

# **TOBACCO TRANSPLANT WATER FOR CONTROL OF BLACK SHANK - INDIANA**

General Information

## **PRODUCT INFORMATION**

Ridomil Gold SL is a systemic fungicide for use on selected crops to control certain diseases caused by members of the Oomycete class of fungi.

## **PRODUCT USE RESTRICTIONS**

Do not use Ridomil Gold SL in greenhouses or other structures such as lath houses, float houses, and hydroponic facilities.

Do not use Ridomil Gold SL for disease control in bedding plants, transplant trays, or nurseries except where specifically allowed in certain crop sections.

**DO NOT USE RIDOMIL GOLD SL AS A FOLIAR APPLICATION UNLESS SPECIFIED ON THE LABEL.**

Do not dip plants or roots, spray bare roots, or use a transplant water treatment with solutions containing Ridomil Gold SL except where specifically allowed in certain crop sections.

Under conditions conducive to severe disease pressure, additional fungicide applications beyond the number allowed by the label may be needed. Under these conditions, use another fungicide registered for the crop/disease appearing on the label.

Where rate ranges are specified on the label, use the higher rate when heavy disease pressure is expected and the lower rate when disease pressure is expected to be light, unless otherwise noted. Maximum usage when applying both metalaxyl- and mefenoxam-containing products to the same crop within the same season: Do not apply more than the maximum seasonal total for the active ingredient as stated on the label of the product containing the lowest seasonal total on that crop. Soil-applied maximum application rates include all uses in Part 1 and all uses in Part 2 except foliar applications.

## Replanting

If replanting is necessary, additional applications of Ridomil Gold SL may be made, provided that the total amount of active ingredient in Ridomil Gold SL applied does not exceed the maximum allowed for the specific crop.

## PRODUCT USE INSTRUCTIONS

Application: Apply Ridomil Gold SL by ground or air in sufficient water or liquid fertilizer to provide uniform coverage of the soil surface. Apply in a minimum of 20 gal per acre for ground applications and 3 gal per acre by air. Refer to the Directions for Use for specific crop application directions. Refer to Application Instructions for band and in-furrow calculations.

## Moving Ridomil Gold into the Root or Seed Zone:

To ensure maximum activity on soilborne pathogens, Ridomil Gold SL must be moved into the seed or root zone of the plant. Follow the specific crop directions. Placement in the seed or root zone includes in-furrow sprays, soil injections, crown dips. Incorporation includes preplant incorporated applications, soil drenches, or shank applications. For soil surface sprays, rainfall will move the fungicide into the seed or root zone, but if rain is not expected within 24 hours after application, mechanically incorporate (before planting) or sprinkler irrigate (after planting) with 1/2 to 1 inch of water.

Efficacy: Under certain conditions conducive to extended infection periods, use another registered fungicide for additional applications if maximum amount of Ridomil Gold SL has been used. If resistant isolates to Group 4 fungicides are present, efficacy can be reduced. Under high disease pressure, it is recommended

to use the highest rate and shortest interval when needed.

**Crop Tolerance:** Plant tolerance has been found acceptable for all crops on the label, however, not all possible tank-mix combinations have been tested under all conditions. When possible, it is recommended to test the combinations on a small portion of the crop to ensure a phytotoxic response will not occur as a result of application.

**Spray Drift Management:** To avoid spray drift, do not apply when conditions favor drift beyond the target area. Avoid spray overlap as crop injury may occur. The interaction of many equipment and weather related factors determine the potential for spray drift. AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR AND THE GROWER. More information on managing spray drift can be found on the Syngenta Crop Protection website under Stewardship <http://www.syngentacropprotection-us.com/enviro/driftmanagement/>

**IPM:** Ridomil Gold SL should be integrated into an overall disease and pest management strategy (IPM) whenever the use of a fungicide is required. Cultural practices known to reduce disease development should be followed. Consult your local agricultural authorities for additional IPM strategies established for your area.

## RESISTANCE MANAGEMENT

Ridomil Gold SL is in the Group 4 class fungicide having a specific mode of action and is subject to the development of insensitive strains of fungi. Fungal pathogens can develop resistance to products with the same mode of action when used repeatedly. Because resistance development cannot be predicted, use of this product should conform to resistance management strategies established for the crop and use area. Consult your local or state agricultural authorities for resistance management strategies that are complementary to those in this label. Resistance management strategies may include rotating and/or tank mixing with products having different modes of action or limiting the total number of applications per season. Syngenta encourages responsible resistance management to ensure effective long-term control of the fungal diseases on this label. Ridomil Gold SL should not be alternated or tank-mixed with any fungicide to which resistance has already developed.

## APPLICATION PROCEDURES

Ground Application (Broadcast):

- Apply in a minimum of 20 gal of water per acre, unless specified otherwise.

#### Ground Application (Banded):

- Application rates in the Directions for Use are generally expressed as an amount per acre which refers to the total crop area to be treated.

#### Ground Applications (In-Furrow):

- Apply Ridomil Gold SL as an in-furrow spray in 3-7 gal per acre of water at planting.  
- Mount the spray nozzle so the spray is directed into the furrow just before the seed are covered.

- The following table provides common row spacings and the amount of Ridomil Gold SL to apply per acre.

#### Aerial Application:

- Apply in a minimum of 3 gal of water per acre, unless specified otherwise.  
- Avoid application under conditions when uniform coverage cannot be obtained or when excessive spray drift may occur.

#### Application through Irrigation Systems (Chemigation):

- Apply this product only through center pivot, solid set, hand move, moving wheel, micro-sprinkler, or drip irrigation systems. Do not apply this product through any other type of irrigation system.  
- Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.  
- If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts.  
- Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system, unless the pesticide label-prescribed safety devices for public water systems are in place.  
- A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.  
- Ridomil Gold SL must be applied on the schedule specified in the specific crop use directions, not according to the irrigation schedule.

Note: Do not inject Ridomil Gold SL at full strength or deterioration of valves and seals may occur. Use a dilution ratio of at least 15 parts water to 1 part Ridomil Gold SL in the mix tank. Ridomil Gold SL can affect many seal materials. Leather seals are best. EPDM or silicone rubber seals can be used, but should be replaced

once a year. Do not use Viton, Buna-N, Neoprene, or PVC seals.

## Limitations, Restrictions, and Exceptions

### Use in Transplant Water:

- Apply in transplant furrow while planting tobacco seedlings for control of black shank caused by *Phytophthora nicotianae*
- Apply 4-8 oz/A (0.25-0.5 pt/A) in at least 200 gallons of transplant water per acre.
- Use the high rate if the disease epidemic is expected to be severe.
- Make at least 1 subsequent application of Ridomil Gold SL at first cultivation and/or layby if necessary, for control of black shank.

### Precautions

- There is a risk of plant injury with transplant water application of Ridomil Gold SL, especially when applied in less than 200 gallons carrier volume/acre. Crop injury is most likely when application is in less than 100 gallons /acre. Injury is temporary and should disappear within 3 weeks.
- Do not apply in less than 200 gallons for burley and dark tobacco.
- Pre-mixing Ridomil Gold SL in a tank separate from the transplant water source tank will help to prevent negative interactions with fertilizers or other pesticides in the transplant water solutions.
- Do not apply to stressed seedlings, or during hot and dry conditions due to injury potential.
- A variety with resistance to race 0 and race 1 of the black shank pathogen should be planted

### Restrictions

- Do not exceed the equivalent of 1.5 lb. a.i./A (3 pts/A) per crop of mefenoxam containing products.

### Method

#### [In Furrow](#)

### Rates

#### [field rates 0](#)

#### [field rates 1](#)

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### Restricted Entry Interval

48 hours

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

Timings

[Transplant](#)