



**BioWorks®**  
How You Grow Matters™



# Root Protection

## Strain T-22, the Active Ingredient in RootShield®:

- Is the highly effective, patented hybrid *Trichoderma harzianum* that forms a protective barrier on the root system to defend against root rotting fungi
- Colonizes outer root surface and its surrounding soil particles (termed: Rhizosphere)
- Grows best between pH 4 - 8, in soil, peat and bark based mixes, between 48 – 97°F
- Feeds on products released by the roots, removing the pathogen's food supply
- Is a living organism, which will continue to grow with the expanding root system providing extended protection against root rotting fungi
- No adverse affects to humans, animals, or plants
- 0 hour REI
- Listed by the Organic Materials Review Institute (OMRI) for use in organic production (RootShield® Granules)

## Disease Control (A Biological Fungicide):

- One of the first EPA-registered biofungicides
- Provides preventative control of *Pythium*, *Rhizoctonia*, *Fusarium*, *Sclerotinia*, *Thielaviopsis* and *Cylindrocladium*
- Blocks pathogens from occupying the space near or on the root zone (Squatter's Rights)
- Actively attacks and kills diseases trying to damage the roots
- Protects the root system of plants grown in the greenhouse and nursery
- Starts immediately protecting propagated plants or seeds, resulting in fewer plant losses
- Protects against secondary infections resulting from insect damage of the roots
- Apply every 3 – 4 months to secure an adequate “defensive” barrier around the roots

## Products:

- RootShield Granules is mixed into your growing medium; BioWorks recommends 1.25 to 1.5 lbs. per cubic yard, or a minimum of three, 40 lbs. bags per truck load of mix (100 cubic yards).
- RootShield® WP wettable powder for use during watering: BioWorks recommends using 3 to 5 ounces per 100 gallons (5 to 6 ounces per 100 gallons for sub-irrigation)
- Costs less than two cents to treat a 6 inch pot with RootShield Granules or RootShield WP
- RootShield Granules has a shelf life of up to 6 months when stored at room temperatures (less than 77°F) or up to 12 months if stored at cooler temperatures (40°F)
- RootShield WP has a shelf life of 6 months when stored under refrigeration
- “Exemption from Residue Tolerance” as established by the EPA for added safety
- Used by organic growers throughout the U.S.
- Can be used in rotation with insecticides, fertilizers, rooting compounds, growth regulators, nonionic surfactants, several types of fungicides and other beneficial biologicals (mycorrhizae, predators)

To find out more about the BioWorks family of products, please contact us at **800-877-9443** or visit [www.bioworksinc.com](http://www.bioworksinc.com). © 2008 BioWorks, Inc.

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