UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460-0001



OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

JUL 29 2013

Direct AG Source, LLC c/o
Jane Miller
115 Obtuse Hill Road
Brookfield, CT 06804

Subject:

Amendment to correct PHI for legume vegetables except soybean, dry - foliar treatment

EPA Registration No. 83222-32

Primary Brand Name: S-Cloprid 4 AG

Submission Date: July 16, 2013

Dear Ms. Miller:

The label referred to above, submitted under FIFRA, as amended, is <u>acceptable</u>. Please submit one final printed copy for the above mentioned label before releasing the product for shipment. If you have any questions, please contact Gene Benbow at (703) 347-0235 or via email at <u>benbow.gene@epa.gov</u>.

1/1

Sincerely,

Venus Eagle

Product Manager (01)

Insecticide-Rodenticide Branch Registration Division (7504P)

S-CLOPRID 4 AG

Flowable Insecticide

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 lbs. of active ingredient per gallon

KEEP OUT OF REACH OF CHILDREN CALITION

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 to 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. 	
information on this pro-	tainer or label with you when calling a poison control center or doctor or going for treatment. For duct, contact the National Pesticide Information Center, 1-800-858-7378, Monday-Friday, 7:30 AM-3:30 contact the National Poison Control Center, 1-800-222-1222, day or night, for emergency medical	

treatment information.

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

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed, absorbed through skin, or inhaled. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category C on an EPA chemical-resistance category selection chart.

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

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

NET CONTENTS: ____GALLON(S)

EPA Reg. No. 83222-32

Manufactured By: Direct AG Source, LLC 30473 260th St. Eldora, IA 50627

ACCEPTED 7-29-13 Under the Pederal insecticide, Fungicide, and Rodenticide Act as arounded, for the p Registered under EPA Reg. No.

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EPA Est. No. XXXXX-XX-XXX

Last EPA approval - amendment to update for CA registration 07 09 2013 Revised Label – correct Legume Vegetables Foliar PHI to 7 – 07 16 2013

ENGINEERING CONTROLS STATEMENT

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in 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

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. This product is toxic to wildlife and highly toxic to aquatic invertebrates.

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

OBSERVE 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.

For Aerial Applications

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 spam or rotor diameter. Spray should be released at the lowest possible height consistent with good pest control and flight safety. Applications more than 10 feet above the crop canopy should be avoided.

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.

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 recommended. 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.

Airblast (Air-Assist) Specific Recommendations for Tree Crops and Vineyards

Airblast sprayers carry droplets into the canopy of trees/vines via a radially or laterally directed airstream. The following specific drift management practices should 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 row.

No-Spray Zone Requirements for Soil and 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.

Runoff Management

Do not cultivate within 10 feet of the aquatic areas to allow growth of a vegetative filter strip. When using S-Cloprid 4 AG on erodible soils employ the Best Management Practice for minimizing runoff. Consult your local Natural Resources Conservation Service for recommendations 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.

S-Cloprid 4 AG 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. This may eventually result in partial or total loss of control of those species by S-Cloprid 4 AG and to other Group 4A insecticides.

The active ingredient in S-Cloprid 4 AG is a member of the neonicotinoid chemical class. Insect pests resistant to other chemical classes have not shown cross-resistance to S-Cloprid 4 AG. In order to maintain susceptibility to this class of chemistry in insect species with high resistance development potential, it is recommended that for each crop season: 1) only a single, soil application of S-Cloprid 4 AG be made; 2) foliar applications of products from the same class not be made following a long residual, soil application of S-Cloprid 4 AG, or other neonicotinoid products.

If a soil application of S-Cloprid 4 AG has not been made during a crop season and foliar applications are to be made, avoid using a block of more than three consecutive applications of S-Cloprid 4 AG and/or other Group 4A products having the same or similar mode of action. Following a neonicotinoid block of treatments, Direct AG Source, LLC strongly encourages the rotation to a block of applications with effective products with 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 an effective use strategy for preventing or delaying an insect's ability to develop resistance to this class of chemistry.

Do not use foliar applications of S-Cloprid 4 AG or other Group 4A products from the neonicotinoid chemical class on crops previously treated with a long-residual, soil-applied products from the neonicotinoid chemical class.

Other Group 4A, neonicotinoid products used as foliar treatments include: Actara, Assail, Calypso, Centric, Clutch, Couraze, Galiant, 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, or once the treated seed is planted in soil or other planting media, 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, natural rubber, polyethylene, polyvinylchloride (PVC), or Viton
- · Shoes plus socks

APPLICATION INSTRUCTIONS ALWAYS MIX THIS PRODUCT THOROUGHLY BEFORE USING

For soil applications of S-Cloprid 4 AG, direct product into the seed or root-zone of crop. Failure to place S-Cloprid 4 AG into root-zone may result in loss of control or delay in onset of activity. S-Cloprid 4 AG may be applied with ground or chemigation application equipment.

Do not apply S-Cloprid 4 AG in enclosed structures such as planthouses or greenhouses except as specifically instructed in the TOBACCO, CUCURBIT VEGETABLES, FRUITING VEGETABLES, and GREENHOUSE VEGETABLES, Cucumber and Tomato only (Mature plants in production greenhouses): sections of this label

APPLICATION DIRECTONS FOLIAR: Apply foliar applications of S-Cloprid 4 AG as a directed or a 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 S-Cloprid 4 AG on leaves and fruit may result in loss of insect control or delay in onset of activity. Apply S-Cloprid 4 AG with properly calibrated ground or aerial application equipment. Minimum spray volumes, unless otherwise specified on crop-specific applications sections, are 10 gallons per acre by ground and 5 gallons per acre by air. S-Cloprid 4 AG may also be applied by overhead chemigation (see additional information in CHEMIGATION section of this label below), if allowed in crop-specific application section.

Restrictions Foliar Applications: Do not apply more than 0.5 lb. active ingredient per acre, per year (365 days) regardless of formulation or method of application.

APPLICATION DIRECTIONS SOIL: When applied as a soil application, optimum activity of S-Cloprid 4 AG results from applications to the root zone of plants to be protected. The earlier S-Cloprid 4 AG is available to a developing plant, the earlier the protection begins. S-Cloprid 4 AG is continuously taken into the roots over a long period of time, and the systemic nature of S-Cloprid 4 AG allows movement from roots through the xylem tissue to all vegetative parts of the plant. This results in extended residual activity of S-Cloprid AG, the control of listed insects, and the prevention and/or reduction of plant virus transmission or symptom expression, and plant health benefits. The rate of S-Cloprid 4 AG applied affects the length of the plant protection period. Use higher listed rates when infestations occur later in crop development or where pest pressure is continuous. S-Cloprid 4 AG 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. Additionally, specific S-Cloprid 4 AG application instructions are also provided in the crop-specific sections of this label.

Restrictions Soil Applications: For applications outdoors (except for plants grown in trays or benches) do not apply more than 0.5 lb. active ingredient per acre per year (365 days) regardless of formulation or method of application. Do not apply to plants grown in non-soil media such as perlite, vermiculite, rock wool or other soil-less media, or plants grown hydroponically.

Suppression, or less than complete control of certain insect pests that may carry diseases including reduced feeding, may also result from a S-Cloprid 4 AG application. Residual control of these pests may require supplemental control measures.

Generally S-Cloprid 4 AG is not allowed for use on crops grown for production of true seed intended for private or commercial planting unless allowed under 24(c) state-specific, supplemental labeling. As with any insecticide, minimize exposure of S-Cloprid 4 AG to honey bees and other pollinators. Do not use S-Cloprid 4 AG on crops requiring bee pollination during bloom and a minimum of 10 days prior to bloom. Additional information on S-Cloprid 4 AG uses for these crops and other questions may be obtained from the Cooperative Extension Service, PCA's, consultants, or local Direct Ag Source, LLC representatives. Apply only to plants grown in field-type soils, potting media, or mixtures thereof. Do not apply to plants grown in nonsoil medias such as perlite, vermiculite, rock wool, or other soilless media, or plants growing hydroponically.

Pre-mix S-Cloprid 4 AG with water or other appropriate diluent prior to application. Keep S-Cloprid 4 AG and water suspension agitated to avoid settling.

MIXING INSTRUCTIONS

To prepare the application mixture, add a portion of the required amount of water to the spray tank and with agitation, add S-Cloprid 4 AG. Complete filling tank with balance of water needed. Maintain sufficient agitation during both mixing and application. S-Cloprid 4 AG may also be used with other pesticides and/or fertilizer solutions. Please see Compatibility section of this label. When tank mixtures of S-Cloprid 4 AG and other pesticides are involved, prepare the tank mixture as recommended above and follow suggested Mixing Order below.

Mixing Order

When pesticide mixtures are needed, add wettable powders or wettable granules first, S-Cloprid 4 AG and other suspension concentrate (flowable) 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.

Compatibility

Test compatibility of the intended mixture before adding S-Cloprid 4 AG 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. Do not use if poor mixing or formation of precipitates that do not readily redisperse occurs, which indicates an incompatible mixture.

CHEMIGATION

Types of Irrigation Systems:

Make foliar chemigation applications of S-Cloprid 4 AG to crops through overhead sprinkler systems if specified in crop-specific application sections. Make soil chemigation applications of S-Cloprid 4 AG only to crops through chemigation as specified in crop-specific applications sections and only through low-pressure systems specifically listed for a given crop. Do not apply S-Cloprid 4 AG through any other type of irrigation system.

Make foliar chemigation applications of S-Cloprid 4 AG as concentrated as possible. Retention of S-Cloprid 4 AG on target site of insect infestation is necessary for optimum activity. Do not chemigate S-Cloprid 4 AG in water volumes exceeding 0.10 inches per acre. See crop-specific application sections of the label for more information.

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 Cooperative 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

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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 should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and to top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. The pesticide injection pipeline must contain a functional automatic quick-closing check valve to prevent the flow of fluid back toward the injection. The pesticide injection pipeline must contain a functional normally closed solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected. Systems must use a metering pump such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

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, and sweet), rapeseed, sorghum, sugarbeet, and wheat

30-DAY PLANT-BACK:

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

10-MONTH PLANT-BACK

Onion and bulb vegetables

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 Treatment

Pests Controlled	Rate: Fluid ounces per 1000 row-feet	Rate: Fluid ounces per acre
Cotton aphid, Plant bugs, Thrips,	0.65	8.5 –10.55
Whiteflies		(depending on row-spacing)

Restrictions:

- Pre-Harvest Interval (PHI): 14 days
- Maximum soil-applied product allowed per year: 10.55 fluid ounces S-Cloprid 4 AG or 0.33 lb ai/A.
- Do not graze treated fields after any application of S-Cloprid 4 AG. See Resistance Management Section of this label.

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

COTTON - Foliar Treatment

Pests Controlled	Rate: Fluid ounces per acre
Cotton aphid, Cotton fleahopper, Bandedwinged whitefly, Plant bugs (excludes <i>Lygus hesperus</i>), Green Stink bug, Southern green stink bug, Bollworm/Budworm (ovicidal effect)	1 to 2
Pests Suppressed	
Lygus bug ((<i>Lygus hesperus</i>), Whiteflies (other than bandedwinged whitefly)	1.52 - 2

Restrictions:

- Pre-Harvest Interval (PHI): 14 days
- Minimum interval between applications: 7 days
- Maximum foliar-applied product allowed per year: 10 fluid ounces S-Cloprid 4 AG per acre or 0.31 lb. ai/A.
- Do not graze treated fields after application of S-Cloprid 4 AG.
- Apply S-Cloprid 4 AG through properly calibrated ground, aerial, or chemigation application equipment.
- Do not apply more than a total of 6 applications of the active ingredient per year.

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. Use a spray adjuvant to improve coverage. S-Cloprid 4 AG may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and re-treat if needed. Tank mix S-Cloprid 4 AG with other insecticide for knockdown of pests or for improved control of other pests.

Tank Mix Instructions		
Pests Controlled (In Addition to Pests Listed Above)	S-Cloprid 4 AG Rate fluid ounces per acre	Bidrin® 8 Rate fluid ounces per acre
Early Season Control: Thrips	1.0 – 1.52	1.6 – 3.2
Mid to Late Season Control: Plant bugs, Stink bugs (including Brown stink bug), Grasshoppers, Saltmarsh caterpillar, Cotton leafperforator	1.0 – 1.52	4.0 – 8.0

Restrictions: (in addition to Restrictions listed above):

 Refer to the Bidrin® 8 product label for specific use directions; observe all restrictions and precautions that appear on the label

PEANUT - Soil Treatment

Pests Controlled	Rate: Fluid ounces per acre	
Aphids, Leafhoppers, Whiteflies	8.0 – 12.0	
Pests Suppressed	Rate: Fluid ounces per acre	
Thrips	8.0 – 12.0	

Restrictions:

- Not for use in California.
- Pre-Harvest Interval (PHI): 14 days
- Maximum soil-applied product allowed per year: 12 fluid ounces S-Cloprid 4 AG per acre or 0.38 lb ai/A.

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

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

Important Note

Increases in tomato spotted wilt virus (TSWV) incidence have been observed with applications of S-Cloprid 4 AG on multiple 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 application of S-Cloprid 4 AG to peanuts, consult with the State Cooperative Extension Service or a Direct Ag Source, LLC representative for recommendations. Growers are advised to weigh insect control benefits against potential increase in viral disease levels. In areas where TSWV or tospovirus are endemic, growers are encouraged to use virus resistant varieties and consult the University of Georgia Tomato Spotted Wilt Virus Index before applying S-Cloprid 4 AG.

POTATO - Soil Treatment

Pests Controlled	Rate: Fluid ounces per 1000 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	Rate: Fluid ounces per 1000 row-feet	Rate: Fluid ounces per acre
Symptoms of: Potato leaf roll virus (PLRV), Potato yellows, Net necrosis, Wireworms (with in-furrow spray atplanting	0.45-0.65	6.5-10.0

Restrictions:

Maximum soil-applied product allowed per year: 10.0 fluid ounces S-Cloprid 4 AG per acre or 0.31 lb ai/A.

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

- In-furrow spray during planting directed on seed pieces or seed potatoes.
- Subsurface side-dress on both sides of the row covered with 3 or more inches of soil.
- Narrow band spray at ground cracking directly over the row during hilling covered with 3 or more inches of soil.
- Narrow band directly below the eventual seed row in a bedding operation 7 or fewer days before planting. For effective
 pest control or suppression, S-Cloprid 4 AG 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
 S-Cloprid 4 AG 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 1000 row-feet	Rate: Fluid ounces per acre
Symptoms of: Potato leaf roll virus (PLRV), Potato yellows, Net necrosis	0.4	8.0

- Maximum S-Cloprid 4 AG allowed per year when making seedpiece treatment applications: 10.0 fluid ounces/Acre (0.31 lb. Al/Acre)
- Do not use treated seed-pieces for food, feed, or fodder.
- Do not apply any subsequent application of any other imidacloprid product following a S-Cloprid 4 AG 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 S-Cloprid 4 AG. Agitate or stir spray solution as needed. Fungicidal or inert absorbent dusts may be applied after S-Cloprid 4 AG 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 S-Cloprid 4 AG treated seed-pieces to sunlight and in accordance with the recommendation of your local Extension service.

* Based on a seeding rate of 2000 lbs. per acre.

POTATO - Foliar Treatment

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

Restrictions:

- Pre-Harvest Interval (PHI): 7 days
- Minimum Interval between applications: 7 days
- Maximum foliar-applied product allowed per year: 6.4 fluid ounces S-Cloprid 4 AG per acre or 0.2 lb ai/A.

Applications: Apply specified rate per acre as a broadcast or directed foliar spray to an infested areas as insect population begins to build. Thorough uniform coverage is necessary for good control. Use of a spray adjuvant to improve coverage. S-Cloprid 4 AG alone may not provide knockdown for heavy or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mixing S-Cloprid 4 AG with other insecticides for knockdown of insects and for improved control of additional insects.

SOYBEAN - Foliar Treatment

Rate: Fluid ounces per acre
1.5

Restrictions:

- Not for use in California or New York
- Pre-Harvest Interval (PHI): 21 days
- Minimum interval between applications: 7 days
- Maximum foliar-applied product allowed per year: 4.5 fluid ounces S-Cloprid 4 AG per acre or 0.14 lb ai/A

TOBACCO - Soil Treatment

Pests Controlled	Rate: Fluid ounces per 1000 plants (as seedling tray drench)	Rate: Fluid ounces per 1000 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	0.7-1.4	0.9-1.4
Symptoms of: Tomato spotted wilt virus		
(TSWV)		

- Pre-Harvest Interval (PHI): 14 days
- Maximum allowed per year when making soil applications or foliar sprays to seedlings. 16.0 fluid ounces S-Cloprid 4 AG per acre or 0.5 lb ai/A.

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

- 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 S-Cloprid 4 AG from foliage into potting media. Failure to wash S-Cloprid 4 AG from foliage may result in a reduction in pest control. Handle transplants carefully during setting to avoid dislogging treated potting media from roots.
- In-furrow spray or transplant-water drench during setting.
- Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.

Important Note: Proper tray drench applications of S-Cloprid 4 AG have been shown to be the most efficacious method of application. However, the specified rate of S-Cloprid 4 AG 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 S-Cloprid 4 AG into the plant and a delay in control.

TOBACCO - Foliar Treatment

Pests Controlled	Rate: Fluid ounces per acre
Aphids	0.8 to 1.6
Flea beetles, Japanese beetles	1.6

Restrictions:

- Pre-Harvest Interval (PHI): 14 days
- Minimum Interval between applications: 7 days
- Maximum foliar-applied product allowed per year: 8.9 fluid ounces S-Cloprid 4 AG per acre or 0.28 lb ai/A.

Applications: Apply specified rate per acre as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough uniform coverage is needed to achieve optimum control. Use of a spray adjuvant to improve coverage. S-Cloprid 4 AG alone may not provide knockdown for heavy insect or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mix S-Cloprid 4 AG with other insecticides labeled for this use may improve knockdown and control of additional insects.

VEGETABLES AND SMALL FRUIT CROPS

CUCURBIT VEGETABLES - Soil Treatment

Crops of 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)

Pests Controlled	Rate: Fluid ounces per acre
Aphids, Cucumber beetles, Leafhoppers, Thrips (foliage feeding thrips only), Whiteflies	8.0-12.0
Pests/ Diseases Suppressed	Rate: Fluid ounces per acre
Bacterial wilt (as vectored by various cucumber beetles), Leaf silvering resulting from whitefly feeding	8.0-12.0

- Pre-Harvest Interval (PHI): 21 days
- Maximum soil-applied product allowed per crop season: 12.0 fluid ounces S-Cloprid 4 AG per acre or 0.38 lb ai/A.
- Not for use on crops grown for seed.

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

- Chemigation into root-zone through low- pressure drip, trickle, micro-sprinkler, or equivalent equipment.
- In-furrow spray directed on or below seed.
- Narrow (2" or less) surface band spray over seed-line during planting incorporated to a depth of 1 to 1 ½ inches with sufficient irrigation within 24 hours of application.
- Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting.
- Post-seeding drench, transplant-water drench, or hill drench.
- Subsurface side-dress on both sides of each row. S-Cloprid 4 AG must be incorporated into root-zone.

Planthouse Application Instructions	
Pest Controlled	Rate: Fluid ounces per 1000 plants
Aphids, Whiteflies	0.05

Restrictions:

- Not for use in California
- Maximum amount S-Cloprid 4 AG applied in the planthouse: 0.05 fluid ounces S-Cloprid 4 AG or 0.00156 lb ai/ 1000 plants.
- Maximum number S-Cloprid 4 AG applications in planthouse: 1
- · Not for use on crops grown for seed.

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:

- Uniform, broadcast high-volume foliar spray, followed immediately by sufficient overhead irrigation to wash S-Cloprid 4
 AG from foliage into potting media without loss of gravitational liquid from the bottom of the tray. Failure to wash S-Cloprid 4 AG from foliage may result in reduced pest control.
- 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. Transplants should be handled 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 S-Cloprid 4 AG applied to seedling flats. Treat a small number of plants and confirm tolerance for 7 days prior to treating entire planthouse.

GREENHOUSE VEGETABLES - Soil Treatment

(Cucumber and Tomato only - mature plants in production greenhouses)

Pests Controlled Ra	Rate: Fluid ounces per 1000 plants
Aphids, whiteflies 0.	0.7

Restrictions:

- Pre-Harvest Interval (PHI): 0 day
- Maximum soil-applied applications of product per crop season: 1
- Maximum allowable rate per crop season: 0.7 fl. oz. (0.03 lb ai)
- · Not for use on crops grown for seed.

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. Application should be made 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.

Apply when infestation pressure surpasses threshold and beneficials are not able to maintain insect populations below damage thresholds. Repellency of bumble bee pollinators and negative effects on some beneficials (*Orius* spp.) can occur when S-Cloprid 4 AG is applied.

Many varieties of vegetables have been tested for tolerance to S-Cloprid 4 AG and show good safety. However, certain varieties may show more sensitivity to S-Cloprid 4 AG. Therefore, treat a few plants before treating the whole greenhouse.

FRUITING VEGETABLES - Soil Treatment

Crops of 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 planthouse instructions.	
Pests Controlled	Rate: Fluid ounces per Acre
Aphids, Colorado potato beetle, Flea beetles, Leafhoppers,	Okra and Pepper:8.0-16.0
Thrips (foliage feeding thrips, only), Whiteflies	Other Crops: 8.0-12.0
Diseases Suppressed	Rate: Fluid ounces per Acre
Symptoms of: Tomato mottle virus, Tomato spotted wilt virus,	Okra and Pepper: 8.0-16.0
Tomato yellow leaf curl virus	Other Crops: 8.0-12.0

Restrictions:

- Pre-Harvest Interval (PHI): 21 days
- Maximum S-Cloprid 4 AG allowed on pepper and okra crops per crop season when making soil application: 16.0 fluid ounces S-Cloprid 4 AG per acre or 0.5 lb ai/Acre.
- Maximum S-Cloprid 4 AG allowed on other fruiting vegetable crops per crop season when making soil applications: 12.0 fluid ounces S-Cloprid 4 AG per acre or 0.38 lb ai/Acre.
- Not for use on crops grown for seed.

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

- Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.
- In-furrow spray directed on or below seed.
- Narrow (2" or less) surface band spray over seed-line during planting incorporated to a depth of 1 to 1 ½ inches with sufficient irrigation within 24 hours of application.
- Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting.
- Post-seeding drench, transplant-water drench, or hill drench.
- Subsurface side-dress on both sides of each row. S-Cloprid 4 AG must be incorporated into root-zone.

Planthouse Application Instructions

Pests Controlled	Rate: Fluid ounces per 1000 plants
Aphids, Whiteflies	0.05

Restrictions:

- Not for use in California
- Maximum amount S-Cloprid 4 AG applied in the planthouse: 0.05 fluid ounces S-Cloprid 4 AG or 0.00156 lb ai/ 1000 plants
- Maximum number S-Cloprid 4 AG applications in planthouse: 1
- Not for use on crops grown for seed.

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:

- Uniform, broadcast high-volume foliar spray, followed immediately by sufficient overhead irrigation to wash S-Cloprid 4
 AG from foliage into potting media without loss of gravitational liquid from the bottom of the tray. Failure to wash SCloprid 4 AG from foliage may result in reduced pest control.
- 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. 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 S-Cloprid 4 AG applied to seedling flats. To check for tolerance, treat a small number of plants and confirm tolerance for 7 days prior to treating entire planthouse.

FRUITING VEGETABLES - Foliar Treatment

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

Pests Controlled	Rate: Fluid ounces per Acre
Aphids, Colorado potato beetle, Leafhoppers, Whiteflies	1.5 to 2.4
Pepper weevil	2.4

Restrictions:

- Pre-Harvest Interval (PHI): 0 days
- Maximum interval between applications: 5 days
- Maximum foliar-applied product allowed per crop season: 7.6 fluid ounces S-Cloprid 4 AG per acre or 0.24 lb ai/A.
- Not for use on crops grown for seed.

Applications: Apply specified rate per acre as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough uniform coverage is necessary to achieve optimum control. Use of a spray adjuvant to improve coverage. S-Cloprid 4 AG alone may not provide knockdown for heavy insect or established populations. A second application may be required to achieve control, if indicated by scouting. Tank mixing S-Cloprid 4 AG with other insecticides for knockdown of insects and to improve control of additional insects.

For Pepper weevil, apply specified dosage of S-Cloprid 4 AG by ground equipment only before a damaging insect population becomes established. Good coverage of foliage and fruit is necessary for optimum control. Use S-Cloprid 4 AG in a full-season program that includes use of different classes of chemistry and modes of action are utilized in a blocked or windowed approach.

For additional information, please contact your Direct Ag Source, LLC representative, Extension Specialist, or crop advisor. When targeting adult whiteflies, use higher rates.

GLOBE ARTICHOKES - Foliar Treatment

Pests Controlled	Rate: Fluid ounces per Acre
Aphids, Leafhoppers	1.6 to 4.0

Restrictions:

- Pre-Harvest Interval (PHI): 7 days
- Minimum interval between applications: 14 days
- Maximum foliar-applied product allowed per crop season: 16 fluid ounces S-Cloprid 4 AG per acre or 0.5 lb ai/A.

Applications: Apply specified rate per acre as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough uniform coverage is necessary to achieve optimum control. Use of a spray adjuvant to improve coverage. S-Cloprid 4 AG alone may not provide knockdown for heavy insect or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mixing S-Cloprid 4 AG with other insecticides labeled for this use may improve knockdown and control of additional insects.

HERBS - Soil Treatment

Crops of Crop Subgroup 19A including: Lemon Balm, Basil (fresh and dried), Borage, Burnet, Chamomille, 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	Rate: Fluid ounces per Acre	
Thrips (foliage-feeding thrips only)	8.0 – 12.0	

Restrictions:

- Pre-Harvest Interval (PHI): 14 days
- Maximum-soil-applied product allowed per crop season: 12.0 fluid ounces S-Cloprid 4 AG per acre or 0.38 lb ai/A.

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

- In-furrow spray during planting directed on or below seed.
- In-furrow spray or transplant-water drench during setting or transplanting.
- Shanked-into or below eventual seed-line.
- Chemigation into root zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.

Note: Not all crops and/or varieties listed above have been tested for phytotoxicity. Without specific knowledge about a particular crop and variety, treat only a small area or small number of plants of each listed above and evaluate prior to commercial use.

HERBS - Foliar Treatment

Crops of Subgroup 19A including: Angelica, Lemon Balm, Basil (fresh and dried), Borage, Burnet, Chamomille, Catnip, Chervil (dried), Chinese chive, Chive, Clary, Coriander, (cilantro or Chinese parsley leaves), Costmary, Cilantro (leaf), Curry (leaf), Dillweed, Horehound, Hyssop, Lavender, Lemongrass, Lovage, Marigold, Marjoram, Nasturtium, Parsley (dried), Pennyroyal, Rosemary, Rue, Sage, Savory (summer and winter), Sweet 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 foliar-applied product allowed per crop season: 4.2 fluid ounces S-Cloprid 4 AG per acre or 0.13 lb ai/A.
- Not for use on crops grown for seed.

Applications: Apply as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough coverage is needed for good control. Use of an organosilicone spray adjuvant as directed on the adjuvant label may improve coverage. S-Cloprid 4 AG alone may not provide knockdown for heavy or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mixing with other insecticides labeled for this use may improve knockdown and control of additional insects.

Not all crops and/or varieties listed above have been tested for phytotoxicity. It is strongly recommended that only small numbers of plants be treated and evaluated before broad-scale application.

BRASSICA (COLE) LEAFY VEGETABLES - Soil Treatment

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

Pests Controlled	Rate: Fluid ounces per acre (on 36 inch rows)
Aphids, Leafhoppers, Thrips (foliage feeding thrips only),	5.0 – 12.0
Whiteflies	

Restrictions:

- Pre-Harvest Interval (PHI): 21 days
- Maximum soil-applied product allowed per crop season: 12.0 fl. oz.(0.38 lb Al/Acre)
- Not for use on crops grown for seed.

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

- · Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.
- In-furrow spray directed at or below seed.
- Narrow (2 inches or less) surface band spray over seed-line at planting incorporated to a depth of 1 to 1 ½ inches followed with sufficient irrigation within 24 hours after application.
- Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting.
- Post-seeding drench, transplant-water drench, or hill drench.
- Subsurface side-dress on both sides of each row followed by incorporation into root-zone.

BRASSICA (COLE) LEAFY VEGETABLES - Foliar Treatment

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

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 foliar-applied product allowed per crop season: 7.68 fluid ounces S-Cloprid 4 AG per acre or 0.24 lb ai/A.
- Not for use on crops grown for seed.

Applications: Apply as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough coverage is needed for good control. Use of a spray adjuvant as directed on the adjuvant label may improve coverage. S-Cloprid 4 AG alone may not provide knockdown for heavy or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mixing with other insecticides labeled for this use may improve knockdown and control of additional insects.

LEAFY VEGETABLES – Soil Treatment

Crops of 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),	5.0 - 12.0
Whiteflies	

Restrictions:

- Pre-Harvest Interval (PHI): 21 days
- Maximum soil applied product allowed per crop season: 12.0 fl. oz.(0.38 lb Al/Acre)
- Not for use on crops grown for seed.

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

- · Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.
- In-furrow spray directed at or below seed.
- Narrow (2 inches or less) surface band spray over seed-line at planting incorporated to a depth of 1 to 1 ½ inches

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followed with sufficient irrigation within 24 hours after application.

- Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting.
- Post-seeding drench, transplant-water drench, or hill drench.
- Subsurface side-dress on both sides of each row followed by incorporation into root-zone.

LEAFY VEGETABLES - Foliar Treatment

Crops of Subgroup 4A including: Amaranth (leafy amaranth, Chinese spinach), Arugula (Roquette), Chervil, Chrysanthemum (edible leaved and garland), Cilantro, Corn salad, Cress (garden, winter, upland, yellow rocket), Dandelion, Dock (sorrel), Endive (escarole), Lettuce (head and leaf), Orach, Parsley, Purslane (green, garden and winter), Radicchio (red chicory), Spinach (including New Zealand and vine (Malabar, Indian), Watercress (upland), Watercress (commercial production only – do not apply to native watercress in streams or other bodies of water)

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 foliar-applied product allowed per crop season: 7.6 fluid ounces S-Cloprid 4 AG per acre or 0.24 lb ai/A.
- · Not for use on crops grown for seed.
- 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 application. Apply only to fully leafed-up
 canopies.

Applications: Apply as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough coverage is needed for good control. Use of a spray adjuvant as directed on the adjuvant label may improve coverage. S-Cloprid 4 AG alone may not provide knockdown for heavy or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mixing with other insecticides labeled for this use may improve knockdown and control of additional insects.

LEAFY PETIOLE VEGETABLES - Soil Treatment

Crops of 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),	5.0-12.0
Whiteflies	

Restrictions:

- Pre-Harvest Interval (PHI): 45 days
- Maximum soil-applied product allowed per crop season: 12.0 fluid ounces/Acre (0.38 lb Al/Acre)
- Not for use on crops grown for seed.

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

- Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.
- In-furrow spray directed at or below seed.
- Narrow (2 inches or less) surface band spray over seed-line at planting incorporated to a depth of 1 to 1 ½ inches followed with sufficient irrigation within 24 hours of application.
- Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting.
- Post-seeding drench, transplant-water drench, or hill drench.
- Subsurface side-dress on both sides of each row followed by incorporation into root-zone.

LEGUME VEGETABLES except soybean, dry - soil treatment

Crops of 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, catjang, 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 soil-applied product allowed per crop season: 12 fluid ounces S-Cloprid 4 AG or 0.38 lb ai/A.
- Not for use on crops grown for seed.

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

- Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.
- In-furrow spray at planting directed at or below seed.
- In a narrow (2 inches or less) surface band over seed-line at planting incorporated to a depth of 1 to 1 ½ inches followed with sufficient irrigation with 24 hours after application.
- In a narrow band directly below the eventual seed row in a bedding operation 7 or fewer days before planting.
- As a post-seeding drench, transplant drench, or hill drench.

LEGUME VEGETABLES except soybean, dry - Foliar Treatment

Crops of Crops Group 6 including: Edible Podded and Succulent Shelled Pea and Bean and Dried Shelled Peas and Beans; (*Lupinus* spp., including grain lupin, sweet lupin, white lupin, and sweet white lupin); *Phaseolus* spp., including field beans, kidney beans, lima beans, navy beans, pinto beans, runner beans, snap beans, tepary beans, wax beans; (*Vigna* spp., including adzuki beans, asparagus beans, black-eyed peas, catjang, Chinese longbeans, cowpeas, Crowder peas, moth beans, mungbeans, rice beans, Southern peas, urd beans, and yardlong beans; Peas (*Pisum* spp.), including dwarf peas, edible-pod peas, English peas, field peas, garden peas, snow peas, sugar snap peas; Broad beans (fava), Chickpeas (garbanzo beans), Guar, Jackbean; Lablab beans (hyacinth), Lentils, Pigeon peas, Soybean (immature seed), Sword beans.

Pests Controlled	Rate: Fluid ounces per acre
Aphids, Leafhoppers, Thrips*, Whiteflies	1.4

Restrictions:

- Pre-Harvest Interval (PHI): 7 days
- Minimum interval between applications: 7 days
- Maximum foliar-applied product allowed per crop season: 4.2 fluid ounces S-Cloprid 4 AG per acre or 0.13 lb ai/A.
- Not for use on crops grown for seed.

* Not for use in California.

Applications: Apply as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough coverage is needed for good control. Use of a spray adjuvant as directed on the adjuvant label may improve coverage. S-Cloprid 4 AG alone may not provide knockdown for heavy or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mixing with other insecticides labeled for this use may improve knockdown and control of additional insects.

ROOT VEGETABLES - Soil Treatment

Crops of Subgroup 1B except Sugarbeet including: Beet (garden) ¹, Burdock (edible) ¹, Carrot ¹, Celeriac ¹, Chervil (turnip-rooted) ¹, Chicory ¹, Gingseng, Horseradish, Kava ¹ (not for use in California), Parsley (turnip-rooted), Parsnip ¹, Radish ¹, Oriental radish (diakon) ¹, Rutabaga ¹, Salsify (oyster plant), Salsify (black) ¹, Salsify (Spanish), Skirret, and Turnip ¹

Pests Controlled	Rate: Fluid ounces per 1000 row-feet	Rate: Fluid ounces per acre
Aphids, Flea beetles, Leafhoppers, Thrips (foliage feeding thrips only), Whiteflies	0.3585	5.0-12.0 (depending on row spacing)

Restrictions:

- Pre-Harvest Interval (PHI): 21 days
- Maximum soil-applied product allowed per crop season: 12 fluid ounces S-Cloprid 4 AG or 0.38 lb ai/A.
- Maximum S-Cloprid 4 AG applications per crop season: 1
- Not for use on crops grown for seed.

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

- Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.
- In-furrow spray (rate specified per 1000 row-feet) or, shanked-in 1 to 2 inches below seed depth during planting.
- 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.

Important Note: The rate applied affects the length of control. Use higher rates where infestations occur later in crop development, or where pest pressure is continuous. S-Cloprid 4 AG rates less than 0.7 fluid ounces/1000 row-feet will not provide adequate residual pest control. S-Cloprid 4 AG treated crops grown on very high organic matter soils (muck) may also require additional pest management control.

¹Tops or greens from these crops may be utilized for food or feed.

ROOT VEGETABLES ~ Foliar Treatment

Crops of Subgroup 1B except Sugarbeet including: Garden Beets¹, Edible Burdock¹, Carrots¹, Celeriac¹, Chervil (turniprooted)¹, Chicory¹, Gingseng, Horseradish, Parsley (turnip-rooted), Parsnip¹, Radish¹, Oriental radish (diakon)¹, Rutabaga¹, Salsify (oyster plant), Black Salsify¹, Spanish Salsify, Skirret, and Turnip¹

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 foliar-applied product allowed per crop season: On radish 1.4 fluid ounces S-Cloprid 4 AG per acre or 0.044 lb ai/A on other crops, 4.2 fluid ounces or 0.13 lb ai per acre.
- Maximum number of applications of S-Cloprid 4 AG per crop season is 1 for radish, 3 for other crops.
- Not for use on crops grown for seed.

Applications: Apply as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough coverage is needed for good control. Use of a spray adjuvant as directed on the adjuvant label may improve coverage. S-Cloprid 4 AG alone may not provide knockdown for heavy or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mixing with other insecticides labeled for this use may improve knockdown and control of additional insects.

¹ Tops or greens may be utilized for food or feed.

TUBEROUS and CORM VEGETABLES - Soil Treatment

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

Pests Controlled	Rate: Fluid ounces per 1000 row-feet	Rate: Fluid ounces per acre
Aphids, Flea beetles, Leafhoppers, Thrips (foliage feeding thrips only), Whiteflies	0.35-0.85	5.0-12.0 (depending on row spacing)

- Pre-Harvest Interval (PHI) from planting application: 3 days (leaves); 125 days (corms)
- Maximum soil-applied product allowed per crop season: 12 fluid ounces S-Cloprid 4 AG or 0.38 lb ai/A.
- Maximum S-Cloprid 4 AG applications per crop season: 1
- Not for use on crops grown for seed.

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

- In-furrow spray (rate specified per 1000 row-feet) over planting materials (hulls) or shanked-in 1 to 2 inches below hulls depth at planting.
- Side-dress not more than 0.3 fluid ounces/1000 row-feet no later than 45 days after planting. Observe the same PHI as above.

Important Note: The rate applied affects the length of control. Use higher listed rates where infestations occur late in crop development, or where pest pressure is continuous. S-Cloprid 4 AG rates less than 0.35 fluid ounces/1000 row-feet may not provide adequate residual pest control. S-Cloprid 4 AG treated crops grown on very high organic matter soils (muck) may also require additional pest management control.

¹Tops or greens from these crops may be utilized for food or feed.

TUBEROUS and CORM VEGETABLES - Foliar Treatment

Crops of Subgroup 1C including: Arracacha, Arrowroot, Artichoke (Chinese and Jerusalem), Canna (edible, Queensland arrowroot), Cassava (bitter and sweet)¹, Chayote (root), Chufa, Dasheen (taro)¹, Ginger, Leren, Sweet potato¹, Tanier (cocoyam)¹, Yam bean (jaicama, manioc pea), True Yams¹

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 foliar-applied product allowed per crop season: 4.2 fluid ounces S-Cloprid 4 AG per acre or 0.13 lb ai/A.
- Maximum number of applications of S-Cloprid 4 AG per crop season is 3.
- Not for use on crops grown for seed.

Applications: Apply as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough coverage is needed for good control. Use of a spray adjuvant as directed on the adjuvant label may improve coverage. S-Cloprid 4 AG alone may not provide knockdown for heavy or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mixing with other insecticides labeled for this use may improve knockdown and control of additional insects.

¹Tops or greens may be utilized for food or feed.

STRAWBERRY1 - Soil Treatment

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 soil-applied product allowed per crop season: 16 fluid ounces S-Cloprid 4 AG or 0.5 lb ai/A.

- 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.
- As a plant material or plant hole treatment just prior to, or during transplanting.
- 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. Do not use plastic or other mulches that limit movement of S-Cloprid 4 AG into
 root zone.

The rate applied affects the length of control. Use higher lis	ted rates where infestations may occur later in crop
development or where pest pressure is continuous.	
Do not use both soil application methods on the same crop	o in the same season.
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

- Pre-Harvest Interval (PHI): 14 days
- Maximum soil-applied product allowed per crop season: 12 fluid ounces S-Cloprid 4 AG or 0.38 lb ai/A.

Applications: Apply a single application post harvest to coincide with renovation of strawberry fields and during active egglaying period of beetles. Apply specified dosage of S-Cloprid 4 AG in one of the following methods:

- As a ground spray via boom or backpack sprayer in a minimum of 20 gallons of water per acre.
- 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.
- As a chemigation application with 600 to 1000 gallons of water followed by 0.1 to 0.25 inches irrigation.

Important Note: 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 S-Cloprid 4 AG into egg-deposition zone may result in decreased activity:

Do not use both soil application methods on the same crop in the same season.

STRAWBERRY - Foliar Treatment

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 foliar-applied product allowed per crop season: 4.5 fluid ounces S-Cloprid 4 AG per acre or 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 as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough coverage is needed for good control. Use of a spray adjuvant as directed on the adjuvant label may improve coverage. S-Cloprid 4 AG alone may not provide knockdown for heavy or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mixing with other insecticides labeled for this use may improve knockdown and control of additional insects.

SUGARBEET - Soil Treatment

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	3.0-6.0
hybrigeminivirus (BCTV)	

Restrictions:

- Maximum soil-applied product allowed per year: 6.0 fluid ounces S-Cloprid 4 AG or 0.18 lb ai/A.
- Do not apply immediately prior to bud opening or during bloom or when bees are actively foraging.
- Not for use on crops grown for seed.

Applications: Apply specified dosage in the following method:

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.

RATE fluid ounces/				luid ounces/1				
Acre			Based on <u>av</u>	<u>rerage</u> row sp	acing (in inch	ies):	4	
	10	15	20	25	30	35	40	45
5	0.10	0.14	0.19	0.24	0.29	0.33	0.38	0.43
6	0.11	0.17	0.23	0.29	0.34	0.40	0.46	0.51
7	0.13	0.20	0.27	0.33	0.40	0.47	0.53	0.60
8	0.15	0.23	0.30	0.38	0.46	0.53	0.61	0.68
9	0.17	0.26	0.34	0.43	0.51	0.60	0.68	0.77
10	0.18	0.29	0.38	0.48	0.57	0.67	0.77	0.86
12	0.23	0.34	0.46	0.57	0.69	0.8	0.92	1.03
14	0.27	0.40	0.54	0.67	0.80	0.94	1.07	1.21
16	0.31	0.46	0.61	0.77	0.92	1.07	1.22	1.38
18	0.34	0.52	0.69	0.86	1.03	1.21	1.38	1.55
20	0.38	0.57	0.76	0.96	1.15	1.34	1.53	1.72
22	0.42	0.63	0.84	1.05	1.26	1.47	1.68	1.89
24	0.46	0.69	0.92	1.15	1.38	1.61	1.84	2.07
26	0.50	0.75	0.99	1.24	1.49	1.74	1.99	2.24
28	0.54	0.80	1.07	1.34	1.61	1.87	2.14	2.41
30	0.57	0.86	1.15	1.43	1.72	2.01	2.29	2.58
32 .	0.61	0.92	1.22	1.52	1.84	2.14	2.45	2.75

NOTE: The rate applied of S-Cloprid 4 AG will affect the length of control as well as the degree and effect of control. Use higher labeled rates where infestations may occur later in crop development or where there is continuous pest pressure. Except as otherwise directed on this label, do not use at application rates lower than 0.35 fluid ounces/1000 row-feet.

TREE, BUSH AND VINE CROPS

BANANAS AND PLANTAINS - Soil Treatment

Rate: Fluid ounces per Acre	
8.0-16.0	
Rate: Fluid ounces per Acre	
8.0-16.0	
	8.0-16.0 Rate: Fluid ounces per Acre

Restrictions:

- Pre-Harvest Interval (PHI): 0 days
- Maximum soil-applied product allowed per year: 16 fluid ounces S-Cloprid 4 AG or 0.5 lb ai/A.

Applications: Apply specified dosage in the following method:

Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.

BANANAS AND PLANTAINS - Foliar Treatment

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 foliar-applied product allowed per year: 16 fluid ounces S-Cloprid 4 AG per acre or 0.5 lb ai/A.

Applications: Apply as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough coverage is needed for good control. S-Cloprid 4 AG alone may not provide knockdown for heavy or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mixing with other insecticides labeled for this use may improve knockdown and control of additional insects.

Apply listed dosage as a broadcast or directed spray to infested area insuring thorough coverage. S-Cloprid 4 AG may be applied through properly calibrated ground or aerial application equipment. Aerial application may result in slower activity and reduce control relative to application using ground equipment. For tree and vine crops, application rates are based on full-size mature trees or vines.

Use of an organosilicone spray adjuvant as directed on the adjuvant label may improve coverage. Do not exceed 2.0 fl. oz. of adjuvant per 100 gallons of spray dilution.

BUSHBERRY - Soil Treatment

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

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

Restrictions:

- Pre-Harvest Interval (PHI): 7 days
- Maximum soil-applied product allowed per year: 16 fluid ounces S-Cloprid 4 AG or 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:

- Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.
- 18-inch band on each side of the row followed by irrigation immediately after application.

For optimal grub control, apply S-Cloprid 4 AG 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 S-Cloprid 4 AG to moist soil. If necessary, apply one hour of irrigation water immediately before application of S-Cloprid 4 AG. To ensure maximum efficacy of soil surface spray, ½ to 1 inch of irrigation water or rainfall should be applied or received within 24 hours of application of S-Cloprid 4 AG to facilitate movement into the soil and into the root-zone.

BUSHBERRY – Foliar Treatment

Crops of Subgroup 13B Including: Blueberries, Currants, Elderberries, Gooseberries, Huckleberries, Juneberries, Lingonberries, Salal

Pests Controlled	Rate: Fluid ounces per acre
Aphids, Leafhoppers, Sharpshooters	1.2 to 1.6
Blueberry maggot, Japanese beetle (adults), Thrips (foliage	2.4 to 3.2
feeding only)	

Restrictions:

- Pre-Harvest Interval (PHI): 3 days
- Minimum interval between applications: 7 days
- Maximum foliar-applied product allowed per year: 16 fluid ounces S-Cloprid 4 AG per acre or 0.5 lb ai/A.
- Maximum number of foliar applications per year is 5.
- Minimum application volume: 20 gallons per acre by ground, 5 gallons per acre by air.
- Do not apply pre-bloom or during bloom or when bees are actively foraging.

Applications: Apply as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough coverage is needed for good control. Use of a spray adjuvant as directed on the adjuvant label may improve coverage. S-Cloprid 4 AG alone may not provide knockdown for heavy or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mixing with other insecticides labeled for this use may improve knockdown and control of additional insects.

CANEBERRY - Soil Treatment

Crops of 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, nectarberry, 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	Rate: Fluid ounces per Acre	
Thrips (foliage feeding thrips only)	8.0-16.0	

Restrictions:

- Pre-Harvest Interval (PHI): 7 days
- Maximum product allowed per year: 16 fluid ounces S-Cloprid 4 AG or 0.5 lb ai/A.
- Do not apply pre-bloom or during bloom or when bees are actively foraging

- · Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.
- Basal, soil drench in a minimum of 500 gallons solution per acre.

CITRUS (Containerized) - Soil Treatment

Crops of 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, White sapote (*Casimiroa* spp), and other cultivars and/or hybrids of these.

Pests Controlled	Rate mL / "citra pot" (0.1 ft ³ container media)
Aphid, Asian citrus psyllid, Blackfly, Citrus leafminer, Leafhoppers/Sharpshooters, Mealybugs, Scales, Whiteflies, Citrus root weevil (larval complex)	0.38 - 0.58
Pests Suppressed	
Citrus thrips (foliage feeding thrips only)	0.58
Pests Suppressed	1

For commercial nursery production in standard "citra pot" of 0.1 ft³ volume.

Restrictions:

• Do not apply more than 3.5 mLs per plant per year.

Application:

- 1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
- 2. Basal, soil drench in a minimum of 30 milliliters (mLs) total solution per "citra pot".

Use sufficient carrier volume to ensure thorough uniform distribution throughout the media without loss of gravitational water from the container. For optimal results make treatment 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.

Citrus (containerized) - Soil Application Restrictions

Pre-Harvest Interval (PHI): 0 day

Maximum S-Cloprid allowed per application: 0.58 mLs / 0.1 ft³ container media.

Maximum S-Cloprid 4 AG allowed per year: 3.5 mLs / plant.

Do not apply pre-bloom or during bloom or when bees are actively foraging.

Citrus (containerized) - Soil Application Notes

- **1. Application** For citrus production with other container volumes: Determine volume of container and calculate required dosage based on 0.58 mLs / 0.1 ft³ potting media. Apply calculated dosage per container as described above. Do not exceed rate of 3.5 mLs / plant per year regardless of container size.
- 2. Phytotoxic Response Potential: If you have no experience with S-Cloprid 4 AG on containerized citrus of a specific variety/hybrid, treat only a few plants and observe phytotoxic effects for up to 60 days prior to treating entire nursery.
- **3. NOTE:** Not all varieties or hybrids of citrus have been tested for phytotoxic response following an S-Cloprid 4 AG application.

CITRUS (Field) - Soil Treatment

Crops of 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, White sapote (*Casimiroa* spp), 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 day
- Maximum soil-applied product allowed per year: 16 fluid ounces S-Cloprid 4 AG or 0.5 lb ai/A.
- Do not apply to trees over 8 feet tall.

- 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. Lightly pre-wet the soil to break soil surface tension prior to applications of S-Cloprid 4 AG. Chemigation application can be made separate to normal irrigation but followed by 10 to 20 minutes of additional watering to move S-Cloprid 4 AG into root-zone. Allowed 24 hours before initiating subsequent irrigations.
- 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 and follow 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.

- 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 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 area of the tree trunk.
- 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 S-Cloprid 4 AG over several consecutive growing seasons provides the greatest degree of nematode suppression and yields the greatest plant response.

CITRUS - Foliar Treatment

Crops of 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, White sapote (*Casimiroa* spp.), and other cultivars of these.

Pests Controlled	Rate: Fluid ounces per acre
Aphids, Asian citrus psyllid, Blackfly, Citrus leafminer, Leafhoppers/Sharpshooters, Mealybugs, Scales, Whiteflies	4.0 to 8.0
Pests Suppressed	
Thrips (foliage feeding only)	4.0 to 8.0

Restrictions:

- Pre-Harvest Interval (PHI): 0 days
- Minimum interval between applications: 10 days
- Maximum foliar-applied product allowed per year: 16 fluid ounces S-Cloprid 4 AG per acre or 0.5 lb ai/A.
- Do not apply pre-bloom or during bloom or when bees are actively foraging.

Applications: Rates are based on fully-grown mature trees. Apply as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough coverage is needed for good control. Use of a spray adjuvant as directed on the adjuvant label may improve coverage. S-Cloprid 4 AG alone may not provide knockdown for heavy or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mixing with other insecticides labeled for this use may improve knockdown and control of additional insects.

Aerial application may result in slower activity and reduce control relative to application using ground equipment.

Scales: Time applications to the crawler stage. Treat each generation.

COFFEE - Soil Treatment

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

Restrictions:

- Pre-Harvest Interval (PHI): 7 days
- Maximum soil-applied product allowed per year: 16 fluid ounces S-Cloprid 4 AG or 0.5 lb ai/A.
- Do not apply pre-bloom or when bees are actively foraging.

- Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.
- Subsurface side-dress shanked into the root-zone on both sides of the plants followed by irrigation.
- Basal soil drench in sufficient water to insure incorporation into the root-zone followed by irrigation.

COFFEE - Foliar Treatment

Pests Controlled	Rate: Fluid ounces per acre
Aphids, Leafhoppers, Leafminer	3.2
Pests Suppressed	
Scales	3.2

Restrictions:

- Pre-Harvest Interval (PHI): 7 days
- Minimum interval between applications: 7 days
- Maximum foliar-applied product allowed per year: 16 fluid ounces S-Cloprid 4 AG per acre or 0.5 lb ai/A.
- Do not apply pre-bloom or during bloom or when bees are actively foraging.

Applications: Rates are based on fully-grown mature trees. Apply as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough coverage is needed for good control. Use of a spray adjuvant as directed on the adjuvant label may improve coverage. S-Cloprid 4 AG alone may not provide knockdown for heavy or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mixing with other insecticides labeled for this use may improve knockdown and control of additional insects.

Aerial application may result in slower activity and reduce control relative to application using ground equipment.

CRANBERRY - Soil Treatment

Pests Controlled	Rate: Fluid ounces per acre
Rootgrubs (Scarabaeidae)	8.0-16.0
Rootworms (Chrysomelidae)	

Restrictions:

- Pre-Harvest Interval (PHI): 30 days
- Maximum soil-applied product allowed per year: 16 fluid ounces S-Cloprid 4 AG or 0.5 lb ai/A.
- Do not apply pre-bloom or during bloom or when bees are actively foraging.

Applications: Apply S-Cloprid 4 AG to moist soil using one of the following methods:

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

After application, immediately incorporate the S-Cloprid 4 AG into the root-zone by 0.1 – 0.3 inches of water per acre, either with chemigation application, or through irrigation or rainfall. Inadequate incorporation within 24 hours of application may result in reduced control.

Rootgrubs and Rootworms

Make application post-bloom immediately after bees are removed. Applications should target early instar larvae.

S-Cloprid 4 AG has not been tested for crop response in tank mixtures with other registered fungicides or insecticides. If tank mixing is desired, premix a sample of the S-Cloprid 4 AG and the fungicide or insecticide partner at labeled rates and apply to a small area. Evaluate the crop response within 48 hours and for at least two weeks prior to using the tank mix on a larger scale. If crop injury results for the premix test, do not apply the tank mix to larger acreage.

GRAPES - Soil Treatment

Including: American bunch grape, Muscadine grape and Vinifera grape

Pests Controlled	Rate: Fluid ounces per acre
European fruit lecanium, Leafhoppers/Sharpshooters,	
Mealybugs, Phylloxera * spp	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 soil-applied product allowed per year: 16 fluid ounces S-Cloprid 4 AG or 0.5 lb ai/A.

- Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.
- Subsurface side-dress shanked into the root-zone on both sides of the plants followed by irrigation.
- Hill drench in sufficient water to insure incorporation into the root-zone followed by irrigation.
- For suppression of nematodes, apply 16 fluid ounces in a single application or two 8 fluid ounce applications on a 30 to

45 day interval. Apply only by 1) chemigation into the root-zone through above ground low-pressure drip, trickle, microsprinkler 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 S-Cloprid 4 AG over several consecutive growing seasons provides the greatest degree of nematode suppression and plant response.

Make application(s) between bud-break and the pea-berry stage. A total of 16 fluid ounces/Acre is recommended under any of the following conditions:

- 1. Where vigorous vine growth is expected;
- 2. In warmer growing areas;
- 3. Where mealybug and European fruit lecanium populations are expected to be heavy;
- 4. Where vine populations exceed 600 per acre, or;
- 5. For suppression of nematodes.

*Repeated and regular use of S-Cloprid 4 AG over several, consecutive growing seasons controls existing *Phylloxera* infestations over time or prevents *Phylloxera* from becoming established.

GRAPES - Foliar Treatment

Including: American bunch grapes, muscadine and vinifera varieties

Pests Controlled	Rate: Fluid ounces per acre
Leafhoppers/sharpshooters, Mealybugs	1.2 to 1.6
Grapeleaf Skeletonizer	1.5 to 1.6

Restrictions:

- Pre-Harvest Interval (PHI): 0 days
- Minimum interval between applications: 14 days
- Maximum foliar-applied product allowed per year: 3.2 fluid ounces S-Cloprid 4 AG per acre or 0.1 lb ai/A.
- · Ground application only.

Applications: Rates are based on mature vines. Apply as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough coverage is needed for good control. Use of a spray adjuvant as directed on the adjuvant label may improve coverage. S-Cloprid 4 AG alone may not provide knockdown for heavy or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mixing with other insecticides labeled for this use may improve knockdown and control of additional insects.

HOPS – Soil Treatment

Pest Controlled .	Rate: Fluid ounces per acre
Aphids	9.6

Restrictions:

- Pre-Harvest Interval (PHI): 60 days
- Maximum soil-applied product allowed per year: 9.6 fluid ounces S-Cloprid 4 AG or 0.3 lb ai/A.

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

- Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.
- Subsurface side-dress shanked into the root-zone on both sides of the plants followed by irrigation.
- Hill drench in sufficient water to insure incorporation into the root-zone followed by irrigation.

Use the higher listed rate where extended residual control is desired or for treating larger vines or vines with dense foliage volume.

HOPS - Foliar Treatment

Pest Controlled	Rate: Fluid ounces per acre
Aphids	3.2

Restrictions:

- Pre-Harvest Interval (PHI): 28 days
- Minimum interval between applications: 21 days
- Maximum foliar-applied product allowed per year: 9.6 fluid ounces S-Cloprid 4 AG or 0.3 lb ai/A.

Applications: Rates are based on mature vines. Apply as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough coverage is needed for good control. Use of a spray adjuvant as directed on the adjuvant label may improve coverage. S-Cloprid 4 AG alone may not provide knockdown for heavy or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mixing with other insecticides labeled for this use may improve knockdown and control of additional insects.

Aerial application may result in slower activity and reduce control relative to application using ground equipment.

POME FRUIT - Soil Treatment

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

Pests Controlled	Rate: Fluid ounces per acre
Aphids (including Wooly apple aphid), Leafhoppers	8.0-12.0
Restrictions:	

- Pre-Harvest Interval (PHI): 21 days
- Maximum soil-applied product allowed per year: 12 fluid ounces S-Cloprid 4 AG or 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 FRUITS - Foliar Treatment

Crops of Group 11 including: Apples, Crabapples, Loquat, Mayhaw, Pears (including Oriental pears), Quince

Pests Controlled	Rate: Fluid ounces per acre
Leafhoppers	1.6 to 3.2
Aphids (except wooly apple aphid), apple maggot,	3.2
Leafminers, San Jose Scale	
Pears only – Mealybugs, Pear psylla	8

Restrictions:

- Pre-Harvest Interval (PHI): 7 days
- Minimum interval between applications: 10 days
- Maximum foliar-applied product allowed per year: 16 fluid ounces S-Cloprid 4 AG per acre or 0.5 lb ai/A.
- Do not apply pre-bloom or during bloom or when bees are actively foraging.

Applications: Rates are based on mature trees. Apply as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough coverage is needed for good control. Use of a spray adjuvant as directed on the adjuvant label may improve coverage. For use in control of apple maggot, Direct AG Source, LLC recommends the use of a labeled sticker. S-Cloprid 4 AG alone may not provide knockdown for heavy or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mixing with other insecticides labeled for this use may improve knockdown and control of additional insects.

Aerial application may result in slower activity and reduce control relative to application using ground equipment.

POMEGRANATE - Soil Treatment

Pests Controlled	Rate: Fluid ounces per acre
Leafhoppers/Sharpshooters, Whiteflies	8.0-16.0

Restrictions:

- Pre-Harvest Interval (PHI): 0 days
- Maximum soil-applied product allowed per year: 16 fluid ounces S-Cloprid 4 AG or 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.

POMEGRANATE - Foliar Treatment

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 foliar-applied product allowed per year: 9.6 fluid ounces S-Cloprid 4 AG or 0.3 lb ai/A.
- Do not apply pre-bloom or during bloom or when bees are actively foraging.

Applications: Rates are based on fully-grown mature trees. Apply as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough coverage is needed for good control. Use of a spray adjuvant as directed on the adjuvant label may improve coverage. S-Cloprid 4 AG alone may not provide knockdown for heavy or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mixing with other insecticides labeled for this use may improve knockdown and control of additional insects.

Aerial application may result in slower activity and reduce control relative to application using ground equipment.

STONE FRUIT - Soil Treatment

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

Rate: Fluid ounces per acre	
8.0-12.0	

Restrictions:

- Pre-Harvest Interval (PHI): 21 days
- Maximum soil-applied product allowed per year: 12 fluid ounces S-Cloprid 4 AG or 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	
Pest Controlled	Rate fluid ounce per 10 gallons root-dip solution
Black peach aphid (infesting roots)	1.0
Mix S-Cloprid 4 AG at 1.0 fluid ounces per 10 gallor	as of water. Thoroughly wet bare-root transplant to slightly above the graft

union by soaking roots in the S-Cloprid 4 AG solution for up to 5 minutes. Allow solution to dry on roots and transplant trees as soon as possible following treatment.

STONE FRUIT - Foliar Treatment

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

Pests Controlled	Rate: Fluid ounces per acre
Aphids, Green June Beetle, Japanese Beetle, Leafhopper/Sharpshooter, Plant Bugs, Rose Chafer, San Jose Scale	1.6 to 3.2
Cherry Fruit Fly	2.4 to 3.2
Pests Suppressed	
Plum Curculio, Stink Bugs	3.2

Restrictions:

Apricots, nectarines, peaches

- Pre-Harvest Interval (PHI): 0 days
- · Minimum interval between applications: 7 days
- Maximum foliar-applied product allowed per year: 9.6 fluid ounces S-Cloprid 4 AG or 0.3 lb ai/A.
- Minimum water volume 50 gallons per acre by ground, 25 gallons per acre by air.
- Do not apply pre-bloom or during bloom or when bees are actively foraging.

Cherries, plums, plumcots, prunes

- Pre-Harvest Interval (PHI): 7 days
- Minimum interval between applications: 10 days
- Maximum foliar-applied product allowed per year: 16 fluid ounces S-Cloprid 4 AG or 0.5 lb ai/A.
- Minimum water volume 50 gallons per acre by ground, 25 gallons per acre by air.
- Do not apply pre-bloom or during bloom or when bees are actively foraging.

Applications: Rates are based on fully-grown mature trees. Apply as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough coverage is needed for good control. Apply in a water volume of at least 50 gallons per acre by ground or 25 gallons per acre by air. Use of a spray adjuvant as directed on the adjuvant label may improve coverage. S-Cloprid 4 AG alone may not provide knockdown for heavy or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mixing with other insecticides labeled for this use may improve knockdown and control of additional insects.

Aerial application may result in slower activity and reduce control relative to application using ground equipment.

TREE NUTS (except Almonds) - Soil Treatment

Crops of Group 14 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,	8.0-16.0
Termites, Whiteflies	
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 soil-applied product allowed per year: 16 fluid ounces S-Cloprid 4 AG or 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:

- Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent irrigation equipment. Pre-wet soil prior to applications of S-Cloprid 4 AG and allow soil to dry following application and prior to subsequent irrigation;
- Emitter or spot application in a minimum of 4 fluid ounces of mixture per emitter site;
- 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 in a minimum of 10 gallons per acre using multiple shanks on both sides of trees. Make
 sure that product placement is below sod or orchard floor debris. Irrigate the entire treated area unless sufficient rain
 falls 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. Use 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 before applying any
 irrigation.

Remarks:

Use the higher listed rates when 1) applied by shank or subsurface sidedress; 2) used on larger trees; 3) to soils with high clay content; 4) to high plant populations; and/or 5) 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.

TREE NUTS (except Almonds) - Foliar Treatment

Crop of Group 14 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 to 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 foliar-applied product allowed per year: 11.5 fluid ounces S-Cloprid 4 AG or 0.36 lb ai/A.
- Minimum water volume 50 gallons per acre by ground, 25 gallons per acre by air.
- Do not apply pre-bloom or during bloom or when bees are actively foraging.

Applications: Rates are based on fully-grown mature trees. Apply as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough coverage is needed for good control. Apply in a water volume of at least 50 gallons per acre by ground or 25 gallons per acre by air. Use of a spray adjuvant as directed on the adjuvant label may improve coverage. S-Cloprid 4 AG alone may not provide knockdown for heavy or established populations. A second application at a 10 to 14 day interval may be required for adequate control, if indicated by scouting. Tank mixing with other insecticides labeled for this use may improve knockdown and control of additional insects.

Aerial application may result in slower activity and reduce control relative to application using ground equipment.

TROPICAL FRUIT ~ Soil Treatment

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

Pests Controlled	Rate: Fluid ounces per acre	
Aphids, Avocado lacebug, Leafhoppers, Whiteflies	12.0-16.0	
Pests Suppressed		
Scales	16.0	

Restrictions:

- Pre-Harvest Interval (PHI): 6 days
- Maximum soil-applied product allowed per year: 16 fluid ounces S-Cloprid 4 AG or 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.

TROPICAL FRUIT - Foliar Treatment

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

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

Restrictions:

- Pre-Harvest Interval (PHI): 7 days
- Minimum interval between applications: 10 days
- Maximum foliar-applied product allowed per year: 16 fluid ounces S-Cloprid 4 AG or 0.5 lb ai/A.
- Do not apply pre-bloom or during bloom or when bees are actively foraging.

Applications: Rates are based on fully-grown mature trees. Apply as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough coverage is needed for good control. Use of a spray adjuvant as directed on the adjuvant label may improve coverage. S-Cloprid 4 AG alone may not provide knockdown for heavy or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mixing with other insecticides labeled for this use may improve knockdown and control of additional insects.

Aerial application may result in slower activity and reduce control relative to application using ground equipment.

OTHER CROPS

CHRISTMAS TREE - Soil Treatment

OTINOTHIAO TILL - OOI TICAMION		
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 soil-applied product allowed per year: 16 fluid ounces S-Cloprid 4 AG or 0.5 lb ai/A.

Applications: Soil incorporation and movement of S-Cloprid 4 AG to the root-zone is required for activity. S-Cloprid 4 AG can be incorporated easiest when applied to moist soil. Apply specified dosage in one of the following methods:

- · Chemigation through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.
- 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 of application.

For optimal grub control, apply S-Cloprid 4 AG during adult flight activity, or up to mid-July when 1st instar larvae are present.

CHRISTMAS TREES - Foliar Treatment

Pest Controlled	Rate: Fluid ounces per acre
Aphids, Adelgids, Sawflies	1.6 to 3.2

Restrictions:

- Minimum interval between applications: 7 days
- Maximum foliar-applied product allowed per year: 16 fluid ounces S-Cloprid 4 AG or 0.5 lb ai/A.

Applications: Apply as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough coverage is needed for good control. Use of a spray adjuvant as directed on the adjuvant label may improve coverage. S-Cloprid 4 AG alone may not provide knockdown for heavy or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mixing with other insecticides labeled for this use may improve knockdown and control of additional insects.

For gall-forming adelgids, time applications to coincide with a full bud-swell of the earliest bud-breaking trees. Treatment will be ineffective once galls are formed.

POPLAR/COTTONWOOD - Soil Treatment

(includes members of the genus Populus grown for pulp or timber)

Field Application Instructions. See below for Cutting/Whips Application Instructions.		
Pests Controlled Rate: Fluid ounces per acre		
Aphids, Cottonwood leaf beetle	8.0-16.0	
Pest Suppressed		
Phylloxerina popularia	8.0-16.0	

Restrictions:

- Not for use in California
- Maximum S-Cloprid 4 AG allowed at-plant per year: 16.0 fluid ounces/Acre (0.5 lb Al/Acre)
- 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 irrigation.
- 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, 0.25 inches/Acre is recommended).

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 above for Field Application Instructions

Pests Controlled	Cutting/Whip Soaking Solution
•	Fluid ounces S-Cloprid 4 AG per 100 gallons
Cottonwood leaf beetle	6.65 – 13.3 (unhydrated cuttings/whips) 13.3 – 20 (partially hydrated cuttings/whips)
Pest Suppressed	
Aphids, Phylloxerina popularia	6.65 – 13.3 (unhydrated cuttings/whips) 13.3 – 20 (partially hydrated cuttings/whips)

Restrictions:

- Not for use in California
- Maximum S-Cloprid 4 AG allowed at-plant per year: 16.0 fluid ounces/Acre (0.5 lb Al/Acre)

Applications:

Product absorption into the plant material is affected by 1) the moisture content of the cuttings/whips prior to application, 2) the solution concentration; and 3) the length of soaking intervals. For a constant soaking interval of 24 hours, drier cuttings/whips absorb a higher amount of solution and require a lower concentration. On the other hand, more hydrated cuttings/whips absorb less solution and require a higher concentration. Soaking of cuttings/whips should be done in a covered container without UV light.

Apply specified dosage in one of the following cuttings/whips soaking methods:

- For freshly cut (unhydrated) cuttings/whips, soak plant material in specific solution concentration for 24 hours prior to cold storage. After removal from cold storage, plant as needed.
- 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.
- Take proper care 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.

Note: Not all *Populus* spp. (clones/varieties/hybrids) have been tested for crop safety. Treat a small numbers of cuttings/whips and evaluate before commercial use.

POPLAR /COTTONWOOD - Foliar Treatment

(includes members of the genus (Populus) grown for pulp or timber)

Pest Controlled	Rate: Fluid ounces per acre
Aphids, Leaf Beetles	1.6 to 3.2

Restrictions:

- · Not for use in California
- Minimum interval between applications: 10 days
- Maximum foliar-applied product allowed per year: 16 fluid ounces S-Cloprid 4 AG or 0.5 lb ai/A.
- Do not apply pre-bloom or during bloom or when bees are actively foraging.

Applications: Apply as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough coverage is needed for good control. Use of a spray adjuvant as directed on the adjuvant label may improve coverage. S-Cloprid 4 AG alone may not provide knockdown for heavy or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mixing with other insecticides labeled for this use may improve knockdown and control of additional insects.

POULTRY HOUSING STRUCTURES

S-CLOPRID 4 AG may be used indoors as a spot, crack and crevice, or overall surface spray to control darkling beetles and hide beetles on floors, walls, and support beams of poultry or turkey housing structures, and within 25 feet of the perimeter of the poultry house.

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Restrictions:

- Do not apply more than 7 days prior to bird placement.
- Do not apply when birds are present.
- Do not allow food or feed to be contacted by the spray.
- Remove feed and water from the treatment area before applying.
- · Do not restock birds until spray has completely dried.

Apply S-CLOPRID 4 AG to the entire footing including 1 foot up onto the wall above the footing, and to 3 to 4 foot wide bands directly beneath all feed lines. These areas are where the vast majority of the adult and larval beetles reside when the birds are in the house, and therefore will have an increased likelihood of coming in contact with the insecticide. Measure these areas to determine the correct amount of S-CLOPRID 4 AG needed for the application.

Apply between flocks after de-caking and sanitation procedures have been completed. If Beetle infestations are very high it may be necessary to treat the footings including 1 foot up onto the walls and the entire floor area of the house.

Also apply as a crack and crevice spray around wall insulation or other areas where beetle may be located. In structures having support beams it is necessary to treat the floor 1 foot around each post and 2 feet up onto the posts. In cases of extreme infestation, treat the entire facility. Apply 3 fl oz per 1000 square feet in 2 gallons of water per 1000 square feet as described above. Apply as a broadcast spray to litter over the entire floor to litter under feed and water lines, and to lower sections of walls to one foot above the foundation.

Mixing and Application Rates

Calculate the surface area to be sprayed. Apply 3 fl. oz. of S-Cloprid 4 AG per 1000 square feet of surface in 1/2 to 2 gallons of final dilution per 1000 square feet. To prepare the dilution, partly fill the spray tank with 1/2 the water to be used, then add the appropriate amount of S-CLOPRID 4 AG, mix, then add the rest of the water while agitating or mixing. Maintain agitation while spraying. Prepare a fresh mixture for each application.

Resistance Management

In order to avoid problems with developed resistance to insecticides it is important to rotate to an Insecticide of a different class each 2-3 flocks. It is best to attempt to use 3 different classes of insecticides during a calendar year.

ANIMAL HOUSING FACILITIES (Not for use in California)

S-CLOPRID 4 AG may be used as a crack and crevice, wall void, surface spray, or soil drench to control ants (except carpenter ants, fire ants, harvester ants, and pharaoh ants) in and around animal housing facilities.

Restrictions:

- . Do not use to control native or imported fire ants, carpenter ants, harvester ants or pharaoh ants.
- Use only crack and crevice or wall void applications in building interiors.
- Do not apply more than 7 days prior to animal placement.
- Do not apply when animals are present.
- Do not allow food or feed to be contacted by the spray.
- · Remove feed and water from the treated area before applying.
- · Keep people and animals out of the treated area until sprays have dried.
- Do not restock birds until spray has completely dried.

Apply at a rate of 3/4 teaspoon to 1 1/2 teaspoons S-CLOPRID 4 AG per gallon of water (2 1/2 teaspoons to 2 1/2 fl. ounces per 10 gallons). Spray into cracks, crevices, drilled holes, onto walls, and around potential entry points such as doors, windows, vents, eaves, soffits, and utility access holes. If nests are present in voids, spray into the void if possible, or apply as a foam. (See specific instructions of foam generator). Spray surfaces to provide complete coverage but do not spray to dripping or runoff.

Also apply as a drench to soil, turf, ornamental shrubs or plants, or ground cover around the exterior of the building, and along driveways or other hard surfaces where ants may be tunneling. For above-ground nests, such as in wood posts, decks, or fences, or in trees, spray into the cavity and on the wood surface.

SEED TREATMENT

S-Cloprid 4 AG may be used as a seed treatment insecticide that protects the labeled seeds and seedlings from injury from certain early-season insects. S-CLOPRID 4 AG will also provide protection to seed in storage against damage from certain insects. Federal regulations have established official tolerances for pesticide residues. In order that residues on food and forage crops will not exceed established tolerances, use this product only at the rates contained on this label.

S-CLOPRID 4 AG is formulated for both commercial and (for specific crops) agricultural establishment (on-farm) application. See below for Seed Treatment directions by crop, for application details. S-CLOPRID 4 AG may be applied with mechanical, slurry, or mist-type seed treating equipment, provided that the equipment is calibrated to accurately and uniformly apply the product to seed. Uniform application to seed is necessary to ensure best insect protection and optimum performance. Only sound and well-cured seed are to be treated. Refer to the application instructions below for label rates and application details. S-CLOPRID 4 AG will treat similarly to other concentrated imidacloprid seed treatment formulations. The specific treating process and equipment that is most suitable depend on factors such as the seed type, rate, treater type and temperature. Contact your local Direct AG Source representative or supplier for specific recommendations if assistance is required.

Use Restrictions:

- · Do not use as a planter (hopper) box treatment.
- CALIFORNIA: Only for use in commercial seed treatment facilities, not allowed for "on farm" use.
- ON FARM TREATMENT: Do not apply this product through any type of irrigation system.
- Do not use for feed, food or oil purposes.
- 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.
- · Store away from food and feedstuffs.
- Treated seed must be planted in the soil at a depth greater than 1 inch.
- Treated seeds exposed on soil surface may be hazardous to wildlife. Cover or collect treated seeds spilled during loading.
- Dispose of all excess treated seed. Leftover treated seed may be buried away from water sources in accordance with local requirements.
- Do not contaminate water bodies when disposing of planting equipment wash waters.
- Do not allow children, pets, or livestock to have access to treated seed.

- The maximum application rate (all imidacloprid uses: seed treatment, foliar application, soil application) per acre per year is 0.5 lbs. Do not use more than 0.5 lb. (226.8 mg) per acre per year.
- Do not apply a neonicitinoid insecticide with 45 days of planting seed treated with S-Cloprid 4 AG.
- Treated seed must not be used for or mixed with food or animal feed or processed for oil.
- Rape greens grown and harvested from S-Cloprid 4 AG treated seed must not be used for human and feed consumption. Rapeseed grown and harvested from S-Cloprid 4 AG treated seed is only for industrial uses and cannot be used for edible oil or any other human/feed consumption.
- Wheat, Barley, Oats, Rye, Triticale, Sorghum and Millet: Do not graze or feed livestock on treated areas for 45 days after planting.
- Cotton (delinted seed only): Regardless of the type of application (seed treatment, soil, or foliar), do not apply more than a total of 0.5 lb. imidacloprid per acre per cropping cycle.
- Soybean: Do not graze or feed livestock on soybean forage or hay grown from treated seed.
- 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.

Seed Dye or Colorant: 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 S-Cloprid 4 AG must be labeled in accordance with all applicable requirements of the Federal Seed Act.

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 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 must be observed. The following plant-back intervals must be observed for listed crops:

	Immediat	e Plant-Back		30-Day Plant-Back
Artichoke	Crambe	Millet	Rye	Buckwheat
Barley	Cucurbits	Mustard Seed	Safflower	Rice
Borage	Eggplant	Oats	Sorghum	
Brassica (cole)	Flax	Okra	Soybean	
Leafy Vegetables	Ground cherry	Pepinos	Strawberry	
Canola	Leaf Petiole	Pepper	Sugar beet	
Carrot	Vegetables	Popcorn	Sunflower	
Cilantro	Leafy Vegetables	Potato	Tomatillo	
Corn, Field	Legume Vegetables	Rapeseed	Tomato	
Corn, Sweet	(succulent or dried,	Root and Tuber	Triticale	
Cotton	except soybean)	Vegetables	Watercress	
Cranberry			Wheat	

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

SEED BAG LABELING REQUIREMENTS

Seed commercially treated with S-Cloprid 4 AG Seed Treatment must be labeled in compliance with all the 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 SHALL BE LABELED WITH THE FOLLOWING STATEMENTS:

- This seed has been treated with imidacloprid insecticide.
- DO NOT use for feed, food or for oil purpose.

THE U.S. ENVIRONMENTAL PROTECTION AGENCY REQUIRES THE FOLLOWING STATEMENTS ON BAGS CONTAINING SEEDS TREATED WITH S-CLOPRID 4 AG:

- Pollinator Precautions: Imidacloprid is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Ensure that planting equipment is functioning properly in accordance with manufacturer specification to minimize seed coat abrasion during planting to reduce dust which can drift to blooming crops or weeds.
- Store away from food and feedstuffs.
- Wear a long-sleeved shirt, long pants, and chemical resistant gloves when handling treated seed.
- Treated seeds exposed on soil surface may be hazardous to wildlife. Cover or collect treated seeds spilled during loading.
- Treated seed must be planted in the soil at a depth greater than 1 inch.
- Dispose of all excess treated seed. Leftover treated seed may be buried away from water sources in accordance with local requirements.
- Do not contaminate water bodies when disposing of planting equipment wash waters.
- Dispose of seed packaging in accordance with local requirements.
- ROTATIONAL PLANT-BACK INTERVALS: 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 all other crops not listed on this product label, or for crops for which no tolerance for the active
 ingredient has been established, a 12-month plant-back interval must be observed. Cover crops for soil building or
 erosion control may be planted any time, but DO NOT graze or harvest for food or feed.
 The following plant-back intervals must be observed for listed crops:
 - Immediate Plant Back: Artichoke; Barley; Borage; Brassica (cole) Leafy Vegetables; Canola; Cilantro; Corn, Field; Corn, Sweet; Cotton; Cranberry; Crambe; Cucurbits; Eggplant; Flax; Ground cherry; Leaf Petiole Vegetables; Leafy Vegetables; Legume Vegetables (succulent or dried, except soybean); Millet, Mustard Seed; Oats; Okra; Pepino; Pepper; Popcorn; Potato; Rapeseed; Root and Tuber Vegetables; Rye; Safflower; Sorghum; Soybean; Strawberry; Sugarbeet; Sunflower; Tomatillo; Tomato; Triticale; Watercress; Wheat.
 - 30-Day Plant-Back: Buckwheat; Rice
- Do not allow children, pets, or livestock to have access to treated seed.
- The maximum application rate (all imidacloprid uses: seed treatment, foliar application, soil application) per acre per year is 0.5 lbs. Do not use more than 0.5 lb. (226.8 mg) per acre per year.
- This seed has been treated with "x" mg of Imidacloprid per seed.
- Do not apply a neonicitinoid insecticide with 45 days of planting seed treated with S-Cloprid 4 AG.
- 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.
- Rape greens grown and harvested from S-Cloprid 4 AG treated seed must not be used for human and feed
 consumption. Rapeseed grown and harvested from S-Cloprid 4 AG treated seed is only for industrial uses and cannot be
 used for edible oil or any other human/feed consumption.

- Wheat, Barley, Oats, Rye, Triticale, Sorghum and Millet: Do not graze or feed livestock on treated areas for 45 days after planting.
- Cotton (delinted seed only): Regardless of the type of application (seed treatment, soil, or foliar), do not apply more than a total of 0.5 lb. imidacloprid per acre per cropping cycle.
- Soybean: Do not graze or feed livestock on soybean forage or hay grown from treated seed.
- 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.

ALWAYS MIX PRODUCT THOROUGHLY BEFORE USING.

Always pretest tank mixes to assure physical compatibility between formulations. Follow the most restrictive of the labeling limitations and precautions of all products used in mixtures. Do not tank mix with any product that contains a label prohibition against tank mixing.

STORED SEED PROTECTION

Applied at labeled rates equal to or above 1.0 fluid ounces per hundredweight (fl. oz. / cwt.), S-CLOPRID 4 AG will provide protection to seed against injury from the following insects: Indian Meal Moth (*Plodia interpunctella*), Rice Weevil (*Sitophilus oryzea*), *Red* Flour Beetle (*Tribiolium castaneum*) and Lesser Grain Borer (*Rhizopertha dominica*) for all labeled crops. Fumigate seed that has an existing population of stored grain pests before treating with this product and bagging seed.

SEED TREATMENT FOR EARLY SEASON PROTECTION AGAINST CERTAIN SUCKING INSECTS

S-CLOPRID 4 AG will aid in the early season protection of seeds and seedlings against injury by certain insects. S-CLOPRID 4 AG kills listed pests which may vector certain plant viruses.

Canola, Rapeseed and Mustard Seed

For End-Use Application At Agricultural Establishments: Always mix this product thoroughly before using. Apply using equipment such as a HCBT or Eight-Bag Batch Treater. Apply 6.4 to 16 fl. oz. of S-CLOPRID 4 AG per 50 pound bag of seed. This product may be diluted with an approved fungicide mixture for extended disease protection. When using a batch treater, treat one-half of seed with one-half of the slurry mix; then add the remainder of the seed and slurry, and continue mixing until all seed is thoroughly covered.

For Commercial Seed Treatment: Apply with mechanical, slurry, or mist-type seed treating equipment, provided that the equipment is calibrated to accurately and uniformly apply the product to seed.

Crop	Pest	Rate	Comments
Canola, Rapeseed and Mustard Seed	Aphids, Flea beetles, Wireworms	12.8 - 32.0 fl. oz. per one hundred pounds (cwt.) of seed	Early season protection of seedlings. In areas where flea beetles and foliar insects are in high numbers, use the higher specified application rate. Please consult your local agricultural extension service office for pest patterns, history and forecasts to assist in determining the appropriate rate for your region.
	Second generation Lygus bugs (including <i>Lygus</i> spp.); Cabbage seedpod weevil larvae (including <i>Ceutorhynchus assimilis</i>)	19.2 - 32.0 fl. oz./cwt.	For suppression only. Please consult your local agricultural extension service office for pest patterns, history and forecasts to assist in determining the appropriate rate for your region.

Flax, crambe, and borage

To provide early season protection of seedlings against wireworms, seed corn maggots and flea beetles, apply as a commercial seed treatment at 32 fl. oz. per hundredweight of seed.

Safflower

To provide early season protection of seedlings against wireworms apply as a commercial seed treatment at 0.25 – 0.50 mg Al per seed (one fl. oz. of S-Cloprid 4 AG contains 14.2 g of imidacloprid).

Sunflower

To provide early season protection of seedlings against wireworms, seed corn maggets and flea beetles, apply as a commercial seed treatment at 0.25 - 0.50 mg Al per seed (one fl. oz. of S-Cloprid 4 AG contains 14.2 g of imidacloprid).

Sunflower seed treated in California must be destined for planting in states other than California and is not to be planted in California.

Sorghum, Millet

For End-Use Application At Agricultural Establishments: Always mix product thoroughly before using. Apply 4 fl. oz. of S-CLOPRID 4 AG per 50 pounds of seed using equipment such as a HCBT or Eight-Bag Batch Treater. This product must be diluted for a slurry application rate of 8 to 10 fluid ounces of slurry per 50 pounds of seed. When using a batch treater, treat one-half of the seed with one-half of the slurry mix. Then add remainder of the seed and slurry, and continue mixing until all seed is thoroughly covered. To improve seed flow, add dry talc at the rate of 0.75 ounce per 50 pounds of seed after slurry treatment, and allow it to distribute evenly on the seed.

For Commercial Seed Treatment: Apply8.0fl.oz.of product per hundredweight (cwt.) seed using any mechanical, slurry, or mist-type seed treating equipment, provided that the equipment is calibrated to accurately and uniformly apply the product to seed.

Crop	Pest	Rate	Comments
Sorghum	Aphids (including Corn leaf, English	8.0 fl. oz./cwt.	Provides early season protection of seedlings against injury. Thorough coverage is necessary for optimal
•	grain, Greenbug, and Yellow sugar cane aphid),		control. (1) Not to kill or control fire ants. Only for protection of
	Chinch bugs, Fire ants ⁽¹⁾ ,	·	seed. Restriction: DO NOT graze or feed livestock on
	Wireworms		treated areas for 45 days after planting.

Wheat, Barley, Oats, Rye, Triticale

For End-Use Application At Agricultural Establishments: Always mix product thoroughly before using. Apply using equipment such as a Total Slurry Treater (TST), Farmer Applied Seed Treater (F.A.S.T.) or other on-farm seed treating equipment capable of accurately applying low rates of S-CLOPRID 4 AG. Apply 1.0 - 3.0 fl. oz. per hundredweight (cwt.) of seed as a slurry treatment prior to planting. S-CLOPRID 4 AG must be combined with a fungicide product for seed and seedling protection against fungal pathogens, as well as the listed insects. Depending on the fungicide product used, dilution with water may be necessary for optimum coverage. S-CLOPRID 4 AG may also be applied on-farm to seed previously treated with a fungicide. In this case, dilution is necessary.

For Commercial Seed Treatment: S-CLOPRID 4 AG may be applied with mechanical, slurry, or mist-type seed treating equipment, provided that the equipment is calibrated to accurately and uniformly apply the product to seed. For maximum effectiveness, seed must be treated uniformly and covered thoroughly.

Restriction: DO NOT feed or graze livestock on treated areas for 45 days after planting.

Crop	Pest	Rate	Comments
Wheat, Barley, Oats, Rye, Triticale	Aphids (including Bird cherry-oat, English grain, Greenbug, and Russian wheat aphid), Hessian fly, Wireworms	1.0 - 3.0 fl. oz./ cwt.	Provides early season protection of seedlings. Reduces possible spread of barley yellow dwarf virus disease from aphid vectoring. Use the higher listed rate to increase time of protection and/or when insect pressure is heavy. Restriction: DO NOT graze or feed livestock on treated areas for 45 days after planting.
	Wireworms	0.16 -0.32 fl. oz./ cwt.	Provides suppression of activity on seed and young seedlings only. The 0.32 fl. oz./cwt. rate increases the time of protection and/or improves protection when insect pressure is high, compared with lower rates of imidacloprid. Restriction: DO NOT graze or feed livestock on treated areas for 45 days after planting.

Grasshoppers	1.5 - 3.0 fl. oz./ cwt.	Treated seed may be planted as a 50- to 60-foot border around the perimeter of the field to help minimize early season damage from grasshoppers. Consult your local agricultural extension service office for grasshopper control information specific to your area. Use the higher listed rate to increase time of protection and/or when insect pressure is heavy. Restriction: DO NOT graze or feed livestock on treated areas for 45 days after planting.
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Cotton (Delinted Seed Only)

For End-Use Application At Agricultural Establishments: Always mix product thoroughly before using. Apply using equipment such as a HCBT or Eight-Bag Batch Treater at rates listed in the table below. This product may be diluted/slurried with water or an approved fungicide for disease control. Mix slurry so that rate is 8 to 10 fluid ounces of diluted slurry per 50 pounds of seed. When using a batch treater, treat one-half of the seed with one-half of the slurry; then add the remainder of seed and slurry, and continue mixing until all seed is thoroughly covered.

For Commercial Seed Treatment: Apply at 0.375 mg. a.i. per seed or 16.0 fluid ounces per hundredweight of seed (16 fl. oz./cwt.), whichever is less. Apply using any mechanical, slurry, or mist-type seed treating equipment, provided that the equipment is calibrated to accurately and uniformly apply the product to seed.

Crop	Pest	Rate -	Comments
Cotton (delinted seed only)	Early season Thrips and Aphids	16.0 fl. oz./ cwt. or 0.375 milligram a.i. per seed	Provides protection of seedlings against injury. Restriction: DO NOT apply more than a total of 0.5 lb. of imidacloprid per acre per cropping cycle, regardless of the type of application (seed treatment, soil, or foliar).

Sugar Beets

For Commercial Seed Treatment Only: Apply at rates specified below with any mechanical, slurry, or mist-type seed treating equipment, provided that the equipment is calibrated to accurately and uniformly apply the product to seed. IMPORTANT: if rate exceeds 3.0 fl. oz. per unit, seed must be pelleted with at least 2 parts of pelleting mixture per part of raw seed.

Crop	Pest	Rate	Comments
Sugar Beets	Whiteflies, Aphids ⁽²⁾ , Leafhoppers ⁽²⁾ , Root aphids, Thrips, Wireworms	Pelleted seeded: 3.0 - 6.3 fl. oz. per seed unit ⁽¹⁾ Non-pelleted raw seed:	Provides early season protection of seedlings. Apply 3.0 to 6.3 fl. oz. seed unit in or on a unit of pelleted sugar beet seed with a weight ratio of at least 2:1 pelleting mixture to raw seed. If applying to non-pelleted raw seed, apply in a film coat and do not exceed a rate of 3.0 fl. oz. per unit of seed. (1) 1 seed unit = 100,000 seeds, approximately 1 kilogram (2.2 lbs.)
			(2) Including reducing risk of spread of Curly top and Yellow mosaic virus by insect vectors.

Field Corn

For End-Use Application At Agricultural Establishments:

Apply using an HCBT or an Eight-Bg Treater. Shake thoroughly before use. Dilute S-Cloprid 4 AG with water and/or an approved fungicide mixture. Adjust the final slurry to apply at a rate of 8-10 fl. oz. diluted slurry per 50 pound bag of seed. Threat one-half of seed with one-half of slurry mixture. Add the balance of the seed and apply the balance of the slurry. Allow mixing until seed is thoroughly covered. Apply 0.75 oz. of dry TALC per 50 pound bag of seed following the S-Cloprid 4 AG application and allow it to distribute evenly on the seed.

For the protection of corn plants from the insect pest listed below, apply as a seed treatment at the listed rates.

Post (S-Cloprid 4 AG		
Pest	MG AI/KERNAL	FL.OZ/80,000 SEED UNIT	
Corn root worm (including Northern, Western,	1.34	7.6	
Southern and Mexican) ¹		7.0	
Flea beetle	·		
Chinch bug			
Southern green stinkbug			
White grub			
Seed corn maggot			
Thrips .			
Vireworm			
Corn leaf aphid			
mported fire ant			
Southern corn leaf beetle			
3illbug ²		·	
Grape colaspis ²			
Black cutworm ³		•	
Flea beetle	0.6	3.4	
Chinch bug			
Seed corn maggot			
Thrips			
Vireworm			
Corn leaf aphid			
mported fire ant			
Grape colaspis ²			
White grub			
Seed corn maggot (seed protection only)	0.16	0.91	
Wireworm (seed protection only)	1		
Flea beetle (through 1 leaf stage)	İ		
mported fire ant			
White grub⁴		•	

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.

Reduces early season feeding damage.

⁴ Reduces feeding damage during emergence and seedling stages.

Sweet Corn

For the protection of sweet corn plants from the listed pests below, apply as a seed treatment at the listed rates.

Pest	S-CLOPRID 4 AG FL OZ/CWT OF SEED
Flea beetle	8
Early season corn leaf aphid	
Seed corn maggot	
Wireworm	
Imported fire ant	4 - 8
Early season corn leaf aphid	
Seed corn maggot	
Wireworm	
Imported fire ant	2 - 4
Seed corn maggot (seed protection)	
Wireworm (seed protection)	
Wireworm (seed protection)	1 - 2
Wileworm (seed protection)	1,4

The final slurry rate must be adjusted to apply at a rate of 16-20 fl. oz. of dilute solution per hundredweight of seed with commercial application equipment.

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

Popcorn

To provide early season protection of seedlings against injury by flea beetle, apply as a commercial seed treatment at 8 fl. oz. per hundredweight of seed.

Other Crops

For Commercial Seed Treatment Only: Soybeans, carrots and the peas, beans and pod vegetables specified below are to be treated only by commercial treaters. S-CLOPRID 4 AG may be applied with mechanical, slurry, or mist-type seed treating equipment, provided that the equipment is calibrated to accurately and uniformly apply the product to seed

Crops	Pest	Rate	Comments
Soybean	Seed corn maggots, Soybean aphids, Over-Wintering Bean leaf beetles, plant virus suppression	2.0 - 4.0 fl. oz./cwt.	Protects planted seed from seed corn maggot. Reduces feeding damage caused by soybean aphids and over-wintering bean leaf beetles. Use higher rate to provide increased length of protection and for heavy insect pressure. S-CLOPRID 4 AG can be used as an over-treatment. Restriction: DO NOT graze or feed live-stock on soybean forage or hay grown from treated seed.
Adzuki bean, Asparagus bean, Broad bean (succulent or dry), Catjang bean, Chinese long-bean, Field bean, Guar Bean, Jackbean, Kidney bean, Lablab Bean, Lima bean (succulent or dry), Moth bean (succulent or dry), Mung bean, Pinto bean, Rice bean, Runner bean, Snap bean, Sword bean, Tepary bean, Urd bean, Wax bean, Yardlong bean, Blackeyed bean (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, Grain lupine, Sweet lupine, White sweet lupine,	Wireworms, Bean leaf beetles, Imported fire ants ⁽¹⁾ , Aphids	2.0 - 4.0 fl. oz./cwt.	To provide early season protection of seedlings against injury, apply as a commercial seed treatment. Restriction: 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. (1) Not to kill or control fire ants. Only for protection of seed.
Lentil			
Carrot	Seed corn maggots, Wireworms	8.0 fl. oz./cwt.	To provides early season protection of seedlings against injury, apply as a commercial seed treatment.

STORAGE AND DISPOSAL

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

Pesticide Storage: Keep pesticide in original container. Do not put concentrate or dilute into food or drink containers. Store in cool, dry place. Do not store diluted spray..

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

Container Handling: Nonrefillable Containers 5 Gallons or Less: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke.

Nonrefillable containers larger than 5 gallons: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Refillable containers larger than 55 gallons: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. Agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read this Limitation of Warranty And Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

It is impossible to eliminate all risks associated with the use of this product. Such risks arise from weather conditions, soil factors, off-target movement, unconventional farming techniques, the presence of other materials, the manner of use or application, or other unknown factors, all of which are beyond the control of Direct Ag Source, LLC. These risks can cause: ineffectiveness of the product, crop injury, or injury to non-target crops or plants.

Direct Ag Source, LLC does not agree to be an insurer of these risks beyond what is expressly warranted by this label. When you buy or use this product, you agree to accept these risks.

Direct Ag Source, LLC warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for the purpose stated in the Directions for Use, subject to the inherent risks described above, when used in accordance with the Directions for Use under normal conditions.

To the extent consistent with applicable law, Direct Ag Source, LLC makes no other express or implied warranty of fitness or of merchantability or any other express or implied warranty.

To the extent consistent with applicable law, in no event shall Direct Ag Source, LLC or seller be liable for any incidental, consequential, or special damages resulting from the use or handling of this product. Buyer's or user's bargained-for expectation is crop protection. To the extent consistent with applicable law, the exclusive remedy of the user or buyer and the exclusive liability of Direct Ag Source, LLC or seller, for any and all claims, losses, injuries, or damages (including claims based on breach of warranty or contract, negligence, tort, or strict liability), whether from failure to perform or injury to crops or other plants, and resulting from the use or handling of this product, shall be the return of the purchase price of the product, or at the election of Direct Ag Source, LLC or seller, the replacement of the product.

To the extent consistent with applicable law that allows such requirement, Direct Ag Source, LLC or its Retailer must have prompt notice of any claim so that an immediate inspection of buyer's or user's growing crops can be made. Buyer and all users shall promptly notify Direct Ag Source, LLC or a Direct Ag Source, LLC Retailer of any claims, whether based on contract, negligence, strict liability, or other tort or otherwise be barred from any remedy.

This Limitation of Warranty and Liability may not be amended by any oral or written agreement.

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Additional/ Alternate Marketing Claims

- One Dose Formula
- Dust Free
- Rapid mixing
- Quick Mixing and Spraying
- Mix and spray liquid formula
- Quick to mix and apply
- Easy to apply, hard on darkling beetles
- Formulated for control of darkling beetles
- Darkling beetle control liquid formulation
- Formulated for use in the poultry industry
- Formulated for effective control of darkling beetles in the poultry industry
- Contains imidacloprid [a chloronicotinyl insecticide] [neonicotinoid insecticide]
- Controls Darkling beetles that may [carry] [spread] [transmit] poultry disease-causing organisms
- Controls darkling beetles that can damage [buildings] [ceilings] [walls] [insulation]
- Controls darkling beetles that can feed on grain
- Controls both larvae and adults of [darkling beetle] [lesser mealworm] [hide beetle]
- Effective against both larvae and adults of [darkling beetle] [lesser mealworm] [hide beetle]
- Stops the damage and risks caused by darkling beetles
- - Stops darkling beetles from [eating] [taking] your profits
- Effective control of [listed ants] [darkling beetles] lesser mealworms] [hide beetles]
- [Targeted]. [Banded] application provides effective control of [darkling beetles] lesser mealworms] [hide beetles]
- One dose. Effective and easy to use
- [Focused] [Targeted] band treatment
- Allows labor-saving band treatment
- Less time-consuming band treatment
- Use less insecticide with [banded] [targeted] application
- Use less insecticide per [house] [building] [barn] with [banded] [targeted] application
- Time-saving band treatment
- Easy and flexible treatment options
- Easy and targeted control of [darkling beetles] lesser mealworms] [hide beetles]
- Mix and spray fast and flexible treatment options
- Broadcast or banded treatment
- May be applied as either band or broadcast spray
- Controls even (pyrethroid) [spinosad] [organophosphate] resistant [darkling beetles] lesser mealworms] [hide beetles]
- Control exactly where you need it
- Flexible application for any poultry operation
- The active ingredient in S-Cloprid 4 AG has been shown to provide effective control of [listed ants] [darkling beetles] [lesser mealworms] [hide beetles]

- Controls darkling beetle adults and larvae
 The solution to control of [darkling beetles] lesser mealworms] [hide beetles]
 Rotate with pyrethroid insecticides to manage resistance
 Manage resistance with a rotation of S-Cloprid 4 AG and pyrethroids