



RootShield® *PLUS*⁺

Compatibility

RootShield® *PLUS*⁺ WP has been tested with the products listed in the Tables below for compatibility. Products were evaluated for impact on viability of active ingredient spores. Even though the active ingredients in RootShield *PLUS*⁺ WP are fungi; research has shown that it can be tank-mixed successfully with many other fungicides. The information below is divided into three (3) tables: (1) materials in the first table are fully tank mix compatible; (2) materials listed in the second table can be applied before or after the application of the compound; (3) the third table lists incompatible fungicides. For incompatible fungicides, BioWorks, Inc. recommends that RootShield® be applied 10 to 14 days before or after chemical fungicide application. Make applications of tank mix solutions as soon as possible after mixing.

Tests were not carried out to evaluate impact on the partner product integrity or for plant phytotoxicity. Compatibility has been tested at labeled tank mix dilutions, not in concentrated stock tank dilutions, such as for injecting at 1:100, unless noted. Physical compatibility can be impacted by your water quality, tank residues, or the addition of other materials in the spray or stock tank. All tank mix combinations have been tested as compatible for up to four hours.

Table 1: Tank mix compatible products—tank mix or rotation

Bactericides	
Active Ingredient (a.i.)	Brand Name(s)
Streptomycin sulfate	Agri-Mycin®, Agrimycin

Fertilizers	
In general fertilizers are compatible with RootShield Plus: <ul style="list-style-type: none">• In concentrated stock solutions with RootShield Plus WP, mix and use within 4 hours.• For Dry mixes with RootShield Plus Granules, mix and use the same day	
Analysis	Brand Name(s)
5-0-2	ON-Gard™
2-0-6	Verdanta® PL-2
<i>Various analyses</i>	<i>Jack's Professional</i>



Table 1: Tank mix compatible products—tank mix or rotation (cont'd)

Fungicides	
Active Ingredient (a.i.)	Brand Name(s)
Aluminum tris (O-ethyl phosphonate)	Aliette® (at 100x stock solution, use w/in 1 hour)
Azoxystrobin	Heritage®, Abound®, Quadris®
<i>Bacillus licheniformis</i> strain 3086	EcoGard® GN
Boscalid plus Pyraclostrobin	Pageant®
Cyazofamid	Segway®
Dimethomorph	Stature®
Etridiazole and Thiophanate-methyl	Banrot®
Fenamidone	FenStop®
Fludioxonil	Medallion®, Maxim®
Mefenoxam	Subdue Maxx®, Ridomil, Ridomil Gold®
Pentachloronitrobenzene (Quintozene)	PCNB, Terraclor® 400, Turfcide®, Penstar®. At labeled dilutions, not compatible in a 100X concentration.
Pyraclostrobin	Empress®, Cabrio®, Insignia®, Pristine®, Headline®
<i>Streptomyces griseoviridis</i> strain K61	Mycostop® (use w/in 2 hours)
<i>Streptomyces lydicus</i> WYEC 108	Actinovate®
Thiabendazole	Mertect® (When tank-mixed for 4 hours or less)
Thiram	Spotrete®, Vitavax® 200

Insecticides	
Active Ingredient (a.i.)	Brand Name(s)
Azadirachtin	Molt-X®
<i>Beauveria bassiana</i> strain GHA	BotaniGard® ES, BotaniGard 22WP, Mycotrol® O
Cyromazine	Citation®
Dinotefuran	Safari®
<i>Isaria fumosorosae</i> Apopka Strain 97	Preferal®
Pyrethrins	Pyganic
Spirotetramat	Kontos®



Table 1: Tank mix compatible products—tank mix or rotation (cont'd)

Microbial Inoculants	
Brand Name(s)	
EM-1	

Surfactants	
Brand Name(s)	
AquaGro® 2000	
AtPlus S-12	
Bivert®	
Capsil®	
Flozine®	
Latron® B 1956	
PsiMatric	
R-11	

Surfactants	
Brand Name(s)	
Silwet	
Silwet Eco	
Many other non-ionic surfactants	

Table 2: Pre- and post- application compatible products

(Incompatible when tank mixed. BioWorks recommends that these products be applied separately before or after RootShield PLUS⁺.)

Biocides	
Active Ingredient (a.i.)	Brand Name(s)
Chlorine dioxide	Selectocide (At free chlorine levels of 5 ppm or less)
Didecyldimethyl ammonium chloride (quaternary ammonium compound)	KleenGrow™ (Use only at 35 ppm or below)
Halogenated heterocyclic	Agribrom®
Hydrogen dioxide/ peroxyacetic acid	ZeroTol® (At concentrations of 1:10,000 or lower in irrigation water)

Table 2: Pre-and post-application compatible products (continued)

Fungicides	
Active Ingredient (a.i.)	Brand Names
<i>Bacillus amyloliquefaciens</i> strain D747	Triathlon [®] BA
<i>Bacillus subtilis</i> strain QST 713	CEASE [®] , Rhapsody [®] , Serenade [®]
<i>Bacillus subtilis</i> (various)	Companion [®] , Subtilex [®] , Taegro [®]
Captan	Captan [®]
Carboxin	Vitavax 34 [®] , Vitavax [®] 200
Chloroneb	Chloroneb [®] , Demosan [®] , Terraneb [®] , Terramec [®]
Chlorothalonil	Bravo [®] , Daconil [®]
Copper sulfate	Phyton-27 [®]
Dicloran	Botran [®]
Etridiazole	Truban [®]
Fenarimol	Rubigan [®] , Lesco Twosome
Fluopicolide	Adorn [®]
Flutolanil	Moncut [®] , Prostar [®]
Iprodione	Chipco 26019, Fungicide X, Rovral [®] , Ipridione Pro
Mancozeb	Fore [®] , Pace [®] 70W, Zyban [®] , Dithane [®]
Maneb	Maneb [®] , Manex [®]
Mefanoxam plus	Hurricane [®]
Metalaxyl	Apron [®] , Subdue [®] , Allegiance
Myclobutanil	Eagle [®]
Phosphorus acid	Alude [®] , Agrifos [®] , Fosphite [®] , Topaz [®]
Propamocarb	Banol [®]
Thiabendazole	Mertect [®] (When tank-mixed for greater than 4 hours)
Thiophanate methyl	Cleary's 3336 [®] , Topsin M [®] , Tops 5 [®] , AllBan [®] , Fungo [®]
Triadimefon	Bayleton [®]
Triadimenol	Baytan [®]
Vinclozolin	Ronilan [®] , Touche [®] , Curalan [®]

Growth Regulators	
Active Ingredient (a.i.)	Brand Name(s)
Ancymidol	A-Rest [®]
Chlormequat chloride	Cycocel [®]
Diaminozide	B-Nine [®]
Paclobutrazol	Bonzi [®]
Uniconazole	Sumagic [®]

Herbicides	
Active Ingredient (a.i.)	Brand Name(s)
Glyphosate	Roundup [®]
Pendimethalin	Prowl [®] , Pendulum [®]



Table 2: Pre-and post-application compatible products (continued)

Insecticides	
Active Ingredient (a.i.)	Brand Name(s)
Acephate	Orthene®
<i>Bacillus thuringiensis</i> , subsp. <i>Israelensis</i> , strain	Gnatrol®
Chlorpyrifos	Lorsban®
Diazinon	Diazinon
Imidacloprid	Marathon®, Gaucho®
Lindane	Lindane®
Malathion	Malathion®
Methoxychlor	Methoxychlor®
Carbaryl	Sevin®

Miticides	
Active Ingredient (a.i.)	Brand Name(s)
Dicofol	Kelthane®

Table 3. Incompatible Products

(Incompatible when tank mixed. BioWorks recommends that RootShield PLUS be applied 10 to 14 days before or after applying the products in this table)

Fungicides	
Active Ingredient (a.i.)	Brand Name(s)
Benomyl	Benlate®, Tersan® 1991, Bonide® Lawn Fungicide
Didecyl dimethyl ammonium chloride (quaternary ammonium compound)	KleenGrow™ (At concentrations above 35 ppm)
Hydrogen dioxide/ peroxyacetic acid	ZeroTo!® (At concentrations above 1:10,000)
Imazilil	Fungaflor®, Flo-Pro®, Nuzone
Propiconazole	Banner®
Tebuconazole	Folicur® 3.6 F
Triflumizole	Terraguard®