

SoilGard®

SoilGard® biofungicide contains spores of a beneficial fungus which must germinate and grow in order to protect plants from soilborne pathogenic fungi. In some applications it may be necessary to mix SoilGard with other products to control insects or nematodes or to enhance soil penetration. It should not be necessary under most circumstances to combine SoilGard with other fungicides to control damping-off diseases. However, there may be cases where supplemental fungicide application is necessary to control difficult soilborne pathogens, especially late in the season.



The table below lists some soil-applied fungicides, insecticides, and other agricultural chemicals that have been found to have no adverse effects on spore germination and fungal growth in laboratory tests under simulated tank mix conditions. These materials can be mixed and applied with SoilGard

without impacting its bioactivity. Materials that do not appear in the table should not be mixed with SoilGard in the same application and should be applied at least 1 week prior to or at least 2 weeks after applying SoilGard.

Materials Having No Adverse Effect on Viability of SoilGard.					
Active Ingredient	Chemical Group MO		Product Trade Names		
Fungicides					
Fosetyl-aluminum	Phosphonate	33	Aliette®		
Metalaxyl	Phenyl amide	4	Ridomil®, Subdue®		
PCNB (quintozene)	Aromatic hydrocarbon	14	Terraclor®		
Etridiazole + thiophanate methyl	Thiadiazole+thiophanate	14+1	Banrot®		
Cyazofamid	Cyanoimidazole	21	Ranman®		
Fenamidone	Imidazolinones	11	Reason®		
Insecticides & Nematicides					
Azadirachtin	Triterpenoid (botanical)		Azatin®, Neemix®, Neemazad®		
Oxamyl	Carbamate	1A	Vydate® L		
Adjuvants					
Alkoxylated polyols + glucoethers	Soil wetting agent		WaterMaxx®2, IrrigAid® Gold		
Ethoxylated copolymers	Soil wetting agent		Penecal [®]		
Linear alcohol + siloxane	Soil wetting agent	Quadra-Tek®			
Polyether/polymethylsiloxane copolymer	Wetting agent		Break-Thru®		
Polyethylene sorbitan monolaurate	Wetting agent		Tween® 20		
Yucca saponins	Wetting agent		Saponyn®, ThermX®		

^{*}Fungicide Resistance Action Committee (FRAC) code or Insecticide Resistance Action Committee (IRAC) group based on mode of action, if applicable (as of November 2009).



Table 2. Fungicides That Reduced Spore Viability and Growth (Do Not Mix With SoilGard®)				
Active ingredient	Chemical Group	MOA Code*	Product Trade Names	
Captan	Phthalimides	M4	Captan®	

Using SoilGard With MeloCon® Biological Nematicide

SoilGard can be used in a program with MeloCon® WG to control both soilborne diseases and plant-parasitic nematodes as an alternative or supplement to soil fumigation. However, they should not be mixed in the same application. Upon application to the soil, the beneficial fungus in SoilGard produces a potent antimicrobial compound that kills and inhibits spore germination of other fungi in the immediate vicinity. Wait at least 3 days after SoilGard application to apply MeloCon when the effect of the antimicrobial compound has dissipated. Allow at least 2 weeks after a MeloCon application before applying SoilGard.

Using SoilGard After Soil Fumigation

Soil fumigants, such as methyl bromide, chloropicrin, iodomethane (Midas®), metam sodium (Vapam®), or metam potassium (K-Pam®), may kill or inhibit the beneficial fungus in SoilGard. Apply SoilGard to recently fumigated soil only after fumigant gases have dissipated. Refer to the fumigant label to determine the safe planting interval after fumigation. SoilGard can be applied as soon as it is safe to plant the crop.

DISCLAIMER: This technical bulletin is not a recommendation to mix SoilGard with any specific product. Mix only with products for which such mixing is permitted by the label for that product. Test the physical compatibility of unfamiliar mixtures by combining small amounts of the products in the intended proportions and mix order before actual use ("jar test"). This technical bulletin may be updated as new information becomes available.

