

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

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

February 8, 2018

Bert Volger, Ph.D. CEV, S.A. c/o Ceres International, LLC 1087 Heartsease Drive West Chester, PA 19382

Subject: Non-PRIA (Pesticide Registration Improvement Act) Labeling Amendment – Adding the

OMRI seal to product label.

Product Name: PROBLAD Verde EPA Registration Number: 84876-2 Application Date: 11/10/2017 OPP Decision Number: 535989

Dear Dr. Volger:

The amended labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable.

This approval does not affect any terms or conditions that were previously imposed on this registration. You continue to be subject to existing terms or conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one (1) copy of the final printed labeling before you release this product for shipment with the new labeling. In accordance with 40 CFR § 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR § 152.3.

Should you wish to add/retain a reference to your company's website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review the U.S. Environmental Protection Agency (EPA). If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section 12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements the EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the EPA find or if it is brought to our attention that a website contains false or misleading statements or

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claims substantially differing from the EPA-approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

Your release for shipment of this product constitutes acceptance of these terms. If these terms are not complied with, this registration will be subject to cancellation in accordance with FIFRA section 6.

If you have any questions, please contact Menyon Adams by phone at (703) 347-8496 or via email at adams.menyon@epa.gov.

Sincerely,

Andrew Bryceland, Team Leader Biochemical Pesticides Branch Biopesticides and Pollution Prevention Division (7511P) Office of Pesticide Programs

andrew C. Buycelow

Enclosure

### ACCEPTED

02/08/2018

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 0.4070 0

84876-2

PROBLAD VERDE (EPA Reg. No. 84876-2) Master label, EPA approved 10/06/2017 Revised 11/10/2017

## PROBLAD VERDE

▼ FOR ORGANIC PRODUCTION

A FUNGICIDE FOR THE CONTROL OF POWDERY MILDEW, BOTRYTIS, ANTHRACNOSE AND OTHER DISEASES IN CERTAIN CROPS AND ORNAMENTALS

ACTIVE INGREDIENT:	
Banda de Lupinus albus doce (BLAD)*	20%
OTHER INGREDIENTS:	80%
TOTAL 1	100%

EPA Reg. No. 84876-2	
Net Content:	
Batch Code:	

EPA Est. No. 84876-PRT-001



# KEEP OUT OF REACH OF CHILDREN CAUTION

FIRST AID		
If in eyes	Hold eye open and rinse slowly and gently with water for 15-20 minutes.	
	<ul> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> </ul>	
	Call a poison control center or doctor for treatment advice.	
If on skin or	If on skin or  • Take off contaminated clothing.	
clothing	Rinse skin immediately with plenty of water for 15-20 minutes.	
Call a poison control center or doctor for treatment advice.		

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-858-7378 (National Pesticide Information Center) for emergency medical treatment information.

Manufactured By:

CEV, S.A.
Zona Industrial de Cantanhede, Lote 120
3060-197 Cantanhede
Portugal

<sup>\*</sup>BLAD is a naturally-occurring seed storage protein in sweet lupines; it is a 20 kDa polypeptide of β- conglutin, or characterized as a fragment of the amino acid sequence of β-conglutin.

<sup>1</sup> gallon of PROBLAD VERDE contains 2.1 lb of BLAD protein.

#### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION**: Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco. Remove and wash contaminated clothing before reuse. Wear the appropriate Personal Protective Equipment (PPE).

#### PERSONAL PROTECTIVE EQUIPMENT

Applicators mixers, loaders and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride
- Shoes plus socks
- Protective eyewear

Follow the 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 Controls: When handlers use enclosed cabs in a manner that meets 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 drinking, eating, chewing gum, using tobacco or using the toilet.
- Remove PPE clothing 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 high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

#### **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with the terms of the Label. 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. Carefully read and understand the Directions for Use and restrictions before applying this product. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

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

or	r water, is:			
		Long-sleeved shirt and long pants		
		Chemical-resistant gloves made of any waterproof material such as polyethylene		
		or polyvinyl chloride		
		Shoes plus socks		

#### GENERAL INFORMATION

PROBLAD VERDE is a broad spectrum, preventive biofungicide formulated as a suspension concentrate containing 2.1 lbs active ingredient per gallon. PROBLAD VERDE is used for the control or suppression of many important plant diseases. Apply as a foliar spray alone, or in tank mixes with other registered pesticides. Apply PROBLAD VERDE with spray equipment commonly used for making ground, and aerial applications, as well as sprinkler/irrigation systems commonly used for chemigation.

**Preparation of the Spray Solution:** Insure the spray tank is clean and free of residues from previous spray treatments. Fill the spray tank ¾ full with clean water. Shake the container and pour the required amount of PROBLAD VERDE into the sprayer tank while the tank agitation system is operating. Add specified amount of PROBLAD VERDE while filling with the appropriate amount of water into the spray tank. Maintain agitation. Do not store the mixture overnight.

**Spray Volume:** Apply PROBLAD VERDE in a minimum 10 gallons of spray solution per acre for ground equipment and a minimum of 5 gallons for aerial equipment, except as noted under "GENERAL" for each crop. Increase spray volume as crop growth increases to ensure thorough coverage of the foliage and fruit. Check equipment calibration frequently. Complete coverage and uniform application are essential for the most effective results, especially when lower spray volumes are applied.

Compatibility: Do not tank mix with products containing a prohibition against tank mixing. PROBLAD VERDE may be mixed with foliar fertilizers, provided that the fertilizer is added after PROBLAD VERDE has been diluted to the recommended field application. Follow the most restrictive labeling requirements of any tank mix product. To determine the physical compatibility of PROBLAD VERDE with other products use a jar test. The following procedure should be followed: Pour the specified proportions of the products into a suitable container of one quart of water; mix thoroughly and allow to stand for at least 15 minutes. If the combination remains mixed or can be re-mixed readily, the mixture is considered a homogeneous solution and physically compatible. If separation occurs (e.g. oils float to top, clumps of solids form, etc.), the combination is incompatible and cannot be used. For further information, contact your local CEV representative.

Chemigation Application: Apply this product only through sprinkler including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, drip (trickle) or hand move irrigation systems. Do not apply this product through any other type of irrigation system. Do not connect any irrigation system, including greenhouse systems, used for pesticide application to a public water system. Crop injury, lack of effectiveness or illegal 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. 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.

- 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, back flow preventer (RPZ) or the functional equivalent in the water supply line upstream form 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 flow 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.
- 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.

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. The pesticide injection pipeline must also contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. 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. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. 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.

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. Do not apply when wind speed favors drift beyond the area intended for treatment. PROBLAD VERDE should be applied continuously for the duration of the water application. PROBLAD VERDE should be diluted in sufficient volume to insure accurate application over the area to be treated. Use the appropriate amount of water to carry the product to the target pest. Agitation generally is not required when suitable diluents are used. A diluents test should be conducted to ensure that phase separation would not occur during dilution and application. Failure to achieve a uniform dilution throughout the time of application may result in undesirable residues or less than desirable control.

Using Water from Public Water Systems: do not apply PROBLAD VERDE through any irrigation system physically 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 out of the year. PROBLAD VERDE may be applied through irrigation systems, which may be supplied by a public water system only if water from the water system is 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 top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. Before beginning chemigation, always make sure that the air gap exists and that there is no blockage of the overflow of the reservoir tank.

Use of Adjuvants: The use of adjuvants with PROBLAD VERDE is not required.

**Pre-Harvest Interval:** Do not harvest until 1 day after last application.

**Integrated Pest Management (IPM):** Integrate PROBLAD VERDE into a disease management strategy that follows practices known to reduce disease development and prevent fungicide resistance. Consult local agricultural advisors for specific IPM strategies meeting the specific crop and location.

#### **USE DIRECTIONS (Applications, Rates, Timings)**

#### **GRAPE**

APPLICATION INSTRUCTIONS		
CROP	DISEASE	RATE OF PROBLAD PLUS
Grape	*Anthracnose ( <i>Elsinoe</i> spp.) Botrytis gray mold ( <i>Botrytis</i> cinerea) Powdery mildew ( <i>Erysiphe</i> necator Schw.)	20.5 to 45.7 fl oz/A (0.34 - 0.75 lbs ai/A)

<sup>\*</sup>Not For Use In California

**GENERAL:** Apply in a minimum of 40 gallons of spray solution per acre. Increase spray volume as vine growth increases in order to provide thorough coverage of vines and fruit for optimum disease control. The rates on the PROBLAD VERDE label reflect the amount of product that should be applied uniformly over an acre of ground on a broadcast basis.

PROBLAD VERDE is a contact fungicide with penetration properties. BLAD is the active ingredient which degrades the fungal chitin. Alternate applications with another effective fungicide with a different mode of action.

PROBLAD VERDE requires two to four hours drying time on plant foliage for the active ingredient to be fixed into the plant tissue before rain or irrigation occurs. If, during the next 12 hours it rains significantly, a new application will be needed during the next 4 days.

#### **Powdery Mildew**

Apply in a preventive spray schedule. Make the first application of PROBLAD VERDE before bloom and continue applications using spray intervals of up to 14 days in low to moderate disease pressure at lower rates in the rate range. Use higher rates and a 14-day schedule when disease pressure is severe.

#### **Botrytis**

For control of Botrytis gray mold apply of PROBLAD VERDE prior to onset of disease development when conditions favor Botrytis development during early bloom, bunch preclosure, veraison and ripening up to the harvest day.

#### **Anthracnose**

Begin application when new shoots are 1 to 3 inches in length. Reapply on a protectant schedule that does not exceed 10 days.

- Do not make more than five foliar applications of PROBLAD VERDE per crop season.
- Do not make more than two sequential applications of PROBLAD VERDE before alternating to a labeled fungicide with a different mode of action.
- Do not harvest until 1 day after last application.

#### **STRAWBERRY**

APPLICATION INSTRUCTIONS		
CROP	DISEASE	RATE OF PROBLAD PLUS
Strawberry	*Anthracnose (Colletrotrichum spp.) Botrytis gray mold (Botrytis cinerea) Powdery mildew (Sphaerotheca macularis).	20.5 to 45.7 fl oz/A (0.34 - 0.75 lbs ai/A)

<sup>\*</sup>Not For Use In California

**GENERAL:** Begin applications of PROBLAD VERDE at early bloom and continue on a 7 to 10-day interval if conditions continue to favor disease development. Under conditions of severe disease pressure, use the higher labeled rate. Apply in a minimum of 50 gallons of spray solution with conventional ground application equipment except when using an electrostatic sprayer where a minimum of 10 gallons of spray solution may be used. Do not apply by air. Thorough coverage is important for optimum disease control.

PROBLAD VERDE is a contact fungicide with penetration properties. BLAD, is the active ingredient which degrades the fungal chitin. Alternate applications with another effective fungicide with a different mode of action.

PROBLAD VERDE requires two to four hours drying time on plant foliage for the active ingredient to be fixed into the plant tissue before rain or irrigation occurs. If, during the next 12 hours it rains significantly, a new application will be needed during the next 4 days.

- Do not make more than five foliar applications of PROBLAD VERDE per harvest cycle.
- Do not apply by air to strawberries.
- Do not make more than two sequential applications of PROBLAD VERDE before alternating to a labeled fungicide with a different mode of action.
- Do not harvest until 1 day after last application.

#### **TOMATO**

APPLICATION INSTRUCTIONS		
CROP	DISEASE	RATE OF PROBLAD PLUS
Tomato	Botrytis gray mold (Botrytis cinerea)  *Anthracnose (Colletotrichum coccodes)  *White mold (Sclerotinia sclerotiorum)  *Southern blight (Sclerotium rolfsii)  *Powdery mildew (Oidium lycopersicum.)	20.5 to 45.7 fl oz/A (0.34 - 0.75 lbs ai/A)

#### \*Not For Use In California

**GENERAL:** Begin applications of PROBLAD VERDE prior to onset of disease development and continue on a 7 to 10-day interval to maintain disease control. Under conditions of severe disease pressure, use the higher labeled rate. Apply the specified rate of PROBLAD VERDE as a foliar spray in a minimum of 20 gallons or more of water per acre to assure thorough coverage of the plants.

PROBLAD VERDE is a contact fungicide with penetration properties. BLAD is the active ingredient which degrades the fungal chitin. Alternate applications with another effective fungicide with a different mode of action.

PROBLAD VERDE requires two to four hours drying time on plant foliage for the active ingredient to be fixed into the plant tissue before rain or irrigation occurs. If, during the next 12 hours it rains significantly, a new application will be needed during the next 4 days.

- Do not make more than five foliar applications of PROBLAD VERDE per harvest cycle.
- Do not make more than two sequential applications of PROBLAD VERDE before alternating to a labeled fungicide with a different mode of action.
- Do not harvest until 1 day after last application.

#### ALMOND

APPLICATION INSTRUCTIONS		
CROP	DISEASE	RATE OF PROBLAD PLUS
Almond	Brown rot blossom blight ( <i>Monilinia spp.</i> )	20.5 to 45.7 fl oz/A (0.34 - 0.75 lbs ai/A)

**GENERAL:** Apply PROBLAD VERDE in a minimum spray volume of 15 gallons per acre by air or 50 gallons per acre by ground.

PROBLAD VERDE is a contact fungicide with penetration properties. BLAD is the active ingredient which degrades the fungal chitin. Alternate applications with another effective fungicide with a different mode of action.

PROBLAD VERDE requires two to four hours drying time on plant foliage for the active ingredient to be fixed into the plant tissue before rain or irrigation occurs. If, during the next 12 hours it rains significantly, a new application will be needed during the next 4 days.

**Almond:** For control of brown rot blossom blight, begin application at pink bud. If the bloom period is extended, and/or severe disease conditions exist, make a second application at full bloom. If conditions remain favorable for disease, make another application at petal fall.

- Do not make more than five foliar applications of PROBLAD VERDE per crop season.
- Do not make more than two sequential applications of PROBLAD VERDE before alternating to a labeled fungicide with a different mode of action.
- Do not harvest until 1 day after last application.

#### \*ORNAMENTALS

APPLICATION INSTRUCTIONS		
CROP	DISEASE	RATE OF PROBLAD PLUS
Rose Azalea (deciduous) Begonia (tuberous) Calendula California poppy China aster (Callistephus) Chrysanthemum Clarkia Columbine Coral bells (Heuchera) Corn flower Cosmos Dahlia Zinnia	Powdery mildew (Sphaerotheca pannosa) (Golovinomyces cichracearum) (Podosphaera spp.)  Botrytis gray mold (Botrytis cinerea)	20.5 to 45.7 fl oz/A (0.34 - 0.75 lbs ai/A)

<sup>\*</sup>Not For Use In California

**GENERAL:** Begin applications of PROBLAD VERDE prior to onset of disease development and continue on a 7 to 10-day interval to maintain disease control. Under conditions of severe disease pressure, use the higher labeled rate. Apply the specified rate of PROBLAD VERDE as a foliar spray in a minimum of 20 gallons or more of water per acre to assure thorough coverage of the plants.

PROBLAD VERDE is a contact fungicide with penetration properties. BLAD is the active ingredient which degrades the fungal chitin. Alternate applications with another effective fungicide with a different mode of action.

PROBLAD VERDE requires two to four hours drying time on plant foliage for the active ingredient to be fixed into the plant tissue before rain or irrigation occurs. If, during the next 12 hours it rains significantly, a new application will be needed during the next 4 days.

- Do not make more than five foliar applications of PROBLAD VERDE per harvest cycle.
- Do not make more than two sequential applications of PROBLAD VERDE before alternating to a labeled fungicide with a different mode of action.

#### STORAGE AND DISPOSAL

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

#### **Pesticide Storage**

Keep container tightly closed when not in use. Store product in a cool and dry place.

#### **Pesticide Disposal**

To avoid waste, use all material in this container by application according to label directions. If waste 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). Improper disposal of unused pesticide, wash water or rinse water is a violation of federal law.

#### **Container Handling**

Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling, if available or puncture and dispose of the container in a sanitary landfill, or by other procedures approved by state and local authorities.

#### LIMITATION OF WARRANTY AND LIABILITY

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

**CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of CEV. All such risks shall be assumed by the user or buyer.

**DISCLAIMER OF WARRANTIES:** CEV makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond the statements made on this label. No agent of CEV is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. CEV disclaims any liability whatsoever for special, incidental or consequential damages resulting from the use or handling of this product.

**LIMITATIONS OF LIABILITY**: To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price of the material as to which a claim is made.