

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

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

Adora Clark GB Biosciences Corporation P.O. Box 18300 Greensboro, NC 27419-8300

JAN 10 2012

SUBJECT: Label Amendment

Bravo 825

EPA Reg No. 50534-201; Decision # 455779 Your Submission Dated September 21, 2011

Dear Ms. Clark:

The amended labeling(s) referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) as amended to clarify conifer uses on the chlorothalonil end use product has been reviewed and found acceptable provided that you:

- 1. Add this restriction statement to the 'Specific Use Restrictions' on page 27; 'Do not use on forests'.
- 2. Delete the blank column on pages 26 and 27 under 'Diseases'.

Submit one copy of your final printed labeling before you release your product for shipment. This label supersedes all previously accepted labels.

If you have any questions regarding this correspondence, contact Rose Kearns of my staff by phone at 703-305-5611 or via email at <a href="mailto:kearns.rosemary@epa.gov">kearns.rosemary@epa.gov</a> or myself at 703-308-9448 or via email at <a href="mailto:kish.tony@epa.gov">kearns.rosemary@epa.gov</a> or myself at 703-308-9448 or via email at <a href="mailto:kish.tony@epa.gov">kearns.rosemary@epa.gov</a> or myself at 703-308-9448 or via email at <a href="mailto:kish.tony@epa.gov">kearns.rosemary@epa.gov</a> or myself at 703-308-9448 or via email at <a href="mailto:kish.tony@epa.gov">kearns.rosemary@epa.gov</a> or myself at 703-308-9448 or via email at <a href="mailto:kish.tony@epa.gov">kearns.rosemary@epa.gov</a> or myself at 703-308-9448 or via email at <a href="mailto:kish.tony@epa.gov">kearns.rosemary@epa.gov</a> or myself at 703-308-9448 or via email at <a href="mailto:kish.tony@epa.gov">kearns.rosemary@epa.gov</a> or myself at 703-308-9448 or via email at <a href="mailto:kish.tony@epa.gov">kearns.rosemary@epa.gov</a> or myself at 703-308-9448 or via email at <a href="mailto:kish.tony@epa.gov">kearns.rosemary@epa.gov</a> or myself at 703-308-9448 or via email at <a href="mailto:kish.tony@epa.gov">kearns.rosemary@epa.gov</a> or myself at 703-308-9448 or via email at <a href="mailto:kish.tony@epa.gov">kearns.rosemary@epa.gov</a> or myself at 703-308-948 or via email at <a href="mailto:kish.tony@epa.gov">kearns.rosemary@epa.gov</a> or myself at 703-308-948 or via email at <a href="mailto:kish.tony@epa.gov">kearns.rosemary@epa.gov</a> or myself at 703-308-948 or via email at <a href="mailto:kish.tony@epa.gov">kearns.rosemary@epa.gov</a> or myself at 703-308-948 or via email at <a href="mailto:kish.tony@epa.gov">kearns.rosemary@epa.gov</a> or myself at 703-308-948 or via email at <a href="mailto:kish.tony@epa.gov">kearns.rosemary@epa.gov</a> or myself at 703-308-948 or via email at <a href="mailto:kish.tony@epa.gov">kearns.rosemary@epa.gov</a> or myself at <a href="mailto:kish.tony@epa.gov">kearns.rosemary@epa.

Sincerely,

Tony Kish

Product Manager 22

Fungicide Branch

Registration Division (7504P)

#### **MASTER**

Bravo® 825

# Agricultural Fungicide

[Insert SuperWeatherStik® logo]

Active Ingredient:	
Chlorothalonil (tetrachloroisophthalonitrile)	82.5%
Other Ingredients:	17.5%
Total:	100.0%

(82.5% Water Dispersible Granules)

KEEP OUT OF REACH OF CHILDREN.

# **DANGER/PELIGRO**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 50534-201 EPA Est. 50534-TX-001 [Net Weight is listed on printed bag.]

ACCEPTED with COMMENTS In EPA Letter Dated

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

FIRST AID			
If in eyes	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> </ul>		
	<ul> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> </ul>		
	<ul> <li>Rinse eye only with water. Do not put eye drops, drugs, or ointments in eyes unless specifically recommended by a medical doctor or a poison control center.</li> </ul>		
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>		
If inhaled	Move person to fresh air.		
	<ul> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> </ul>		
	<ul> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>		
lf on skin or	Take off contaminated clothing.		
clothing	<ul> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> </ul>		
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>		

#### NOTE TO PHYSICIAN

Possible mucosal damage may contraindicate the use of gastric lavage; chemical adsorbents are recommended to reduce adsorption of the product. Persons suffering with temporary allergic skin reactions may respond to treatment with oral antihistamines and topical or oral steroids.

If in eyes, the upper and lower lids should be retracted and irrigated, and any particulate matter should be carefully removed from the conjunctival fornix. Irrigation should be continued until the conjunctival sac is neutral on pH testing with universal indicator paper. Fluroscein staining is required to reveal the extent of corneal or conjunctival epithelial loss. Topical antibiotic ointments are indicated when corneal epithelial damage is identified. Use of steroid eye drops is not advocated unless expressly requested by an ophthalmologist.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

#### HOT LINE NUMBER

For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident),
Call

1-800-888-8372

#### PRECAUTIONARY STATEMENTS

#### **Hazards to Humans and Domestic Animals**

#### DANGER/PELIGRO

Corrosive. Causes irreversible eye damage. May be fatal if inhaled. Causes skin irritation. Do not get in eyes, on skin, or on clothing. Do not breathe dust. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

# Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are made of any waterproof material. If you want more options, follow the instructions for category A on an EPA chemical-resistant category selection chart.

# Mixers, loaders, applicators, and all other handlers must wear:

- coveralls over short-sleeved shirt and short pants
- chemical-resistant gloves made of any waterproof material Category A (e.g., barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinyl chloride (PVC) or Viton®)
- chemical-resistant footwear plus socks
- protective eyewear
- chemical-resistant headgear for overhead exposure
- chemical-resistant apron when cleaning equipment, mixing, or loading.
- and NIOSH approved dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C) or a NIOSH approved respirator with any N, R, P or HE filter

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. DO NOT reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### **Engineering Control Statements**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

#### **User Safety Recommendations**

#### Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- 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.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

#### **Environmental Hazards**

This product is toxic to aquatic invertebrates and wildlife. DO NOT apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. DO NOT contaminate water when disposing of equipment wash water or rinsate.

This chemical is known to leach through soil into groundwater under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

This chemical can contaminate surface water through spray drift. Under some conditions, it may also have a high potential for runoff into surface water for several days to weeks after application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlaying extremely shallow ground water, areas with infield canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas overlaying tile drainage systems that drain to surface water.

### CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of GB BIOSCIENCES CORPORATION or Seller. To the extent permitted by applicable law, Buyer and User agree to hold GB BIOSCIENCES and Seller harmless for any claims relating to such factors.

GB BIOSCIENCES warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Seller or GB BIOSCIENCES, and, (2) Buyer and User assume the risk of any such use. TO THE EXTENT PERMITTED BY APPLICABLE LAW, GB BIOSCIENCES MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

To the extent permitted by applicable law, in no event shall GB BIOSCIENCES be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF GB BIOSCIENCES AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF GB BIOSCIENCES OR SELLER, THE REPLACEMENT OF THE PRODUCT.

GB BIOSCIENCES and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of GB BIOSCIENCES.

## **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, or pets either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the 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.

DO NOT enter or allow workers to enter treated areas during the restricted-entry interval (REI) of 12 hours.

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 over short-sleeved shirt and short pants
- chemical-resistant gloves made of any waterproof material Category A (e.g. barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinyl chloride (PVC) or Viton®)
- · chemical-resistant footwear plus socks
- protective eyewear
- · chemical-resistant headgear for overhead exposure

**Special Eye Irritation Provisions:** Chlorothalonil in this product is a severe eye irritant. Although the restricted-entry interval expires after 12 hours, for the next 6.5 days entry is permitted only when the following safety measures are provided:

- (1) At least one container designed specifically for flushing eyes must be available in operating condition at the WPS-required decontamination site intended for workers entering the treated area.
- (2) Workers must be informed, in a manner they can understand:
- that residues in the treated area may be highly irritating to their eyes
- that they should take precautions, such as refraining from rubbing their eyes, to keep the residues out of their eyes
- that if they do get residues in their eyes, they should immediately flush their eyes using the
  eyeflush container that is located at the decontamination site or using other readily available
  clean water
- how to operate the eyeflush container

#### **GENERAL INFORMATION**

Bravo 825 is an excellent fungicide when used according to label directions for control of a broad spectrum of plant diseases. Bravo 825 is recommended for use in programs which are compatible with the principles of Integrated Pest Management (IPM), which include the use of disease resistant crop varieties, cultural practices, pest scouting and disease forecasting systems which reduce unnecessary applications of pesticides.

Bravo 825 is effective for strategic use in programs that attempt to minimize disease resistance to fungicides. Some other fungicides which are at risk from disease resistance exhibit a single-site mode of fungicidal action. Bravo 825, with a multi-site mode of action, may be used to delay or prevent the development of resistance to single-site fungicides. Consult with your Federal or State Cooperative Extension Service representatives for guidance on the proper use of Bravo 825 in programs which seek to minimize the occurrence of disease resistance to other fungicides.

Bravo 825 can be used effectively in dilute or concentrate sprays. Thorough, uniform coverage is essential for disease control.

#### **General Precautions and Restrictions**

DO NOT use on greenhouse-grown crops.

DO NOT combine Bravo 825 in the spray tank with pesticides, surfactants, or fertilizers unless your prior use has shown the combination physically compatible, effective, and noninjurious under your conditions of use. DO NOT combine Bravo 825 with Dipel®, Latron B-1956®, or Latron AG-98® as phytotoxicity may result from the combination when applied to some crops on this label.

This product must not be applied within 150 feet for aerial applications, or 25 feet for ground applications of marine/estuarine water bodies, unless there is an untreated buffer area of that width between the area to be treated and the water body.

#### **Spray Drift Precautions**

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off target drift movement from aerial applications to agricultural field crops. These requirements do not apply to conifer applications, public health uses, or applications using dry formulations.

- 1. The distance of the outer most nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
- 2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they should be observed.

The applicator should be familiar with and take into account the information covered in the **Aerial Drift Reduction Advisory Information**.

## **Aerial Drift Reduction Advisory Information**

[This section is advisory in nature and does not supersede the mandatory label requirements.]

# Information on Droplet Size

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential but will not prevent drift if applications are made improperly, or under unfavorable conditions (see **Wind**, **Temperature**).

#### **Controlling Droplet Size**

- Volume Use high flow rate nozzles to apply the highest practical spray volume. Nozzles
  with higher rated flows produce larger droplets.
- Pressure Do not exceed the nozzle manufacturer's recommended pressures. For many
  nozzle types, lower pressure produces larger droplets. When higher flow rates are needed,
  use higher flow rate nozzles instead of increasing pressure.
- Number of nozzles Use the minimum number of nozzles that provide uniform coverage.
- Nozzle Orientation Orienting the nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- Nozzle Type Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift potential.

#### **Boom Length**

For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

#### Wind

Drift potential is lowest between wind speeds of 2 to 10 mph. However, many factors including droplet size, and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

#### **Temperature and Humidity**

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

#### **Temperature Inversions**

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

#### **APPLICATION**

Dosage rates on this label indicate pounds of Bravo 825 per acre, unless otherwise stated. Under conditions favoring disease development the high rate specified and shortest application interval should be used.

The required amount of Bravo 825 should be added slowly into the spray tank during filling. With concentrate sprays, pre-mix the required amount of Bravo 825 in a clean container and add to the spray tank as it is being filled. Keep agitator running when filling spray tank and during spray operations.

Apply Bravo 825 in sufficient water to obtain adequate coverage of foliage. Gallonage to be used will vary with crop and amount of plant growth. For field and row crops, spray volume usually will range from 20 to 150 gallons per acre (200 to 1400 liters per hectare) for dilute sprays and 5 to 10 gallons per acre (50 to 100 liters per hectare) for concentrate ground sprays and aircraft applications. For tree and orchard crops, apply Bravo 825 in sufficient water and with proper calibration to obtain uniform coverage of tree canopy. For fruit and nut bearing crops, the maximum volume is 300 gallons per acre unless indicated otherwise in the specific use directions. For conifers, the maximum volume is 100 gallons per acre.

# **Application and Calibration Techniques for Chemigation**

Apply this product only through center pivot, motorized lateral move, traveling gun, solid set or portable (wheel move, side roll, end tow, or hand move) irrigation system(s). DO NOT apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

DO NOT apply this product through irrigation systems connected to a public water system. 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 per year.

Controls for both irrigation water and pesticide injection systems must be functionally interlocked, so as to automatically terminate pesticide injection when the irrigation water pump motor stops. A person knowledgeable of the irrigation system and responsible for its operation shall be present so as to discontinue pesticide injection and make necessary adjustments, should the need arise.

The irrigation water pipeline must be fitted with a functional, automatic, quick-closing check valve to prevent the flow of treated irrigation water back toward the water source. The pipeline must also be fitted with a vacuum relief valve and low pressure drain, located between the irrigation water pump and the check valve, to prevent back-siphoning of treated irrigation water into the water source.

Always inject Bravo 825 into irrigation water after it discharges from the irrigation pump and after it passes through the check valve. Never inject pesticides into the intake line on the suction side of the pump.

Pesticide injection equipment must be fitted with a functional, normally closed, solenoidoperated valve located on the intake side of the injection pump. Interlock this valve to the power system, so as to prevent fluid from being withdrawn from the chemical supply tank when the irrigation system is either automatically or manually turned off.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. 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.

Spray mixture in the chemical supply tank must be agitated at all times, otherwise settling and uneven application may occur. DO NOT apply when wind speed favors drift beyond the area intended for treatment.

Posting of areas to be chemigated is required when (1) any part of a treated area is within 300 feet of sensitive areas such as residential areas, labor camps, businesses, day care centers, hospitals, in-patient clinics, nursing homes, or any public areas such as schools, parks, playgrounds, or other public facilities not including public roads, or (2) when the chemigated area is open to the public.

Posting must conform to the following requirements. Treated areas shall be posted with signs at all usual points of entry and along likely routes of approach from the listed sensitive areas. When there are no usual points of entry, signs must be posted in the corners of the treated areas and in any other location affording maximum visibility to sensitive areas. The printed side of the sign should face away from the treated area towards the sensitive area. The signs shall be printed in English. Signs must be posted prior to application and must remain posted until foliage has dried and soil surface water has disappeared. Signs may remain in place indefinitely as long as they are composed of materials to prevent deterioration and maintain legibility for the duration of the posting period.

All words shall consist of letters at least 2½ inches tall, and all letters and the symbol shall be a color which sharply contrasts with their immediate background. At the top of the sign shall be the words KEEP OUT, followed by an octagonal stop sign symbol at least 8 inches in diameter containing the word STOP. Below the symbol shall be the words PESTICIDES IN IRRIGATION WATER.

This sign is in addition to any sign posted to comply with the Worker Protection Standard.

Bravo 825 may be used through two basic types of sprinkler irrigation systems as outlined in Sections A and B below. Determine which type of system is in place, then refer to the appropriate directions provided for each type.

#### A. Center Pivot, Motorized Lateral Move and Traveling Gun Irrigation Equipment

For injection of pesticides, these continuously moving systems must use a positive displacement injection pump, of either diaphragm or piston type, constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock and capable of injection at pressures approximately 2-3 times those encountered within the irrigation water line. Venturi applicator units cannot be used on these systems.

Thoroughly mix recommended amount of Bravo 825 for acreage to be covered into the same amount of water used during calibration and inject into system continuously for one revolution or run. Mixture in the chemical supply tank must be continuously agitated during the injection run. Shut off injection equipment after one revolution or run, but continue to operate irrigation system until Bravo 825 has been cleared from last sprinkler head.

# B. Solid Set and Portable (Wheel Move, Side Roll, End Tow, or Hand Move) Irrigation Equipment

With stationary systems, an effectively designed in-line venturi applicator unit is preferred which is constructed of materials that are compatible with pesticides; however, a positive-displacement pump can also be used.

Determine acreage covered by sprinkler. Fill tank of injection equipment with water and adjust flow to use contents over a thirty to forty-five minute period. Mix desired amount of Bravo 825 for acreage to be covered with water so that the total mixture of Bravo 825 plus water in the injection tank is equal to the quantity of water used during calibration, and operate entire system at normal pressures recommended by the manufacturer of injection equipment used, for amount of time established during calibration. Agitation is recommended. Bravo 825 can be injected at the beginning or end of the irrigation cycle or as a separate application. Stop injection equipment after treatment is completed and continue to operate irrigation system until Bravo 825 has been cleared from last sprinkler head.

# **DIRECTIONS FOR APPLICATION**

CROP	DISEASES (Pathogen)	Lbs. Product/A (lbs. a.i./A)	APPLICATION DIRECTIONS
Asparagus	Rust (Puccinia asparagi)  Purple spot (Pleospora herbarum)  Cercospora blight (C. asparagi)	1.8 to 3.6 (1.5 to 3.0)	Use water volumes of 25 to 50 gallons per acre. Begin applications following final harvest of spears. Repeat applications at 14 to 28 day intervals (the minimum retreatment interval is 14 days), depending on disease pressure. Use the higher rate and shorter interval if disease severibegins to increase during the season or weather conditions are conducive for severe epidemics.  Apply by ground.

#### Specific Use Restrictions:

Do not apply more than 11 pounds of Bravo 825 (9.0 lbs. a.i.) per acre during each growing season.

Do not apply within 190 days of the harvest of spears in the following season.

Bean (Snap)	Rust ( <i>Uromyces</i> appendiculatus)	1.25 to 2.7 (1.0 to 2.2)	Use in sufficient water to obtain adequate coverage. Begin applications during early be stage or when disease first threatens and re
	Botrytis blight (gray mold) (B. cinerea)	2.7 (2.2)	<ul> <li>as necessary (the minimum retreatment interval is 7 days) to maintain control.</li> <li>Apply by ground, air, or chemigation.</li> </ul>

#### Specific Use Restrictions:

Do not apply more than 10.9 pounds of Bravo 825 (9.0 lbs. a.i.) per acre during each growing season. Do not apply within 7 days of harvest.

CROP	DISEASES (Pathogen)	Lbs. Product/A (lbs. a.i./A)	APPLICATION DIRECTIONS
Beans (Dry) (except soybeans) bean, adzuki bean, broad bean, dry bean, lablab bean, navy bean, kidney bean, lima bean, moth bean, pink bean, pink bean, pinto bean, tepary bean, urd bean, yardlong catjang chickpea (garbanzo) cowpea lupin, grain lupine bean, rice bean, runner bean, jackbean pea, blackeyed pea, southern	Rust (Uromyces appendiculatus)  Anthracnose (Colletotrichum lindemuthianum)  Downy mildew (Phytophthora nicotianae)  Cercospora leaf blotch (C. cruenta)  Ascochyta blight (A. phaseolorum)	1.25 to 1.8 (1.0 to 1.5)	Use in sufficient water to obtain adequate coverage. Begin applications during early bloom stage and repeat at 7 to 10 day intervals (the minimum retreatment interval is 7 days). For use only on beans to be harvested dry with pods removed. Do not apply more than 4 times per growing season.  Apply by ground, air, or chemigation.

- Do not apply more than 7.3 pounds of Bravo 825 (6 lbs. a.i.) per acre during each growing season. Do not apply within 14 days before harvest.

Anthracnose (ripe rot) (C. gloeosporoides)  Mummy berry (M. vacciniicorymbosi)  (2.2 to 3.0)  disease management strategy which incluaternation with a fungicide with a different of action. Diseases may only be suppress fruit russetting may occur under heavy dispressure or unfavorable environmental conditions.  Use 2.7 to 3.6 lbs. in sufficient water to obadequate coverage, normally 20 to 100 gaper acre. Begin applications at budbreak tip). Repeat applications through early blooms.	CROP	DISEASES (Pathogen)	Lbs. Product/A (lbs. a.i./A)	APPLICATION DIRECTIONS
disease pressure, use the higher rate.  Do not combine Bravo 825 in spray tank verification pesticides, surfactants or fertilizers, unless prior use has shown the combination physicompatible, effective and noninjurious und conditions of use. Do not combine Bravo with Dipel, Latron AG-98 or Latron B-1956	Blueberries	Anthracnose (ripe rot) (C. gloeosporoides)  Mummy berry	(2.2 to 3.0)	conditions.  Use 2.7 to 3.6 lbs. in sufficient water to obtain adequate coverage, normally 20 to 100 gallons per acre. Begin applications at budbreak (green tip). Repeat applications through early bloom and repeat at 10-day intervals (the minimum retreatment interval is 10 days). Under heavy disease pressure, use the higher rate.  Do not combine Bravo 825 in spray tank with pesticides, surfactants or fertilizers, unless your prior use has shown the combination physically compatible, effective and noninjurious under your conditions of use. Do not combine Bravo 825 with Dipel, Latron AG-98 or Latron B-1956 as phytotoxicity may result from the combination when applied to the crops on this label.

- Do not apply more than 10.9 pounds of Bravo 825 (9.0 lbs. a.i.) per acre during each growing season. Do not apply after full bloom or within 42 days of harvest.

Cabbage Chinese Cabbage (tightheaded varieties only) Cauliflower Broccoli Chinese Broccoli	Alternaria leaf spot (Alternaria spp.)  Downy mildew (Peronospora parasitica)	1.4 (1.2)	Use in sufficient water to obtain adequate coverage. Begin applications after transplants are set in field, or shortly after emergence of field-seeded crop, or when conditions favor disease development. Repeat at 7 to 10 day intervals or as necessary (the minimum retreatment interval is 7 days) to maintain control.
Brussels Sprouts	Ring spot (California only)	1.4 (1.2)	Apply by ground, air, or chemigation.  For field-seeded brussels sprouts, begin applications at time of early sprout development or when conditions favor disease development. Repeat at 7 to 10 day intervals or as necessary (the minimum retreatment interval is 7 days) to maintain control.

- Do not apply more than 14.5 pounds of Bravo 825 (12 lbs. a.i.) per acre during each growing season.
   Do not apply within 7 days of harvest.

CROP	DISEASES (Pathogen)	Lbs. Product/A (lbs. a.i./A)	APPLICATION DIRECTIONS
Carrot	Cercospora leaf spot (C. carotae)  Alternaria leaf blight (A. dauci)	1.4 to 1.8 (1.2 to 1.5)	Use in sufficient water to obtain adequate coverage. Start applications when disease threatens and repeat at 7 to 10 day intervals or as necessary (the minimum retreatment intervals 7 days) to maintain control.  Apply by ground, air, or chemigation.

- Do not apply more than 18.2 pounds of Bravo 825 (15 lbs. a.i.) per acre during each growing season.
- Bravo 825 may be applied the day of harvest.

Celery	Early blight (Cercospora apii)  Late blight (Septoria apicola)	1.8 to 2.7 (1.5 to 2.2)	Use in sufficient water to obtain adequate coverage. Start applications when transplants are set in the field and repeat at a 7-day interval as needed to maintain control (the minimum retreatment interval is 7 days).
	Basal stalk rot (Rhizoctonia solani)		Apply by ground, air, or chemigation.
	Pink rot (suppression - 7-day schedule)	2.7 (2.2)	,
	Early blight (Cercospora apii) Late blight (Septoria apicola)	1.4 to 1.8 lbs. per 100 gal. (1.2 to 1.5 lbs. a.i. per 100 gal.)	For celery seedbeds, apply in a spray volume of 125 gallons per acre twice weekly or as needed to maintain control. Start applications shortly after crop emergence. Use the higher rate under severe disease conditions.

# Specific Use Restrictions:

- Do not apply more than 21.8 pounds of Bravo 825 (18 lbs. a.i.) per acre during each growing season.
- Do not apply within 7 days of harvest.

Corn (sweet) Corn (grown for seed)	Helminthosporium leaf blights Rust ( <i>Puccinia</i> spp.)	0.7 to 1.8 (0.6 to 1.5)	Use in sufficient water to obtain adequate coverage. Begin applications when conditions favor disease development and repeat at a 7-day interval as required to maintain control (the minimum retreatment interval is 7 days). Under severe disease conditions, use 1.4 to 1.8 pounds of Bravo 825 per acre.  Apply by ground, air, or chemigation.
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- Do not apply more than 10.9 pounds of Bravo 825 (9 lbs. a.i.) per acre during each growing season.
- Do not apply within 14 days of harvest.
- Do not apply to sweet corn to be processed.
- Do not allow livestock to graze in treated fields.
- Do not ensile treated corn or use as livestock forage.

CROP	DISEASES (Pathogen)	Lbs. Product/A (lbs. a.i./A)	APPLICATION DIRECTIONS
Cranberry	Fruit rots  Lophodermium leaf/twig blight (L. hypophyllum)	3.8 to 6.0 (3.1 to 5.0)	Apply at early bloom and repeat at 10 to 14 day intervals (the minimum retreatment interval is 10 days). Under severe disease conditions, use 6.0 pounds of Bravo 825 (5.0 lbs. a.i.) per acre rate on a 10-day schedule. Do not apply Bravo 825 more than 3 times per season.  Apply by ground, air, or chemigation. When applying by chemigation, use 300 gallons of water per acre through solid set systems only.

- Do not apply more than 18.2 pounds of Bravo 825 (15 lbs. a.i.) per acre during each growing season.
- Do not apply within 50 days before harvest.

  Do not apply to beds when flooded or allow release of irrigation water from beds for at least 3 days following application.

Cucurbits Cucumber Cantaloupe Muskmelon Honeydew melon Watermelon Squash Pumpkin	Target spot (Corynespora cassiicola)  Anthracnose (Colletotrichum spp.)  Downy mildew (Pseudoperonospora cubensis)	1.4 to 1.8 (1.2 to 1.5)	Use in sufficient water to obtain adequate coverage. Begin applications when plants are in first true leaf stage or when conditions are favorable for disease development. Repeat applications at 7-day intervals (the minimum retreatment interval is 7 days).  Note: Spraying mature watermelons may result in sunburn of the upper surface of the fruit. Do not apply Bravo 825 to watermelons when any of
	Cercospora leaf spot (C. citrullina)  Gummy stem blight/ vine decline (Didymella bryoniae)  Alternaria leaf blight (A. cucumerina)  Alternaria leaf spot (A. alternata)  Scab (Cladosporium cucumerinum)  Powdery mildew (Sphaerotheca only)	1.8 to 2.7 (1.5 to 2.2)	the following conditions are present:  1. Intense heat and sunlight 2. Drought conditions 3. Poor vine canopy 4. Other crop and environmental conditions which may be conducive to increased natural sunburn.  Do not combine Bravo 825 with anything except water for application to watermelons unless prior use has shown the combination to be non-injurious to watermelons under your conditions of use.  Apply by ground, air, or chemigation.

- Do not apply more than 19.1 pounds of Bravo 825 (15.75 lbs. a.i.) per acre during each growing season. Bravo 825 may be applied the day of harvest.

CROP	DISEASES (Pathogen)	Lbs. Product/A (lbs. a.i./A)	APPLICATION DIRECTIONS
Fruiting Vegetables: (except tomato) Eggplant Groundcherry Okra Pepino Pepper (includes bell pepper, coili pepper, cooking pepper, pimento, sweet pepper) Tomatillo	Anthracnose (Colletotrichum spp.)  Botrytis leaf mold (Botrytis cinerea)  Cercospora leaf spot (Cercospora spp.)  Powdery mildew (Leveilfula taurica)	1.4 (1.2)	Use in sufficient water to obtain adequate coverage. Begin applications as a foliage, flower, and fruit spray when disease is expected Repeat applications at 7-10 day intervals.  Apply by ground, air or chemigation.

- Do not apply more than 10.9 pounds of Bravo 825 (9.0 lbs. a.i.) per acre during each growing season.
- Do not apply within 3 days of harvest (3-day PHI).

Grasses Grown for Seed	Stem rust Leaf rust	0.9 to 1.4 (0.75 to 1.2)	Use in sufficient water to obtain adequate coverage. Begin applications during stem elongation when conditions favor disease
	Stripe rust		development. Reapply at flag (top) leaf emergence and repeat applications at 14-day intervals (the minimum retreatment interval is 1
	Septoria leaf spot		days).
	Glume blotch		Apply by ground, air, or chemigation.
	Bipolaris and Drechslera leaf spots		
	Selenophoma (eyespot)	0.9 to 1.8 (0.75 to 1.5)	

# Specific Use Restrictions:

- Do not apply more than 5.4 pounds of Bravo 825 (4.5 lbs. a.i.) per acre during each growing season.
- Do not apply within 14 days of harvest.
- Do not allow livestock to graze in treated areas or feed treated plant parts to livestock.

Mango	Anthracnose (Colletotrichum spp.)	1.8 to 3.1 (1.5 to 2.6)	Use a water volume of 20 to 300 gallons per acre. Begin applications at early bloom and repeat on a 7to 14 day interval until early fruit development. Begin the season with the 1.8 lb. rate on a 14-day interval (the minimum retreatment interval is 7 days). If disease pressure is severe, use the higher rate and shorter interval.
		140	Apply by ground or air.

- Do not apply more than 29 pounds of Bravo 825 (24.0 lbs. a.i.) per acre during each growing season.
- Do not apply within 21 days of harvest.

CROP	DISEASES (Pathogen)	Lbs. Product/A (lbs. a.i./A)	APPLICATION DIRECTIONS

Mint (Indiana, Michigan and Wisconsin only)  Rust (Puccinia menthae)  Septoria leaf spot (S. menthae)	1.2 (1.0)	Use in sufficient water to obtain adequate coverage, normally 20 to 150 gallons per acre for dilute sprays and 5 to 10 gallons per acre for concentrate ground and aircraft applications. Begin applications when emerging plants are 4 to 8 inches high. Repeat applications at 7 to 10 day intervals or as necessary to maintain control (the minimum retreatment interval is 7 days). Do not apply more than 3 times per season.
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- Specific Use Restrictions:
  Do not apply more than 3.6 pounds of Bravo 825 (3 lbs. a.i.) per acre during each growing season.
  Do not apply within 80 days of harvest.
- Do not feed fresh or extracted mint hay from treated fields to livestock.

Onion (dry bulb) and Garlic	Botrytis leaf blight (Botrytis spp.)  Botrytis neck rot (suppression)	0.9 to 2.7 (0.75 to 2.2)	Use in sufficie coverage of to for use with di adjust fungicio application ac Bravo 825 as	pps. Bravo 8 sease monit de rates and cording to di	325 is recomi oring system frequency of	mended is which f
	Purple blotch (Alternaria porri)  Downy mildew (suppression) (Peronospora destructor)			Low Disease Hazard & Prior to Infection	Low Disease Hazard & Some Disease Present	High Disease Hazard
			Rate per Acre	0.9 lbs.	1.25 lbs.	2.7 lbs.
			Frequency	10 days	7-10 days	7 days
			For suppression storage, a min prior to lifting, per acre, is real.  The minimum Apply by groun	nimum of thre using 1.25 t commended retreatment	ee weekly ap o 2.7 lbs. of l interval is 7	plications Bravo 825

- Do not apply more than 18.2 pounds of Bravo 825 (15 lbs. a.i.) per acre during each growing season. Do not apply within 7 days of harvest.

CROP	DISEASES (Pathogen)	Lbs. Product/A (lbs. a.i./A)	APPLICATION DIRECTIONS
Onion (green bunching) Leek Shallots Onion and Garlic (grown for seed)	Botrytis leaf blight (Botrytis spp.)  Purple blotch (Alternaria porri)  Downy mildew (suppression) (Peronospora destructor)	1.4 to 2.7 (1.2 to 2.2)	Use in sufficient water to obtain thorough coverage of tops. Begin applications prior to favorable infection periods, and repeat at 7 to 10 day intervals for as long as conditions favor disease (the minimum retreatment interval is 7 days). Use the high rate and a 7-day schedule o applications when heavy dew or rain persist.  Apply by ground, air, or chemigation.

- Do not apply more than 8.2 pounds of Bravo 825 (6.75 lbs. a.i.) per acre during each growing season.
- Do not apply within 7 days of harvest on garlic.
- Do not apply within 14 days of harvest on green bunching onions, leeks or shallots.

Anthracnose (Colletotrichum spp.)  Stem end rot (A. alternata, Colletotrichum spp.)  development of disease and continue treatments at 14-day intervals until weather conditions no longer favor disease development (the minimum retreatment interval is 14 days).	Papaya	(Colletotrichum spp.) Stem end rot (A. alternata,	1.4 to 2.7 (1.2 to 2.2)	at 14-day intervals until weather conditions no longer favor disease development (the minimum
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#### Specific Use Restrictions:

- Do not apply more than 8.2 pounds of Bravo 825 (6.75 lbs. a.i.) per acre during each growing season.
- Bravo 825 may be applied the day of harvest.

Parsnip	Alternaria leaf spot (Alternaria spp.)  Downy mildew (Plasmopara crustosa)  Anthracnose (Colletotrichum spp.)  Botrytis blight (gray mold) (B. cinerea)	1.4 to 1.8 (1.2 to 1.5)	Apply in sufficient water to obtain adequate coverage. Make the first application at the first sign of disease or when conditions are favorable for infection. Continue applications on a 7 to 10 day schedule (the minimum retreatment interval is 7 days). Do not apply more than 4 times per season.  Apply by ground, air, or chemigation.
9	(B. cinerea)  Bottom rot (Rhizoctonia)		,

- Do not apply more than 7.3 pounds of Bravo 825 (6 lbs. a.i.) per acre during each growing season.
- Do not apply within 10 days of harvest.

CROP	DISEASES (Pathogen)	Lbs. Product/A (lbs. a.i./A)	APPLICATION DIRECTIONS
Passion Fruit	Alternaria fruit and leaf spot (Alternaria spp.)  Anthracnose (Colletotrichum spp.)  Cercospora fruit spot	1.8 (1.5)	Apply with ground equipment in sufficient water to obtain adequate coverage of fruit and leaves. Begin applications during late bloom and repeat at 14-day intervals until weather conditions no longer favor disease development (the minimum retreatment interval is 14 days.)

- Do not apply more than 9.1 pounds of Bravo 825 (7.5 lbs. a.i.) per acre during each growing season. Do not apply within 7 days of harvest.

Peanut	Early leaf spot	0.9 to 1.36	Apply in sufficient water for coverage when leaf
, ound	(Cercospora arachidicola)	(0.75 to 1.1)	wetness first occurs or 30 to 40 days after planting; repeat at 14-day intervals (the minimum retreatment interval is 14 days). When
	Late leaf spot (Cercosporidium personatum)		conditions favor late leaf spot or when rust or web blotch occur, apply 1.36 pounds of Bravo 825 per acre at 14-day intervals for the remainder of the season.
	Pepper spot (Leptosphaerulina crassiasca)		Apply by ground, air, or chemigation. If applying by chemigation, use 1.36 pounds of Bravo 825
	Rust (Puccinia arachidis)	1.36 (1.1)	per acre. It is recommended to alternate chemigation applications with ground or aerial applications.
	Web blotch ( <i>Phoma</i> arachidicola)	,	

- Do not apply more than 10.9 pounds of Bravo 825 (9 lbs. a.i.) per acre during each growing season.
- Do not apply within 14 days of harvest.

  Do not allow livestock to graze in treated areas.
- Do not feed hay or threshings from treated fields to livestock.

CROP	DISEASES (Pathogen)	Lbs. Product/A (lbs. a.i./A)	APPLICATION DIRECTIONS
Potato	Early blight (Alternaria solani)  Late blight (Phytophthora infestans)  Botrytis vine rot (B. cinerea)	0.7 -then- 0.9 to 1.36 (0.6 -then- 0.75 to 1.1)	Begin applications at the low rate when vines are first exposed and leaf wetness occurs. Repeat applications at 5 to 10 day intervals (the minimum retreatment interval is 5 days).  Begin applying the higher label rates at 5 to 10 day intervals when any one of the following events occur:  Vines close between rows  Late blight forecasting measures 18 disease severity values (DSV)  The crop reaches 300 P-days  Increase water spray volume as canopy density increases. Use the highest rate and shortest interval when plants are rapidly growing and disease conditions are severe.  Apply by ground, air, or chemigation. Do not exceed a 10-day interval between applications when using chemigation.

- Do not apply more than 13.6 pounds of Bravo 825 (11.25 lbs. a.i.) per acre during each growing season. Do not apply within 7 days of harvest.

CROP	DISEASES (Pathogen)	Lbs. Product/A (lbs. a.i./A)	APPLICATION DIRECTIONS
Soybean	Anthracnose (Colletotrichum truncatum)  Diaporthe pod and stem rot (D. phaseolorum)		Apply in sufficient water to obtain complete coverage, using at least five gallons of water per acre for aerial application. Use the three application program in areas having a history of moderate to severe disease intensity. The minimum retreatment interval is 14 days.  Apply by ground, air, or chemigation.
	Frogeye leaf spot (Cercospora sojina)  Purple seed stain (C. kikuchii)  Cercospora leaf blight (C. kikuchii)	1.4 to 2.2 (1.2 to 1.8)	Two application program: For determinate varieties, make the first application at R3 stage (early pod set) and the second appliction at R5. For indeterminate varieties, make the first application when largest pods are 1-1½ inches in length. Make the second application 14 days later.
	Septoria brown spot (S. glycines)  Rust (suppression) (Phakopsora pachyrhizi)	0.9 to 1.4 (0.75 to 1.2)	Three application program: For determinate varieties, make the first application at the beginning of flowering (R1), the second at early pod set (R3), and the third at beginning of seed formation (R5). For indeterminate varieties, make the first application one week after first flowering and continue applications at 14-day intervals.
	Stem canker (Diaporthe phaseolorum)	0.9 (0.75)	Apply in 10 to 20 gallons of water per acre, as a band treatment directing spray to provide coverage of entire plant. Make the first application at time of emergence of the second trifoliate leaves (V2). If conditions favor stem canker disease make a second and a third application. Make all applications at 14-day intervals.

- Do not apply more than 5.4 pounds of Bravo 825 (4.5 lbs. a.i.) per acre during each growing season. Do not apply within 6 weeks of harvest.

  Do not feed soybean hay or threshings from treated fields to livestock.

CROP	DISEASES (Pathogen)	Lbs. Product/A (lbs. a.i./A)	APPLICATION DIRECTIONS
Tomato	FOLIAGE  Early blight (Alternaria solani)  Late blight (Phytophthora infestans)  Gray leaf spot (Stemphyllium botryosum)  Gray leaf mold (Fluvia fluva; Cladosporium)  Septoria leaf spot (S. lycopersici)  Target spot (Corynespora cassiicola)	1.3 to 1.8 (1.1 to 1.5)	Apply in sufficient water to obtain adequate coverage. Begin applications when dew or rain occur and disease threatens. Apply on a 7 to 10 day interval for foliage diseases. For fruit diseases, begin at fruit set and apply on a 7 to 14 day interval. Use the highest rate and shortest interval specified when disease conditions are severe. The minimum retreatment interval is 7 days.  Apply by ground, air, or chemigation.
	FRUIT  Anthracnose (Colletotrichum spp.)  Alternaria fruit rot (black mold) (A. alternata)  Botrytis gray mold (B. cinerea)  Late blight fruit rot (P. infestans)  Rhizoctonia fruit rot (R. solani)	1.8 to 2.6 (1.5 to 2.2)	

- Specific Use Restrictions:

  Do not apply more than 18.3 pounds of Bravo 825 (15.1 lbs. a.i.) per acre during each growing season.

  Bravo 825 may be applied the day of harvest.

#### **Tree and Orchard Crops**

Apply Bravo 825 in sufficient water and with proper calibration to obtain uniform coverage of tree canopy. For fruit and nut bearing crops, the maximum volume is 300 gallons per acre unless indicated otherwise in the specific use directions. For conifers, the maximum volume is 100 gallons per acre.

Application with ground equipment is preferable to aerial application, because ground applications generally give better coverage of the tree canopy. If application with ground equipment is not feasible, Bravo 825 may be applied with aircraft using at least 20 gallons per acre. The minimum volume for application by aircraft to conifer stands and Christmas trees is 10 gallons per acre.

When concentrate sprays are used or when treating non-bearing or immature trees, the lower rate of Bravo 825 listed may be used. DO NOT allow livestock to graze in treated areas.

CROP	DISEASES (Pathogen)	Lbs Product PER (lbs. a.i. per)		
		Acre	100 gal.*	APPLICATION DIRECTIONS
Almonds	Blossom blight/brown rot (Monilinia spp.)  Shot hole (Wilsonomyces carpophilus)  Scab (Venturia carpophila)	3.6 (3.0)	1.2 (1.0)	Use water volumes of 20 to 300 gallons per acre. For blossom blight, begin application at popcorn (pink bud) and follow with an application at full bloom. If weather is still conducive for disease development, another application may be made at petal fall.  For control of shot hole, make an application in the autumn at leaf fall. In the spring, make the first application at budbreak, followed by an application at shuck split to control nut infections and to control scab.  Apply by ground or air.

#### Specific Use Restrictions:

Do not apply more than 22.8 pounds of Bravo 825 (18.75 lbs. a.i.) per acre during each growing season (leaf fall through shuck split).

Do not apply within 150 days of harvest.

- Do not app	Do not apply within 150 days of harvest.						
Filberts	Eastern filbert	3.6	1.2	Use a water volume of 20 to 300 gallons per acre.			
(Hazelnuts)	blight ( <i>Anisogramma</i> <i>anomala</i> )	(3.0)	(1.0)	Begin applications at the onset of disease or when weather conditions favor disease development.  Make applications on a 14 to 28 day schedule, using the shorter interval under heavy disease pressure (the minimum retreatment interval is 14 days).  Apply by ground or air.			

- Do not apply more than 11 pounds of Bravo 825 (9 lbs. a.i.) per acre during each growing season.
- Do not apply within 120 days of harvest.
- Do not apply through irrigation.
- Do not apply with oils, other pesticides, surfactants or fertilizers.
- Do not apply within one week of an oil-based pesticide application.

			duct PER a.i. per)	
CROP	DISEASES (Pathogen)	Acre	100 gal.*	APPLICATION DIRECTIONS
Peach Nectarine Apricot Cherry Plum Prune	Leaf curl (Taphrina deformans)  Shot hole (Wilsonomyces carpophilus)	2.8 to 3.8 (2.3 to 3.1)	0.9 to 1.25 (0.75 to 1.0)	For best control of both diseases apply at leaf fall in late autumn, using sufficient water and proper sprayer calibration to obtain uniform coverage. When conditions favor high disease levels use the high rate of application and apply once or twice more in mid to late winter before budswell. If the leaf fall application is not practical, application of Bravo 825 for control of leaf curl may be made at any time prior to budswell the following spring. Where shot hole occurs, also apply at budbreak to protect newly emerging leaves and at shuck split to prevent fruit infections.
	Lacy (russet) scab (plum/prune)	2.8 to 3.8 (2.3 to 3.1)	0.9 to 1.25 (0.75 to 1.0)	Apply by ground or air.  Make one application at popcorn (pink, red or early white bud) and a second application at full bloom. If weather conditions favor disease development, make an additional application at petal fall.
	Cherry leaf spot (Blumeriella jaapii)  Scab (Cladosporium carpophilum)  Black knot (cherry,	2.8 to 3.8 (2.3 to 3.1)	0.9 to 1.25 (0.75 to 1.0)	In addition to the bloom application listed above, make one application at shuck split. Do not apply Bravo 825 after shuck split and before harvest. If additional disease control is needed before harvest, use another registered fungicide.  For control of cherry leaf spot after harvest, make one application to foliage within 7 days after fruit is removed. In orchards with a history of high leaf spot
	plum) (Apiosporina morbosa)			incidence, make a second application 10 to 14 days later.  Apply by ground or air.

Do not apply more than 18.8 pounds of Bravo 825 (15.5 lbs. a.i.) per acre during each growing season.

I ne minin	num retreatment interv	al is 10 days		
Pistachio	Alternaria late blight suppression (A. alternata)  Botryosphaeria blight (B. dothidea)	5.4 (4.5)	2.7 (2.2)	Use a water volume of 20 to 200 gallons per acre. Make the first application at the beginning of the blossom period followed by an application at full bloom. Make additional applications as required on a 28-day schedule (the minimum retreatment interval is 28 days). For Septoria and Botrytis, use the higher rate if disease pressure is severe.
	Septoria leaf spot (S. pistacina)  Botrytis blight (B. cinerea)	3.6 to 5.4 (3.0 to 4.5)	1.8 to 2.7 (1.5 to 2.2)	NOTE: Use of this product may result in speckling or reddening of the fruit hull (epicarp). This effect is superficial and has not resulted in any change in nut quality.  Apply by ground or air.

- Do not apply more than 27 pounds of Bravo 825 (22.5 lbs. a.i.) per season. Do not apply within 14 days of harvest.

# Conifers

Apply Bravo 825 in sufficient water and with proper calibration to obtain uniform coverage of tree canopy. Applications may be made by ground or air. DO NOT allow livestock to graze in treated areas.

		Lbs Prod (lbs. a.		
CROP	DISEASES (Pathogen)	Acre	100 gal.*	APPLICATION DIRECTIONS
Conifers (including Christmas trees)  For use in 1) conifer nursery beds 2) Christmas tree and bough production plantations and 3) tree seed orchards	Swiss needlecast (Phaeocryptopus gaeumannii)  Interior needle blight (Mycosphaerella spp. and Phaeocryptopus nudus)	2.5 to 5.0 (2.1 to 4.1)		One to Two Applications: In Christmas tree plantations or conifer stands make one application in the spring when new shoot growth is ½ to 2 inches in length. Under high disease pressure, a second application may be made 10-14 days after the first application.  When using aerial applications, use the highest rate.
	Scleroderris canker (Gremmeniella abietina)  Swiss needlecast (P. gaeumannii)  Interior needle blight (Mycosphaerella spp. and Phaeocryptopus nudus)	1.25 to 2.5 (1.0 to 2.1)		Multiple Applications: Make the first application in spring when new shoot growth is ½ to 2 inches in length. Make additional applications at 3 to 4 week intervals until conditions no longer favor disease development. For use in nursery beds, apply the highest rate specified on a 3-week schedule.  When using aerial applications, use the highest rate.
	Sirococcus tip blight (S. conigenus)	1.8 to 3.2 (1.5 to 2.6)		
	Rhizosphaera needlecast (Rhizosphaera spp.) Scirrhia brown spot	5.0 (4.1)		
	(Mycosphaerella dearnessii)			
	Cyclaneusma and Lophodermium needlecasts	2.5 to 5.0 (2.1 to 4.1)		Apply in early spring prior to budbreak. Repeat applications at approximately 6 to 8 week intervals, until spore release ceases in late fall. Apply monthly during periods of frequent rainfall, and where Lophodermium infections occur during dormancy (Pacific Northwest). During drought periods, applications may be suspended, then resumed upon next occurrence of needle wetness.
	Rhabdocline needlecast (Douglas-fir)	1.4 to 2.5 (1.1 to 2.1)		Apply at budbreak and repeat at 3 to 4 week intervals until needles are fully elongated and conditions no longer favor disease development. In plantations of mixed provenance, or when irregular budbreak occurs, apply weekly until all trees have broken bud, then every 3 to 4 weeks as specified above. In nursery beds, use the high rate on a 3-week schedule.

Botrytis seedling blight  Phoma twig blight	1.4 to 2.5 (1.1 to 2.1)	Begin applications in nursery beds when seedlings are 4 inches tall and when cool, moist conditions favor disease development. Make additional applications at 7 to 14 day intervals as long as disease favorable conditions persist.
Weir's cushion rust (Chrysomyxa weirrii)	1.8 to 3.2 (1.5 to 2.6)	Begin applications when 10% of buds have broken and twice thereafter at 7 to 10 day intervals.

- Do not apply more than 20 pounds of Bravo 825 (16.5 lbs. a.i.) per acre during each growing season.
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#### MUSHROOMS:

Verticillium brown spot and dry bubble - Apply 2.5 to 5 oz. of Bravo 825 per 1,000 sq. ft. of mushroom bed. Apply as a drench to the mushroom bed surface in at least 12.5 gallons of water per 1,000 sq. ft. of mushroom bed. Make two applications. Apply the high rate (5 oz.) of Bravo 825 in the first application and the low rate (2.5 oz.) of Bravo 825 in the second application. The first application should be made within two days of top-dressing the spawn-colonized mushroom compost with a casing layer. The second application should be made at pinning. Do not apply within 5 days of first harvest. Make no more than two applications per cropping cycle. Do not apply more than 7.5 oz. of Bravo 825 per cropping cycle.

#### STORAGE AND DISPOSAL

DO NOT contaminate water, food or feed by storage or disposal.

#### **Pesticide Storage**

Store in a dry place.

# **Pesticide Disposal**

Pesticide wastes are toxic. Improper disposal of excess pesticide, pesticide spray or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

#### **Container Handling**

Non-refillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling if available or dispose of empty bag in a sanitary landfill or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER.

<sup>\*</sup>Volumetric rates to be used only with full dilute spray volume specified on this label for tree and orchard crops.

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For non-emergency (e.g., current product information) call 1-800-334-9481.

Manufactured for: GB Biosciences Corporation P.O. Box 18300 Greensboro, North Carolina 27419-8300

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