GROUP 3 INSECTICIDE

MATADOR® 120EC

Emulsifiable Concentrate Insecticide

AGRICULTURAL

For the Control or Suppression of Labelled Insects on Labelled Crops.

ACTIVE INGREDIENT:
Lambda-cyhalothrin ..... 120 g/L

READ THE LABEL AND THE PAMPHLET BEFORE USING
KEEP OUT OF REACH OF CHILDREN

DANGER  **POISON**

EYE IRRITANT AND SKIN IRRITANT
POTENTIAL SKIN SENSITIZER

REGISTRATION NO: **24984**
PEST CONTROL PRODUCTS ACT

NET CONTENTS: **200 mL to 3.78 L**

Syngenta Canada Inc.
140 Research Lane, Research Park
Guelph, Ontario N1G 4Z3
Telephone: 1-877-964-3682

Label

NOTICE TO USER

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label. The user assumes the risk to persons or property that arises from any such use of this product.

FIRST AID

IF POISONING IS SUSPECTED, IMMEDIATELY contact a doctor or a poison control centre. Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

If swallowed, call a poison control centre or doctor **IMMEDIATELY** for treatment advice. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give **any** liquid to the person. 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 centre or doctor for treatment advice.

If in eyes, hold eye open and rinse slowly and gently with water for 15–20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre 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 by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

TOXICOLOGICAL INFORMATION

This product contains more than 80 percent petroleum distillate. Vomiting may cause aspiration pneumonia. If swallowed, perform gastric lavage, taking care to prevent aspiration of gastric contents; treat symptomatically. This product has potential for skin and eye irritation; treat symptomatically. In case of exposure to skin of face or other sensitive areas, some individuals may feel a tingling or numbness. This is a transitory effect and does not cause harm to skin.

PRECAUTIONS

1. KEEP OUT OF REACH OF CHILDREN AND ANIMALS. Keep unused product in original container tightly closed, locked up and away from food.

2. Fatal/poisonous if swallowed. May be fatal if inhaled. DO NOT breathe sprays or vapours. May be harmful if absorbed through skin. MATADOR® 120EC is corrosive to eyes and skin. Skin sensitizer. Do not get in eyes or on skin. If hands are contaminated, wash with soap and water before touching other areas of skin. Wear a long-sleeved shirt, long pants, chemical-resistant gloves and chemical-resistant boots during mixing, loading, clean-up and repair. In addition, during mixing, loading, clean-up and repair activities, workers must also wear safety goggles and a face shield, and either a respirator with a NIOSH approved organic-vapour-

removing cartridge with a prefilter approved for pesticides OR a NIOSH approved canister for pesticides. Wear a long-sleeved shirt, long pants, chemical-resistant gloves and chemical-resistant boots during application. In addition, wear chemical-resistant headgear during open cab airblast application. Chemical-resistant headgear includes Sou'Wester hat, chemical-resistant rain hat or large brimmed waterproof hat and hood with sufficient neck protection. Gloves are not required during application within a closed cab. In addition, during mechanically-pressurized handgun application, wear either a respirator with a NIOSH approved organic-vapour-removing cartridge with a prefilter approved for pesticides OR a NIOSH approved canister for pesticides.When using open cab airblast or hand held equipment, applicators must also wear chemical resistant gloves. Avoid touching face with contaminated gloves or clothing. Wash gloves before removal. Wash protective equipment with soap and water after each use.

3. DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours. Workers shall be given oral warning of the re-entry interval. See Directions for use for additional REI's for specific crops.

4. MATADOR 120EC may be applied aerially only to those crops for which this use is specified on this label.

5. Apply only when the potential for drift to areas of human habitation or areas of human activity such as houses, cottages, schools and recreational areas is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings.

If this pest control product is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in the U.S., visit CropLife Canada's website at **www.croplife.ca.**

ENVIRONMENTAL HAZARDS

This product contains an active ingredient and aromatic petroleum distillates that are TOXIC to aquatic organisms. Observe buffer zones specified under DIRECTIONS FOR USE.

This product is toxic to bees when exposed to direct treatment, drift, or residues on flowering crops or weeds. **DO NOT** apply this product to flowering crops or weeds if bees are visiting the treatment area. Minimize spray drift to reduce harmful effects on bees in habitats close to the application site. Spray deposits should be dry before bees commence foraging in treated crop.

To reduce runoff from treated areas into aquatic habitats avoid application to areas with a moderate to steep slope, compacted soil, or clay.

Avoid application when heavy rain is forecast.

Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip between the treated area and the edge of the water body.

STORAGE

Store in a cool, well ventilated area away from foodstuffs and out of the reach of children and animals. Store above 0°C. Storage below 0°C will not impair the effectiveness of MATADOR 120EC, however, following such storage, agitate well before use.

SPILL CLEAN-UP

Wear appropriate protective equipment (gloves, glasses, apron) when attempting to clean up the spill. If the container is leaking, secure leak and place the container into a drum or heavy gauge plastic bag. Contact Syngenta Canada Inc. (See EMERGENCY NUMBER below) for further information.

For spills and leaks - contain the liquid with dikes of inert material (soil, clay, kitty litter, etc.). Absorb the spill onto inert material and shovel into a sealable waste container.
On hard surfaces - sprinkle spill area with detergent and scrub in a small quantity of water with a coarse broom. Let stand 10 minutes then absorb onto an inert material and shovel into the waste container. Dispose of all waste, including broom, in accordance with provincial requirements.

On soil - remove the top 15 cm of soil in the spill area and replace with fresh soil. Dispose of all waste in accordance with provincial requirements.

For more information on the disposal of waste and the clean-up of spills, contact the provincial regulatory agency and the manufacturer.

DECONTAMINATION AND DISPOSAL

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

CONTAINER DISPOSAL:

Recyclable Container:
Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

(1) Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
(2) Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

IN CASE OF EMERGENCY INVOLVING A MAJOR SPILL, FIRE OR POISONING, CALL 1-800-327-8633 (FASTMED)

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Avoid application when heavy rain is forecast.

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STORAGE

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IN CASE OF EMERGENCY INVOLVING A MAJOR SPILL, FIRE OR POISONING, CALL 1-800-327-8633 (FASTMED)

PRODUCT INFORMATION

MATADOR 120EC is a photostable, synthetic pyrethroid insecticide. It is a fast acting stomach and contact insecticide effective against a broad spectrum of foliar pests. It has no fumigant or systemic activity. Best results will be obtained with MATADOR 120EC when applied against the early development stages of the pest as determined by regular monitoring.

DIRECTIONS FOR USE

Control of some insect species with pyrethroid insecticides decreases as temperature rises. For best results, apply MATADOR 120EC during the early morning before temperatures rise, and during the evening, past the heat of the day. Use sufficient water for thorough coverage, applied by ground sprayer.

As this product is not registered for the control of pests in aquatic systems, DO NOT use to control aquatic pests.

Field sprayer application: DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty. DO NOT apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE) medium classification. Boom height must be 60 cm or less above the crop or ground.

Airblast application: DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty. DO NOT direct spray above plants to be treated. Turn off outward pointing nozzles at row ends and outer rows. DO NOT apply when wind speed is greater than 16 km/h at the application site as measured outside of the treatment area on the upwind side.

Optimum application timing for the control of specific pest species is best determined by monitoring pest development and populations. In general, MATADOR 120EC is most effective against early developmental stages of surface feeding pests and against adults of pests which deposit eggs within plant parts. Follow recommendations provided by local pest monitoring services regarding appropriate application timing for your area. Follow provincial spray calendars for optimum timing of programmed spray applications.

Repeated applications are not advised for orchards where integrated pest management programs are being followed because severe reductions in beneficial arthropods may result. If pest monitoring services recommend repeated insecticide applications, consider alternating MATADOR 120EC applications with insecticides from different classes to prevent the development of resistant pest populations. Localized populations of some insect pests (e.g., Colorado Potato Beetle, Spotted Tentiform Leafminer) have developed resistance to other synthetic pyrethroid insecticides and can be expected to quickly develop resistance to MATADOR 120EC. Consult regional extension specialists regarding the susceptibility of local populations. Follow Integrated Pest Management (IPM) techniques to minimize the need for insecticide applications and ensure that needed applications are timed for optimum effectiveness.

AERIAL APPLICATION

Generic Aerial Application Label Instructions - Directions for Use

Apply only by fixed-wing or rotary aircraft equipment which has been functionally and operationally

calibrated for the atmospheric conditions of the area and the application rates and conditions of this label.

Label rates, conditions and precautions are product specific. Read and understand the entire label before opening this product. Apply only at the rate recommended for aerial application on this label. Where no rate for aerial application appears for the specific use, this product cannot be applied by any type of aerial equipment.

Ensure uniform application. To avoid streaked, uneven or overlapped application, use appropriate marking devices.

Use Precautions

Apply only when meteorological conditions at the treatment site allow for complete and even crop coverage. Apply only under conditions of good practice specific to aerial application as outlined in the *National Aerial Pesticide Application Manual,* developed by the Federal/Provincial/Territorial Committee on Pest Management and Pesticides.

Do not apply to any body of water. Avoid drifting of spray onto any body of water or other non-target areas. Specified buffer zones should be observed.

Coarse sprays are less likely to drift, therefore, avoid combinations of pressure and nozzle type that will result in fine particles (mist). Do not apply during periods of dead calm or when wind velocity and direction pose a risk of spray drift. Do not spray when the wind is blowing towards a nearby sensitive crop, garden, terrestrial habitat (such as shelter-belt) or aquatic habitat.

Operator Precautions

Do not allow the pilot to mix chemicals to be loaded onto the aircraft. Loading of premixed chemicals with a closed system is permitted.

It is desirable that the pilot have communication capabilities at each treatment site at the time of application.

The field crew and the mixer/loaders must wear chemical resistant gloves, coveralls and goggles or face shield during mixing/loading, clean-up and repair. Follow the more stringent label precautions in cases where the operator precautions exceed the generic label recommendations on the existing ground boom label.

All personnel on the job site must wash hands and face thoroughly before eating and drinking. Protective clothing, aircraft cockpit and vehicle cabs must be decontaminated regularly.

Product Specific Precautions

Read and understand the entire label before using this product.

For aerial applications, ensure the aircraft is equipped and calibrated to deliver a uniform spray coverage with a minimum potential for drift. To ensure uniform application, use an appropriate marking device. Apply in weather conditions that will not promote drift. Suggested conditions for good aerial application are moderate temperatures (less than 25 °C), moderate relative humidity (greater than 40%), and light winds (3 to 9 kph).

Use only medium or coarse nozzles rated as delivering droplets of volume median diameter of 300 microns or greater. Examples: 6506 flat fan, CP 0.125 deflector nozzle with a low shear deflector angle (30 degrees), D12-56 disc-core.

Apply in a spray volume of 10 to 40 litres per hectare. Use water volumes at the higher end of this range to ensure good coverage for optimum insect control and to minimize drift.

Aerial application: **DO NOT** apply during periods of dead calm. Avoid application of this product when winds are gusty. **DO NOT** apply when wind speed is greater than 16 km/h at flying height at the site of application. **DO NOT** apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE) medium classification. To reduce drift caused by turbulent wingtip vortices, the nozzle distribution along the spray boom length **MUST NOT** exceed 65% of the wing- or rotorspan.

BUFFER ZONES

Use of the following spray methods or equipment **DO NOT** require a buffer zone: hand-held or backpack sprayer and spot treatment. The buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands) and estuarine/marine habitats.

Method of application	**Crop**		**Buffer Zones (metres) Required for the Protection of:**			
			Freshwater Habitats of Depths:		**Estuarine/Marine Habitats of Depths:**	
			Less than 1 m	**Greater than 1 m**	**Less than 1 m**	**Greater than 1 m**
Field sprayer	All field crops		15	15	15	15
	Seed orchards		20	15	120	45
Airblast	All orchard fruit crops, poplar and willow, Saskatoon berries, tree nuts	Early or late growth stage	80	80	80	80
	Seed orchards	Early and late stage growth	80	80	80	80
Aerial	Potatoes, oilseed crops, cereal crops, alfalfa, unimproved pasture, summerfallow, poplar and willow	Fixed or rotary wing	100	20	100	100
	Corn	Fixed wing	225	20	800	800
		Rotary wing	250	15	800	500
	Legume vegetables	Fixed wing	600	25	800	800
		Rotary wing	300	20	800	525

For tank-mixes, consult the labels of the tank-mix partners and observe the largest (most

restrictive) buffer zone of the products involved in the tank-mixture and apply using the coarsest spray (ASAE) category indicated on the labels for those tank-mix partners.

The buffer zones for this product can be modified based on weather conditions and spray equipment configuration by accessing the Buffer Zone Calculator on the Pest Management Regulatory Agency web site. [Buffer zones of 120 m (field sprayer) or 800 m (aerial sprayer) CANNOT be modified.]

Clean and decontaminate protective clothing and application equipment regularly.

DIRECTIONS FOR USE

FRUIT CROPS	
CROPS	**APPLES**
PEST	Apple Aphid, Apple Brown Bug, Apple Leaf Midge, Codling Moth, Fruit Tree Leafroller, Oblique Banded Leafroller, Pale Apple Leafroller, Spotted Tentiform Leafminer, White Apple Leafhopper, Winter Moth
RATE (mL/ha)	83
APPLICATION METHOD	Ground application
APPLICATION TIMING	Timing of applications should be based on the presence of vulnerable pest developmental stages and significant populations as determined by local monitoring.
NOTES	Allow a 7 day interval between treatments. **DO NOT** apply within 7 days of harvest. **DO NOT** use more than 3 applications per year. **DO NOT** APPLY BY AIR.
CROPS	**APPLES**
PEST	Plum Curculio, Tarnished Plant Bug, Woolly Apple Aphid
RATE (mL/ha)	104
APPLICATION METHOD	Ground application
APPLICATION TIMING	Timing of applications should be based on the presence of vulnerable pest developmental stages and significant populations as determined by local monitoring.
NOTES	Allow a 7 day interval between treatments. **DO NOT** apply within 7 days of harvest. **DO NOT** use more than 3 applications per year. **DO NOT** APPLY BY AIR.

FRUIT CROPS	
CROPS	**CHERRIES**
PEST	Plum Curculio, Cherry Maggot
RATE (mL/ha)	104
APPLICATION METHOD	Ground application
APPLICATION TIMING	**Plum Curculio:** Shuck stage, when the fruit is the size of a pea, and 10 to 12 days later if oviposition scars are detected. **Cherry Maggot:** When the fruit is turning from green to pink. A second application may be required 10 days later.
NOTES	Allow a 7 day interval between treatments. **DO NOT** apply within 7 days of harvest. **DO NOT** use more than 3 applications per year. **DO NOT** APPLY BY AIR.
CROPS	**PEACHES AND NECTARINES**
PEST	Green Peach Aphid, Oriental Fruit Moth, Tarnished Plant Bug
RATE (mL/ha)	104
APPLICATION METHOD	Ground application
APPLICATION TIMING	Timing of applications should be based on the presence of vulnerable pest developmental stages and significant populations as determined by local monitoring.
NOTES	Allow a 7 day interval between treatments. **DO NOT** apply within 7 days of harvest. **DO NOT** use more than 3 applications per year. **DO NOT** APPLY BY AIR.
CROPS	**PEARS**
PEST	Pear Psylla (Nymphs and Adults), Codling Moth
RATE (mL/ha)	83
APPLICATION METHOD	Ground application
APPLICATION TIMING	Timing of applications should be based on the presence of vulnerable pest developmental stages and significant populations as determined by local monitoring.
NOTES	**DO NOT** apply within 7 days of harvest. **DO NOT** use more than 1 application per year. **DO NOT** APPLY BY AIR.

FRUIT CROPS	
CROPS	**PLUMS**
PEST	Plum Curculio, Mealy Plum Aphid
RATE (mL/ha)	104
APPLICATION METHOD	Ground application
APPLICATION TIMING	**Plum Curculio:** Shuck stage, when the fruit is the size of a pea, and 10 to 12 days later if oviposition scars are detected. **Mealy Plum aphid**: Control should be based on local monitoring for significant populations.
NOTES	Allow a 7 day interval between treatments. **DO NOT** apply within 7 days of harvest. **DO NOT** use more than 3 applications per year. **DO NOT** APPLY BY AIR.
CROPS	**STRAWBERRIES**
PEST	Bud (Clipper) Weevil, Meadow Spittle Bug and Tarnished Plant Bug
RATE (mL/ha)	104
APPLICATION METHOD	Ground application
APPLICATION TIMING	**Bud Weevil:** When buds are visible in crown and again when first buds show white. **Spittle Bug:** When first noticed. **Plant Bug:** 7 to 10 days after first bloom and repeat 7 to 10 days later.
NOTES	Allow a 7 day interval between treatments. **DO NOT** apply within 7 days of harvest. **DO NOT** use more than 3 applications per year. **DO NOT** APPLY BY AIR.
VEGETABLE CROPS	
CROPS	**COLE CROPS** (Broccoli, Brussels Sprouts, Cabbage, Cauliflower)
PEST	Crucifer Flea Beetle, Diamondback Moth Larvae, Imported Cabbageworm
RATE (mL/ha)	42
APPLICATION METHOD	Ground application
APPLICATION TIMING	Timing of applications should be based on the presence of vulnerable pest developmental stages and significant populations as determined by local monitoring.
NOTES	Allow a 7 day interval between treatments. **DO NOT** apply within 1 day of harvesting cabbage and 3 days of harvesting broccoli, Brussels sprouts or cauliflower. **DO NOT** use more than 3 applications per year. **DO NOT** APPLY BY AIR.

VEGETABLE CROPS	
CROPS	**COLE CROPS** (Broccoli, Brussels Sprouts, Cabbage, Cauliflower)
PEST	Cabbage Looper
RATE (mL/ha)	83
APPLICATION METHOD	Ground application
APPLICATION TIMING	Timing of applications should be based on the presence of vulnerable pest developmental stages and significant populations as determined by local monitoring.
NOTES	Allow a 7 day interval between treatments. **DO NOT** apply within 1 day of harvesting cabbage and 3 days of harvesting broccoli, Brussels sprouts or cauliflower. **DO NOT** use more than 3 applications per year. **DO NOT** APPLY BY AIR.
CROPS	**POTATOES**
PEST	Potato Flea Beetle, Potato Leafhopper, Tarnished Plant Bug, and Tuber Flea Beetle
RATE (mL/ha)	83
APPLICATION METHOD	Ground or aerial application
APPLICATION TIMING	When insects or damage appear. Timing of applications should be based on the presence of vulnerable pest developmental stages and significant populations as determined by local monitoring.
NOTES	Allow a 7 day interval between treatments. Use sufficient water for thorough coverage. The maximum rate per season must not exceed 250 mL of product per hectare. **DO NOT** apply within 7 days of harvest. **DO NOT** use more than 3 applications per year if using the 83 mL per hectare rate. **Aerial Application: DO NOT** make more than 2 applications of 83 mL/ha of the allowed seasonal total by air. Use a minimum of 100 L water for ground application.

VEGETABLE CROPS	
CROPS	**POTATOES**
PEST	European Corn Borer
RATE (mL/ha)	83
APPLICATION METHOD	Ground or aerial application
APPLICATION TIMING	Spray at egg hatch and no later than when the first feeding damage is seen on foliage. Reapply at 4 to 7 day intervals if monitoring indicates that it is necessary. Consult provincial guidelines and local extension experts for monitoring protocols and thresholds for treatment.
NOTES	The maximum rate per season must not exceed 250 mL of product per hectare. Allow a 4 to 7 day interval between treatments. Use a minimum of 100 L water for ground application. Use sufficient water for thorough coverage. **DO NOT** apply within 7 days of harvest. **DO NOT** use more than 3 applications per year if using the 83 mL per hectare rate. **Aerial Application: DO NOT** make more than 2 applications of 83 mL/ha of the allowed seasonal total by air.
CROPS	**POTATOES**
PEST	Colorado Potato Beetle: susceptibility to pyrethroid insecticides should be confirmed using an appropriate assay.
RATE (mL/ha)	83 - 125 for ground application 83 for aerial application
APPLICATION METHOD	Ground or aerial application (see rates above)
APPLICATION TIMING	Use 125 mL per hectare rate when Colorado Potato Beetle larvae are beyond the second instar stage of development or when populations are high.
NOTES	The maximum rate per season must not exceed 250 mL of product per hectare. Allow a 7 day interval between treatments. **DO NOT** apply within 7 days of harvest. **DO NOT** use more than 3 applications per year if using the 83 mL per hectare rate. **DO NOT** use more than 2 applications per year if using the 125 mL per hectare rate. **Aerial Application: DO NOT** make more than 2 applications of 83 mL/ha of the allowed seasonal total by air. Use a minimum of 100 L water for ground application. Use sufficient water for thorough coverage.

VEGETABLE CROPS	
CROPS	**TOMATOES**
PEST	Potato Flea Beetle, Potato Leafhopper, Tarnished Plant Bug, Cutworms
RATE (mL/ha)	83
APPLICATION METHOD	Ground application
APPLICATION TIMING	When insects or damage appear. Timing of applications should be based on the presence of vulnerable pest developmental stages and significant populations as determined by local monitoring. **Cutworms:** Applications should be made under moist conditions in the evening or night when cutworm activity is highest. Do not disturb the soil surface for 5 days after treatment.
NOTES	Allow a 7 day interval between treatments. The maximum rate per season must not exceed 250 mL of product per hectare. **DO NOT** apply within 7 days of harvest. **DO NOT** use more than 3 applications per year if using the 83 mL per hectare rate. **DO NOT** use more than 2 applications per year if using the 125 mL per hectare rate. **DO NOT** APPLY BY AIR.
CROPS	**TOMATOES**
PEST	Colorado Potato Beetle: susceptibility to pyrethroid insecticides should be confirmed using an appropriate assay.
RATE (mL/ha)	83 - 125
APPLICATION METHOD	Ground application
APPLICATION TIMING	When insects or damage appear. Timing of applications should be based on the presence of vulnerable pest developmental stages and significant populations as determined by local monitoring. **Colorado Potato Beetle:** Use 125 mL per hectare rate when Colorado Potato Beetle larvae are beyond the second instar stage of development, or when populations are high.
NOTES	Allow a 7 day interval between treatments. The maximum rate per season must not exceed 250 mL of product per hectare. **DO NOT** apply within 7 days of harvest. **DO NOT** use more than 3 applications per year if using the 83 mL per hectare rate. **DO NOT** use more than 2 applications per year if using the 125 mL per hectare rate. **DO NOT** APPLY BY AIR.

TOBACCO	
CROPS	**TOBACCO Seedlings, Greenhouse**
PEST	Cutworm (Darksided and White)
RATE (mL/ha)	2 mL/30 L water
APPLICATION METHOD	Ground application
APPLICATION TIMING	Cutworm activity is greatest during the late evening and night. Application of MATADOR 120EC should be timed as close as possible to insect feeding activity.
NOTES	Mix 2 mL of MATADOR 120EC in 30 L of water and apply to 200 m^2 of plant bed. **DO NOT** APPLY BY AIR.
CROPS	**FIELD TOBACCO**
PEST	Cutworm (Darksided and White)
RATE (mL/ha)	2 mL/30 L water
APPLICATION METHOD	Ground application
APPLICATION TIMING	Cutworm activity is greatest during the late evening and night. Application of MATADOR 120EC should be timed as close as possible to insect feeding activity.
NOTES	Apply the recommended rate of MATADOR 120EC in 225 to 450 L of water per hectare using spray pressure of 175 to 350 kPa. **DO NOT** APPLY BY AIR.

CROPS	**COVER CROP TREATMENT**
PEST	Cutworm (Darksided and White)
RATE (mL/ha)	42
APPLICATION METHOD	Ground application
APPLICATION TIMING	When crop is 10 to 15 cm high, 4-5 days before ploughdown. Cutworm activity is greatest during the late evening and night. Application of MATADOR 120EC should be timed as close as possible to insect feeding activity.
NOTES	Apply 42 mL of MATADOR 120EC per hectare once to rye or wheat cover. Application should also be made to fence rows and to a 15 m strip into nearby cover crop. **DO NOT** APPLY BY AIR.

CROPS	**SOIL TREATMENT**
PEST	Cutworm (Darksided and White)
RATE (mL/ha)	83
APPLICATION METHOD	Ground application
APPLICATION TIMING	Apply once to the soil 5 days before transplanting. Cutworm activity is greatest during the late evening and night. Application of MATADOR 120EC should be timed as close as possible to insect feeding activity.
NOTES	**DO NOT** incorporate. **DO NOT** disturb the soil surface for at least 5 days following treatment since mixing of MATADOR 120EC with soil will reduce its effectiveness. Application should also be made to fence rows and to a 15 m strip into nearby cover crops. **DO NOT** APPLY BY AIR.
CROPS	**POST PLANTING TREATMENT**
PEST	Cutworm (Darksided and White)
RATE (mL/ha)	83
APPLICATION METHOD	Ground application
APPLICATION TIMING	At transplanting. Cutworm activity is greatest during the late evening and night. Application of MATADOR 120EC should be timed as close as possible to insect feeding activity.
NOTES	Spray in a 25 cm band over the row using 150 to 300 L of water per hectare. Under conditions of severe insect pressure, application should be made to fence rows and to a 15 m wide strip into nearby cover crops. A follow-up treatment may be necessary if there are late developing cutworms. **DO NOT** use more than 1 application per year. **DO NOT** apply within 60 days of harvest. **DO NOT** APPLY BY AIR.

OILSEED CROPS	
CROPS	**CANOLA AND MUSTARD**
PEST	Grasshopper
RATE (mL/ha)	63 - 83 for ground application 83 for aerial application
PEST	Crucifer Flea Beetle Lygus Bug Cabbage Seedpod Weevil (adults) Imported Cabbageworm Diamondback Moth Larvae Cabbage Looper Bertha Armyworm Cutworms *(Refer to User Requested Minor Use Label Expansion (URMULE) section for label directions regarding Swede midge (Contarinia nasturtii) control.)*
RATE (mL/ha)	83
APPLICATION METHOD	Ground or aerial application
APPLICATION TIMING	Apply when the insects are at a vulnerable stage. Consult provincial guidelines and local extension experts for treatment threshold and advice. **Cabbage Seedpod Weevil (adults):** Apply at the bud to early flowering stage of crop development. Timing of applications should also be based on the presence of significant populations of adults, as determined by local monitoring. Application prior to adult migration into the field will not be effective. MATADOR 120EC will not control larvae developing within the pod, and must be applied prior to egg laying. **Flea beetle:** To prevent migration of overwintering flea beetle adults throughout the field, ground spray a 15 m strip around the field at the first sign of flea beetle feeding. **Grasshopper:** Apply the low rate when grasshoppers are up to the 3rd nymphal stage (up to 1 cm in length) or when insect numbers are low. Apply the high rate when grasshoppers are larger, up to but not including winged adults (up to 2.5 cm in length) or when insect numbers are high. If insect pressure is high apply as spray to a 15 m strip around the field. Avoid environmentally sensitive areas and unregistered crops. **Cutworms:** Applications should be made in the evening or night when cutworm activity is highest. Application at the time of cutworm emergence will ensure contact of MATADOR 120EC to the pest. Apply in sufficient water to ensure thorough coverage.
NOTES	Allow a 7 day interval between treatments (by ground application). For cabbage seedpod weevil: make only 1 application per season by either ground or aerial application equipment. **DO NOT** apply within 7 days of harvest. **DO NOT** use more than 3 applications per year. **Aerial Application: DO NOT** make more than 1 application of 83 mL/ha of the allowed seasonal total by air. **Water Volume:** Ground Application: Apply in 100 - 200 L of water per hectare. Aerial Application: Apply in 10 - 40 L of water per hectare.

OILSEED CROPS	
CROPS	**FLAX**
PEST	Grasshoppers
RATE (mL/ha)	63 - 83 for ground application 83 for aerial application
PEST	Cutworms
RATE (mL/ha)	83
APPLICATION METHOD	Ground or aerial application (see rates above)
APPLICATION TIMING	Apply when the insects are at a vulnerable stage. Consult provincial guidelines and local extension experts for treatment threshold and advice. **Grasshoppers:** Apply the low rate when grasshoppers are up to the 3rd nymphal stage (up to 1 cm in length) or when insect numbers are low. Apply the high rate when grasshoppers are larger, up to but not including winged adults (up to 2.5 cm in length) or when insect numbers are high. If insect pressure is high apply a spray to a 15 m strip around the field. Avoid environmentally sensitive areas and unregistered crops. **Cutworms:** Applications should be made in the evening or night when cutworm activity is highest. Application at the time of cutworm emergence will ensure contact of MATADOR 120EC to the pest. Apply in sufficient water to ensure thorough coverage.
NOTES	Allow a 7 day interval between treatments. **DO NOT** apply within 7 days of harvest. **DO NOT** use more than 3 applications per year. **Aerial Application: DO NOT** make more than 1 application of 83 mL/ha of the allowed seasonal total by air. **Water Volume:** Ground Application: Apply in 100 - 200 L of water per hectare. Aerial Application: Apply in 10 - 40 L of water per hectare.
CROPS	**SUNFLOWERS**
PEST	Sunflower beetle
RATE (mL/ha)	42 - 63 by ground application 83 by aerial application
APPLICATION METHOD	Ground or aerial application (see rates above)
APPLICATION TIMING	Apply when insects appear. Use the higher rate to control adults.
NOTES	Allow a 7 day interval between treatments. **DO NOT** apply within 7 days of harvest. **DO NOT** use more than 3 applications per year. **Aerial Application: DO NOT** make more than 1 application of 83 mL/ha of the allowed seasonal total by air.

CEREAL CROPS	
CROPS	**WHEAT, BARLEY, OATS**
PEST	Grasshoppers
RATE (mL/ha)	63 - 83 for ground application 83 for aerial application
APPLICATION METHOD	Ground or aerial application (see rates above)
APPLICATION TIMING	Apply the low rate when grasshoppers are up to the 3rd nymphal stage (up to 1 cm in length) or when insect numbers are low. Apply the high rate when grasshoppers are larger, up to but not including winged adults (up to 2.5 cm in length) or when insect numbers are high. If insect pressure is high apply a spray to a 15 m strip around the field. Avoid environmentally sensitive areas and unregistered crops.
NOTES	Allow a 7 day interval between treatments. **DO NOT** apply within 28 days of harvest or 14 days of livestock foraging. **DO NOT** use more than 3 applications per year. **Aerial Application: DO NOT** make more than 2 applications of 83 mL/ha of the allowed seasonal total by air.

Tank-Mix with HORIZON® 240EC Herbicide: MATADOR 120EC can be tank-mixed with HORIZON 240EC Herbicide for one pass grasshopper and weed control in spring and durum wheat, if monitoring of grasshopper populations indicates application is necessary and timing is correct. Consult HORIZON 240EC Herbicide label for rates and weeds controlled.

DO NOT APPLY BY AIR.

Tank-Mix with ACHIEVE® Liquid Herbicide, ACHIEVE 40SC Herbicide, and Liquid ACHIEVE SC Herbicide: MATADOR 120EC can be tank mixed with ACHIEVE Liquid Herbicide, ACHIEVE 40SC Herbicide or Liquid ACHIEVE SC Herbicide for one pass grasshopper and wild oat control in spring wheat and spring barley, if monitoring of grasshopper populations indicates application is necessary and timing is correct. A reduction in control of green foxtail and yellow foxtail may be observed when MATADOR 120EC is tank mixed with ACHIEVE Liquid Herbicide, ACHIEVE 40SC Herbicide or Liquid ACHIEVE SC Herbicide. Consult ACHIEVE Liquid Herbicide, ACHIEVE 40SC Herbicide or Liquid ACHIEVE SC Herbicide labels for use instructions and rates. For ground application only.

DO NOT APPLY BY AIR.

Tank-Mix with QUILT® Fungicide for use on Wheat, Barley, Oats, and Corn (Field, Sweet and Seed)

MATADOR 120EC can be tank-mixed with QUILT Fungicide for labeled foliar disease and insect control on wheat, barley, oats and corn (field, sweet and seed). Refer to the MATADOR 120EC and QUILT Fungicide labels for diseases and insects controlled as well as specific application instructions and precautions. Pests and crops must be at the correct stage as specified on the MATADOR 120EC and QUILT Fungicide labels.

Apply in at least 100 L of water per hectare for ground application and 45 L of water per hectare for aerial application.

CORN: Do not make more than two applications of this tank-mix per season. Allow 14 days between treatments.

Do not apply to field corn and field corn grown for seed after brown silk. Do not apply within 30 days of harvest for forage. Do not apply to sweet corn within 14 days of harvest.

This tank-mix is not registered for use on popcorn.

ALL OTHER CEREAL CROPS: Do not make more than one application of this tank-mix per season.

Do not apply within 45 days of harvest for grain or straw. Do not harvest wheat for forage. Do not graze or feed livestock treated forage or cut green crop for hay or silage.

CROPS	**CORN** (including field, pop and sweet types, and crops grown for seed production)
PEST	Cutworms, Fall Armyworm
RATE (mL/ha)	83
PEST	Armyworm *Pseudaletia unipuncta*
RATE (mL/ha)	83 - 208
APPLICATION METHOD	Ground or aerial application
APPLICATION TIMING	Spray no later than when the first feeding is seen on foliage. Repeat sprays at 4 to 7 day intervals depending on the presence of significant populations as determined by local monitoring. Where there are two generations, late plantings of sweet corn will require sprays from the late whorl stage until close to harvest. This treatment will not prevent internal cob damage if the insect has penetrated the ear. **Cutworms:** (up to the 5-leaf stage). Applications should be made under moist conditions in the evening or night when cutworm activity is highest. Do not disturb the soil surface for 5 days after treatment.
NOTES	Allow a 4 to 7 day interval between treatments. **DO NOT** apply within 1 day of harvest for sweet corn. **DO NOT** apply within 14 days if the crop is being harvested for silage. **DO NOT** use more than 3 applications per year. **Aerial Application: DO NOT** make more than 2 applications of 83 mL/ha of the allowed seasonal total by air.

Tank-Mix with TILT® 250E Fungicide: MATADOR 120EC can be tank-mixed with TILT 250E Fungicide for insect and foliar disease control. Apply MATADOR 120EC at a rate of 83 mL/ha in tank-mix with TILT 250E Fungicide at a rate of 250-500 mL/ha. Refer to both the MATADOR 120EC and TILT 250E Fungicide labels for insects and diseases controlled, specific application instructions and precautions. Insects and crops must be at the correct stage as specified on the MATADOR 120EC as well as TILT 250E Fungicide labels.

This tank-mix can be applied by air and ground. Use 40 L of water per hectare when applying by air.

This tank-mix is not registered for use on popcorn.

Do not harvest treated corn within 14 days of this tank-mix application.

Do not make more than 3 applications on seed corn and 2 applications on field and sweet corn per year.

Compatibility should always be confirmed by premixing small proportional quantities of water, MATADOR 120EC, and the tank-mix partner in advance.

Tank-Mix with QUADRIS® Flowable Fungicide: **Seed Corn, Field Corn and Sweet Corn -** MATADOR 120EC can be tank-mixed with QUADRIS Flowable Fungicide for insect and foliar disease control. Apply MATADOR 120EC at a rate of 83 mL/ha in tank-mix with QUADRIS Flowable Fungicide at a rate of 453 mL/ha. Refer to both the MATADOR 120EC and QUADRIS Flowable Fungicide labels for insects and diseases controlled, specific application instructions and precautions. Insects and crops must be at the correct stage as specified on the MATADOR 120EC as well as QUADRIS Flowable Fungicide labels.

This tank-mix can be applied by air and ground. Use 200 L of water per hectare when applying by ground. Use 45 L of water per hectare when applying by air.

This tank-mix is not registered for use on popcorn.

Do not harvest treated corn within 14 days of this tank-mix application.

Do not make more than 2 applications per year.

Compatibility should always be confirmed by premixing small proportional quantities of water, MATADOR 120EC, and the tank-mix partner in advance.

OTHER USES	
CROPS	**ALFALFA/GRASS MIXTURES, UNIMPROVED PASTURE, SUMMERFALLOW**
PEST	Grasshoppers
RATE (mL/ha)	63 - 83 for ground application 83 for aerial application
APPLICATION METHOD	Ground or aerial application (see rates above)
APPLICATION TIMING	Apply the low rate when grasshoppers are up to the 3rd nymphal stage (up to 1 cm in length) or when insect numbers are low. Apply the high rate when grasshoppers are larger, up to but not including winged adults (up to 2.5 cm in length) or when insect numbers are high. If insect pressure is high apply a spray to a 15 m strip around the field. Avoid environmentally sensitive areas and unregistered crops.
NOTES	Allow a 7 day interval between treatments. Alfalfa seed from treated crops is not to be used for production of 'alfalfa sprouts' for human consumption. **DO NOT** apply within 3 days of livestock foraging. **DO NOT** use more than 3 applications per year. **Aerial Application: DO NOT** make more than 1 application of 83 mL/ha of the allowed seasonal total by air.
CROPS	**ALFALFA**
PEST	Alfalfa Weevil, Lygus Bug, Tarnished Plant Bug, Pea Aphid, Potato Leafhopper
RATE (mL/ha)	83
APPLICATION METHOD	Ground or aerial application
APPLICATION TIMING	Timing of applications should be based on the presence of vulnerable pest developmental stages and significant populations as determined by local monitoring.
NOTES	Allow a 7 day interval between treatments. Alfalfa seed from treated crops is not to be used for production of 'alfalfa sprouts' for human consumption. **DO NOT** apply within 3 days of livestock foraging. **DO NOT** use more than 3 applications per year. **Aerial Application: DO NOT** make more than 1 application of 83 mL/ha of the allowed seasonal total by air.

ALFALFA Rate Conversion Chart:

Rate (mL/ha)	Hectares Treated with 1 L Product
63	15.9
83	12.0

NOTE TO USER: READ THE FOLLOWING BEFORE USING THIS PRODUCT FOR THE INDICATED SPECIAL USE APPLICATIONS:

The DIRECTIONS FOR USE for this product for the use(s) described below were developed by persons other than Syngenta Canada Inc. and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion program. Syngenta Canada Inc. itself makes no representation or warranty with respect to performance (efficacy) or crop tolerance (phytotoxicity) claims for this product when used on the crop(s) listed below.

Accordingly, the Buyer and User assume all risks related to performance and crop tolerance arising, and agree to hold Syngenta Canada Inc. harmless from any claims based on efficacy or phytotoxicity in connection with the use(s) described below.

DIRECTIONS FOR USE

BULB VEGETABLES	
CROPS	**Garlic, great-headed (elephant) garlic, leek, dry bulb onion, green onion, Welch onion and Shallot**
PEST	Onion Thrips, Leek Moth (*Acrolepiopsis assectella*)
RATE (mL/ha)	188 Apply in sufficient water to ensure thorough coverage. A water volume of 500 L/ha of water is recommended
APPLICATION METHOD	Apply by foliar broadcast spray Ground application only
APPLICATION TIMING	Timing of application should be based on the presence of vulnerable pest developmental stages and significant populations as determined by local monitoring. Consult provincial guidelines and local extension experts for treatment threshold for different crops. **Thrips:** apply when the insect or damage appears. Thorough coverage and penetration of spray droplets into the leaf whorls, where most thrips are feeding and hiding, are essential for good control.
NOTES	Allow 7 days between applications. **DO NOT** apply more than 3 applications per year. **DO NOT** apply within 14 days of harvest. **DO NOT** APPLY BY AIR. For hand harvest and thinning green onions, **DO NOT** re-enter treated areas for 10 days after treatment. For all other activities **DO NOT** re-enter treated areas until 24 hours after treatment. For all other crops **DO NOT** re-enter treated areas until 24 hours after treatment. Workers shall be given oral warning of the re-entry interval.

LETTUCE	
CROPS	**Head Lettuce**
PEST	Cabbage Looper, Tarnished Plant Bug, Darksided and White Cutworms
RATE (mL/ha)	83
APPLICATION METHOD	Ground application only
APPLICATION TIMING	Timing of applications should be based on the presence of vulnerable pest developmental stages and significant populations as determined by local monitoring.
NOTES	Allow a 7 day interval between treatments. **DO NOT** apply within 3 days of harvest. **DO NOT** use more than 3 applications per year. **DO NOT** APPLY BY AIR. Use 500 L/ha of water for thorough coverage.
CROPS	**Leaf Lettuce**
PEST	Tarnished Plant Bug
RATE (mL/ha)	83
APPLICATION METHOD	Ground application only
APPLICATION TIMING	Timing of applications should be based on the presence of vulnerable pest developmental stages and significant populations as determined by local monitoring.
NOTES	Allow a 7 day interval between treatments. **DO NOT** apply within 3 days of harvest. **DO NOT** use more than 3 applications per year. **DO NOT** APPLY BY AIR. Use 500 L/ha of water for thorough coverage.
CHOKE CHERRIES	
CROPS	**Choke Cherry shelterbelts**
PEST	Prairie Tent Caterpillar, Ugly Nest Caterpillar, Fruit Tree Leafroller
RATE (mL/ha)	58
APPLICATION METHOD	Ground application only
APPLICATION TIMING	**Prairie Tent Caterpillar:** Apply prior to flowering when tents are visible, generally mid to late May. **Ugly Nest Caterpillar:** Apply after flowering when tents are first visible, generally early to mid June. **Fruit Tree Leafroller:** Apply after flowering when damage is first noted, generally early to mid June.
NOTES	Apply as a foliar spray so leaves are wet but not dripping. **DO NOT** use more than 1 application per year. **DO NOT** APPLY BY AIR. Use 1000 L/ha of water for thorough coverage.

BRASSICA LEAFY VEGETABLES	
CROPS	**CROP SUBGROUP 5A (Head and Stem Brassica Subgroup): Broccoli, Chinese broccoli (gai lon), Brussels sprouts, cabbage, Chinese cabbage (napa), Chinese cabbage mustard (gai choy), cauliflower, cavolo broccolo and kohlrabi)**
PEST	Swede midge (*Contarinia nasturtii*), Cabbage looper
RATE (mL/ha)	83
APPLICATION METHOD	Ground application only
APPLICATION TIMING	Timing of applications should be based on the presence of vulnerable pest developmental stages and significant populations as determined by local monitoring.
NOTES	Allow at least 7 day interval between treatments. **DO NOT** apply within 1 day of harvesting cabbage, Chinese cabbage (napa), Chinese mustard cabbage (gai choy) and 3 days of harvesting broccoli, Brussels sprouts, cauliflower, Chinese broccoli, cavolo broccolo or kohlrabi. **DO NOT** use more than 3 applications per crop per year (249 mL product/year). **DO NOT** APPLY BY AIR. Use sufficient water for thorough coverage. A water volume of 100 to 200 L/ha by ground is recommended.
CROPS	**CROP SUBGROUP 5A (Head and Stem Brassica Subgroup): Broccoli, Chinese broccoli (gai lon), Brussels sprouts, cabbage, Chinese cabbage (napa), Chinese cabbage mustard (gai choy), cauliflower, cavolo broccolo and kohlrabi)**
PEST	Onion thrips
RATE (mL/ha)	188
APPLICATION METHOD	Ground application only
APPLICATION TIMING	Apply when the insect first appears.
NOTES	Apply by foliar broadcast spray. **DO NOT** apply within 1 day for mechanical harvesting cabbage and 3 days for mechanical harvesting all other crops in Crop Group 5A. **DO NOT** apply within 6 days for hand harvesting all crops in Crop Group 5A. **DO NOT** enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 days for scouting and 6 days for hand pruning, topping, irrigation, thinning and tying. An REI of 24 hours is required for all other activities. **DO NOT** apply more than 3 applications per growing season. Allow a 7 day interval between treatments. **DO NOT** apply by air. Apply in sufficient water to ensure thorough coverage. A water volume of 500 L/ha is recommended

CROPS	**CROP SUBGROUP 5A (Head and Stem Brassica Subgroup): Broccoli, Chinese broccoli (gai lon), Brussels sprouts, cabbage, Chinese cabbage (napa), Chinese cabbage mustard (gai choy), cauliflower, cavolo broccolo and kohlrabi)**
PEST	Crucifer Flea Beetle, Diamondback Moth Larvae, Imported Cabbageworm
RATE (mL/ha)	42
APPLICATION METHOD	Ground application
APPLICATION TIMING	Timing of applications should be based on the presence of vulnerable pest developmental stages and significant populations as determined by local monitoring.
NOTES	DO NOT use more than 3 applications per year. Allow a 7 day interval between treatments. DO NOT apply within 1 day of harvesting cabbage, Chinese cabbage (napa), Chinese mustard cabbage (gai choy) and 3 days of harvesting broccoli, Brussels sprouts, cauliflower, Chinese broccoli, cavolo broccolo or kohlrabi. DO NOT APPLY BY AIR. Use sufficient water for thorough coverage. A water volume of 100 to 200 L/ha by ground is recommended.
CELERY	
CROPS	**Celery**
PEST	Tarnished plant bug
RATE (mL/ha)	83
APPLICATION METHOD	Ground application
APPLICATION TIMING	Timing of application should be based on the presence of vulnerable pest development stages and significant populations as based on local monitoring.
NOTES	Allow at least 7 day interval between treatments. **DO NOT** apply within 3 days of harvest of celery. **DO NOT** use more than 3 applications per season. Maximal seasonal application is 30 g ai/ha. Use sufficient water for thorough coverage, applied by ground sprayer. A water volume of 500 L/ha is recommended. **DO NOT APPLY BY AIR.**

LEGUME VEGETABLES	
CROPS	**Crop Group 6 - Legume Vegetables including Soybean**
PEST	Soybean aphid, Pea aphid, Bean aphid
RATE (mL/ha)	83 - 233
APPLICATION METHOD	Ground or aerial application
APPLICATION TIMING	The need and timing of application should be based on the presence of vulnerable pest developmental stages and significant populations as determined by local monitoring. Use the higher rate when conditions favour rapidly increasing aphid populations. Repeat sprays at 7 day intervals depending on the presence of significant populations as determined by local monitoring. Provincial soybean aphid management guidelines suggest applying insecticide during the flowering growth stage of soybean development. Consult local agricultural personnel and provincial guidelines on the use of this product.
NOTES	Allow at least a 7 day interval between treatments. **DO NOT** apply within 7 days of harvest for succulent shelled and edible-podded peas and beans. **DO NOT** apply within 14 days of harvest of dry peas and beans (including lupins, lentils, chickpeas and fava beans). **DO NOT** apply within 21 days of harvest for soybean. **DO NOT** use more than 3 applications per season. **Aerial application:** Do not make more than 2 applications of 83 mL/ha of the allowed seasonal total by air. **DO NOT** graze or harvest treated forage, straw or hay for livestock feed. **Water Volume:** For ground application: 100 to 200 L/ha. For aerial application: apply in minimum spray volume of 20 L/ha.

LEGUME VEGETABLES	
CROPS	**Crop Group 6: Legume Vegetables including Soybean**
PEST	Western bean cutworm
RATE (mL/ha)	83 - 187
APPLICATION METHOD	Ground or aerial application
APPLICATION TIMING	The need and timing of application should be based on the presence of vulnerable pest developmental stages and significant populations as determined by local monitoring. Consult local agricultural personnel and provincial guidelines on the use of this product. Cutworm activity is greatest during the late evening and night. Application should be timed as close as possible to insect feeding activity.
NOTES	Repeat sprays at 4-7 day intervals. **DO NOT** apply within 7 days of harvest for succulent shelled and edible-podded peas and beans. **DO NOT** apply within 14 days of harvest of dry peas and beans (including lupins, lentils, chickpeas and fava beans). **DO NOT** apply within 21 days of harvest for soybean. **DO NOT** use more than 3 applications per season. **Aerial application:** Do not make more than 2 applications of 83 mL/ha of the allowed seasonal total by air. **DO NOT** graze or harvest treated forage, straw or hay for livestock feed. **Water Volume:** For ground application: 100 to 200 L/ha. For aerial application: apply in minimum spray volume of 20 L/ha.

LEGUME VEGETABLES	
CROPS	**Soybeans, Succulent and Dry Edible Beans*, Succulent and Dry Peas**, Chickpeas, Lentils**
PEST	Cutworms
RATE (mL/ha)	83
APPLICATION METHOD	Ground or aerial application
APPLICATION TIMING	The need and timing of application should be based on the presence of vulnerable pest developmental stages and significant populations as determined by local monitoring. Cutworm activity is greatest during the late evening and night. Application should be timed as close as possible to insect feeding activity. Consult local agricultural personnel and provincial guidelines on the use of this product.
NOTES	Repeat sprays at 4 to 7 day intervals depending on the presence of significant populations as determined by local monitoring. **DO NOT** apply within 7 days of harvest for succulent shelled and edible-podded peas and beans. **DO NOT** apply within 14 days of harvest of dry peas and beans (including lentils and chickpeas). **DO NOT** apply within 21 days of harvest for soybean. **DO NOT** use more than 3 applications per season. **Aerial application:** Do not make more than 2 applications of 83 mL/ha of the allowed seasonal total by air. **DO NOT** graze or harvest treated forage, straw or hay for livestock feed. **Water Volume:** For ground application: 100 to 200 L/ha. For aerial application: apply in minimum spray volume of 20 L/ha.

LEGUME VEGETABLES	
CROPS	**Soybeans, Succulent and Dry Edible Beans*, Fava Beans, Lentils**
PEST	Lygus bugs
RATE (mL/ha)	83
APPLICATION METHOD	Ground or aerial application
APPLICATION TIMING	The need and timing of application should be based on the presence of vulnerable pest developmental stages and significant populations as determined by local monitoring. Consult local agricultural personnel and provincial guidelines on the use of this product.
NOTES	Repeat sprays at 4 to 7 day intervals depending on the presence of significant populations as determined by local monitoring. **DO NOT** apply within 7 days of harvest for succulent shelled and edible-podded beans. **DO NOT** apply within 14 days of harvest of dry beans (including fava beans and lentils). **DO NOT** apply within 21 days of harvest for soybean. **DO NOT** use more than 3 applications per season. **Aerial application:** Do not make more than 2 applications of 83 mL/ha of the allowed seasonal total by air. **DO NOT** graze or harvest treated forage, straw or hay for livestock feed. **Water Volume:** For ground application: 100 to 200 L/ha. For aerial application: apply in minimum spray volume of 20 L/ha.
CROPS	**Soybeans, Dry Peas**, Chickpeas and Lentils**
PEST	Grasshoppers
RATE (mL/ha)	83
APPLICATION METHOD	Ground or aerial application
APPLICATION TIMING	The need and timing of application should be based on the presence of vulnerable pest developmental stages and significant populations as determined by local monitoring. Consult local agricultural personnel and provincial guidelines on the use of this product.
NOTES	Repeat sprays at 4 to 7 day intervals depending on the presence of significant populations as determined by local monitoring. **DO NOT** apply within 14 days of harvest of dry peas, chickpeas and lentils. **DO NOT** apply within 21 days of harvest for soybean. **DO NOT** use more than 3 applications per season. **Aerial application:** Do not make more than 2 applications of 83 mL/ha of the allowed seasonal total by air. **DO NOT** graze or harvest treated forage, straw or hay for livestock feed. **Water Volume:** For ground application: 100 to 200 L/ha. For aerial application: apply in minimum spray volume of 20 L/ha.

LEGUME VEGETABLES	
CROPS	**Soybean, Succulent and Dry Edible Beans*, Succulent and Dry Peas**, Fava Beans (broad beans) and Chickpeas**
PEST	Bean Leaf Beetle
RATE (mL/ha)	83 - 233 for ground application 83 for aerial application
APPLICATION METHOD	Ground or aerial application (see rates above)
APPLICATION TIMING	For bean leaf beetle, use the higher rate to target higher pest populations or when conditions are conducive to bean pod mottle virus. Repeat sprays at 4 to 7 day intervals depending on the presence of significant populations as determined by local monitoring. The need and timing of application should be based on the presence of vulnerable pest developmental stages and significant populations as determined by local monitoring. Consult local agricultural personnel and provincial guidelines on the use of this product.
NOTES	**DO NOT** apply within 7 days of harvest for succulent shelled and edible-podded peas and beans. **DO NOT** apply within 14 days of harvest of dry peas and beans (including fava beans and chickpeas). **DO NOT** apply within 21 days of harvest for soybean. **DO NOT** use more than 3 applications per season. **Aerial application:** Do not make more than 2 applications of 83 mL/ha of the allowed seasonal total by air. **DO NOT** graze or harvest treated forage, straw or hay for livestock feed. **Water Volume:** For ground application: 100 to 200 L/ha. For aerial application: apply in minimum spray volume of 20 L/ha.

LEGUME VEGETABLES	
CROPS	**Succulent and Dry Edible Beans*, Succulent Peas**, Fava Beans (broad beans), Chickpeas and Lentils**
PEST	Potato Leafhopper
RATE (mL/ha)	83
APPLICATION METHOD	Ground or aerial application
APPLICATION TIMING	The need and timing of application should be based on the presence of vulnerable pest developmental stages and significant populations as determined by local monitoring. Consult local agricultural personnel and provincial guidelines on the use of this product.
NOTES	Repeat sprays at 4 to 7 day intervals depending on the presence of significant populations as determined by local monitoring. **DO NOT** apply within 7 days of harvest for succulent shelled and edible-podded peas and beans. **DO NOT** apply within 14 days of harvest of dry beans (including lentils, chickpeas and fava beans). **DO NOT** apply within 21 days of harvest for soybean. **DO NOT** use more than 3 applications per season. **Aerial application:** Do not make more than 2 applications of 83 mL/ha of the allowed seasonal total by air. **DO NOT** graze or harvest treated forage, straw or hay for livestock feed. **Water Volume:** For ground application: 100 to 200 L/ha. For aerial application: apply in minimum spray volume of 20 L/ha.

LEGUME VEGETABLES	
CROPS	**Succulent and Dry Edible Beans***
PEST	Corn Borer
RATE (mL/ha)	83
APPLICATION METHOD	Ground or aerial application
APPLICATION TIMING	Apply before the larva bores into the plant stalk or pods. The need and timing of application should be based on the presence of vulnerable pest developmental stages and significant populations as determined by local monitoring. Consult local agricultural personnel and provincial guidelines on the use of this product.
NOTES	Repeat sprays at 4 to 7 day intervals depending on the presence of significant populations as determined by local monitoring. **DO NOT** apply within 7 days of harvest for succulent shelled and edible-podded beans. **DO NOT** apply within 14 days of harvest of dry beans. **DO NOT** use more than 3 applications per season. **Aerial application:** Do not make more than 2 applications of 83 mL/ha of the allowed seasonal total by air. **DO NOT** graze or harvest treated forage, straw or hay for livestock feed. **Water Volume:** For ground application: 100 to 200 L/ha. For aerial application: apply in minimum spray volume of 20 L/ha.

LEGUME VEGETABLES	
CROPS	**Field Peas**
PEST	Pea leaf weevil (*Sitona lineata*)
RATE (mL/ha)	83
APPLICATION METHOD	Ground or aerial application
APPLICATION TIMING	Make the first application after emergence but prior to the 5 to 6 node stage. Apply while the adults are still present on the plants, before egg laying begins. The need and timing of application should be based on the presence of vulnerable pest developmental stages and significant populations as determined by local monitoring. Consult local agricultural personnel and provincial guidelines on the use of this product.
NOTES	Repeat sprays at 4 to 7 day intervals depending on the presence of significant populations as determined by local monitoring. **DO NOT** apply within 14 days of harvest for dry peas. **DO NOT** use more than 3 applications per season. **Aerial application:** Do not make more than 2 applications of 83 mL/ha of the allowed seasonal total by air. **DO NOT** graze or harvest treated forage, straw or hay for livestock feed. **Water Volume:** For ground application: 100 to 200 L/ha. For aerial application: apply in minimum spray volume of 20 L/ha.

*** Beans, succulent and dry edible:** Beans (*Phaseolus* spp.) (includes, runner bean, snap beans, wax beans, lima bean (green), field bean, kidney bean, navy bean, Pinto bean, tepary bean); bean (*Vigna* spp.) (includes asparagus bean, Chinese longbean, moth bean, yardlong bean, adzuki bean, mung bean, rice bean, urd bean, blackeyed pea, catjang, cowpea, southern pea, crowder pea); jackbean; sword bean; bean (*Lupinus* spp.) (includes grain lupin, sweet lupin, white lupin, and white sweet lupin), lablab bean, guar.

** **Peas, succulent**: Pea (*Pisum* spp.) (includes dwarf pea, edible-pod pea, snow pea, sugar snap pea, English pea, garden pea, green pea), pigeon pea. **Peas, dry**: Peas (*Pisum* spp.) (includes field pea), pigeon pea.

LEGUMES VEGETABLES (CROP GROUP 6) INCLUDING SOYBEANS

MATADOR 120EC TANK-MIX WITH TILT 250E FUNGICIDE

MATADOR 120EC can be tank-mixed with TILT 250E Fungicide for insect and foliar disease control. Apply MATADOR 120EC at a rate of 83-233 mL/ha for control of soybean aphid on soybean and at a rate of 83mL/ha for the rest of the crops in Crop Group 6 in a tank-mix with TILT 250E Fungicide at a rate of 250-756mL/ha. Refer to both the MATADOR 120EC and TILT 250E Fungicide labels for insects and diseases controlled, specific application instructions and precautions. Pests and crops must be at the correct stage as specified on the MATADOR 120EC as well as TILT 250E Fungicide labels. DO NOT apply more than 2 applications per season of this tank-mix. PHI 30 days for crop subgroup 6C (dry legume vegetables) and soybeans. PHI 15 days for crop subgroup 6A (edible podded legume vegetables) and 6B (succulent shelled legume vegetables). DO NOT graze or harvest treated forage, straw or hay for livestock feed. Not all members of the legume vegetable group have been tested for efficacy and phytotoxicity at the recommended label rates, and should be used at the discretion of the user. This tank-mix can be applied by ground application equipment only. DO NOT APPLY THE TANK-MIX BY AIR.

MATADOR 120EC TANK-MIX WITH QUADRIS FLOWABLE FUNGICIDE

MATADOR 120EC can be tank-mixed with QUADRIS Flowable Fungicide for insect and foliar disease control. Apply MATADOR 120EC at a rate of 83-233 mL/ha for control of soybean aphid on soybean and at a rate of 83mL/ha for the rest of the crops in Crop Group 6 in a tank-mix with QUADRIS Flowable Fungicide at a rate of 500mL/ha. Refer to both the MATADOR 120EC and QUADRIS Flowable Fungicide labels for insects and diseases controlled, specific application instructions and precautions. Pests and crops must be at the correct stage as specified on the MATADOR 120EC as well as QUADRIS Flowable Fungicide label. DO NOT apply more than 2 applications per season of this tank-mix. DO NOT make more than one application to soybean hay and dry pea hay per season of this tank-mix. PHI 30 days for crop subgroup 6C (dry legume vegetables) and soybeans. PHI 15 days for crop subgroup 6A (edible podded legume vegetables) and 6B (succulent shelled legume vegetables). DO NOT apply within 14 days of harvest of soybean hay and dry pea hay. A plantback interval of 30 days for broadleaf and root crops, and of 45 days for cereals is required for this tank-mix. DO NOT feed dried pea vines to livestock. DO NOT graze or harvest treated forage, straw or hay for livestock feed. Not all members of the legume vegetable group have been tested for efficacy and phytotoxicity at the recommended label rates, and should be used at the discretion of the user. This tank-mix can be applied by ground application equipment only. DO NOT APPLY THE TANK-MIX BY AIR.

MATADOR 120EC TANK-MIX WITH QUILT FUNGICIDE

MATADOR 120EC can be tank-mixed with QUILT Fungicide for insect and foliar disease control. Apply MATADOR 120EC at a rate of 83-233 mL/ha for control of soybean aphid on soybean and at a rate of 83mL/ha for the rest of the crops in Crop Group 6 in a tank-mix with QUILT Fungicide at a rate of 1.0 -1.5 L/ha. Refer to both the MATADOR 120EC and QUILT Fungicide labels for insects and diseases controlled, specific application instructions and precautions. Pests and crops must be at the correct stage as specified on the MATADOR 120EC as well as QUILT Fungicide label. DO NOT apply more than 2 applications per season of this tank-mix. DO NOT make more than one application to soybean hay and dry pea hay of this tank-mix per season. PHI 30 days of harvest for crop subgroup 6C (dry legume vegetables) and soybeans. PHI 15 days for crop subgroup 6A (edible podded legume vegetables) and 6B (succulent shelled legume vegetables). DO NOT apply within 14 days of harvest of soybean hay and dry pea hay of this tank-mix per season. DO NOT graze or harvest treated forage, straw or hay for livestock feed. Not all members of the legume vegetable group have been tested for efficacy and phytotoxicity at the recommended label rates, and should be used at the discretion of the user. This tank-mix can be applied by ground or air application equipment. Apply in at least 100 L of water per hectare for ground application and 45 L of water per hectare for aerial application.

SUCCULENT BEANS

MATADOR 120EC TANK-MIX WITH LANCE® WDG FUNGICIDE

MATADOR 120EC can be tank-mixed with Lance WDG Fungicide for control of corn borer, white mold (*Sclerotinia sclerotiorum*), and gray mold (*Botrytis cinera*). Apply MATADOR 120EC at a rate of 83 mL/ha in a tank-mix with Lance Fungicide at a rate of 0.42 kg/ha for gray mold, and 0.56-0.77 kg/ha for white mold in a spray volume of 100-200 L. Refer to both the MATADOR 120EC and Lance Fungicide labels for specific application instructions and precautions. Apply before larva bores into the plant stalk or pods. Follow the most restrictive application directions for each of the tank-mix partner with respect to the maximum number of applications, pre-harvest interval, and other label instructions. DO NOT apply more than 2 applications per season of this tank-mix using an application interval of 7-14 days. Use the high rate and shorter interval of Lance Fungicide when disease pressure is high. PHI 14 days. This tank-mix can be applied by ground application equipment only. DO NOT APPLY THE TANK-MIX BY AIR.

LETTUCE (Greenhouse only)	
CROPS	**Lettuce (greenhouse)**
PEST	Cabbage Loopers
RATE (mL/ha)	83
APPLICATION METHOD	Ground application only
APPLICATION TIMING	Apply when insects or damage first appear. For best results, apply against early developmental stages of the pest.
NOTES	**DO NOT** apply within 3 days of harvest. **DO NOT** use more than 2 applications per year. **DO NOT** apply by air. Apply in sufficient water to ensure adequate coverage.
FERNS OF ASPARAGUS	
CROPS	**Ferns of Asparagus**
PEST	European Asparagus Aphids
RATE (mL/ha)	83
APPLICATION METHOD	Ground application only
APPLICATION TIMING	Apply post-harvest to fern only. Reapply after 7-10 days if monitoring indicates further applications are required.
NOTES	Allow a 7 to 10 day interval between treatments. **DO NOT** apply within 180 days of harvest. **DO NOT** apply more than 3 applications per season. **DO NOT** apply by air. Apply in 100 to 200 L of water per hectare.

CEREAL CROPS - CROP GROUP 15 – Corn, Barley, Buckwheat, Pearl Millet, Proso Millet, Oats, Rice, Rye Sorghum, Teosinte, Triticale, Wheat, and Wild Rice	
CROPS	**Crop Group 15 - Corn (field, sweet, pop, and seed), Barley, Buckwheat, Pearl Millet, Proso Millet, Oats, Rice, Rye Sorghum, Teosinte, Triticale, Wheat, and Wild Rice**
PEST	Armyworm
RATE (mL/ha)	83
APPLICATION METHOD	Ground or aerial application
APPLICATION TIMING	Spray no later than when the first feeding damage is seen on foliage.
NOTES	Repeat sprays at 4-7 day intervals. DO NOT apply more than 3 applications per hectare in total per season. DO NOT make more than 2 applications by air per season. DO NOT apply within 28 days of harvest for barley, buckwheat, millet (pearl and proso), oats, rice, rye, sorghum (milo), teosinte, triticale, wheat and wild rice grain. DO NOT apply within 1 day of harvest for sweet corn. DO NOT apply within 14 days if the crop is being harvested for silage. DO NOT apply within 21 days of harvest for field corn, popcorn and corn grown for seed. Water Volume: Ground Application: Apply in 100 - 200 L of water per hectare. Aerial Application: Apply in 10 - 40 L of water per hectare.
CROPS	**Corn (Field, Sweet, Seed, and Pop)**
PEST	Armyworm (*Pseudaletia unipuncta)*
RATE (mL/ha)	83 - 208
APPLICATION METHOD	Ground or aerial application
APPLICATION TIMING	Spray no later than when first feeding damage is seen on foliage.
NOTES	Repeat sprays at 4-7 day intervals depending on the presence of significant populations as determined by local monitoring. **DO NOT** apply more than 3 applications per hectare in total per season. **DO NOT** apply more than 2 applications of 83 mL/ha of the allowed seasonal total by air. **DO NOT** apply within 1 day of harvest for sweet corn. **DO NOT** apply within 14 days of harvest of corn for silage. **DO NOT** apply within 21 days of harvest for field corn, popcorn and corn grown for seed. **Water Volume:** Aerial Application**:** Apply in 10 - 40 L of water per hectare. Ground Application**:** Apply in 100 - 200 L of water per hectare.

CROPS	**Corn (Field, Sweet, Seed and Pop)**
PEST	European corn borer (*Ostrinia nubilalis*), Corn earworm (*Helicoverpa zea*)
RATE (mL/ha)	83 - 187
APPLICATION METHOD	Ground or aerial application
APPLICATION TIMING	Spray no later than when first feeding damage is seen on foliage. Where there are two generations, late plantings of sweet corn will require sprays from the late whorl stage until close to harvest. This treatment will not prevent internal cob damage if the insect has penetrated the ear.
NOTES	Repeat sprays at 4-7 day intervals depending on the presence of significant populations as determined by local monitoring. **DO NOT** apply more than 3 applications per hectare in total per season. **DO NOT** make more than 2 applications of 187 mL/ha by air per season. **DO NOT** apply within 1 day of harvest for sweet corn. **DO NOT** apply within 14 days of harvest of corn for silage. **DO NOT** apply within 21 days of harvest for field corn, popcorn and corn grown for seed. **Water Volume:** Ground Application: Apply in 100 - 200 L of water per hectare. Aerial Application: Apply in 10 - 40 L of water per hectare.
CROPS	**Corn (Field, Sweet, Seed and Pop)**
PEST	Western bean cutworm
RATE (mL/ha)	83 -187
APPLICATION METHOD	Ground or aerial application
APPLICATION TIMING	Applications should be based on the presence of vulnerable pest development stages and significant populations as determined by local monitoring
NOTES	Repeat sprays at 4-7 day intervals depending on the presence of significant populations as determined by local monitoring. **DO NOT** apply more than 3 applications per hectare in total per season. **DO NOT** make more than 2 applications of 83-187 mL/ha by air per season. **DO NOT** apply within 1 day of harvest for sweet corn. **DO NOT** apply within 14 days of harvest of corn for silage. **DO NOT** apply within 21 days of harvest for field corn, popcorn and corn grown for seed. **Water Volume:** Ground Application: Apply in 100 - 200 L of water per hectare. Aerial Application: Apply in 10 - 40 L of water per hectare.

TIMOTHY (grown for hay or seed)	
CROPS	**Timothy (grown for hay or seed)**
PEST	Grasshoppers
RATE (mL/ha)	63 – 83
APPLICATION METHOD	Ground application only
APPLICATION TIMING	Apply the low rate when grasshoppers are up to the 3rd nymphal stage (up to 1 cm in length) or when insect numbers are low. Apply the high rate when grasshoppers are larger, up to but not including winged adults (up to 2.5 cm in length) or when insect numbers are high. If insect pressure is high apply a spray to a 15 m strip around the field. Avoid environmentally sensitive areas and unregistered crops.
NOTES	Allow 7 days between applications. **DO NOT** apply more than 3 applications per season. **DO NOT** apply within 14 days of harvest. **DO NOT** apply by air. Crops treated with MATADOR 120EC may be fed to non-lactating dairy animals and other livestock following a 3 day interval from application to harvest or foraging. Apply in 100 to 200 L of water per hectare.
SWEET POTATO	
CROPS	**Sweet Potato**
PEST	Potato Flea Beetle, Tuber Flea Beetle, Potato Leafhopper
RATE (mL/ha)	83 mL/ha Apply in a minimum of 100 L of water/ha
APPLICATION METHOD	Ground only
APPLICATION TIMING	Timing of application should be based on the presence of vulnerable pest development stages and significant population as determined by local monitoring.
NOTES	Allow 7 days between applications. **DO NOT** apply more than 3 applications per year. **DO NOT** apply within 7 days of harvest. **DO NOT** apply by air.

POTATOES	
CROPS	**Potatoes**
PEST	Armyworm (*Pseudaletia unipuncta*)
RATE (mL/ha)	83
APPLICATION METHOD	Ground or aerial application
APPLICATION TIMING	Spray no later than when first feeding damage is seen on foliage.
NOTES	Repeat sprays at 4-7 day intervals depending on the presence of significant populations as determined by local monitoring. **DO NOT** apply within 7 days of harvest. **DO NOT** apply more than 3 applications per year for ground. **DO NOT** apply more than 2 applications of 83 mL/ha of the allowed seasonal total by air. **Water Volume:** Ground Application: Apply in 100 - 200 L of water per hectare. Aerial Application: Apply in 10 - 40 L of water per hectare.
SUNFLOWERS	
CROPS	**Sunflowers**
PEST	Lygus bugs (*Lygus* spp.)
RATE (mL/ha)	83
APPLICATION METHOD	Ground or aerial application
APPLICATION TIMING	Timing of application should be based on the presence of vulnerable pest developmental stages and significant populations as determined by local monitoring.
NOTES	Allow 7 days between applications. **DO NOT** apply within 7 days of harvest. **DO NOT** apply more than 1 application of 83 mL/ha of the seasonal total by air. **DO NOT** apply more than 3 applications per hectare in total per season. **DO NOT** enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours. **Water Volume:** Ground Application: Apply in 100 - 200 L of water per hectare. Aerial Application: Apply in 10 - 40 L of water per hectare.

CARROTS	
CROPS	**Carrot**
PEST	Carrot rust fly (*Psila rosae*), Carrot weevil (*Listronotus oregonensis)*
RATE (mL/ha)	83
APPLICATION METHOD	Ground application
APPLICATION TIMING	First application should be applied at the 2-3 leaf stage when insects or damage appear. Timing of applications should be based on the presence of vulnerable pest developmental stages and significant populations as determined by local monitoring.
NOTES	Allow 7 days between applications. **DO NOT** apply within 14 days of harvest. **DO NOT** apply more than 3 applications per year. **DO NOT** apply by air.
POPLAR and WILLOW	
CROPS	**Poplar (*Populus* spp.) and willow (*Salix*) plantings, including Short-Rotation-Intensive-Culture (SRIC), their hybrids and their planting stock**
PEST	Grasshoppers
RATE (mL/ha)	63 - 83 for ground application 83 for aerial application
APPLICATION METHOD	Ground or aerial application (see rates above)
APPLICATION TIMING	Apply immediately before planting of the new crop, and/or following planting of the crop (depending on the developmental stage of the grasshoppers). Apply in the second growing season where a significant risk exists and/or where a significant re-plant is required. Apply the low rate when grasshoppers are up to the 3rd nymphal stage (up to 1 cm in length) or when insect numbers are low. Apply the high rate when grasshoppers are larger, up to but not including winged adults (up to 2.5 cm in length) or when insect numbers are high. If insect pressure is high apply a spray to a 15 m strip around the field. Avoid environmentally sensitive areas and unregistered crops.
NOTES	Allow 7 days between applications. **DO NOT** apply more than 3 applications per hectare in total per season. **DO NOT** apply more than 2 applications of the seasonal total by air. **Water Volume:** Ground Application: Use a minimum of 100 L of water/ha. Use sufficient water for thorough coverage. Aerial Application: Apply in 10 - 40 L of water per hectare. If using high pressure handheld equipment, during mixing, loading, application, clean-up and repair activities workers should wear coveralls over long pants, long-sleeved shirts, chemical resistant gloves, chemical-resistant boots and either a respirator with a NIOSH/MSHA/BHSE approved organic-vapour-removing cartridge with a prefilter approved for pesticides, OR a NIOSH/MSHA/BHSE approved canister approved for pesticide. In addition, during mixing, loading, clean-up and repair activities, workers must also wear goggles.

POPLAR and WILLOW	
CROPS	**Poplar (*Populus* spp.) and willow (*Salix*) plantings, including Short-Rotation-Intensive-Culture (SRIC), their hybrids and their planting stock**
PEST	Potato leaf hopper, tarnished plant bug
RATE (mL/ha)	83
APPLICATION METHOD	Ground or aerial application
APPLICATION TIMING	Apply when insects or damage appear. Timing of applications should be based on the presence of vulnerable pest developmental stages and significant populations as determined by local monitoring.
NOTES	Allow 7 days between applications. **DO NOT** apply more than 3 applications per hectare in total per season. **DO NOT** apply more than 2 applications of the seasonal total by air. **Water Volume:** Ground Application: Use a minimum of 100 L of water/ha. Use sufficient water for thorough coverage. Aerial Application: Apply in 10 - 40 L of water per hectare. If using high pressure handheld equipment, during mixing, loading, application, clean-up and repair activities workers should wear coveralls over long pants, long-sleeved shirts, chemical resistant gloves, chemical-resistant boots and either a respirator with a NIOSH/MSHA/BHSE approved organic-vapour-removing cartridge with a prefilter approved for pesticides, OR a NIOSH/MSHA/BHSE approved canister approved for pesticide. In addition, during mixing, loading, clean-up and repair activities, workers must also wear goggles.
CROPS	**Poplar (*Populus* spp.) and willow (*Salix*) plantings, including Short-Rotation-Intensive-Culture (SRIC), their hybrids and their planting stock**
PEST	Prairie tent caterpillar, ugly nest caterpillar
RATE (mL/ha)	58
APPLICATION METHOD	Ground application
APPLICATION TIMING	Prairie tent caterpillar: Apply when tents are visible, generally mid to late May. Ugly nest caterpillar: Apply when tents are first visible, generally early to mid June.
NOTES	**DO NOT** apply more than 1 application per hectare in total per season. **Water Volume:** Ground Application: Use a minimum of 100 L of water/ha. Use sufficient water for thorough coverage. If using high pressure handheld equipment, during mixing, loading, application, clean-up and repair activities workers should wear coveralls over long pants, long-sleeved shirts, chemical resistant gloves, chemical-resistant boots and either a respirator with a NIOSH/MSHA/BHSE approved organic-vapour-removing cartridge with a prefilter approved for pesticides, OR a NIOSH/MSHA/BHSE approved canister approved for pesticide. In addition, during mixing, loading, clean-up and repair activities, workers must also wear goggles.

STRAWBERRIES	
CROPS	**Strawberries**
PEST	Suppression of black vine weevil adults (*Otiorhynchus sulcatus*)
RATE (mL/ha)	104
APPLICATION METHOD	Foliar spray
APPLICATION TIMING	Applications are to be made as soon as weevils appear, but not until after the final harvest of strawberries.
NOTES	Allow 7 days between applications. **DO NOT** apply within 7 days of harvest. Apply in sufficient water to ensure thorough coverage. The recommended application volume is 250-500 L/ha. **DO NOT** apply more than 3 applications per year. **DO NOT** apply by air.
SASKATOON BERRIES	
CROPS	**Saskatoon berries**
PEST	Saskatoon bud moth
RATE (mL/ha)	104
APPLICATION METHOD	Ground
APPLICATION TIMING	Application should be based on the presence of vulnerable pest stages as determined by monitoring. If warranted, make the first application at bud break (early green tip). A second application can be made after petal drop if insect pressure indicates the need.
NOTES	Allow 10 to 15 days between applications. **DO NOT** apply within 21 days of harvest. **DO NOT** apply more than 2 applications per year. **Water Volume:** Apply in a minimum of 200 L of water/ha.
CUCURBIT VEGETABLES	
CROPS	**CROP GROUP 9: chayote (fruit), Chinese waxgourd, citron melon, cucumber, gherkin, edible gourd, momordica spp., muskmelon, pumpkin, summer squash, winter squash, watermelon**
PEST	Striped cucumber beetle (*Acalymma vittatum*) Squash bug (*Anasa tristis*)
RATE (mL/ha)	187-233 Use higher application rate when pest populations are high.
APPLICATION METHOD	Ground application
APPLICATION TIMING	Timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds. Reapply after a minimum of 7 days if monitoring indicates it is necessary.
NOTES	Allow 7 days between applications. **DO NOT** apply within 1 day of harvest. **DO NOT** apply more than 3 applications per growing season. **Water Volume:** Use sufficient water for thorough coverage. 100 to 200 L/ha is recommended.

CANOLA	
CROPS	**Canola**
PEST	Swede midge (*Contarinia nasturtii*)
RATE (mL/ha)	83
APPLICATION METHOD	Ground or aerial application
APPLICATION TIMING	Timing of applications should be based on the presence of vulnerable pest developmental stages and significant populations as determined by local monitoring.
NOTES	Allow a 7 day interval between treatments. **DO NOT** apply within 7 days of harvest. **DO NOT** use more than 3 applications per year. **Aerial Application: DO NOT** make more than 1 application of 83 mL/ha of the allowed seasonal total by air. **Water Volume:** Ground Application: Apply in 100 - 200 L of water per hectare. Aerial Application: Apply in 10 - 40 L of water per hectare.
CONIFER SEED ORCHARDS	
CROPS	Douglas fir, hemlocks, larches, pines, spruces, true firs.
PEST	Western conifer-seed bug (*Leptoglossus occidentalis*)
RATE (mL/ha)	40 mL/ 100 L water. Spray to the point of run-off, ranging from 800-1200 L/ha depending on tree size
APPLICATION METHOD	Air blast
APPLICATION TIMING	The first application should be made when owverwintered adults appear in the seed orchard. Timing of reapplications should be based on the presence of vulnerable pest developmental stages and significant populations as determined by local monitoring.
NOTES	Allow a minimum of 10 day between applications. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 1 day for handset irrigation activities. For all other post-application activities, DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours. Do not apply more than 3 applications per year.
ADDITIONAL USE DIRECTIONS	DO NOT APPLY BY AIR

TREE NUTS - CROP GROUP 14-11 – Tree Nuts (Excluding Ginkgo, Monkey puzzle nut and Pine nuts) - Beechnut, Bur Oak, Butternut, Chestnut, Chinquapin, Hazelnut (Filbert), Heartnut, Hickory nut, Japanese horse-chestnut, Black walnut, English walnut, Yellowhorn	
CROPS	**Tree Nuts (Excluding Ginkgo, Monkey puzzle nut and Pine nuts) - Beechnut, Bur Oak, Butternut, Chestnut, Chinquapin, Hazelnut (Filbert), Heartnut, Hickory nut, Japanese horse-chestnut, Black walnut, English walnut, Yellowhorn**
PEST	Oblique-banded leaf roller
RATE (mL/ha)	83
PEST	Aphids
RATE (mL/ha)	104
APPLICATION METHOD	Apply by ground equipment with sufficient water to obtain full coverage of the foliage or target area.
APPLICATION TIMING	Apply as required by scouting, usually at intervals of 7 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic threshold.
NOTES	**DO NOT** apply within 14 days of harvest. **DO NOT** apply more than 390 mL/ha of MATADOR per year. **DO NOT** apply more than 4 applications per year for the obliquebanded leafroller. **DO NOT** apply more than 3 applications per year for aphids.

CROPS	**Walnut, butternut, heartnut**
PEST	Codling moth
RATE (mL/ha)	83
PEST	Butternut curculio and walnut husk fly
RATE (mL/ha)	104
APPLICATION METHOD	Apply by ground equipment with sufficient water to obtain full coverage of the foliage or target area.
APPLICATION TIMING	Apply as required by scouting, usually at intervals of 7 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic threshold.
NOTES	**DO NOT** apply within 14 days of harvest. **DO NOT** apply more than 390 mL/ha of MATADOR per year. **DO NOT** apply more than 4 applications per year for the codling moth. **DO NOT** apply more than 3 applications per year for butternut curculio and walnut husk fly.

Resistance-Management Recommendations

For resistance management, please note that MATADOR 120EC contains a Group 3 insecticide. Any insect population may contain individuals naturally resistant to MATADOR 120EC and other Group 3 insecticides. The resistant individuals may dominate the insect population if this group of insecticides is used repeatedly in the same fields. Other resistance mechanisms that are not linked to site of action but are specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance-management strategies should be followed.

To delay insecticide resistance:

Where possible, rotate the use of MATADOR 120EC or other Group 3 insecticides with different groups that control the same pests in a field.

Use tank-mixtures with insecticides from a different group when such use is permitted.

Insecticide use should be based on an IPM program that includes scouting, record keeping, and considers cultural, biological and other chemical control practices.

Monitor treated pest populations for resistance development.

Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area.

For further information or to report suspected resistance, contact Syngenta Canada Inc. company representatives at 1-87-SYNGENTA (1-877-964-3682) or at www.syngenta.ca.

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