



Product Compatibility RootShield® PLUS⁺

RootShield® PLUS⁺ WP, *Trichoderma harzianum* strain T-22 and *Trichoderma virens* strain G-41, 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 sections: (1) materials in the first section are fully tank mix compatible; (2) materials listed in the second section can be applied before or after the application of the compound; (3) the third section lists incompatible fungicides. For incompatible fungicides, BioWorks 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 4 hours.

Section 1: Compatible Products for tank mixing or in rotation

Bactericides (Compatible)	
Active Ingredient (a.i.)	Brand Name(s)
Streptomycin sulfate	Agri-Mycin®, Agrimycin
<i>Agrobacterium radiobacter</i> strain K84	Galltrol®

Fertilizers (Compatible)	
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 	
Brand Name(s)	
5-0-0	ON-Gard®
2-0-6	Verdanta® PL-2
<i>Various analyses</i>	<i>Jack's Professional</i>



Fungicides (Compatible)	
Active Ingredient (a.i.)	Brand Name(s)
Aluminum tris (O-ethyl phosphonate)	Aliette® (at 100x stock solution, use within 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>Reynoutria sachalinensis</i>	Regalia®
<i>Streptomyces griseoviridis</i> strain K61	Mycostop® and PreFence® (use within 2 hours)
<i>Streptomyces lydicus</i> WYEC 108	Actinovate®
Thiabendazole	Mertect® (When tank-mixed for 4 hours or less)
Thiram	Spotrete®, Vitavax® 200

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

Microbial Inoculants (Compatible)
Brand Name(s)
EM-1

Mycorrhizae (Compatible)	
Active Ingredient (a.i.)	Brand Name(s)
<i>Glomus</i> spp.	Various

Surfactants (Compatible)
Brand Name(s)
AquaGro® 2000
AtPlus S-12
Bivert®
Capsil®
Flozine®
Latron® B 1956
PsiMatric
R-11
Silwet
Silwet Eco
Many other non-ionic surfactants



Section 2: Pre- and post- application compatible products

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

Fungicides Pre- and Post- Application	
Active Ingredient (a.i.)	Brand Names
<i>Bacillus amyloliquefaciens</i> strain D747	Triathlon® BA
<i>Bacillus subtilis</i> strain QST 713	CEASE®, Rhapsody®, Serenade® (wait 1 day)
<i>Bacillus subtilis</i> (various)	Companion®, Subtalex®, Taegro®
Captan	Captan®
Carboxin	Vitavax 34®, Vitavax® 20
Chloroneb	Chloroneb®, Demosan®, Terraneb®, Terramec®
Chlorothalonil	Bravo®, Daconil®
Copper sulfate	Phyton-27®
Dicloran	Botran®
Etridiazole	Truban®
Fenarimol	Rubigan®, Lesco Twosome
Fluopicolide	Adorn®, Presidio®
Flutolanil	Moncut®, Prostar®
Iprodione	Chipco 26019, Fungicide X, Rovral®, Ipridione Pro
Mancozeb	Fore®, Pace® 70W, Zyban®, Dithane®
Maneb	Maneb®, Manex®
Mefanoxam plus Fludioxonil	Hurricane®
Metalaxyl	Apron®, Subdue®, Allegiance
Myclobutanil	Eagle®
Phosphorus acid	Alude®, Agrifos®, Fosphite®, Topaz®
Propamocarb hydrochloride	Banol®, Previcur Flex
Propanil	Prostar®

Biocides Pre- and Post- Application	
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® (Only apply at concentrations of 1:10,000 or lower in irrigation water)

Growth Regulators Pre- and Post- Application	
Active Ingredient (a.i.)	Brand Name(s)
Ancymidol	A-Rest®
Chlormequat chloride	Cycocel®
Diaminozide	B-Nine®
Pacllobutrazol	Bonzi®
Uniconazole	Sumagic®

Herbicides Pre- and Post- Application	
Active Ingredient (a.i.)	Brand Name(s)
Glyphosate	Roundup®
Pendimethalin	Prowl®, Pendulum®

Miticides Pre- and Post- Application	
Active Ingredient (a.i.)	Brand Name(s)
Dicofol	Kelthane®



Fungicides Pre- and Post- Application	
Active Ingredient (a.i.)	Brand Names
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 [®]

Insecticides Pre- and Post- Application	
Active Ingredient (a.i.)	Brand Name(s)
Acephate	Orthene [®]
<i>Bacillus thuringiensis</i> , subsp. israelensis, strain AM 65-52	Gnatrol [®]
Chlorpyrifos	Lorsban [®]
Diazinon	Diazinon
Imidacloprid	Marathon [®] , Gaucho [®]
Lindane	Lindane [®]
Malathion	Malathion [®]
Methoxychlor	Methoxychlor [®]
Carbaryl	Sevin [®]

Section 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 Incompatible	
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	ZeroTol [®] (At concentrations above 1:10,000)
Imazilil	Fungaflor [®] , Flo-Pro [®] , Nuzone
Propiconazole	Banner [®]
Tebuconazole	Folicur [®] 3.6 F
Triflumizole	Terraguard [®]

Insecticides Incompatible	
Active Ingredient (a.i.)	Brand Name(s)
No incompatibilities recognized at this time	

Always read and follow label instructions. BotaniGard[®], CEASE[®], Mycotrol[®], MilStop[®] and RootShield[®] are all registered trademarks of BioWorks, Inc. Refer to product labels for complete application details. Additional technical information is available on our website (bioworksinc.com) or from your BioWorks technical sales representative.