UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

February 3, 2016

Adora Clark
Sr. Regulatory Product Manager
Syngenta Crop Protection, LLC
P.O. Box 18300
Greensboro, NC 27419

Subject: PRIA Label Amendment – Expansion of the existing crop group commodity uses to Stone Fruit Group 12-12 and Tree Nut Group 14-12, and adding new uses on Ti palm, leaves, Ti palm, roots and Quinoa, grain
Product Name: Abound Flowable Fungicide
EPA Registration Number: 100-1098
Application Date: September 23, 2014
Decision Number: 495745, 495746

Dear Ms. Clark:

The application referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable under FIFRA Section 3(c)(7)(B), subject to the following conditions:

1. You must submit and/or cite all data required for registration/reregistration/registration review of your product under FIFRA when the Agency requires all registrants of similar products to submit such data.

2. You are required to comply with the data requirements described in the DCI identified below:
   a. Azoxystrobin GDCI-128810-892

   You must comply with all of the data requirements within the established deadlines. If you have questions about the Generic DCI listed above, you may contact the Chemical Review Manager in the Pesticide Reevaluation Division: http://www.epa.gov/oppsrrd1/contacts_prd.htm

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

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

Your release for shipment of the product constitutes acceptance of these conditions. If you fail to satisfy these data requirements, EPA will consider appropriate regulatory action including, among other things, cancellation under FIFRA section 6(e). If you have any questions, please contact Aswathy Balan by phone at 703-347-0510, or via email at balan.aswathy@epa.gov.

Rachel C. Holloman

Rachel C. Holloman, Chief
Fungicide and Herbicide Branch,
Registration Division,
Office of Pesticide Programs

[Master Label]

GROUP 11 FUNGICIDE

Abound® Flowable Fungicide

Broad spectrum fungicide for control of plant diseases

Active Ingredient:	
Azoxystrobin: methyl (*E*)-2-{2-[6-(2-cyanophenoxy) pyrimidin-4-yloxy]phenyl}-3-methoxyacrylate*	22.9%
Other Ingredients:	77.1%
Total:	100.0%

Contains 2.08 lb of active ingredient per gallon
*IUPAC

KEEP OUT OF REACH OF CHILDREN.

CAUTION

See additional precautionary statements and directions for use inside booklet.

Reformulation is prohibited. See individual container labels for repackaging limitations.

EPA Reg. No. 100-1098

EPA Est.

1 gallon
2.5 gallons
264 gallons
_____ gallons
Net Contents

FIRST AID	
If on skin or clothing	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center or doctor or going for treatment.	
HOTLINE NUMBER For 24-Hour Medical Emergency Assistance (Human or Animal) Or Chemical Emergency Assistance (Spill, Leak, Fire or Accident) Call **1-800-888-8372**	

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION

Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse. Wear long-sleeved shirt and long pants, socks and shoes and chemical resistant gloves made of any waterproof material such as polyvinyl chloride, nitrile rubber or butyl rubber.

Personal Protective Equipment (PPE)

Some materials that are chemically resistant to this product are listed below.
Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material such as polyvinyl chloride, nitrile rubber or butyl rubber
- Shoes plus socks

User Safety Requirements

Follow the 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.

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.

IMPORTANT: When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

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/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Environmental Hazards

Azoxystrobin is toxic to freshwater and estuarine/marine fish and aquatic invertebrates. Azoxystrobin can be persistent for several months or longer.

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or regional office of the EPA.

For terrestrial uses: Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment washwater or rinsate.

Ground Water Advisory

Azoxystrobin and a degradate of azoxystrobin are known to leach through soil to ground water under certain conditions as a result of label use. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

Surface Water Advisory

This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having a 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 azoxystrobin and a degradate of azoxystrobin 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.

Notify State and/or Federal authorities and Syngenta immediately if you observe any adverse environmental effects due to use of this 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, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, LLC or Seller. To the extent permitted by applicable law, Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

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

To the extent permitted by applicable law, in no event shall SYNGENTA be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA 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 SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

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

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Use of Abound through airblast application equipment on grapes is prohibited in the following townships and boroughs of Erie County, Pennsylvania:

> North East, Harborcreek, Lawrence Park, Erie, Presque Isle, Millcreek, Fairview, Girard and Springfield.

This prohibition is intended to help eliminate phytotoxicity problems with apples observed in this geographic location.

FAILURE TO FOLLOW THE USE DIRECTIONS AND PRECAUTIONS ON THIS LABEL MAY RESULT IN PLANT INJURY OR POOR DISEASE CONTROL.

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 4 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water is:

- Coveralls
- Chemical-resistant gloves made of any waterproof material such as polyvinyl chloride, nitrile rubber or butyl rubber
- Shoes plus socks

PRODUCT USE PRECAUTIONS

FAILURE TO FOLLOW DIRECTIONS AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR DISEASE CONTROL, AND/OR ILLEGAL RESIDUES.

ATTENTION

Abound is extremely phytotoxic to certain apple varieties.

AVOID SPRAY DRIFT. Extreme care must be used to prevent injury to apple trees (and apple fruit).

DO NOT spray Abound where spray drift may reach apple trees.

DO NOT spray when conditions favor drift beyond area intended for application. Conditions which may contribute to drift include thermal inversion, wind speed and direction, sprayer nozzle/pressure combinations, spray droplet size, etc. Contact your State extension agent for spray drift prevention guidelines in your area.

DO NOT use spray equipment which has been previously used to apply Abound to spray apple trees. Even trace amounts can cause unacceptable phytotoxicity to certain apple and crabapple varieties.

AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.

PRODUCT INFORMATION

Abound is a broad spectrum, preventative fungicide with systemic and curative properties recommended for the control of many important plant diseases. Abound Flowable Fungicide is a member of Syngenta's Plant Performance™ product line and may also improve the yield and/or quality of the crop. These additional benefits are due to positive effects on plant physiology. The effects may vary according to factors such as the crop, crop hybrid, or environment. Abound may be applied as a foliar spray in alternating spray programs or in tank mixes with other registered crop protection products. All applications must be made according to the use directions that follow.

Restrictions for Resistance Management Purposes

Greenhouse Use: To help manage fungicide resistance, do not use for commercial transplant production in the greenhouse except where specified on the label.

PRODUCT USE INSTRUCTIONS

Application: Thorough coverage is necessary to provide good disease control. Make no more spray solution than is needed for application. Avoid spray overlap, as crop injury may occur.

Adjuvants: When an adjuvant is to be used with this product, the use of an adjuvant that meets the standards of the Chemical Producers and Distributors Association (CPDA) adjuvant certification is recommended.

Efficacy: Under certain conditions conducive to extended infection periods, use another registered fungicide for additional applications if maximum amount of Abound has been used. If resistant isolates to Group 11 fungicides are present, efficacy can be reduced for certain diseases. The higher rates in the rate range and/or shorter spray intervals may be required under conditions of heavy infection pressure, with highly susceptible varieties, or when environmental conditions are conducive to disease.

INTEGRATED PEST (DISEASE) MANAGEMENT

Abound should be integrated into an overall disease and pest management strategy whenever the use of a fungicide is required. Cultural practices known to reduce disease development should be followed. This should include selection of varieties with disease tolerance, removal of plant debris in which inoculum overwinters, and proper timing and placement of irrigation. Consult your local agricultural authorities for additional IPM strategies established for your area. Abound may be used in State Agricultural Extension advisory (disease forecasting) programs which recommend application timing based on environmental factors favorable for disease development.

Crop Tolerance: Plant tolerance has been found to be acceptable for all crops on the label, however, not all possible tank-mix combinations have been tested under all conditions. When possible, it is recommended to test the combinations on a small portion of the crop to ensure that a phytotoxic response will not occur as a result of application. See Product Use Precautions for apple phytotoxicity information.

RESISTANCE MANAGEMENT

GROUP 11 FUNGICIDE

Abound (azoxystrobin) is a Group 11 fungicide. The mode of action for Abound is the inhibition of the QoI (quinone outside) site within the electron transport system [Group 11]. Fungal pathogens can develop resistance to products with the same mode of action when used repeatedly. Because resistance development cannot be predicted, use of this product should conform to resistance management strategies established for the crop and use area. Consult your local or State agricultural authorities for resistance management strategies that are complementary to those in this label. Resistance management strategies may include alternating and/or tank-mixing with products having

different modes of action or limiting the total number of applications per season. Syngenta encourages responsible resistance management to ensure effective long-term control of the fungal diseases on this label.

Follow the crop specific resistance management recommendations in the directions for use.

If no resistance recommendation on number of applications is specified in the directions for use, follow the recommendations in the table below.

If planned total number of fungicide applications per crop is:	1	2	3	4	5	6	7	8	9	10	11	12
Recommended Solo QoI fungicide sprays	1	1	2	2	2	2	2	3	3	3	3	4
Recommended QoI fungicide sprays in mixture (tank-mix or formulated)	1	2	2	2	2	3	3	4	4	5	5	6

In situations requiring multiple sprays, develop season long spray programs for Group 11 (QoI) fungicides. In crops where two sequential Group 11 fungicide applications are made, they should be alternated with two or more applications of a fungicide that is not in Group 11. If more than 12 applications are made, observe the following guidelines:

- When using a QoI fungicide as a solo product, the number of applications must be no more than ⅓ (33%) of the total number of fungicide applications per season.
- For QoI mixes in programs in which tank mixes or pre mixes of QoI with mixing partners of a different mode of action are utilized, the number of QoI containing applications must be no more than ½ (50%) of the total number of fungicide applications per season.
- In programs in which applications of QoI are made with both solo products and mixtures, the number of QoI containing applications must be no more than ½ (50%) of the total number of fungicide applications per season.

If a Group 11 fungicide is applied to the seed or soil, do not make another application with a Group 11 fungicide for at least 3 weeks.

Rotational Crop Restrictions

The following crops may be planted at the specified interval following application of Abound fungicide.

Crop Rotational Interval

	Plant back interval
Buckwheat, millet	12 months
All other crops with Azoxystrobin registered uses	0 days

SOILBORNE/SEEDLING DISEASE CONTROL

For those crops that have specific use directions for soilborne disease control:
Abound can provide control of many soilborne diseases if applied early in the growing season. Specific applications for soilborne diseases include in-furrow applications and banded applications applied over the row, either shortly after plant emergence or during herbicide applications or cultivation. These applications will provide control of pre- or postemergence damping off and diseases that infect plants at the soil-plant interface.

The use of either type of application depends on the cultural practices in the region. In some locations, one type of application may provide better disease control than the other, depending on the timing of the disease epidemic. Seedling diseases are generally controlled by in-furrow applications while banded applications are more effective against soilborne diseases that develop later in the season. Consult your local expert to get some guidance regarding application type.

Under cool, wet conditions, crop injury from soil directed applications can occur.

BANDED

- Apply Abound prior to infection as a directed spray to the soil, using single or multiple nozzles, adjusted to provide thorough coverage of the lower stems and the soil surface surrounding the plants.
- Band width should be limited to 7 inches or less.
- Apply Abound at a rate of 0.40-0.80 fl oz product (0.10-0.20 oz ai)/1000 row feet. For banded applications on 22-inch rows, the maximum application rate is 0.70 fl oz/1000 row feet.
- These applications come into contact with the foliage and are counted as foliar applications when considering resistance management.
- They may be applied during cultivation or hilling operations to provide soil incorporation.

IN-FURROW

- Apply Abound as an in-furrow spray in 3-15 gallons of water at planting.
- Mount the spray nozzle so the spray is directed into the furrow just before the seeds are covered.
- Use the higher rate when the weather conditions are expected to be conducive for disease development, if the field has a history of Pythium problems, or if minimum/low till programs are in place.

IN-FURROW APPLICATION RATES

Rate per 1000 row-feet		Row Spacing (inches)										
fl oz product	oz ai	22	30	32	34	36	38	40	48	60	72	80
		Product per Acre (fl oz)										
0.40	0.10	9.5	7.0	6.5	6.1	5.8	5.5	5.2	4.4	3.5	2.9	2.6
0.60	0.15	14.3	10.5	9.8	9.2	8.7	8.3	7.8	6.5	5.2	4.4	3.9
0.80	0.20		13.9	13.1	12.3	11.6	11.0	10.5	8.7	7.0	5.8	5.2
1.00	0.25					14.5	13.8	13.1	10.9	8.7	7.3	6.5
1.20	0.30								13.1	10.5	8.7	7.8
1.38	0.36								15.0	12.0	10.0	9.0
1.50	0.40									13.1	10.9	9.8
1.72	0.45									15.0	12.5	11.2
2.00	0.50										14.5	13.1
2.07	0.54										15.0	13.5
2.30	0.60											15.0

Do not apply more than 15 fl oz/A.

Row spacing (inches)	Row-Feet Per Acre
22	23,760
30	17,424
32	16,335
34	15,374
36	14,520
38	13,756
40	13,068
48	10,890
60	8,712
72	7,260
80	6,534

DRIP

Refer to the **Application Instructions Through Irrigation System** section.

SPRAY DRIFT MANAGEMENT

To avoid spray drift, do not apply when conditions favor drift beyond the target area. The interaction of many equipment and weather related factors determine the potential for spray drift. AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR AND THE GROWER.

ATTENTION

Abound is extremely phytotoxic to certain apple varieties.

AVOID SPRAY DRIFT. Extreme care must be used to prevent injury to apple trees (and apple fruit).

DO NOT spray Abound where spray drift may reach apple trees.

DO NOT spray when conditions favor drift beyond area intended for application. Conditions which may contribute to drift include thermal inversion, wind speed and direction, sprayer nozzle/pressure combinations, spray droplet size, etc. Contact your State extension agent for spray drift prevention guidelines in your area.

DO NOT use spray equipment which has been previously used to apply Abound to spray apple trees. Even trace amounts can cause unacceptable phytotoxicity to certain apple and crabapple varieties.

AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.

Do not apply when weather conditions favor drift from treated areas to non-target aquatic habitat.

MIXING AND APPLICATION METHODS

Spray Equipment

Abound may be applied with all types of spray equipment commonly used for making ground and aerial applications. Proper adjustments and calibration of spraying equipment to give good canopy penetration and coverage is essential for good disease control.

Nozzles

- Equip sprayers with nozzles that provide accurate and uniform application.
- Nozzles should be the same size and uniformly spaced across the boom.
- Calibrate sprayer before use.
- It is suggested that screens be used to protect the pump and to prevent nozzles from clogging.

- Screens placed on the suction side of the pump should be *16-mesh or coarser*.
- Do not place a screen in the recirculation line.
- Use 50-mesh or coarser screens between the pump and boom, and where required, at the nozzles.
- Check nozzle manufacturer's recommendations.

Pump

- Use a pump with capacity to:
  (1) Maintain 35-40 psi at nozzles
  (2) Provide sufficient agitation in tank to keep mixture in suspension - this requires recirculation of 10% of tank volume per minute.
- Use a jet agitator or liquid sparge tube for agitation.
- Do not air sparge.

For more information on spray equipment and calibration, consult sprayer manufacturers and state recommendations. For specific local directions and spray schedules, consult the current state agricultural recommendations.

Mixing Instructions

- Abound is a suspension concentrate (SC) formulation.
- Prepare no more spray mixture than is required for the immediate operation.
- Thoroughly clean spray equipment before using this product.
- Agitate the spray solution before and during application.
- Rinse spray tank thoroughly with clean water after each day's use and dispose of pesticide rinsate by application to an already treated area.

Abound Alone (No Tank Mix)

- Add ½-⅔ of the required amount of water to the spray or mixing tank.
- With the agitator running, add Abound to the tank.
- Continue agitation while adding the remainder of the water.
- Begin application of the spray solution after Abound has completely dispersed into the mix water.
- Maintain agitation until all of the mixture has been sprayed.

Abound + Tank Mixtures: Abound is usually compatible with all tank-mix partners listed on this label. To determine the physical compatibility of Abound with other products, use a jar test. Using a quart jar, add the proportionate amounts of the products to 1 qt of water. Add wettable powders and water dispersible granular products first, then liquid flowables, and emulsifiable concentrates last. After thoroughly mixing, let stand for at least 5 minutes. If the combination remains mixed or can be remixed readily, it is physically compatible. Once compatibility has been proven, use the same procedure for adding required ingredients to the spray tank.

Abound has demonstrated some phytotoxic effects when mixed with products that are formulated as emulsifiable concentrates (EC). These effects are enhanced if applications are made under cool, cloudy conditions and these conditions remain for several days following application. In addition, adjuvants that contain some form of silicone have also contributed to phytotoxicity.

Mixing in the Spray Tank

- Add ½-⅔ of the required amount of water to the spray or mixing tank.
- With the agitator running, add the tank-mix partner(s) into the tank in the same order as described above.
- Allow the material to completely dissolve and disperse into the mix water. Continue agitation while adding the remainder of the water and Abound to the spray tank.
- Allow Abound to completely disperse.
- Spray the mixture with the agitator running.

APPLICATION INSTRUCTIONS THROUGH IRRIGATION SYSTEMS (CHEMIGATION)

Application Through Irrigation Systems (Chemigation)

- Use only on crops for which chemigation is specified on this label.
- Apply this product only through center pivot, solid set, hand move, or moving wheel irrigation systems. Do not apply this product through any other type of irrigation system.
- Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
- Apply in 0.1-0.25 inches/acre. Excessive water may reduce efficacy.
- 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 system, unless the pesticide label-prescribed safety devices for 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 down and make necessary adjustments should the need arise.

Spray Preparation: Chemical tank and injector system should be thoroughly cleaned. Flush system with clean water.

Drip Irrigation: Abound may be applied through drip irrigation systems for soilborne disease control. The soil should have adequate moisture capacity prior to drip application.

Terminate drip irrigation at fungicide depletion from the main feed supply tank or after 6 hours from start, whichever is shorter. For maximum efficacy, subsequent irrigation (water only) should be delayed for at least 24 hours following drip application.

Sprinkler Irrigation

- Apply this product through sprinkler irrigation systems including center pivot, lateral move, end tow, side [wheel] roll, traveler, big gun, solid set, or hand move irrigation systems.
- Do not apply this product through any other type of irrigation system except as specified on this label.
- Apply with center pivot or continuous-move equipment distributing ½ acre-inch or less during treatment.
- In general, use the least amount of water required for proper distribution and coverage.
- If stationary systems (solid set, handlines or wheel lines other than continuous-move) are used, this product should be injected into no more than the last 20-30 minutes of the set.
- Do not apply when winds are greater than 10-15 mph to avoid drift or wind skips.
- Do not apply when wind speed favors drift beyond the area intended for treatment.
- Plant injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform treated water.
- Thorough coverage of foliage is required for good control.
- Good agitation should be maintained during the entire application period.

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

Operating Instructions

1. Do not apply when wind speed favors drift beyond the area intended for treatment.

2. 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.

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

4. 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.

5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

6. 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.

7. 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.

8. Allow sufficient time for pesticide to be flushed through all lines and all nozzles before turning off irrigation water. 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.

9. 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.

Center Pivot Irrigation Equipment

Notes: (1) Use only with drive systems which provide uniform water distribution. (2) Do not use end guns when chemigating Abound through center pivot systems because of non-uniform application.

- Determine the size of the area to be treated.
- Determine the time required to apply ⅛-½ inch of water over the area to be treated when the system and injection equipment are operated at normal pressures as specified by the equipment manufacturer. When applying Abound 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 Abound required to treat the area covered by the irrigation system.
- Add the required amount of Abound 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 Abound solution. Time the injection to last at least as long as it takes to bring the system to full pressure.
- Maintain constant solution tank agitation during the injection period.
- Continue to operate the system until the Abound solution has cleared the sprinkler head.

Solid Set, Hand Move, and Moving Wheel Irrigation Equipment

- Determine the acreage covered by the sprinklers.
- Fill injector solution tank with water and adjust flow rate to use the contents over a 20 to 30-minute interval. When applying Abound through irrigation equipment use the lowest obtainable water volume while maintaining uniform distribution.
- Determine the amount of Abound required to treat the area covered by the irrigation system.
- Add the required amount of Abound 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 Abound solution has cleared the last sprinkler head.

Specific Instructions for Public Water Systems

1. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back-flow preventer (RPZ) or the functional equivalent in the water supply line upstream 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.

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

4. The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.

6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

7. Do not apply when wind speed favors drift beyond the area intended for treatment.

DIRECTIONS FOR USE

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Alfalfa (*See* Nongrass Animal Feeds Forage, Fodder, Straw and Hay)			
Almonds	Alternaria Leaf and Fruit Spot (*Alternaria alternata*) Anthracnose (*Colletotrichum acutatum*) Leaf Blight (*Seimatosporium lichenicola*) Leaf Rust (*Tranzschelia discolor*) Scab (*Cladosporium carpophilum*) Shot Hole (*Wilsonomyces carpophilus*)	6.0-15.5 (0.10-0.25)	Abound applications should begin prior to disease development and continue throughout the season following the resistance management guidelines. Applications may be made by ground, air or chemigation. For aerial applications apply in a minimum of 15 GPA. Thorough and uniform coverage is essential for disease control. Reduced efficacy has been observed when uniform coverage cannot be obtained. Abound may be applied by air only at growth stages prior to and including 5 weeks after petal fall. An adjuvant may be added at specified rates. Anthracnose, scab and shot hole: Begin applications prior to disease development and continue at 7- to 14-day intervals throughout the season. Blossom blight: Begin applications at early bloom and continue through petal fall. Do not apply more than two sequential applications of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11.
	Brown Rot Blossom Blight (*Monilinia laxa, M. fructicola)*	12.0-15.5 (0.20-0.25)	

Specific Use Restrictions:

1) Do not apply more than 92.3 fl oz of product/A/season.
2) Do not apply more than 1.5 lb ai/A/season of azoxystrobin-containing products.
3) Do not apply within 28 days of harvest (28-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Artichoke, Globe	Ramularia Leaf Spot *(Ramularia cynarae)*	11.0-15.5 (0.18-0.25)	Begin applications prior to or in the early stages of disease development, and continue as needed throughout the season at a 2-3 week interval, up to and including the day of harvest. Do not apply at less than 7-day intervals. Applications may be made by ground, air or chemigation. For ground applications, apply in 50-200 gallons of water per acre to obtain coverage without excessive runoff. For aerial applications, apply in a minimum of 5 gallons of water per acre. An adjuvant may be added at specified rates. Do not apply more than one application of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11.
Specific Use Restrictions: 1) Do not apply more than 92.3 fl oz of product/A/season. 2) Do not apply more than 1.5 lb ai/A/season of azoxystrobin-containing products. 3) Abound may be applied the day of harvest (0-day PHI).			
Asparagus	Stemphyllium Purple Spot *(Stemphyllium vesicarium)*	6.0-15.5 (0.10-0.25)	Abound applications should begin prior to disease development and continue throughout the season on a 7- to 14-day schedule, following the resistance management guidelines. Applications may be made by ground, air or chemigation. An adjuvant may be added at specified rates. Use a minimum of 10 gallons of water per acre by ground, and minimum of 3 gallons per acre by air. An adjuvant may be added at specified rates. Do not apply more than one application of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11.
Specific Use Restrictions: 1) Do not apply more than 92.3 fl oz of product/A/season. 2) Do not apply more than 1.5 lb ai/A/season of azoxystrobin-containing products. 3) Do not apply within 100 days of harvest (100-day PHI).			

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Bananas Plantains	Black Sigatoka (*Mycosphaerella fijiensis*) Yellow Sigatoka (*Mycosphaerella musicola*)	5.5-8.5 (0.09-0.135)	Abound applications should begin prior to disease development and continue throughout the season every 12-14 days following the resistance management guidelines. Applications may be made by ground, air or chemigation. An adjuvant may be added at specified rates. Do not apply more than two sequential applications of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11.
Specific Use Restrictions: 1) Do not apply more than 66.4 fl oz of product/A/season. 2) Do not apply more than 1.08 lb ai/A/season of azoxystrobin-containing products. 3) Abound may be applied the day of harvest (0-day PHI).			
Cereals Barley Oats Rye	Kernel Blight or Black Point (*Alternaria* spp.) *(Cochiobolus sativus)* Leaf Rust (*Puccinia hordei*) *(P. recondita)*	6.0-12.0 (0.10-0.20)	Abound should be applied prior to disease development. Protecting the flag leaf is important for maximizing disease control. For best results, sufficient water volume must be used to provide thorough coverage. Abound can be applied by ground, air or chemigation. A crop oil concentrate adjuvant may be added at 1.0% v/v to optimize efficacy. For chemigation, apply in 0.1-0.25 inches/A of water. Chemigation with excessive water may lead to a decrease in efficacy. Do not apply more than two sequential applications of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11. Do not make more than two (2) applications of Abound or other Group 11 fungicide per season.
	Barley Stripe (*Drechslera graminea* = *Pyrenophora graminea*) Net Blotch (*Pyrenophora teres*) Scald *(Rhynchosporium secalis)* Septoria Leaf and Glume Blotch *(Septoria* spp., *Stagonospora* spp.) Spot Blotch *(Cochliobolus sativus)* Stem Rust *(Puccinia graminis* f.sp. tritici) Stripe Rust *(Puccinia striiformis)* Tan Spot *(Pyrenophora trichostroma)*	9.0-12.0 (0.15-0.20)	
	Powdery Mildew (*Erysiphe graminis f. sp. hordei*) Stagonospora Blotch (*Stagonospora nodorum*)	12.0 (0.20)	
Specific Use Restrictions: 1) Do not apply after Feekes 10.54. 2) Do not apply more than 0.40 lb ai/A/season of azoxystrobin-containing products. 3) Do not apply within 7 days of grazing or harvest (7-day PHI) for forage and hay.			

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Berries, Bushberry Subgroup 13-07B Aronia Berry Blueberry, Highbush Blueberry, Lowbush Buffalo Currant Chilean Guava Cranberry, Highbush Currant, Black Currant, Red Elderberry European Barberry Gooseberry Honeysuckle, Edible Huckleberry Jostaberry Juneberry (Saskatoon Berry) Lingonberry Native Currant Salal Sea Buckthorn Including all cultivars and/or hybrids of these	Alternaria Fruit Rot (*Alternaria* spp.) Anthracnose Fruit Rot (*Colletotrichum gloeosporoides*) Botryosphaeria Canker (*Botryosphaeria* spp.) Leaf Spot and Blotch *(Mycosphaerella* spp., *Septoria* spp.*)* Mummyberry (*Monilinia vaccinii-corymbosi*) Phomopsis Leaf Spot, Twig Blight and Stem Canker (*Phomopsis vaccinii*) Powdery Mildew *(Sphaerotheca* spp.) Septoria Blight (*Septoria* spp.) Spur Blight *(Didymella spp., Phoma* spp.*)*	6.0-15.5 (0.10-0.25)	Abound applications should begin prior to disease development and continue throughout the season on a 7- to 14-day schedule, following the resistance management guidelines. Applications may be made by ground, air or chemigation. An adjuvant may be added at specified rates. Do not apply more than two sequential applications of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11.

Specific Use Restrictions:
1) Do not apply more than 46 fl oz of product/A/season.
2) Do not apply more than 0.75 lb ai/A/season of azoxystrobin-containing products.
3) Abound may be applied the day of harvest (0-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Berries, Caneberry Subgroup 13-07A Blackberry Bingleberry Boysenberry Dewberry Lowberry Marionberry Olallieberry Youngberry Loganberry Red and Black Raspberry Wild Raspberry Including all cultivars and/or hybrids of these	Anthracnose *(Spaceloma necator)* *(Elsinoe veneta)* Botryosphaeria Canker (*Botryosphaeria dothidea*) Colletotrichum Rot *(Colletotrichum gloeosporioides)* Leaf Spot and Blotch *(Mycosphaerella* spp.*)* (*Septoria rubi*) (*Sphaerulina rubi*) Powdery Mildew (*Sphaerotheca macularis)* *(Microphaera* spp.*)* *(Oidium* spp.*)* Rosette or Double Blossom of Blackberries *(Cercosporella rubi)* Spur Blight *(Didymella applanata)*	6.0-15.5 (0.10-0.25)	Begin applications at onset of disease and continue as required until harvest. Make applications on a 7- to 14-day schedule. Use a minimum water volume of 10 gallons per acre by ground and a minimum of 3 gallons by air. Do not apply more than two sequential applications of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11.
	Blackberry Rust (*Phragmidium* spp.)	10-15.5 (0.16-0.25)	

Specific Use Restrictions:

1) Do not apply more than 92.3 fl oz of product/A/season.
2) Do not apply more than 1.5 lb ai/A/season of azoxystrobin-containing products.
3) Abound may be applied the day of harvest (0-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Berries, Low Growing Subgroup 13-07G (except Cranberry) **Strawberry** See additional crops below.	Anthracnose *(Colletotrichum fragariae)* Leather Rot *(Phytophthora cactorum)* Powdery Mildew *(Sphaerotheca macularis)* Suppression of Botrytis on the Foliage (*Botrytis cinerea*)	6.0-15.5 (0.10-0.25)	Abound applications should begin prior to disease development and continue throughout the season on a 7- to 10-day schedule, following the resistance management guidelines. Applications may be made by ground, air or chemigation. An adjuvant may be added at specified rates. For leather rot control apply 2 applications on a 7-day schedule from late bloom through harvest. **Field Nurseries**: Apply to young plants in field nurseries by ground, drip, or overhead chemigation. If applying through drip irrigation, calculate the rate as a band application with a band width equal to the root zone width. Inject Abound into the irrigation water. **For dip applications at transplanting for commercial berry production:** For suppression of root and crown rot caused by *Colletotrichum* spp., mix 5-8 fl oz of Abound per 100 gallons of water. Dip plants for 2-5 minutes. Plant treated plants as quickly as possible. It is recommended that transplants be washed to remove excess soil prior to dipping. For continued anthracnose control, follow with foliar applications beginning 2-3 weeks after transplant. Do not apply more than two sequential applications of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11.
	Soilborne Diseases Seedling Root Rot, Basal Stem Rot (*Rhizoctonia solani*)	0.40-0.80 fl oz/1000 row feet	For soilborne/seedling disease control, see directions and rates under the **SOILBORNE/SEEDLING DISEASE CONTROL** section.

Additional Low Growing Berries: Bearberry, Bilberry, Cloudberry, Muntries, Partridgeberry including all cultivars and/or hybrids of these.

Specific Use Restrictions:

1) Do not apply more than 61.5 fl oz of product/A/season.
2) Do not apply more than 1.0 lb ai/A/season of azoxystrobin-containing products.
3) Abound may be applied the day of harvest (0-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Berries, Low Growing Subgroup 13-07H (except Strawberry) **Cranberry** See additional crops below.	Cottonball *(Monilinia oxycocci)* Fruit Rots *(Physalospora vaccinii)* *(Glomerella cingulata)* *(Coleophoma empetri)* Lophodermium Twig Blight *(Lophodermium* spp.)	6.0-15.5 (0.10-0.25)	Begin applications at 5-10% bloom for fruit rot, cottonball, and twig blight. Continue applications on a 7- to 14-day schedule if conditions are favorable for disease development. Applications may be made by ground, chemigation or air. Do not apply more than two sequential applications of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11.
	Fairy Ring (suppression) (Psilocybe spp.)	15.5 (0.25)	Make the first application at bud break. Measure the ring diameter and add 10 feet to that diameter. Apply Abound at a rate equivalent to 15.5 fl oz/A in 30 – 100 gallons of water to the affected area. Irrigation (1 – 2 hours) following application is advisable to ensure penetration to the base of the plant. If necessary make another application 2 – 4 weeks later. For ground application ensure adequate water volume for thorough canopy penetration.

Additional Low Growing Berries: Bearberry; Bilberry; Blueberry, lowbush; Cloudberry; Lingonberry; Muntries; and Partridgeberry including all cultivars and/or hybrids of these

Specific Use Restrictions:

1) Do not apply more than 92.3 fl oz of product/A/season.
2) Do not apply more than 1.5 lb ai/A/season of azoxystrobin-containing products.
3) Do not treat cranberry fields used for aquaculture of fish and crustacea.
4) Do not apply when weather conditions favor drift from treated areas to non-target aquatic habitat. Applicators should use care in making applications near non-target aquatic habitats.
5) Do not apply to flooded crop.
6) Do not allow release of irrigation or flood water to non-target aquatic habitat for at least 14 days after the last application.
7) Do not apply within 3 days of harvest (3-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Brassica, Head and Stem Subgroup 5A Broccoli Chinese Broccoli (gai lon) Brussels Sprouts Cabbage Chinese Cabbage (napa) Chinese Mustard Cabbage (gai choy) Cauliflower Cavalo Broccolo Kohlrabi Including all cultivars and/or hybrids of these	Alternaria Leaf Spot *(Alternaria* spp.) Anthracnose *(Colletotrichum* spp.*)* Cercospora Leaf Spot *(Cercospora brassicicola*) Downy Mildew *(Peronospora parasitica)* Pin Rot (*Alternaria* spp.) Powdery Mildew *(Erysiphe polygoni)* Rhizoctonia Blight *(Rhizoctonia solani)* Ring Spot *(Mycosphaerella brassicicola)* White Leaf Spot *(Pseudocercosporella capsellae)* White Rust *(Albugo candida)*	6.0-15.5 (0.10-0.25)	Abound applications should begin prior to disease development and continue throughout the season on a 7- to 14-day schedule, following the resistance management guidelines. Applications may be made by ground, air or chemigation. An adjuvant may be added at specified rates. Use a minimum of 10 gallons of water per acre by ground, and minimum of 3 gallons per acre by air. Do not apply more than two applications of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11.

Specific Use Restrictions:

1) Do not apply more than 92.3 fl oz of product/A/season.
2) Do not apply more than 1.5 lb ai/A/season of azoxystrobin-containing products.
3) Abound may be applied the day of harvest (0-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Brassica, Leafy Greens Subgroup 5B Broccoli Raab Cabbage, Chinese Collards Kale Mizuna Mustard Greens Mustard Spinach Rape Greens Including all cultivars and/or hybrids of these	Alternaria Leaf Spot (*Alternaria* spp.) Anthracnose (*Colletotrichum* spp.) Black Spot (*Alternaria* spp.) Cercospora Leaf Spot (*Cercospora* spp.) Downy Mildew (*Peronospora parasitica)* Powdery Mildew (*Erysiphe polygoni)* Ring Spot (*Mycosphaerella brassicicola)* White Rust (*Albugo candida*)	6.0-15.5 (0.10-0.25)	Abound applications should begin prior to disease development and continue throughout the season on a 7- to 14-day schedule, following the resistance management guidelines. Applications may be made by ground, air or chemigation. An adjuvant may be added at specified rates. Do not apply more than one application of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11.
	Soilborne Diseases Seedling Root Rot, Basal Stem Rot (*Rhizoctonia solani*)	0.40-0.80 fl oz/1000 row feet	For soilborne/seedling disease control, see directions and rates under the **SOILBORNE/SEEDLING DISEASE CONTROL** section.

Specific Use Restrictions:

1) Do not apply more than 46 fl oz of product/A/season.
2) Do not apply more than 0.75 lb ai/A/season of azoxystrobin-containing products.
3) Abound may be applied the day of harvest (0-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Bulb Vegetables Crop Group 3-07 Garlic Leek Onion, bulb Daylily, bulb Fritillaria, bulb Garlic, bulb Garlic, great-headed, bulb Garlic, serpent, bulb Lily, bulb Onion, bulb Onion, Chinese, bulb Onion, pearl Onion, potato, bulb Shallot, bulb Onion, green Chive, fresh leaves Chive, Chinese, fresh leaves Elegans hosta Fritillaria, leaves Kurrat Lady's leek Leek Leek, wild Onion, beltsville bunching Onion, fresh Onion, green Onion, macrostem Onion, tree, tops Onion, Welsh, tops Shallot, fresh leaves Including all cultivars and/or hybrids of these	**Foliar Diseases** Cladosporium Leaf Blotch (*Cladosporium allii*) Powdery Mildew *(Leveillula taurica)* Purple Blotch and Leaf Blight *(Alternaria porri)* *(Stemphylium vesicarium)* Rust *(Puccinia allii)*	6.0-12.0 (0.10-0.20)	For downy mildew, make preventative applications on a 5- to 7-day schedule. For all other diseases, Abound applications should begin prior to disease development and continue throughout the season every 7-14 days following the resistance management guidelines. Applications may be made by ground, air or chemigation. If applications are made by air, the higher rates should be used for adequate control. An adjuvant may be added at specified rates. Do not apply more than one application of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11. Mixtures of Abound with insecticides and silicone adjuvants must be tested for crop safety before application to the crop.
	Botrytis Leaf Blight *(Botrytis aclada)* Downy Mildew *(Peronospora destructor)*	9.0-15.5 (0.15-0.25)	
	Soilborne Diseases Rhizoctonia Damping-Off *(Rhizoctonia solani)*	0.40-0.80 fl oz/1000 row feet	For soilborne/seedling disease control, see directions under the **SOILBORNE/SEEDLING DISEASE CONTROL** section. If the application is an in-furrow application, the spray should be made just prior to seed placement so that the majority of the chemical is under the seed. This will reduce the potential for phytotoxicity, especially if fertilizer is added to the application.

Specific Use Restrictions:
1) Do not apply more than 92.3 fl oz of product/A/season.
2) Do not apply more than 1.5 lb ai/A/season of azoxystrobin-containing products.
3) Abound may be applied the day of harvest (0-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Canola (see Oilseed Crops for additional information)	Alternaria Blackspot (*Alternaria* spp.) Blackleg (*Leptosphaeria maculans*) Sclerotinia Stem Rot (*Sclerotinia sclerotiorum*)	6.0-15.5 (0.10-0.25)	In general, apply 7.0 fl oz of Abound at early bud followed by 14.0 fl oz at about 45 days before harvest. A third application of 7.0 fl oz may be made 30 days before harvest. Specifically for blackleg, Abound applications should be made at the 2- to 4-leaf stage. For Alternaria or Sclerotinia, 9.0-15.5 fl oz product/A should be applied at 10-25% flowering (3-7 days following first flower). Use the higher rate under heavy disease pressure or when conditions are favorable for disease. For control of Alternaria alone, 8.0 fl oz product/A may be applied at pod stage (approximately 95% petal fall). Do not apply more than one application of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11. Applications may be made by ground, air or chemigation. Use a minimum of 10 gallons of water per acre for ground applications.

Specific Use Restrictions:

1) Do not apply more than 27.6 fl oz of product/A/season.
2) Do not apply more than 0.45 lb ai/A/season of azoxystrobin-containing products.
3) Do not apply within 30 days of harvest (30-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Carrots	Cercospora Leaf Spot *(Cercospora* spp.*)* Early Blight (*Cercospora carotae)* Late Blight *(Alternaria dauci)* Powdery Mildew *(Erysiphe* spp.*)* White Mold *(Sclerotium rolfsii)* For additional diseases, see **Vegetables, Root, Subgroup.**	9.0-20.0 (0.15-0.33)	Abound applications should begin prior to disease development and continue throughout the season every 7-14 days following the resistance management guidelines. Applications may be made by ground, air or chemigation. An adjuvant may be added at specified rates. Do not apply more than one application of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11.
	Soilborne Diseases Rhizoctonia Root Rot (*Rhizoctonia solani)*	0.40-0.80 fl oz/1000 row feet	For soilborne/seedling disease control, see directions and rates under the **SOILBORNE/SEEDLING DISEASE CONTROL** section.

Specific Use Restrictions:
1) Do not apply more than 123 fl oz of product/A/season.
2) Do not apply more than 2.0 lb ai/A/season of azoxystrobin-containing products.
3) Abound may be applied the day of harvest (0-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Celery	Early Blight (*Cercospora apii)* Late Blight (*Septoria apicola)* For additional diseases, see **Leafy Vegetables.**	9.0-15.5 (0.15-0.25)	Abound applications should begin prior to disease development and continue throughout the season every 7-14 days following the resistance management guidelines. Applications may be made by ground, air or chemigation. An adjuvant may be added at specified rates. Do not apply more than one application of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11.
	Soilborne Diseases Rhizoctonia Root Rot (*Rhizoctonia solani)*	0.40-0.80 fl oz/1000 row feet	For soilborne/seedling disease control, see directions and rates under the **SOILBORNE/SEEDLING DISEASE CONTROL** section.
Specific Use Restrictions: 1) Do not apply more than 92.3 fl oz of product/A/season. 2) Do not apply more than 1.5 lb ai/A/season of azoxystrobin-containing products. 3) Abound may be applied the day of harvest (0-day PHI).			
Christmas Trees	Diplodia Tip Blight *(Diplodia pinea)* Lophodermium Needlecast *(Lophodermium pinastri)* Swiss Needlecast *(Phaeocrytopus gaumannii)*	6.0-15.5 (0.10-0.25)	Abound applications should begin prior to disease development and continue throughout the season at 7- to 21-day intervals following the resistance management guidelines. Applications may be made by ground, air or chemigation. An adjuvant may be added at specified rates. Do not apply more than two sequential applications of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11.
Specific Use Restrictions: 1) Do not apply more than 123 fl oz of product/A/season. 2) Do not apply more than 2.0 lb ai/A/season of azoxystrobin-containing products.			

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Citrus Fruit Crop Group 10-10 Calamondin Citron Grapefruit Kumquat Lemon Lime Mandarin Orange (sour and sweet) Pummelo Satsuma Mandarin Tangerine Including all cultivars and/or hybrids of these See complete list of citrus fruit crops below.	Albinism *(Alternaria alternata pv citri*) Alternaria Leaf and Fruit Spot *(Alternaria citri)* Anthracnose *(Colletotrichum acutatum, C. gloeosporioides)* Cercospora Leaf Spot (*Cercospora* spp.) Diplodia Stem-End Rot (*Diplodia natalensis*) Greasy Spot *(Mycosphaerella citri)* Melanose *(Diaporthe citri)* Penicillium Decays Green Mold, Whisker Mold, Suppression of Blue Mold (*Penicillium* spp.) Phomopsis Stem-End Rot (*Phomopsis citrii*) Post Bloom Fruit Drop (PFD) *(Colletotrichum acutatum)* Powdery Mildew *(Erysiphe* spp.) Scab *(Elsinoe fawcettii)* Sweet Orange Scab *(Elsinoe australis)*	12.0-15.5 (0.20-0.25)	Abound applications should begin prior to disease development and continue throughout the season on 7- to 21-day intervals following the resistance management guidelines. Under conditions that favor severe disease epidemics, the higher application rates should be used. Applications may be made by ground, air or chemigation. An adjuvant may be added at specified rates. A horticultural spray oil should be used to improve control of greasy spot. Do not apply more than two sequential applications of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11. Do not make more than four (4) applications of Abound or other Group 11 fungicide per season.
	Black Spot *(Guidnardia citricarpa*)	9.0-15.5 (0.15-0.25)	
Pummelo Citrus Hybrid (Uniq fruit only)	**Soilborne Diseases** Seedling Root Rot, Basal Stem Rot (*Rhizoctonia solani*)	0.40-0.80 fl oz/1000 row feet	For soilborne/seedling disease control, see directions and rates under the **SOILBORNE/SEEDLING DISEASE CONTROL** section.

Complete List of Citrus Fruit Crops: Australian Desert Lime (*Eremocitrus glauca*); Australian Finger Lime (*Microcitrus australasica*); Australian Round Lime (*Microcitrus australis*); Brown River Finger Lime (*Microcitrus papuana*); Calamondin (*Citrofortunella microcarpa*); Citron (*Citrus medica*); Citrus Hybrids, *Citrus* spp., *Eremocitrus* spp., *Fortunella* spp., *Microcitrus* spp., and *Poncirus* spp.; Grapefruit (*Citrus paradise*); Japanese Summer Grapefruit (*Citrus natsudaidai*); Kumquat (*Fortunella* spp.); Lemon (*Citrus limon*); Lime (*Citrus aurantiifolia*); Mediterranean Mandarin (*Citrus deliciosa*); Mount White Lime (*Microcitrus garrowayae*); New Guinea Wild Lime (*Microcitrus warburgiana*); Orange, Sour (*Citrus aurantium*); Orange, Sweet (*Citrus sinensis*); Pummelo (*Citrus maxima*); Russell River Lime (*Microcitrus inodora*); Satsuma Mandarin (*Citrus unshiu*); Sweet Lime (*Citrus limetta*); Tachibana Orange (*Citrus tachibana*); Tahiti Lime (*Citrus latifolia*); Tangelo (*Citrus* x tangelo); Tangerine (Mandarin) (*Citrus reticulate*); Tangor (*Citrus nobilis*); Trifoliate Orange (*Poncirus trifoliate*); Uniq Fruit (*Citrus aurantium* Tangelo group); cultivars, varieties and/or hybrids of these.

Specific Use Restrictions:
1) Do not apply more than 92.3 fl oz of product/A/season.
2) Do not apply more than 1.5 lb ai/A/season of azoxystrobin-containing products.
3) Do not use Abound in citrus plant propagation nurseries.
4) Abound may be applied the day of harvest (0-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Clover (and stands containing Clover) (See Nongrass Animal Feeds Forage, Fodder, Straw and Hay)			
Corn Field Pop Sweet (Includes Seed Production)	Rust (*Puccinia sorghi)*	6.0-9.0 (0.10-0.15)	For gray leaf spot, apply Abound at the onset of disease. A second application may be required 14 days later if disease pressure persists. For all other diseases, Abound applications should begin prior to disease development and may continue throughout the season every 7-14 days following the resistance management guidelines. Applications may be made by ground, air or chemigation. An adjuvant may be added at specified rates. Do not apply more than two sequential applications of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11. For field corn and field corn grown for seed, do not make more than two (2) applications per season.
	Anthracnose Leaf Blight (*Colletotrichum graminicola)* Eye Spot *(Aureobasidium zeae)* Gray Leaf Spot (*Cercospora sorghi)* Northern Corn Leaf Blight (*Setosphaeria turcica)* Northern Corn Leaf Spot (*Cochliobolus carbonum*) Physoderma Brown Spot *(Physoderma maydis)* Southern Corn Leaf Blight (*Cochliobolus heterostrophus*) Southern Rust *(Puccinia polyspora)*	6.0-15.5 (0.10-0.25)	
	Early Application (V4 – V8)	6.0 (0.10)	Abound, a member of Syngenta's Plant Performance™ product line, may be applied early (V4 – V8) for early season disease control and beneficial physiological benefits. If mixing with herbicides, other than solo glyphosate products, Callisto®, Callisto® Xtra, or Halex® GT, consult your local Syngenta representative.
	Soilborne Diseases Rhizoctonia Root and Stalk Rot (*Rhizoctonia solani)*	0.40-0.80 fl oz/1000 row feet	For soilborne/seedling disease control, see directions and rates under the **SOILBORNE/SEEDLING DISEASE CONTROL** section.

Specific Use Restrictions:

1) Do not apply more than 123 fl oz of product/A/season.
2) Do not apply more than 2.0 lb ai/A/season of azoxystrobin-containing products.
3) Do not apply within 7 days of harvest (7-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Cotton	Alternaria Leaf Spot *(Alternaria* spp.) Anthracnose (*Glomerella gossypii*) Areolate Mildew *(Ramularia gossypii)* Ascochyta Blight (*A. gossypii*) Boll Rots *(Ascochyta gossypii, Alternaria* spp., *Diplodia* spp., *Phoma* spp.*)* Cotton Rust (*Puccinia schedonnardi*) Diplodia Boll Rot *(Diplodia* spp.) Hardlock *(Fusarium verticillioides)* Leaf Spots and Blights *(Alternaria* spp., Ascochyta gossypii, *Cercospora* spp., *Stemphyllium* spp.*)* Southwestern Cotton Rust (*Puccinia cacabata*) *(Puccinia* spp.*)* Stemphyllium Leaf Spot *(Stemphyllium* spp.*)* Target spot *(Corynespora cassiicola)*	6.0-9.0 (0.1-0.15)	For optimum disease control, Abound applications should begin prior to or in the early stages of disease development. Applications may be made by ground, air, or chemigation. An adjuvant may be added at specified rates. Minimum application volumes for air and ground are 5 and 10 gallons per acre, respectively. The first Abound application should be targeted approximately at pinhead square to first bloom to protect the plant from diseases. Subsequent application(s) are specified on a 14- to 21-day schedule. An additional application may be made depending on environmental conditions and the health of the cotton plant. Under poor environmental conditions conducive to seedling disease and poor cotton growth, Abound may be applied to early season cotton to suppress damping off and other diseases which result in plant stand loss. Do not apply more than two foliar applications of Abound or other Group 11 fungicides before alternating with a fungicide that has a different mode of action. Do not make more than three (3) foliar applications of Abound or other Group 11 fungicides per crop per acre per year.
	Pythium Seedling Blight *(Pythium aphanidermatum)* Rhizoctonia Seedling Blight *(Rhizoctonia solani)*	**In-Furrow** 0.40-0.80 fl oz product per 1000 row feet (0.10-0.20 oz ai per 1000 row feet)	**Abound Application Directions**: Apply Abound as an in-furrow spray in 3-7 gallons of water at planting. Mount the spray nozzle so the spray is directed into the furrow just before the seed are covered. Use the higher rate when the weather conditions are expected to be conducive for disease development, if the field has a history of Pythium problems, or if minimum/low till programs are in place. See the **SOILBORNE/SEEDLING DISEASE CONTROL** section for table illustrating total fluid ounces per acre with various row spacings.

Specific Use Restrictions:
1) Do not apply more than 27 fl oz of product/crop/season as a foliar spray.
2) Abound may be applied up to 45 days before harvest (45-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Cucurbits, Crop Group 9 Cantaloupe Chayote Chinese-Waxgourd Cucumber Gourds Honeydew Melons *Momordica* spp. (bitter melon, balsam apple) Muskmelon Watermelon Pumpkin Squash Zucchini Including cultivars and/or hybrids of these	Alternaria Blight *(Alternaria cucumerina)* Anthracnose (*Colletotrichum lagenarium*) Belly Rot (*Rhizoctonia solani*) Cercospora Leaf Spot *(Cercospora citrulina)* Downy Mildew (*Pseudoperonospora cubensis*) Gummy Stem Blight (*Didymella bryoniae*) Leaf Spots (*Alternaria* spp., *Cercospora* spp.) Myrothecium Canker *(Myrothecium roridum)* Plectosporium Blight *(Plectosporium tabacinum)* Powdery Mildew (*Sphaerotheca fuliginea*, *Erysiphe cichoracearum*) Target Leaf Spot *(Corynespora cassicola)* Ulocladium Leaf Spot (*Ulocladium cucurbitae)*	6.0-15.5 (0.10-0.25)	For both downy and powdery mildew, make preventative applications on a 5- to 7-day schedule. For belly rot control, the first application should be made at the 1-3 leaf crop stage with a second application just prior to vine tip over or 10-14 days later whichever occurs first. For all other diseases, Abound applications should begin prior to disease development and continue throughout the season every 7-14 days following the resistance management guidelines. Applications may be made by ground, air or chemigation. An adjuvant may be added at specified rates. Do not tank mix Abound with crop oil concentrates (COC), methylated spray oil (MSO) or silicon adjuvants. Do not tank mix Abound with Malathion, Kelthane®, Thiodan®, Phaser®, Lannate®, Lorsban®, M-Pede® or Botran®. Do not apply more than one application of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11. Do not make more than four (4) foliar applications of Abound or other Group 11 fungicides per crop per acre per year.
	Soilborne Diseases Rhizoctonia Root Rot (*Rhizoctonia solani*)	0.40-0.80 fl oz/1000 row feet	For soilborne/seedling disease control, see directions and rates under the **SOILBORNE/SEEDLING DISEASE CONTROL** section.

Specific Use Restrictions:
1) Do not apply more than 92.3 fl oz of product/A/season.
2) Do not apply more than 1.5 lb ai/A/season of azoxystrobin-containing products.
3) Do not apply within 1 day of harvest (1-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Fruiting Vegetables Crop Group 8-10 **Pepper** Bell Pepper Non-Bell Pepper Sweet Non-Bell Pepper **Eggplant** **Okra** **Pepino** Including all cultivars and/or hybrids of these **See specific directions for use for Tomatoes.** See complete list of fruiting vegetables below.	Anthracnose (*Colletotrichum* spp.) Powdery Mildew (*Sphaerotheca* spp.)	6.0-15.5 (0.10-0.25)	Abound applications should begin prior to disease development and continue throughout the season on a 7- to 14-day schedule, following the resistance management guidelines. Applications may be made by ground, air or chemigation. An adjuvant may be added at specified rates. Do not apply more than one application of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11.
	Soilborne Diseases Rhizoctonia Seedling Rot (*Rhizoctonia solani)*	0.40-0.80 fl oz/1000 row feet	For soilborne/seedling disease control, see directions and rates under the **SOILBORNE/SEEDLING DISEASE CONTROL** section.

Complete List of Fruiting Vegetables: African Eggplant; Bell Pepper; Eggplant; Martynia; Nonbell Pepper; Okra; Pea Eggplant; Pepino; Roselle; Scarlet Eggplant; cultivars, varieties; and/or hybrids of these.

Specific Use Restrictions:

1) Do not apply more than 61.5 fl oz of product/A/season.
2) Do not apply more than 1.0 lb ai/A/season of azoxystrobin-containing products.
3) Abound may be applied the day of harvest (0-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Grapes and Other Small Fruit Vine Climbing Subgroup 13-07F (except fuzzy kiwifruit) Amur River Grape Kiwifruit, Hardy Maypop Muscadines Schisandra Berry Including all cultivars and/or hybrids of these	Black Rot (*Guignardia bidwellii*) Downy Mildew (*Plasmopara viticola*) Phomopsis Cane and Leaf Spot (*Phomopsis viticola*) Powdery Mildew (*Uncinula necator*) **Suppression Only:** Botrytis Bunch Rot (*Botrytis cinerea)*	10.0-15.5 (0.16-0.25)	Abound applications should begin prior to disease development and continue throughout the season every 10-14 days following the resistance management guidelines. Applications may be made by ground, air or chemigation. An adjuvant may be added at specified rates. Do not apply more than two sequential foliar applications of Abound or other Group 11 fungicides before alternating with a fungicide that is not in Group 11. **ATTENTION** Abound is extremely phytotoxic to certain apple varieties. AVOID SPRAY DRIFT. Extreme care must be used to prevent injury to apple trees (and apple fruit). DO NOT spray Abound where spray drift may reach apple trees. DO NOT use spray equipment which has been previously used to apply Abound to spray apple trees. Even trace amounts can cause unacceptable phytotoxicity to certain apple and crabapple varieties. AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.

Specific Use Restrictions:
1) Do not apply more than 92.3 fl oz of product/A/season.
2) Do not apply more than 1.5 lb ai/A/season of azoxystrobin-containing products.
3) Do not apply within 14 days of harvest (14-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Grasses (grown for seed)	Ergot Stem Diseases Powdery Mildew (*Erysiphe graminis*) Rust (*Puccinia* spp.)	6.0-15.5 (0.10-0.25)	Abound applications should begin prior to disease development and continue throughout the season on a 10- to 14-day schedule, following the resistance management guidelines. Applications may be made by ground, air or chemigation. An adjuvant may be added at specified rates. Do not apply more than two sequential applications of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11.

Specific Use Restrictions:

1) Do not apply more than 49 fl oz of product/A/season.
2) Do not apply more than 0.8 lb ai/A/season of azoxystrobin-containing products.
3) Do not feed treated straw, seed, or screenings to livestock.
4) Abound may be applied up to 8 days prior to harvest (swathing) (8-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Herbs & Spices (except black pepper) **Crop Group 19** Allspice; Angelica; Anise (seed); Anise, star; Annatto; Balm; Basil; Borage; Burnet; Camomile; Caper (buds); Caraway; Caraway, Black; Cardamon; Cassia (buds); Catnip; Celery Seed; Chervil (dried); Chive; Chive, Chinese; Cinnamon; Clary; Clove (buds); Coriander (cilantro or Chinese parsley) (leaf); Coriander (seed); Costmary; Culantro (leaf and seed); Cumin; Curry (leaf); Dill (seed); Dillweed; Fennel, Common; Fennel, Florence (seed); Fenugreek; Grains of Paradise; Horehound; Hyssop; Juniper (berry); Lavender; Lemongrass; Lovage (leaf and seed); Mace; Marigold; Marjoram; Mustard (seed), Nasturtium; Nutmeg; Parsley (dried); Pennyroyal; Pepper, White; Poppy Seed; Rosemary; Rue; Saffron; Sage; Savory, Summer and Winter Sweet Bay; Tansy; Tarragon; Thyme; Vanilla; Wintergreen; Woodruff; Wormwood	Corynespora Blight *(Corynespora cassiicola)* Dill Blight *(Cercosporidium punctum)* Phoma Blight *(Passalora puncta)*	6.0-15.5 (0.10-0.25)	Abound applications should begin at the onset of disease development and continue throughout the season on a 7-day schedule, following the resistance management guidelines. Applications may be made by ground only. An adjuvant may be added at specified rates. Use a minimum of 30 gallons of water per acre. Do not apply more than two sequential applications of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11.
Wasabi	Fusarium Rhizome and Root Rot (*Pythium* spp.)	6.2-15.4 (0.10-0.25)	Abound applications should begin at the onset of disease development and continue throughout the season on a 7-day schedule, following the resistance management guidelines. Applications may be made by ground or through the irrigation system (chemigation). An adjuvant may be added at specified rates. Use a minimum of 30 gallons of water per acre. Do not apply more than two sequential applications of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11.

Specific Use Restrictions:
1) Do not apply more than 92.3 fl oz of product/A/season.
2) Do not apply more than 1.5 lb ai/A/season of azoxystrobin-containing products.
3) Abound may be applied the day of harvest (0-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Leafy Vegetables (except Brassica), Crop Group 4 Amaranth Arugula Cardoon Celery Celtuce Chervil Chrysanthemum, Edible Corn Salad Cress Dandelion Dock Endive Fennel Lettuce, Head and Leaf Orach Parsley Purslane Radicchio Rhubarb Spinach Swiss Chard Including cultivars and/or hybrids of these	**Foliar Diseases** Alternaria Leaf Spot *(Alternaria sonchi, A.* spp.) Anthracnose *(Microdochium panattonianum, Colletotrichum dematium)* Ascochyta Leaf Spot *(Ascochyta* spp.*)* Cercospora Leaf Spot *(Cercospora* spp.) Rust *(Puccinia* spp.*)* *(Uromyces* spp.*)* Septoria Leaf Spot *(Septoria petroselini)* White Rust *(Albugo occidentalis)*	6.0-15.5 (0.10-0.25)	For both downy and powdery mildew, make preventative applications on a 5- to 7-day schedule. For all other diseases, Abound applications should begin prior to disease development and continue throughout the season every 7-14 days following the resistance management guidelines. Applications may be made by ground, air or chemigation. An adjuvant may be added at specified rates. Do not apply more than one application of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11. **ATTENTION:** Applications of Abound to leafy vegetable foliage have contributed to phytotoxicity under certain circumstances. Proceed with caution with regard to tank mixes and adjuvants when treating all leafy vegetables with Abound. Abound must not be tank mixed on leaf lettuce with Ambush® WP, Pounce® WP, Aliette®, Warrior with Zeon Technology®, or another product that may increase the penetration of Abound into the leaf surface, such as, but not limited to, silicone wetters.
	Downy Mildew (*Bremia lactucae)* Powdery Mildew *(Eyrisiphe cichoracearum)*	12.0-15.5 (0.20-0.25)	
	Soilborne Diseases Webb Blight, Bottom Rot, Crater Rot, Root Rot *(Rhizoctonia solani)*	0.40-0.80 fl oz/1000 row feet	For soilborne/seedling disease control, see directions and rates under the **SOILBORNE/SEEDLING DISEASE CONTROL** section.

Specific Use Restrictions:
1) Do not apply more than 92.3 fl oz of product/A/season.
2) Do not apply more than 1.5 lb ai/A/season of azoxystrobin-containing products.
3) Abound may be applied the day of harvest (0-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Legume Vegetables, Dry and Succulent, Crop Group 6 and Legume Vegetables, Foliage of any Cultivar of Bean *(Phaseolus* spp.) and Field Pea (*Pisum* spp.), Crop Group 7 Bean (*Lupinus* spp.) (includes grain lupin, sweet lupin, white lupin, and white sweet lupin) Bean (*Phaseolus* spp.) (includes field bean, kidney bean, lima bean,navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean) Bean (*Vigna* spp.) (includes adzuki bean, asparagus bean, blackeyed pea, cowpea, catjang, Chinese longbean, crowder pea, moth bean, mung bean, rice bean, southern pea, urd bean, yardlong bean) Bean (Glycine max) Soybean, Immature Seed (edamame) Broad bean (fava bean) (*Vicia faba*) Chickpea (garbanzo bean) (*Cicer arietinum*) Guar (*Cyamopsis tetragonoloba*) Jackbean (*Canavalia ensiformis)* Lablab Bean (hyacinth bean) *(Lablab purpureus)* Lentil (*Lens esculenta*) Pea (*Pisum* spp.) (includes dwarf pea, edible-pod pea, English pea, garden pea, green pea, field pea, snow pea, sugar snap pea) Pigeon Pea (*Cajanus cajan*) Sword Bean *(Canavalia gladiata*)	Bean Rust (*Uromyces appendiculatus*)	6.0 (0.10)	Abound applications should begin prior to disease development and continue throughout the season every 7-14 days following the resistance management guidelines. Use the higher rates under severe disease pressure. Applications may be made by ground, air or chemigation. An adjuvant may be added at specified rates. For rust, use of a non-ionic surfactant is recommended. Do not apply more than two sequential applications of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11.
	Alternaria Blight (*Alternaria* spp.) Alternaria Leaf Spot (*Alternaria alternata)* Anthracnose (*Colletotrichum lindemuthianum)* Ascochyta Blight (*Mycosphaerella pinodes)* Ascochyta Leaf and Pod Spot (*Ascochyta* spp.) Ascochyta Leaf Spot (*Ascochyta phaseolorum)* Rust (*Phakopsora* spp.) Southern Blight (*Sclerotium rolfsii*) Web Blight (*Rhizoctonia solani)*	6.0-15.5 (0.10-0.25)	
	Soilborne Diseases Rhizoctonia Root Rot (*Rhizoctonia solani*)	0.40-0.80 fl oz/1000 row feet	For soilborne/seedling disease control, see directions and rates under the **SOILBORNE/SEEDLING DISEASE CONTROL** section. Abound can be applied to the furrow and covering soil at planting time in a 7-inch band. Avoid a concentrated stream directly on the seed or delayed emergence may occur. If using a narrow spray as an in-furrow spray, adjust the spray stream to hit the soil next to the seed but not hit the seed. NOTE: Conduct a seed safety test with your crop before making in-furrow applications.

Specific Use Restrictions:

1) Do not apply more than 92.3 fl oz of product/A/season.
2) Do not apply more than 1.5 lb ai/A/season of azoxystrobin-containing products.
3) Do not apply within 14 days of harvest (14-day PHI) of dry legume vegetables (dry bean and dry pea seeds).
4) Abound may be applied the day of harvest (0-day PHI) for succulent beans and peas.
5) For use on soybeans, please refer to the soybean crop directions for use.

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Mint (Fresh or for processing into mint oil)	Leaf Spot (*Ramularia* spp.) (*Alternaria* spp.) (*Phoma,* spp.) Powdery mildew (*Erysiphe* spp.) Rust (*Puccinia menthae*)	6.0-15.5 (0.10-0.25)	Abound applications should begin prior to disease development and continue throughout the season on a 7- to 10-day schedule, following the resistance management guidelines. Applications may be made by ground, air or chemigation. An adjuvant may be added at specified rates. Do not apply more than two sequential applications of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11.
	Soilborne Diseases Seedling Root Rot, Basal Stem Rot (*Rhizoctonia solani*)	0.40-0.80 fl oz/1000 row feet	For soilborne/seedling disease control, see directions and rates under the **SOILBORNE/SEEDLING DISEASE CONTROL** section.

Specific Use Restrictions:
1) Do not apply more than 46 fl oz of product/A/season.
2) Do not apply more than 0.75 lb ai/A/season of azoxystrobin-containing products.
3) For processed mint, do not apply within 7 days of harvest (7-day PHI).
4) For fresh mint, Abound may be applied the day of harvest (0-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Nongrass Animal Feeds Forage, Fodder, Straw and Hay, Crop Group 18 For pure/mixed stands of the following or stands mixed with grasses: Alfalfa (*Medicago sativa* subsp. *sativa*) Bean, Velvet (*Mucuna pruriens* var. *utilis*) Clover (*Trifolium* spp., *Melilotus* spp.) Kudzu (*Pueraria lobata*) Lespedeza (*Lespedeza* spp.) Lupin (*Lupinus* spp.) Sainfoin (*Onobrychis viciifolia*) Trefoil (*Lotus* spp.) Vetch (*Vicia* spp.) Vetch, Crown (*Coronilla varia*) Vetch, Milk (*Astragalus* spp.)	Alternaria Leaf Spot (*Alternaria* spp.) Anthracnose *(Colletotrichum trifolii)* Black Patch *(Rhizoctonia leguminicola)* Cercospora Leaf Spot (*Cercospora* spp.) Common Leaf Spot *(Pseudopezizza solani)* Downy Mildew (*Peronospora* spp.) Leaf Spot *(Leptospaerulina briosiai)* Powdery Mildew *(Oidium* spp., *Erysiphe* spp.) Rhizoctonia and Stem Blight *(Rhizoctonia solani)* Rust (*Phakopsora* spp.) (*Uromyces* spp.) Spring Black Stem and Leaf Spot *(Phoma medicaginis)* Stagonospora Leaf Spot *(Stagonospora meliloti)* Stemphyllium Leaf Spot *(Stemphyillium* spp.) Summer Black Stem and Leaf Spot *(Cercospora medicaginis)* Yellow Leaf Blotch *(Leptotrichilia medicaginis)*	6.0-15.5 (0.10-0.25)	Abound applications should begin prior to disease development and continue throughout the season. Use the higher rates under severe disease pressure. Applications may be made by ground, air or chemigation. Use of an additive such as crop oil concentrate or non-ionic surfactant is recommended. For management of outbreaks of Asian soybean rust and other Puccinia species on alternate host species such as kudzu, lespedeza, trefoil and vetch, apply Abound to forages grown in the vicinity of soybeans and other legume crops (beans and peas) as a part of an Asian rust disease management strategy. Consult with local experts and university extension agents for the latest advice. Do not apply more than three sequential applications of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11.
	Sclerotinia Crown Rot and Wilt on Clover *(Sclerotinia trifoliorum)*	10.0 (0.17)	

Specific Use Restrictions:

1) Do not apply more than 0.25 lb ai/A per cutting.
2) Do not apply more than 0.75 lb ai/A/season of azoxystrobin-containing products.
3) Do not apply within 14 days of grazing or harvest (14-day PHI) for forage and hay.
4) Not for use on rangeland.

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Oilseed Crops Crop Group 20 Crambe Flax Mustard, Indian Mustard, Field Mustard, Black Rapeseed Rapeseed, Indian Safflower Sunflower Including all cultivars and/or hybrids of these See complete list of oilseed crops below.	Alternaria Leaf Spot (*Alternaria* spp.) Downy Mildew (*Plasmopora halstedii, Plasmopora helianthi*) Pasmo (*Septoria linicola garass*) Sunflower Rust (*Puccinia helianthi*)	6.0-15.5 (0.1-0.25)	Apply 6.0 fl oz of Abound at early bud followed by 14.0 fl oz at about 45 days before harvest. A third application of 7.0 fl oz may be made 30 days before harvest. Applications may be made by ground, air or chemigation. Use a minimum of 10 gallons of water per acre for ground applications. Do not apply more than two sequential applications of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11.

Complete List of Oilseed Crops: Borage; Calendula; Castor Oil Plant; Chinese Tallowtree; Cottonseed; Crambe; Cuphea; Echium; Euphorbia; Evening Primrose; Flax Seed; Gold of Pleasure; Hare's Ear Mustard; Jojoba; Lesquerella; Lunaria; Meadowfoam; Milkweed; Mustard Seed; Niger Seed; Oil Radish; Poppy Seed; Rapeseed; Rose Hip; Safflower; Sesame; Stokes Aster; Sunflower; Sweet Rocket; Tallowwood; Tea Oil Plant; Vernonia; cultivars, varieties, and/or hybrids of these.

Specific Use Restrictions:

1) Do not apply more than 27 fl oz of product/A/season.
2) Do not apply more than 0.45 lb ai/A/season of azoxystrobin-containing products.
3) Do not apply within 30 days of harvest (30-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Peanuts	**Soilborne Diseases – early season (in-furrow application)** Aspergillus Crown Rot (*Aspergillus niger*) Pythium Damping Off (*Pythium* spp.) Stem Rot/White Mold Suppression (*Sclerotium rolfsii*)	0.40-0.80 fl oz/1000 row feet	Apply Abound in-furrow at planting for control of various seed/seedling diseases including early season suppression of stem rot. See directions and rates under **PRODUCT INFORMATION** section.
	Soilborne Diseases – mid-late season Rhizoctonia Peg and Pod Rot (*Rhizoctonia solani*) Stem Rot/White Mold (*Sclerotium rolfsii*) **Suppression Only:** Cylindrocladium Black Rot (*Cylindocladium crotalariae*) Pythium Pod Rot (*Pythium myriotylum*)	12.0-24.5 (0.20-0.40)	Abound should be applied at approximately 60 and 90 days after planting as a foliar application. This application regime may be applied earlier in the season if environmental conditions favor disease development. These two applications of Abound will provide protection against the soil borne diseases and will also provide control of the foliar diseases listed for a 10- to 14-day period after each spray. Under heavy disease pressure and/or where there is high rainfall and/or irrigation, use 18.5-24.5 fl oz/A. For light disease pressure and dry environmental conditions (non-irrigated, low rainfall), use 12.0-24.5 fl oz/A. For control of Pythium, a rate of 24.5 fl oz/A is required. Additional applications of other fungicides on a leaf spot application schedule will be required to provide season-long disease control of the leaf spot diseases. Applications may be made by ground, air or chemigation. An adjuvant may be added at specified rates.
	Foliar Diseases Early Leaf Spot (*Cercospora arachidicola*) Late Leaf Spot (*Cercosporidium personatum*) Rust (*Puccinia arachidis*) Web Blotch (*Phoma arachidicola*)	6.0-18.5 (0.10-0.30)	For foliar disease control only, a lower rate of Abound may be applied on a 10- to 14-day interval. Do not apply more than two sequential applications of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11.

Specific Use Restrictions:
1) Do not apply more than 49 fl oz of product/A/season.
2) Do not apply more than 0.8 lb ai/A/season of azoxystrobin-containing products.
3) Do not apply within 14 days of harvest (14-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Pistachios	Alternaria Late Blight *(Alternaria alternata)* Botryosphaeria Panicle and Shoot Blight (*Botryosphaeria dothidea*) Septoria Leaf Spot (*Septoria pistaciarum*)	6.0-15.5 (0.10-0.25)	Abound applications should begin prior to disease development and continue throughout the season on 7- to 21-day intervals following the resistance management guidelines. Applications may be made by ground, air or chemigation. An adjuvant may be added at specified rates. Do not apply more than two sequential applications of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11.

Specific Use Restrictions:
1) Do not apply more than 92.3 fl oz of product/A/season.
2) Do not apply more than 1.5 lb ai/A/season of azoxystrobin-containing products.
3) Do not apply within 7 days of harvest (7-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Potatoes	Black Dot (*Colletotrichum coccodes)* Early Blight (*Alternaria solani*) Late Blight (*Phytophthora infestans*) Powdery Mildew (*Erysiphe cichoracearum)*	6.0-20.0 (0.10-0.33)	**Early blight** - For a 7-day application schedule, use Abound 6.2 fl oz product/A. For a 14-day application schedule, use the 12.0 fl oz product/A rate. **Late blight** - Apply Abound at 12.0 fl oz product/A on a 7-day schedule. Initiate late blight applications in a preventative schedule prior to disease development according to local practices. If late blight symptoms develop or conditions favor disease, switch immediately to a non-Group 11 fungicide, using a 5-day schedule. Addition of a spreader/sticker may improve coverage. For all other diseases, Abound applications should begin prior to disease development and continue throughout the season every 7-14 days following the resistance management guidelines. Use the high rate and the shorter interval if disease epidemics are severe. Applications may be made by ground, air or chemigation. Do not apply more than one application of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11.
	Soilborne Diseases Black Dot (*Colletotrichum coccodes)* Black Scurf *(Rhizoctonia solani)* Silver Scurf *(Helminthosporium solani)*	0.40-0.80 fl oz/1000 row feet	For soilborne/seedling disease control, see directions and rates under the **SOILBORNE/SEEDLING DISEASE CONTROL** section.

Specific Use Restrictions:
1) Do not apply more than 123 fl oz of product/A/season.
2) Do not apply more than 2.0 lb ai/A/season of azoxystrobin-containing products.
3) Do not apply within 14 days of harvest (14-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Quinoa	Leaf Spot *(Ascochyta hyalospora)* Stalk Rot *(Phoma exigua*)	12 (0.20)	Apply prior to disease development. An adjuvant may be added at recommended rates.

Application Directions: Abound can be applied by either ground, chemigation, or aerial application.

Specific Use Restrictions:

1) Do not apply more than 0.40 lb ai/A/season of azoxystrobin-containing products.
2) Do not apply within 7 days (7-day PHI) for forage and hay.
3) Do not apply within 14 days of grazing (14-day PHI).
4) Do not apply within 30 days of harvest (30-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Rice	**Sheath/Stem Diseases** Sheath Blight (*Rhizoctonia solani*)	6.0-18.5 (0.10-0.30)	Abound should be applied prior to disease development. Applications may be made by ground, air or chemigation. For aerial application, volumes should be 5-10 GPA. An adjuvant may be added at specified rates. For sheath blight control, application rates may vary from 9.0 to 12.0 fl oz/A depending on the growth stage of the rice and the severity of the disease. Consult with your local extension personnel or Syngenta representative for the Syngenta Technical Bulletin on sheath blight control. For other stem/sheath diseases including stem rot, black sheath rot, aggregate sheath spot and sheath spot, apply when disease is less than 4 inches above water line usually between panicle differentiation (PD) +5 days to PD +10 days or at initial sign of disease. Under heavy disease pressure and conditions favorable for disease development, a second application may be applied. For foliar and panicle diseases, apply Abound prior to disease development. Abound must be applied as a preventative treatment for blast control and applied prior to favorable conditions for blast development. For panicle blast, an application should be applied at mid-boot to boot-split but prior to full head emergence. A second application should be applied when panicles are approximately 60-90% emerged from the boot (7-14 days later). When Abound is being applied for panicle blast on continuous rice acreage (no rotation to other crops), no more than two sequential foliar applications of Abound or other Group 11 fungicides should be made over multiple years before alternating with a fungicide with a different mode of action. Do not make more than two foliar applications of Abound or other Group 11 fungicides per acre per season.
	Aggregate Sheath Spot (*Ceratobasidium oryzae-sativae = Rhizoctonia oryzae-sativae*) Black Sheath Rot (*Gaeumannomyces graminis var. graminis*) Sheath Spot (*Rhizoctonia oryzae*) Stem Rot *(Magnaporthe salvinii = Sclerotium oryzae = Nakateae sigmoidea)*	9.0–18.5 (0.15–0.30)	
	Foliar Diseases Brown Leaf Spot (*Cochliobolus miyabeanus*) Leaf Smut (*Entyloma oryzae*) Narrow Brown Leaf Spot (*Cercospora janseana = Cercospora oryzae*)		
	Panicle Diseases Kernel Smut (*Tilletia barclayana = Neovossia barclayana*) Panicle Blast (*Pyricularia grisea*)		

Specific Use Restrictions:

1) Do not treat rice fields used for aquaculture of fish and crustaceans.
2) Do not apply when weather conditions favor drift from treated areas to non-target aquatic habitat. Applicators should use care in making applications near non-target aquatic habitats.
3) Do not apply more than 0.70 lb ai/A/season of azoxystrobin-containing products.
4) Do not allow release of irrigation or flood water for at least 14 days after the last application.
5) Do not apply within 28 days of harvest (28-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Sorghum	Anthracnose (*Colletotrichum graminicola*) Gray Leaf Spot (*Cercospora sorghi*)	6.0-15.5 (0.10-0.25)	Abound applications should begin prior to disease development. Use the high rates under conditions favorable for severe disease pressure, dense plant canopies, or when susceptible varieties are planted. Contact extension personnel for local economic thresholds and timings for specific diseases in your area. Applications may be made by ground, air or chemigation. An adjuvant may be added at specified rates. Do not apply more than two sequential applications of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11.
	Soilborne Diseases Damping-Off (*Rhizoctonia solani, Pythium aphanadermatum*)	0.40-0.80 fl oz/1000 row feet	For soilborne/seedling disease control, see directions and rates under the **SOILBORNE/SEEDLING DISEASE CONTROL** section.

Specific Use Restrictions:
1) For grain and stover, do not apply more than 0.75 lb ai/A/season of azoxystrobin-containing products.
2) For forage, do not apply more than 0.5 lb ai/A/season of azoxystrobin-containing products.
3) Do not apply within 14 days of harvest (14-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Soybeans Soybean, Immature Seed (edamame)	Aerial Blight (*Rhizoctonia solani)* Alternaria Leaf Spot *(Alternaria* spp.) Anthracnose *(Colletotrichum truncatum)* Brown Spot *(Septoria glycines)* Cercospora Blight and Leaf Spot (*Cercospora kikuchii)* Frogeye Leaf Spot *(Cercospora sojina)* Pod and Stem Blight *(Diaporthe phaseolorum* Rust (*Phakopsora* spp.)	6.0-15.5 (0.10-0.25)	Abound applications should begin prior to disease development. Use the high rates under conditions favorable for severe disease pressure, dense plant canopies, or when susceptible varieties are planted. Contact Extension personnel for local economic thresholds and timings for specific diseases in your area. Applications may be made by ground, air or chemigation. An adjuvant may be added at specified rates. Use of a crop oil concentrate or non-ionic surfactant with the lower use rate is recommended. Soybean rust: Abound may be used at 4 fl oz/A when tank mixed with a triazole registered for use on soybean rust. Do not apply more than two sequential applications of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11.
	Soilborne Diseases Rhizoctonia solani *(Rhizoctonia solani)* Southern blight *(Sclerotium rolfsii)*	0.40-0.80 fl oz/1000 row feet	For soilborne/seedling disease control, see directions and rates under the **SOILBORNE/SEEDLING DISEASE CONTROL** section.

Specific Use Restrictions:

1) Do not apply more than 92.3 fl oz of product/A/season.
2) Do not make more than one application at 15.5 fl oz product/acre or 0.25 lb ai/A to soybean forage and hay.
3) Do not apply more than 1.5 lb ai/A/season of azoxystrobin-containing products.
4) Do not apply within 14 days of harvest (14-day PHI) of soybeans (beans).
5) Abound may be applied the day of harvest (0-day PHI) to soybean forage and hay.

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Stone Fruits, Crop Group 12-12 Apricot Cherry, Sweet Cherry, Tart Nectarine Peach Plum Plumcot Prune	Brown Rot Blossom Blight and Fruit Rot (*Monilinia fructicola, M. laxa*)	12.0-15.5 (0.20-0.25)	For brown rot blossom blight, begin applications at early bloom and continue through petal fall. For brown rot on fruit, Abound may be applied to fruit up to the day of harvest. For scab, begin applications at petal fall and continue at 7- to 14-day intervals. For all other diseases, begin application at the onset of disease as a protectant fungicide and continue on a 7- to 14-day schedule. For peaches only, 9.0-15.5 fl oz of Abound may be used for scab control. Applications may be made by ground, air or chemigation. Do not apply more than two sequential applications of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11.
	Scab (*Cladosporium carpophilum*) Alternaria spot and fruit rot (*Alternaria alternata*) Anthracnose (*Colletotrichum prunicola, C. gloeosporioides*) Leaf rust (*Tranzschelia discolor*) Powdery mildew (*Sphaerotheca pannosa, Podosphaera clandestina*) Shot hole (*Wilsonomyces carpophilus*)	6.0-15.5 (0.10-0.25)	

Complete List of Stone Fruit Crops: Apricot; apricot, Japanese; capulin; cherry, black; cherry, Nanking; cherry, sweet; cherry, tart; Jujube, Chinese; nectarine; peach; plum; plum, American; plum, beach; plum, Canada; plum, cherry; plum, Chickasaw; plum, Damson; plum, Japanese; plum, Klamath; plum, prune; plumcot; sloe; cultivars, varieties, and/or hybrids of these.

Specific Use Restrictions:

1) Do not apply more than 92.3 fl oz of product/A/season.
2) Do not apply more than 1.5 lb ai/A/season of azoxystrobin-containing products.
3) Abound may be applied the day of harvest (0-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Sugarcane	Brown Rust (*Puccinia melanocephela)* Orange Rust (*Puccinia kuehnii)*	9.0-12.0 (0.15-0.20)	Abound applications should begin prior to rust development, and continue throughout the season every 14-28 days following resistance management guidelines. Scout fields and begin applications at the earliest sign of rust. An adjuvant may be used at recommended rates. For ground applications, apply Abound in sufficient water volume for adequate coverage and canopy penetration. Applications may be made by ground, air or chemigation. Do not apply more than two sequential applications of Abound or other Group 11 fungicide, before alternation with a fungicide that is not in Group 11. Do not make more than four foliar applications of Abound or other Group 11 fungicide per acre per year.

Specific Use Restrictions:

1) Do not apply more than 0.80 lb ai/A per season of azoxystrobin-containing products.
2) Do not apply within 30 days of harvest (30-day PHI).
3) When applying by air, use no less than 5 gallons spray solution per acre.

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Ti Palm, Leaves and Roots	**Foliar Diseases** Alternaria Leaf Spot *(Alternaria* spp., *A. alternata)* Ascochyta Leaf Spot (*Ascochyta cynarae)* Phyllostica Leaf Spot (*Phyllostica* spp.) Rust *(Uromyces betae, Puccinia helianthi)* White Rust *(Albugo tragopogonis*)	6.0-20.0 (0.10-0.33)	For powdery mildew, make preventative applications on a 5- to 7-day schedule. For all other diseases, Abound applications should begin prior to disease development and continue throughout the season every 7-14 days following the resistance management guidelines. Applications may be made by ground, air or chemigation. An adjuvant may be added at specified rates. Do not apply more than one application of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11. Do not apply more than six applications of Abound per year for *Phyllostica* spp.
	Cercospora Leaf Spot *(Cercospora betae, C. pastinaceae)* Powdery Mildew *(Erysiphe polygoni, Leveillula taurica)*	9.0-15.5 (0.15-0.25)	Do not apply more than eight applications of Abound per year for *Cercospora* spp.
	Soilborne Diseases Circular Spot, Southern Blight *(Sclerotium rolfsii)* Pythium Root Rot (*Pythium aphanidermatum)* Rhizoctonia Stem Canker, Crown Rot *(Rhizoctonia solani)*	0.40-0.80 fl oz/1000 row feet	For soilborne/seedling disease control, see directions and rates under the **SOILBORNE/SEEDLING DISEASE CONTROL** section.

Specific Use Restrictions:

1) Do not apply more than 123 fl oz of product/A/season.
2) Do not apply more than 2.0 lb ai/A/season of azoxystrobin-containing products.
3) Apply as an in-furrow spray in a minimum of 10 gallons per acre.
4) Abound may be applied the day of harvest (0-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Tobacco	Blue Mold *(Peronospora tabacina)* Frogeye Leaf Spot *(Cercospora nicotianae)* Target Spot *(Rhizoctonia solani)*	6.0-12.0 (0.1-0.2)	Abound applications should begin prior to disease development or at first indication that blue mold is in the area. Do not apply Abound as a curative application. If blue mold is present in the field, initiate applications with Acrobat MZ® prior to an Abound application. Apply on a 7- to 14-day interval with shorter intervals under conditions conducive to disease development. For ground applications, apply Abound in sufficient water volume for adequate coverage and canopy penetration. For aerial application, volumes should be 10-15 GPA. Applications may be made by ground, air or chemigation. Do not apply Abound on greenhouse seedlings. Do not tank mix with Thiodan. Tank mixing Abound with insecticides formulated as emulsifiable concentrates (EC) or containing high amounts of solvents, may cause some crop injury Do not apply more than one application of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11. NOTE: Abound may enhance weather flecking on the leaves of certain tobacco types. This does not affect yield and quality.
Specific Use Restrictions: 1) Do not apply more than 32 fl oz of product/A/season. 2) Do not apply more than 0.52 lb ai/A/season of azoxystrobin-containing products. 3) Abound may be applied the day of harvest (0-day PHI).			
Tobacco Transplants in Greenhouse **KY only**	Target Spot *(Rhizoctonia solani)*	6.0 (0.1)	**<u>Application Directions</u>:** Apply 6 oz/A or 0.14 oz (4ml)/1000 sq ft in enough water for thorough coverage (recommend 5 gal/1000 sq ft). Make only one application prior to transplanting.

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Tomatoes **Tomatillos** **Subgroup 8-10A** Including all cultivars and/or hybrids of these See complete list of tomato crops below.	Anthracnose *(Colletotrichum coccodes*) Black Mold *(Alternaria alternata)* Buckeye Rot *(Phytophthora* spp.) Early Blight (*Alternaria solani)* Powdery Mildew *(Oidiopsis sicula)* Septoria Leaf Spot (*Septoria lycopersici)* Target Spot *(Corynespora cassiicola)*	5.0-6.2 (0.08-0.10)	Abound applications should begin prior to disease development and continue throughout the season following the resistance management guidelines. For late blight, Abound should be applied at 5- to 7-day intervals. For all other tomato diseases, Abound should be applied on 7- to 21-day intervals. Applications may be made by ground, air or chemigation. Do not apply more than one application of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11. Under certain weather conditions (particularly high temperatures) Abound in combination with high rates of silicone-based or oil containing (petroleum or crop) additives or adjuvants may cause injury. Do not exceed 0.125% adjuvant (v/v). Consult a Syngenta representative for more information concerning additives or adjuvants. A tank mixture with Dimethoate may cause crop injury. On fresh market tomatoes do not use adjuvants or tank mix Abound with any emulsifiable concentrate (EC) product.
	Late Blight (*Phytophthora infestans*)	6.2 (0.10)	

Complete List of Tomato Crops: Bush Tomato; Cocona; Currant Tomato; Garden Huckleberry; Goji Berry; Groundcherry; Naranjilla; Sunberry; Tomatillo; Tomato; Tree Tomato; cultivars, varieties, and/or hybrids of these.

Specific Use Restrictions:

1) Do not apply more than 37 fl oz of product/A/season.
2) Do not apply more than 0.6 lb ai/A/season of azoxystrobin-containing products.
3) Abound may be applied the day of harvest (0-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Tree Nuts, Crop Group 14-12 (except Pistachios) Beechnut Brazil Nut Butternut Cashew Chestnut Chinquapin Filbert (hazelnut) Hickory Macadamia Pecan Walnut Almonds, Pistachios (see specific use instructions)	Alternaria Leaf and Fruit Spot (*Alternaria alternata*) Anthracnose (*Colletotrichum acutatum, Glomerella cingulata*) Eastern Filbert Blight *(Anisogramma anomale)* Late Blight (*Alternaria alternata*) Scab (*Cladosporium carpophilum*) Septoria Leaf Spot (*Septoria pistaciarum*) Shot Hole (*Wilsonomyces carpophilus*)	6.0-12.0 (0.10-0.20)	Abound applications should begin prior to disease development and continue throughout the season following the resistance management guidelines. Applications may be made by ground, air or chemigation. An adjuvant may be added at specified rates. Begin applications prior to disease development and continue at 7- to 21-day intervals throughout the season. Do not apply more than two sequential applications of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11.
	Blossom Blight (*Monilinia laxa, M. fructicola*)		For blossom blight, begin applications at early bloom and continue through petal fall.

Complete List of Tree Nut Crops: African nut-tree; almond; beechnut; Brazil nut; Brazilian pine; bunya; bur oak; butternut; Cajou nut; candlenut; cashew; chestnut; chinquapin; coconut; coquito nut; dika nut; ginkgo; Guiana chestnut; hazelnut (filbert); heartnut; hickory nut; Japanese horse-chestnut; macadamia nut; mongongo nut; monkey-pot; monkey puzzle nut; Okari nut; Pachira nut; peach palm nut; pecan; pequi; Pili nut; pine nut; pistachio; Sapucaia nut; tropical almond; walnut, black; walnut, English; yellowhorn; cultivars, varieties, and/or hybrids of these.

Specific Use Restrictions:

1) Do not apply more than 73.8 fl oz of product/A/season.
2) Do not apply more than 1.2 lb ai/A/season of azoxystrobin-containing products.
3) Do not apply within 45 days of harvest (45-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Tropical Fruit Acerola Atemoya Avocado Biriba Canistel Cherimoya Custard Apple Dragon Fruit Feijoa Guava Ilama Jaboticaba Jackfruit Longan Loquat Lychee Mango Papaya Passionfruit Pawpaw Persimmon Pulasan Rambutan Sapodilla Sapote, Black Sapote, Mamey Sapote, White Soursop Star Apple Starfruit Sugar Apple Spanish Lime Tamarind	Anthracnose (*Colletotrichum* spp.) Cercospora Leaf Spot (*Cercospora* spp.) Powdery Mildew *(Erysiphe* spp.) Rust (*Puccinia* spp.)	6.0-15.5 (0.10-0.25)	Abound applications should begin prior to disease development and continue throughout the season on a 10- to 14-day schedule, following the resistance management guidelines. Applications may be made by ground, air or chemigation. An adjuvant may be added at specified rates. Follow the resistance management guidelines in the Resistance Management Section. Do not apply more than two sequential applications of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11.
	Soilborne Diseases Seedling Root Rot, Basal Stem Rot (*Rhizoctonia solani*)	0.40-0.80 fl oz/1000 row feet	For soilborne/seedling disease control, see directions and rates under the **SOILBORNE/SEEDLING DISEASE CONTROL** section.

Specific Use Restrictions:

1) Do not apply more than 92.3 fl oz of product/A/season.
2) Do not apply more than 1.5 lb ai/A/season of azoxystrobin-containing products.
3) Abound may be applied the day of harvest (0-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Vegetables, Leaves of Root and Tuber Group and Root Subgroup Beet, Garden and Sugar[1,2] Burdock[1,2] Carrot[1,2] Cassava, Bitter and Sweet[1] Celeriac (celery root)[1,2] Chervil, Turnip-Rooted[1,2] Chicory[1,2] Dasheen (taro)[1] Ginseng[2] Horseradish[2] Parsley, Turnip-Rooted[2] Parsnip[1,2] Radish[1,2] Radish, Oriental (daikon)[1,2] Rutabaga[1,2] Salsify[2] Salsify, Black[1,2] Salsify, Spanish[2] Skirret[2] Sweet Potato[1] Tanier[1] Turnip[1,2] Yam, True[1]	**Foliar Diseases** Alternaria Leaf Spot (*Alternaria* spp., *A. alternata)* Ascochyta Leaf Spot (*Ascochyta cynarae)* Rust (*Uromyces betae, Puccinia helianthi)* White Rust (*Albugo tragopogonis*)	6.0-20.0 (0.10-0.33)	For powdery mildew, make preventative applications on a 5- to 7-day schedule. For all other diseases, Abound applications should begin prior to disease development and continue throughout the season every 7-14 days following the resistance management guidelines. Applications may be made by ground, air or chemigation. An adjuvant may be added at specified rates. Do not apply more than one application of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11.
	Cercospora Leaf Spot (*Cercospora betae, C. pastinaceae)* Powdery Mildew (*Erysiphe polygoni, Leveillula taurica)*	9.0-15.5 (0.15-0.25)	
	Soilborne Diseases Circular Spot, Southern Blight (*Sclerotium rolfsii)* Pythium Root Rot (*Pythium aphanidermatum)* Rhizoctonia Stem Canker, Crown Rot (*Rhizoctonia solani)*	0.40-0.80 fl oz/1000 row feet	For soilborne/seedling disease control, see directions and rates under the **SOILBORNE/SEEDLING DISEASE CONTROL** section. **For sugar beets** apply 3-7 inch banded applications in a minimum of 10 gallons per acre at the 2- to 8-leaf stage. Do not apply as a dribble application over the seed row. Tank mixtures of Abound with crop oil concentrates (COC) or methylated spray oil (MSO) may result in crop injury. If cool soil conditions are expected after planting which could result in an extended period of plant emergence, Abound should not be applied in-furrow. If using Abound at the time of planting, do not use a starter fertilizer with it.

[1] = Leaves of Root and Tuber Vegetables, Crop Group 2
[2] = Root Vegetable, Crop Subgroup 1A

Specific Use Restrictions:
1) Do not apply more than 123 fl oz of product/A/season.
2) Do not apply more than 2.0 lb ai/A/season of azoxystrobin-containing products.
3) Apply as an in-furrow spray in a minimum of 10 gallons per acre.
4) Abound may be applied the day of harvest (0-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Vegetables, Tuberous and Corm Subgroup 1C Arracacha Arrowroot Artichoke, Chinese and Jerusalem Canna, Edible Cassava, Edible, Bitter and Sweet Chayote (root) Chufa Dasheen (Taro) Ginger Leren Potato Sweet Potato Tanier Turmeric Yam, Bean Yam, True	**Foliar Diseases** Alternaria Leaf Spot *(Alternaria* spp., *A. Alternata)* Ascochyta Leaf Spot (*Ascochyta cynarae)* Rust *(Uromyces betae, Puccinia helianthi)* White Rust *(Albugo tragopogonis*)	6.0-20.0 (0.10-0.33)	For powdery mildew, make preventative applications on a 5- to 7-day schedule. For all other diseases, Abound applications should begin prior to disease development and continue throughout the season every 7-14 days following the resistance management guidelines. Applications may be made by ground, air or chemigation. An adjuvant may be added at specified rates. Do not apply more than one application of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11.
	Cercospora Leaf Spot *(Cercospora betae, C. pastinaceae)* Powdery Mildew *(Erysiphe polygoni, Leveillula taurica)*	9.0-15.5 (0.15-0.25)	
	Soilborne Diseases Circular Spot, Southern Blight *(Sclerotium rolfsii)* Rhizoctonia Stem Canker, Crown Rot *(Rhizoctonia solani)* Pythium Root Rot (*Pythium aphanidermatum)*	0.40-0.80 fl oz/1000 row feet	For soilborne/seedling disease control, see directions and rates under the **SOILBORNE/SEEDLING DISEASE CONTROL** section.

Specific Use Restrictions:
1) Do not apply more than 123 fl oz of product/A/season.
2) Do not apply more than 2.0 lb ai/A/season of azoxystrobin-containing products.
3) Do not apply within 14 days of harvest (14-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Watercress	Cercospora Leaf Spot (*Cercospora* spp.)	6.0-15.5 (0.10-0.25)	Abound applications should begin prior to disease development and continue throughout the season on a 7- to 10-day schedule, following the resistance management guidelines. Applications may be made by ground, air or chemigation. An adjuvant may be added at specified rates. Do not apply more than two sequential applications of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11.

Specific Use Restrictions:
1) Do not apply more than 93.2 fl oz of product/A/season.
2) Do not apply more than 1.5 lb ai/A/season of azoxystrobin-containing products.
3) Do not apply within 7 days of harvest (7-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Cereals **Wheat** **Triticale**	Leaf Rust (*Puccinia triticina* = *Puccinia recondita* f.sp. *tritici)* Septoria Leaf and Glume Blotch (*Septoria tritici, Septoria nodorum*) Stem Rust (*Puccinia graminis*) Stripe Rust (*Puccinia striiformis*) Tan Spot (*Pyrenophora tritici-repentis*)	4.0-12.0 (0.07-0.20)	Abound should be applied prior to disease development. Applications may be made by ground, air or chemigation. A crop oil concentrate adjuvant may be added at 1.0% v/v to optimize efficacy. Do not apply more than two sequential applications of Abound or other Group 11 fungicide before alternation with a fungicide that is not in Group 11. Do not make more than two applications of Abound or other Group 11 fungicide per season.
	Powdery Mildew (*Erysiphe graminis*)	7.5-11.0 (0.125-0.175)	

Specific Use Restrictions:

1) Do not apply after Feekes 10.54.
2) Do not apply more than 0.40 lb ai/A/season of azoxystrobin-containing products.
3) Do not apply within 7 days (7-day PHI) for forage and hay.
4) Do not apply within 14 days of grazing (14-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Wild Rice	Brown Spot (*Bipolaris oryzae or Bipolaris sorokiana)* Also known as *Helminthosporium oryzae* and *H. sativum* Stem Rot *(Nakataea sigmoidea)*	12.5-15.5 (0.20-0.25)	Abound should be applied prior to disease development. Applications may be made by ground, air, or chemigation. For aerial application, volumes should be 5-10 GPA. An adjuvant may be added at specified rates. For foliar diseases, apply Abound prior to disease development. Apply during tillering, boot, early heading, or at initial sign of disease. Under heavy disease pressure and conditions favorable for disease development, a second application may be applied. Do not apply more than two sequential applications of Abound or other Group 11 fungicide before alternation with a fungicide that is not in Group 11. Do not make more than two applications of Abound or other Group 11 fungicide per season.

Specific Use Restrictions:

1) Do not treat wild rice fields used for aquaculture of fish and crustaceans.
2) Do not apply when weather conditions favor drift from treated areas to non-target aquatic habitat. Applicators should use care in making applications near non-target aquatic habitats.
3) Do not apply more than 0.70 lb ai/A/season of azoxystrobin-containing products.
4) Do not allow release of irrigation or flood water for at least 14 days after the last application.
5) Do not apply within 28 days of harvest (28-day PHI).

Abound Rate Conversion Chart

Fl oz Product/A	Lb ai/A	Treated Acres/ Gal Product
4.0	0.07	32.0
5.0	0.08	25.6
5.5	0.09	23.2
6.0	0.10	21.3
6.2	0.10	21.3
7.0	0.11	18.3
8.5	0.14	15.4
9.0	0.15	14.2
9.2	0.15	14.2
10.0	0.16	13.0
11.0	0.18	11.6
12.0	0.20	10.4
12.3	0.20	10.4
13.0	0.21	9.8
14.0	0.23	9.1
15.4	0.25	8.3
15.5	0.25	8.3
18.3	0.30	6.9
18.5	0.30	6.9
20.0	0.33	6.4
20.3	0.33	6.4
24.5	0.40	5.2

POST HARVEST APPLICATIONS

<table>
<tr><th>Crop</th><th>Target Diseases</th><th>Use Rate</th><th>Remarks</th></tr>
<tr><td>Bananas
Plantains</td><td>Crown Rot/Crown Mold (Colletotrichum musae, Fusarium pallidoroseum, Acremonium spp., Ceratocystis paradoxa, Glomerella cingulata, Penicillium spp.)</td><td>200-400 ppm solution</td><td>Apply Abound as a single application of a 200-400 ppm solution to achieve good coverage. The application may be made as a spray, dip or may be painted onto the cut ends of the bananas. Application of the 200 ppm rate is appropriate for short distance transportation (e.g., within the USA). When a longer time in transport is expected (export), use the 300-400 ppm rate. If alum (1% w/v) is added to the spray solution, stir the suspension frequently as sedimentation and flocculation may occur. Addition of a non-ionic surfactant (0.10% v/v) may improve the compatibility of this mixture.

Amount of Abound to Mix 100 Gallons for Post-Harvest Banana Applications

<table>
<tr><th>Abound Use Rate</th><th>100.0 gal Spray Solution</th></tr>
<tr><td>200 ppm</td><td>11 fl oz</td></tr>
<tr><td>300 ppm</td><td>15 fl oz</td></tr>
<tr><td>400 ppm</td><td>21 fl oz</td></tr>
</table>
</td></tr>
</table>

Specific Use Restrictions:

1) Do not make more than one application to bananas as post-harvest treatment.
2) Abound may be degraded by exposure to direct sunlight. Do not store treated fruit in direct sunlight.

Crop	Target Diseases	Use Rate	Remarks
Citrus Fruit Crop Group 10-10 Calamondin Citron Citrus Hybrids Grapefruit Kumquat Lemon Lime Mandarin Orange (sour and sweet) Pummelo Satsuma Mandarin Tangerine Uniq Fruit Hybrid Including all cultivars and/or hybrids of these See complete list of citrus fruit crops below.	Penicillium Decays Green Mold, Whisker Mold, Suppression of Blue Mold (*Penicillium* spp.) Diplodia Stem-End Rot (*Diplodia natalensis*) Phomopsis Stem-End Rot (*Phomopsis citrii*)	See Remarks	Use Abound as a dip, drench, flood, or spray for the control of certain post-harvest diseases. **For high volume (dilute) applications:** Mix 32-64 fl oz of Abound in 25-100 gallons of an appropriate water, wax/oil emulsion, or aqueous dilution of a wax/oil emulsion for the crop being treated. Use T-Jet, flooders, or similar application systems. **For low volume (concentrate) applications:** Mix 32-64 fl oz of Abound in 7-25 gallons of water, wax/oil emulsion, or aqueous dilution of wax/oil emulsion for the crop being treated. Apply to 250,000 lb of fruit. Use a controlled-droplet type of applicator or similar system. **For dip applications:** Mix 32-64 fl oz of Abound in 100 gallons of water, wax/oil emulsion, or aqueous dilution of wax/oil emulsion. Dip for approximately 30 seconds and allow fruit to drain. For maximum decay control, treat citrus fruit once before storage and once after storage, just prior to marketing.

Complete List of Citrus Fruit Crops: Australian Desert Lime (*Eremocitrus glauca*); Australian Finger Lime (*Microcitrus australasica*); Australian Round Lime (*Microcitrus australis*); Brown River Finger Lime (*Microcitrus papuana*); Calamondin (*Citrofortunella microcarpa*); Citron (*Citrus medica*); Citrus Hybrids, *Citrus* spp., *Eremocitrus* spp., *Fortunella* spp., *Microcitrus* spp., and *Poncirus* spp.; Grapefruit (*Citrus paradise*); Japanese Summer Grapefruit (*Citrus natsudaidai*); Kumquat (*Fortunella* spp.); Lemon (*Citrus limon*); Lime (*Citrus aurantiifolia*); Mediterranean Mandarin (*Citrus deliciosa*); Mount White Lime (*Microcitrus garrowayae*); New Guinea Wild Lime (*Microcitrus warburgiana*); Orange, Sour (*Citrus aurantium*); Orange, Sweet (*Citrus sinensis*); Pummelo (*Citrus maxima*); Russell River Lime (*Microcitrus inodora*); Satsuma Mandarin (*Citrus unshiu*); Sweet Lime (*Citrus limetta*); Tachibana Orange (*Citrus tachibana*); Tahiti Lime (*Citrus latifolia*); Tangelo (*Citrus* x tangelo); Tangerine (Mandarin) (*Citrus reticulate*); Tangor (*Citrus nobilis*); Trifoliate Orange (*Poncirus trifoliate*); Uniq Fruit (*Citrus aurantium* Tangelo group); cultivars, varieties and/or hybrids of these.

Specific Use Restrictions:

1) Do not make more than two applications to citrus fruit as post-harvest treatments.
2) Abound may be degraded by exposure to direct sunlight. Do not store treated fruit in direct sunlight.

Tuberous and Corm Vegetable Subgroup 1C - Post harvest

Arracacha; Arrowroot; Artichoke, Chinese; Artichoke, Jerusalem; Canna, Edible; Cassava, Bitter and Sweet; Chayote (root); Chufa; Dasheen; Ginger; Leren; Potato; Sweet Potato; Tanier; Turmeric; Yam Bean; Yam, True.

Use Abound as a post-harvest spray for the control of certain post-harvest rots caused by Silver Scurf (*Helminthosporium solani), Fusarium* species, Late Blight (*Phytophthora infestans*), and Pink Rot (*Phytophthora erythroseptica*).

Application Method	Disease	Rate (fl oz)	Remarks
In-Line Aqueous Spray Application	Silver Scurf Fusarium Dry Rot Late Blight Pink Rot	0.6 fl oz/ton of tubers	• Ensure proper coverage of the tubers. Tubers should be tumbling as they are treated. • Mix the fungicide solution in an appropriate amount of water for the crop being treated. • Use T-jet, CDA, or similar application system.
Do not make more than one post-harvest application to the tubers.			
Specific Use Restrictions: 1) Do not use on seed potatoes or seed pieces. 2) Ensure the Abound solution remains in suspension by using agitation.			

STORAGE AND DISPOSAL

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

Pesticide Storage
Store in original containers only. 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 [less than or equal to 5 gallons]
Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank 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 and disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.

Container Handling [greater than 5 gallons]
Refillable container. Refill this container with pesticide only. Do not reuse the container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the person refilling. To clean container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over

onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

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

This product is protected by U.S. Patent Numbers 5,602,076 and 5,633,256.

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

Manufactured for:
Syngenta Crop Protection, LLC
P.O. Box 18300
Greensboro, North Carolina 27419-8300

Abound Flowable Fungicide 1098 MAS AMEND-D 0814 – bb – 9-14-15
000100-01098.20140812D.ABOUND-AMEND-AUG2014.pdf

Abound Flowable Fungicide 1098 MAS AMEND-E 0814 – mar – 12/18/15
000100-01098.20140812E.ABOUND-AMEND-AUG2014.pdf

Abound Flowable Fungicide 1098 MAS AMEND 0814 Version F – pl – 12/23/15
000100-01098.20140812F.ABOUND_AMEND_AUG2014.pdf

Abound Flowable Fungicide 1098 MAS AMEND 0814 Version G – bb – 1/29/16
000100-01098.20140812G.ABOUND_AMEND_AUG2014.pdf

SUPPLEMENTAL LABELING

Syngenta Crop Protection, LLC
P. O. Box 18300
Greensboro, North Carolina 27419-8300
SCP 1098A-S

GROUP 11 FUNGICIDE

Abound® Flowable Fungicide

Broad spectrum fungicide for control of plant diseases

This supplemental label expires on February 1, 2019 and must not be used or distributed after this date.

Active Ingredient:	
Azoxystrobin: methyl (*E*)-2-{2-[6-(2-cyanophenoxy) pyrimidin-4-yloxy]phenyl}-3-methoxyacrylate*	22.9%
Other Ingredients:	77.1%
Total:	100.0%

Contains 2.08 lb of active ingredient per gallon
*IUPAC

KEEP OUT OF REACH OF CHILDREN.

CAUTION

EPA Reg. 100-1098

All applicable directions, restrictions and precautions on the EPA-registered label are to be followed. Before using Abound Flowable Fungicide as permitted according to this Supplemental Labeling, read and follow all applicable directions, restrictions, and precautions on the EPA-registered label on or attached to the pesticide product container. This Supplemental Labeling contains revised use instructions and/or restrictions that may be different from those that appear on the container label. This Supplemental Labeling must be in the possession of the user at the time of pesticide application. It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

ACCEPTED
Feb 03, 2016
Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 100-1098

syngenta

DIRECTIONS FOR USE

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Quinoa	Leaf Spot *(Ascochyta hyalospora)* Stalk Rot *(Phoma exigua*)	12 (0.20)	Apply prior to disease development. An adjuvant may be added at recommended rates.

Application Directions: Abound can be applied by either ground, chemigation, or aerial application.

Specific Use Restrictions:

1) Do not apply more than 0.40 lb ai/A/season of azoxystrobin-containing products.
2) Do not apply within 7 days (7-day PHI) for forage and hay.
3) Do not apply within 14 days of grazing (14-day PHI).
4) Do not apply within 30 days of harvest (30-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Stone Fruits, Crop Group 12-12 Apricot Cherry, Sweet Cherry, Tart Nectarine Peach Plum Plumcot Prune	Brown Rot Blossom Blight and Fruit Rot (*Monilinia fructicola, M. laxa*)	12.0-15.5 (0.20-0.25)	For brown rot blossom blight, begin applications at early bloom and continue through petal fall. For brown rot on fruit, Abound may be applied to fruit up to the day of harvest. For scab, begin applications at petal fall and continue at 7- to 14-day intervals. For all other diseases, begin application at the onset of disease as a protectant fungicide and continue on a 7- to 14-day schedule. For peaches only, 9.0-15.5 fl oz of Abound may be used for scab control. Applications may be made by ground, air or chemigation. Do not apply more than two sequential applications of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11.
	Scab (*Cladosporium carpophilum*) Alternaria spot and fruit rot (*Alternaria alternata*) Anthracnose (*Colletotrichum prunicola, C. gloeosporioides*) Leaf rust (*Tranzschelia discolor*) Powdery mildew (*Sphaerotheca pannosa, Podosphaera clandestina*) Shot hole (*Wilsonomyces carpophilus*)	6.0-15.5 (0.10-0.25)	

Complete List of Stone Fruit Crops: Apricot; apricot, Japanese; capulin; cherry, black; cherry, Nanking; cherry, sweet; cherry, tart; Jujube, Chinese; nectarine; peach; plum; plum, American; plum, beach; plum, Canada; plum, cherry; plum, Chickasaw; plum, Damson; plum, Japanese; plum, Klamath; plum, prune; plumcot; sloe; cultivars, varieties, and/or hybrids of these.

Specific Use Restrictions:

1) Do not apply more than 92.3 fl oz of product/A/season.
2) Do not apply more than 1.5 lb ai/A/season of azoxystrobin-containing products.
3) Abound may be applied the day of harvest (0-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Ti Palm, Leaves and Roots	**Foliar Diseases** Alternaria Leaf Spot *(Alternaria* spp., *A. alternata)* Ascochyta Leaf Spot (*Ascochyta cynarae)* Phyllostica Leaf Spot (*Phyllostica* spp.) Rust *(Uromyces betae, Puccinia helianthi)* White Rust *(Albugo tragopogonis*)	6.0-20.0 (0.10-0.33)	For powdery mildew, make preventative applications on a 5- to 7-day schedule. For all other diseases, Abound applications should begin prior to disease development and continue throughout the season every 7-14 days following the resistance management guidelines. Applications may be made by ground, air or chemigation. An adjuvant may be added at specified rates. Do not apply more than one application of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11. Do not apply more than six applications of Abound per year for *Phyllostica* spp. Do not apply more than eight applications of Abound per year for *Cercospora* spp.
	Cercospora Leaf Spot *(Cercospora betae, C. pastinaceae)* Powdery Mildew *(Erysiphe polygoni, Leveillula taurica)*	9.0-15.5 (0.15-0.25)	
	Soilborne Diseases Circular Spot, Southern Blight *(Sclerotium rolfsii)* Pythium Root Rot (*Pythium aphanidermatum)* Rhizoctonia Stem Canker, Crown Rot *(Rhizoctonia solani)*	0.40-0.80 fl oz/1000 row feet	For soilborne/seedling disease control, see directions and rates under the **SOILBORNE/SEEDLING DISEASE CONTROL** section.

Specific Use Restrictions:

1) Do not apply more than 123 fl oz of product/A/season.
2) Do not apply more than 2.0 lb ai/A/season of azoxystrobin-containing products.
3) Apply as an in-furrow spray in a minimum of 10 gallons per acre.
4) Abound may be applied the day of harvest (0-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Tree Nuts, Crop Group 14-12 (except Pistachios) Beechnut Brazil Nut Butternut Cashew Chestnut Chinquapin Filbert (hazelnut) Hickory Macadamia Pecan Walnut Almonds, Pistachios (see specific use instructions)	Alternaria Leaf and Fruit Spot (*Alternaria alternata*) Anthracnose (*Colletotrichum acutatum, Glomerella cingulata*) Eastern Filbert Blight *(Anisogramma anomale)* Late Blight (*Alternaria alternata*) Scab (*Cladosporium carpophilum*) Septoria Leaf Spot (*Septoria pistaciarum*) Shot Hole (*Wilsonomyces carpophilus*)	6.0-12.0 (0.10-0.20)	Abound applications should begin prior to disease development and continue throughout the season following the resistance management guidelines. Applications may be made by ground, air or chemigation. An adjuvant may be added at specified rates. Begin applications prior to disease development and continue at 7- to 21-day intervals throughout the season. Do not apply more than two sequential applications of Abound or other Group 11 fungicides before alternation with a fungicide that is not in Group 11.
	Blossom Blight (*Monilinia laxa, M. fructicola*)		For blossom blight, begin applications at early bloom and continue through petal fall.

Complete List of Tree Nut Crops: African nut-tree; almond; beechnut; Brazil nut; Brazilian pine; bunya; bur oak; butternut; Cajou nut; candlenut; cashew; chestnut; chinquapin; coconut; coquito nut; dika nut; ginkgo; Guiana chestnut; hazelnut (filbert); heartnut; hickory nut; Japanese horse-chestnut; macadamia nut; mongongo nut; monkey-pot; monkey puzzle nut; Okari nut; Pachira nut; peach palm nut; pecan; pequi; Pili nut; pine nut; pistachio; Sapucaia nut; tropical almond; walnut, black; walnut, English; yellowhorn; cultivars, varieties, and/or hybrids of these.

Specific Use Restrictions:

1) Do not apply more than 73.8 fl oz of product/A/season.
2) Do not apply more than 1.2 lb ai/A/season of azoxystrobin-containing products.
3) Do not apply within 45 days of harvest (45-day PHI).

Abound Flowable Fungicide 1098 SUPP 12-23-15 – pl – 12/23/15
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Abound Flowable Fungicide 1098 SUPP 12-23-15-B – bb – 1/29/16
000100-01098.20151223B.ABOUND_SUPP.pdf

Abound Flowable Fungicide 1098 SUPP 12-23-15-C – bb – 2/1/16
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