



U.S. ENVIRONMENTAL PROTECTION AGENCY  
Office of Pesticide Programs  
Biopesticides and Pollution Prevention Division (7511C)  
1200 Pennsylvania Avenue NW  
Washington, DC 20460

EPA Reg. Number:  
68539-3

Date of Issuance:  
DEC 06 2011

Term of Issuance: **Unconditional**

Name of Pesticide Product:  
T-22 G Biological Fungicide

NOTICE OF PESTICIDE:  
 Registration  
 Reregistration  
(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

Bioworks, Inc.  
c/o Technological Sciences Group, Authorized Agent  
1150 18<sup>th</sup> Street, NW, Suite 1000  
Washington, DC 20036

**Note:** Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Biopesticides and Pollution Prevention Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA Sec. 3(c)(5) provided you:

1. Submit and/or cite all data required for registration/ reregistration of your product under FIFRA section 3(c)(5) and section 4 when the Agency requires all registrants of similar products to submit such data.
2. Submit three (3) copies of the revised final printed labeling before you release the product for shipment.

A stamped copy of the label is enclosed for your records.

The basic confidential statement of formula (CSF) dated January 25, 2010 is acceptable and supersedes all previous basic CSFs. A copy of the CSF has been placed in the file jacket for this registration.

Signature of Approving Official:

W. Michael McDavit, Associate Director  
Biopesticides and Pollution Prevention Division (7511P)

Date:

DEC 06 2011

# T-22G Biological Fungicide

(Alternate Brand Names: RootShield® Granules Biological Fungicide; T-22 G Granules Biological Fungicide; TurfShield® Granules Biological Fungicide)

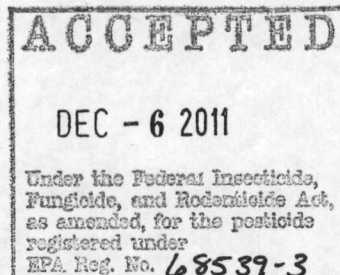
### ACTIVE INGREDIENT

Trichoderma harzianum Rifai strain T-22\* ..... 1.15%

OTHER INGREDIENTS ..... 98.85%

TOTAL ..... 100.00%

\*Contains at least 1.0 x 10<sup>7</sup> colony forming units per gram dry weight.



**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

FIRST AID	
If in eyes	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15 – 20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>HOT LINE NUMBER:</b> 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. Wear protective eyewear. 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, waterproof gloves, and shoes plus socks. Mixer/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 directions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

### USER SAFETY RECOMMENDATIONS:

Remove PPE immediately after handling this product. Wash the outside of gloves before removing. 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, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash water or rinsate.

EPA Reg. No.: 68539-3  
EPA Est. No.: 068539-NY-001

Manufactured by: BioWorks, Inc., 100 Rawson Road, Ste. 205, Victor, NY 14564

Net Weight: \_\_\_\_\_  
Lot No.: \_\_\_\_\_  
Use Before: \_\_\_\_\_ (Date will be 184 days after production)\_\_\_\_\_

**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 agency responsible for pesticide regulation.

**AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. 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 statements on this label about personal protective equipment (PPE) and restricted entry interval. 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**

T-22G is a preventative biological fungicide for control of soilborne plant pathogens and plant root diseases. The active ingredient is a microbe, *Trichoderma harzianum* Rifai Strain T-22, which when applied as an inoculant to soil, planting mixes or turf, grows onto plant roots as they develop and provides protection against plant root pathogens such as *Pythium*, *Rhizoctonia*, *Fusarium*, *Cylindrocladium* and *Thielaviopsis*.

T-22G can be used in combination with or in rotation with other fungicides, insecticides, miticides, fertilizers or micronutrients in accordance with the more restrictive of label limitation 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: imazilil, propiconazole, tebuconazole, and triflumizole. Do not apply T-22G immediately before these pesticides are used. Where early season seed rot and seedling diseases are expected, use chemically treated seed or other appropriate measures for stand establishment and T-22G for root disease control.

Note: T-22G contains live spores of a microbe that must be used prior to disease onset. T-22G becomes active in soil or on plants when temperatures are above 50°F and is not effective while temperatures remain cold. T-22G 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 furrow and potting soil ) for all listed crops.

**USE RESTRICTIONS**

Do not apply this product as a broadcast application. Cover applied product with soil or otherwise incorporate it into soil.

**DO NOT APPLY to sugarcane, peachay, rice, mushrooms, kiwi, tobacco, barley, oats, lemon, apple, and chickpea. Not for use on aquatic crops.**

**APPLICATION INSTRUCTIONS**

**APPLY VIA GROUND APPLICATION ONLY.**

**CROPS ON WHICH T-22G MAY BE USED:**

<b>CROPS</b>	<b>USE</b>	<b>APPLICATION RATE of T-22G</b>
<b>Berries and Small Fruits:</b> Blackberries, Blueberries, Currants, Elderberries, Gooseberries, Huckleberries, Loganberries, Raspberries, Strawberries, Grapes	In-furrow	5.0 – 12.0 lb / acre
<b>Bulb Vegetables:</b> Garlic, Leeks, Onions, Shallots	In-furrow	5.0 – 12.0 lb / acre
<b>Cereal Grains:</b> Buckwheat, Corn (grain, sweet corn, popcorn, high oil)	In-furrow	5.0 – 12.0 lb / acre
<b>Citrus Fruits:</b> Citrus Hybrids, Grapefruit, Kumquat, Limes, Oranges, Pummelos	In-furrow	5.0 – 12.0 lb / acre
<b>Cucurbit Vegetables:</b> Cucumbers, Melons, Gourds Pumpkins, Squash	In-furrow	5.0 – 12.0 lb / acre
<b>Flowers, Bedding Plants, and Ornamentals</b>	In-furrow Greenhouse planting mix Nursery planting mix Nursery bed applications	5.0 – 12.0 lb / acre 1.0 – 3.0 lb / cubic yd. soil mix 1.0 – 3.0 lb / cubic yd. soil mix 0.5 – 7.5 lb / 1000 sq. ft. incorporate with rake or tiller
<b>Fruiting Vegetables:</b> Eggplant, Sweet and Hot Peppers, Tomatillos, Tomatoes	In-furrow Greenhouse planting mix	5.0 – 12.0 lb / acre 1.0 – 3.0 lb / cubic yd. soil mix
<b>Herbs and Spices</b>	In-furrow Greenhouse planting mix	5.0 – 12.0 lb / acre 1.0 – 3.0 lb / cubic yd. soil mix
<b>Mints</b>	In-furrow Greenhouse planting mix	6.0 – 12.0 lbs / acre 1.0 – 3.0 lb / cubic yd. soil mix
<b>Leafy and Brassica (Cole) Leafy Vegetables:</b> Arugula, Celery, Chervil, Endive, Fennel, Lettuce (head and leaf), Parsley, Radicchio, Rhubarb, Spinach, Swiss Chard, Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Collards, Kale, Kohlrabi, Mustard Greens	In-furrow Greenhouse planting mix Nursery bed application	5.0 – 12.0 lb / acre 1.0 – 3.0 lb / cubic yd. soil mix 0.5 – 7.5 lb / 1000 sq. ft. incorporate with rake or tiller

CROPS	USE	APPLICATION RATE of T-22G
Asparagus	In-furrow Greenhouse planting mix Nursery bed application	5.0 – 12.0 lb / acre 1.0 – 3.0 lb / cubic yd. soil mix 0.5 – 7.5 lb / 1000 sq. ft. incorporate with rake or tiller
<b>Legume Vegetables (Succulent or Dried):</b> Snap Beans, Lentils, Succulent Peas, Peanuts, Soybeans	In-furrow	5.0 – 12.0 lb / acre
<b>Oilseed Crops:</b> Cotton, Canola, Safflower, Sunflower	In-furrow	5.0 – 12.0 lb / acre
<b>Pome Fruits:</b> Pears, Quince	In-furrow Greenhouse planting mix Nursery planting mix Trees and shrubs	5.0 – 12.0 lb / acre 1.0 – 3.0 lb / cubic yd. soil mix 0.2 – 8.0 oz. / transplant hole and incorporate
<b>Root Vegetables:</b> Beets, Sugarbeets, Carrots, Celeriac, Chicory, Horseradish, Parsnip, Radish, Rutabaga, Salsify, Turnips	In-furrow	1.0 – 3.0 lb / cubic yd. soil mix 0.2 – 8.0 oz. / transplant hole and incorporate
<b>Shadehouse and Outdoor Nursery Crops:</b> Deciduous trees (Maple, Oak), Ornamentals, Pine	In-furrow Shadehouse or outdoor nursery use Nursery planting mix Nursery beds  Trees and shrubs	5.0 12.0 lb / acre 1.0 – 3.0 lb / cubic yd. soil mix incorporate with rake or tiller  1.0 – 3.0 lb / cubic yd. soil mix 0.5 – 7.5 lb/1000sq. ft. incorporate with rake or tiller 0.2 – 8.0 oz. / transplant hole and incorporate
<b>Stone Fruits:</b> Apricots, Cherries, Nectarines, Peaches, Plums, Prunes	In-furrow Greenhouse planting mix Nursery planting mix Trees and shrubs	5.0 – 12.0 lb / acre 1.0 – 3.0 lb / cubic yd. soil mix 1.0 – 3.0 lb / cubic yd. soil mix 0.2 – 8.0 oz. / transplant hole and incorporate
<b>Tree Nuts:</b> Almonds, Beech Nuts, Brazil Nuts, Butternuts, Cashews, Chestnuts, Filberts, Hickory Nuts, Macadamia Nuts, Pecans, Pistachios, Walnuts	In-furrow Greenhouse planting mix Nursery planting mix Trees	5.0 – 12.0 lb / acre 1.0 – 3.0 lb / cubic yd. soil mix 1.0 – 3.0 lb / cubic yd. soil mix 0.2 – 8.0 oz. / transplant hole and incorporate

**IN-FURROW SOIL TREATMENT:** Apply T-22G from a granular applicator at the rate of 5-12 pounds per 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 T-22G with planting mixes at a rate of 1-3 pounds per cubic yd. (loose) mix. Thoroughly incorporate T-22G into planting mixes during mix preparation or at pot filling.

**NURSERY PLANTING MIX AMENDMENT:** For nursery planting mixes apply T-22G at the rate of 1-3 pounds per cubic yd. (loose) mix. For nursery beds, incorporate at a rate of 0.5-7.5 pounds per 1000 square feet of bed by raking or tilling. Application of irrigation water will help move T-22G into the soil. If soil is fumigated or steam sterilized apply T-22G after treatment.

**TREES:** Apply T-22G granules to the planting hole at a rate of 0.2 - 8.0 ounces and incorporate into the planting soil or soil mix.

**STORAGE AND DISPOSAL**

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

**PESTICIDE STORAGE:** Store in a cool, dry place. Do not store near food or feed commodities. 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.

(10 lb unit packaged in polyethylene bag and placed into corrugated carton) Completely empty bag into the application equipment. Then offer for recycling if available, or dispose of empty bag in sanitary landfill or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke. If outer box is contaminated, offer for recycling if available, or dispose of empty box in sanitary landfill or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

(40 lb bag, 500 lb bag, 1000 lbs bag) Completely empty bag into the application equipment. Then offer for recycling if available, or dispose of empty bag in sanitary landfill or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**NOTICE TO BUYER AND SELLER:** Seller warrants that this product conforms to the description on the label and is reasonably fit for the purposes stated on the label when used and stored in accordance with directions under normal conditions of use. This warranty does not extend to 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. 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 or indirect 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.

Country: United States of America