GROUP 4 FUNGICIDE

## **RIDOMIL GOLD® 480SL**

**FUNGICIDE** 

**SOLUTION** 

**AGRICULTURAL** 

For the control or suppression of certain diseases caused by the Oomycete class of fungi in Apples (non-bearing), Field and Greenhouse Cucumbers, Ginseng, Hops, Raspberries, Blueberries, Snap Beans, Strawberries, Tobacco, Spinach, Radish and Potatoes.

#### **GUARANTEE:**

Metalaxyl-M and S-isomer ...... 480 g/L

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



Harmful if swallowed. Avoid inhalation of spray mist. Avoid contact with skin and eyes. Avoid contamination of food and feed and domestic or irrigation water supplies, lakes, streams and ponds.

REGISTRATION NO.: 28474
PEST CONTROL PRODUCTS ACT

## Syngenta Canada Inc.

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

**PAMPHLET** 

## **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**

**IN CASE OF POISONING,** call a physician or poison control centre **IMMEDIATELY.** 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. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

**If on skin or clothing,** take off contaminated clothing. Rinse skin **IMMEDIATELY** with plenty of water for 15–20 minutes. Call a poison control 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**

No specific antidote is known. Treat symptomatically. Contact with eyes may require specialized ophthalmologic attention.

#### **PRECAUTIONS**

KEEP OUT OF REACH OF CHILDREN.

Harmful or Fatal if swallowed. Causes eye irritation. DO NOT get in eyes. May irritate the skin. Avoid contact with skin.

Do not get in eyes, on skin or on clothing. Wear chemical resistant gloves, and goggles or a face shield, coveralls over long-sleeved shirt, long pants, socks and chemical resistant footwear during mixing/loading/application and during clean up and repair activities. Change clothing after use. Wash with soap and water after use. Do not eat, drink or smoke while mixing or during application.

Do not apply in such a way that this product will contact workers or other persons, either directly or through drift. Only handlers (mixers, loaders and applicators) wearing personal protective

equipment may be in the area being treated during application.

Do not enter or allow worker entry into treated areas for 12 hours following application.

Do not use or store near heat or open flame.

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 web site at <a href="https://www.croplife.ca">www.croplife.ca</a>.

#### **ENVIRONMENTAL PRECAUTIONS**

Avoid application when weather conditions favour drift from treated areas.

Do not apply this product directly to freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs, ditches and wetlands), estuaries or marine habitats.

Do not contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

## **Environmental Hazards:**

The use of this product may result in contamination of groundwater, particularly in areas where soils are permeable (e.g. sandy soil) or the water table is shallow. To reduce runoff from treated areas into aquatic habitats, consider the characteristics and conditions of the site before treatment. Site characteristics and conditions that may lead to runoff include, but are not limited to, heavy rainfall, moderate to steep slope, bare soil, poorly draining soil (e.g. compacted or fine-textured soils such as clay). In order to minimize risk to the environment from the use of this product, do not use on coarse textured gravelly soils, soils with less than 2% organic matter, or in areas where the water table may be high.

Avoid application of this product when heavy rain is forecast.

TOXIC to aquatic organisms and non-target terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE.

## **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:**

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)

## **DIRECTIONS FOR USE**

RIDOMIL GOLD<sup>®</sup> 480SL Fungicide is a systemic fungicide for use in a preventative program for the control of: Collar rot in apples (non-bearing),

Pythium damping-off in field cucumbers, Pythium sp. in greenhouse cucumbers,

Pythium damping-off and Phytophthora root rot in ginseng,

Downy Mildew in hops,

Pythium and Phytophthora root rot in raspberries, Phytophthora root rot in highbush blueberries,

Pythium damping-off and Phytophthora root rot in snap beans,

Red stele in strawberries,

Pythium spp. in tobacco greenhouse seedbeds,

Blue mold in tobacco, Downy mildew in spinach,

Suppression of Downey mildew in radishes,

Suppression of Pink Rot and Pythium Leak in potatoes, and Foliar Late blight, Early blight, and Botrytis vine rot in potatoes

RIDOMIL GOLD 480SL Fungicide is readily absorbed by the roots and provides protection against attack from these diseases under varied weather conditions.

#### **USE LIMITATIONS:**

Experience has shown that strains of fungus resistant to metalaxyl-M and S-isomer may develop. Failure to control the disease will result in crop damage and/or yield losses. Since the occurrence of the resistance cannot be foreseen, Syngenta Canada Inc. accepts no responsibility for any loss of, or damage to, crops resulting from the failure of RIDOMIL GOLD 480SL Fungicide to control the resistant fungus strains. If disease appears in a treated field, consult your local government extension specialist immediately.

DO NOT APPLY BY AIR.

DO NOT USE RIDOMIL GOLD 480SL Fungicide AS A FOLIAR APPLICATION UNLESS SPECIFIED ON THIS LABEL.

Do not dip plants or roots, spray bare roots, or use a transplant water treatment with solutions containing RIDOMIL GOLD 480SL Fungicide.

Only apply RIDOMIL GOLD 480SL Fungicide with one of the recommended tank partners when used on potatoes.

#### **DIRECTIONS FOR USE**

<u>Field Sprayer Application:</u> **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.

#### **Buffer zones:**

Use of the following spray methods or equipment **DOES NOT** require a buffer zone: hand-held or backpack sprayer, spot treatment, inter-row hooded sprayer, soil drench and soil incorporation.

The buffer zones specified in the table below for metalaxyl are required between the point of direct application and the closest downwind edge of sensitive freshwater and terrestrial habitats (such as grasslands, forested areas, shelter belts, woodlots, hedgerows, riparian areas and shrublands), 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 Habitat of Depths:	Terrestrial Habitat
		Less than 1 m	
Field sprayer*	Strawberry	0	1
	Radish	0	1

\*For field sprayer application, buffer zones can be reduced with the use of drift reducing spray shields. When using a spray boom fitted with a full shield (shroud, curtain) that extends to the crop canopy, the labelled buffer zone can be reduced by 70%. When using a spray boom where individual nozzles are fitted with coneshaped shields that are no more than 30 cm above the crop canopy, the labelled buffer zone can be reduced by 30%.

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.

APPLES (Non-Bearing)		
DISEASE	PRODUCT USE RATE	COMMENTS
Phytophthora Collar Rot	1 mL of product in 5 L of water per tree	RIDOMIL GOLD 480SL Fungicide should be applied as a thorough drench to the surface of the soil around the base of the tree. Make the first application at the time of planting, as a preventative treatment and make a second application in late August. In subsequent non-bearing years, apply RIDOMIL GOLD 480SL Fungicide in the spring before new growth begins (usually late April) and again in late August.
HOPS		
DISEASE	PRODUCT USE RATE	COMMENTS
Downy Mildew	570 mL of product in 200 L of water per hectare	Apply in early April as a soil drench at the root site.  Make only one application per season. The preharvest interval is 135 days.
RASPBERRIES		
DISEASE	PRODUCT USE RATE	COMMENTS
Pythium and Phytophthora Root Rot	37 mL per 100 metres of row	NEW PLANTINGS: Apply to the soil surface in a one-metre wide band centred over the row, as a post planting soil drench. Make a second application at the same rate in the fall prior to freeze-up (no later than November 30).
		ESTABLISHED PLANTINGS: Apply to the soil surface in a one-metre wide band centred over the row in the fall prior to freeze-up (no later than November 30).
		RIDOMIL GOLD 480SL Fungicide will readily move into the soil root zone following rain or irrigation.
		RIDOMIL GOLD 480SL Fungicide SHOULD NOT BE APPLIED IN THE SPRING ON ESTABLISHED PLANTINGS.

STRAWBERRIES:	IES: Ontario, Quebec and Maritime Provinces		
DISEASE	PRODUCT USE	COMMENTS	
	RATE		
Red Stele	1 L per hectare	Apply as a broadcast application in sufficient water to ensure even coverage. If dry conditions occur at the time of application, use sufficient water volume (2500 L/ha) to ensure movement of RIDOMIL GOLD 480SL Fungicide into the root zone.  NEW PLANTINGS:  First Application - Apply in early September.	
		Second Application - Apply in late October but not later than October 31.	
		ESTABLISHED PLANTINGS:	
		Fall Application - First application in early September.	
		Second Application - Apply in late October but not later than October 31.	
		RIDOMIL GOLD 480SL Fungicide SHOULD NOT BE APPLIED IN THE SPRING ON ESTABLISHED PLANTINGS.	
STRAWBERRIES:	Western Canada		
DISEASE	PRODUCT USE	COMMENTS	
	RATE		
Red Stele	20 mL per 100 metres of row	NEW PLANTINGS: Apply to the soil surface in a one-metre wide band centred over the row, as a post planting soil drench. Make a second application at the same rate in the fall prior to freeze-up (no later than November 30).  ESTABLISHED PLANTINGS: Apply to the soil surface in a one-metre wide band centred over the row, in the fall prior to freeze-up (no later than	
		November 30).	
		RIDOMIL GOLD 480SL Fungicide will readily move into the soil root zone following rain or irrigation.	
		RIDOMIL GOLD 480SL Fungicide SHOULD NOT BE APPLIED IN THE SPRING ON ESTABLISHED PLANTINGS.	
		WARNING:	
		FAILURE TO FOLLOW LABEL DIRECTIONS MAY RESULT IN FAILURE TO CONTROL RED STELE. IF SPRAYERS ARE NOT THOROUGHLY CLEANED BEFORE APPLYING RIDOMIL GOLD 480SL FUNGICIDE, SEVERE CROP DAMAGE MAY OCCUR. CONSULT THE LOCAL FRUIT SPECIALIST ON PROPER SPRAYER CLEANING TECHNIQUES.	

POTATOES –Tank mix with QUADRIS <sup>®</sup> Flowable Fungicide		
DISEASE	PRODUCT USE RATE	COMMENTS
Rhizoctonia stem and stolon canker ( <i>Rhizoctonia</i> spp.)	4 mL/100 m row RIDOMIL GOLD 480SL Fungicide	Apply once as an in-furrow spray in 50 to 140 L per hectare of water at
Black scurf (Rhizoctonia solani)	4-6 mL/100 m row - QUADRIS Flowable Fungicide	planting. Mount spray nozzle so the spray is
Suppression of pink rot (Phytophthora erythroseptica)		directed into the furrow as a 15-20 cm band just before the seed is covered.

- Read all the labels and follow the precautionary statement, directions for use (rates, diseases controlled and application intervals) and other restrictions.
- Always check the compatibility of the RIDOMIL GOLD 480SL Fungicide tank mix using a jar test
  with proportionate amounts of QUADRIS Flowable Fungicide and water before mixing in the spray
  tank.
- Provide sufficient jet or mechanical agitation during filling and application to keep the tank mix uniformly suspended.
- Fill tank at least 1/2 full of clean water.
- First add QUADRIS Flowable Fungicide followed by RIDOMIL GOLD 480SL Fungicide.
- Do not leave tank mix combinations in the spray tank for prolonged periods without agitation. Mix and apply in the same day.

A plant back interval of 30 days for potatoes (root crops) is required.

Do not apply more than one application per season.

POTATOES –Tank mix with QUADRIS Flowable Fungicide and ACTARA® 240SC Insecticide			
PEST	PRODUCT USE RATE	NOTES	
Rhizoctonia stem and stolon canker	4 mL/100 m row RIDOMIL GOLD 480SL Fungicide +	Apply once as in-furrow spray in sufficient water to ensure good coverage.	
Black scurf	4-6 mL/100 m row QUADRIS Flowable Fungicide	Use the higher rate of	
Pink rot (suppression only)	+ 3.4-4.4 mL/100 m row ACTARA	QUADRIS Flowable Fungicide when the risk of	
Colorado potato beetle	240SC Insecticide	disease is high.	
Potato leafhopper		Use the higher rate of ACTARA 240SC Insecticide	
Aphids - including green peach, potato, buckthorn, and foxglove		for extended residual control.	
aphid		Mount spray nozzle so the spray is directed into the	
		furrow as a 15-20 cm band just before the seed is covered.	

## **Mixing Instructions:**

- 1. Fill tank at least 1/2 full of clean water.
- 2. With the agitator running, add QUADRIS Flowable Fungicide and ACTARA 240SC Insecticide, followed by RIDOMIL GOLD 480SL Fungicide.
- 3. Continue filling the spray tank with water until the desired volume is reached.
- 4. Begin application of the solution after the products have completely dispersed into the mix water. Maintain agitation until all of the mixture has been applied.

#### **Precautions:**

Read the labels for all products in the tank-mix and follow the precautionary statements, directions for use (rates, diseases controlled and application intervals) and other restrictions.

Always check the compatibility of the RIDOMIL GOLD 480SL Fungicide tank-mix using a jar test with proportionate amounts of QUADRIS Flowable Fungicide, ACTARA 240SC Insecticide and water before mixing in the spray tank.

Provide sufficient jet or mechanical agitation during filling and application to keep the tank mix uniformly suspended.

Do not leave tank mix combinations in the spray tank for prolonged periods without agitation. Mix and apply in the same day.

Do not follow a soil application of ACTARA 240SC Insecticide with a foliar application of ACTARA 25WG Insecticide.

A plant back interval of 30 days for potatoes (root crops) is required.

Do not apply more than one application per season.

POTATOES –Tank mix with either BRAVO $^{\circ}$ 500 or BRAVO 720 or BRAVO ZN or BRAVO Ultrex Agricultural Fungicides			
DISEASE	PRODUCT USE RATE	COMMENTS	
Control of foliar Late blight, Early blight, Botrytis vine rot, and Suppression of Storage rots namely Pythium Leak ( <i>Pythium</i> spp.) and Pink Rot ( <i>Phytophthora erythroseptica</i> )	0.208 L/ha RIDOMIL GOLD 480SL + 2.0 L/ha BRAVO 500 OR 1.39 L/ha BRAVO 720 OR 2.0 L/ha BRAVO ZN OR	Apply a second and third application of this tank mix at 14-day intervals. Apply a registered contact fungicide at 7-day intervals after application of this tank mixture. Use a minimum of 50 L of water to obtain adequate spray coverage. Begin applications when plants are 15-20 cm high but no later than when plant foliage meets within the row uniformly across the field, or when disease threatens.	

• Read all the labels and follow the precautionary statement, directions for use (rates, diseases controlled and application intervals) and other restrictions.

1.21 kg/ha BRAVO Ultrex

- Always check the compatibility of the RIDOMIL GOLD 480SL Fungicide tank mix using a jar test
  with proportionate amounts of tank mix partner and water before mixing in the spray tank.
- Provide sufficient jet or mechanical agitation during filling and application to keep the tank mix uniformly suspended.
- Fill tank at least 1/2 full of clean water.
- First add tank mix partner followed by RIDOMIL GOLD 480SL Fungicide.
- Do not leave tank mix combinations in the spray tank for prolonged periods without agitation. Mix and apply in the same day.

**Restrictions:** DO NOT apply more than three (3) applications per season regardless of disease being treated. DO NOT apply to potato plants later than 14 days before harvest.

TOBACCO GREENHOUSE SEEDBEDS		
DISEASE	PRODUCT USE RATE	COMMENTS
Pythium spp.	12 mL in 100 litres of water and apply to 100 square metres of plant bed	Apply within 72 hours prior to seeding. DO NOT APPLY RIDOMIL GOLD 480SL FUNGICIDE WITH EQUIPMENT THAT HAS BEEN USED PREVIOUSLY FOR HERBICIDE APPLICATION.

TOBACCO (FLUE-CURED) - FIELD APPLICATION		
DISEASE	PRODUCT USE RATE	COMMENTS
Blue Mold	600 mL to 1.2 L/ha	First Application: Apply prior to transplanting. If dry weather persists after application, irrigation or cultivation is required to move RIDOMIL GOLD 480SL Fungicide into the root zone. The 600 mL/ha rate may give a maximum of five weeks prevention against blue mold. To date, experience in Ontario indicates that blue mold usually becomes a problem in the last two weeks of July, and the first week of August. If season-long control of blue mold is desired, apply the 1.2 litre rate of RIDOMIL GOLD 480SL Fungicide.
	600 mL/ha	Second Application: For prolonged control of blue mold in field planted tobacco, make a supplemental application of RIDOMIL GOLD 480SL Fungicide at 600 mL/ha as a broadcast soil application before the last cultivation. If dry weather persists after application, irrigation must be applied to move RIDOMIL GOLD 480SL Fungicide into the root zone.  Do not make this lay-by application if more than 600 mL of RIDOMIL GOLD 480SL Fungicide were applied before transplanting. Do not use RIDOMIL GOLD 480SL Fungicide as a foliar application on field grown tobacco or injury may occur.

TOBACCO (BURLEY) - FIELD APPLICATION		
DISEASE	PRODUCT USE RATE	COMMENTS
Blue Mold	1.2 L/ha for single application  Or	May be applied as a single application of 1.2 L/ha prior to transplanting or as a split application of 600 mL/ha prior to transplanting followed by 600 mL applied to the soil just prior to the final cultivation.
	600 mL/ha for split application	If dry weather persists after application, irrigation must be applied to move RIDOMIL GOLD 480SL Fungicide into the root zone.  Do not use RIDOMIL GOLD 480SL Fungicide as a foliar application on field grown tobacco or injury may occur.

#### **TOBACCO**

#### APPLICATION AND INCORPORATION INSTRUCTIONS:

Apply RIDOMIL GOLD 480SL Fungicide close to and preferably within 24 hours prior to transplanting. Spray evenly over the entire soil surface. For proper incorporation, cultivate between the rows with S-Tine or Konskilde-type teeth set to work the soil 10 cm deep, making sure the sides of the fumigant hill are removed. Travel at a ground speed of 10-13 km/hr. Minimize soil movement from the top of the fumigant hill during transplanting so that young seedlings are not surrounded by untreated soil. DO NOT BAND. DO NOT APPLY IN TRANSPLANT WATER. DO NOT APPLY RIDOMIL GOLD 480SL FUNGICIDE BY AIRCRAFT.

#### WARNING:

FAILURE TO FOLLOW LABEL DIRECTIONS MAY RESULT IN FAILURE TO CONTROL BLUE MOLD. IF HERBICIDE SPRAYERS ARE NOT THOROUGHLY CLEANED BEFORE APPLYING RIDOMIL GOLD 480SL FUNGICIDE, SEVERE CROP DAMAGE MAY OCCUR. CONSULT THE LOCAL TOBACCO SPECIALIST ON PROPER SPRAYER CLEANING TECHNIQUES.

#### **TOBACCO FIELD APPLICATION - Mixing and Spraying Instructions:**

- 1. Fill spray tank 1/2 to 3/4 full with water.
- 2. With agitation system engaged, add the required amount of RIDOMIL GOLD 480SL Fungicide (see application rates section of the label) and then continue filling the tank with water.
- 3. Maintain sufficient agitation during the mixing and spraying operation.
- 4. Sprayer equipment should be thoroughly flushed with clean water and drained before and after use of RIDOMIL GOLD 480SL Fungicide.

**NOTE:** Do not let tank contents stand for long periods of time without agitation. If spraying is interrupted, thoroughly re-agitate the spray solution before application. RIDOMIL GOLD 480SL FUNGICIDE SPRAY SOLUTION MUST NOT BE STORED OVERNIGHT.

#### **Sprayer Information:**

Use 50 mesh or larger nozzle screens. Keep by-pass line on or near bottom of tank to minimize foaming.

Spray pressure: 200 to 300 kPa.

Spray volume per hectare: 200 to 300 litres of water.

**COMPATIBILITY:** RIDOMIL GOLD 480SL FUNGICIDE SHOULD NOT BE TANK-MIXED WITH ANY NEMATICIDE, INSECTICIDE, HERBICIDE, FUNGICIDE, OR FERTILIZER.

#### **NOTE TO USER**

The DIRECTIONS FOR USE for this product for the uses 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) and/or crop tolerance (phytotoxicity) claims for this product when used on the crops listed below.

Accordingly, the Buyer and User assume all liability arising, and agree to hold Syngenta Canada Inc. harmless from any claims based on efficacy and/or phytotoxicity in connection with the uses described below.

## **DIRECTIONS FOR USE**

#### **GINSENG:**

Control of Pythium Damping-Off and Phytophthora Root Rot

For the control of *Pythium* damping-off in the seedling year apply 650 mL of product per hectare just prior to emergence of the seedlings. For the control of *Phytophthora* root rot in subsequent years apply 650 mL of product per hectare as a soil broadcast application in the spring prior to the emergence of the ginseng. Apply in a minimum of 2500 L of water per hectare. Do not apply RIDOMIL GOLD 480SL Fungicide more than once a year.

NOTE: DO NOT USE RIDOMIL GOLD 480SL Fungicide DURING THE GROWING SEASON. Use up to 2 applications of RIDOMIL 480SL during the growing season following the directions on the RIDOMIL 480SL label. Do not apply products containing metalaxyl or metalaxyl-M and S-isomer within 9 days prior to harvesting ginseng. Do not make more than 3 applications in total per year of products containing either metalaxyl or metalaxyl-M and S-isomer.

## **CUCUMBERS (FIELD):**

Control of Pythium Damping-Off

For the control of *Pythium* damping-off in cucumbers, apply 2.25 to 4.5 mL of RIDOMIL GOLD 480SL Fungicide per 100 m of row as a 18 cm band, centred over the row. Apply immediately after seeding or just before transplanting. RIDOMIL GOLD 480SL Fungicide should be incorporated mechanically into the top 5 cm of soil before transplanting, or moved into the seed zone shortly after seeding with 15-25 mm of rainfall or irrigation. Use the high rate when disease pressure is high. Apply in a minimum of 200 L water per hectare. Apply RIDOMIL GOLD 480SL Fungicide to cucumbers only once per year with ground application equipment only.

RIDOMIL GOLD 480SL Fungicide must only be applied as a spray to the soil surface. Do not use RIDOMIL GOLD 480SL Fungicide for disease control in greenhouse crops. Do not apply over the top of transplants, as a drench, or dip transplants in solutions containing RIDOMIL GOLD 480SL Fungicide. RIDOMIL GOLD 480SL Fungicide is readily absorbed by the roots and provides protection against attack

from this disease under varied weather conditions.

## **CUCUMBERS (GREENHOUSE):**

Control of *Pythium* spp.

GROWERS USING THIS TREATMENT ARE REQUIRED TO SIGN A WAIVER OF LIABILITY AND INDEMNIFICATION CERTIFICATE BEFORE PURCHASING AND USING RIDOMIL GOLD 480SL Fungicide ON CUCUMBERS GROWN IN GREENHOUSES.

Apply 250 mL of the RIDOMIL GOLD 480SL Fungicide mixture (0.75-1.25 mL product/10 L water) once,

immediately after transplanting as a drench to the growing media at the base of each plant.

- DO NOT APPLY RIDOMIL GOLD 480SL Fungicide TO THE FOLIAGE.
- MAKE ONLY ONE APPLICATION PER PLANTING CYCLE.
- DO NOT USE IN THE PROPAGATION HOUSE.
- DO NOT APPLY WITHIN 21 DAYS OF HARVEST.
- DO NOT APPLY TO CUCUMBERS INTENDED FOR TRANSPLANT OUT TO FIELDS.
- DO NOT APPLY TO GREENHOUSE CUCUMBERS GROWN IN SOIL.

#### **SNAP BEANS:**

Control of Pythium Damping-Off and Phytophthora Root Rot

RIDOMIL GOLD 480SL Fungicide applied at planting will control *Pythium* damping-off and *Phytophthora* root rot in snap beans. Apply RIDOMIL GOLD 480SL Fungicide at the rate of 2.3 mL of product per 100 metres of row based on a 20 cm spray band and 76 cm row spacing. This is equivalent to an application rate of 300 mL of RIDOMIL GOLD 480SL Fungicide per treated hectare. Adjust the spray nozzles so that one third of the band is applied to each side of the seed furrow and one third directly into the seed furrow. Make only one application per year.

#### **HIGHBUSH BLUEBERRY:**

Control of root rot (Phytophthora cinnamoni)

Apply 37 mL of RIDOMIL GOLD 480SL Fungicide per 100 metres of row to the soil surface in a one-metre wide band centred over the row or in early spring prior to growth. Apply in a minimum of 2000 L of water per hectare. Do not apply RIDOMIL GOLD 480SL Fungicide more than once a year.

The pre-harvest interval is 80 days.

#### **POTATOES:**

Suppression of Pink Rot (*Phytophthora erythroseptica*)

Apply 4 mL of RIDOMIL GOLD 480SL Fungicide per 100 metres of row directly over the seed pieces in furrow as a 15-20 cm band prior to row closure. Apply in a minimum of 30 L of water per hectare.

Do not apply more than one application per season. Do not apply RIDOMIL GOLD 480SL Fungicide beyond the at-planting stage.

#### SPINACH:

Control of downy mildew (Peronospora farinose f.sp. spinaciae)

Apply 1 L RIDOMIL GOLD 480SL Fungicide per hectare. Apply at planting as a banded application over the row, pre-plant incorporated application. Apply one application per season.

Experience has shown that strains of fungus resistant to metalaxyl-M and S-isomer may develop. Failure to control the disease will result in crop damage and/or yield losses. Since the occurence of the resistance cannot be forseen, Syngenta Canada Inc. accepts no responsibility for any loss of, or damage to, crops resulting from the failure of RIDOMIL GOLD 480SL Fungicide to control the resistant fungal strains. If disease appears in a treated field, consult your local government extension specialist immediately.

DO NOT apply RIDOMIL GOLD 480SL Fungicide beyond the at-planting stage. DO NOT APPLY BY AIR.

#### RADISH:

Suppression of downy mildew (Peronospora parasitica)

Apply 1.2 to 2.4 L/ha RIDOMIL GOLD 480SL Fungicide per hectare. Use the higher rate in areas with a history of high disease pressure. Maximum one application per season. Apply in sufficient water to provide uniform coverage of soil.

Single Broadcast or Banded application: Before or at planting. For banded applications, use an 18 cm band.

Do not apply within 21 days of harvest. DO NOT apply by air. DO NOT apply RIDOMIL GOLD 480SL Fungicide beyond the at-planting stage.

#### RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, please note that RIDOMIL GOLD 480SL Fungicide contains a Group 4 fungicide. Any fungal population may contain individuals naturally resistant to RIDOMIL GOLD 480SL Fungicide and other Group 4 fungicides. A gradual or total loss of pest control may occur over time if these fungicides are used repeatedly in the same fields. Other resistance mechanisms that are not linked to site of action but specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance-management strategies should be followed.

## To delay fungicide resistance:

Where possible, rotate the use of RIDOMIL GOLD 480SL Fungicide or other Group 4 fungicides with different groups that control the same pathogens. In order to minimize the potential for the development of resistance among the labeled disease organisms do not use RIDOMIL GOLD 480SL Fungicide in any two consecutive seed generations.

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

Fungicide use should be based on an IPM program that includes scouting, historical information related to pesticide use and crop rotation and considers host plant resistance, impact of environmental conditions on disease development, disease thresholds, as well as cultural, biological and other chemical control practices.

Where possible, make use of predictive disease models to effectively time fungicide applications.

Monitor treated fungal populations for resistance development. Notify Syngenta Canada Inc. if reduced sensitivity of the pathogen to RIDOMIL GOLD 480SL Fungicide is suspected.

If disease continues to progress after treatment with this product, do not increase the use rate. Discontinue use of this product, and switch to another fungicide with a different target site of action, if available.

Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for specific crops and pathogens.

For further information and to report suspected resistance, contact Syngenta Canada Inc. at 1-87-SYNGENTA (1-877-964-3682) or at <a href="https://www.syngenta.ca">www.syngenta.ca</a>.

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