citrus psyllid, Blackfly, Leafhoppers/ Sharpshooters, Leafminers, Mealybugs, Scales, Whiteflies	4.0 - 8.0 (depending on tree size, target pest and infestation pressure)
Pests Suppressed	
Thrips (foliage feeding thrips only)	4.0-8.0

Restrictions:
- Pre-Harvest Interval (PHI): 0 days
- Minimum interval between applications: 10 days
- Maximum Willowood Imidacloprid 4SC allowed per year when making foliar applications: 16 fluid ounces per acre (0.5 lb. AI/A).
- Do not apply during bloom or within 10 days prior to bloom or when bees are actively foraging.

Applications: Scales - time applications to the crawler stage. Treat each generation.
Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. A spray adjuvant may be used to improve coverage. Willowood Imidacloprid 4SC may not knockdown established and heavy insect populations. Two applications may be required to achieve control. Scout fields and retreat if needed. Willowood Imidacloprid 4SC may be tank mixed with other insecticides for knockdown of pests or from improved control of other pests. Aerial application of Willowood Imidacloprid 4SC may result in slower activity and reduced control relative to results from ground application. For tree and vine crops, application rates are based on full-size, mature trees or vines.

COFFEE[1]- SOIL

Pests Controlled	Rate: Fluid Ounces per Acre
Aphids, Leafhoppers, Leafminers	8.0-16.0
Pests Suppressed	
Scales	8.0-16.0

Restrictions:
- Pre-Harvest Interval (PHI): 7 days
- Maximum Willowood Imidacloprid 4SC allowed per year when making soil applications: 16.0 fluid ounces per Acre (0.5 lb. AI/A).
- Do not apply pre-bloom or during bloom or when bees are actively foraging.

Applications: Apply specified dosage in one of the following methods:
1. Chemigation into root-zone through low-pressure drip, trickle, microsprinkler, or equivalent equipment;
2. Subsurface side-dress shanked into the root-zone on both side of the plants followed by irrigation;
3. Basal, soil drench in sufficient water to insure incorporation into the root-zone followed by irrigation.

[1] Use not permitted in CA unless otherwise directed by state specific 24(c) Special Local Needs labeling.

COFFEE[1] - FOLIAR

Pests Controlled	Rate: Fluid Ounces per Acre
Aphids, Leafhoppers, Whiteflies	3.2
Pests Suppressed	
Scales	3.2

Restrictions:
- Pre-Harvest Interval (PHI): 7 days
- Minimum interval between applications: 7 days
- Maximum Willowood Imidacloprid 4SC allowed per crop year when making foliar applications: 16 fluid ounces per Acre (0.5 lb. AI/A).
- Do not apply pre-bloom or during bloom or when bees are actively foraging.

Applications: Apply specified dosage as a broadcast or directed spray to infested area insuring thorough coverage. Willowood Imidacloprid 4SC may be applied through properly calibrated ground or aerial application equipment. Aerial application of Willowood Imidacloprid 4SC may result in slower activity and reduced control relative to results from ground application.

[1] Use not permitted in CA unless otherwise directed by state specific 24(c) Special Local Needs labeling.

CRANBERRY- SOIL

Pests Controlled	Rate: Fluid Ounces per Acre
Rootgrubs (Scarabaeidae), Rootworms (Chrysolmelidae)	8.0-16.0

Restrictions:
- Pre-Harvest Interval (PHI): 30 days
- Maximum Willowood Imidacloprid 4SC allowed per year when making soil applications: 16.0 fluid ounces/Acre (0.5 lb. AI/A).
- Do not apply pre-bloom or during bloom or when bees are actively foraging.

Applications: Apply Willowood Imidacloprid 4SC to moist soil. Apply specified dosage in one of the following methods:

1. As a soil spray (ground application) directed to the root and crown area using a minimum of 20 gal of water per acre;
2. As a chemigation application with 600 to 1000 gal water.

Immediately upon application, Willowood Imidacloprid 4SC must be incorporated into root-zone by 0.1 - 0.3 inches water/Acre, either with the chemigation application or through irrigation/rainfall if not applied through chemigation. Inadequate incorporation within 24 hours of application may result in reduced control.
Rootgrubs and Rootworms: Best control may be achieved when application is made post-bloom immediately after bees are removed. Applications should target early instar larvae.
Willowood Imidacloprid 4SC has not been tested for crop response in tank mixes with other registered fungicides or insecticides. If tank mixing is desired, premix a sample of the Willowood Imidacloprid 4SC and the desired fungicide or insecticide partner at labeled rates and apply to a small area. Evaluate crop response within 48 hours and for at least two weeks prior to utilizing the tank mix on larger acreage. If crop injury results from the premix test, do not apply the tank mix to larger acreage.

GRAPE- SOIL

Including: American bunch grape, Muscadine grape and Vinifera grape

Pests Controlled	Rate: Fluid Ounces per Acre
European fruit lecanium, Leafhoppers/Sharpshooters, Mealybugs, *Phylloxera**	8.0-16.0
Pest/Disease Suppressed	
Grapeleaf skeletonizer, Nematodes, Pierce's disease	12.0-16.0

Restrictions:

• Pre-Harvest Interval (PHI): 30 days

• Maximum Willowood Imidacloprid 4SC allowed per year when making soil applications: 16.0 fluid ounces/Acre (0.5 lb. AI/A).

Applications: Apply specified dosage in one of the following methods:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment;
2. Subsurface side-dress shanked into the root-zone on both sides of the plants followed by irrigation;
3. Hill drench in sufficient water to insure incorporation into the root-zone followed by irrigation;
4. For suppression of nematodes, apply 7 fluid ounces in a single application or two 3.5 fluid ounce applications on a 30- to 45-day interval. Treat only by 1) chemigation into root-zone through above ground low-pressure drip, trickle, micro-sprinkler, or equivalent equipment; or 2) French plow technique, followed immediately by sufficient irrigation to move the product into the entire root-zone of the plant. Repeated and regular use of Willowood Imidacloprid 4SC over several consecutive growing seasons provides the greatest degree of nematode suppression and yields the greatest plant response.

For optimum results, make application(s) between bud-break and the pea-berry stage. Use a total of 16 fluid ounces/Acre under any of the following conditions:

• Where vigorous vine growth is expected;

• In warmer growing areas;

• Where mealybug and European fruit lecanium populations are expected to be heavy;

• Where vine populations exceed 600 per acre, or;

• For suppression of nematodes.

* Repeated and regular use of Willowood Imidacloprid 4SC over several, consecutive growing seasons controls existing *Phylloxera* infestations over time or prevents *Phylloxera* from becoming established.

GRAPE- FOLIAR

Including: American bunch grape, Muscadine grape and Vinifera grape

Pests Controlled	Rate: Fluid ounces per acre
Leafhoppers/Sharpshooters, Mealybugs	1.2-1.6
Grapeleaf skeletonizer	1.5-1.6

Restrictions:
• Pre-Harvest Interval (PHI): 0 days
• Minimum interval between applications: 14 days
• Maximum Willowood Imidacloprid 4SC allowed per season when making foliar applications: 3.2 fluid ounces/Acre (0.1 lb. AI/A).
• Willowood Imidacloprid 4SC may be applied by ground application only.

Applications: Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. A spray adjuvant may be used to improve coverage. Willowood Imidacloprid 4SC may not knockdown established and heavy insect populations. Two applications may be required to achieve control. Scout fields and retreat if needed. Willowood Imidacloprid 4SC may be tank mixed with other insecticides for knockdown of pests or from improved control of other pests. For tree and vine crops, application rates are based on full-size, mature trees or vines.

HOP[1]- SOIL

Pests Controlled	Rate: Fluid Ounces per Acre
Aphids	3.2 - 9.6

Restrictions:
• Pre-Harvest Interval (PHI): 60 days
• Maximum Willowood Imidacloprid 4SC allowed per season when making soil applications: 9.6 fluid ounces/Acre (0.3 lb. AI/A).

Applications: Apply specified dosage in one of the following methods:
1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment;
2. Subsurface side-dress shanked into the root-zone on both sides of the plants followed by irrigation.
3. Hill drench in sufficient water to insure incorporation into the root-zone followed by irrigation.

Use the higher dosage within the specified rate range where extended residual control is desired or for treating larger vines or vines with dense foliage volume.
[1] Use not permitted in CA unless otherwise directed by state specific 24(c) Special Local Needs labeling.

HOP- FOLIAR

Pests Controlled	Rate: Fluid Ounces per Acre
Aphids	3.2

Restrictions:
• Pre-Harvest Interval (PHI): 28 days
• Minimum interval between applications: 21 days
• Maximum Willowood Imidacloprid 4SC allowed per season when making foliar applications: 9.6 fluid ounces/Acre (0.3 lb. AI/A).

Applications: Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. A spray adjuvant may be used to improve coverage. Willowood Imidacloprid 4SC may not knockdown established and heavy insect populations. Two applications may be required to achieve control. Scout fields and retreat if needed. Willowood Imidacloprid 4SC may be tank mixed with other insecticides for knockdown of pests or from improved control of other pests. Aerial application of Willowood Imidacloprid 4SC may result in slower activity and reduced control relative to results from ground application. For tree and vine crops, application rates are based on full-size, mature trees or vines.

POME FRUIT- SOIL

Crops of Crop Group 11 Including: Apple, Crabapple, Loquat, Mayhaw, Pear (including Oriental pear), Quince

Pests Controlled	Rate: Fluid Ounces per Acre
Aphids (including woolly apple aphid), Leafhoppers	8.0-12.0

Restrictions:
- Pre-Harvest Interval (PHI): 21 days
- Maximum Willowood Imidacloprid 4SC allowed per season when making soil applications: 12.0 fluid ounces/Acre (0.38 lb. AI/A).
- Do not apply pre-bloom or during bloom or when bees are actively foraging.

Applications: Apply specified dosage in the following method:
- Chemigation into the root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.

POME FRUIT- FOLIAR

Crops of Crop Group 11 Including: Apple, Crabapple, Loquat, May haw, Pear (including Oriental pear), Quince

Pests Controlled	Rate: Fluid Ounces per Acre
Leafhoppers	1.6-3.2
Aphids (except Woolly apple aphid), Apple maggot, Leafminers, San Jose scale	3.2
FOR PEAR ONLY: Mealybugs, Pear psylla	8.0

Restrictions:
- Pre-Harvest Interval (PHI): 7 days
- Minimum interval between applications: 10 days
- Maximum Willowood Imidacloprid 4SC allowed per year when making foliar applications: 16 fluid ounces per acre (0.5 lb. AI/A).
- Do not apply pre-bloom or during bloom or when bees are actively foraging.

Applications: Combine applications targeting apple maggot with manufacturer's rate of a sticker, such as Nu-Film 17.
Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. A spray adjuvant may be used to improve coverage. Willowood Imidacloprid 4SC may not knockdown established and heavy insect populations. Two applications may be required to achieve control. Scout fields and retreat if needed. Willowood Imidacloprid 4SC may be tank mixed with other insecticides for knockdown of pests or from improved control of other pests. Aerial application of Willowood Imidacloprid 4SC may result in slower activity and reduced control relative to results from ground application. For tree and vine crops, application rates are based on full-size, mature trees or vines.

POMEGRANATE[1] - SOIL

Pests Controlled	Rate: Fluid Ounces per Acre
Aphids, Leafhoppers/Sharpshooters, Whiteflies	8.0-16.0

Restrictions:
- Pre-Harvest Interval (PHI): 0 days
- Maximum Willowood Imidacloprid 4SC allowed per year when making soil applications: 16.0 fluid ounces/Acre (0.5 lb. AI/A).
- Do not apply pre-bloom or during bloom or when bees are actively foraging.

Applications: Apply specified dosage in the following method:
- Chemigation into the root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.

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POMEGRANATE[1] - FOLIAR

Pests Controlled	Rate: Fluid Ounces per Acre
Aphids, Leafhoppers/Sharpshooters, Whiteflies	3.2
Pests Suppressed	
Scales	3.2

Restrictions:
- Pre-Harvest Interval (PHI): 7 days
- Minimum interval between applications: 7 days
- Maximum Willowood Imidacloprid 4SC allowed per year when making foliar applications: 9.6 fluid ounces per acre (0.5 lb. AI/A).
- Do not apply pre-bloom or during bloom or when bees are actively foraging.

Applications: Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. A spray adjuvant may be used to improve coverage. Willowood Imidacloprid 4SC may not knockdown established and heavy insect populations. Two applications may be required to achieve control. Scout fields and retreat if needed. Willowood Imidacloprid 4SC may be tank mixed with other insecticides for knockdown of pests or from improved control of other pests. Aerial application of Willowood Imidacloprid 4SC may result in slower activity and reduced control relative to results from ground application. For tree and vine crops, application rates are based on full-size, mature trees or vines.

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STONE FRUIT- SOIL

Crops of Crop Group 12 Including: Apricot, Cherry (including sweet and tart), Nectarine, Peach, Plum (including Chickasaw, Damson, and Japanese), Plumcot, Prune (fresh and dried)

In-field, Soil Application	
Pests Controlled	**Rate: Fluid Ounces per Acre**
Aphids (including Woolly apple aphid), Leafhoppers	8.0-12.0

Restrictions:
- Pre-Harvest Interval (PHI): 21 days
- Maximum Willowood Imidacloprid 4SC allowed per season when making soil applications: 12.0 fluid ounces/Acre (0.38 lb. AI/A).
- Do not apply pre-bloom or during bloom or when bees are actively foraging.

Applications: Apply specified dosage in the following method:
- Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.

Pre-plant, Root Dip Application	
Pests Controlled	**Rate: Fluid Ounces per 10 Gallons Root-Dip Solution**
Black peach aphid (infesting roots)	1.0
Mix Willowood Imidacloprid 4SC at 1.0 fluid ounce per 10 gallons of water. Thoroughly wet bare-root transplant to slightly above the graft union by soaking roots in the Willowood Imidacloprid 4SC solution for up to 5 minutes. Allow solution to dry on roots and transplant trees as soon as possible following treatment.	

STONE FRUIT- FOLIAR

Crops of Crop Group 12 Including: Apricot, Cherry (including sweet and tart), Nectarine, Peach, Plum (including Chickasaw, Damson, and Japanese), Plum-cot, Prune (fresh and dried)

Pests Controlled	Rate: Fluid Ounces per Acre
Aphids, Green June beetle, Japanese beetle, Leafhoppers/Sharpshooters, Plant bugs, Rose chafer, San Jose scale	1.6-3.2
Cherry fruit fly	2.4-3.2
Pests Suppressed	
Plum curculio, Stink bugs	3.2

Restrictions for Apricot, Nectarine, Peach:
- Pre-Harvest Interval (PHI): 0 days
- Minimum interval between applications: 7 days
- Maximum Willowood Imidacloprid 4SC allowed per season when making foliar applications: 9.6 fluid ounces/Acre (0.3 lb. AI/A).
- Minimum application volume (water): 50 GPA - ground application, 25 GPA aerial application.
- Do not apply pre-bloom or during bloom or when bees are actively foraging.

Restrictions for Cherries, Plums, Plumcot, Prune:
- Pre-Harvest Interval (PHI): 7 days
- Minimum interval between applications: 10 days
- Maximum Willowood Imidacloprid 4SC allowed per season when making foliar applications: 16.0 fluid ounces/Acre (0.5 lb. AI/A).
- Minimum application volume (water): 50 GPA - ground application, 25 GPA-aerial application.
- Do not apply pre-bloom or during bloom or when bees are actively foraging.

Applications: Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. A spray adjuvant may be used to improve coverage. Willowood Imidacloprid 4SC may not knockdown established and heavy insect populations. Two applications may be required to achieve control. Scout fields and retreat if needed. Willowood Imidacloprid 4SC may be tank mixed with other insecticides for knockdown of pests or from improved control of other pests. Aerial application of Willowood Imidacloprid 4SC may result in slower activity and reduced control relative to results from ground application. For tree and vine crops, application rates are based on full-size, mature trees or vines.

TREE NUTS[1]- SOIL

Crops of Crop Group 14 Except Almond including: Beechnut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert, Hickory nut, Macadamia nut, Pecan, Pistachio, Walnut (black and English)

Pests Controlled	Rate: Fluid Ounces per Acre
Aphids, Leafhoppers/Sharpshooters, Mealybugs, Spittlebugs, Termites, Whiteflies	8.0-16.0
Pests/Diseases Suppressed	
Pecan scab (from reduction in honeydew deposition)	8.0-16.0
Thrips (foliage-feeding thrips only)	16.0

Restrictions:

- **Pre-Harvest Interval (PHI): 7 days**
- Maximum Willowood Imidacloprid 4SC allowed per year when making soil applications: 16.0 fluid ounces/Acre (0.5 lb. AI/A).
- Do not apply pre-bloom or during bloom or when bees are actively foraging.

Applications: Apply specified dosage prior to or at onset of pest infestation in one of the following methods:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent irrigation equipment. Pre-wet soil prior to applications of Willowood Imidacloprid 4SC and allow soil to dry following application and prior to subsequent irrigation;
2. Emitter or spot application in a minimum of 4 fluid ounces of mixture per emitter site;
3. Shank or subsurface side-dress, injected to a depth just above or just within the root zone and between the trunk and drip line of the tree canopy. Apply product in a minimum of 10 gallons per acre using multiple shanks on both sides of trees. Ensure product placement is below sod or orchard floor debris. Irrigate entire treated area within 48 hours to promote uptake by root system.

For control of termites, apply specified dosage to slightly moist soil as a high-volume drench to the basal portion of the tree trunk and surrounding soil in the immediate vicinity of the tree trunk. Utilize sufficient carrier volume to penetrate the soil to a depth of 18 - 24 inches to obtain optimum control. Allow soil to dry following treatment and prior to applying any irrigation.

Remarks: Use the higher rates when applied by shank or subsurface side-dress, used on larger trees, soils with high clay content, for high plant populations, and/or where extended control is desired. Under some conditions, control may not occur for 14 or more days or until two (2) irrigations have been made. Applications made later in the season may result in reduced efficacy.

[1] Use not permitted in CA unless otherwise directed by state specific 24(c) Special Local Needs labeling.

TREE NUTS[1]- FOLIAR

Crops of Crop Group 14 Except Almond including: Beechnut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert, Hickory nut, Macadamia nut, Pecan, Pistachio, Walnut (black and English)

Pests Controlled	Rate: Fluid Ounces per Acre
Aphids (except black pecan aphid), Leafhoppers/Sharpshooters, Phylloxera spp. (leaf infestations), Spittlebugs, Whiteflies	1.4-2.8
Black pecan aphid, Mealybugs, San Jose scale	3.2

Restrictions:
• Pre-Harvest Interval (PHI): 7 days
• Minimum interval between applications: 6 days
• Maximum Willowood Imidacloprid 4SC allowed per crop season when making foliar applications: 11.5 fluid ounces/Acre (0.36 lb. AI/A).
• Minimum application volume (water): 50 GPA - ground application, 25 GPA -aerial application.
• Do not apply pre-bloom or during bloom or when bees are actively foraging.

Applications: Applications for control of San Jose scale should be timed according to crawler stage, treating each successive generation. Two applications on a 10- to 14-day interval may be required to achieve control. Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. A spray adjuvant may be used to improve coverage. Willowood Imidacloprid 4SC may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and retreat if needed. Willowood Imidacloprid 4SC may be tank mixed with other insecticides for knockdown of pests or from improved control of other pests. Aerial application of Willowood Imidacloprid 4SC may result in slower activity and reduced control relative to results from ground application. For tree and vine crops, application rates are based on full-size, mature trees or vines.
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TROPICAL FRUIT - SOIL
Including: Acerola, Atemoya[1], Avocado, Birida[1], Black sapote, Canistel, Cherimoya[1], Custard apple[1], Feijoa, Jaboticaba, Guava, Llama[1], Longan, Lychee, Mamey sapote, Mango, Papaya, Passionfruit, Persimmon, Pulasan, Rambutan, Sapodilla, Soursop[1], Spanish lime, Star apple, Starfruit, Sugar apple[1], Wax jambu

Pests Controlled	Rate: Fluid Ounces per Acre
Aphids, Avocado lacebug, Leafhoppers, Whiteflies	12.0-16.0
Pests Suppressed	
Scales, Thrips (foliage feeding thrips only)	16.0

Restrictions:
• Pre-Harvest Interval (PHI): 6 days
• Maximum Willowood Imidacloprid 4SC allowed per year when making soil applications: 16.0 fluid ounces/Acre (0.5 lb. AI/A)
• Do not apply pre-bloom or during bloom or when bees are actively foraging.

Applications: Apply specified dosage in the following method:
• Chemigation through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.
[1] Use not permitted in CA unless otherwise directed by state specific 24(c) Special Local Needs labeling.

TROPICAL FRUIT - FOLIAR
Including: Acerola, Atemoya[1], Avocado, Birida[1], Black sapote, Canistel, Cherimoya[1], Custard apple[1], Feijoa, Jaboticaba, Guava, Llama[1], Longan, Lychee, Mamey sapote, Mango, Papaya, Passionfruit, Persimmon, Pulasan, Rambutan, Sapodilla, Soursop[1], Spanish lime, Star apple, Starfruit, Sugar apple[1], Wax jambu

Pests Controlled	Rate: Fluid Ounces per Acre
Aphids, Leafhoppers/Sharpshooters, Mealybugs, Thrips (foliage feeding thrips only), Whiteflies	3.2
Pests Suppressed	
Scales	3.2

Restrictions:
• Pre-Harvest Interval (PHI): 7 days
• Minimum interval between applications: 10 days
• Maximum Willowood Imidacloprid 4SC allowed per crop year when making foliar applications: 16.0 fluid ounces per acre (0.5 lb. AI/A)
• Do not apply pre-bloom or during bloom or when bees are actively foraging.

Applications: Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. A spray adjuvant may be used to improve coverage. Willowood Imidacloprid 4SC may not knockdown established and heavy insect populations. Two applications may be required to achieve control. Scout fields and retreat if needed. Willowood Imidacloprid 4SC may be tank mixed with other insecticides for knockdown of pests or from improved control of other pests. Aerial application of Willowood Imidacloprid 4SC may result in slower activity and reduced control relative to results from ground application. For tree and vine crops, application rates are based on full-size, mature trees or vines.
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OTHER CROPS

CHRISTMAS TREE[1]- SOIL

Pests Controlled	Rate: Fluid Ounces per Acre
White grub complex (damage from grubs of Asiatic garden beetle, European and Masked chafer, Japanese beetle and Oriental beetle)	8.0-16.0

Restrictions:
• Maximum Willowood Imidacloprid 4SC allowed per year when making soil applications: 16.0 fluid ounces/Acre (0.5 lb. AI/A)

Applications: Soil incorporation and movement of Willowood Imidacloprid 4SC to the root-zone is required for activity. Willowood Imidacloprid 4SC can be incorporated most readily when applied to moist soil. Apply specified dosage in one of the following methods:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment;
2. 18-inch band on each side of the row (small trees) to full broadcast application (large trees) followed by rainfall or 0.25 -1 inch of irrigation within 12 hours after application.

For optimal grub control, apply Willowood Imidacloprid 4SC during adult flight activity, or up to mid-July, when 1st instar larvae are present.
[1] Use not permitted in CA unless otherwise directed by state specific 24(c) Special Local Needs labeling.

CHRISTMAS TREE- FOLIAR

Pests Controlled	Rate: Fluid Ounces per Acre
Aphids, Adelgids, Sawflies	1.6-3.2

Restrictions:
- Minimum interval between applications: 7 days
- Maximum Willowood Imidacloprid 4SC allowed per crop year when making foliar applications: 16.0 fluid ounces/Acre (0.5 lb. AI/A).

Applications: Gall-forming adelgids-time applications to coincide with full bud-swell of earliest bud-breaking trees. Once galls form spraying will be ineffective.
Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. A spray adjuvant may be used to improve coverage. Willowood Imidacloprid 4SC may not knockdown established and heavy insect populations. Two applications may be required to achieve control. Scout fields and retreat if needed. Willowood Imidacloprid 4SC may be tank mixed with other insecticides for knockdown of pests or for improved control of other pests.

POPLAR/COTTONWOOD[1] - SOIL
(Includes members of the genus *Populus* grown for pulp or timber)

Field Application Instructions. See details below for Cuttings/Whips Application Instructions.	
Pests Controlled	**Rate: Fluid Ounces per Acre**
Aphids, Cottonwood leaf beetle	8.0-16.0
Pests Suppressed	
Phylloxerina popularia	8.0-16.0

Restrictions:
- Maximum Willowood Imidacloprid 4SC allowed at-plant per crop year: 16.0 fluid ounces/Acre (0.5 lb. AI/A)
- Do not apply pre-bloom or during bloom or when bees are actively foraging.

Applications: Apply specified dosage in the following method:
1. Chemigation through low-pressure drip irrigation.
2. For narrow-row, cutting orchards/nurseries used for plant propagation, shank into root-zone followed by adequate irrigation to promote uptake. (Adequate irrigation depends on soil moisture level at application. Under dry conditions, use 0.25 inches/Acre).

For Cottonwood leaf beetle, protection against damage will occur when application is made early-season, when the beetles first begin feeding. Larger trees may require earlier treatment as a result of slower uptake. For *Phylloxerina,* apply early in the year from break of dormancy through May.

Cutting/Whip Application Instructions. See details above for Field Application Instructions.	
Pests Controlled	**Cutting/Whip Soaking Solution: Fluid Ounces Willowood Imidacloprid 4SC Needed per 100 Gallons**
Cottonwood leaf beetle	6.7-13.3 (unhydrated cuttings/whips) 13.3-20.0 (partially hydrated cuttings/whips)
Pests Suppressed	
Aphids, *Phylloxerina popularia*	6.7 -13.3 (unhydrated cuttings/whips) 13.3-20.0 (partially hydrated cuttings/whips)

Restrictions:
• Maximum Willowood Imidacloprid 4SC allowed at-plant per crop year: 16.0 fluid ounces/Acre (0.5 lb. AI/A)

Applications: Moisture content of cuttings/whips prior to application, the solution concentration, and the length of soaking interval interact to affect the amount of product absorbed into plant material. For a constant soaking interval of 24 hours, drier cuttings/whips absorb a higher quantity of solution and require a lower concentration. Conversely, more hydrated cuttings/ whips absorb less solution and require a higher concentration. Soaking of cuttings/whips should occur in a covered container in absence of UV light. Not all *Populus* spp. clones/varieties/hybrids have been tested for crop safety. Without specific knowledge about a particular *Populus* spp. clone/variety/hybrid, Willowood LLC recommends that small numbers of cuttings/whips of each be treated and evaluated prior to commercial use.

Apply Willowood Imidacloprid 4SC in one of the following cuttings/whips soaking methods:

1. For freshly cut (unhydrated) cuttings/whips, soak plant material in specified solution concentration for 24 hours prior to cold storage. After removal from cold storage, plant as needed;
2. For previously hydrated cuttings/whips removed from cold storage, allow plant material to reach room temperature and soak in specified solution concentration for 24 hours prior to planting.

Proper care must be taken in disposal of any residual soaking solution. Solution may be applied to existing trees or other registered crops as long as all product label precautions and restrictions are observed.
[1] Use not permitted in CA unless otherwise directed by state specific 24(c) Special Local Needs labeling.

POPLAR/COTTONWOOD[1] - FOLIAR
(Includes members of the genus *Populus* grown for pulp or timber)

Pests Controlled	Rate: Fluid Ounces per Acre
Aphids, Leaf beetles	1.6-3.2

Restrictions:
• Minimum interval between applications: 10 days
• Maximum Willowood Imidacloprid 4SC allowed per crop year when making foliar applications: 16 fluid ounces per acre (0.5 lb. AI/A).
• Do not apply pre-bloom or during bloom or when bees are actively foraging.

Applications: Apply specified rate per acre as a broadcast or directed foliar spray to infested area as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. A spray adjuvant may be used to improve coverage. Willowood Imidacloprid 4SC may not knockdown established and heavy insect populations. Two applications may be required to achieve control. Scout fields and retreat if needed. Willowood Imidacloprid 4SC may be tank mixed with other insecticides for knockdown of pests or for improved control of other pests.
[1] Use not permitted in CA unless otherwise directed by state specific 24(c) Special Local Needs labeling.

Darkling Beetle, Lesser Mealworm, and Hide Beetle Control In Poultry Housing Structures, Facilities, Buildings, Barns

Use WILLOWOOD IMIDACLOPRID 4SC as a surface, spot, or crack and crevice treatment to floors, walls, and support beams of poultry, broiler, turkey, caged egg layer, breeder, housing structures, facilities, buildings, barns. Willowood Imidacloprid 4SC may be applied within 25 feet around the perimeter of the poultry house. **DO NOT APPLY WHEN BIRDS ARE PRESENT .** Cover or remove exposed feed and water from the area to be treated. Allow treated surfaces to dry before restocking/reintroducing birds, animals into the house, structure, facility, building, barn.

MIXING AND APPLICATION INSTRUCTIONS AND RATES:

1) Determine the area (number of square feet) to be treated. Refer to the Mixing Table below for the amount of WILLOWOOD IMIDACLOPRID 4SC to be used.
2) Mix the required amount of WILLOWOOD IMIDACLOPRID 4SC with the appropriate amount of water and apply as a spray. Fill the sprayer tank with ½ of the water required for the treatment.
3) Begin agitating the water and add the required amount of product to the tank.
4) Continue mixing and add the remaining water. Maintain sufficient agitation during product application to ensure a uniform spray.
5) Prepare a fresh spray mixture before each treatment.

MIXING TABLE FOR WILLOWOOD IMIDACLOPRID 4SC

Pests to Control	WILLOWOOD IMIDACLOPRID 4SC Per 1,000 Feet^2	Gallons of Water Per 1,000 Feet^2
Darkling Beetles & Hide Beetles	3 fl. oz.* (90 mL*)	½ - 2 gallons

*Equivalent to 45 grams of imidacloprid a.i./1,000 ft.^{2}

CONVERSION KEY: 128 fl. oz. = 1 gal., 16 fl. oz. = 1 pint, 8 pints = 1 gal., 1 fl. oz. = 29.5 mL

APPLICATION TIMING

Apply between flocks, following de-caking/sanitation procedures.

APPLICATION INSTRUCTIONS

Band Application

When darkling beetles are concentrated in certain areas, such as under feed or water lines, or along the perimeter walls, it may not be necessary to treat the entire floor area, litter surface, of a poultry, broiler, turkey, caged egg layer, breeder house. In these situations, certain portions of the house or "bands" may be treated. For example, apply diluted WILLOWOOD IMIDACLOPRID 4SC to a 3-foot wide band of litter under all of the feed and/or water lines in the house; a 3-foot wide band of litter adjacent to the side and end walks: and the lower section of the walls, including 1 foot up onto wood surfaces above the foundation. Be sure to measure the actual area (square feet) to be treated in order to determine the amount of WILLOWOOD IMIDACLOPRID 4SC needed for the application.

Whole House Application

When darkling beetle infestation is severe, the entire house may need to be treated. Apply diluted WILLOWOOD IMIDACLOPRID 4SC as a broadcast spray to the litter covering the entire floor area, especially to litter under feed and water lines, as well as to the lower sections of walls, including 1 foot up onto wood surfaces above the concrete foundation.

For Best Results

In houses with support beams, treat the litter surface around each support post and 1 foot up each post. Also apply diluted spray to cracks and crevices around wall insulation, where beetles have been seen or can find harborage.

RESISTANCE MANAGEMENT

Darkling beetles, like all insects, have the ability to develop resistance to insecticides. When a single chemical class is used continuously this increases the likelihood that resistance to that chemical class will develop. WILLOWOOD

IMIDACLOPRID 4SC contains imidacloprid, which belongs to the class of chloronicotinyl insecticides. WILLOWOOD IMIDACLOPRID 4SC should be used in an insecticide rotation program with other classes of insecticides including pyrethroids, organophosphates, and spinosyns to prevent resistance and preserve the product's effectiveness for darkling beetle control.

- Read and follow all label directions when using WILLOWOOD IMIDACLOPRID 4SC or any other insecticide.
- Do not use WILLOWOOD IMIDACLOPRID 4SC or any other insecticide product at lower than the specified label rate. This exposes the insects to a sub-lethal dose and increases the development of resistance.
- Use integrated Pest Management (IPM) strategies in addition to insecticide treatments to manage darkling beetle population.

When pest exclusion at possible entry points is desired, supplement WILLOWOOD IMIDACLOPRID 4SC treatments with targeted applications of pyrethroid insecticides to the building perimeter, foundation, doors, and windows, utility entry points, and other places where pests may enter the structure. Read and follow all label directions for use of other products.

WILLOWOOD IMIDACLOPRID 4SC CONVERSION CHART FOR LINEAR APPLICATION ONLY

Rate: Fluid Ounces /Acre	**Rate: Fluid Ounces/1,000 Row-Feet Based on *Average* Row Spacing (in Inches):**							
	10	**15**	**20**	**25**	**30**	**35**	**40**	**45**
10	0.10	0.15	0.19	0.24	0.29	0.34	0.38	0.43
12	0.12	0.17	0.23	0.29	0.35	0.40	0.46	0.52
14	0.14	0.20	0.27	0.34	0.40	0.47	0.54	0.61
16	0.16	0.23	0.31	0.39	0.46	0.54	0.61	0.69
18	0.17	0.26	0.35	0.43	0.52	0.61	0.69	0.78
20	0.19	0.29	0.38	0.48	0.58	0.67	0.77	0.86
22	0.21	0.32	0.42	0.53	0.63	0.74	0.84	0.95
24	0.23	0.35	0.46	0.58	0.69	0.81	0.92	1.04
26	0.25	0.38	0.50	0.62	0.75	0.87	1.00	1.12
28	0.27	0.40	0.54	0.67	0.81	0.94	1.07	1.21
30	0.29	0.43	0.58	0.72	0.86	1.01	1.15	1.29
32	0.31	0.46	0.61	0.76	0.92	1.07	1.23	1.38

Important Note: Rate of this product applied affects the length of control and, to a considerable extent, the degree of control or effect. Row-spacing X rate combinations in shaded blocks may not provide adequate residual pest control and are not recommended for long-term, residual control. Use higher labeled rates where infestations may occur later in crop development or where pest pressure is continuous. Willowood offers no warranty for use of this product at rates below 0.35 fluid ounce/1,000 row- feet (the Row-Spacing/Rate combinations that are shaded).

STORAGE AND DISPOSAL

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

Pesticide Storage: Store in a cool, dry place, out of direct sunlight, and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area. Handle and open container in a manner as to prevent spillage. If the container is leaking, invert to prevent leakage. If container is leaking or material spilled for any reason or cause, carefully dam up spilled material to prevent runoff. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Absorb spilled material with absorbing type compounds and dispose of as directed for pesticides below. In spill or leak incidents, keep unauthorized people away.

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

CONTAINER DISPOSAL:

Nonrefillable container (equal to or less than 5 gallons): Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling, if available or reconditioning, or puncture and dispose of in a sanitary landfill or by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Nonrefillable container (greater than 5 gallons): 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 ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 20 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 mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Offer for recycling, or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

LIMITATION OF WARRANTY AND LIABILITY

Read the entire Directions for Use, Conditions of Warranties and Limitations of Liability before using this product If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

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

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, WILLOWOOD LLC MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. To the extent consistent with applicable law, no agent of Willowood LLC is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISENT WITH APPLICABLE LAW, WILLOWOOD LLC DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

LIMITATIONS OF LIABILITY: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT,

NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID OR AT WILLOWOOD LLC'S ELECTION, THE REPLACEMENT OF PRODUCT.

[Sub-Label B: Seed Treatment]
Willowood Imidacloprid 4SC

For Use as a Seed Treatment to Protect the Seed of Listed Crops Against Listed Pests

ACTIVE INGREDIENT	**% BY WT.**
Imidacloprid:	
1-[(6-Chloro-3-pyridinyl)methyl] -N-nitro-2-imidazolidinimine	40.7%
OTHER INGREDIENTS:	59.3%
TOTAL:	100.0%

Contains 4.0 pounds of active ingredient per gallon.

Shake well before using.
STOP-Read the label before use.
KEEP OUT OF REACH OF CHILDREN
CAUTION

FIRST AID
IF SWALLOWED: • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING: • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
IF INHALED: • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
IF IN EYES: • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center, doctor, or going for treatment. For emergency information concerning this product, call the National Pesticides Information Center (NPIC) at **1-800-858-7378** seven days a week, 6:30 a.m. to 4:30 p.m. Pacific Time (NPIC Web site: www.npic.orst.edu)
NOTE TO PHYSICIAN: No specific antidote is available. Treat the patient symptomatically.

See inside booklet for additional Precautionary Statements, Directions for Use, Storage and Disposal, and Limitation of Warranty and Liability.

Manufactured For:
Willowood LLC
1600 NW GARDEN VALLEY BLVD., SUITE 120
ROSEBURG OR 97471

EPA Reg. No. 87290-26 **EPA Est. No.**

Net Contents: __ Gals.

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION. Harmful if swallowed. Harmful if absorbed through skin. Harmful if inhaled. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Avoid breathing vapor or spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical resistant to this product are listed below. More options can be obtained by following the instructions for Category C on an EPA chemical-resistance category selection chart.

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material such as nitrile rubber, butyl rubber, neoprene rubber, barrier laminate, polyethylene, polyvinyl chloride (PVC), or Viton.
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining personal protective equipment, PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

ENGINEERING CONTROLS 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

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE 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 wildlife and highly toxic to aquatic invertebrates. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters. Cover or incorporate spilled treated seeds.

This product is highly toxic to bees. Ensure that planting equipment is functioning properly in accordance with manufacturer specifications to minimize seed coat abrasion during planting to reduce dust which can drift to blooming crops or weeds.

Ground Water Advisory

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

DIRECTIONS FOR USE

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

For use in commercial seed treatment facilities. Use is also permitted as an end-use seed treatment on agricultural establishments at planting, or immediately before planting, as specified in the Specific Crop Use Directions. This product is to be used in liquid or slurry treaters only.

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.

Mix thoroughly before use or use entire container at one time. All tank mixes should be pre tested to determine physical compatibility between formulations. Follow the most restrictive precautions and limitations on the labeling of all products used in mixtures.

AGRICULTURAL USE REQUIREMENTS

Use this product 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 intervals. 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.

Exception: If the seed is treated with the product and the treated seed is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:
- Coveralls
- Chemical-resistant gloves made of any waterproof material such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyethylene, polyvinyl choride (PVC), or Viton
- Shoes plus socks

ROTATIONAL CROPS

Treated areas may be replanted with any crop specified on an imidacloprid label, or any crop for which a tolerance exists for the active ingredient, as soon as practical following the last application. The following plant-back intervals are required for listed crops:

Rotational Plant-Back Intervals*				
Immediate Plant-back				30-Day Plant-back
Artichoke	Crambe	Oats	Soybean	Cereals, including:
Barley	Cucurbits	Okra	Strawberry	Buckwheat
Brassica (cole)	Eggplant	Pepinos	Sugarbeet	Rice
Leafy vegetable	Flax	Pepper	Sunflower	
Borage	Ground cherry	Popcorn	Tomatillo	
Bulb vegetable	Leaf petiole veg.	Potato	Tomato	
Canola	Leafy veg.	Rapeseed	Triticale	
Cilantro	Legume veg.	Rye	Root and Tuber	
Corn, Field	(succulent or dried,	Safflower	Veg.	
Corn, Sweet	including soybean)	Sorghum	Watercress	
Cotton	Millet		Wheat	

Cranberry	Mustard seed			
*Cover crops for soil building or erosion control may be planted any time, but do not graze or harvest for food or feed. For all other crops not listed on an Imidacloprid label, or for crops for which no tolerances for the active ingredient has been established, a 12-month plant-back interval is required.				

Notification of the crop rotational restriction must be conveyed to the grower by appropriate seed tag labeling or bag printing on all seed units.

NOTE: The purchaser of this product is responsible for ensuring that all seed treated with this product are adequately dyed with a suitable color to prevent its accidental use as food for man or feed for animals. Refer to 21 CFR, Part 2.25. Any dye or colorant added to treated seed must be cleared for use under 40 CFR, Part 180.1001. Federal regulations have established official tolerances for certain pesticide residues. In order that residues on food and forage crops will not exceed established tolerances, use only at specified rates.

Treated seed must not be used for or mixed with food or animal feed or processed for oil. Seed commercially treated with Willowood Imidacloprid 4SC must be labeled in accordance with all applicable requirements of the Federal Seed Act.

Use Restrictions

- DO NOT use as a planter (hopper) box treatment.
- DO NOT use treated seed for feed, food, or oil purposes.
- Store treated seed away from feeds and foodstuffs.
- DO NOT allow children, pets or livestock to have access to treated seed.
- The maximum application rate for imidacloprid (including seed treatments foliar applications soil applications) is 0.5 lb. per acre per year. DO NOT apply more than 0.5 lb. ai imidacloprid per acre per year.
- Treated seed must be planted into the soil at a depth greater than 1 inch.
- Exposed treated seed may be hazardous to birds. Cover or incorporate spilled treated seed. Excess or leftover seed may be double sown around the headland or buried away from bodies of water in accordance with local requirements.

SEED BAG LABELING REQUIREMENTS

Seed commercially treated with this product must be labeled in accordance with all applicable requirements of the Federal Seed Act. The user of this product is responsible for ensuring that the seed bag meets all requirements under the Federal Seed Act.

THE FEDERAL SEED ACT REQUIRES THAT BAGS CONTAINING TREATED SEEDS BE LABELED WITH THE FOLLOWING STATEMENTS:

This seed has been treated with Willowood Imidacloprid 4SC (imidacloprid).
DO NOT use treated seed for feed, food, or oil purposes.

THE US ENVIRONMENTAL PROTECTION AGENCY REQUIRES THE FOLLOWING STATEMENTS ON BAGS CONTAINING SEEDS TREATED WITH WILLOWOOD IMIDACLOPRID 4SC (imidacloprid)

- Pollinator Precautions: Imidacloprid is highly toxic to bees. Ensure that planting equipment is functioning properly in accordance with manufacturer specifications to minimize seed coat abrasion during planting to reduce dust which can drift to blooming crops or weeds.
- Store away from feeds and foodstuffs.
- Wear long sleeved shirt, long pants, and chemical resistant gloves when handling treated seed.
- Treated seed must be planted into the soil at a depth greater than 1 inch.
- Exposed treated seed may be hazardous to birds. Cover or incorporate spilled treated seeds. Excess or leftover seed may be double sown around the headland or buried away from bodies of water in

accordance with local requirements.

- Dispose of seed packaging in accordance with local requirements.
- DO NOT contaminate water bodies when disposing of planting equipment washwater.
- DO NOT allow children pets or livestock to have access to treated seed.
- In the event of a crop failure or harvest of a crop grown from Willowood Imidacloprid 4SC treated seed, the field may be replanted immediately to artichoke, barley, borage, Brassica (cole) leafy vegetables, bulb vegetables, canola, cilantro, corn (field or sweet), cotton, cranberry, crambe, cucurbits, eggplant, flax, groundcherry, leafy petiole vegetables, leafy vegetables, legume vegetables (succulent or dried including soybean), millet, mustard seed, oats, okra, pepinos, pepper, popcorn, potato, rapeseed, rye, safflower, sorghum, soybean, strawberry, sugarbeets, sunflower, tomatillo, tomato, triticale, root and tuber vegetables, watercress, and wheat. For cereals, including buckwheat and rice, the minimum plant back interval is 30 days from the date Willowood Imidacloprid 4SC treated seed was planted. Cover crops for soil building or erosion control may be planted at any time but do not graze or harvest for food or feed. For all other crops not listed on an imidacloprid label or for crops for which no imidacloprid tolerance for the active ingredient has been established a 12 month plant back interval must be observed.
- The maximum application rate (including seed treatment foliar application and soil application) per acre per year for imidacloprid is 0.5 lb.
- This seed has been treated with _X_ lbs imidacloprid per lbs of seed [or_X_ mg imidacloprid per seed].
- Excess treated seed may be used for ethanol production only if (1) by products are not used for livestock feed and (2) no measurable residues of pesticides remain in the ethanol by products that are used in agronomic practice.

SPECIFIC CROP USE DIRECTIONS

CARROT	
To provide early season protection of seedlings against injury by listed pests apply as a commercial seed treatment	
For Use In Commercial Seed Treatment Facilities	
Target Pest	**Fl. Oz. Product/100 lb. Seed**
Seed corn maggot Wireworm	8.0

CORN				
For the protection of corn plants from the corn insect pests listed below apply as a seed treatment at the specified rates				
Field Corn				
For Use In Commercial Seed Treatment Facilities				
Target Pests	**Fl. Oz. of Product/**			**Mg A.I./SEED**
	100 lb. Seed	**1,000 Seeds**	**80,000 Seed Count**	
Corn root worm (including Northern Western Southern and Mexican) Flea beetle Chinch bug Southern green stinkbug White grub Seed corn maggot Thrips Wireworm Corn leaf aphid	16.9	0.095	7.57	1.34

Imported fire ant Southern corn leaf beetle Billbug[2] Grape colaspis[2] Black cutworm[3]				
Flea beetle Chinch bug Seed corn maggot Thrips Wireworm Corn leaf aphid Imported fire ant Grape colaspis[2] White grub	7.6	0.043	3.40	0.60
Seed corn maggot (seed protection only) Wireworm (seed protection only) Flea beetle (through 1 leaf stage) Imported fire ant White grub[4]	2.0	0.011	0.90	0.16

This product contains 14,200 mg. imidacloprid (AI) /fluid ounce based on a standard number of 1,786 seeds/lb. (100,000 seeds/56 lb. bag).

[1] In areas of heavy to severe corn rootworm populations protection will not be adequate. Use only in areas of light to moderate corn rootworm populations. Consult your State Agricultural Extension Service on levels of corn rootworm populations.

[2]Reduces early season feeding damage.

[3] Will reduce feeding damage caused by leaf feeding black cutworms that are 1/2 inch or less in length.

[4] Reduces feeding damage during emergence and seedling stages.

NOTE: To maintain mg ai / seed, adjust fluid ounces / 100 lb. in proportion to the actual seeds / lb. compared to the standard number of seeds / lb. for that crop. Fluid ounces per number of seeds does not need to be adjusted. For example, if there are 1,600 corn seeds / lb. and the targeted rate is 0.16 mg ai / seed at a non-adjusted rate of 2.0 fl. oz. / 100 lb. of seed use (1,600 – 1,786) x 2.0 = 1.79 fl. oz. / 100 lb. of seed.

For End Use Application At Agricultural Establishments

Apply using an HCBT or an Eight Bag Batch Treater. Shake this product thoroughly before use. Dilute this product with water and/or an approved Willowood fungicide mixture. Adjust the final slurry rate to apply a rate of 8 to 10 fluid ounces of diluted slurry per 50 pound bag of seed. Treat one half of slurry mix. Allow mixing until seed is thoroughly covered. Apply 0.75 ounce of dry TALC per 50 pound bag of seed following the product application and allow it to distribute evenly on the seed.

Sweet Corn

For Use In Commercial Seed Treatment Facilities

Target Pests	Fl. Oz. Product/100 lb. Seed
Flea beetle Early season corn leaf aphid Seed corn maggot Wireworm	8.0
Imported fire ant Early season corn leaf aphid Seed corn maggot Wireworm	4.0 – 8.0
Imported fire ant	2.0 – 4.0

Seed corn maggot (seed protection) Wireworm (seed protection)	
Wireworm (seed protection)	1.0 – 2.0
Adjust the final slurry rate to apply 16 to 20 fluid ounces of diluted solution per 100 lb. of seed with commercial equipment.	
Popcorn	
For Use In Commercial Seed Treatment Facilities	
Target Pests	**Fl. Oz. Product/100 lb. Seed**
Flea beetles	8.0

COTTON (Delinted Seed Only)		
To provide protection of seedlings against injury by listed pests, apply as a seed treatment at the specified rates.		
For Use In Commercial Seed Treatment Facilities		
Target Pests	**Fl. Oz. Product/100 lb. Seed**	**MG AI/SEED**
Thrips, Aphids	16.0	0.375
For End Use Application At Agricultural Establishments		
Apply using an HCBT or an 8 Bag Batch Treater. Shake this product thoroughly before use. This product may be diluted with water or an approved Willowood fungicide mixture for extended disease protection. Adjust the final slurry rate to apply a rate of 8 to 10 fluid ounces of diluted slurry per 50 pound bag of seed. Treat one half of seed with one half of slurry mix. Add the balance of the seed and apply balance of slurry. Allow mixing until seed is thoroughly covered.		
Target Pests	**Fl. Oz. Product/50 lb. Bag**	
Thrips, Aphids	8.0	
USE RESTRICTIONS Regardless of the type of application (seed treatment soil or foliar), DO NOT apply more than a total of 0.5 pound of imidacloprid per acre per year.		

OIL SEED CROP GROUP	
To provide early season protection of seedlings against injury by listed pests apply as a seed treatment at rates the specified.	
For Use In Commercial Seed Treatment Facilities	
Target Pests	**Fl. Oz. Product/100 lb. Seed**
Aphids, Flea beetles, Wireworms	12.8 – 32.0
In areas where flea beetles and foliar insects are in high numbers, use the higher application rate within the specified range. Consult your local agricultural office for pest patterns history and forecasts to assist in determining the appropriate rate for your region.	
For suppression of 2nd Generation Lygus bugs including Lygus spp Seedpod weevil larvae including *Ceutorhynchus assimilis*	19.2 – 32.0
Flax, Crambe, and Borage	
Target Pests	**Fl. Oz. Product/100 lb. Seed**
Wireworms Seed corn maggots Flea beetles	32.0
Safflower	
Target Pests	**MG AI/SEED**
Wireworms	0.25 – 0.50 (14,200 mg. imidacloprid/fl. oz. product
Sunflower	
Target Pests	**MG AI/SEED**

Wireworms Seed corn maggots Flea beetles	0.25 – 0.50 (14,200 mg imidacloprid/fl. oz. product
For End Use Application At Agricultural Establishments	
Apply using an HCBT or a Batch Treater. Shake this product thoroughly before use. This product may be diluted with an approved Willowood fungicide mixture for extended disease protection. Treat one half of seed with one half of slurry mix. Add the balance of the seed and apply balance of slurry. Allow mixing until seed is thoroughly covered.	
Canola, Rapeseed, Mustard Seed	
Target Pests	**Fl. Oz. Product/50 lb. Bag**
Aphids Flea beetles Wireworms	6.4 – 16.0
Flax, Sunflower, Crambe, and Borage	
Target Pests	**Fl. Oz. Product/100 lb. Bag**
Wireworms Seed corn maggots Flea beetles	16.0
Safflower	
Target Pests	**Fl. Oz. Product/100 lb. Bag**
Wireworms	16.0
USE RESTRICTIONS Rape greens grown and harvested from this products treated seed must not be used for human and feed consumption. Rapeseed grown and harvested from this products treated seed is only for industrial uses and cannot be used for edible oil or any other human/feed consumption. Seed treated in California must be destined for planting in states other than California and is not to be planted in California.	

SEED AND POD VEGETABLES (Including)	
Adzuki Bean, Asparagus Bean, Broad Bean (Succulent or Dry), Catjang Bean, Chinese Longbean, Field Bean, Guar Bean, Jackbean, Kidney Bean, Lablab, Bean Lima Bean (Succulent or Dry), Moth Bean (Succulent or Dry), Mung Bean, Navy Bean, Pinto Bean, Rice Bean, Runner Bean, Snap Bean, Sword Bean, Tepary Bean, Urd Bean, Wax Bean, Yardlong Bean, Blackeyed Pea (Succulent or Dry), Chickpea, Cowpea (Succulent or Dry), Crowder Pea, Dwarf Pea, Edible Pod Pea, English Pea, Field Pea, Garden Pea, Green Pea, Pigeon Pea (Succulent or Dry), Snow Pea, Southern Pea (Succulent or Dry), Sugar Snap, Pea Gram, Lupin, Sweet Lupin, White Lupin, White Sweet Lupin, Lentil	
To provide early season protection of seedlings against injury by listed pests apply as a seed treatment at the specified rates.	
For Use In Commercial Seed Treatment Facilities	
Target Pests	**Fl. Oz. Product/100 lb. Bag**
Wireworm, Bean Leaf Beetle, Fire ant, Aprhids	2.0 – 4.0
USE RESTRICTIONS: Seed-and-pod vegetable seed treated in California must be destined for planting in states other than California and is not to be planted in California.	

SORGHUM	
To provide early season protection of seedlings against injury by listed pests, apply as a seed treatment at the specified rates.	
For Use In Commercial Seed Treatment Facilities	
Target Pests	**Fl. Oz. Product/100 lb. Bag**
Aphids (including Corn leaf, English grain, Greenbug,	8.0

and Yellow sugar cane) Chinch bugs Fire ants Wireworms	
For End Use Application At Agricultural Establishments	
Apply using an HCBT or an 8-Bag Batch Treater. Shake this product thoroughly before use. Dilute this product with water. Adjust the final slurry rate to apply a rate of 8 to 10 fluid ounces of diluted slurry per 50-pound bag of seed. Treat one-half of seed with one-half of slurry mix. Add the balance of the seed and apply balance of slurry. Allow mixing until seed is thoroughly covered. Apply 0.75 ounce of dry TALC per 50-pound bag of seed following the product application and allow it to distribute evenly on the seed.	
Target Pests	**Fl. Oz. Product/50 lb. Bag**
Aphids (including Corn leaf, English grain, Greenbug, and Yellow sugar cane) Chinch bugs Fire ants Wireworms	4.0
USE RESTRICTIONS: DO NOT graze or feed livestock on treated areas for 45 days after planting.	

SOYBEAN				
To provide early season protection against injury by listed pests and to suppress the spread of certain viruses caused by insect vectors, apply as a seed treatment at the specified rates.				
For Use In Commercial Seed Treatment Facilities				
Use higher rates within the specified range to provide increased length of protection and for heavy insect pressure. This product can be used as an over-treatment.				
Target Pests	**Fl. oz. of Product/**			**Mg A.I./SEED**
	100 lb. Seed*	**1,000 Seeds**	**140,000 Seed Count**	
Seed corn maggot Soybean aphids Bean leaf beetles (overwintering)	2.0 – 4.0	0.0067 – 0.0133	0.93 – 1.87	0.095 – 0.190
This product contains 14,200 mg imidacloprid /fluid ounce. *based on a standard number of 3000 seeds / lb. **NOTE**: To maintain mg ai / seed, adjust fluid ounces / 100 lb. of seed in proportion to the actual seed count / lb. compared to the base number of seeds / lb for that crop; fluid ounces per number of seeds (i.e., 1000, 80,000, 140,000) does not need to be adjusted. For example, if there are 2,800 soybean seeds / lb. and the targeted rate is 0.095 mg ai / seed at a non adjusted rate per 2.0 fl. oz. /100 lb. of seed, use: (2,800 + 3,000) x 2.0 = 1.87 fl. oz. /100 lb. of seed. **USE RESTRICTIONS**: DO NOT graze or feed livestock on soybean forage or hay.				

SUGARBEETS	
To provide early season protection of seedlings against injury by listed pests apply as a seed treatment at the specified rates.	
For Use In Commercial Seed Treatment Facilities	
Target Pests	**Use Rate**
Whitefly Aphids / Leafhoppers (including vectors that may spread Curly top and Yellow mosaic virus) Root aphids	3.0 to 6.25 fluid ounces of this product in or on a unit of pelleted sugar beet seed with a weight ratio of 2:1 pelleting mixture to raw seed (seed count 100,000 seed approximately 1 kilogram by weight). Apply in a

Thrips Wireworms	film coat directly to raw seed (100,000 seed or approximately 1 kilogram by weight) at a rate of 3.0 fluid ounces per unit of seed. If rates exceed 3.0 fluid ounces per unit seed must be pelleted.

WHEAT, BARLEY, OATS, RYE, TRITICALE	
To provide early season protection of seedlings against injury by listed pests, apply as a seed treatment at the specified rates.	
For Use In Commercial Seed Treatment Facilities	
Target Pests	**Fl. Oz. Product/100 lb. Bag**
Aphids (including Bird cherry oat, English gram, Greenburg, and Russian wheat aphid), Hessian fly	1.0 – 3.0
For Suppression of Wireworm	0.16 – 0.33
Grasshopper	1.5 – 3.0
Use the higher rate within the specified range to provide increased length of protection and to reduce potential spread of Barley yellow dwarf virus due to aphid vectors. To reduce early season damage caused by grasshopper, this product's treated seed may be planted as a 50 to 60 foot border around the edges of the field. Consult your local university extension entomologist for details regarding grasshopper control in your area. For maximum effectiveness seed should be treated uniformly.	
For End Use Application At Agricultural Establishments	
Apply using a Total Slurry Treater (TST) Farmer Applied Seed Treater (FAST) Farmer Air Pressure System (FAP) or other on farm liquid or slurry seed treating equipment to deliver accurate rates of this product to achieve optimum product performance. Combine this product with an approved Willowood fungicide product for seed and seedling protection against fungal pathogens. Dilution with water may be necessary depending on fungicide formulation used. This product may also be applied on farm as an over treatment to seed pretreated with a fungicide In this case dilution is necessary.	
USE RESTRICTIONS DO NOT graze or feed livestock on treated areas for 45 days after planting.	

ADDITIONAL USES
Stored Seed Protection: When applied according to use directions and at labeled rates equal to or above 1.0 fluid ounce per 100 lb. of seed, this product will provide protection to seed against injury from the following insects: Indian Meal Moth (Plodia mterpunctella), Rice Weevil (Sitophilus oryzea), Red Flour Beetle (Tribiolium castaneum) and Lesser Grain Borer (Rhizopertha dominica). It is recommended that seed with existing populations of stored gram pests be fumigated prior to treating and bagging seed.

STORAGE AND DISPOSAL

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

Pesticide Storage: Store in a cool, dry place, out of direct sunlight, and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area. Handle and open container in a manner as to prevent spillage. If the container is leaking, invert to prevent leakage. If container is leaking or material spilled for any reason or cause, carefully dam up spilled material to prevent runoff. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Absorb spilled material with absorbing type compounds and dispose of as directed for pesticides below. In spill or leak incidents, keep unauthorized people away.

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

CONTAINER DISPOSAL:

Nonrefillable container (equal to or less than 5 gallons): Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling, if available or reconditioning, or puncture and dispose of in a sanitary landfill or by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Nonrefillable container (greater than 5 gallons): 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 ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 20 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 mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Offer for recycling, or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

LIMITATION OF WARRANTY AND LIABILITY

Read the entire Directions for Use, Conditions of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

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

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, WILLOWOOD LLC MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. To the extent consistent with applicable law, no agent of Willowood LLC is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISENT WITH APPLICABLE LAW, WILLOWOOD LLC DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

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