

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (H7505C)
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

EP)g. Number: 66222-247	Date of Issuance: FEB 2 1 2013
Term of Issuance: Unconditional	
Name of Pesticide Produ	nct:

NOTICE OF PESTICIDE:

X Registration
Reregistration

B # A B T A	11001
MANA	11201

(Under FIFRA as amended)

Name and Address of Registrant (include ZIP Code):
Makhteshim Agan of North America, Inc
3120 Highwoods Blvd, Suite 100
Raleigh, NC 27604

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

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

This product is <u>unconditionally</u> registered in accordance with FIFRA sec. 3(c)(5). Once a pesticide is registered, however, it is not regarded as permanently acceptable. Registration does not eliminate the need for continual reassessment of pesticides. If the Agency determines that, at any time, additional data are required to maintain in effect an existing registration, the Agency will require submission of such data under FIFRA section (3).

- 1. You will make the following label changes before you release the product for shipment:
 - a) Revise the EPA Registration Number to read "EPA Reg. No. 66222-247."
- 2. One year form the date of this notice conduct and submit to the Agency an one year storage stability and corrosion characteristics study with observations made at 0, 3, 6, 9, and 12 month intervals.
- 3. Per 40 CFR 156.10(a)(6), submit one copy of your final printed labeling before releasing the product for shipment. As defined in 40 CFR 152.3, "final printed labeling" means the "label or labeling of the product when distributed or sold". Clearly legible reproductions or photo reductions will be accepted for unusual labels. Note that a clean copy of the master label in most cases does not meet the definition of final printed labeling. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product bearing amended labeling constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.

If you have any questions regarding this action, please contact BeWanda Alexander at www.alexander.bewanda@epa.gov or (703) 305-7460.

Signature of Approving Official (1) Manda (1) Manda (1)	Date:
Richard Gebken Product Manager	teb 21, 2013
Insecticide Branch/Registration Division (7505P)	7400,000

MANA 11201

ACCEPTED
FEB 2 1 2013

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide Registered under EPA Reg. No. (06202) - 247

ACTIVE INGREDIENT:	% BY WT
Bifenthrin: (2-methyl[1,1'-biphenyl]-3-yl) methyl-3-(2-chloro-3,3,	
3-trifluoro-1-propenyl)-2,2-dimethyl-cyclopropanecarboxylate*	21.65%
Imidacloprid: 1-[(6-Chloro-3-pyridinyl)methyl]-N-nitro-2-imidazolidinimine	10.80%
OTHER INGREDIENTS:	67.55%
TOTAL:	100.00%
*CIS isomers 97% minimum, trans isomers 3% maximum.	
This product contains 2 lb. active Bifenthrin and 1 lb. active Imidacloprid per gallon.	

KEEP OUT OF REACH OF CHILDREN

WARNING

This label must be in the possession of the user at the time of application. Si usted no entiende la etiqueta, busque a alguien para que se a explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See other panels for additional precautionary information.

Manufactured for:

Makhteshim Agan of North America, Inc. 3120 Highwoods Blvd., Suite 100 Raleigh, NC 27604

EPA Reg. No. 66222-xxx

NET	CONTENTS:	GALLONS
11-1	OUITIEITO.	UALLUIO

EPA Est. No.

	FIRST AID
IF SWALLOWED:	 Call a poison control center or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquids to the person. Do not give anything by mouth to an unconscious person.
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 ON SKIN OR CLOTHING:	 Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. For a medical emergency involving this product call: 1-866-944-8565.

NOTE TO PHYSICIAN: This product contains a pyrethroid. If large amounts have been ingested, the stomach and intestines should be evacuated. Treatment is symptomatic and supportive. Digestible fats, oils, or alcohol may increase absorption and so should be avoided.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING. May be fatal if swallowed. Harmful if absorbed through skin. Harmful if inhaled. Avoid breathing spray mist. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and

MANA 11201, EPA Reg. No. 66222-EUT Proposed Master Label Clean copy – Label Version (3) July 25, 2012 Page 1 of 35 before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instruction for Category E on the EPA Chemical resistance category section chart.

Applicators and other handlers must wear:

- · Long-sleeved shirt and long pants,
- · Protective eyewear,
- · Chemical-resistant gloves, such as Barrier Laminate or Nitrile Rubber or Neoprene Rubber or Viton, and
- · Shoes plus socks.

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

USER SAFETY RECOMMENDATIONS

Users should:

- · Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to fish and aquatic invertebrates. Use with care when applying in areas adjacent to any body of water.

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 make applications when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters.

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

The use of bifenthrin is prohibited in areas that may result in exposure of endangered species to bifenthrin. Prior to use in a particular county, contact the local extension service for procedures and precautions to use to protect endangered species.

The chemical imidacloprid 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.

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near oxidizing agents.

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 it will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours. 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 over long-sleeved shirt and long pants;
- Chemical-resistant gloves such as Barrier Laminate or Neoprene Rubber or Viton;
- · Shoes plus socks; and
- · Protective eyewear.

RESISTANCE MANAGEMENT

Some insects are known to develop resistance to products with the same chemical class used repeatedly for control. MANA 11201 contains Group 3 and Group 4A insecticides. Although pest resistance cannot be predicted, a general rule to reduce the onset of resistance in pest species to MANA 11201 is not to consecutively and repeatedly apply Group 3 and/or Group 4A insecticides during a growing season for control of a particular pest target. Consult your local or state agricultural authorities or your Makhteshim Agan of North America (MANA) representative for more specific details on insect resistance management strategies.

The Group 4A active ingredient in MANA 11201 is a member of the neonicotinoid chemical group. Avoid using a block of more than three consecutive applications of MANA 11201 and/or other Group 4A products having the same or similar mode of action. Following a neonicotinoid block of treatments, LPI strongly encourages the rotation to a block of applications with effective products of different mode before using additional applications of neonicotinoid products. Using a block rotation or windowed approach, along with IPM practices, is considered an effective use strategy for preventing or delaying an insect's ability to develop resistance to this class of chemistry.

Foliar applications of MANA 11201 or other Group 4A products from the neonicotinoid chemical class must not be used on crops previously treated with a long-residual, soil-applied product from the neonicotinoid chemical class.

If resistance to this product develops in your area, this product, or other products with a similar mode of action, may not provide adequate control. If poor performance cannot be attributed to improper application or extreme weather conditions, a resistant strain of insect(s) may be present. If you experience difficulty with control and resistance is a reasonable cause, immediately consult your local MANA company representative or agricultural advisor for the best alternative method of control for your area.

Application Instructions:

Rate of application is variable according to pest pressure, timing of sprays, and field scouting. Use lower rates under light to moderate infestations; higher rates under heavy insect pressures. Arid climates generally require higher rates.

Use adequate spray volumes, properly calibrated application equipment and VADER® spray adjuvant to obtain thorough coverage. To optimize deposition, penetration, and translocation, use 0.25% v/v of VADER. Other adjuvants must be used at 0.25 to 0.50% v/v.

Cultivation within 10 feet of a water body is prohibited to allow for the growth of a vegetated filter strip. In New York State, this product may not be applied within 100 feet (using ground equipment) or 300 feet (using aerial equipment) of coastal marshes or streams that drain into coastal marshes.

California Special Equipment and Restrictions: MANA 11201 must be used in a closed system that meets the criteria for closed systems as established by the California Department of Food and Agriculture. The criteria and a list of the closed systems meeting the criteria are available through the California Department of Food and Agriculture.

ROTATIONAL CROPS

Plant back restrictions are determined by the crop. Crops that have tolerances for both bifenthrin and imidacloprid may be rotated at any time. Crops with tolerances for bifenthrin and not imidacloprid can be rotated 12 months following the final application of MANA 11201. Crops that have tolerances for imidacloprid and not bifenthrin may be rotated 30 days following the final application of MANA 11201.

Plant back restrictions:

Immediate plant back: Crops on this label, as well as, corn (all), tobacco, tomatoes, eggplant, peppers bell and non-bell, okra, caneberries, citrus, artichoke, lettuce (head and leaf), grapes, spinach, pears, hops, legume vegetables (edible podded), tuberous root and corm vegetables (except sugar beet), cilantro and coriander, soybeans and strawberries.

30 Day plant back: Cereals, cucurbits, safflower 10 Month plant back: Onion and bulb vegetables

12 Month plant back: All other crops

MAXIMUM ALLOWABLE USE PER SEASON

Refer to the individual crop sections for maximum allowable MANA 11201 usage per acre per season. The maximum allowable use must include all registered use patterns including at-plant, soil applied and/or foliar applications for the 12 month period. The 12-month period is to begin upon the initial application to the acreage.

Tank Mixture

MANA 11201 may be applied in tank mixtures with other products approved for use on registered crops. Observe all restrictions and precautions which appear on the labels of these products. Test for compatibility of products before mixing.

BUFFER ZONES

Vegetative Buffer Zones

Construct and maintain a minimum 10-foot-wide vegetative filter strip of grass or other permanent vegetation between the field edge and down gradient aquatic habitat (such as, but not limited to, lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries and commercial fish farm ponds).

Only apply product containing bifenthrin onto fields where a maintained vegetative buffer strip of at least 10 feet exists between the field and down gradient aquatic habitat.

For guidance, refer to the following publication for information on constructing and maintaining effective buffers: Conservation Buffers to Reduce Pesticide Losses. Natural Resources Conservation Services. USDA, NRCS. 2000. Fort Worth, Texas. 2I pp. http://www.in.nrcs.usda.qov/technical/aqronomy/newconbuf.pdf.

Buffer Zone for Ground Application (groundboom, overhead chemigation, or airblast)

Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, natural ponds, estuaries, and commercial fish ponds).

Buffer Zone for ULV Aerial Application

Do not apply within 450 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, natural ponds, estuaries, and commercial fish ponds).

Buffer Zone for Non-ULV Aerial Application

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

SPRAY DRIFT REQUIREMENTS

Wind Direction and Speed

Only apply this product if the wind direction favors on-target deposition. Do not apply when the wind velocity exceeds 15 mph.

Temperature Inversion

Do not make aerial or ground applications into temperature inversions. Inversions are characterized by stable air and increasing temperatures with height above the ground. Mist or fog may indicate the presence of an inversion in humid areas. The applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.

Droplet Size

Use only medium or coarser spray nozzles (for ground and non-ULV aerial application) according to ASAE (S572) definition for standard nozzles. In conditions of low humidity and high temperatures, applicators should use a coarser droplet size.

Additional Requirements for Ground Applications

Wind speed must be measured adjacent to the application site on the upwind side, immediately prior to application.

For ground boom applications, apply using a nozzle height of no more than 4 feet above the ground or crop canopy.

For airblast applications, turn off outward pointing nozzles at row ends and when spraying the outer two rows. To minimize spray loss over the top in orchard applications, spray must be directed into the canopy.

Additional Requirements for Aerial Applications

The spray boom should be mounted on the aircraft as to minimize drift caused by wingtip or rotor vortices. The minimum practical boom length should be used and must not exceed 75% of the wing span or 80% rotor diameter. Flight speed and nozzle orientation must be considered in determining droplet size. Spray must be released at the lowest height consistent with pest control and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety. When applications are made with a cross-wind, the swath will be displaced downwind. The applicator must compensate for this displacement at the downwind edge of the application area by adjusting the path of the aircraft upwind.

CHEMIGATION USE DIRECTIONS

Apply this product only through sprinkler including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move irrigation systems. Do not apply this product through any other type of irrigation system. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system.

For LEPA irrigation, a minimum of 0.75 inch of water per acre is recommended. Where non-emulsified oils are used as the diluent,1 to 2 pints per acre is recommended.

Results from utilizing chemigation have been variable and depend upon the set up and calibration of equipment. Crop injury, lack of effectiveness, or illegal residues in the crop can result from non-uniform distribution of treated water. Contact your State Agricultural Extension Service specialists, equipment manufacturers or other experts for consultation on the suitability of the equipment set up to obtain effective control of the target insect pests.

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. Failure to cease application during a mechanical stoppage may result in undesirable residues to adjacent areas. The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment. MANA 11201 should be applied continuously for the duration of the water application. MANA 11201 should be diluted in sufficient volume to ensure accurate application over the area to be treated. When using chemigation, a minimum of 0.5 inch per acre of irrigation water is recommended. Agitation generally is not required when a suitable diluent is used. A diluent test should be conducted to ensure that phase separation will not occur during dilution and application. Failure to achieve a uniform dilution throughout the time of application may result in undesirable residues or less than desirable control.

CROP USE RECOMMENDATIONS AGRICULTURAL USES

CROP	TARGET PESTS	RATE		REMARKS		
		lb Al/A	fl oz/A			
ARTICHOKE (GLOBE)	Aphid spp. Artichoke plume moth Cribrate weevil Leafhopper spp.	0.10	6.4	Make applications when pests appear. Apply in sufficient volume to ensure sufficient coverage of foliage. Ground application: Apply in a minimum of 75 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Aerial application: Apply in a minimum of 10 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Use higher rates for increased residual control.		
	1	apply more than 0.5 lb Al/A of Imidacloprid per season. apply more than 0.5 lb Al/A of Bifenthrin per season.				
	Do not apply within 5 da	days of harvest.				
	Do not apply at intervals	at intervals less than 15 days.				

CROP	TARGET PESTS	RATE		REMARKS	
		lb Al/A	fl oz/A		
BRASSICA (Head and Stem) Broccoli, Broccoli (Cavalo), Broccoli (Chinese), Brussels sprouts, Cabbage, Cabbage (Chinese Mustard), Cabbage (Chinese napa), Cauliflower, Cavalo Broccolo, Kohlrabi	Aphid spp. Armyworm spp.* Budworm Corn earworm Crickets Cucumber beetle Cutworm spp. Diamondback moth** Ground beetles Grasshoppers Imported cabbageworm Leafhopper spp. Loopers Saltmarsh caterpillar Stink bug spp. Thrips Tobacco budworm Wireworm (adults) Banks Grass Mite Beet armyworm Carmine Mite Lygus spp. Pacific spider Mite Two Spotted Spider Mite Whitefly	0.033 – 0.10	5.12 - 6.0	Apply in sufficient volume to ensure sufficient coverage of foliage. Ground application: Apply in a minimum of 10 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Aerial application: Apply in a minimum of 2 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. When applying by air, 1 to 2 qts of emulsified oil may be substituted for 1 to 2 qts of water in the finished spray. When foliage is dense and/or pest populations are high, use 5-10 gallons/A by air or 20 gallons/A by ground and higher use rates. Use higher rates for increased residual control.	
	 * Including all armyworm pests except Beet Armyworm. ** Pyrethroid resistance is common for this pest. Consult your local or state agricultural authority to determine if resistant pest populations are in your area. If so refer to the Resistance management statement of this label. Do not apply more than 0.24 lb Al/A of Imidacloprid per season. Do not apply more than 0.5 lb Al/A of Bifenthrin per season. Do not apply within 7 days of harvest. Do not apply at intervals less than 7 days. Do not apply more than 5 applications after bloom. 				

CROP	TARGET PESTS	RATE		REMARKS	
		lb Al/A	fl oz/A		
BRASSICA (Leafy Greens) Broccoli Raab, Cabbage (Chinese bok choy), Collards, Kale, Mizuna, Mustard Greens, Mustard Spinach, Rape Greens Turnip tops (greens)***	Aphid spp. Armyworm spp.* Budworm Corn earworm Crickets Cucumber beetle Cutworm spp. Diamondback moth** Ground beetles Grasshoppers Imported cabbageworm Leafhopper spp. Loopers Saltmarsh caterpillar Stink bug spp. Thrips Tobacco budworm Wireworm (adults)	0.033 - 0.10	5.12 - 6.0	Make applications when pests appear. Apply in sufficient volume to ensure sufficient coverage of foliage. Ground application: Apply in a minimum of 10 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Aerial application: Apply in a minimum of 2 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. When applying by air, 1 to 2 qts of emulsified oil may be substituted for 1 to 2 qts of water in the finished spray. When foliage is dense and/or pest populations are high, use 5-10 gallons/A	
	Beet armyworm Carmine Mite Lygus spp. Pacific spider Mite Two Spotted Spider Mite Whitefly * Including all armyworm **Pyrethroid resistance				
	 Pyrethroid resistance is common for this pest. Consult your local or state agricultural authority to determine if resistant pest populations are in your area. If so refer to the Resistance management statement of this label. * This use not permitted in California unless allowed by an approved supplemental label. Do not apply more than 0.24 lb Al/A of Imidacloprid per season. Do not apply more than 0.5 lb Al/A of Bifenthrin per season. Do not apply within 7 days of harvest. Do not apply at intervals less than 7 days. Do not apply more than 5 applications after bloom. 				

CROP	TARGET PESTS	RATE		REMARKS		
		lb Al/A	fl oz/A			
CILANTRO and CORIANDER	Aphid spp. Cabbage looper Cutworm spp. Flea beetle Grasshopper Leafhopper spp. Leafminer Saltmarsh caterpillar Spotted cucumber beetle Thrips Beet armyworm Twospotted spider mite	0.033 - 0.10	2.1 - 5.6 5.12 - 5.6	Make applications when pests appear. Apply in sufficient volume to ensure sufficient coverage of foliage. Ground application: Apply in a minimum of 10 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Aerial application: Apply in a minimum of 2 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area.		
·	Whitefly	0.42 lb 01/0 -		When foliage is dense and/or pest populations are high, use 5-10 gallons/A by air or 20 gallons/A by ground and higher use rates. Use higher rates for increased residual control.		
	 Do not apply more than 0.13 lb Al/A of Imidacloprid per season. Do not apply more than 0.5 lb Al/A of Bifenthrin per season. 					
		ot apply within 3 days of harvest. ot apply at intervals less than 7 days.				
L	Do not apply at intervals less than 7 days.					

CROP	TARGET PESTS	RATE		REMARKS
		lb Al/A	fl oz/A	
CITRUS (Except Florida)*: Calamondin, Citron citron, Citrus hybrids (includes chironja, tangelo and tangor), Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Pummelo, Orange (sweet	Asian cockroach Diaprepes root weevil (Diaprepes abbreviatus) Fire ants			The use of this product protects citrus tree roots from Diaprepes and other citrus roots and post-application irrigation may aid in the uniformity of coverage as well. The use of this product protects citrus tree roots from Diaprepes and other citrus roots desired. A prevention of the product to contact fruit or foliage. Must be uniformly applied from the trunk to the drip line of tree. Apply in a minimum of 40 gallons of dilute spray per acre or sufficient spray volume to obtain full coverage of target area. Higher spray volume should insure greater uniformity of coverage. A pre- and post-application irrigation may aid in the uniformity of coverage as well. The use of this product protects citrus tree roots from Diaprepes and other citrus root weevil feeding by forming a barrier. As newly hatched Citrus weevil larvae (neonates) fall to the soil surface beneath the tree and come in contact with this product as they attempt to burrow into the root zone. Disturbance of the soil beneath trees should be minimized.
and sour), Satsuma mandarin, White sapote (Casimiroa spp.), and other cultivars and/or hybrids of these				suggests that peak emergence of adult Diaprepes Weevil varies by citrus growing region and these emergence peaks can be dramatically affected by environmental factors, such as soil moisture. Usually, two peaks are observed for Diaprepes, first in spring then late summer or early fall. Southern Blue-Green and Blue-Green Citrus Weevils and Fuller Rose Beetle typically exhibit the Leaf Notchers typically exhibit three emergence peaks, spring, summer and fall. Since emergence varies seasonally and by location, timing of this product application can be accurately forecast by observing adults. Adults are most active early morning and late afternoon; numbers can be estimated by trapping throughout spring and summer (emergence periods). Egg laying will occur for 8 to 10 weeks following adult emergence from the soil; larval invasion of the soil will begin 2-3 weeks following adult emergence. This product must be applied prior to drop of the neonates. Insecticides are one of several effective tools in an integrated pest management program for Citrus Root Weevils. Application of this product should be used in conjunction with good cultural practices, biological control of larvae and foliar control of adults. Consult local university extension personnel for current information to protect citrus trees from Citrus Root Weevils and other pests.
				Apply to individual citrus resets, when not in solid planted rows, using hand-gun or shielded sprayer. Peak emergence of Diaprepes root weevil generally occurs in the spring. Depending on weather conditions, a minor emergence of Diaprepes root weevil may also occur in the fall. If the citrus grove to be treated is in an area where weather conditions are conducive to primary emergence occurring in the spring, 32 fl ozs formulated product should be used to obtain the longest residual management of Diaprepes root weevil. If
	Do not apply by air or t	hrough irrigation sy 0 days prior to bloo	stems om through bl	the citrus grove to be treated is in an area where weather conditions will promote more than one peak of pest emergence, 16 fl ozs formulated product can be applied early season and 16 fl ozs formulated product can be applied later in the season. If emergence extends beyond the residual protection of this product, grower is advised to use additional management strategies (i.e. foliar adult control or soil larvae control such as nematodes). Contact your state agricultural Extension Specialist as to the recommendation suited for local conditions. ed by a supplemental label. com or when bees are actively foraging.
	Do not apply more thanDo not apply within 1 dDo not apply at interval	ay of harvest.		ason.
				MANA 11201, EPA Reg. No. 66222-EUT

CROP	TARGET PESTS	RAT	<u> </u>	REMARKS
		lb Al/A	fl oz/A	
CITRUS(Florida only):	Asian citrus psyllid Blue green citrus root	0.25 - 0.50	16 – 32	Apply by ground equipment to bare soil beneath citrus trees - Do not allow any application of the product to contact fruit or foliage.
Calamondin, Citron citron, Citrus hybrids (includes	weevil (Pachnaeus opalus) Brown leaf notcher (Epicacrus mexicanus)			Must be uniformly applied from the trunk to the drip line of tree. Apply in a minimum of 40 gallons of dilute spray per acre or sufficient spray volume to obtain full coverage of target area. Higher spray volume should insure greater uniformity of coverage.
chironja, tangelo	Diaprepes root weevil			A pre- and post-application irrigation may aid in the uniformity of coverage as well.
and tangor), Grapefruit, Kumquat, Lemon, Lime, Mandarin	(Diaprepes abbreviatus) Leafhoppers/Sharpshooters Leafminers Little leaf notcher (Artipus floridanus)			The use of this product protects citrus tree roots from Diaprepes and other citrus root weevil feeding by forming a barrier. As newly hatched Citrus weevil larvae (neonates) fall to the soil surface beneath the tree and come in contact with this product as they attempt to burrow into the root zone. Disturbance of the soil beneath trees should be minimized.
(tangerine), Pummelo, Orange (sweet and sour), Satsuma mandarin, White sapote (Casimiroa spp.), and other cultivars and/or hybrids of these	Mealy bugs Scales Southern blue green citrus root weevil (Pachnaeus litus) Whiteflies			Timing of applications is critical and current information suggests that peak emergence of adult Diaprepes Weevil varies by citrus growing region and these emergence peaks can be dramatically affected by environmental factors, such as soil moisture. Usually, two peaks are observed for Diapreps, first in spring then late summer or early fall. Southern Blue-Green and Blue-Green Citrus Weevils and Fuller Rose Beetle typically exhibit a single emergence peak in the spring. Brown and Little Leaf Notchers typically exhibit three emergence peaks, spring, summer and fall. Since emergence varies seasonally and by location, timing of this product application can be accurately forecast by observing adults. Adults are most active early morning and late afternoon, numbers can be estimated by trapping throughout spring and summer (emergence periods). Egg laying will occur for 8 to 10 weeks following adult emergence from the soil; larval invasion of the soil will begin 2-3 weeks following adult emergence. This product must be applied prior to drop of the neonates. Insecticides are one of several effective tools in an integrated pest management program
	Asian cockroaches, Fire ants	0.1 – 0.25	6.4 - 16	for Citrus Root Weevils. Application of this product should be used in conjunction with good cultural practices, biological control of larvae and foliar control of adults. Consult local university extension personnel for current information to protect citrus trees from Citrus Root Weevils and other pests.
				Apply to individual citrus resets, when not in solid planted rows, using hand-gun or shielded sprayer.
				Peak emergence of Diaprepes root weevil generally occurs in the spring. Depending on weather conditions, a minor emergence of Diaprepes root weevil may also occur in the fall.
				If the citrus grove to be treated is in an area where weather conditions are conducive to primary emergence occurring in the spring, 32 fl ozs formulated product should be used to obtain the longest residual management of Diaprepes root weevil. If the citrus grove to be treated is in an area where weather conditions will promote more than one peak of pest emergence, 16 fl ozs formulated product can be applied early season and 16 fl ozs formulated product can be applied later in the season. If emergence extends beyond the residual protection of this product, grower is advised to use additional management strategies (i.e. foliar adult control or soil larvae control such as nematodes). Contact your state agricultural Extension Specialist as to the recommendation suited for local conditions.
	 Do not apply by air or throu Do not apply starting 10 da foraging. 			m or when bees are actively
	Do not apply more than 0.2Do not apply more than 0.5			
	 Do not apply within 1 day o Do not apply at intervals les 	f harvest.	,	
	- Do not apply at intervals let			MANA 11201, EPA Reg. No. 66222-EUT

CROP	TARGET PESTS	R/	ATE	REMARKS	
		lbs Al/A/ 1000 RF	fl. oz./1000RF		
CORN (GRAIN AND SILAGE), POPCORN, FIELD CORN GROWN FOR SEED (AT	Corn rootworm larvae Northern Southern Western	0.007	0.30	Apply in a minimum of 3 gallons per acres as a 5 to 7 inch T-band treatment over an open seed furrow. Position the spray nozzle behind the planter shoe, in front of the press wheel	
PLANT USE)	Army cutworm Cutworm spp. Grubs Seed corn beetle Seed corn maggot True armyworm or Armyworm spp. Wireworm	0.0035 - 0.007	0.15 - 0.30	centered over the row. Use the table below to determine this product's needs/A. Mix this product with water or fertilizer in the following manner: Fill the spray tank approximately one-half full with water or liquid fertilizer, add the proper amount of this product, then add the rest of the water or fertilizer. Provide sufficient agitation during mixing and application to maintain a uniform spray mixture. Applications of this product alone or in recommended tank mixtures, in conjunction with in-furrow pop-up fertilizers may be used. A jar compatibility test should be performed with appropriate ratio of this product and fertilizer to ensure mixture will stay in solution. Constant agitation should be	
				maintained.	
	 Do not apply more than 0.15 lb Al/A/season as an at plant application. Do not apply more than 0.3 lb Al/A of Imidacloprid per season. Do not apply more than 0.3 lb Al/A of Bifenthrin per season including PRE and PPI, atplanting, plus foliar applications. Do not apply within 30 days of harvest. Do not apply to soil where there is greater than 30% cover of crop residue remaining. Do not graze livestock in treated area or cut treated crops for feed within 30 days of treatment. 				

Row Spacing (inches)	40	38	36	30
MANA 11201 (IbAI/A)	0.09	0.096	01035	0.12
MANA 11201 (Product - fl	3.9	4.1	4.4	5.12
oz/A)				

CROP	TARGET PESTS	RA	TE	REMARKS	
		lbs Al/A/ 1000 RF	fl. oz./1000RF		
FIELD CORN (GRAIN AND SILAGE), POPCORN, FIELD CORN GROWN FOR SEED (PRE & PPI)	Armyworm spp. Black cutworm Seedcorn maggot Stalkborer White grub Wireworm	0.07 – 0.093	3 - 4	Pre-Plant Incorporated (PPI) The 3 to 4 ozs/A rate must be applied as PPI and can be tankmixed and applied with PPI herbicides. Incorporation of this product should not be any deeper than the intended planting depth and no deeper than 3 inches. Incorporation depth should be close to the intended seed planting depth.	
	Armyworm spp. Black cutworm Stalkborer	0.040	2.56	Pre-Emergence (PRE) The 2.56 ozs/A rate may be applied PRE and can be tankmixed and applied with PRE herbicides.	
	 Do not apply more than 0.3 lb Al/A of Imidacloprid per season. Do not apply more than 0.3 lb Al/A of Bifenthrin per season including PRE and PPI, atplanting, plus foliar applications. Do not apply within 30 days of harvest. Do not apply to soil where there is greater than 30% cover of crop residue remAl/Aning. Do not graze livestock in treated area or cut treated crops for feed within 30 days of treatmer 				

CROP	TARGET PESTS	RA	TE	REMARKS
		lb Al/A	fl oz/A	
FIELD CORN (GRAIN AND SILAGE), POPCORN, FIELD CORN GROWN FOR SEED (FOLIAR USE)	Aphids Army cutworm Beet armyworm Cereal leaf beetle Chinch bug Common stalk borer Corn earworm Corn rootworm adults Cucumber beetle adult Cutworm spp. Southwestern corn borer European corn borer Fall armyworm Flea beetle Grasshoppers Greenbug Japanese beetle adult Sap beetle Southern armyworm Southern corn leaf beetle Stink bug Tarnished plant bug True armyworm spp. Webworms Western bean cutworm Yellowstriped armyworm	0.033 — 0.10	2.1 – 6.4	General: Apply in a minimum of 2 to 5 gallons of finished spray/A by air or in a minimum of 10 gallons/A with ground equipment. To improve control by air, use 5 gallons of finished spray/A particularly when initial populations are heavier than normal. When applying by air, 1 to 2 qts of emulsified oil may be substituted for 1 to 2 qts of water in the finished spray. Thorough coverage is essential to achieve control. To control ear-attacking pests: Apply this product just before silking and repeat as necessary to maintain control, but do not exceed maximum application rates and reapplication intervals listed elsewhere in this section. Southwestern corn borer, European corn borer: Make application for corn borer control with initial application at or shortly before egg hatch. For control of other insect pests: Apply when pests first appear and repeat as necessary but do not exceed maximum application rates and reapplication intervals listed elsewhere in this section.

 		r		
Banks grass mite	0.08 - 0.10	5.12 – 6.4	For control of mites:	
Carmine mite			Banks Grass Mite - Apply for control	
Twospotted spider mite			when colonies first form prior to leaf	
			damage or discoloration and before	
			dispersal above the bottom third of the	
			plant.	
			Twospotted Spider Mite and Carmine	
			Mite - Apply when colonies first form	
			prior to leaf damage or discoloration and	
			before widespread mite dispersal	
			throughout the canopy.	
			, , ,	
			Higher rates will be necessary for	
			heavier initial populations and corn	
			under heat or drought stress. Field	
			experience with dimethoate at 0.5 lb	
			Al/A in tank mixture has demonstrated	
			good control under these conditions.	
			For mite control in Texas, New	
			Mexico, Oklahoma, Arizona: Apply in a	
			minimum of 5 gallons of finished spray/A	
	,		by aircraft or in a minimum of 10	
			gallons/A with ground equipment.	
			gament that greated againments	
Do not apply more than	0.3 lb Al/A of I	midacloprid p	er season.	
		Bifenthrin per :	season including PRE and PPI, at-	
planting, plus foliar appli				
,	0.3 lb Al/A/sea	ason including	PRE & PPI, at plant, plus foliar	
applications.				
 Do not apply at intervals 				
Do not apply more than				
Do not apply within 30 d				
Do not graze livestock in treated area or cut treated crops for feed within 30 days of treatment.				
Do not use on corn in all				
 Do not make application 				
 Do not apply using Ultra 	Low Volume	(ULV) applicat	ion.	

CROP	TARGET PESTS	RATE		REMARKS		
		lbs Al/A/ 1000 RF	fl. oz./1000RF			
SWEET CORN (GRAIN AND SILAGE) SWEET CORN GROWN FOR SEED (AT PLANT USE)	Corn rootworm larvae Northern Southern Western Mexican	0.007	0.3	Apply in a minimum of 3 gallons per acres as a 5 to 7 inch T-band treatment over an open seed furrow. Position the spray nozzle behind the planter shoe, in front of the press wheel centered over the row. Use the table below to determine this product's needs/A. Mix this product with water or fertilizer in the following manner: Fill the spray tank approximately one-half full with water or liquid fertilizer, add the proper amount of this product, then add the rest of the water or fertilizer. Provide sufficient agitation during mixing and application to maintain a uniform spray mixture. Applications of this product alone or in recommended tank mixtures, in conjunction with in-furrow pop-up fertilizers may be used. A jar compatibility test should be performed with appropriate ratio of this product and fertilizer to ensure mixture will stay in solution. Constant agitation should be maintained during mixing and application.		
	Army cutworm Cutworm spp. Grubs Seed corn beetle Seed corn maggot True armyworm or Armyworm spp. Wireworm	0.0035 – 0.007	0.15 - 0.30			
	 Do not apply more than 0.15 lb Al/A/season as an at plant application. Do not apply more than 0.2 lb Al/A of Imidacloprid per season. Do not apply more than 0.2 lb Al/A of Bifenthrin per season. Do not apply within 30 days of harvest. Do not apply to soil where there is greater than 30% cover of crop residue remaining. Do not graze livestock in treated area or cut treated crops for feed within 30 days of treatment. 					

Row Spacing (inches)	40	38	36	30
MANA 11201 (lbAl/A)	0.09	0.096	0.103	0.12
MANA 11201 (Product – fl oz/A)	3.9	4.1	4.4	5.12

CROP	TARGET PESTS	DA	TE	REMARKS
CRUP	IARGELFESIS	Ib Al/A	fl oz/A	REWIARNS
SWEET CORN (GRAIN AND SILAGE) SWEET CORN GROWN FOR SEED (FOLIAR USE)	Aphids Army cutworm Aster leafhopper Beet armyworm Cereal leaf beetle Chinch bug Common stalk borer Corn earworm Corn rootworm adults Corn silk fly Cucumber beetle adult Cutworm spp. European corn borer Fall armyworm Flea beetle Grasshoppers Greenbug Japanese beetle adult Leafhoppers Sap beetle Southern armyworm Southern corn leaf beetle Southwestern corn borer Stinkbugs Tarnished plant bug Thrips True armyworm or Armyworm spp. Webworms Western bean cutworm Yellowstriped armyworm	0.033 – 0.10	2.1 – 6.4	General: Apply in a minimum of 2 gallons of finished spray/A by air or in a minimum of 10 gallons/A with ground equipment. To improve control by air, use 5 gallons of finished spray/A particularly when initial populations are heavier than normal. When applying by air, 1 to 2 qts of emulsified oil may be substituted for 1 to 2 qts of water in the finished spray. Thorough coverage is essential to achieve control. To control ear-attacking pests: Apply this product just before silking and repeat as necessary to maintain control, but do not exceed maximum application rates and reapplication intervals listed elsewhere in this section. For control of other insect pests: Apply when pests first appear and repeat as necessary but do not exceed maximum application rates and reapplication intervals listed elsewhere in this section.
	Banks grass mite Carmine mite Twospotted spider mite	0.08 - 0.10	5.12 – 6.4	For control of mites: Banks Grass Mite - Apply for control when colonies first form prior to leaf damage or discoloration and before dispersal above the bottom third of the plant. Twospotted Spider Mite and Carmine Mite - Apply when colonies first form prior to leaf damage or discoloration and before widespread mite dispersal throughout the canopy. Higher rates will be necessary for heavier initial populations and corn under heat or drought stress.

- Do not apply more than 0.2 lb Al/A of Imidacloprid per season.
- Do not apply more than 0.2 lb Al/A of Bifenthrin per season.
- Do not apply within 1 day of harvest.
- Do not apply at intervals less than 7 days.
- Do not graze livestock in treated area or cut treated crops for feed within 1 day of treatment.
- Do not use on corn in all coastal counties.
- Do not make applications to corn if heavy rainfall is imminent.
- Do not apply using Ultra Low Volume (ULV) application.

		 		
CROP	TARGET PESTS		TE	REMARKS
COTTON	Bandedwinged whitefly Boll weevil Cotton aphid Cotton fleahopper Lygus spp. Plant bugs (excludes Lygus hesperus) Southern garden leafhopper Stink bug spp. Armyworm spp.* Bollworm Cabbage looper Cotton leaf perforator Cutworm spp. European corn borer Pink bollworm Saltmarsh caterpillar Tobacco budworm Thrips spp.	Ib AI/A 0.04 - 0.10	fl oz/A 2.6 - 6.4 3.8 - 6.4	Application in Water: Apply in a minimum of 5 gallons/A with ground equipment or 1 gallon/A by air. When applying by air, 1 qt of emulsified oil may be substituted for one quart of water in the finished spray. ULV Application: Apply the recommended rate of this product in refined vegetable oil in a minimum of 1 qt of finished spray/A with aircraft calibrated to give adequate coverage. To Control Boll Weevil: Apply this product at an interval of 3 to 4 days until pest numbers are reduced to acceptable levels. To Control Aphids: Apply when pest first appears. Repeat as necessary to maintain control. Higher rates will be required once a damaging threshold is established.
		0.31 lb AI/A of d of application nt, soil and folia 0.5 lb AI/A of s less than 7 da	f Imidacloprion, apply no mar uses. Bifenthrin peays.	I by foliar application per crop; regardless ore than 0.5 lb Al/A per acre per season,

• Do not graze livestock in treated area or cut treated crops for feed.

• Do not make more than 10 synthetic pyrethroid applications (of a single product or a combination of pyrethroid containing products) to a cotton crop in one growing season.

CROP	TARGET PESTS	R/	TE	REMARKS
		lb Al/A	fl oz/A	
FRUITING VEGETABLES: Crops of Crop Group 8 including EGGPLANT, PEPPERS (BELL & NON-BELL), GROUNDCHERRY, PEPINO	Armyworm spp.* Cabbage looper Colorado potato beetle Corn earworm Cucumber beetle Cutworms European corn borer Flea beetle Leafminer Loopers Stink bug Thrips Tomato hornworm Tomato pinworm Aphid spp. Artichoke plume moth Banks grass mite Carmine mite Leafhopper spp. Pacific spider mite Pepper weevil	0.033 - 0.10	5.12 – 6.4	Make applications when pests appear. Apply in sufficient volume to ensure sufficient coverage of foliage. Ground application: Apply in a minimum of 10 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Aerial application: Apply in a minimum of 2 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. When applying by air, 1 qt of emulsified oil may be substituted for one quart of water in the finished spray. When foliage is dense and/or pest populations are high, use 5-10 gallons/A by air or 20 gallons/A by ground and higher use rates.
	Beet armyworm Lygus spp. Whitefly * Including all armyworr Do not apply more than Do not apply at intervals Do not apply within 7 da	0.24 lb Al/A 0.2 lb Al/A or s less than 7	of Imidacloprio f Bifenthrin pe days.	Use higher rates for increased residual control.

CROP	TARGET PESTS	RAT	Ē	REMARKS
		lb Al/A	fl oz/A	1
GRAPES	Cutworm spp. Eastern grape leafhopper Fleabeetle spp. Grape berry moth Grape bud beetle Grape leafroller Grapeleaf skeletonizer Japanese beetles (adult) Mealybug Omnivorous leafroller Orange tortrix Sharpshooter spp. Thrips (adults) Variegated leafhopper Western grape leafhopper	0.05 — 0.10	3.2 - 6.4	Make applications when pests appear. Apply in sufficient volume to ensure sufficient coverage of foliage. Ground application: Apply in a minimum of 25 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Aerial application: Apply in a minimum of 10 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. When applying by air, 1 qt of emulsified oil may be substituted for one quart of water in the finished
	Black vine weevil Glassywinged sharpshooter Two spotted spider mite Do not apply more tha Do not apply more tha Do not apply at interva Do not apply within 30	n 0.1lb Al/A of Bife ils less than 14 da	enthrin per se	

CROP	TARGET PESTS	RA	TE	REMARKS
	Ī	lb Al/A	fl oz/A	
PEANUT*	Corn earworm Cutworm spp. Fall armyworm Grasshoppers Green cloverworm Leafhoppers Lesser cornstalk borer Loopers Rednecked peanut worm Southern armyworm Southern corn rootworm Stink bugs Threecornered alfalfa hopper Thrips Velvetbean caterpillar Yellowstriped armyworm	0.033 – 0.10	2.1 – 5.6	*Not for Use in California Make applications when pests appear. Apply in sufficient volume to ensure sufficient coverage of foliage. Ground application: Apply in a minimum of 10 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. When foliage is dense and/or pest populations are high, use 20 gallons/A by ground and higher use rates. Use higher rates for increased residual control.
	Aphids Beet armyworm Spider mites Whiteflies	0.10	5.6	
	*Not for Use in Californ Do not apply more than 0 Do not apply more than 0 Do not apply within 14 da Do not apply at intervals Do not feed green immates	0.13 lb Al/A of 0.5 lb Al/A of E ays of harvest less than 14 c	Bifenthrin per s lays.	eason.
CROP	TARGET PESTS		ATE	REMARKS
		lb Al/A	fl oz/A	
HEAD LETTUCE	Aphid spp Leafhopper spp. Stink bug spp. Thrips	0.033 – 0.10	2.1 – 6.0	Make applications when pests appear. Apply in sufficient volume to ensure sufficient coverage of foliage. Ground application: Apply in a

	Armyworm spp.* Cabbageworm Corn earworm Crickets Cucumber beetle Cutworm spp. Diamondback moth European corn borer Flea beetle Grasshoppers Ground beetles Leafminer Loopers Pepper weevil Tomato hornworm Tomato pinworm Tomato pinworm Saltmarsh caterpillar Beet armyworm Carmine mite Lygus spp. Two-spotted spider mite Whiteflies	0.06 - 0.10	6.0	minimum of 10 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Aerial application: Apply in a minimum of 2 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. When applying by air, 1 qt of emulsified oil may be substituted for one quart of water in the finished spray. When foliage is dense and/or pest populations are high, use 5-10 gallons/A by air or 20 gallons/A by ground and higher use rates. Use higher rates for increased residual control.
	 * Including all armyworr Do not apply more than Do not apply more than Do not apply at intervals Do not apply within 7 day 	0.24 lb Al/A o 0.5 lb Al/A of s less than 7 o	of Imidacloprid f Bifenthrin pe lays.	per season.
CROP	TARGET PESTS	RA	TE	REMARKS
ONOF	TARGET FEGTS	Ib Al/A	fl oz/A	NEWAIN O
HOPS	Root weevil	0.05 – 0.10	3.2 – 6.4	Make applications when pests appear. Apply in sufficient volume to ensure sufficient coverage of foliage. Ground application: Apply in a
	Aphid spp. Armyworm spp.* Cutworm spp. Leafrollers Looper spp.	0.06 - 0.10	3.8 - 6.4	minimum of 100 - 150 gallons per acre in early season; 200 – 250 gallons per acre late season. Aerial application: Apply in a minimum of 10 gallons per acre or

	Two spotted spider mite Beet armyworm	0.10	6.4	sufficient spray volume to obtain full coverage of the foliage or target area For Root weevil control: Make a direct spray to the base of the plant. Spray up to 3 ft on the vine and 1.5 to 2 ft on sides of the plant. Thorough coverage is essential to achieve control. Use higher rates for increased residual control.
	 *All armyworm except E Do not apply more than Do not apply more than Do not apply at interval Do not apply within 28 of 	n 0.3 lb Al/A of n 0.3 lb Al/A o s less than 21	Imidacloprid f Bifenthrin pe days.	
CROP	TARGET PESTS	RA Ib Al/A	TE floz/A	REMARKS
SPINACH	Armyworm spp.* Cabbageworm Colorado potato beetle Corn earworm Cucumber beetle Cutworm spp. Diamondback moth European corn borer Flea beetle Leafhopper spp. Leafminer	0.033 – 0.10	2.1 – 6.0	Make applications when pests appear. Apply in sufficient volume to ensure sufficient coverage of foliage. Ground application: Apply in a minimum of 10 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Aerial application: Apply in a

Use higher rates for increased residual

control.

- Including all armyworms pests except beet armyworm.
 Do not apply more than 0.24 lb Al/A of Imidacloprid per season.
- Do not apply more than 0.43 lb Al/A of Bifenthrin per season.
- Do not apply at intervals less than 7 days.Do not apply within 40 days of harvest.

CROP	TARGET PESTS	RA	TE	REMARKS
		Ib Al/A	fl oz/A	
OKRA	Aphid spp. Armyworm Corn earworm Cucumber beetle Cutworms European corn borer Flea beetles Leafminer Loopers Japanese beetle (adult) Stink bug spp. Thrips Whitefly	0.033 – 0.10	2.1 6.0	Make applications when pests appear Apply in sufficient volume to ensure sufficient coverage of foliage. Ground application: Apply in a minimum of 10 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Aerial application: Apply in a minimum of 2 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. When foliage is dense and/or pest
	Broad Mite Carmine Mite Lygus spp. Two Spotted Spider Mite Do not apply more than Do not apply more than Do not apply at interval Do not apply within 7 de	n 0.20 lb Al/A s less than 7 c	of Bifenthrin _l lays.	•

CROP	TARGET PESTS	RA	√TE-	REMARKS
		lb Al/A	fl oz/A	
PEARS	Aphid spp. Codling moth Cutworm spp. Green fruitworm Leafhopper spp. Leafminer Leafroller Lygus spp. Plum curculio	0.04 - 0.2	2.6 – 12.8	Make applications when pests appear. Apply in sufficient volume to ensure sufficient coverage of foliage. Ground application: Apply as a dilute spray in a minimum of 200 gallons per acre (Dilute) and 50 gallons per acre (concentrate) or sufficient spray volume
	Stink bug spp. Twospotted Spider Mite Yellow Mite	0.09 - 0.2	3.8 – 12.8	to obtain full coverage of the foliage or target area.
	r enow write			Aerial application: Apply in a minimum of 10 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area.
	European Red Mite	0.12 - 0.2	5.12-12.8	When foliage is dense and/or pest populations are high, use 5-10 gallons/A by air 20 gallons/A by ground and higher use rates.
	Apple maggot	0.2	12.8	Use higher rates for increased residual control.
	Do not apply more thanDo not apply at intervalDo not apply within 14 or	n 0.5 lb AI/A of s less than 30 days of harves	Bifenthrin pei days. st.	per season (0.45 lb Al/A after petal fall). r season (0.45 lb Al/A after petal fall). eated cover crops for feed.

CROP	TARGET PESTS	R	ATE	REMARKS
		Ib Al/A	fl oz/A	
POTATO (Foliar uses)	Banded cucumber beetle	0.033 - 0.10	2.1 – 6.0	Make applications when pests appear.
,	Black flea beetle Cucumber beetle			Apply in sufficient volume to ensure sufficient coverage of foliage.
	European corn borer Grasshopper spp. Looper spp. Flea beetle spp. June beetle Sugarcane beetle Sweetpotato flea beetle Sweetpotato weevil Tuberworm Whitefringed beetle			Ground application: Apply in a minimum of 5 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Aerial application: Apply in a minimum of 1 gallon per acre or sufficient spray volume to obtain full coverage of the foliage or target area. When applying by air, 1 qt of emulsified oil may be substituted for 1 qt of water in the finished spray. When foliage is dense and/or pest populations are high, use 5-10 gallons/A by air or 20 gallons/A by ground and higher use rates. Use higher rates for increased residual
				control.
	Aphid Colorado Potato beetle Leafhopper Potato psyllid Whitefly	0.10	6.0	
	 Do not apply more that Do not apply more that Two applications are processed followed by a foliar aptenuation of the processed processed for the processed for th	n 0.2 lb Al/A o permitted per s plication later i als less than 7	f Bifenthrin peeason. It is pen the same godays.	er season. Dermitted to make one at-plant application
CROP	TARGET PESTS	RA Ib Al/A	TE fl oz/A	REMARKS
POTATO (At-	Aphid spp.	0.30	19.2	At-plant Application/In-furrow
plant)	Colorado potato beetle Flea beetle spp. (adult, larvae) Japanese beetle (larvae) Leafhopper spp. Potato psyllid	0.00	10.2	applications: Apply as an in-furrow spray onto the seed pieces or seed potatoes.
	Rootworm spp. White grub Wireworm			MANA 11201 EDA Reg. No. 66222 ELIT

- Do not apply within 21 days of harvest.
- Do not apply more than 0.2 lb Al/A of Imidacloprid per season.
- Do not apply more than 0.2 lb Al/A of Bifenthrin per season.
- Do not apply at intervals less than 7 days.
- A maximum of one at-plant application is permitted/season.

A maximum of one at-plant application is permitted/season.							
CROP	TARGET PESTS	R.A	\TE	REMARKS			
		lb Al/A	fl oz/A				
TUBEROUS AND CORM VEGETABLES: Arracacha; arrowroot; artichoke, Chinese; artichoke, Jerusalem; canna, ediable; cassava, bitter and sweet; chayote (root); chufa; dasheen (taro); Ginger; Leren; Tanier; Turmeric; Bean, Yam, True yam.	 Do not apply more than Do not apply more than Do not apply at intervals Do not apply within 21 or Do not make more than 	0.10 0.10 0.10 0.11 0.10 0.10 0.10 0.10 0.10 0.10 0.10 0.10 0.10 0.10 0.10 0.10 0.10	of Imidacloprif Bifenthrin persper season days.	Make applications when pests appear. Apply in sufficient volume to ensure sufficient coverage of foliage. Ground application: Apply in a minimum of 10 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Aerial application: Apply in a minimum of 2 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. When applying by air, 1 qt of emulsified oil may be substituted for 1 qt of water in the finished spray. When foliage is dense and/or pest populations are high, use 5-10 gallons/A by air or 20 gallons/A by ground and higher use rates. Use higher rates for increased residual control. d per season (0.45 lb Al/A after petal fall). er season (0.45 lb Al/A after petal fall).			

CROP	TARGET PESTS	RATI	Ε	REMARKS
		lb Al/A	fl oz/A	
TREE NUTS	Aphids (except black pecan aphid) Codling moth Filbert worm Hickory shuckworm Leaffooted bug Navel orangeworm Oblique banded leafroller Leafhoppers/Sharpshooters Peach twig borer Pecan leaf casebearer Pecan nut casebearer Phylloxera spp. (leaf infestations) Plantbug spp. Spittlebugs	1b Al/A 0.05 - 0.20	3.2 – 11.2	Make applications when pests appear. Apply in sufficient volume to ensure sufficient coverage of foliage. Ground application: Apply by ground as a dilute (minimum of 200 gallons of finished spray per acre) or concentrate (50 gallons of finished spray per acre) spray in sufficient water to provide through coverage. Aerial application: Apply in a
	Stink bug spp. Black pecan aphid European mite Mealybugs San Jose scale Spider mite	0.08 - 0.20	5.1 – 11.2	minimum of 10 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Use higher rates for increased residual control.
	Fire ants Walnut husk fly	0.1 – 0.20	3.2 -11.2	Applications for control of San Jose scale should be timed according to crawler stage, treating each successive generation.
	 Do not apply more than 0.3 Do not apply more than 0.5 Do not apply at intervals les Do not apply within 7 days Do not apply during bloom foraging. 	Ib AI/A of Bifenthes than 15 days. of harvest. (Pecal	nrin per seasc n PHI – 21 da	on. ays)

CROP	TARGET PESTS	RA	TE	REMARKS	
		lb Al/A	fl oz/A		
LEGUME VEGETABLES DRIED BEANS AND PEAS Including: Dried cultivars of bean (Lupinus spp.) (Phaseolus spp.); and any one (includes grAl/An lupin, sweet lupin, dried cultivar of pea (Pisum white lupin, and white sweet lupin); (Phaseolus spp.) (includes field bean, kidney bean, lima bean(dry), navy bean, pinto bean, tepary bean; bean (Vigna spp.) (includes adzuki bean, blackeyed pea, catjang, cowpea, Crowder pea, moth bean, mung bean, rice bean, southern pea, urd	Alfalfa caterpillar Aphid spp. Armyworm spp.* Bean leaf beetle Cloverworm Corn earworm Corn rootworm (adult) Cucumber beetle Cutworm spp. European corn borer Flee beetle spp. Grasshopper Japanese beetle (adult) June beetle (adult) Leafhopper spp. Looper spp. Mexican bean beetle Pea leaf weevil Pea weevil Sap beetle (adult) Saltmarsh caterpillar Silverspotted skipper Threecornered alfalfa hopper Thrips (adult) (foliage feeding) Webworm Banks grass mite Reet armyworm	0.033 - 0.10	5.12 - 5.6	Make applications when pests appear. Apply in sufficient volume to ensure sufficient coverage of foliage. Ground application: Apply in a minimum of 10 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Aerial application: Apply in a minimum of 2 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. When applying by air, 1 qt of emulsified oil may be substituted for 1 qt of water in the finished spray. Use higher rates for increased residual control.	
southern pea, urd bean); broad bean (dry); chickpea; guar; lablab bean; lentil; pea (Pisum	Beet armyworm Carmine Mite Lygus spp. Twospotted spider mite Whitefly				
spp.) (includes field pea); pigeon pea.	*All armyworm except Beet Armyworm Do not apply more than 0.13 lb Al/A of Imidacloprid per season. Do not apply more than 0.2 lb Al/A for peas and 0.3 lb Al/A for beans of Bifenthrin per season. Do not apply at intervals less than 7 days. Do not apply within 14 days of harvest.				

CROP	TARGET PESTS	RATE		REMARKS
		Ib Al/A	fl oz/A	1
SUCCULENT BEANS AND PEAS: Crops in the Succulent Pea and Bean group, Pea (Pisum spp.): Dwarf pea, Edible-pod pea, English pea, Garden pea, Green pea, Snow pea, Sugar snap pea, Pigeon pea; Bean (Phaseolus spp.): Broadbean (succulent), Lima bean (green), Runner bean, Snap bean, Wax bean; Bean (Vigna spp.): Asparagus bean, Blackeyed pea, Chinese longbean, Cowpea, Moth bean, Southern pea, Yardlong bean., Jackbean, Soybean (immature seed), Sword bean	Alfalfa caterpillar Bean leaf beetle Cloverworm Corn earworm Corn rootworm (adult) Cucumber beetle Cutworm spp. European corn borer Fall armyworm Flea beetle Japanese beetle (adult) Looper spp. Pea leaf weevil Pea weevil Sap beetle (adult) Southern armyworm Webworm Yellowstriped armyworm Banks grass mite Beet armyworm Carmine Mite Lygus spp. Twospotted spider mite Whitefly • Do not apply more than • Do not apply at intervale • Do not apply within 3 day	0.10 0.10 0.08 - 0.10 0.13 lb Al/A of 0.2 lb Al/A of s less than 7 of	2.1 – 5.6 5.12 – 5.6 f Imidaclopric Bifenthrin pelays.	'

CROP	TARGET PESTS	∤ RA	TE	REMARKS
		lb Al/A	fl oz/A	
SOYBEANS	Alfalfa caterpillar Aphids Aster leafhopper Bean leaf beetle Beet armyworm* Cloverworm Corn earworm Corn rootworm adult Cucumber beetles Cutworms European corn borer Fall armyworm Flea beetle Grasshoppers Imported cabbageworm Japanese beetle adult Leafhoppers Leafminer Loopers Mexican bean beetle (adult) Pea leaf weevil Pea weevil Plant bug Saltmarsh caterpillar Sap beetle Southern armyworm Stink bugs Tarnished plant bug Thrips Tobacco budworm* Twospotted spider mite Webworms Western bean cutworm Yellowstriped armyworm Lygus spp. Twospotted spider mite Whitefly			Make applications when pests appear Apply in sufficient volume to ensure sufficient coverage of foliage. Ground application: Apply in a minimum of 10 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Aerial application: Apply in a minimum of 2 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Use higher rates for increased residua control.

- Do not apply more than 0.14 lb Al/A of Imidacloprid per season.
- Do not apply more than 0.3 lb Al/A of Bifenthrin per season.
- Do not apply at intervals less than 30 days.
- Do not apply within 18 days of harvest.
- *Pyrethroid resistance is common for beet armyworm and tobacco budworm. Consult your local extension specialist, certified crop advisor, and/or manufacturer for insecticide resistance management and/or IPM guidance for the specific site and resistant pest problems.

CROP	TARGET PESTS	RATE		REMARKS		
		Ib Al/A	fl oz/A			
TOBACCO	Aphid Armyworm spp. Chinch bugs Cutworm spp. Flea beetle (Adults) Grasshoppers Japanese beetles Stalkborers Stink bug Thrips Beet armyworm Lygus spp. Spider mites Whitefly	0.04 - 0.10	6.4	Make applications when pests appear. Apply in sufficient volume to ensure sufficient coverage of foliage. Ground application: Apply in a minimum of 10 gallons per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Aerial application: Apply in a minimum of 5 gallon per acre or sufficient spray volume to obtain full coverage of the foliage or target area. When applying by air, 1 qt of emulsified oil may be substituted for 1 qt of water in the finished spray. Use higher rates for increased residual control.		
	 * Including all armyworm pests except beet armyworm. Do not apply more than 0.28 lb Al/A of Imidacloprid per season. Do not apply more than 0.3 lb Al/A of Bifenthrin per season. Do not apply at intervals less than 7 days. Do not apply within 14 days of harvest. Do not apply more than 2 applications per season. 					

CROP	TARGET PESTS	RATE		REMARKS
		lb Al/A	fl oz/A	
TOMATO	Aphid app. Armyworm spp. Bean leaf beetle Cabbageworm Cloverworm Corn earworm Corn rootworm Cucumber beetle Cutworms Diamondback moth European corn borer Flea beetle Flea hopper Grasshopper Japanese beetle (adult) Leaf hopper Loopers Lygus spp. Melonworm Pea leaf weevil Pea weevil Pickleworm Rindworm Saltmarsh caterpillar Sap beetle Seedpod weevil Squash bug Stink bug spp. Thrips Twospotted spider mite Colorado potato beetle Pepper weevil	0.033 - 0.08	2.1- 5.2 5.12 - 6.4	per season as a foliar application.

STORAGE AND DISPOSAL

PROHIBITIONS:

Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited. Do not reuse empty container.

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PESTICIDE STORAGE:

DO NOT ALLOW PRODUCT TO FREEZE. Do not store below 40° F. If crystals are observed, warm material to above 60° F by placing container in warm location. Shake or roll container periodically to redissolve solids. Keep out of reach of children and animals. Store in original containers only. Store in a cool, dry place and avoid excess heat. Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal.

PESTICIDE DISPOSAL:

Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative of the nearest EPA Regional Office for guidance.

CONTAINER HANDLING:

Nonrefillable Container (five gallons or less): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container 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. If recycling is not available, puncture or dispose of in a sanitary landfill or incineration or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Nonrefillable Container (greater than five gallons): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container 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. If recycling is not available, puncture or dispose of in a sanitary landfill or incineration or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

LIMITATION OF WARRANTY AND LIABILITY

Read the entire directions for use, conditions of warranties and limitations of liability before using this product. If terms are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following **CONDITIONS, DISCLAIMER OF WARRANTIES** and **LIMITATIONS OF LIABILITY.**

CONDITIONS:

The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Makhteshim Agan of North America, Inc. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES:

To the extent consistent with applicable law, Makhteshim Agan of North America, Inc. makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond the statements made on this label. No agent of Makhteshim Agan of North America, Inc. is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. To the extent consistent with applicable law, Makhteshim Agan of North America, Inc. disclaims any liability whatsoever for special, incidental or consequential damages resulting from the use or handling of this product.

LIMITATIONS OF LIABILITY:

To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid or at Makhteshim Agan of North America, Inc.'s election, the replacement of product.

MANA Inc. of NA Company

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