

Phobos FC is a broad-spectrum systemic fungicide for the control of Ascomycetes. Basidiomycetes and Deuteromycetes diseases in a variety of crops including: barley: bushberries: low growing berries: buckwheat: millet: oats: rve: corn: cotton: chickpeas: cucurbit vegetables; dried shelled peas and beans; lentils; rapeseeds (including canola and Brassica carinata): peanuts: rice: sovbeans: sugar beets: wheat and triticale

Active Ingredient:	By Wt
Prothioconazole, 2-(2-(1-Chlorocyclopropyl)-	
3-(2-chlorophenyl)-2-hydroxypropyl)-1H-	
1,2,4-triazole-3(2H)-thione	32.3%
Other Ingredients:	67.7%
Total:	100.0%
This product contains 3.0 pounds active ingred	lient per
gallon.	

# KEEP OUT OF REACH OF CHILDREN

This label must be in the possession of the user at the time of application.

See inside booklet for additional precautionary information and directions for use.

## FIRST AID

## EMERGENCY INFORMATION

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

For information on this pesticide product (including general health concerns or pesticide incidents), call the National Pesticide Information Center at 1-800-858-7378 Monday through Friday, 8:00 AM to 12:00 PM Pacific Standard Time. In the event of a medical emergency, call your poison control center at 1-800-222-1222.

EPA Reg. No. 89118-17

Net Contents: 2.5 Gallons



Vive Crop Protection Inc. 500 Westover Dr., #10198 Sanford, NC 27330 1-888-760-0187

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

## Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants:
- chemical-resistant gloves made of barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, polyvinyl chloride (PVC) ≥14 mils, or Viton ≥14 mils;
- · shoes plus socks.

Engineering Controls: 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.

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 exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

## **USER SAFETY RECOMMENDATIONS**

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Wash thoroughly with soap and water after handling.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash outside
  of gloves before removing. As soon as possible, wash thoroughly and
  change into clean clothing.

## **ENVIRONMENTAL HAZARDS**

This product is toxic to estuarine/marine invertebrates, and freshwater/ estuaries/marine aquatic plants. 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.

Degradates of prothioconazole are known to leach through soil into groundwater under certain conditions as a result of label use. These chemicals may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

This product may impact surface water quality due to runoff of rainwater. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having high potential for reaching surface water via runoff for several months or more after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of prothioconazole and degradates from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours.

## PHYSICAL CHEMICAL HAZARD

**DO NOT** mix or allow coming in contact with oxidizing agents, hazardous chemical reaction may occur.

## **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, 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), notification to workers, 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 12 hours. Some crops have longer crop-specific REIs. Crop-specific REIs are listed in the Directions for Use section associated with the crop.

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:
- chemical-resistant gloves made of barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, polyvinyl chloride (PVC) ≥14 mils, or Viton ≥14 mils;
- shoes plus socks.

## PRODUCT INFORMATION

Phobos FC is a broad-spectrum systemic fungicide for the control of Ascomycetes, Basidiomycetes and Deuteromycetes diseases in a variety of crops including: barley; bushberries; low growing berries; buckwheat; millet; oats; rye; corn; cotton; chickpeas; cucurbit vegetables; dried shelled peas and beans; lentils; rapeseeds (including canola and *Brassica carinata*); peanuts; rice; soybeans; sugar beets; wheat and triticale. Under conditions which may result in extended infection periods or high disease pressure additional fungicide applications may be required. If the number of applications required is more than allowed by this label, use another fungicide registered for the crop/disease combination.

#### **USE RESTRICTIONS**

## Use Site and Application Method Restrictions

 Do not apply prothioconazole with mechanically pressurized handgun equipment to orchards or vineyards (bushberry subgroup 13-07B; low growing berry subgroup, except strawberry subgroup 13-07H), field crops (cucurbit vegetables (crop Group 9); corn, sweet; garbanzos (including chickpeas); or lentils.

#### **Rotational Crops**

#### Rotational Crops - Plant-Back Intervals

IMMEDIATE PLANT-BACK: All crops on this label including the following: barley; bushberries; low growing berries; buckwheat; millet; oats; rye; corn; cotton; chickpeas; cucurbit vegetables; dried shelled peas and beans; lentils; rapeseeds (including canola and *Brassica carinata*); peanuts; rice; soybeans; sugar beets; wheat and triticale.

**30-DAY PLANT-BACK:** All other crops not listed above for immediate plant-back.

## RESISTANCE MANAGEMENT

For resistance management, Phobos FC contains a Group 3 fungicide. Any fungal population may contain individuals naturally resistant to Phobos FC and other Group 3 fungicide. A gradual or total loss of pest control may occur over time if these fungicides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay fungicide resistance, take the following steps:

- Rotate the use of Phobos FC or other Group 3 fungicides within a growing season sequence with different groups that control the same pathogens.
- Use tank mixtures with fungicide from a different group that are equally
  effective on the target pest when such use is permitted. Use at least the
  minimum application rate as labeled by the manufacturer.
- Adopt an integrated disease management program for fungicide use that includes scouting, uses historical information related to pesticide use, and crop rotation, and which considers host plant resistance, impact of environmental conditions on disease development, disease thresholds, as well as cultural, biological and other chemical control practices.
- Where possible, make use of predictive disease models to effectively time fungicide applications. Note that using predictive models alone is not sufficient to manage resistance.
- Monitor treated fungal/bacterial populations for resistance development.
- Contact your local extension specialist or certified crop advisor for any additional pesticide resistance-management and/or IPM recommendations for specific crops and pathogens.
- For further information or to report suspected resistance contact Vive Crop Protection at 1-888-760-0187. You can also contact your pesticide distributor or university extension specialist to report resistance.

## MANDATORY SPRAY DRIFT MANAGEMENT

## Aerial Applications:

- DO NOT release spray at a height greater than 10 ft above the ground or vegetative canopy, unless a greater application height is necessary for pilot safety.
- Applicators are required to select nozzle and pressure that deliver medium or coarser droplets (ASABE S641).
- DO NOT apply when wind speeds exceed 15 mph at the application site. If the wind speed is greater than 10 mph, the boom length must not exceed 65% of the wingspan for fixed wing aircraft or 75% of the rotor diameter for helicopters. Otherwise, the boom length must be 75% or less of the wingspan for fixed wing aircraft and 90% or less of the rotor diameter for helicopters.
- If the windspeed is 10 miles per hour or less, applicators must use ½ swath displacement upwind at the downwind edge of the field. When the windspeed is between 11-15 miles per hour, applicators must use ¾ swath displacement upwind at the downwind edge of the field.
- DO NOT apply during temperature inversions.

#### Ground Boom Applications:

- User must only apply with the release height recommended by the manufacturer, but no more than 4 feet above the ground or crop canopy.
- Applicators are required to select nozzle and pressure that deliver medium or coarser droplets (ASABE S572.1).
- DO NOT apply when wind speeds exceed 15 miles per hour at the application site.
- DO NOT apply during temperature inversions.

## SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

#### IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

#### Controlling Droplet Size - Ground Boom

- Volume Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce spray drift.

## Controlling Droplet Size - Aircraft

 Adjust Nozzles - Follow nozzle manufacturers recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

#### **BOOM HEIGHT - Ground Boom**

For ground equipment, the boom should remain level with the crop and have minimal bounce.

#### RELEASE HEIGHT - Aircraft

Higher release heights increase the potential for spray drift.

## SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

#### TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

## TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or 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. Avoid applications during temperature inversions.

## WIND

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.

Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

## **Handheld Technology Applications:**

· Take precautions to minimize spray drift.

## APPLICATION AND MIXING INSTRUCTIONS

Shake well before use.

Phobos FC is designed for at-plant, banded, and foliar spray applications, and must be diluted with water and/or liquid fertilizer before application. Refer to Specific Use Directions for Crops for disease control or suppression instructions.

Don't use strainer (nozzle screens) with a mesh designation greater than 50. Make sure that application equipment is thoroughly cleaned and properly calibrated prior to application and thoroughly cleaned after application.

Phobos FC can be mixed directly with water and/or liquid starter or popup fertilizer. Follow liquid fertilizer recommendations regarding seed safety and use quidelines. Conduct a preliminary jar test using the appropriate ratio of

fertilizer and Phobos FC (see instructions below). If mixture compatibility is not acceptable, repeat the jar test with an equivalent volume of water added to the liquid fertilizer prior to adding Phobos FC. Don't exceed dilution specified by mixing instructions. For best results, use immediately after mixing. Don't allow a tank mixture to set overnight. Don't store mixtures. Make sure that application equipment is thoroughly cleaned and properly calibrated prior to application and thoroughly cleaned after application.

- Use spray nozzles appropriate for the crop to provide full coverage and uniform distribution of the spray mixture.
- Use screens where appropriate to protect sprayer equipment and prevent clogging.
- Screens used to protect pump on the suction side to be no finer than 16-mesh
- Don't fit the recirculation line of the spray system with a screen.
- Screens used on the spray nozzles are to be no finer than 50-mesh.
- The spray system pump is to have sufficient capacity to deliver 35-40 psi of pressure to the nozzles, and recirculate at least 10% of the tank volume per minute to maintain a uniform mixture.
- Agitate the spray mixture with a jet agitator or liquid sparge tube.
- · Don't use air sparge.

Consult manufacturers of spray equipment for more information on sprayer use, calibration, and recommendations. Consult state agricultural extension recommendations for local directions and spray schedules.

#### Adiuvants

It is recommended that a non-ionic surfactant at the lowest recommended labeled rate is used with Phobos FC for most crops when applying to foliage. Where a surfactant is not recommended for a particular crop, refer to the specific crop recommendation.

## Mixing Instructions

#### Solo Phobos FC Application

- Determine the required volume of water or liquid fertilizer for application and fill the spray/mixing tank with ½ - ¾ of this volume.
- Begin agitation of the tank and add the required volume of Phobos FC for the application.
- Continue agitation while adding the remaining ½ ⅓ volume of water or liquid fertilizer to complete the spray mixture.
- Apply the mixture after the contents of the tank are completely dispersed.
- Maintain agitation of the spray tank until all of the spray mixture has been applied.
- Thoroughly rinse spray tank with water and dispose of the rinse water by spraying onto a section of the already treated crop.

## **Phobos FC Tank Mixture Application**

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Phobos FC may be applied in tank mixtures with adjuvants, micronutrients, and other products approved for use on registered crops. Observe all restrictions and precautions which appear on the labels of these products. Don't combine Phobos FC in the spray tank with pesticides, adjuvants or fertilizers unless compatibility charts or your own prior use has shown that the combination is physically compatible, and the combination is effective and non-injurious to the target crop under your use conditions.

When an adjuvant is used, it is recommended to use an adjuvant that meets the standards of the Chemical Producers and Distributors Association (CPDA) adjuvant certification.

#### Jar Test Procedure

Test potential mixing partners, including adjuvants, for mixing compatibility using a standard jar test or other similar method and for crop safety prior to use on a crop.

The following jar test procedure is recommended to evaluate compatibility: Following any product specific instructions for order of addition, pour the recommended proportions of the products into a suitable container, mix thoroughly and allow to stand at least twenty (20) minutes. If the combination remains mixed or can be re-mixed readily, the mixture is considered physically compatible.

#### Tank Mixture Order of Addition Recommendation

This is the general recommendation for order of addition. Always follow any specific order of addition instructions on all the tank-mix partner labels. Jar tests (or other similar methods) to ensure order of addition compatibility between products should be conducted before use.

- 1. Fill tank 1/3 to 1/2 full with mixing diluent (water, liquid fertilizer, etc.).
- 2. Begin tank agitation before adding any tank-mix partners.
- 3. Add any water conditioner/anti-foam/compatibility agents.
- Add any products packaged in water-soluble packaging and allow to completely dissolve/disperse.
- Add any wettable powders/flowables (dispersible concentrate (DC), powder for dry seed treatment (DS), granule (GR), water soluble granule (SG), water soluble powder (SP)).
- 6. Add any microencapsulated suspensions (ME).
- Add any liquids and solubles (suspension concentrate (SC) (including Phobos FC), ultra-low volume suspension (SU)).
- 8. Add any emusifiable concentrates (EC).
- 9. Add any adjuvants.

## Soilborne/Seedling Disease Control

Phobos FC can be applied as a soil-directed application at plant as an infurrow application or a banded application over the row at the time of planting and up to row closure for certain crops for control of soilborne/seedling diseases. Refer to the use directions for specific crops to determine if such applications are labeled for a given crop and, if so, for which fungal diseases.

## **At-Plant Application Instructions**

- $\bullet~$  Use 3 20 gallons of water or liquid fertilizer per acre for in-furrow applications.
- Direct the spray into the furrow just before the seed is covered, unless instructed otherwise under the specific crop instructions.
- See table below for rate calculations for different row spacing.

## **Banded Application Instructions**

- Apply Phobos FC as a spray directed at the lower plant stems and surrounding soil; thorough coverage is important.
- See table below for rate calculations for different row spacing.

Banded and At Plant In-Furrow Application Rates								
Floz	(fl oz product per 1000 row ft)  Fl oz Average Row Spacing (inches)							
product			Average	How 5	pacing	(inches	)	
per acre	15	20	22	24	30	32	34	36
3.46	0.10	0.13	0.15	0.16	0.20	0.21	0.23	0.24
5.33	0.15	0.20	0.22	0.24	0.31	0.33	0.35	0.37
6.66	0.19	0.25	0.28	0.31	0.38	0.41	0.43	0.46
7.6	0.22	0.29	0.32	0.35	0.44	0.47	0.49	0.52
9.47	0.27	0.36	0.40	0.43	0.54	0.58	0.62	0.65

Linear Row Feet Calculation: 522,720 ÷ row spacing (in inches) = Row feet per acre

#### Instructions for Foliar Applications

Phobos FC can be applied as a spray to above ground plant parts such as flowers, foliage and fruit. Refer to the use directions for specific crops to determine if such applications are labeled for a given crop and, if so, for which plant parts and which diseases.

Use higher label rates and/or shorter application intervals if disease pressure is high and/or conditions are expected to be favorable for disease development.

**DO NOT** apply when conditions foster drift from the area intended for treatment; follow instructions under the **SPRAY DRIFT** section.

#### **Aerial Applications**

Do not apply directly to humans or animals. **DO NOT apply when conditions favor drift from the area intended for treatment**; follow instructions under the Spray Drift section. Uniform coverage is important for good control, avoid applications when uniform coverage cannot be obtained.

## **Chemigation Use Directions**

Only make applications of Phobos FC through irrigation equipment to crops for which chemigation is specified on this label.

Phobos FC alone or in combination with other pesticides, which are registered for application through irrigation systems, may be applied through irrigation systems. Apply this product only through center pivot, solid set, drip, linear, or moving wheel irrigation systems. **DO NOT** apply this product through any other type of irrigation system. Blegal pesticide residues in the crop can result from nonuniform distribution of treated water. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts. **DO NOT** connect an irrigation system (including greenhouse systems) used for pesticide application to a public water systems are in place. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system own and make necessary adjustments should the need arise.

#### Operating Instructions

- 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 contain a functional, automatic, quick-closing check-valve to prevent the flow of fluid back toward the injection pump.
- 3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 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.
- 7. **DO NOT** apply when wind speed favors drift beyond the area intended.

## **Center Pivot Irrigation Equipment**

- Use only with drive systems that provide uniform water distribution.
- DO NOT use end guns when chemigating through center pivot systems because of non-uniform application.
- . Determine the size of the area to be treated.
- Determine the time required to apply 1/2-1/2 inch of water over the area
  to be treated when the system and infection equipment are operated
  at normal pressures as specified by the equipment manufacturer. When
  applying this product through irrigation equipment use the lowest
  obtainable water volume while maintaining uniform distribution. Run the
  system at 80-95% of the manufacturer's rated capacity.
- Using water, determine the injection pump output when operated at normal line pressure.
- Determine the amount of product required to treat the area covered by the irrigation system.
- Add the required amount of product and sufficient water to meet the injection time requirements to the solution tank.
- Make sure the system is fully charged with water before starting injection
  of the product suspension. Time the injection to last at least as long as it
  takes to bring the system to full pressure.

Maintain constant chemical supply tank agitation during the injection period.
 Continue to operate the system until the fungicide has cleared the sprinkler head.

## Solid Set and Moving Wheel Irrigation Equipment

- Determine the acreage covered by the sprinklers.
- Fill injector supply tank with water and adjust flow rate to use the contents over a 20- to 30- minute interval. When applying this product through irrigation equipment use the lowest attainable water volume while maintaining uniform distribution.
- Determine the amount of product required to treat the area covered by the irrigation system.
- Add the required amount of product into the same quantity of water used to calibrate the injection period.
- Operate the system at the same pressure and time interval established during the calibration.
- Stop injection equipment after treatment is completed. Continue to operate the system until the fungicide has cleared the last sprinkler head.

#### Chemigation through Drip Irrigation

- 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 back flow.
- 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 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 inter-locking 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.
- If a pesticide supply tank is used, maintain constant agitation in the supply tank.
- This product may be applied through drip irrigation systems for control of soilborne diseases. Ensure that the soil has adequate moisture capacity prior to drip application.
- Terminate drip irrigation when the fungicide has been depleted from the main supply tank or after 6 hours, whichever comes first.
- For maximum efficacy, delay subsequent irrigation for at least 24 hours following drip application.

## Using Water from Public Water Systems

- 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.
- 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 from the point of pesticide introduction. As an option to the RPZ, discharge the water from the public water system into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pipe.

- 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.
- 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.
- 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

## SPECIFIC USE DIRECTIONS FOR CROPS

## **BARLEY**

BARLEY - FOLIAR APPLICATIONS				
	USE RATES			
DISEASE	fl oz product/acre (lb a.i./acre)			
Fusarium Head Blight (Fusarium species) (Suppression Only)	6.66 – 7.6 (0.156 – 0.178)			
Leaf and Stem Diseases Net Blotch (Pyrenophora teres) Powdery Mildew (Blumeria graminis f. species Hordei) Rusts (Puccinia species) Scald (Rhynchosporium secalis) Spot Blotch (Cochliobolus sativus)	3.75 – 5.7 (0.088 – 0.134)			

#### Instructions:

- Phobos FC may be applied by either ground, aerial, or chemigation application equipment. Chemigation is only allowed prior to heading.
- The lowest labeled rate of spray surfactant should be tank mixed with Phobos FC to ensure optimal disease control.
- Repeat applications using a 14-day spray interval if disease development persists or worsens.
- · For aerial applications:
- o Prior to heading (Feekes growth stage 10.5), apply a minimum of 2 gallons per acre spray.
  - o For applications made at the heading growth stage of after, apply a minimum of 5 gallons per acre spray.
- Fusarium Head Blight (Suppression Only): Phobos FC is to be applied as a preventative foliar spray once barley heads on the main stem are fully emerged (approximately Feekes growth stage 10.5). Thorough coverage of the barely heads is needed. With ground application equipment, the use of forward and backward nozzles (or two-directional nozzles) is recommended to ensure thorough coverage. Follow the spray pressure directions suggested by the manufacturer of the nozzles being used.
- Leaf and Stem Diseases: Phobos FC is to be applied to leaves and stems as a preventative foliar spray at the first sign of disease. Scouting for early signs of disease is important, particularly under prolonged conditions favorable to disease development or when susceptible varieties are planted.

## Specific Use Restrictions:

- DO NOT make more than 2 applications per year.
- DO NOT apply more than 7.6 fl oz of Phobos FC (0.178 lbs prothioconazole) per acre per application.
- DO NOT apply more than 12.5 fl oz of Phobos FC (0.293 lbs prothioconazole) per acre per year.
- DO NOT make applications less than 14 days apart.
- PHI: DO NOT apply Phobos FC within 32 days of harvest.

## BUSHBERRY SUBGROUP (SUBGROUP 13-07B)

Aronia berry; blueberry (highbush and lowbush); Chilean guava; highbush cranberry; currant (black, buffalo, and red); elderberry; European barberry; gooseberry; edible honeysuckle; huckleberry; jostaberry; Juneberry (Saskatoon berry); lingonberry; native currant; salal: sea buckthorn; and cultivars, varieties, and/or hybrids of these.

BUSHBERRIES - FOLIAR APPLICATIONS				
	USE RATES			
DISEASE	fl oz product/acre (lb a.i./acre)			
Septoria leaf spot (Septoria species) Monilinia blight (Monilinia vaccinii-corymbosi) Valdensinia leaf spot (Valdensinia heterodoxa) Leaf rust (Thekopsora minima) Anthracnose (Colletotrichum gloeosporioides) Botrytis blight (Botrytis cinerea) Phomopsis canker and twig blight <sup>1</sup> (Phomopsis vaccinii) Alternaria fruit rot (Alternaria species) <sup>1</sup> White pine blister rust (Cronartium ribicola) <sup>1</sup>	7.6 (0.178)			

#### Instructions:

- Phobos FC may be applied by either ground or chemigation application equipment.
- · Apply Phobos FC at the first sign of disease.
- If conditions remain favorable for continued or increasing disease development, make a second application of Phobos FC 7-10 days after the first application.

## Specific Use Restrictions:

- DO NOT make more than 2 applications per year.
- DO NOT apply more than 7.6 fl oz of Phobos FC (0.178 lbs
  - prothioconazole) per acre per application.
- DO NOT apply more than 15.2 fl oz of Phobos FC (0.356 lbs prothioconazole) per acre per year.
- DO NOT make applications less than 7 days apart.
- PHI: DO NOT apply Phobos FC within 7 days of harvest.

<sup>1</sup>Not for use in California

## LOW GROWING BERRY SUBGROUP, EXCEPT STRAWBERRY (SUBGROUP 13-07H)[1]

Bearberry: bilberry: cloudberry: cranberry: muntries: partridgeberry: and cultivars, varieties and/or hybrids of these.

LOW GROWING BERRIES - FOLIAR APPLICATIONS				
	USE RATES			
DISEASE	fl oz product/acre (lb a.i./acre)			
Fruit rot: Coleophoma empetri Glomerella cingulate Phyllosticta vaccinii Physalospora vaccinii Allantophomopsis lycopodina Allantophomopsis cytisporea Fusicoccum putrefaciens Penicillium species	6.66 (0.156)			
Phomopsis vaccinii Colletotrichum acutatum Botrytis species Monilinia species Valdensinia leaf spot (Valdensinia heterodoxa)				

#### Instructions:

- Phobos FC may be applied by either ground or chemigation application
- Make application at early bloom for optimal control of fruit rots.
- If conditions remain favorable for continued or increasing disease development, make a second application of Phobos FC or another approved fungicide 7-10 days after the first application.

## Specific Use Restrictions:

- DO NOT make more than 2 applications per year.
- DO NOT apply more than 6.66 fl oz of Phobos FC (0.156 lbs) prothioconazole) per acre per application.
- DO NOT apply more than 13.35 fl oz of Phobos FC (0.313 lbs) prothioconazole) per acre per year.
- DO NOT make applications less than 7 days apart.
- PHI: DO NOT apply Phobos FC within 45 days of harvest.

Not for use in California

## BUCKWHEAT: MILLET, PEARL: MILLET, PROSO: OATS: RYE

	USE RATES
FOLIAR DISEASE	fl oz product/acre (lb a.i./acre)
Rusts (Puccinia species) Glume Blotch (Stagonospora nodorum) Head Blight or Scab (Fusarium graminearum) (Suppression only) Powdery Mildew (Erysiphe graminis) Scald (Rhynchosporium secalis) Speckled Blotch (Septoria avenae; Septoria tritici) Spot Blotch (Bipolaris sorokiniana) Tan Spot or Yellow leaf Spot (Pyrenophora tritici-repentis)	6.66 – 7.6 (0.156 – 0.178)

DUCKWIEST, MILLET DEADL, MILLET DDOCO, OATC, DVE

- Applications may be made by ground or aerial spray equipment.
- Apply Phobos FC to leaves and stems as a preventative foliar spray at the first sign of disease.
- Scouting for early signs of disease is important, particularly under prolonged conditions favorable to disease development or when susceptible varieties are planted.

## Specific Use Restrictions:

• DO NOT make more than 1 application per year.

- DO NOT apply more than 7.6 fl oz of Phobos FC (0.178 lbs.) prothioconazole) per acre per application.
- DO NOT apply more than 7.6 fl oz of Phobos FC (0.178 lbs.) prothioconazole) per acre per year.
- . PHI: DO NOT apply within 30 days of harvest.

Field corn, field corn grown for seed, and popcorn

CORN - IN-FURROW AND I	CORN - IN-FURROW AND BANDED APPLICATIONS			
	USE RATES			
DISEASE	fl oz product/acre (lb a.i./acre)	fl oz product/1000 row ft. @ 30" rows (lb a.i./1000 row ft. @ 30" rows)		
Soilborne/Seedling Diseases: Rhizoctonia root <sup>[1]</sup> and stalk rot <sup>[1]</sup> (Rhizoctonia solani)	3.46 - 5.33 (0.081 - 0.125)	0.20 - 0.31 (0.005 - 0.007)		

#### Instructions:

- In-furrow application: Apply 3.46 to 5.33 fl oz per acre (0.20 to 0.31 fl oz per 1000 row feet based on 30-inch row spacing).
- Banded applications: Apply Phobos FC in a 4- to 6-inch band over the row at or near emergence.
- For other row spacing refer to the In-Furrow and Banded Application

  Rates chart.

CORN - FOLIAR APPLICATIONS				
	DISEASE	fl oz product/acre (lb a.i./acre)		
	Anthracnose Leaf Blight (Colletotrichum graminicola) Eye Spot (Aureobasidium zeae) Gray leaf spot (Cercospora zeae-maydis) Northern Corn Leaf Blight (Setosphaeria turcica)² Northern Corn Leaf Spot (Cochliobolus carbonum)² Rust (Puccinia species) Southern Corn Leaf Blight (Cochliobolus heterostrophus)²	7.6 (0.178)		
	For the suppression of: Fusarium <sup>(1)</sup> , Gibberella <sup>(1)</sup> and Aspergillus <sup>(1)</sup> , ear rot (Fusarium species, Gibberella species and Aspergillus species)	7.6 (0.178)		

#### Instructions:

- Phobos FC may be applied by either ground, aerial, or chemigation application equipment.
- For aerial applications: Apply a minimum of 3 gallons per acre spray. To improve spray coverage. Phobos FC may be sprayed with an adjuvant.
- When corn is under severe environmental stress conditions it isn't recommended to make an application of Phobos FC.
- Phobos FC is to be applied to leaves and stems as a preventative foliar spray at the first sign of disease.
- Repeat applications using a 7 to 14-day spray interval if disease development persists or worsens.
- For suppression of Fusarium, Gibberella and Aspergillus ear rots: apply Phobos FC between the initial silk emergence to the brown silk growth stage (R1 to R2) to reduce symptoms of disease and mycotoxin levels in the grain.

#### Specific Use Restrictions:

- DO NOT spray with adjuvants if applied between the V8 (8 leaf collar) and VT stages (emergence of tassels on the lowest branch; silk not yet emerged).
- DO NOT apply more than 5.33 fl oz of Phobos FC (0.125 lb prothioconazole) per acre per soil application or 7.6 fl oz of Phobos FC (0.178 lbs prothioconazole) per acre per foliar application.
- DO NOT apply more than 30.4 fl oz of Phobos FC (0.713 lbs prothioconazole) per acre per year from all uses, including soil and foliar applications.
- . DO NOT make applications less than 7 days apart.
- PHI
  - o Grain and fodder: Do not apply within 14 days of harvest.
  - o Forage: may be harvested on the same day as application.
- Not for use in California
- <sup>2</sup>Also known as Helminthosporium leaf blights.

#### COTTON

COTTON - IN-FURROW AND BANDED APPLICATIONS				
	USE RATES			
DISEASE	fl oz product/acre (lb a.i./acre)	fl oz product/1000 row ft. @ 36" rows (lb a.i./1000 row ft. @ 36" rows)		
Damping off (Rhizoctonia solani)	7.6 – 9.47	0.52 - 0.65		
Fusarium Wilt <sup>[1]</sup> (Fusarium species)	(0.178 – 0.222)	(0.012 – 0.015)		

#### Instructions:

- In-furrow application: Apply 7.6 to 9.47 fl oz per acre (0.52 to 0.65 fl oz per 1000 row feet based on 36-inch row spacing).
- Banded applications: Apply Phobos FC in a 4- to 6-inch band over the row at or near emergence.
- For other row spacing refer to the In-Furrow and Banded Application
  Rates chart.

## COTTON - FOLIAR APPLICATIONS

DISEASE	fl oz product/acre (lb a.i./acre)	
Foliar Target Spot (Corynespora cassiicola) Rust (Puccinia species)	6.66 – 7.6 (0.156 – 0.178)	

#### Instructions:

- Phobos FC may be applied by either ground, aerial, or chemigation application equipment.
- If conditions remain favorable for continued or increasing disease development, repeat application of Phobos FC on a 14-day spray interval.

## Specific Use Restrictions:

- DO NOT make more than 3 application per year if using a rate of 6.66
   -7.6 fl oz per acre including in-furrow, banded, and foliar applications.
- DO NOT make more than 2 application per year if any application uses a rate above 7.6 fl oz per acre including in-furrow, banded, and foliar applications.
- DO NOT apply more than 9.47 fl oz of Phobos FC (0.222 lb prothioconazole) per acre per soil application or 7.6 fl oz of Phobos FC (0.178 lbs prothioconazole) per acre per foliar application.
- DO NOT apply more than 22.8 fl oz of Phobos FC (0.534 lbs prothioconazole) per acre per year from soil and foliar applications.
- . DO NOT make applications less than 14 days apart.
- . PHI: Do not apply within 30 days of harvest.

<sup>1</sup>Not for use in California

## CHICKPEA

CHICKPEA - FOLIAR APPLICATIONS		
	USE RATES	
DISEASE	fl oz product/acre (lb a.i./acre)	
Ascochyta Blight (Ascochyta species)	6.66 – 7.6 (0.156 – 0.178)	

## Instructions:

- Phobos FC may be applied by either ground, aerial, or chemigation application equipment.
- The lowest rate of spray surfactant should be tank mixed with Phobos FC to ensure optimal disease control.
- Apply Phobos FC at the first sign of disease. Use the higher labelled rate when under prolonged conditions favorable to disease development or when susceptible varieties are planted.
- If conditions remain favorable for continued or increasing disease development, repeat application of Phobos FC on a 10- to 14-day spray interval.

#### Specific Use Restrictions:

- DO NOT make more than 3 applications per year.
- DO NOT apply more than 7.6 fl oz of Phobos FC (0.178 lbs prothioconazole) per acre per application.
- DO NOT apply more than 22.8 fl oz of Phobos FC (0.534 lbs prothioconazole) per acre per year.
- . DO NOT make applications less than 10 days apart.
- PHI: Do not apply within 7 days of cutting or swathing for harvest.

## **CUCURBIT VEGETABLES (CROP GROUP 9)**

Chayote (fruit); Chinese waxgourd (Chinese preserving melon); citron melon; cucumber; gherkin; edible gourd (includes hyotan, cucuzza, hechima, Chinese okra); *Momordica* species (includes balsam apple, balsam pear, bittermelon, Chinese cucumber); muskmelon (includes true cantaloupe, cantaloupe, casaba, Crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, and snake melon); pumpkin; squash (summer and winter, crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini, butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash); watermelon

CUCURBIT VEGETABLES - SOIL AND FOLIAR APPLICATIONS			
	USE RATES		
DISEASE	fl oz product/acre (lb a.i./acre)		
Fusarium wilt (Fusarium oxysporum) Fusarium blight (Fusarium species) Gummy stem blight (Didynella species) Southern blight <sup>(1)</sup> (Sclerotium rolfsi) Powdery mildew (Sphaerotheca fuliginea I Podosphaera xanthii) (Erysiphe cichoracearum)	Soil or Foliar Applications 7.6 (0.178)		

#### Instructions:

- Phobos FC may be applied by either ground or chemigation application equipment (including drip irrigation).
- Repeat applications using a 5- to 10-day spray interval if disease development persists or worsens.

## Specific Use Restrictions:

- DO NOT use in a greenhouse or transplant house.
- DO NOT use in water used for hand transplanting.
- DO NOT make more than 1 soil and 2 foliar applications of Phobos FC per year.
- DO NOT apply more than 7.6 fl oz of Phobos FC (0.178 lbs prothioconazole) per acre per application.
- DO NOT apply more than 22.8 fl oz of Phobos FC (0.534 lbs prothioconazole) per acre per year.
- DO NOT make applications less than 5 days apart.
- PHI: Do not apply within 7 days of harvest.

<sup>1</sup>Not for use in California.

# DRIED SHELLED PEAS AND BEANS SUBGROUP 6C (EXCEPT SOYBEANS AND LENTILS)

Lupinus species (grain, sweet, white and white sweet lupins); Phaseolus species (field, kidney, dry lima, navy, pinto and tepary beans); Vigna species (adzuki bean, blackeyed pea, catjang, cowpea, Crowder pea, moth bean, mung bean, rice bean, southern pea, and urd bean); dry broad bean; guar; lablab bean; Pisum species (pea (including field pea) and pigeon Pea)
See LENTILS for additional directions.

DRIED SHELLED PEAS AND BEANS - IN-FURROW APPLICATIONS			
	USE RATES		
DISEASE	fl oz product/acre (lb a.i./acre)	fl oz product/1000 row ft. @ 30" rows (lb a.i./1000 row ft. @ 30" rows)	

3.46 - 6.66

(0.081 - 0.156)

0.20 - 0.38

(0.005 - 0.009)

#### Instructions:

Rhizoctonia rots[1]

(Rhizoctonia species)

- In-furrow application: Apply 3.46 to 6.66 fl oz per acre (0.20 to 0.38 fl oz per 1000 row feet based on 30-inch row spacing).
- For other row spacing refer to the In-Furrow and Banded Application Rates chart.

DRIED SHELLED PEAS AND BEANS - FOLIAR APPLICATIONS		
	USE RATES	
FOLIAR DISEASE	fl oz product/acre (lb a.i./acre)	
Ascochyta Blight (Ascochyta pinodes) Rust (Uromyces appendiculatus) White Mold (Sclerotinia sclerotiorum)	7.6 (0.178)	

#### Instructions:

- Phobos FC may be applied by either ground, aerial or chemigation application equipment.
- For ground application, apply a minimum of 20 gallons per acre spray.
- The lowest labeled rate of spray surfactant should be tank mixed with Phobos FC to ensure optimal disease control.
- For rust control: Apply at the first sign of disease.
- For white mold control: apply Phobos FC Fungicide at 25% flower.
- If conditions remain favorable for continued or increasing disease development, repeat application of Phobos FC on a 5- to 14-day spray interval.

## Specific Use Restrictions:

- DO NOT make more than 3 application per year.
- DO NOT apply more than 6.66 fl oz of Phobos FC (0.156 lb prothioconazole) per acre per soil application or 7.6 fl oz of Phobos FC (0.178 lbs prothioconazole) per acre per foliar application.
- DO NOT apply more than 22.8 fl oz of Phobos FC (0.534 lbs prothioconazole) per acre per year.
- DO NOT make applications less than 5 days apart.
- PHI: Do not apply within 7 days of harvest.

<sup>1</sup>Not for use in California.

## **LENTILS**

LENTILS - FOLIAR APPLICATIONS		
	USE RATES	
DISEASE	fl oz product/acre (lb a.i./acre)	
Ascochyta Blight (Ascochyta species)	5.7 – 7.6 (0.134 – 0.178)	

#### Instructions:

- Phobos FC may be applied by either ground, aerial, or chemigation application equipment.
- Use the higher rate when under prolonged conditions favorable to disease development or when susceptible varieties are planted.
- The lowest labeled rate of spray surfactant should be tank mixed with Phobos FC to ensure optimal disease control.
- Apply Phobos FC at the first sign of disease or during early flowering.
- If conditions remain favorable for continued or increasing disease development, repeat application of Phobos FC on a 10- to 14-day spray interval.

#### Specific Use Restrictions:

- DO NOT make more than 3 application per year.
- DO NOT apply more than 7.6 fl oz of Phobos FC (0.178 lbs prothioconazole) per acre per application.
- DO NOT apply more than 22.8 fl oz of Phobos FC (0.534 lbs prothioconazole) per acre per year.
- . DO NOT make applications less than 10 days apart.
- PHI: Do not apply within 7 days of cutting or swathing the crop for harvest.

PEANUT - IN-FURROW AND BANDED APPLICATIONS		
	USE RATES	
DISEASE SUPPRESSED	fl oz product/acre (lb a.i./acre)	fl oz product/1000 row ft. @ 36" rows (lb a.i./1000 row ft. @ 36" rows)
Sclerotium Rot White Mold Southern Blight Southern Stem rot (Sclerotium rolfsii) Rhizoctonia Limb Rot (Rhizoctonia solani) Early Leaf Spot (Cercospora arachidicola) Late Leaf Spot (Cercosporidium personatum)	7.6 (0.178)	0.52 (0.012)
*Suppression with in- furrow only Cylindrocladium Black Rot (CBR) (Cylindrocladium crotalariae*)		

#### Instructions:

- In-Furrow Application: Apply 7.6 fl oz per acre (0.52 fl oz per 1000 row feet based on 36-inch row spacing).
   Banded applications: Apply Phobos FC at or near emergence in 4- to
- 6- inch bands over the row. Apply a minimum application volume of 20 gallons per acre is recommended.
- For other row spacing refer to the In-Furrow and Banded Application Rates chart.
- Note: Drought conditions introduce decreased effectiveness of Phobos FC against root and pod rots diseases (Sclerotium rolfsii and Rhizoctonia solani). Therefore, Phobos FC should be applied aided by rainfall or an irrigation system into roots and pod zone.

PEANUT - SOIL APPLICATIONS	
DISEASE SUPPRESED	fl oz product/acre (lb a.i./acre)
Soil-Borne Sclerotium Rot (Sclerotium rolfsii) (White Mold, Southern Blight, Southern Stem Rot) Rhizoctonia Limb Rot, Peg Rot, Pod Rot (Rhizoctonia solani) "Suppression only Cylindrocladium Black Rot (Cylindrocladium crotalariae")	7.6 (0.178)

## Instructions:

- Phobos FC may be applied by either ground, aerial, or chemigation application equipment.
- For Soil-Borne Disease: Apply 4 consecutive applications of Phobos FC in 14-day intervals. In a typical 7 spray application, Phobos FC should be applied for sprays 3,4,5,6. The spray program should begin 30-40 days after planting or in accordance with local recommendations. To prevent resistance of disease, fungicides with a differing mode of action should be used before and after the application of Phobos FC. Use of cultural practices which reduce severity of soilborne disease, such as proper crop rotation, is recommended to be used in conjunction with Phobos FC.
- Leaf Spot Advisory Program Schedule: For control of soilborne diseases, apply Phobos FC at the first spray advisory in July and continue to make applications in 14-day intervals.
- Note: Drought conditions introduce decreased effectiveness of Phobos FC against root and pod rots diseases (Sclerotium rolfsii and Rhizoctonia solani). Therefore, Phobos FC should be applied aided by rainfall or an irrigation system into roots and pod zone.

PEANUT - FOLIAR APPLICATIONS		
DISEASE SUPPRESED	fl oz product/acre (lb a.i./acre)	
Early Leaf Spot (Cercospora arachidicola) Late Leaf Spot (Cercosporidium personatum) Leaf Rust (Puccinia arachidis) Web Blotch (Phoma arachidicola) Leaf Scorch and Pepper Spot (Leptosphaerulina crassiasca)	6.66 – 7.6 (0.156 – 0.178)	

#### Instructions:

- Phobos FC may be applied by either ground, aerial, or chemigation application equipment.
- Foliar Application: Make applications using the specified rate in a preventative spray schedule. Repeat applications up to 4 total applications using a 14-day spray interval. Use the higher rate when under prolonged conditions favorable to disease development or when susceptible varieties are planted.
- Application intervals may be extended to 21 days when using varieties with good to excellent resistance to foliar disease when in the absence of soil borne diseases.

#### Specific Use Restrictions:

- DO NOT make more than 4 applications per year, including foliar, infurrow, and banded applications.
- DO NOT apply more than 7.6 fl oz of Phobos FC (0.178 lb prothioconazole) per acre per soil application or 7.6 fl oz of Phobos FC (0.178 lbs prothioconazole) per acre per foliar application.
- DO NOT apply more than 30.4 fl oz of Phobos FC (0.713 lbs prothioconazole) per acre per year.
- DO NOT make applications less than 14 days apart.
- PHI: DO NOT apply within 14 days of harvest.
- DO NOT feed hay or threshings or allow livestock to graze in treated areas.

<sup>1</sup>Not for use in California.

# RAPESEED SUBGROUP 20A (INCLUDING CANOLA AND BRASSICA CARINATA<sup>(1)</sup>)

Borage; *Brassica carinata*; crambe; cuphea; echium; flax; gold of pleasure; hare's ear mustard; lesquerella, lunaria; meadowfoam; milkweed; mustard seed; oil radish; poppy seed; rapeseed; sesame; sweet rocket: cultivars. varieties. and/or hybrids of these

RAPESEED - FOLIAR APPLICATIONS	
	USE RATES
DISEASE	fl oz product/acre
	(lb a.i./acre)
Sclerotinia Stem Rot	5.7 – 7.6
White Mold (Sclerotinia sclerotiorum)	(0.134 – 0.178)

#### Instructions:

- Phobos FC may be applied by either ground, aerial, or chemigation application equipment.
- The lowest labeled rate of spray surfactant should be tank mixed with Phobos FC to ensure optimal disease control.
- Apply Phobos FC before petals begin to fall off plants (around the 20-50% bloom stage) to ensure thorough spray coverage of the petals.
   Good spray coverage of the plants is essential for good disease control.
- For fields with a history of increased disease pressure or for dense crop stands, use higher rates of Phobos FC.
- If conditions remain favorable for continued or increasing disease development, make a second application of Phobos FC on a 14-day spray interval.

## Specific Use Restrictions:

- DO NOT make more than 2 application per year.
- DO NOT apply more than 7.6 fl oz of Phobos FC (0.178 lbs prothioconazole) per acre per application.
- DO NOT apply more than 15.2 fl oz of Phobos FC (0.356 lbs prothioconazole) per acre per year.
- DO NOT apply Phobos FC beyond the 50% bloom stage.
- DO NOT make applications less than 14 days apart.
- PHI: Do not apply within 36 days of harvest.

<sup>1</sup>Not for use in California.

#### **BICE**[1]

RICE - FOLIAR APPLICATIONS		
	USE RATES	
DISEASE	fl oz product/acre (lb a.i./acre)	
Sheath/Stem Diseases Sheath Blight (Rhizoctonia solani)		
Foliar Diseases Brown Spot (Cochliobolus miyabeanus) Narrow Brown Leafspot (Cercospora oryzae)	6.0 (0.141)	
Leaf Smut (Entyloma oryzae) False Smut (Ustilaginoidea virens)		

## Instructions:

- Phobos FC may be applied by either ground or aerial application equipment.
- Make application at the initial sign of disease. Consult a local extension specialist, certified crop advisor, or Vive Crop Protection representative to determine the optimal time for rice disease control depending on rice growth stage, rice variety, the type of disease and disease severity. Phobos FC is typically applied from panicle differentiation to late boot stage.

## Specific Use Restrictions:

- DO NOT make more than 1 application per year.
- DO NOT apply more than 6.0 fl oz of Phobos FC (0.141 lbs prothioconazole) per acre per application.
- DO NOT apply more than 6.0 fl oz of Phobos FC (0.141 lbs
- prothioconazole) per acre per year.
- DO NOT apply Phobos FC once 70% panicle has emerged from the boot.
- PHI: DO NOT apply within 40 days of harvest.

<sup>1</sup>Not for use in California.

#### 

#### Instructions:

- In-Furrow Applications: Apply 3.46 to 6.66 fl oz per acre (0.20 to 0.38 fl oz per 1000 row feet based on 30-inch row spacing).
- For other row spacing refer to the In-Furrow and Banded Application Rates chart.

## SOYBEANS - FOLIAR APPLICATIONS

DISEASE	fl oz product/acre (lb a.i./acre)
Asian Soybean Rust (Phakopsora pachyrhizi) Frog Eye Leaf Spot (Cercospora sojina) Powdery Mildew (Microsphaera diffusa) Brown Spot <sup>[1]</sup> (Septoria glycines)	3.33 – 4.0 (0.078 – 0.094)
Alternaria Leaf Spot <sup>11</sup> (Alternaria species) Anthracnose <sup>11</sup> (Colletotrichum truncatum) Asian Soybean Rust <sup>11</sup> (Phakopsora pachyrhiz) Brown Spot <sup>11</sup> (Septoria glycines) Cercospora Blight <sup>11</sup> (Cercospora kikuchii) Frogeye Leaf Spot <sup>11</sup> (Cercospora sojina) Pod & Stem Blight <sup>11</sup> (Diaporthe phaseolorum) Powdery Mildew <sup>11</sup> (Microsphaera diffusa) Rhizoctonia Aerial Blight <sup>11</sup> (Rhizoctonia solani)	4.0 – 6.66 (0.094 – 0.156)
Suppression Only: Sclerotinia Stem Rot also known as White Mold (Sclerotinia sclerotiorum)	

#### Instructions:

- Phobos FC may be applied by either ground, aerial, or chemigation application equipment.
- Phobos FC is to be applied as a preventative foliar spray, or at the first sign of disease.
- Repeat applications using a 10- to 21-day spray interval if conditions are favorable to disease.
   If disease pressure is severe, shorten the application interval and use
- a higher rate.
- For Aerial Applications: apply a minimum of 2 gallons per acre spray.
   Sclerotinia Stem Rot (Suppression Only):
  - Apply Phobos FC at the beginning of bloom (R1). An additional application of Phobos FC can be made at the beginning of full pod develooment (R3-R4).
  - Phobos FC may be applied by ground or air.
  - Apply in a minimum of 10 gallons per acre of spray solution by ground equipment, or in a minimum of 5 gallons of spray per acre of spray solution by aircraft spray equipment.
- Caution: Applying foliar applications under hot, dry conditions may increase the risk of phytotoxicity. Consult your local Vive Crop Protection representative, extension service, or certified crop advisor for recommendations on foliar applications in your area.

#### Specific Use Restrictions:

- DO NOT make more than 3 applications per year including soil and foliar applications.
- DO NOT apply more than 6.66 fl oz of Phobos FC (0.156 lb prothioconazole) per acre per soil application or 6.66 fl oz of Phobos FC (0.156 lbs prothioconazole) per acre per foliar application.
- DO NOT apply more than 17.2 fl oz of Phobos FC (0.403 lbs prothioconazole) per acre per year.
- DO NOT make applications less than 10 days apart.
- . PHI: DO NOT apply within 21 days of harvest.

## Not for use in California.

#### SUGAR BEETS

SUGAR BEETS – IN-FURROW AND BANDED APPLICATIONS		
	USE RATES	
DISEASE	fl oz product/acre (lb a.i./acre)	fl oz product/1000 row ft. @ 22" rows (lb a.i./1000 row ft. @ 22" rows)
Rhizoctonia Stem Canker, Root Rot, Crown Rot (Rhizoctonia solani)	7.6 (0.178)	0.32 (0.007)

#### Instructions:

- In-Furrow Applications: Apply 7.6 fl oz per acre (0.32 fl oz per 1000 row feet based on 22-inch row spacing).
- Banded Applications: Apply Phobos FC in a seven-inch band at the 4-leaf to row closure growth stage.
- For other row spacing refer to the In-Furrow and Banded Application Rates chart.

SUGAR BEETS - FOLIAR APPLICATIONS		
DISEASE	fl oz product/acre (lb a.i./acre)	
Foliar Diseases Cercospora Leaf Spot (Cercospora beticola) Powdery Mildew (Erysiphe polygoni)	6.66 – 7.6 (0.156 – 0.178)	

#### Instructions:

- Phobos FC may be applied by either ground, aerial, or chemigation application equipment.
- The lowest labeled rate of spray surfactant should be tank mixed with Phobos FC to ensure optimal disease control.
- Apply Phobos FC at the first sign of disease.
- Repeat applications using a 14- to 21-day spray interval depending on disease pressure.
   Use the higher rate and shorter spray interval when under prolonged.
- conditions favorable to disease development or when susceptible varieties are planted.
- To limit the potential development of disease resistance, alternate every application of Phobos FC with other non-Group 3 fungicides.

## Specific Use Restrictions:

- DO NOT make more than 3 applications per year including all soil and foliar applications.
- Do NOT apply more than 7.6 fl oz of Phobos FC (0.178 lb prothioconazole) per acre per soil application or 7.6 fl oz of Phobos FC (0.178 lbs prothioconazole) per acre per foliar application.
- DO NOT apply more than 22.8 fl oz of Phobos FC (0.534 lbs prothioconazole) per acre per year.
- DO NOT make applications less than 14 days apart.
- . PHI: DO NOT apply within 7 days of harvest.

## WHEAT (SPRING, DURUM, AND WINTER)/TRITICALE

WHEAT/TRITICALE - FOLIAR APPLICATIONS		
	USE RATES	
DISEASE	fl oz product/acre (lb a.i./acre)	
Suppression Only: Fusarium Head Blight (Fusarium species)	6.66 – 7.6 (0.156 – 0.178)	
Leaf and Stem Diseases Powdery Mildew (Blumeria graminis f. sp. tritici) Rusts (Puccinia species) Septoria Leaf and Glume Blotch (Septoria tritici) Stagonospora Blotch (Stagonospora nodorum) Tan Spot (Pyrenophora tritici-repentis)	5.7 – 6.66 (0.134 – 0.156)	

## Instructions:

- Phobos FC may be applied by either ground, aerial or chemigation application equipment. Chemigation application is only allowed prior to heading.
- The lowest labeled rate of spray surfactant should be tank mixed with Phobos FC to ensure optimal disease control.
- If conditions remain favorable for continued or increasing disease development, make a second application of Phobos FC on a 14-day spray interval.
- For aerial applications: Prior to heading (Feekes growth stage 10.5), apply a minimum of 2 gallons per acre spray. For applications made at the heading growth stage of after, apply a minimum of 5 gallons per acre spray.
- Fusarium Head Blight (Suppression Only): Phobos FC is to be applied as a preventative foliar spray at early flower (Feekes Growth Stage 10.51). Thorough coverage of wheat heads is needed. Use of forward and backward nozzles (or two-directional nozzles) is recommended to ensure thorough coverage. Follow the spray pressure directions suggested by the manufacturer of the nozzles being used.
- Leaf and Stem Diseases: Phobos FC is to be applied to leaves and stems as a preventative foliar spray at the first sign of disease. Scouting for early signs of disease is important, particularly under prolonged conditions favorable to disease development or when susceptible varieties are planted.

## Specific use restrictions:

- DO NOT make more than 2 application per year.
- DO NOT apply more than 7.6 fl oz of Phobos FC (0.178 lbs prothioconazole) per acre per application.
- DO NOT apply more than 12.5 fl oz of Phobos FC (0.293 lbs prothjoconazole) per acre per year.
- DO NOT make applications less than 14 days apart.
- PHI: DO NOT apply Phobos FC within 30 days of harvest.

## STORAGE AND DISPOSAL

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

#### Storage

Store in original containers only. Keep from freezing. Protect from excessive heat. Keep container closed when not in use. **DO NOT** store near food or feed. In case of spill on floor or paved surfaces, mop and remove to chemical waste storage area until proper disposal can be made if product cannot be used according to the label.

## Pesticide Disposal

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, 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 of the nearest EPA Regional Office for guidance.

## **Container Handling:**

Container Handling less than or equal to 5 gallons - Non-refillable container: DO NOT reuse or refill this container. Triple rinse container promptly after emptying. Triple Rinse as follows: Empty the remaining contents into application equipment or a mix tank and 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. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

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

# IMPORTANT INFORMATION READ BEFORE USING PRODUCT

## 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 beyond the control of Vive Crop Protection or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Vive Crop Protection and Seller harmless for any claims relating to such factors.

Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the Directions for Use when used in accordance with the directions under normal conditions of use.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, VIVE CROP PROTECTION MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE, NOR ANY OTHER EXPRESS OR IMPLIED WARRANTIES WITH RESPECT TO THE SELECTION, PURCHASE, OR USE OF THIS PRODUCT.

Any warranties, express or implied, having been made are inapplicable if this product has been used contrary to label instructions, or under abnormal conditions, or under conditions not reasonably foreseeable to (or beyond the control of) Seller or Vive Crop Protection, and Buyer assumes the risk of any such use.

To the extent consistent with applicable law, Vive Crop Protection or Seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF VIVE CROP PROTECTION 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 VIVE CROP PROTECTION OR SELLER. THE REPLACEMENT OF THE PRODUCT.

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