**RootShield PLUS Granules**

**Biological Fungicide**

**Granules**

**NEW H/Y 2012**

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**ACTIVE INGREDIENTS:**
- Thiodicarb (95% Tech, strain T-22)
  - 1.75% Thiodicarb (95% Tech, strain T-22)
- Other Ingredients: 98.25%

**TOTAL:** 99.99%

*Contains at least 1.1% and 1.9% of ready-to-use active ingredients per granule dry weight.

**US Pesticide Control No.:**
- EPA Reg. No.: 88383-10
- EPA En. No.: 88383-AK-001

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**KEEP OUT OF REACH OF CHILDREN**

**CAUTION:**

- Harmful if swallowed, inhaled or absorbed through skin.
- Do not apply in a manner that will contaminate milk, food, water or soil. Do not apply near food or water sources.

**PRECAUTIONARY STATEMENTS:**

**Hazard:**
- Hazards to humans and domestic animals: CAUTION.
- May be harmful if swallowed, inhaled or absorbed through skin.

**Precautionary Statements:**
- Use product only in accordance with its label and with the Worker Protection Standard, 40 CFR part 190.
- Keep out of reach of children.
- Store away from food and water sources.
- Do not contaminate milk, food, water or soil.
- Do not apply near food or water sources.

**DIRECTIONS FOR USE:**

- Do not apply Thompson Plus Capsules Biological Fungicide granules to the soil or as a foliar spray. Apply to plant roots. Do not use on plants that are not to be planted in soil.

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**PRODUCT INFORMATION:**

- RootShield PLUS Granules Biological Fungicide is a preservative biological fungicide for control of root rot pathogens in root crop plants.
- It is formulated with a blend of two natural antibiotics, which inhibit the growth of disease-causing fungi.
- It is safe for use on all crops, including organic production.

**APPLICATION INSTRUCTIONS:**

**APPLY VIA GROUND APPLICATION ONLY:**
- Crops on which RootShield PLUS Granules Biological Fungicide may be used:
  - Blueberries, Cranberries, Concord Grapes, Gooseberries, Highbush and Lowbush Blueberries, Raspberries, Strawberries, Grapes

**APPLICATION RECOMMENDATIONS:**
- Apply RootShield PLUS Granules Biological Fungicide at the rate of 0.5 lb./1,000 lb. of dry weight at planting or transplanting.
- Apply as a foliar spray at the rate of 1 lb./1,000 lb. of dry weight at planting or transplanting.

**STORAGE AND DISPOSAL:**
- Do not contaminate water, food or feed by either improper handling or disposal.
- Do not store in areas subject to freezing temperatures. The product must be stored in a dry, cool area.

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**CROPS**

**USE**

**APPLICATION RATE OF ROOTSHIELD PLUS GRANULES BIOLOGICAL FUNGICIDE**

<table>
<thead>
<tr>
<th>Crops</th>
<th>Use</th>
<th>Application Rate of RootShield Plus Granules Biological Fungicide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Berries and Small Fruits</td>
<td>0.5 lb./1,000 lb.</td>
<td></td>
</tr>
<tr>
<td>Blueberries, Cranberries, Concord Grapes</td>
<td>0.5 lb./1,000 lb.</td>
<td></td>
</tr>
<tr>
<td>Raspberry, Strawberries, Grapes</td>
<td>0.5 lb./1,000 lb.</td>
<td></td>
</tr>
<tr>
<td>Beef Vegetables</td>
<td>0.5 lb./1,000 lb.</td>
<td></td>
</tr>
<tr>
<td>Citrus Fruit</td>
<td>0.5 lb./1,000 lb.</td>
<td></td>
</tr>
<tr>
<td>Cucumber Vegetables</td>
<td>0.5 lb./1,000 lb.</td>
<td></td>
</tr>
</tbody>
</table>

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**Net Weight:** 40 lb (18 kg)
RootShield® PLUS+ Granules

Biological Fungicide

ACTIVE INGREDIENTS:
- Trichoderma harzianum Rifai strain T-22* ......................................................... 1.15%
- Trichoderma viride strain G-41** ................................................................. 0.61%
OTHER INGREDIENTS: ................................................................................. 38.24%
TOTAL: ........................................................................................................ 100.00%

*Contains at least 1.0 x 10^7 colony forming units per gram dry weight.
**Contains at least 0.3 x 10^7 colony forming units per gram dry weight.

US Patent Pending.
EPA Reg. No.: 68539-10
EPA Est. No.: 58586-NY-001

KEEP OUT OF REACH OF CHILDREN

CAUTION

FIRST AID
If in eyes: Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
Call a poison control center or doctor for treatment advice.

HOT LINE NUMBER: Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-222-1222 for emergency medical treatment information.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS - CAUTION: Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

PERSONAL PROTECTIVE EQUIPMENT (PPE)
Applicators and other handlers must wear protective eyewear, long-sleeved shirt and long pants, and shoes plus socks. Mixers/Loaders and applicators must wear a dust/mist filtering respirator meeting NIOSH standards of at least N-95, R-95, or P-95. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washable PPE, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS
Users should remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing. Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

ENVIRONMENTAL HAZARDS
For Terrestrial Use: Do not apply directly to water or to areas where surface water is present, or to parts of areas below the mean high water mark. Do not contaminate water when disposing of equipment wash water or waste.

DIRECTIONS FOR USE
It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected workers may be in the area during application. For any requirement specific to your State or Tribe, consult the State or Tribal pesticide office.

CROPS

<table>
<thead>
<tr>
<th>APPLICATION RATE OF</th>
<th>ROOTSHIELD PLUS GRANULES BIOLOGICAL FUNGICIDE</th>
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<tbody>
<tr>
<td>Flowers, Bedding Plants, and Ornamentals</td>
<td></td>
</tr>
<tr>
<td>In-furrow</td>
<td>2.5 - 6.0 lb. / 1/4 acre</td>
</tr>
<tr>
<td>Greenhouse planting mix</td>
<td>1.0 - 3.0 lb. / cubic yd soil mix</td>
</tr>
<tr>
<td>Nursery planting mix</td>
<td>1.0 - 3.0 lb. / cubic yd soil mix</td>
</tr>
<tr>
<td>Nursery bed application</td>
<td>0.5 - 7.5 lb. / 1000 sq ft bed, incorporate with rake or tiller</td>
</tr>
</tbody>
</table>

| Fruiting Vegetables: Eggplant, Sweet and Hot Peppers, Tomatillo, Tomatoes |
| In-furrow | 2.5 - 6.0 lb. / 1/4 acre |
| Greenhouse planting mix | 1.0 - 3.0 lb. / cubic yd soil mix |
| Nursery bed application | 0.5 - 7.5 lb. / 1000 sq ft bed, incorporate with rake or tiller |

| Herbs and Spices |
| In-furrow | 2.5 - 6.0 lb. / 1/4 acre |
| Greenhouse planting mix | 1.0 - 3.0 lb. / cubic yd soil mix |
| Nursery bed application | 0.5 - 7.5 lb. / 1000 sq ft bed, incorporate with rake or tiller |

| Mints |
| In-furrow | 2.5 - 6.0 lb. / 1/4 acre |
| Greenhouse planting mix | 1.0 - 3.0 lb. / cubic yd soil mix |
| Nursery bed application | 0.5 - 7.5 lb. / 1000 sq ft bed, incorporate with rake or tiller |

| Leafy and Brassica (Cole) Leafy Vegetables: Arugula, Celery, Chervil, Endive, Fennel, Lettuce (head and leaf), Parsley, Radicchio, Romaine, Spinach, Swiss Chard, Broccoli, Brussels Sprout, Cabbage, Cauliflower, Collards, Kale, Kohlrabi, Mustard Greens |
| In-furrow | 2.5 - 6.0 lb. / 1/4 acre |
| Greenhouse planting mix | 1.0 - 3.0 lb. / cubic yd soil mix |
| Nursery bed application | 0.5 - 7.5 lb. / 1000 sq ft bed, incorporate with rake or tiller |

Asparagus
In-furrow 2.5 – 6.0 lb. / 1/4 acre
Greenhouse planting mix 1.0 – 3.0 lb. / cubic yd soil mix
Nursery bed application 0.5 – 7.5 lb. / 1000 sq ft bed, incorporate with rake or tiller

Legume Vegetables ( Succulent or Dried): Snap Beans, Lentils, Succulent Peas, Peanuts, Soybeans
In-furrow 2.5 – 6.0 lb. / 1/4 acre
Greenhouse planting mix 1.0 – 3.0 lb. / cubic yd soil mix
Nursery bed application 0.5 – 7.5 lb. / 1000 sq ft bed, incorporate with rake or tiller

Oilsed Crops: Cotton, Canola, Sunflower
In-furrow 2.5 – 6.0 lb. / 1/4 acre
Greenhouse planting mix 1.0 – 3.0 lb. / cubic yd soil mix
Nursery bed application 0.5 – 7.5 lb. / 1000 sq ft bed, incorporate with rake or tiller

Pome Fruits: Pear, Quince
In-furrow 2.5 – 6.0 lb. / 1/4 acre
Greenhouse planting mix 1.0 – 3.0 lb. / cubic yd soil mix
Nursery bed application 0.5 – 7.5 lb. / 1000 sq ft bed, incorporate with rake or tiller
Trees and shrubs 0.2 – 0.5 oz. / transplant hole and incorporate

Root Vegetables: Beets, Sugar Beets, Carrots, Celery, Chicory, Horseradish, Parsnips, Radish, Rutabaga, Safflower, Turnip
In-furrow 2.5 – 6.0 lb. / 1/4 acre
Greenhouse planting mix 1.0 – 3.0 lb. / cubic yd soil mix
Nursery bed application 0.5 – 7.5 lb. / 1000 sq ft bed, incorporate with rake or tiller
Trees and shrubs 0.2 – 0.5 oz. / transplant hole and incorporate

Shadehouse and Outdoor Nursery Crops: Deciduous Trees (e.g. Maple, Oak), Ornamentals, Figs
In-furrow 2.5 – 6.0 lb. / 1/4 acre
Greenhouse planting mix 1.0 – 3.0 lb. / cubic yd soil mix
Nursery bed application 0.5 – 7.5 lb. / 1000 sq ft bed, incorporate with rake or tiller
Trees and shrubs 0.2 – 0.5 oz. / transplant hole and incorporate

Stone Fruits: Apricots, Cherries, Nectarines, Peaches, Plums, Prunes
In-furrow 2.5 – 6.0 lb. / 1/4 acre
Greenhouse planting mix 1.0 – 3.0 lb. / cubic yd soil mix
AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 190. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the requirements on the label about personal protective equipment (PPE) and restricted-entry intervals (REI). The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard. No REI is required as this product is soil incorporated, and the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PRODUCT INFORMATION

RootShield® Plus Granules Biological Fungicide is a preventative biological fungicide for control of soilborne plant pathogens and plant root diseases. The active ingredients are microbes: Thielavia basicola RIT-1 strain T22 and Trichoderma viride strain G-41, which when applied as an inoculant to soil or to planting mixes, grow onto plant roots as they develop and provide protection against plant root pathogens such as Phytophthora, Rhizoctonia, Fusarium, Cylindrocladium, and Thielaviopsis.

RootShield® Plus Granules Biological Fungicide can be used in combination with or in rotation with other fungicides, insecticides, miticides, fertilizers or micronutrients in accordance with the most restrictive of label limitations and precautions. Do not exceed label dosage rates. This product cannot be used with any product containing a label prohibition against such mixing. This product is not compatible with chemicals that contain the following active ingredients: pyraclostrobin, propiconazole, tebuconazole, and trifloxystrobin. Do not apply RootShield® Plus Granules Biological Fungicide immediately before these pesticides are applied. Where early season seed and soil fumigation are used, see the directions for use of seed or other appropriate measures for stand establishment and RootShield® Plus Granules Biological Fungicide for root disease control.

Note: RootShield® Plus Granules Biological Fungicide contains one species of microbes that must be used prior to disease control. RootShield® Plus Granules Biological Fungicide becomes active in soil when temperatures are above 60°F and is not effective when temperatures remain cold. RootShield® Plus Granules Biological Fungicide can be applied to sterilized or fumigated soil but must be applied after sterilization or fumigation.

This biological fungicide is for use in soil applications (in soil fumigation and planting soil) for all listed crops.

ATTENTION: DO NOT APPLY to sugarcane, peyote, rice, mushrooms, kiwi, tobacco, barley, oats, lemon, apple, and chickpeas. Not for use on aquatic crops.

APPLICATION INSTRUCTIONS

APPLY VIA GROUND APPLICATION ONLY.

CROPS ON WHICH ROOTSHIELD® PLUS GRANULES BIOLOGICAL FUNGICIDE MAY BE USED:

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<tr>
<td>Berries and Small Fruits: Blackberries, Blueberries, Concord Grapes, Goosberries, Huckleberries, Loganberries, Raspberries, Strawberries, Grapes</td>
<td>In-furrow</td>
<td>2.5 – 6.0 lb / 1/4 acre</td>
</tr>
<tr>
<td>Bulb Vegetables: Garlic, Leeks, Onions, Shallots</td>
<td>In-furrow</td>
<td>2.5 – 6.0 lb / 1/4 acre</td>
</tr>
<tr>
<td>Cereal Grains: Barley, Corn (grain), Oats</td>
<td>In-furrow</td>
<td>2.5 – 6.0 lb / 1/4 acre</td>
</tr>
<tr>
<td>Citrus Fruits: Citrus hybrids, Grapefruit, Kumquat, Limes, Oranges, Pummellos, Cucurbit Vegetables: Cucumbers, Melons, Squash</td>
<td>In-furrow</td>
<td>2.5 – 6.0 lb / 1/4 acre</td>
</tr>
<tr>
<td>Tree Nuts: Almonds, Beech Nuts, Brazil Nuts, Butternuts, Cashews, Chesnuts, Filberts, Hickory Nuts, Macadamia Nuts, Pecans, Platanos, Walnuts</td>
<td>In-furrow</td>
<td>2.5 – 6.0 lb / 1/4 acre</td>
</tr>
<tr>
<td>Tree:</td>
<td></td>
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IN-FURROW SOIL TREATMENT: Apply RootShield® Plus Granules Biological Fungicide from a granular applicator at the rate of 2.5-6.0 pounds per half-acre. Apply granules using a metering device, such as a Gandy applicator or equivalent, mounted to deliver granules into the furrow just behind the furrow opener. Apply in furrow at seeding or to established crops as a side dress and incorporate into soil.

GREENHOUSE PLANTING MIX AMENDMENT: Mix RootShield® Plus Granules Biological Fungicide with planting mix at a rate of 1-3 pounds per cubic yard (loose). Thoroughly incorporate RootShield® Plus Granules Biological Fungicide into planting mixes during mix preparation or at pot filling.

NURSERY PLANTING MIX AMENDMENT: For nursery planting mixes, apply RootShield® Plus Granules Biological Fungicide at the rate of 1-3 pounds per cubic yard (loose). For nursery beds, incorporate at a rate of 0.5-1.5 pounds per 1000 square feet of bed by mixing or tilling. Application of irrigation water will help move RootShield® Plus Granules Biological Fungicide into the soil. If soil is fumigated or steam sterilized, apply RootShield® Plus Granules Biological Fungicide after treatment.

TREES AND SHRUBS: Apply RootShield® Plus Granules Biological Fungicide to the planting hole at a rate of 0.2 – 0.8 ounces and incorporate into the planting soil or soil mix.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage and disposal.

PESTICIDE STORAGE: Store in a cool, dry place. Do not store at temperatures above 75°F for prolonged periods. Keep container tightly closed when not in use.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

CONTAINER HANDLING: Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Do not return bag to retailer. Do not incinerate or, if allowed by state and local authorities, by burning. When finished, take out of smoke area.

NOTICE TO BUYER AND SELLER: Seller warrants that this product conforms to the description on this label and is reasonably fit for the purpose stated on this label when used and stored in accordance with the directions for use. This warranty does not extend to the use of this product contrary to label directions or under conditions not reasonably foreseeable by the Seller, and Buyer and User assume the risk of any such use. To the extent consistent with applicable law, Seller disclaims all other warranties, express or implied, including any warranty of fitness or merchantability. To the extent consistent with applicable law, Seller shall not be liable for consequential, special, indirect, or incidental damages resulting from use or handling of this product, and Seller's sole liability and Buyer's and User's exclusive remedy shall be limited to refund of the purchase price.

This product is sold only for uses stated on its label. No express or implied license is granted to use or sell this product under any patent in any country except as specifically authorized.

In Case of Emergency: Call CHEMTREC: (800) 424-9300

Manufactured in the United States of America by BioWorks, Inc.

Lot No.: 160 Rawson Rd., Suite 205, Victor, NY 14564

Expires: 2021

Net Weight: 40 lb (18 kg)