241-410

11/07/2007



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

> OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

> > 7 2007

NOV

Mr. Jeffrey H. Birk BASF Corporation 26 Davis Drive Research Triangle Park, NC 27709-3528

Dear Mr. Birk:

Subject: Acrobat 50WP Fungicide EPA Reg. No. 241-410 Your Submission of January 7, 2005

The amendment referred to above, submitted in connection with registration under FIFRA sec. 3(c)(7)(A), is conditionally accepted provided that:

The following revisions are made to the label: Revise the Disclaimer statement on page 29 as follows: Add the phrase "To the extent allowed by law" to the beginning of the last sentence in the first paragraph. Add the same phrase following the word "and" in the third line of the first paragraph in bold type and to the beginning of the first sentence in the second paragraph in bold type.

Submit one copy of the final printed label before you release the product for shipment.

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

A stamped copy of the label and supplemental labeling containing the new uses on Brassica head and stem vegetables (subgroup5A) are enclosed for your records.

Sincerely yours,

Mary J. Waller

Mary L Waller Product Manager 21 Fungicide Branch Registration Division (750

Enclosures

7505P:C.Grable:cg:11/5/07



Supplemental Labeling

EPA Reg. No. 241-410

U.S. Patent No. 5,952,496

For Disease Control in Brassica Head and Stem Vegetables

ALL APPLICABLE DIRECTIONS, RESTRICTIONS AND PRECAUTIONS ON THE ACROBAT 50WP CONTAINER LABEL MUST BE FOLLOWED. THIS LABELING MUST BE IN THE POSSESSION OF THE USER AT THE TIME OF APPLICATION.

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 when wind conditions favor drift. 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.

GENERAL INFORMATION

ACROBAT[®] 50WP fungicide may be used in a preventative spray program to manage downy mildew on Brassica Head and Stem Vegetables. Thorough plant coverage is necessary for effective disease control. ACROBAT 50WP must be used in accordance with this label. It is recommended that this product be used within an Integrated Pest Management Program.

In order to reduce the risk of development of fungicide resistance, **ACROBAT 50WP** must be used as a tank-mix with fungicides active against the target diseases. **DO NOT** apply **ACROBAT 50WP** alone.

Disease pressure, plant growth rate, and environmental conditions will determine the length of the spray interval and frequency of application. Sprayers should be properly calibrated before application. Apply material with adequate spray pressure and gallonage and using proper nozzle arrangement to provide full coverage.

ACROBAT 50WP may be applied by ground, aerial or chemigation according to label directions.

Refer to the respective tank-mix partner labeling for rates, methods of application, proper timing, restrictions and precautions. Always use in accordance with the more restrictive label restrictions and precautions. Do not use a pesticide product that contains a prohibition against tank mixing.

ACCEPTED with COMMENTS In EPA Letter Dated

NOV 57 2007 Under the Federal Insecticide, Fundicide, and Radenzicide Act as amended, for the posticide registered under EPA Reg. No. 241-410

APPLICATION INSTRUCTIONS

Сгор	Target Disease	Use Rate: Oz Product / Acre / Application	General Recommendations	Restrictions
Brassica Head and Stem Vegetables: Broccoli Chinese Broccoli Brussels Sprouts Cabbage Chinese Cabbage (Napa) Chinese Mustard Cauliflower Cavalo Broccoli Kohirabi	Downy Mildew (<i>Peronospora</i> parasitica)	6.4	ACROBAT 50 WP must be applied as a tank mix with another fungicide active against downy mildew. Do not make more than two sequential applications of ACROBAT 50 WP before alternating to another effective fungicide with a mode of action different from ACROBAT 50 WP for at least one application. Begin applications when conditions favor disease development. Continue applications on a 7 day spray schedule as needed until weather conditions favoring infection and sporulation decrease.	 DO NOT make more than 5 applications per season. DO NOT exceed 32 oz per acre per growing season. DO NOT use less than 20 gallons of water per acre for ground applications and 5 gallons per acre for aerial applications. DO NOT apply within 7 days of harvest for Brassica Head and Stem vegetables. Not registered for use on these crops in California

RESISTANCE MANAGEMENT

Downy mildew may develop resistance to some crop protection products after repeated use. Since the development of resistance cannot be predicted, ACROBAT[®] 50WP fungicide should always be used in a resistance management program. In order to reduce the risk of development of fungicide resistance, ACROBAT 50WP must be used as a tank-mix with fungicides active against the target diseases. DO NOT apply ACROBAT 50WP alone. Alternate ACROBAT 50WP with other effective fungicides with different modes of action according to label recommendations.

ROTATIONAL CROP GUIDELINES

After making the last ACROBAT 50WP application, rotational crops may be planted at the following intervals:

1. Any time

Potatoes, Tomatoes, Tobacco, Bulb Vegetables, Cucurbit Vegetables, Fruiting Vegetables, Hops, Lettuce (head and leaf), Taro and Brassica Leafy Vegetables

2. One month

Barley, Oats, Wheat

Leafy vegetables, such as spinach, and celery

Root/tuber vegetables, such as carrot, radish, and sugar beet

3. Seven months

4

Alfalfa	Clover	Peas	Sorghum
Beans	Corn	Rice	Soybeans
Twelve mon	ths		

All other crops

©2004 BASF Corporation All rights reserved Acrobat is a trademark of BASF 000241-00410.20041209 **NVA 2004-04-171-0336** BASF Corporation 26 Davis Drive Research Triangle Park, NC 27709



The Chemical Company

The Onemical Company

ACROBAT 50WP

For Use in Bulb Vegetables, Cucurbit Vegetables, Fruiting Vegetables, Brassica Leafy Vegetables, Hops, Lettuce, Potatoes, Taro, Tobacco and Field Grown Tomatoes ACTIVE INGREDIENT:

INERT INGREDIENTS:	· · · · · · · · · · · · · · · · · · ·	 	. <u>50.0%</u>
EPA Reg. No. 241-410		 EPA Est. No.	
U.S. Patent No. 5,952,496	:		•

KEEP OUT OF REACH OF CHILDREN CAUTION!/iPRECAUCION!

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

In case of an emergency endangering life or property involving this product, call day or night 1-800-832-HELP (4357).

See inside for First Aid, Precautionary Statements, Directions for Use and Conditions of Sale and Warranty.

Net Contents: ____

BASF Corporation · Agricultural Products · 26 Davis Drive · Research Triangle Park, NC 27709

ACCEPTED with COMMENTS In EPA Letter Dated

Under the Federal Insecticide, Fundicide, and Rodenticide Ast as amended, for the posticide registered under EPA Reg. No. 241-410

 •Call a poison control center or doctor immediately for treatment advice. •Have person sip a glass of water if able to swallow. •Do not induce vomiting unless told to do so by a poison control center or doctor. •Do not give anything by mouth to an unconscious person. •Take off contaminated clothing. •Rinse skin immediately with plenty of water for 15-20 minutes. •Call a poison control center or doctor. 	FIRST AID						
If on skin or •Rinse skin immediately with plenty of water for 15-20 minutes.	If swallowed	 Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. 	• •				
• Call a poison control center of doctor for treatment advice.			- - - -				

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact BASF Corporation for emergency medical treatment information: 1-800- 832-HELP (4357).

2

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if swallowed or absorbed through skin. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling.

Personal Protection Equipment (PPE):

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category **A** on an EPA chemical resistance category selection chart.

Applicators 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

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

User Safety Recommendations:

User should:

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

ENVIRONMENTAL HAZARDS

DO NOT apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. **DO NOT** contaminate water when cleaning equipment or disposing of equipment washwaters.

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 when wind conditions favor drift.

DO NOT apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handiers may be in the area during application.

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

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

DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of **12** hours.

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, wear:

coveralls

•

 chemical resistant gloves made of any waterproof material, such as polyethylene or polyvinyl chloride.

shoes plus socks

STORAGE AND DISPOSAL

DO NOT contaminate water, food or feed by storage or disposal. **Storage:** Store in a cool, well-ventilated area. **DO NOT** allow to become overheated in storage. Keep container closed when not in use.

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on-site or at an approved waste disposal facility.

Container Disposal: Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

GENERAL INFORMATION

THIS LABELING MUST BE IN THE POSSESSION OF THE USER AT THE TIME OF FUNGICIDE APPLICATION. DO NOT apply this product through any type of irrigation system unless the label instructions on chemigation are followed. See below for Chemigation Use Directions.

Acrobat[®] **50WP fungicide** should be used in a preventative spray program to manage the target diseases. Maximum results can only be achieved by thorough coverage. **Acrobat 50WP** must be used in accordance with this label. It is recommended that this product be used within an Integrated Pest Management Program.

Fungus strains have developed resistance to some fungicides after repeated use. Since the development of resistance cannot

be predicted, **Acrobat 50WP** should always be used in a resistance management program.

Tank mixing and thorough spray coverage are necessary to minimize the development of fungus strains with resistance to **Acrobat 50WP**.

In order to reduce the risk of the development of fungicide resistance, Acrobat 50WP must be used as a tank-mix with fungicides active against the target diseases (EXCEPT MEFENOXAM where the target disease has shown reduced sensitivity to these fungicides). DO NOT apply Acrobat 50WP alone.

The use of Acrobat 50WP in all tobacco transplant production systems (including greenhouse, float-beds, and traditional ground beds) is STRICTLY PROHIBITED. DO NOT use Acrobat 50WP in transplant water.

Carefully read, understand, and follow all directions and precautions.

Disease pressure, plant growth rate, and environmental conditions will determine the length of the spray interval and the rate of **Acrobat 50WP**. Consult local disease forecast advisory system recommendations to determine the predicted disease pressure and the associated application rates and intervals. Sprayers should be properly calibrated before application. Determine the size of the area to be sprayed and the output rate to determine the quantities of **Acrobat 50WP** and water needed for accurate application. Apply material with adequate spray pressure, water volume, and proper nozzle arrangement to provide full coverage.

ADDITIVES AND GENERAL TANK MIXING INFORMATION

Acrobat* 50WP fungicide can be tank mixed with most recommended fungicides, insecticides, herbicides, liquid fertilizers, biological control products, adjuvants, and additives as specified in the crop specific recommendations in the **DIRECTIONS FOR** APPLICATION section of this label. Under some conditions, the use of additives or adjuvants may improve the performance of Acrobat 50WP. However, all varieties and cultivars have not been tested with possible tank mix combinations. Local conditions can also influence crop tolerance and may not match those under which BASF has conducted testing. Physical incompatibility, reduced disease control, or crop injury may result from mixing Acrobat 50WP with other products. Therefore, before using any tank mix (fungicides, insecticides, herbicides, liquid fertilizers, biological control products, adjuvants and additives), test the combination on a small portion of the crop to be treated to ensure that a phytotoxic response will not occur as a result of application.

MIXING INSTRUCTIONS

Fill the spray tank until it is approximately 1/2 full with clean water. Slowly, add **Acrobat 50WP** to the spray tank while agitating. Agitation must be engaged prior to the addition of the product to obtain a complete and uniform mixture of **Acrobat 50WP**.

Limit amount of spray mixture prepared to that needed for immediate use.

Mixing Order:

- 1) Water: Begin by agitating a thoroughly clean sprayer tank half full of clean water.
- 2) Products in PVA bags: Place the water-soluble PVA bag into the mixing tank. The water-soluble PVA bag will dissolve in water to allow the contents to disperse. Wait until all water-soluble PVA bags have fully dissolved and the product is evenly mixed in the spray tank before continuing.
- Water-dispersible products: (wettable powders including Acrobat 50WP, dry flowables, suspension concentrates, or suspo-emulsions)
- 4) Water-soluble products
- 5) Emulsifiable concentrates: (oil concentrate or methylated seed oil when applicable)
- Water-soluble additives: (ammonium sulfate or urea ammonium nitrate when applicable)

7) Remaining quantity water

Maintain maximum constant agitation during application. Thorough agitation is required if the mixture is allowed to stand for a prolonged period of time.

COMPATIBILITY

The tank mixing behavior of this fungicide with other pesticides has not been fully investigated. If tank mixing with other pesticides is desirable, conduct a jar test with rates and volumes of carrier typically used in an agricultural application. Look for signs of separation, globules, sludge, flakes or other precipitates. **DO NOT** tank mix with the other pesticide if the jar test with **Acrobat 50WP** has indicated incompatibility.

TANK MIXES WITH FUNGICIDES

DO NOT apply Acrobat[®] 50WP fungicide alone. Acrobat 50WP must be used in a tank-mix with fungicides that are active against the target disease, <u>EXCEPT MEFENOXAM when the</u> <u>target disease has shown reduced sensitivity to these</u> <u>fungicides</u>. Refer to the respective tank-mix partner labeling for rates, methods of applications, proper timing, restrictions and precautions. Always use in accordance with the more restrictive label restrictions and precautions. Always use in accordance with the more restrictive label restrictions and precautions. **DO NOT** use a pesticide product which contains a prohibition against tank mixing.

AERIAL SPRAY APPLICATIONS

Prior to aerial application, check the aircraft for uniformity of spray pattern, spray swath width and output. If hollow cone or whirlplate nozzles are used, it is recommended that they be positioned straight down or slightly backwards. When using nozzles that produce relatively straight streams (e.g., D-series orifice with no core), the recommended positioning is straight back or slightly down from back.. Uniformly apply with properly calibrated aerial equipment in 5 or more gallons of water per acre. If foliage is dense, use an output that will ensure optimum fungicide penetration. Spray swaths should be marked using flaggers who are in completely enclosed vehicles, by counting rows, or by using some other marking device.

DO NOT apply when weather conditions favor drift.

CHEMIGATION USE DIRECTIONS

Acrobat 50WP can be applied prior to the onset of disease infection on a regular protectant spray schedule, not an irrigation schedule. Chemigation applications must be made according to crop specific spray schedule interval recommendation in the DIRECTIONS FOR USE section of this label, and may dépend on disease pressure and environmental conditions. Consult local late blight advisory system recommendations to determine the predicted disease pressure and the associated application rates and intervals. Chemigation applications may need to be supplemented with ground or aerial applications if irrigation cycles are less frequent than what is recommended on the label to obtain optimum control.

Apply **Acrobat 50WP** fungicide only through sprinkler irrigation systems including center-pivot, lateral move, side (wheel) roll, solid set, or hand move irrigation systems. **DO NOT** apply product through any other type of irrigation system.

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

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

The irrigation system must be correctly calibrated (with water only) to ensure that the recommended rate of **Acrobat 50WP** is applied.

DO NOT connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label prescribed safety devices for public water systems are in place. Public water system means a system

F

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 (RPZ), backflow preventer or the functional equivalent in the water supply line upstream from 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 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.

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.

The system should have properly working nozzles providing the recommended output and pattern. The chemigation system should also be free of leaks.

Overhead Sprinkler Irrigation System Requirements

- 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.

- 4. 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.
- The irrigation line or water pump must include a functional pressure switch that will stop the water pump motor when the water pressure decreases to the point that 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 following routine checks will help to ensure that the sprinkler irrigation system is working properly.

- 1. Use a calibrated injection metering pump as specified by the manufacturer.
- Metering pumps, the supply tank, and any associated equipment must be clean and dry before adding diluted Acrobat*
 50WP fungicide to the system for injection.
- Check the metering pump periodically to confirm that Acrobat 50WP is being injected continuously and at the proper calibration throughout the irrigation period.

4. Continuous agitation must be maintained in the supply tank during the entire overhead sprinkler irrigation period.

Center Pivot, and Lateral Move Irrigation Equipment:

(Use only with electric or oil hydraulic drive systems which provide a uniform water distribution)

- 1. Determine size of area to be treated.
- Determine the time required to apply the least amount of water. No more than 0.2 inches of water should be applied over the area to be treated when the system and injection equipment are operated at normal pressures recommended by the equipment manufacturer's rated capacity.
- 3. Using only water, determine the injection pump output when operated at normal line pressure.
- 4. Determine the amount of **Acrobat® 50WP fungicide** required to treat area.
- Add the required amount of Acrobat 50WP fungicide and sufficient water to meet the injection time requirements of the solution tank.
- 6. Maintain constant solution tank agitation during the injection period.
- Stop injection equipment after treatment is completed. Continue to operate the system until **Acrobat 50WP** fungicide solution has cleared the last sprinkler head.

Solid-set, Side (wheel) Roll, and Hand Move Irrigation Equipment:

- 1. Determine acreage covered by sprinkler.
- 2. Fill injector solution tank with water and adjust flow rate to use contents over a 10 to 30 minute interval.

- 3. Determine the amount of **Acrobat 50WP** fungicide required to treat the area.
- Add the required amount of Acrobat 50WP fungicide into the same quantity of water used to calibrate the injection equipment.
- 5. Maintain constant solution tank agitation during the injection period.
- 6. Operate system at normal pressures recommended by the manufacturer of the injection equipment and use for the time interval established during calibration.
- 7: Inject **Acrobat 50WP** fungicide at the end of the irrigation cycle or as a separate application to maximize foliar fungicide retention.
- Stop injection equipment after treatment is completed. Continue to operate the system until **Acrobat 50WP** fungicide solution has cleared the last sprinkler head.

DIRECTIONS FOR APPLICATION

Maximum benefit of Acrobat[®] 50WP fungicide from foliar applications requires thorough coverage of the plant. To obtain thorough coverage of foliage, use proper spray pressure and a minimum of 20 gallons per acre.

Сгор	Target Disease	Use Rate: Oz. Product per Acre per Application	General Recommendations	Restrictions
Bulb Vegetables: Garlic Garlic, great-headed	Downy Mildew (Peronospora destructor)	6.4	Acrobat 50WP must be applied as a tank mix with another fungicide active against downy mildew. DO NOT	DO NOT make more than 5 applications per season. DO NOT exceed 32 oz. per
Leek Onion, dry bulb Onion, green Onion, Welch Shallot			make more than two sequential applications of Acrobat 50WP before alternating to another effective fungicide with a mode of action different from Acrobat 50WP for at least one application.	acre per growing season. DO NOT use less than 20 gallons of water per acre for ground applications and 5
			Begin applications when condi- tions favor disease develop- ment. Continue applications on a 5-7 day spray schedule as needed until weather condi- tions favoring infection and sporulation decrease.	Bulbs or leaves may be har- vested on the day of the last application after sprays have dried.

Maximum benefit of Acrobat[®] 50WP fungicide from foliar applications requires thorough coverage of the plant. To obtain thorough coverage of foliage, use proper spray pressure and a minimum of 20 gallons per acre.

Сгор	Target Disease	Use Rate: Oz. Product per Acre per Application	General Recommendations	Restrictions
Cucurbit Vegetables: Cantaloupe Chayote Chinese waxgourd Citron melon Cucumber Gherkin Gourd, edible Melon <i>Momordica</i> spp. Muskmelon Pumpkin Squash, summer Squash, winter Watermelon	Downy Mildew (<i>Pseudoperonospora</i> <i>cubensis</i>)	6.4	make more than two sequential applications of Acrobat 50WP before alternating to another effective fungicide with a mode	DO NOT use less than 20 gallons of water per acre for ground applications and 5

Maximum benefit of Acrobat[®] 50WP fungicide from foliar applications requires thorough coverage of the plant. To obtain thorough coverage of foliage, use proper spray pressure and a minimum of 20 gallons per acre.

Сгор	Target Disease	Use Rate: Oz. Product per Acre per Application	General Recommendations	Restrictions
Cucurbit Vegetables:	Phytophthora Blight	6.4	Acrobat 50WP must be	DO NOT make more than 5
(continued)	or Crown Rot		applied as a tank mix with	applications per season.
Cantaloupe Chayote Chinese waxgourd Citron melon Cucumber Gherkin Gourd, edible Melon	(Phytophthora capsici)		another fungicide active against Phytophthora Blight. DO NOT make more than two sequential applications of Acrobat 50WP before alternating to another effective fungicide with a mode of action different from Acrobat 50WP for at least one application.	DO NOT exceed 32 oz per acre per growing season. DO NOT use less than 20 gallons of water per acre for ground applications and 5
<i>Momordica</i> spp. Muskmelon Pumpkin Squash, summer Squash, winter Watermelon			Begin applications when plants are 4-6 inches high or prior to the onset of disease infection and spray to runoff. Applications should be made on a 5-7 day spray schedule under higher disease pressure and on a 7-10 day spray schedule under low to moder- ate disease pressure.	Cucurbits may be harvested on the day of the last appli- cation after sprays have dried.

5

Maximum benefit of Acrobat[®] 50WP fungicide from foliar applications requires thorough coverage of the plant. To obtain thorough coverage of foliage, use proper spray pressure and a minimum of 20 gallons per acre.

Group (except Tomato)*(Phytophthora capsic)tank mix with another fungicide active against Phytophthora blight. DO NOT make more than two sequential applications of Acrobat 50WP before alternating to another effective fungi- cide with a mode of action different from Acrobat 50WP for at least one applications.applications per season acre per growing season acre per g	Сгор	Target Disease	Use Rate: Oz. Product per Acre per Application	General Recommendations	Restrictions
apply every 7:10 days. When envi- ronmental conditions have been con- ducive for diseases, or when disease has been detected within the field or nearby, a 5-7 day schedule is recom-	Group (except Tomato)* Eggplant Ground cherry Pepino Pepper (all varieties)	(Phytophthora capsici		tank mix with another fungicide active against Phytophthora blight. DO NOT make more than two sequential applications of Acrobat 50WP before alternating to another effective fungi- cide with a mode of action different from Acrobat 50WP for at least one application. Begin applications when plants are 4- 6 inches high and prior to the onset of disease infection. Apply on a 5-10 day spray schedule. Prior to the onset of conditions favoring infection, apply every 7-10 days. When envi- ronmental conditions have been con- ducive for diseases, or when disease has been detected within the field or nearby, a 5-7 day schedule is recom- mended.	DO NOT exceed 32 oz. per acre per growing season. DO NOT use less than 20 gallons of water per acre for ground applications and 5 gallons per acre for aerial applications. Fruiting vegetables (except tomato) may be harvested on the day of the last appli- cation after the spray has

12

!

Maximum benefit of Acrobat® 50WP fungicide from foliar applications requires thorough coverage of the plant. To obtain thorough coverage of foliage, use proper spray pressure and a minimum of 20 gallons per acre.

Сгор	Target Disease	Use Rate: Oz. Product per Acre per Application	General Recommendations	Restrictions
Brassica Leafy	Downy Mildew	6.4	Acrobat 50WP must be applied as a	DO NOT make more than 5
Vegetables*	(Peronospora		tank mix with another fungicide active	applications per season.
Leafy:	parasitica)		against downy mildew. DO NOT	DO NOT and an and
Broccoli raab			make more than two sequential appli-	DO NOT exceed 32 oz. per
Chinese Cabbage			alternating to another effective fungi-	acre per growing season.
(Bok Choy)			cide with a mode of action different	DO NOT use less than 20
Collards		· ·	from Acrobat 50WP for at least one	gallons of water per acre for
Kale			application.	ground applications and 5
Mizuma Mustard Greens				gallons per acre for aerial
Mustard Spinaci			Begin applications when conditions	applications.
Rape Greens			favor disease development. Continue	
Head and Stem:	1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -		applications on a 7 day spray sched-	Leafy Brassica Greens may
Broccoli			ule as needed until weather conditions	be harvested on the day of
Chinese Broccoli			favoring infection and sporulation	the last application after the
Brussels Sprouts			luecrease.	spray has dried.
Cabbage				
Chinese Cabbage				DO NOT apply within 7
(Napa)	1			days of harvest for Brassica
Chinese Mustard				Head and Stem Vegetables
Cauliflower			· · ·	
Cavalo Broccoli				Not registered for use on
Kohirabi			:	these crops in California

Maximum benefit of Acrobat® 50WP fungicide from foliar applications requires thorough coverage of the plant. To obtain thorough coverage of foliage, use proper spray pressure and a minimum of 20 gallons per acre.

	Crop	Target Disease	Use Rate: Oz. Product per Acre per Application	General Recommendations	Restrictions
Hops		Downy Mildew (Pseudoperonospora humuli)	6.4	Acrobat 50WP must be applied as a tank mix with another fungicide active against downy mildew. Applications of Acrobat 50WP must be alternated with at least one application of an effective downy mildew fungicide with a mode of action different from Acrobat 50WP. Use Acrobat 50WP as a preventive foliar spray before infection occurs. The application interval for Acrobat 50WP is 10 days.	applications per season. DO NOT exceed 19.2 oz. per acre per growing sea-

.

ly

33

Maximum benefit of Acrobat® 50WP fungicide from foliar applications requires thorough coverage of the plant. To obtain thorough coverage of foliage, use proper spray pressure and a minimum of 20 gallons per acre.

Сгор	Target Disease	Use Rate: Oz. Product per Acre per Application	General Recommendations	Restrictions
Lettuce (head and leaf)	Downy Mildew (<i>Bremia</i> <i>lactucae</i>)	6.4	Acrobat 50WP must be applied as a tank mix with another fungicide active against downy mildew. DO NOT make more than two sequential applications of Acrobat 50WP before alternating to another effective fungicide with a mode of action different from Acrobat 50WP for at least one application. Begin applications prior to the onset of disease infection. Continue applications on a 5-10 day spray schedule. Use shorter spray intervals when disease pressure is higher.	DO NOT make more than 5 applications per season. DO NOT exceed 32 oz. per acre per growing season. DO NOT use less than 20 gallons of water per acre for ground applications and 5 gallons per acre for aerial applications. Plants may be harvested on the day of the last application after sprays have dried.

Maximum benefit of Acrobat[®] 50WP fungicide from foliar applications requires thorough coverage of the plant. To obtain thorough coverage of foliage, use proper spray pressure and a minimum of 20 gallons per acre.

Сгор	Target Disease	Use Rate: Oz. Product per Acre per Application	General Recommendations	Restrictions
Potato	Late Blight (Phytophthora infestans)	4 - 6.4	5-10 day application intervals. Disease pressure and environmental conditions should determine applica- tion rates and spray intervals. Use higher rates and shorter spray inter- vals when disease pressure is higher.	DO NOT exceed 32 oz. per acre per growing season. DO NOT use less than 20 gallons of water per acre for ground applications and 5 gallons per acre for aerial applications. DO NOT apply within 4 days of harvest in all states.

Maximum benefit of Acrobat® 50WP fungicide from foliar applications requires thorough coverage of the plant. To obtain thorough coverage of foliage, use proper spray pressure and a minimum of 20 gallons per acre.

Сгор	Target Disease	Use Rate: Oz. Product per Acre per Application	General Recommendations	Restrictions
Potato (<i>continued</i>)	Tuber Blight (<i>Phytophthora</i> <i>infestans</i>) MANAGEMENT OR SUPPRESSION	6.4	When used according to label recom- mendations for Late Blight control, Acrobat 50WP can also reduce tuber blight. To maximize activity against tuber blight, begin fungicide applications before disease onset occurs and in accordance with local late blight advi- sory system recommendations. Also, maintain regular application schedules and obtain thorough plant coverage. Acrobat 50WP may be applied after vine kill.	days of harvest in all states.

3

Maximum benefit of Acrobat^e 50WP fungicide from foliar applications requires thorough coverage of the plant. To obtain thorough coverage of foliage, use proper spray pressure and a minimum of 20 gallons per acre.

Сгор	Target Disease	Use Rate: Oz. Product per Acre per Application	General Recommendations	Restrictions
Taro*	Phytophthora rot and leaf blight (<i>Phytophthora</i> spp.)	6.4	Acrobat 50WP must be applied as a tank mix with another fungicide active against leaf blight. DO NOT make more than two sequential applications of ACROBAT 50WP before alternat- ing to another effective fungicide with a mode of action different from Acrobat 50WP for at least one appli- cation.	DO NOT make more than 5 applications per season. DO NOT exceed 32 oz. per acre per growing season. DO NOT use less than 20 gallons of water per acre for ground applications and 5 gallons per acre for aerial
			Begin applications when conditions favor disease development. Continue applications on a 7 day spray sched- ule as needed until weather conditions favoring infection and sporulation decrease.	DO NOT apply within 7 or 30 days of harvest for the greens and corms, respec- tively. Not registered for use on these crops in California.

Maximum benefit of Acrobat[®] 50WP fungicide from foliar applications requires thorough coverage of the plant. To obtain thorough coverage of foliage, use proper spray pressure and a minimum of 20 gallon's per acre.

(Сгор	Target Disease	Use Rate: Oz. Product per Acre per Application	General Recommendations	Restrictions
Tobacco		Blue Mold (Peronospora tabacina)	2 - 8	See specific use directions in the sec- tion titled DIRECTIONS FOR USE IN FIELD GROWN TOBACCO	
					Tobacco may be harvest the day of the last application, after spray has dried.
		•			
		· .			

.

Maximum benefit of Acrobat[®] 50WP fungicide from foliar applications requires thorough coverage of the plant. To obtain thorough coverage of foliage, use proper spray pressure and a minimum of 20 gallons per acre.

Сгор	Target Disease	Use Rate: Oz. Product per Acre per Application	General Recommendations	Restrictions
Tomato - Non-staked	Late Blight (<i>Phytophthora</i> <i>infestans</i>)	6.4	Begin applications when plants are 4- 6 inches high and prior to the onset of disease infection. Apply on a 5-10 day spray schedule. Prior to the onset of conditions favoring infection, apply every 7-10 days. When envi- ronmental conditions have been con- ducive for diseases, or when disease has been detected within the field or nearby, a 5-7 day schedule is recom- mended. Apply spray to obtain thorough and complete plant coverage.	DO NOT exceed 32 oz. per acre per growing season. DO NOT use less than 20 gallons of water per acre for ground applications and 5 gallons per acre for aerial applications. DO NOT apply within 4 days of harvest in all states.

Maximum benefit of Acrobat[®] 50WP fungicide from foliar applications requires thorough coverage of the plant. To obtain thorough coverage of foliage, use proper spray pressure and a minimum of 20 gallons per acre.

Сгор	Target Disease	Use Rate: Oz. Product per Acre per Application	General Recommendations	Restrictions
Tomato - Staked	Late Blight (<i>Phytophthora</i> <i>infestans</i>)	6.4	Begin applications when plants are 4-6 inches high and prior to the onset of dis- ease infection. Apply on a 5-10 day spray schedule. Prior to the onset of conditions favoring infection, apply every 7-10 days. When environmental conditions have been conducive for diseases, or when disease has been detected within the field or near- by, a 5-7 day schedule is recommended. For ground application us a minimum of 20 gallons of spray volume and increase the spray volume as the plants grow dur- ing the season. Spray volume should be proportional to the amount of plant tissue to be covered such that 100 gallons of spray per acre is used on mature plants. For aerial applications, follow the direc- tions for non-staked tomatoes above. Apply spray to obtain thorough and com- plete plant coverage.	DO NOT apply more than 32 oz. per acre per growing season. DO NOT use less than 20 gallons of water per acre for ground applications. DO NOT apply within 4 days of harvest in all states.

DIRECTIONS FOR USE IN FIELD GROWN TOBACCO

ACCEPTABLE CONTROL OF BLUE MOLD AND MANAGEMENT OF FUNGICIDE RESISTANCE WITH Acrobate 50WP fungicide REQUIRES THOROUGH COVERAGE TO LEAF SURFACES THROUGHOUT THE ENTIRE PLANT CANOPY.

The use of Acrobat 50WP in all tobacco transplant production systems (including greenhouse, float-beds, and traditional ground beds) is STRICTLY PROHIBITED. DO NOT use Acrobat 50WP in transplant water.

TRACTOR-DRIVEN SPRAYER APPLICATIONS TO TOBACCO

To obtain thorough coverage of the foliage, use proper spray pressure, fungicide nozzles (such as hollow cones), proper nozzle spacing (nozzles over the row and multiple nozzles on the drops, **SEE DIAGRAM** below), and slow tractor speed. The following diagram outlines the correct spray nozzle configuration for field applications in tobacco.

Application Following Transplanting Up To 3 Weeks

Another Row

DIRECTIONS FOR USE IN FIELD GROWN TOBACCO (continued)

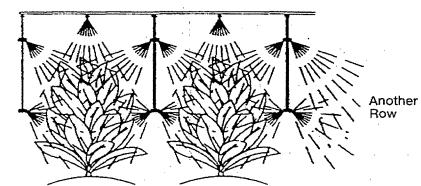
ACCEPTABLE CONTROL OF BLUE MOLD AND MANAGEMENT OF FUNGICIDE RESISTANCE WITH Acrobat® 50WP fungicide REQUIRES THOROUGH COVERAGE TO LEAF SURFACES THROUGHOUT THE ENTIRE PLANT CANOPY.

The use of Acrobat 50WP in all tobacco transplant production systems (including greenhouse, float-beds, and traditional ground beds) is STRICTLY PROHIBITED. DO NOT use Acrobat 50WP in transplant water.

TRACTOR-DRIVEN SPRAYER APPLICATIONS TO TOBACCO

To obtain thorough coverage of the foliage, use proper spray pressure, fungicide nozzles (such as hollow cones), proper nozzle spacing (nozzles over the row and multiple nozzles on the drops, **SEE DIAGRAM** below), and slow tractor speed. The following diagram outlines the correct spray nozzle configuration for field applications in tobacco.

Application To Mid - Size Plants (3-5 Weeks After Transplanting)



DIRECTIONS FOR USE IN FIELD GROWN TOBACCO (continued)

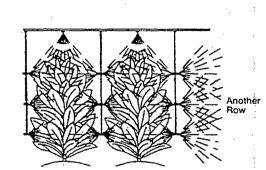
ACCEPTABLE CONTROL OF BLUE MOLD AND MANAGEMENT OF FUNGICIDE RESISTANCE WITH Acrobat® 50WP fungicide REQUIRES THOROUGH COVERAGE TO LEAF SURFACES THROUGHOUT THE ENTIRE PLANT CANOPY.

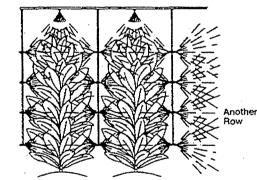
The use of Acrobat 50WP in all tobacco transplant production systems (including greenhouse, float-beds, and traditional ground beds) is STRICTLY PROHIBITED. DO NOT use Acrobat 50WP in transplant water.

TRACTOR-DRIVEN SPRAYER APPLICATIONS TO TOBACCO

To obtain thorough coverage of the foliage, use proper spray pressure, fungicide nozzles (such as hollow cones), proper nozzle spacing (nozzles over the row and multiple nozzles on the drops, **SEE DIAGRAM** below), and slow tractor speed. The following diagram outlines the correct spray nozzle configuration for field applications in tobacco.

Application To Large Plants (6 Weeks After Transplanting Up To Topping)





BACKPACK SPRAYER APPLICATIONS TO TOBACCO

Acrobat^e 50WP fungicide can be applied with backpack mist blowers or air-blast blowers. **DO NOT** apply with hand-pumped backpack sprayers due to low pressure and poor plant coverage. Spray to foliar run-off. Thorough plant coverage is essential for preventative control of blue mold.

TANK MIXES WITH INSECTICIDES

On tobacco, **Acrobat 50WP** may be tank mixed with Orthene[®] insecticide or endosulfan. The crop safety and tank mix compatibility of tank mixes with insecticides other than those previously listed have not been fully investigated. **DO NOT** mix **Acrobat 50WP** with surfactants, foliar fertilizers, household bleach, or sucker control materials when making applications to tobacco.

Application Timing, Rates and Spray Volumes To Control Blue Mold in Tobacco

Weeks of Growth After Transplant	Rate of Acrobatt 50WP (Oz. of Product)	Spray Volume for Tractor "Driven Sprayer (Gallons/Acre)	Spray-Volume for Backpack Sprayer (Gallons/Acre):
Recently transplanted to 3 weeks after transplanting	2	20	10
3-4 weeks after transplanting (Knee High)	3	40	20
4-5 weeks after transplanting (Waist High)	4	60	30
6-7 weeks after transplanting (Chest High)	6	80	40
7 weeks after transplanting and beyond (Shoulder Height Up to Topping)	. 7	100	50

AERIAL SPRAY APPLICATIONS TO TOBACCO

Aerial applications can be used by growers who have limitations with ground applications, or when weather conditions are unfavorable for timely applications by ground. Aerial sprayers should be properly calibrated before application. Determine the area to be sprayed and the output rate to determine the quantities of **Acrobat[®] 50WP fungicide** and water needed for accurate application. To obtain thorough coverage of the foliage, <u>use a minimum of 15 gallons per acre</u>, with nozzle positioning and orientation that favors plant coverage while minimizing drift.

For aerial applications, use 8 oz. of **Acrobat 50WP** per acre for applications at all growth stages. **DO NOT** use rates lower than 8 oz. of **Acrobat 50WP** per acre for aerial application.

APPLICATION TIMING AND FREQUENCY IN TOBACCO

Begin applications when the **Blue Mold Advisory states that conditions favor development of blue mold**, and before the onset of disease infection. Continue applications on a 5-7 day spray schedule until weather conditions favoring infection and sporulation decrease.

TOBACCO USE RESTRICTIONS

DO NOT exceed 8 oz. per acre per application. **DO NOT** exceed 32 oz. per acre of **Acrobat 50WP** per season for all types of applications. **Acrobat 50WP** preharvest interval is zero days. Refer to tank-mix partner labeling for preharvest interval restrictions.

The use of **Acrobat 50WP** in all tobacco transplant production systems (including greenhouses, float-beds, and traditional ground beds) prior to transplanting is **STRICTLY PROHIBITED.**

To reduce the possibility of developing blue mold resistance to both Acrobat 50WP and to mefenoxam products, the tank mixing of ACROBAT 50WP with any of these products is <u>STRICTLY PROHIBITED</u>. DO NOT use Acrobat 50WP in transplant water.

Blue mold fungal strains have developed resistance to some crop protection products after repeated use. Since the development of resistance cannot be predicted, **Acrobat 50WP** should always be used in a blue mold resistance management program. Tank mixing and thorough spray coverage are necessary to minimize the development of blue mold strains with resistance to **Acrobat 50WP**.

ROTATIONAL CROP GUIDELINES

After making the last Acrobat 50WP application, rotational crops may be planted at the following intervals:

1. Any time

Potatoes, Tomatoes, Tobacco, Bulb Vegetables, Cucurbit Vegetables, Fruiting Vegetables, Hops, Lettuce (head and leaf), Taro and Brassica Leafy Vegetables

2. One month

Barley, Oats, Wheat

Leafy vegetables, such as spinach and celery Root/tuber vegetables, such as carrot, radish and sugar beet

2Ż

ROTATIONAL CROP GUIDELINES (continued)

3

33

3.	Seven months			•
	Alfalfa	Peas	•	•
	Beans	Rice		1
	Clover	Sorghum	;	·
	Corn	Soybeans		ł .
4.	Twelve months			*

28

All other crops

DISCLAIMER

The label instructions for the use of this product reflect the opinion of experts based on research and field use. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with 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 use of, or application of the product contrary to label instructions, all of which are beyond the control of **BASF** Corporation (**BASF**). All such risks shall be assumed by the user.

BASF shall not be responsible for losses or damages resulting from use of this product in any manner not set forth on this label. User assumes all risks associated with the use of this product in any manner not specifically set forth on this label.

BASF warrants only that the material contained herein conforms to the chemical description on the label and is reasonably fit for the use therein described when used in accordance with the directions for use, subject to the risks referred to above.

BASF DOES NOT MAKE OR AUTHORIZE ANY AGENT OR REPRESENTATIVE TO MAKE ANY OTHER WARRANTIES, EXPRESS OR IMPLIED AND EXPRESSLY EXCLUDES AND DISCLAIMS ALL IMPLIED WARRANTIES OF MER-CHANTABILITY OR FITNESS FOR A PARTICULAR PUR-POSE.

BUYER'S EXCLUSIVE REMEDY AND BASF'S EXCLUSIVE LIABILITY, WHETHER IN CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL BE LIMITED TO REPAYMENT OF THE PURCHASE PRICE OF Acrobat[®]

50WP fungicide. In no case shall BASF or the seller be liable for consequential, special or indirect damages resulting from the use or handling of this product.

USES WITH OTHER PRODUCTS (TANK MIXES)

If this product is used in combination with any other product except as specifically recommended in writing by BASF, then BASF shall have no liability for any loss, damage, or injury arising out of its use in any such combination not so specifically recommended. If used in a combination recommended by BASF, the liability of BASF shall in no manner extend to any damage, loss or injury not directly caused by the inclusion of the BASF product in such combination use, and in any event shall be limited to return of the amount of the purchase price of the product.

©2004 BASF Corporation All rights reserved

Acrobat is a registered trademark of BASF Orthene is a registered trademark of Valent U.S.A. Corporation 000241-00410.20041207.NVA 2004-04-171-0293.pdf Supersedes: NVA 2003-04-171-0200

> BASF Corporation Agricultural Products 26 Davis Drive Research Triangle Park, NC 27709

