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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

APR 20 2012

Ms. Amy Roberts  
Technology Sciences Group, Inc.  
Agent for Premier Horticulture, Inc.  
712 Fifth Street. Suite A  
Davis, CA 95616

Re: PRO-MIX with Biofungicide  
EPA Reg. No. 74267-1  
Submission dated 11/3/2011

Dear Ms. Roberts:

The Agency has reviewed your request to amend the subject product registration. The amendment includes the following changes to the product's label:

- Addition of alternate brand names;
- Revisions to or addition of optional label claims.

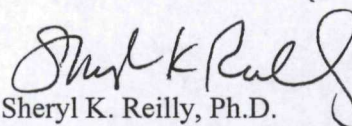
The amendment referred to above, submitted in connection with registration under FIFRA section 3(c)(7)(A), is acceptable provided that you:

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.

If these conditions are not complied with, then the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions.

A stamped copy of the label and A-79 are enclosed for your records. If you have questions, please contact Michael Glikes by phone at (703) 305-6231 or by email at [glikes.michael@epa.gov](mailto:glikes.michael@epa.gov).

Sincerely,



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

Product Label: PRO-MIX with Biofungicide – Master Label (7 pages)  
 Package Size: 3.8 cu.ft. compressed and 2.8 cu.ft. loose fill bag  
 Date: February 7, 2012 – label version (10)  
 Consolidated label to update PRN 2007-4, to add alternate brand names and to make optional label claim revisions.

(FRONT PANEL)

# PRO-MIX with Biofungicide

**(Alternate Brand Names:** SOGEMIX 'VT-M' with Biofungicide; PRO-MIX 'FPX' with Biofungicide; PRO-MIX 'VFT' with Biofungicide; PRO-MIX 'BX' with Biofungicide; PRO-MIX 'BRK' with Biofungicide; SOGEMIX VT-M with Biofungicide; PRO-MIX FPX with Biofungicide; PRO-MIX VFT with Biofungicide; PRO-MIX BX with Biofungicide; PRO-MIX BRK with Biofungicide; PRO-MIX BIOFUNGICIDE; PRO-MIX BX BIOFUNGICIDE, PRO-MIX BRK BIOFUNGICIDE; PRO-MIX HP BIOFUNGICIDE; PRO-MIX LP-15 BIOFUNGICIDE; PRO-MIX PGX BIOFUNGICIDE; PRO-MIX FPX BIOFUNGICIDE.)

**ACTIVE INGREDIENT:**

*Bacillus subtilis*, MBI 600 (not less than 1 X 10<sup>5</sup> viable spores per gram of media)..... 0.001%

**OTHER INGREDIENTS:** ..... 99.999%

Optional Text:

- PROFESSIONAL
- PROFESSIONAL GROWING MEDIUM
- GROWING MEDIUM WITH BIOFUNGICIDE
- FINE-GRADE PLUG GROWING MEDIUM
- SPHAGNUM PEAT-BASED GROWING MEDIA
- FOR GREENHOUSE OR GLASSHOUSE USE
- VEGETABLE, FRUIT & TOBACCO GROWING MEDIUM
- VEGETABLE TRANSPLANT GROWING MIX WITH BIOFUNGICIDE
- WITH SUBTILEX®
- (Logo) Research (Investigacion), Quality Control (Control de Calidad)
- (Logo) TECHNOLOGIES PREMIER TECH
- (website) pthorticulture.com
- Other Ingredients, depending on blend can include:
  - (Canadian) (Sphagnum) Peat Moss, fine granulation (or short fiber) (60-85% by volume)
  - Vermiculite, horticulture or fine granulation
  - Perlite, horticulture or plug grade
  - Dolomitic and Calcitic Limestone (pH adjuster)
  - Fertilizers
  - Wetting Agent

## ACCEPTED

APR 20 2012

Under the Federal Insecticide, Fungicide,  
 and Rodenticide Act, as amended, for  
 the pesticide registered under  
 EPA Reg. No. 74267-1

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

**See Additional Precautionary Statements on Side Panel**

EPA Reg. No. 74267-1

EPA Establishment No. 74267-CAN-01/02/03/04

For identification of establishment number, refer to the manufacturing identification, which is ink-jet printed within white bar. This indicates year/month/day/manufacture location/manufacture shift, military time and product identification. For example: 2002/07/01 1 02 02:45 BX. Manufacturing locations are coded as:

Factory Code:

- 1 for Riviere-du-Loup, Quebec - compressed products (EPA Establishment No. 74267-CAN-01)
- 2 for Riviere-du-Loup, Quebec - loose fill products (EPA Establishment No. 74267-CAN-02)
- 3 for St. Anne, Manitoba (EPA Establishment No. 74267-CAN-03)
- 4 for Northal, Alberta (EPA Establishment No. 74267-CAN-04)

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(SIDE PANEL)

**PRECAUTIONARY STATEMENTS**

**Hazards to Humans and Domestic Animals. CAUTION:** Avoid contact with eyes. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling.

**Personal Protective Equipment:** Applicators and other handlers must wear long-sleeved shirt and long pants, and shoes plus socks. As a general precaution when exposed to living microbial products such as this, applicators (persons opening bags and/or filling potting machines) must wear a dust/mist filtering respirator meeting NIOSH standards of at least N-95, R-95 or P-95. Follow manufacturer's instructions for cleaning / maintaining PPE. Keep and wash PPE separately from other laundry.

**Environmental Hazards:** For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to inter-tidal areas below the mean high-water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash water.

**User Safety Recommendations:** Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Users should remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

**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.

(BACK PANEL)

## PRO-MIX with Biofungicide

GROWING MEDIUM WITH BIOFUNGICIDE  
FINE-GRADE PLUG GROWING MEDIUM  
SPHAGNUM PEAT-BASED GROWING MEDIA  
FOR GREENHOUSE OR GLASSHOUSE USE  
VEGETABLE, FRUIT & TOBACCO GROWING MEDIUM  
VEGETABLE TRANSPLANT GROWING MIX WITH BIOFUNGICIDE

**PRO-MIX with Biofungicide** has been enriched with Subtlex® (active ingredient: *Bacillus subtilis* MBI 600), a biofungicide that prevents root diseases. The *Bacillus subtilis* bacteria colonize developing root systems, and suppress disease-causing organisms, such as *Pythium*, *Fusarium*, *Rhizoctonia*, *Alternaria* and *Aspergillus*, which attack root systems. The bacteria also act as a biostimulant developing with the growing root system. As a result, a vigorous root system is (then) established that results in more uniform plant stands after transplanting and crop response. (Optional Text: As a result, a vigorous root system is established that results in more uniform plant stands after transplanting in the field and in greater crop yields).

### PRO-MIX With Biofungicide Custom Blends

PRO-MIX With Biofungicide is a custom blended growing medium designed to meet your growing needs.

- **BX Blend.** The BX Blend (PRO-MIX 'BK' with Biofungicide) is a 'General Purpose' peat-based (professional) growing medium formulated (designed) for the cultivation of horticultural plants. This growing medium (It) contains a blend of select Canadian Sphagnum peat moss, perlite, vermiculite, dolomitic and calcitic limestone. This formulation is lightweight, uniform and provides conditions necessary to establish plant growth. PRO-Mix 'BX' with Biofungicide is suitable for a wide variety of plants.
- **BRK Blend.** The BRK Blend (PRO-MIX 'BRK' with Biofungicide) is a medium-weight, Peat/Bark-based growing medium designed for the cultivation of horticulture plants. Processed pine bark adds weight and reduces water retention of media while (quality) Sphagnum peat moss is light-weight and possesses high water-holding ability (ensures the optimal balance between air and water). This combination forms a base for a "general use" growing medium that provides conditions necessary to establish plant growth, particularly when container stability and low-water retention are required.
- **GSX Blend.** The GSX Blend is a medium-weight, Peat/Bark-based growing medium designed for the cultivation of horticulture plants with automated drip and subirrigation watering systems. It contains a blend of Canadian Sphagnum peat moss, composted softwood bark and coarse perlite to form a porous growing medium which allows water drainage and air exchange for developing root systems.
- **HP Blend.** The HP Blend is a 'High Porosity' peat-based growing medium designed for the cultivation of horticultural plants. This lightweight and porous growing medium provides conditions necessary to establish plant growth, especially when growing situations require medium with high air-capacity and low water-retention. This formulation is excellent for use with water sensitive crops, propagation of plant cuttings and /or low-light growing conditions.

- **LP15 Blend.** PRO-MIX LP15 BIOFUNGICIDE is a multipurpose peat-based, perlite professional growing medium designed for growers that prefer a low amount of aggregate and no vermiculite. PRO-MIX LP15 is suitable for a wide range of greenhouse and transplanting applications.
- **FPX Blend.** The FPX Blend is a fine peat/perlite-based growing medium for germinating ornamental and vegetable seeds in small cell plug trays. It contains a base blend of short-fiber Sphagnum peat moss and fine perlite for easy filling of trays with minimal bridging. When in use, this blend retains less water than peat/vermiculite blends.
- **PGX Blend.** The PGX Blend is a peat-based growing medium designed for germinating ornamental and vegetable seeds. This fine textured blend contains a base of short-fiber Sphagnum peat moss and fine grade vermiculite and is well suited for traditional seeding and plug-system applications.
- **TA Blend.** The TA Blend is a peat-based growing medium formulated for germinating and growing-on of Tobacco and Agriculture transplants. This blend is ideal for use with trays/flats cultivated in subirrigated float systems and conventional irrigation methods. This fine textured blend is user-friendly for filling small cell trays and flats with automated equipment or by hand.
- **VFT Blend.** The VFT Blend is a peat-based growing medium formulated for germinating and growing-on of vegetable, fruit and tobacco transplants. This blend is designed for use with trays/flats cultivated in subirrigated float systems and conventional irrigation methods. (Optional Text: This formulation contains a blend of ingredients that allow oxygen and water to move freely for uniform seed germination and plant growth. This fine textured blend is user-friendly for filling small cell trays and flats with automated equipment or by hand. USES: Vegetable Transplants, Fruit Transplants, Tobacco Transplants, Germination of Tobacco and Vegetable Seeds, Float Trays, Subirrigation systems.)

To determine the best PRO-MIX With Biofungicide custom blend for your growing needs, consult the following base-formula table. For technical assistance, plant compatibility information and crop culture guidelines, contact PREMIER GROWER SERVICES –USA and Mexico: (800) 424-2554; Canada: (800) 667-5366.

Optional Text/Table:

LIST OF INGREDIENTS PER BLEND	
LP15	• Canadian Sphagnum Peat Moss (80-90% by volume) • Perlite – horticultural grade • Dolomitic and Calcitic limestone (pH adjuster) • Wetting Agent • Biofungicide ( <i>Bacillus subtilis</i> )
BX	• Canadian Sphagnum Peat Moss (75-85%) • Vermiculite – horticultural grade • Perlite – horticultural grade • Dolomitic and Calcitic limestone (pH adjuster) • Wetting Agent • Biofungicide ( <i>Bacillus subtilis</i> )
HP	• Canadian Sphagnum Peat Moss (65-75% by volume) • Perlite – horticultural grade • Dolomitic and Calcitic limestone (pH adjuster) • Wetting Agent • Biofungicide ( <i>Bacillus subtilis</i> )
PGX	• Canadian Sphagnum Peat Moss (75-85% by volume) • Vermiculite – fine grade • Dolomitic and Calcitic limestone (pH adjuster) • Wetting Agent • Biofungicide ( <i>Bacillus subtilis</i> )
FPX	• Canadian Sphagnum Peat Moss (80-90% by volume) • Vermiculite – fine grade • Dolomitic and Calcitic limestone (pH adjuster) • Wetting Agent • Biofungicide ( <i>Bacillus subtilis</i> )
BRK	• Canadian Sphagnum Peat Moss (45-55% by volume) • Processed Pine bark • Perlite –

horticultural grade • Dolomitic and Calcitic limestone (pH adjuster) • Wetting Agent • Biofungicide (*Bacillus subtilis*)  
 Mycorrhizae (Mycorrhizae E) is available in the above blends, as requested.

Optional Text/Table:

PRO-MIX Base Formula	Sphagnum Peat Moss	Perlite	Vermiculite	Bark	Starter Nutrients	Limestone	Wetting Agent
BX	---- 75-85%/vol.	----	----		----	----	----
HP	---- 65-75%/vol.	----			----	----	----
LP-15	80-90%/vol.	----					
GSX	---- 55-65%/vol.	----		*1 ---- 25-35%/vol.	----	----	----
BRK	---- 40-50%/vol.	----		*1 ---- 35-45%/vol.	---- ++	----	----
FPX	80-90%/vol.						
PGX	---- 75-85%/vol.	---- plug-grade	---- plug-grade		---- --	----	----
TA	---- 80-90%/vol.		---- plug-grade		---- ++	----	----
VFT Blend	75-85%/vol.		---- plug-grade			----	----

\*1 – Processed pine

Optional Text/Table:

To determine the best PRO-MIX With Biofungicide custom blend for your growing needs, consult the following table. For technical assistance, plant compatibility information and crop culture guidelines, contact PREMIER GROWER SERVICES –USA and Mexico: (800) 424-2554.

Blend	Bedding Trays	Hanging Baskets*	Potted Plants*	Perennials & Hardy Mums	Cuttings* *	Seed Germination	Float Trays	Subirrigation Systems
BX Blend	✓	✓	✓	✓	✓	✓		✓
BRK Blend	✓		✓	✓				✓
HP Blend	✓	✓	✓	✓	✓			✓
FPX Blend						✓	✓	✓
LP15 Blend	✓	✓	✓	✓	✓			
PGX Blend						✓	✓	✓
TA Blend						✓	✓	✓
VFT Blend						✓	✓	✓

\* Intended for annuals, bulbs, flowering and/or foliage plants

\*\* Intended for the propagation of cuttings, such as flowering, foliage, herbaceous and woody plants.

**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 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 intervals (REI). The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

There is a zero (0) restricted entry interval for this product.

**PREPARATION:**

Open package at the time of seeding, potting or transplanting. Potting benches and equipment should be located in a clean, weed-free area. Add water to **PRO-MIX with Biofungicide** until slightly moist to the touch. Transplant cuttings, plugs, seedlings, etc. in moistened medium taking care to avoid compaction (do not press down around seed or root systems). After transplanting, add water to settle medium. Place newly transplanted trays and pots in a suitable growing area within the greenhouse.

*(Optional Text: Select trays and flats that provide adequate drainage and fill completely with moistened medium, taking care not to compact. Do not pack down. Compaction reduces air space and can adversely affect germination and seedling growth. Sow seeds according to seed packet directions and irrigate with water. Place newly sown trays in suitable growing area and maintain air/medium temperatures that favor plant species grown. / Sow seeds, transplant cuttings, seedlings, ect. in moistened medium taking care to avoid compaction (do not press down around seed or root systems). Be sure that all flats and trays have adequate drainage. After seeding/transplanting, add water to settle medium. Place newly sown/transplanted trays and pots in a suitable growing area within the greenhouse.)*

**IMPORTANT:** PRO-MIX with Biofungicide is suitable for fruit and vegetable seedlings, and transplants. Do not use for plants bearing fruit. PRO-MIX with Biofungicide is for use in protected growing environments only (e.g. glasshouse or greenhouse): not for use in non-protected environments (e.g. non-contained nurseries or slat houses).

**FERTILIZATION:**

Initial plant development will occur without immediate fertilization. It is essential to initiate a fertilization program at the emergence of the first set of true leaves, this will ensure plants receive adequate nutrients. Select a fertilization program that is appropriate for the plant species grown, stage of development and water nutrient content. If you frequently analyze media nutrient levels and plant tissue throughout the production cycle, you can insure plants receive proper nutritional requirements.

**WATER MANAGEMENT:**

An essential part of crop culture is water management. When plants require water, irrigate the crop early in the day. This will allow plant foliage and medium surface to dry. Also, medium temperature can warm to normal level by evening. Irrigate thoroughly so water 'runs through' to prevent salt accumulation and to ensure uniform wetting and drying of containers throughout the crop. If preferred, additional wetting agent can be applied during the crop cycle at irrigation to reduce surface tension of water for more thorough water penetration and movement throughout the root zone.

**APPLICATION INFORMATION:**

- Use **PRO-MIX with Biofungicide** "as is" from package. Add water to moisten.
- Thoroughly moisten medium to "water-in" plants after transplanting and placing in the greenhouse.
- Do not add fertilizers when sowing seeds.

- Use for plants requiring a growing pH between 5.0 and 7.0.
- Do not sterilize or pasteurize **PRO-MIX with Biofungicide**.
- Do not store wet growing media, as pH will tend to climb from activation of limestone.
- Store products in sealed bags to (preserve quality) (avoid intrusion from water, pathogens, pesticides and weeds).
- Pesticides and chemical growth regulator treatments can be used in combination with **PRO-MIX with Biofungicide** and will provide extended protection throughout the growing season. (*Optional Text: The biofungicide-enriched media can be used with pesticide and chemical treatments and will provide extended protection throughout the growing season.*)

**STORAGE AND DISPOSAL**

Do not contaminate water, food or feed by storage or disposal. Do not contaminate water by cleaning of equipment or disposal wastes.

**STORAGE:** Store in a dry place.

**PRODUCT DISPOSAL:** Wastes resulting from the use of this product may be disposed on site, or at an approved waste disposal facility.

**CONTAINER DISPOSAL:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. Completely empty bag by shaking and tapping sides and bottom to loosen clinging particles. Then dispose of bag in trash or by incineration, if allowed by State and local authorities.

**QUALITY GUARANTEE**

PREMIER HORTICULTURE is committed to quality. All PRO-MIX professional products are made with high-quality components. If for any reason you are not completely satisfied with the quality of this product, you may return this package to the seller and PREMIER HORTICULTURE guarantees to replace it or refund its purchase price, at your choice. As usual with similar products, all other remedies and liabilities including, liability for direct or consequential damages, warranties of merchantability and fitness for a particular purpose are excluded.

**PRODUCT OF CANADA**

**Manufactured for:**  
PREMIER HORTICULTURE, INC.  
Quakertown, PA 18951  
For additional information, call:  
(215) 529-1290 or (800) 525-2553  
[www.premierhort.com](http://www.premierhort.com)

**Manufactured by:**  
PREMIER HORTICULTURE LTEE / LTD  
Riviere-du-Loup, Canada G5R 6C1  
For additional information, call:  
(514) 631-6700 or (800) 667-5366

SUBTILEX is a registered trademark of MicroBio Limited and the strain of *Bacillus subtilis* is a product of Becker Underwood, Inc.