SoilGard® microbial fungicide contains live spores of a naturally occurring soil fungus known as *Gliocladium virens* (also known as *Trichoderma virens*) strain GL-21. SoilGard is effective against plant diseases caused by *Pythium*, *Rhizoctonia*, *Sclerotinia*, *Sclerotium*, *Fusarium*, *Phytophthora capsici* and other common soilborne plant pathogens.

Upon application to the soil, germinating GL-21 spores produce an antibiotic compound that kills disease-causing fungi in close proximity. SoilGard also attacks and consumes the mycelia of these fungi and competes with any survivors. Once established in the rhizosphere, SoilGard excludes pathogenic fungi from re-colonizing, protecting the young plant until it attains sufficient root mass to resist or tolerate infection.

SoilGard is a preventive, root-protecting biofungicide and, as such, must be delivered to the root environment to be successful. The following are some key tips to help you be successful with SoilGard in your operation.

**Keys to a Successful SoilGard Application:**

- **Initial field applications can occur** immediately before or during planting or transplanting. However, SoilGard should not be applied in the field more than 1 week prior to planting or transplanting. SoilGard can be reapplied any time after planting or transplanting, up to the time of harvest.

- **SoilGard works best in soil that has been** thoroughly tilled and is free of large clumps allowing uniform distribution in the rooting zone.

- **SoilGard is most active at soil temperatures** between 45° and 90° F.

- **Light, aerated soils with moderate organic matter** provide oxygen and nutrients for the beneficial fungus in SoilGard as it grows and protects the plant roots.

- **Excessively dry, waterlogged or compacted soils** will reduce establishment of SoilGard in the root zone.

- **Mix SoilGard with a minimum of 2 gals. of water per pound of product for application.**
For Sprinkler Application

Apply SoilGard to moist or pre-irrigated soil at 2 to 10 lbs. per acre.

Calculate the amount of time necessary to deliver premixed SoilGard from nurse tank based on irrigation system and multiply this irrigation period by three. This will be the minimum time necessary to irrigate and apply SoilGard. (Figure 1).

- The first third of the irrigation period should be used to pre-wet soil.
- Inject SoilGard at the beginning of the second third of the irrigation period to deliver uniformly from the nurse tank through the field.
- Use the final third of the irrigation period to drive the SoilGard into the soil and to help clear any remaining SoilGard material from the irrigation lines.

SoilGard can be mixed directly in the nurse tank with constant agitation and injected into the sprinkler lines under the following conditions:

- High flow rate, achieved through high pressure (30 psi or higher), large water volumes (at least 50 gals. per acre), or a combination of both.
- Large mesh (50 or coarser) or no screens.
- Large orifice sprinkler head nozzles.

If screens cannot be removed, pressure is limited, or lower water volumes are required, follow the steps below to prepare a finer suspension of spores in water:

- Mix SoilGard in a minimum of 2 gals. of water per pound of product in a large bucket or other container of sufficient volume.
- Stir or agitate for 10 minutes. The spores of the beneficial fungus in SoilGard will dislodge from the solid material and become suspended in the water.
- Allow solid material to settle to the bottom of the bucket for another 10 minutes.
- Pour or pump the water (now containing the spores) into the nurse tank, leaving solids behind in the bottom of the bucket.
- Alternately, after the SoilGard mixed in water is stirred or agitated for 10 minutes, pour the unsettled suspension through cheesecloth or other filter material, or a 50 mesh or finer screen, allowing the liquid portion to go directly into spray, nurse or mix tank.

Inject SoilGard downstream from filters. DO NOT allow SoilGard to enter into sand/silicate filtration systems, which may trap spores and prevent their distribution in the field.

Regardless of application method, SoilGard can be reapplied as labeled throughout the growing period to maintain soil disease control.

Dispose of any unused carrier or rinsate left in mix tanks according to applicable state and local regulations.