

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

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

February 15, 2019

Bert Volger, Ph.D. Ceres International LLC 1087 Heartsease Drive West Chester, PA 19382

Subject: Pesticide Registration Improvement Act (PRIA) Labeling Amendment – Amending to

Add Cucurbits, Fruiting Vegetables, Hops, Pome Fruits and Stone Fruits

Product Name: PROBLAD PLUS EPA Registration Number: 84876-1 Application Date: January 10, 2017 OPP Decision Number: 525385

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 by 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

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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 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 of my team 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

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Enclosure

## ACCEPTED

02/15/2019

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 84876-1

PROBLAD PLUS (84876-1) Master label Add new Uses (cucurbits, fruiting veg., hops, pome fruit, stone fruit) Revised 2-14-2019

# PROBLAD PLUS

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	100%

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

EPA Reg. No. 84876-1 Net Content: 1 gal. **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.		
	Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.		
	Call a poison control center or doctor for treatment advice.		
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.		
If inhaled	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>		
Have the product of	container or label with you when calling a poison control center or		

Manufactured By: CEV, S.A.

Zona Industrial de Cantanhede

Lote 120

3060-197 Cantanhede

Portugal

doctor, or going for treatment. You may also contact 1-800-858-7378 (National Pesticide Information Center) for emergency medical treatment information.

<sup>1</sup> gallon of PROBLAD PLUS 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 or inhaled. 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
- A NIOSH-approved particulate respirator with any N, R, or P filter with NIOSH approval number prefix TC-84A, or a NIOSH-approved powered air-purifying respirator with an HE filter with NIOSH approval number prefix TC-21C. (Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization).

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:

- 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

## **GENERAL INFORMATION**

PROBLAD PLUS is a broad spectrum, preventive biofungicide formulated as a suspension concentrate containing 2.1 lbs active ingredient per gallon. PROBLAD PLUS 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 PLUS with spray equipment commonly used for making ground, 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 PLUS into the sprayer tank while the tank agitation system is operating. Add specified amount of PROBLAD PLUS while filling with the appropriate amount of water into the spray tank. Maintain agitation. Do not store the mixture overnight.

**Spray Volume:** Apply PROBLAD PLUS in a minimum 10 gallons of spray solution per acre for ground 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 PLUS may be mixed with foliar fertilizers, provided that the fertilizer is added after PROBLAD PLUS 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 PLUS 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 PLUS should be applied continuously for the duration of the water application. PROBLAD PLUS 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 PLUS 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 PLUS 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 PLUS is not required.

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

**Integrated Pest Management (IPM):** Integrate PROBLAD PLUS 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)**

**ALMOND (Crop Group 14)** 

APPLICATION INSTRUCTIONS			
CROP DISEASE RATE OF PROBLAD PLUS			
Almond	Brown rot blossom blight (Monilinia spp.)	18.1 - 45.7 fl oz/A (0.3 - 0.75 lb ai/A)	

**GENERAL:** Apply PROBLAD PLUS in a minimum spray volume of 50 gallons per acre by ground.

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

**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.

**CUCURBITS (Crop Group 8)** 

APPLICATION INSTRUCTIONS			
CROP	DISEASE	RATE OF PROBLAD PLUS	
Chayote fruit (Sechium edule)			
Chinese waxgourd (Benincasa hispida	Powdery mildew (Golovinomyces cichoracearum		
Citron melon (Citrulius lanatus var. citroides)	[syn. Erysiphe cichoracearum s.l.], Podosphaera xanthii [syn. Sphaerotheca fuliginea])	18.1 - 45.7 fl oz/A (0.3 - 0.75 lb ai/A)	
Cucumber (Cucumis salvus)			
Gourd edible (Langenaria			

spp) includes hyotan and cucuzza; (Luffa actangula, L. cylindrical) includes hechina and Chinese okra Momordica ssp.includes balsam apple, balsam pear, bitter melon and Chinese cucumber	
Muskmellon (Cucumis melo hybrids and or cultivars) Includes true cantaloupe, cantaloupe, casaba, creshaw melon, golden pershaw melon, honeydew mellon, honey balls, mango mellon, Persian melon, pine apple melon, Santa Claus melon and snake melon	
Pumpkin (Cucurbita spp)	
Squash, sunner (Cucurbita pepo var. melopepo) includes crookneck squash, scallop squash, straightneck squash, vegetable marrow, and zucchini	
Squash winter (Cucurbita maxima; C. moshata) incluese butternut squash, calabaza, hubbard squash and C. mixta: C. pepo) includes acorn squash and spagehetti squash	
Watermelon (hybrids and/or varieties of Citrullius lanatus)	

**GENERAL:** Begin applications prior to disease development and continue on a 7 to 10 day preventive interval if conditions continue to favor disease development. Under conditions of weather favoring severe disease pressure apply the higher labeled rate or shorter interval.

PROBLAD PLUS requires two to four hours drying time on plant foliage for the active ingredient to fix on 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 PLUS per crop season.
- Do not make more than two sequential applications of PROBLAD PLUS before alternating to a labeled fungicide with a different mode of action.
- Do not harvest until 1 day after last application.

FRUITING VEGETABLES (Crop Group 6)

FRUITING VEGETABLES (Crop Group 6)			
APPLICATION INSTRUCTIONS			
CROP	DISEASE	RATE OF PROBLAD PLUS	
Eggplant, African (Solanium macrocarpon L.) Tomato,bush (Solanium central J.M Black) Cocona, Solanunum sesiflorium Dural Tomato,currant (Lycopersicon pimpinellfolium L.) Eggplant (Solanium melongena L.) Garden huckleberry, (Solanium scabrun Mil) Goji berry, (Lycium barbarum L) Groiundcherry (Physalis alkekengiL. P.grisea (Waldorf) M.Martinex, P. peruviana L. P. pubescens L.) Martynia, (Proboscidea louisanica (Mil.) Thell) Naranijlia(Solanium quitoense Lam) Okra, (Abelmoschus esculentus L. Moench) Pea eggplant (Solanium torvum Sw) Pepino, Solanium muricatum Alton) Pepper, Bell (Capsicum annuum L var annum, Capsicum spp) Peppers, non-bell (Capsicum chinese Jacq, C. Annuum L var. annuum, C.frutesence L. C. baccatum L. C. pubescens Rulz &Pav, Capsicum spp) Roselle (Hibiscus sabadarrifa L) Scarlet eggplant (Solanum aethiopicum L) Sunberry (Solanum retroflexum Dunal) Tomato (Solanium lycopersicum L S.lycopersicum) Tree tomato (Solanium betaceum Cav) Cultivars, varieties and/or hybrids of these	gray mold (Botrytis cinerea) powdery mildew (Leveillula taurica)	18.1 - 45.7 fl oz/A (0.3 - 0.75 lb ai/A)	

**GENERAL:** Begin applications of PROBLAD PLUS 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 rate. Apply the specified rate of PROBLAD PLUS as a foliar spray in a minimum of 20 gallons or more of water per acre to assure through coverage of plants.

PROBLAD PLUS requires two to four hours drying time on plant foliage for the active ingredient to fix on 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 PLUS per crop season.
- Do not make more than two sequential applications of PROBLAD PLUS before alternating to a labeled fungicide with a different mode of action.
- Do not harvest until 1 day after last application.

## **GRAPE (Crop Group 13)**

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.)	18.1 - 45.7 fl oz/A (0.3 - 0.75 lb 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.

PROBLAD PLUS is a contact fungicide with penetration properties. BLAD is the active ingredient which degrades the fungal chitin.

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

PROBLAD PLUS 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 PLUS 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 PLUS 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.

#### **HOPS**

APPLICATION INSTRUCTIONS				
CROP DISEASE RATE OF PROBLAD PLUS				
Hops	Powdery Mildew (Podosphaera macularis)	18.1 - 45.7 fl oz/A (0.3 - 0.75 lb ai/A)		

#### General:

Begin applications preventively at the first sign of disease or when favorable conditions exist, targeting the younger susceptible leaves and cones, and continue on a 5 to 10 day interval as needed.

PROBLAD PLUS requires two to four hours drying time on plant foliage for the active ingredient to fix on 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 PLUS per crop season.
- Do not make more than two sequential applications of PROBLAD PLUS before alternating to a labeled fungicide with a different mode of action.
- Do not harvest until 1 day after last application.

POME FRUIT (Crop Group 11) - Powdery Mildew

APPLICATION INSTRUCTIONS			
CROP	DISEASE	RATE OF PROBLAD PLUS	
Apple (Malus domestica)	Powdery mildew (Podosphaera leucotricha)		
Crabapple (Malus spp.)	,	18.1 - 45.7 fl oz/A	
Loquat (Eriobotrya japonica)		(0.3 - 0.75 lb ai/A)	
Mayhaw (Crataegus Aestivalis,			
C.opaca and C. rufulia)			
Pear (Pyrys communis)			
Pear,oriental (Pyrus pyrifolia)			

**GENERAL:** Begin applications at tight cluster to pink bud, prior to disease development and continue on a 10 to 14 day preventive interval if conditions continue to favor disease development. Under conditions of infestation favoring severe disease pressure apply the higher labeled rate.

PROBLAD PLUS requires two to four hours drying time on plant foliage for the active ingredient to fix on 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 5 foliar applications per harvest cycle.
- Do not make more than two sequential applications of PROBLAD PLUS before alternating to a labeled fungicide with a different mode of action.
- Do not harvest until 1 day after last application.

## POME FRUIT (Crop Group 11) - Fire Blight

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CROP	DISEASE	RATE OF PROBLAD PLUS
Apple (Malus domestica)	Fire Blight (Erwinia amylovora)	
Crabapple (Malus spp.) Loquat (Eriobotrya japonica) Mayhaw (Crataegus Aestivalis, C.opaca and C. rufulia) Pear (Pyrys communis) Pear,oriental (Pyrus pyrifolia)		18.1 - 45.7 fl oz/A (0.3 - 0.75 lb ai/A)

**GENERAL:** Begin applications preventively at early bloom throught petal fall, on a 3 to 6 day interval when conditions favor development of disease. After petal fall, apply for twig blight on a 10 to 14 day interval.

PROBLAD PLUS requires two to four hours drying time on plant foliage for the active ingredient to fix on 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 5 foliar applications per harvest cycle.
- Do not make more than two sequential applications of PROBLAD PLUS before alternating to a labeled fungicide with a different mode of action.
- Do not harvest until 1 day after last application.

## POME FRUIT (Crop Group 11) - Scab

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APPLICATION INSTRUCTIONS		
CROP	DISEASE	RATE OF PROBLAD PLUS

Apple (Malus domestica)	Scab	
	(Venturia inaequalis)	
Crabapple (Malus spp.)		18.1 - 45.7 fl oz/A
Loquat (Eriobotrya japonica)		(0.3 - 0.75 lb ai/A)
Mayhaw (Crataegus Aestivalis,		,
C.opaca and C. rufulia)		
Pear (Pyrys communis)		
Pear, oriental (Pyrus pyrifolia)		

**GENERAL:** Begin applications preventively when favorable conditions exist, and continue on a 7 to 14 day interval as needed.

PROBLAD PLUS requires two to four hours drying time on plant foliage for the active ingredient to fix on 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 5 foliar applications per harvest cycle.
- Do not make more than two sequential applications of PROBLAD PLUS before alternating to a labeled fungicide with a different mode of action.
- Do not harvest until 1 day after last application.

**STONE FRUIT (Crop Group 12)** 

APPLICATION INSTRUCTIONS			
CROP	DISEASE	RATE OF PROBLAD PLUS	
Apricot (Prunus americaniaca L.)	Blossom blight	18.1 to 45.7 fl oz/A	
Apricot Japanese (Prunus mume Siebold & Zucc.)	(Monilinia sp.)	(0.3 - 0.75 lb ai/A)	
Capulin (Prunus serotina Ehrh. Var. salicicfolia (Kihnth) Koehne) Cherry, black (Prunus serotina Ehrh.) Cherry Nanking (Prunus tomentosa Thunb.) Cherry sweet (Prunus avlum L.) Jujube Chinese (Ziziphus jujube Mil.) Nectarine (Prunuspersica (L) Batssch var. nucipersica (Sukow) C.K. Scneid) Peach (Prunus persica (L.) Batsch var. persica) Plum (Prunus domestica L susp. Domestica) Plum, American (Prunus Americana Marshal) Plum, beach (Prunus maritime Marshall) Plum, Canada (Prunus nigra Aiton) Plum, Cherry (Prunus cerasifera Ehrh.) Plum, Chickasaw (Prunus angustifolia Marshal) Plum, Damson (Prunus domestica L. subsp. Insititia (L) CK. Schneid) Plum Japanese (Prunus salacina Lindl.; P.	Brown rot (Monilinia sp.)		

salacina Lindl var salacina)	
Plum, Klamath (Prunus subcordata Benth.)	
Plum, prune (Prunus domseticaL. Subsp.	
domestica)	
Plumcot (Prunus hybr.)	
Sloe (Prunus spinosa L.)	
Cultivars, varieties, and/or hybrids of these	

#### **GENERAL**

**Blossom blight phase:** Begin applications at tight bud prior to disease development and continue on a 7 to 14 day preventive interval if conditions continue to favor disease development. Under conditions of weather favoring severe disease pressure apply the higher labeled rate.

**Brown rot phase**: Make applications during the month before harvest on a 7 to 14 day preventive schedule when conditions favor disease development.

PROBLAD PLUS requires two to four hours drying time on plant foliage for the active ingredient to fix on 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 5 foliar applications per harvest cycle.
- Do not make more than two sequential applications of PROBLAD PLUS before alternating to a labeled fungicide with a different mode of action.
- Do not harvest until 1 day after last application.

## STRAWBERRY (Crop Group 13)

APPLICATION INSTRUCTIONS				
CROP	DISEASE	RATE OF PROBLAD PLUS		
Strawberry	*Anthracnose (Colletrotrichum spp.) Botrytis gray mold (Botrytis cinerea) Powdery mildew (Sphaerotheca macularis).	18.1 - 45.7 fl oz/A (0.3 - 0.75 lb ai/A)		

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

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

#### \*ORNAMENTALS

ORNAMIENTALS				
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 PLUS 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 PLUS as a foliar spray in a minimum of 20 gallons or more of water per acre to assure thorough coverage of the plants.

PROBLAD PLUS 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 PLUS 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 PLUS per harvest cycle.
- Do not make more than two sequential applications of PROBLAD PLUS 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.