

81606-1

09/23/2008

1/24

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

SEP 23 2008

Ms. Amy Plato Roberts
Regulatory Consultant
Biopreparaty Co. Ltd. c/o Technology Sciences Group, Inc.
1150 18th Street, N.W., Suite 1000
Washington, DC 20036

Re: Biopreparaty Co. Ltd., Polyversum®
EPA Registration No. 81606-1
Minor Label ("Fast Track") Amendment
Application Dated 06/27/2008

Dear Ms. Roberts:

The Agency has reviewed your request to amend the subject product registration, which included the following changes to the product label:

- 1) Addition of National Organic Program (NOP) labeling to all sub-labels,
- 2) Addition of an EPA Establishment Number to all sub-labels,
- 3) Update to the registrant's contact information on all sub-labels,
- 4) Revisions to the First Aid and Hazards to Humans and Domestic Animals sections to accurately reflect the Agency's evaluation of the results of the toxicity studies submitted for the product's registration to all sub-labels,
- 5) Modification of the "dust/mist filtering respirator" statement in the Personal Protective Equipment (PPE) section of sub-label A,
- 6) Addition of the "dust/mist filtering respirator" and "sensitization" statements to the Hazards to Humans and Domestic Animals section of sub-label B,
- 7) Structural and clarity adjustments to the Precautionary Statements and the Directions for Use to all sub-labels,
- 8) Addition of Compatibility statements in accordance with PR Notice 1982-1 to sub-labels A and B,
- 9) Addition of "Tree Fruit" as a new application site to sub-label A,
- 10) Revision of the Storage and Disposal statements in accordance with PR Notice 2007-4 on all sub-labels, and
- 11) Addition of a Warranty section to sub-labels B and C.

CONCURRENCES

SYMBOL	7511P	7511P	7511P				
SURNAME	KAUSCH	Bayerland	Quilf				
DATE	09/23/08	09/23/08	09/23/08				

2/24

Amy Plato Roberts
EPA Registration No. 81606-1

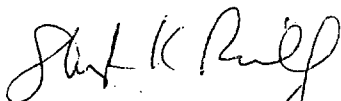
The changes referred to on the previous page, submitted in connection with registration under FIFRA section 3(c)(5), are acceptable provided that you:

- 1) Submit and/or cite all data required for registration of your product under FIFRA section 3(c)(5) when the Agency requires all registrants of similar products to submit such data.
- 2) Submit two (2) copies of your final printed labeling before you release the product for shipment. Refer to the A-79 enclosure for a further description of a final printed label.

Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions. If you have any questions contact Jeannine Kausch at 703-347-8920 or by email at: kausch.jeannine@epa.gov.

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

Sincerely,



Sheryl Reilly, Ph.D., Chief
Microbial Pesticides Branch
Biopesticides and Pollution
Prevention Division (7511P)

Enclosures (2):
- A-79 Enclosure
- Accepted Label

3/24

Polyversum®

(Alternate Brand Names: Biodresser®; Green Doctor®; Polidrench®; Polidresser®)

Sublabel A: Agricultural Use
Sublabel B: Turf & Professional Landscape Use
Sublabel C: Home & Garden Use
Optional Label Claims

ACTIVE INGREDIENT:

Pythium oligandrum DV 74* 1.0%

OTHER INGREDIENTS: 99.0%

TOTAL: 100.0%

*Contains not less than 1×10^5 cfu/gram.

EPA Reg. No.: 81606-1

EPA Establishment No.: (81606-CHK-001)

Manufactured by:

Biopreparaty Co. Ltd.

Tylišovska 1

Prague 6, Czech Republic

Marketed by:

Beta-Biologics™ Ltd.

500 Sheppard Avenue East, Suite 304

Toronto, ON, Canada M2N 6H7

(Contact us at:) 647.426.3062 or www.beta-biologics.com

ACCEPTED

SEP 23 2008


Under the Federal Insecticide, Fungicide,
and Rodenticide Act, as amended, for
the pesticide registered under
EPA Reg. No. 81606-1

4/24

Sublabel A: Agricultural Use

Polyversum®

(Alternate Brand Names: Biodresser®; Green Doctor®; Polidrench®; Polidresser®)

 (For Organic Production) (For Use in Organic Production)

ACTIVE INGREDIENT:

Pythium oligandrum DV 74* 1.0%

OTHER INGREDIENTS: 99.0%

TOTAL: 100.0%

*Contains no less than 1 X 10⁵ cfu/gram.

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

FIRST AID	
If in eyes	<ul style="list-style-type: none"> • 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.	
See back panel for additional precautionary statements and directions for use.	

EPA Reg. No.: 81606-1
EPA Establishment No.: (81606-CHK-001)

Net Contents: XXX
(Batch No.: XXX)

Manufactured by:
Biopreparaty Co. Ltd.
Tylisovska 1
Prague 6, Czech Republic

Marketed by:
Beta-Biologics™ Ltd.
500 Sheppard Avenue East, Suite 304
Toronto, ON, Canada M2N 6H7
(Contact us at:) 647.426.3062 or www.beta-biologics.com

5/24

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:

- long-sleeved shirt and long pants
- waterproof gloves
- 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 the manufacturer's instructions for cleaning / maintaining PPE. If no instructions are available, use detergent and hot water for washables. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

Users should:

- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- 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.

Environmental Hazards: For terrestrial uses: Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean highwater mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

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.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 4 hours.

EXCEPTION: If the product is soil incorporated, 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.

6/24

PPE required for early entry to treated areas (that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water), is:

- Coveralls
- Waterproof gloves
- Shoes plus socks

General Information: (Polyversum® is for the stimulation of plant growth**, the enhancement of plant strength** and the prevention of fungal attack. Polyversum® mobilizes plant defense mechanisms, increasing plant resistance to pathogenic fungal attack, increasing rate of growth** and increasing overall crop strength and yield.**)

(Polyversum® is a (microbial seed dresser) (microbial preparation) that protects (field) crops against soilborne fungal pathogens, promotes plant growth**, enhances plant strength** and induces a plant defense reaction against soil and airborne pathogenic fungi.)

Polyversum® can be applied as a seed dressing, pre-plant soak, overhead spray or soil drench, or irrigation application.

Mode of Action: The active ingredient *Pythium oligandrum* DV 74 colonizes (the surroundings of treated and sown seeds) (the rhizosphere of treated plants). Because of its strong mycoparasitic and competitive abilities, the active ingredient suppresses the growth and antagonistic effects of many soilborne pathogenic fungi, which cause damping-off and seed, and root rots such as *Phytophthora*, *Rhizoctonia*, *Fusarium*, etc. The active ingredient also induces a defense reaction in the newly emerged plant through the stimulation of phytohormones that trigger the plant's resistance mechanisms against diseases. *Pythium oligandrum* DV 74 does not produce any antibiotics and therefore is considered a true plant growth promoter** for the induction of plant resistance.

[**Not registered for this use in California.]

Integrated Pest Management: Integrate Polyversum® into an overall disease and pest management strategy whenever fungicide use is necessary. Follow practices known to reduce disease development. Consult local agricultural authorities for specific IPM strategies developed for your crop(s) and location.

Pre-Harvest Interval: Polyversum® can be applied up to and including the day of harvest.

Mixing Instructions: Shake well before use or before mixing with water.

MIXING: Dilute Polyversum® with water and apply using conventional ground spray equipment. Partially fill the spray tank with clean water and begin agitation. Add the specified amount of Polyversum® to the tank. Finish filling the tank to the desired volume to obtain the proper spray concentration. Maintain agitation continuously while spraying. Use spray mixture within two hours of mixing. Do not allow spray mixture to stand overnight or for prolonged periods. Use large spray nozzles. For seed dressing applications, use undiluted Polyversum®.

COMPATIBILITY: Do not mix Polyversum® with chemical fungicides. Consult other product's labels for additional information or restrictions concerning tank mixing. Observe the most

restrictive of the labeling limitations and precautions of all products used in mixtures. Do not exceed label dosage rates. This product cannot be mixed with any product containing a label prohibition against such mixing. Polyversum® has been evaluated for phytotoxicity on a variety of crops under various normal growing conditions. However, testing all crop varieties, in all mixtures and combinations is not feasible. Prior to treating entire crop, test a small portion of the crop. Consult your Beta-Biologics Ltd. representative for more information on Polyversum® compatibility with pesticides, surfactants and fertilizers.

Application Sites: Use Polyversum® on the following agricultural commodities and horticultural crops:

Fruiting Vegetables: eggplant, pepper and tomato.

Leafy Vegetables: asparagus, broccoli, cabbage, celery, collards, lettuce and spinach.

Cucurbit Vegetables: cantaloupe, cucumber, melon, squash, watermelon and zucchini.

Legume Crops: field beans, lentils, peas, peanuts, and soybeans.

Root, Bulb, and Tuber Crops: beets, carrots, cassava, garlic, ginger, leeks, onions, potatoes, radish, sugar beets, sweet potatoes and yams.

Grain, Forage, Fiber and Oil Crops: alfalfa, barley, canola, corn, cotton, hops, millet, oats, rice, rye, sesame, sorghum, sunflower, and wheat.

Vine Crops: grapes, kiwi and passion fruit.

Tropical Crops: avocado, banana, cocoa, coffee, guava, lychee nuts, mango, papaya, pineapple and plantain.

Tree Fruit Crops: grapefruit, kumquat, lemon, lime, mandarin (tangerine), orange, pummelo, apple, pear, apricot, cherry, nectarine, peach, plum, and prune.

Berry Crops: blueberry, gooseberry, raspberry and strawberry.

Ornamental Plants grown in greenhouses and nurseries: African violet, begonia, bougainvillea, cacti, calla lily, chrysanthemum, cineraria, cyclamen, daffodil, dahlia, exacum, ferns, foliage plants, fuchsia, geranium, gerbera, gloxinia, hibiscus, holiday cactus, hyacinth, hosta, iris, ivy, kalanchoe, lily, lisianthus, miniature roses, orchid, peony, phlox, and poinsettia.

Ornamental Trees and Shrubs grown in greenhouses and nurseries: alder, apple, azalea, beech, birch, blue spruce, boxwood, camellia, cedar, crabapple, cypress, dogwood, elm, ficus, fir, flowering cherry, flowering peach, eucalyptus, forsythia, gardenia, hackberry, holly, hydrangea, larch, laurel, lilac, magnolia, maple, myrtles, oak, palms, pear, pines, poplar, privet, pyracantha, rose, rhododendron, spruce, sycamore, thuia and willow.

8/24

Bedding Plants grown in greenhouses and nurseries: astor, calendula, carnation, cosmos, impatiens, lobelia, marigold, nasturtium, pansy, periwinkle, petunia, snapdragon, sweet alyssum, verbena and zinnia.

Turf Grass on sod farms: bentgrass, Bermuda grass, bluegrass, centipede grass, fescue, ryegrass, and St. Augustine.

Use Polyversum® to suppress / control the growth of plant diseases such as: *Alternaria* spp., *Ascochyta* spp., *Botrytis cinerea*, *Fusarium* spp., *Peronosplasmopara* spp., *Phoma* spp., *Phytophthora infestans*, *Plasmopara viticola*, *Puccinia* spp., *Pythium* spp., *Rhizoctonia solani*, *Sclerotinia sclerotiorum*, *Unicula necator*, *Verticillium* spp.

Application Instructions: Make applications before planting and in the early stages of plant growth for control of pathogens in the soil. Reapply at 14-day intervals or per specific label directions as needed throughout the growing season for preventative control. Early treatment prevents diseases from developing.

SEED DRESSING: Use Polyversum® to protect seeds from pathogenic organisms. Shake the container of Polyversum® well before use as a seed dressing. Seeds with a rough texture can be dusted with or rolled in Polyversum®. Excess material can be removed through a sieve. Larger quantities of seeds can be treated using a dusting machine. Seeds with a smooth surface should be moistened to improve adhesion. Immediately plant moistened, treated seeds. Do not use treated seed for food, feed or oil purposes. Treat only those seeds needed for immediate use and planting. Do not store excess treated seeds beyond planting time.

PRE-PLANT SOAK: Use Polyversum® to prevent damping-off, seed rots and plant and cutting diseases on seeds, seedlings, bulbs, transplants or cuttings prior to planting. Soak seeds, bulbs, cuttings, seedlings and plants for up to thirty minutes in a suspension of Polyversum®. Prepare enough solution to ensure thorough coverage.

IRRIGATION APPLICATION: Refer to the Chemigation section of this label for complete details on application through irrigation systems. Apply through a drip (trickle) or sprinkler system only. Apply Polyversum® at 14-day intervals or as needed throughout the growing season.

OVERHEAD SPRAY OR SOIL DRENCH: Apply Polyversum® using conventional equipment as a root and stem spray or drench to the point of saturation. Good coverage and wetting is required. Use large spray nozzles. The amount of spray solution to apply will vary depending on the type of crop. Most row crops will require up to 100 gallons of spray per acre. Prepare enough solution based on plant density and soil conditions to insure thorough coverage. Reapply at 14-day intervals or per specific label directions as needed throughout the growing season for preventative control.

Application Rates:

Apply Polyversum® as a seed dressing, as a pre-plant soak, and at least twice as a field spray after germination or planting.

SEED DRESSING: Apply Polyversum® as a seed dressing at a rate of 0.1 – 3 oz per 60 – 100 lbs seed weight unless specified below for a specific crop. Seeds with a smooth surface should

9/24

be moistened prior to application to improve adhesion. Immediately plant moistened, treated seeds. For dry treated seeds, plant seeds shortly after dressing.

Barley, Rye, Soybean and Wheat – For wet dressing, apply at a rate of 17.5 oz in 1 – 3 gallons of water/ton seed. Plant seeds immediately after dressing.

Potatoes – Apply Polyversum® at a rate of 1 oz / ton seeds or bulbs. Plant shortly after dressing.

Garlic bulbs - Apply Polyversum® as a bulb dressing at 1.1 lbs / half-ton.

Onion & leek bulbs - Apply Polyversum® as a bulb dressing at 0.5 lbs / ton.

PRE-PLANT SOAK: Apply Polyversum® as a pre-plant soak at a rate of 0.2 oz / 3 gallons of water unless otherwise noted. Soak seeds, seedlings, bulbs, transplants or cuttings for 30 minutes. Immediately plant treated seeds and bulbs. Once planted, use remaining suspension as a stem and root drench.

Strawberry - Apply Polyversum® at a rate of 0.08 oz / 1 gallon of water.

OVERHEAD SPRAY OR SOIL DRENCH: Apply Polyversum® at a rate of 1.5 – 3 oz / acre in sufficient water to ensure thorough coverage. Apply 1st application 14 days after planting. Make repeat applications at 14-day intervals throughout the growing season.

For overhead spray or soil drench rates specific to a given crop, see the table below. If your crop is not listed below, follow general directions above.

Specific Crop Application Rates:

Crops	Oz/Acre	Notes
Barley Rye Wheat	1.5 - 3	For winter cereals: Apply 1 st application in the autumn when the soil temperature is 10°C (50°F) or greater. Apply 2 nd application in the spring when soil temperature is 10°C (50°F) or greater. Apply 3 rd application 30 days after spring application. For spring cereals: Apply 1 st application in the spring when soil temperature is 10°C (50°F) or greater. Apply 2 nd application 30 days after spring application.
Canola Corn Sunflower	1.5 - 3	For canola: Apply 1 st application in the autumn after shoot emergence. Apply 2 nd application in the spring when soil temperature is 10°C (50°F) or greater. Apply 3 rd application 30 days after spring application. For corn and sunflower: Apply 1 st application at the time of three true leaves. Apply 2 nd application 30 days later.
Hops	1.5 - 3	Apply 1 st application at the beginning of vegetative growth. Make repeat applications at 14-day intervals throughout the growing season.

10/24

Soybeans	1.5 - 3	Apply 1 st application in the spring when soil temperature is 10°C (50°F) or greater. Apply 2 nd application 30 days after spring application.
Potatoes	1.5 - 3	Apply 1 st application when plants are 10 cm (4 in.) high. Apply 2 nd application 14 days later. Continue applications at 14-day intervals throughout the growing season.
Grapes	1.5 - 3	Apply 1 st application one week after cotyledon emergence. Make repeat applications at 14-day intervals throughout the growing season.
Beets	1.5 - 3	Apply 1 st application one week after cotyledon emergence. Make repeat applications at 21-day intervals throughout the growing season.
Garlic Onions Leeks	1.5 - 3	Apply 1 st application one week after cotyledon emergence. Make repeat applications at 14-day intervals throughout the growing season.
Ornamental Plants Bedding Plants	1.5 - 3	Apply 1 st application one week after cotyledon emergence. Make repeat applications at 14-day intervals throughout the growing season.
Ornamental Trees	1.5 - 3	Apply 1 st application one week after cotyledon emergence. Make repeat applications at 14-day intervals throughout the growing season.
Turf Grass on sod farms	1.5 - 3	Make 1 st application at the start of the growing season. Make 2 nd application 14 days later. Make repeat applications at 30-day intervals throughout the growing season.

CHEMIGATION:

General Requirements –

- 1) Apply this product only through a drip (trickle) system or sprinkler including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set or hand move irrigation systems. Do not apply this product through any other type of irrigation system.
- 2) Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
- 3) If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.
- 4) Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.
- 5) A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Specific Requirements for Chemigation Systems Connected to Public Water Systems –

- 1) Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- 2) Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the

RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

- 3) The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 4) The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 5) The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6) Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- 7) Do not apply when wind speed favors drift beyond the area intended for treatment.

Specific Requirements for Drip (Trickle) Chemigation –

- 1) The system must contain a functional check valve, vacuum relief valve and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- 2) The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 3) The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 4) The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5) The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6) Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being filled with a system interlock.

Specific Requirements for Sprinkler Chemigation –

- 1) The system must contain a functional check valve, vacuum relief valve and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- 2) The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 3) The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 4) The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

12/24

- 5) The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6) Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being filled with a system interlock.
- 7) Do not apply when wind speed favors drift beyond the area intended for treatment.

Application Instructions –

- 1) Remove scale, pesticide residues, and other foreign matter from the chemical supply tank and entire injector system. Flush with clean water. Failure to provide a clean tank, void of scale or residues may cause product to lose effectiveness or strength.
- 2) Determine the treatment rates as indicated in the directions for use and make proper dilutions. Product can be applied continuously or at any time during the water application.
- 3) Prepare a solution in the chemical tank by filling the tank with the required water and then adding product as required. The product will immediately go into suspension without any required agitation.

STORAGE AND DISPOSAL

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

Pesticide Storage: Store in a cool, dry place. Store in original container only. Keep container tightly closed when not in use.

Pesticide Disposal: To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

Container Disposal: Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment by shaking and tapping sides and bottom to loosen clinging particles. Then offer for recycling if available, or dispose of empty bag in a sanitary landfill or by incineration. Do not burn, unless allowed by state and local ordinances.

WARRANTY


Seller warrants that this product complies with the specifications expressed in this label. To the extent consistent with applicable law, Seller makes no other warranties, and disclaims all other warranties, express or implied, including but not limited to warranties of merchantability and fitness for the intended purpose. To the extent consistent with applicable law, Sellers liability for default, breach or failure under this law shall be limited to the amount of the purchase price. To the extent consistent with applicable law, Seller shall have no liability for consequential damages.

13/24

Sublabel B: Turf & Professional Landscape Use

Polyversum®

(Alternate Brand Names: Biodresser®; Green Doctor®; Polidrench®; Polddresser®)

 (For Organic Production) (For Use in Organic Production)

ACTIVE INGREDIENT:

Pythium oligandrum DV 74* 1.0%

OTHER INGREDIENTS: 99.0%

TOTAL: 100.0%

*Contains no less than 1 X 10⁵ cfu/gram.

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

FIRST AID	
If in eyes	<ul style="list-style-type: none"> • 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.	
See back panel for additional precautionary statements and directions for use.	

EPA Reg. No.: 81606-1
EPA Establishment No.: (81606-CHK-001)

Net Contents: XXX
(Batch No.: XXX)

Manufactured by:
Biopreparaty Co. Ltd.
Tylisovska 1
Prague 6, Czech Republic

Marketed by:
Beta-Biologics™ Ltd.
500 Sheppard Avenue East, Suite 304
Toronto, ON, Canada M2N 6H7
(Contact us at:) 647.426.3062 or www.beta-biologics.com

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. 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.

USER SAFETY RECOMMENDATIONS

Users should:

- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

ENVIRONMENTAL HAZARDS: Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean highwater mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

DIRECTIONS FOR USE

It is a violation of Federal law to apply this product in a manner inconsistent with its labeling.

For use only on plants that are in ornamental gardens, parks, golf courses, and public or private lawns or grounds, and that are intended only for aesthetic purposes or climatic modification.

Keep unprotected persons out of treated areas until sprays have dried.

General Information:

(Polyversum® stimulates plant growth, enhances plant strength and prevents fungal attack. Polyversum® mobilizes plant defense mechanisms, increasing plant resistance to pathogenic fungal attack, increasing rate of growth and increasing overall plant strength and yield.)

(Polyversum® is a (microbial seed dresser) (microbial preparation) that protects ornamental plants, trees, shrubs, bedding plants, turf and lawns against soilborne fungal pathogens, promotes plant growth, enhances plant strength and induces a plant defense reaction against soil and airborne pathogenic fungi.)

Polyversum® can be applied as a seed dressing, pre-plant soak, overhead spray or soil drench, or irrigation application.

Mode of Action: The active ingredient *Pythium oligandrum* DV 74 colonizes the rhizosphere of treated grasses and plants. Because of its strong mycoparasitic and competitive abilities, the active ingredient suppresses the growth and antagonistic effects of many soilborne pathogenic fungi, which cause damping-off and seed, and root rots such as *Phytophthora*, *Rhizoctonia*, *Fusarium*, etc. The active ingredient also induces a defense reaction in the newly emerged plant, through stimulation of the phytohormones, which are involved in the resistance mechanisms of the plant against diseases. *Pythium oligandrum* DV 74 does not produce any

15/24

antibiotics and therefore is considered a true plant growth promoter for the induction of plant resistance.

Integrated Pest Management: Integrate Polyversum® into an overall disease and pest management strategy whenever fungicide use is necessary. Follow practices known to reduce disease development. Consult local agricultural authorities for specific IPM strategies developed for location.

Mixing Instructions: Shake well before use or before mixing with water.

MIXING: Dilute Polyversum® with water and apply using conventional ground spray equipment. Partially fill the spray tank with clean water and begin agitation. Add the specified amount of Polyversum® to the tank. Finish filling the tank to the desired volume to obtain the proper spray concentration. Maintain agitation continuously while spraying. Use spray mixture within two hours of mixing. Do not allow spray mixture to stand overnight or for prolonged periods. Use large spray nozzles. If application equipment does not have large nozzles or internal mixing capability, pour suspension through a fine sieve before placement into the spray tank. For seed dressing applications, use undiluted Polyversum®.

COMPATIBILITY: Do not mix Polyversum® with chemical fungicides. Consult specific product labels for additional information or restrictions concerning tank mixing. Observe the most restrictive of the labeling limitations and precautions of all products used in mixtures. Do not exceed label dosage rates. This product cannot be mixed with any product containing a label prohibition against such mixing. Polyversum® has been evaluated for phytotoxicity on a variety of plants under various normal growing conditions. However, testing all plant varieties, in all mixtures and combinations is not feasible. Prior to treating entire area, test a small portion of the plant for sensitivity. Consult your Beta-Biologics Ltd. representative for more information on Polyversum® compatibility with pesticides, surfactants and fertilizers.

Application Sites: Use Polyversum® on the following turf and ornamentals:

Ornamental Plants in parks, ornamental gardens, golf courses, and public lawns and grounds: begonia, bougainvillea, chrysanthemum, cyclamen, dahlia, ferns, foliage plants, fuchsia, ivy, lily, miniature roses, orchid, peony, phlox, and poinsettia.

Ornamental Trees and Shrubs in parks, ornamental gardens, golf courses, and public lawns and grounds: alder, azalea, beech, birch, blue spruce, boxwood, camellia, cedar, crabapple, cypress, dogwood, elm, ficus, fir, flowering cherry, flowering peach, eucalyptus, forsythia, gardenia, hackberry, holly, hydrangea, larch, laurel, lilac, magnolia, maple, myrtles, oak, pines, poplar, privet, pyracantha, rhododendron, spruce, sycamore, thuja and willow.

Bedding Plants in parks, ornamental gardens, golf courses, and public lawns and grounds: astor, calendula, carnation, cosmos, impatiens, lobelia, marigold, nasturtium, pansy, petunia, snapdragon, sweet alyssum, verbena and zinnia.

Turf Grass in parks, golf courses and public lawns and grounds: bentgrass, Bermuda grass, bluegrass, centipede grass, fescue, ryegrass, and St. Augustine.

16/24

Use Polyversum® to suppress / control the growth of plant diseases such as: *Alternaria* spp., *Ascochyta* spp., *Botrytis cinerea*, *Fusarium* spp., *Peronosplasmopara* spp., *Phoma* spp., *Phytophthora infestans*, *Puccinia* spp., *Pythium* spp., *Rhizoctonia solani*, *Sclerotinia sclerotiorum*, *Verticillium* spp.

Application Instructions: Make applications before planting and in the early stages of plant growth for initial control. Reapply at 14-day intervals or as needed throughout the growing season for preventative control. Early treatment prevents diseases from developing.

SEED DRESSING: Use Polyversum® to protect seeds from pathogenic organisms. Seeds with a rough texture can be dusted with or rolled in Polyversum®. Excess material can be removed through a sieve. Larger quantities of seeds can be treated using a dusting machine. Seeds with a smooth surface should be moistened to improve adhesion. Immediately plant moistened, treated seeds. Do not use treated seed for food, feed or oil purposes. Treat only those seeds needed for immediate use and planting. Do not store excess treated seeds beyond planting time.

PRE-PLANT SOAK: Use Polyversum® to prevent damping-off, seed rots and plant and cutting diseases on seeds, seedlings, bulbs, transplants or cuttings prior to planting. Soak seeds, bulbs, cuttings, seedlings and transplants for up to thirty minutes in a suspension of Polyversum®. Prepare enough solution to ensure thorough coverage.

IRRIGATION APPLICATION: Refer to the Chemigation section of this label for complete details on application through irrigation systems. Apply through a drip (trickle) or sprinkler system only. Apply Polyversum® at 14-day intervals or as needed throughout the growing season.

OVERHEAD SPRAY OR SOIL DRENCH: Apply Polyversum® using conventional equipment to the point of saturation. Good coverage and wetting is required. The amount of spray solution to apply will vary depending on application site. Most applications will require up to 100 gallons of spray per acre. Prepare enough solution based on plant density and soil conditions to insure thorough coverage. Reapply at 14-day intervals or as needed throughout the growing season for preventative control.

Application Rates:

Apply as a seed dressing, as a pre-plant soak, and at least twice as a field spray after germination or planting.

SEED DRESSING: Apply Polyversum® as a seed dressing at a rate of 0.1 – 3 oz per 60 – 100 lbs seed weight. Seeds with a smooth surface should be moistened prior to application to improve adhesion. Immediately plant moistened, treated seeds. For dry treated seeds, plant seeds shortly after dressing.

PRE-PLANT SOAK: Apply Polyversum® as a pre-plant soak at a rate of 0.2 oz / 3 gallons of water. Soak seeds, seedlings, bulbs, transplants or cuttings for 30 minutes. Immediately plant treated seeds and bulbs. Once planted, use remaining suspension as a stem and root drench.

OVERHEAD SPRAY OR SOIL DRENCH: Apply Polyversum® at a rate of 1.5 – 3 oz / acre in sufficient water to ensure thorough coverage. For ornamental plants, bedding plants, and ornamental trees, apply first application one week after cotyledon emergence. Make repeat

applications at 14-day intervals throughout the growing season. For turf grass, apply 1st application 14 days after planting. Make repeat applications at 14-day intervals throughout the growing season. Apply in sufficient water to ensure full coverage.

CHEMIGATION:

General Requirements -

- 1) Apply this product only through a drip (trickle) system or sprinkler including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set or hand move irrigation systems. Do not apply this product through any other type of irrigation system.
- 2) Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
- 3) If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.
- 4) Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.
- 5) A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Specific Requirements for Chemigation Systems Connected to Public Water Systems -

- 1) Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- 2) Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- 3) The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 4) The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 5) The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6) Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- 7) Do not apply when wind speed favors drift beyond the area intended for treatment.

Specific Requirements for Drip (Trickle) Chemigation -

- 1) The system must contain a functional check valve, vacuum relief valve and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

- 2) The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 3) The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 4) The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5) The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6) Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being filled with a system interlock.

Specific Requirements for Sprinkler Chemigation -

- 1) The system must contain a functional check valve, vacuum relief valve and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- 2) The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 3) The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 4) The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5) The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6) Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being filled with a system interlock.
- 7) Do not apply when wind speed favors drift beyond the area intended for treatment.

Application Instructions -

- 1) Remove scale, pesticide residues, and other foreign matter from the chemical supply tank and entire injector system. Flush with clean water. Failure to provide a clean tank, void of scale or residues may cause product to lose effectiveness or strength.
- 2) Determine the treatment rates as indicated in the directions for use and make proper dilutions. Product can be applied continuously or at any time during the water application.
- 3) Prepare a solution in the chemical tank by filling the tank with the required water and then adding product as required. The product will immediately go into suspension without any required agitation.

STORAGE AND DISPOSAL

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

Pesticide Storage: Store in a cool, dry place. Store in original container only. Keep container tightly closed when not in use.

19/24

Pesticide Disposal: To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

Container Disposal: Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment by shaking and tapping sides and bottom to loosen clinging particles. Then offer for recycling if available, or dispose of empty bag in a sanitary landfill or by incineration. Do not burn, unless allowed by state and local ordinances.

WARRANTY

Seller warrants that this product complies with the specifications expressed in this label. To the extent consistent with applicable law, Seller makes no other warranties, and disclaims all other warranties, express or implied, including but not limited to warranties of merchantability and fitness for the intended purpose. To the extent consistent with applicable law, Seller's liability for default, breach or failure under this law shall be limited to the amount of the purchase price. To the extent consistent with applicable law, Seller shall have no liability for consequential damages.

20/24

Sublabel C: Home & Garden Use

Polyversum®

(Alternate Brand Names: Biodresser®; Green Doctor®; Polidrench®; Polidresser®)



(For Organic Gardening) (For Use in Organic Gardening)

ACTIVE INGREDIENT:

Pythium oligandrum DV 74* 1.0%

OTHER INGREDIENTS: 99.0%

TOTAL: 100.0%

*Contains no less than 1 X 10⁵ cfu/gram.

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

FIRST AID	
If in eyes	<ul style="list-style-type: none"> • 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.	
See back panel for additional precautionary statements and directions for use.	

EPA Reg. No.: 81606-1
EPA Establishment No.: (81606-CHK-001)

Net Contents: XXX
(Batch No.: XXX)

Manufactured by:
Biopreparaty Co. Ltd.
Tylisovska 1
Prague 6, Czech Republic

Marketed by:
Beta-Biologics™ Ltd.
500 Sheppard Avenue East, Suite 304
Toronto, ON, Canada M2N 6H7
(Contact us at:) 647.426.3062 or www.beta-biologics.com

21/24

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.

USER SAFETY RECOMMENDATIONS

Users should:

- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

ENVIRONMENTAL HAZARDS: Do not apply directly to water. Do not contaminate water when disposing of equipment washwaters or rinsate.

DIRECTIONS FOR USE

It is a violation of Federal law to apply this product in a manner inconsistent with its labeling.

For use only on plants grown for other than commercial and research purposes, which may include plants in habitations, home fruit and vegetable gardens, and home greenhouses.

How it Works: Polyversum® protects plants against fungal pathogens, promotes plant growth, and enhances plant strength. The active ingredient in Polyversum® is a naturally-occurring microbial organism that suppresses the growth and antagonistic effects of many soilborne pathogenic fungi that cause damping-off and root rots, AND the active ingredient induces a defense reaction in plants, which promotes resistance to disease and other stresses.

Uses: Use Polyversum® to promote plant growth and manage plant diseases, such as bacterial leaf spot, blackleaf spot, *Botrytis*, *Fusarium* wilt and powdery mildew. Use Polyversum® on roses and other flowers, vegetables, fruiting trees, berries, vines, herbs, root vegetables, ornamental trees and shrubs and indoor plants.

How to Apply: Shake the container of Polyversum® well before use or before mixing with water. Keep unprotected persons out of treated areas until sprays have dried.

1. Fill a 1-3 gallon spray tank with water.
2. Add one packet (0.25 oz) to the water. Mix thoroughly. Use spray solution within 2 hours of mixing.
3. Use large spray nozzles. If application equipment does not have large nozzles, pour suspension through a fine sieve before placement into the spray tank.
4. Spray roots and stems until completely wet.
5. Make repeat applications at 14-day intervals throughout the growing season.

Compatibility: Do not mix Polyversum® with chemical fungicides or fertilizers.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE

Store in a cool, dry place.

PESTICIDE DISPOSAL AND CONTAINER HANDLING

If empty: Nonrefillable container. Do not reuse or refill this container. Place in trash and offer

22/24

for recycling if available.

If partially filled: Call your local solid waste agency or (800) 858-7378 (National Pesticide Information Center) for disposal instructions. Never place unused product down any indoor or outdoor drain.

WARRANTY

Seller warrants that this product complies with the specifications expressed in this label. To the extent consistent with applicable law, Seller makes no other warranties, and disclaims all other warranties, express or implied, including but not limited to warranties of merchantability and fitness for the intended purpose. To the extent consistent with applicable law, Seller's liability for default, breach or failure under this law shall be limited to the amount of the purchase price. To the extent consistent with applicable law, Seller shall have no liability for consequential damages.

23/24

OPTIONAL LABEL CLAIMS

General Claims:

- Biofungicide.
 - Biological Fungicide.
 - Biological Seed Dresser.
 - Plant Growth Stimulator.
 - Polversum® is patented worldwide and has multiple applications in turf, horticulture and agricultures.
 - Opening the door to sustainable agriculture for the 21st century.
 - Establishes an optimal environment for healthy plant growth.
 - Stimulates the development of root systems.
 - Does not develop resistance in treated plants.
 - Controls Soil Borne and Foliar Diseases.
 - Can be used throughout the entire growing season.
 - (Easy to use) (Simple application procedures)
-
- Polversum® is effective the whole growing season.
 - For use in irrigation systems.
 - Two-year shelf life.

Claims for Sublabel A – Agricultural Uses:

- Stimulates plant growth, enhances plant strength and prevents fungal diseases.
- Provides biological protection of seeds.
- Stimulates the growth of seedlings.
- Promotes significantly higher yields.
- No pre-harvest interval (PHI).
- Low Reentry Interval (REI).

Claims for Sublabel B- Turf Uses:

- Turf Growth Stimulator.
- Helps fight stress in sudden dry conditions.
- Stimulates the uptake of phosphorous.
- By increasing root systems, (Product Name) can contribute to reduced water uses and lessen the need for added nutrients.
- Suitable as a seed dresser.
- Suited for all types of turf grass.

Claims for Sublabel C – Home & Garden Uses:

- Promotes plant growth.
- Helps manage disease.
- Stimulates plant growth, enhances plant strength and prevents fungal diseases.
- Larger, healthier plants and flowers.
- Hearty plants, fruits and vegetables.