

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

May 6, 2015

Dr. Ruhi Rezaaiyan, Ph.D. Syngenta Crop Protection, LLC P.O. Box 18300 Greensboro, NC 27419

Subject: Label Amendment – New Uses: Dried shelled pea and bean Subgroup 6C; Bushberry Subgroup 13-07B; Petition #4F8231With Rule Published 4/2/2015 Product Name: Quadris Top Fungicide EPA Registration Number: 100-1313 Application Date: December 26, 2013 Decision Number: 486689

Dear Dr. Rezaaiyan:

The amendment to your Master and Supplemental label 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/registration/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 and due dates listed below:

a. <u>850.4100 (Terrestrial plant toxicity, seedling emergence) – TEP</u>

This requirement was originally listed in the EPA letter dated 4/21/2010 for EPA Reg. No. 100-739 (D403560) and was required by 4/7/2011. A Tier I study was submitted (MRID 48453203) but was found Supplemental. The available Tier I study is Supplemental because there were biologically significant effects observed in dicots at the limit test concentration which is below the maximum labeled single application rate (turf; 0.26 lb ai/A). Our understanding is that 0.26 lb ai/A is the highest current single application rate but Syngenta must verify this is correct and conduct the study at the highest possible single application rate on any difenoconazole label. The current risk assessment is impacted by the lack of a NOAEC for dicots. Tier II testing is required for the dicot species that showed effects in the available study (lettuce, soybean, and sugar beet). Furthermore, a NOAEC must be established at the maximum single application rate (Tier 1 test) for the other seven test species (those showing no effects in the available study) to meet the data requirement; alternatively, Tier II testing may be conducted for those species. Syngenta recently requested a one

year extension and therefore this study is now <u>due one year from the date of this</u> <u>letter.</u>

b. 850.4150 (Terrestrial plant toxicity, vegetative vigor) – TEP

This requirement was originally listed in the EPA letter dated 4/21/2010 for EPA Reg. No. 100-739 (D403560) and was required by 4/7/2011. A Tier I study was submitted (MRID 48453204) but was found Supplemental. The available Tier I study is Supplemental because the limit test concentration is below the maximum labeled single application rate (turf; 0.26 lb ai/A). Our understanding is that 0.26 lb ai/A is the highest current single application rate but Syngenta must verify this is correct and conduct the study at the highest possible single application rate on any difenoconazole label. The current risk assessment is not impacted. To satisfy the data requirement, a NOAEC must be established for all ten test species at the maximum single application rate (Tier I test). Alternatively, Tier II testing may be conducted. Syngenta recently requested a one year extension and therefore this study is now <u>due one year from the date of this letter.</u>

c. <u>Chronic toxicity to benthic invertebrates (whole sediment: freshwater and estuarine/marine) – difenoconazole (TGAI)</u>

This freshwater invertebrate requirement was originally listed in the Agency letter dated 1/16/2008 for EPA Reg No. 100-739 and a study was submitted (MRID 47648601) but found Supplemental. There is uncertainty associated with chronic risk to benthic invertebrates given that pore water EECs are similar to water column EECs and a lack of acceptable toxicity data for benthic invertebrates. Although this sediment toxicity study (range finding with a freshwater midge) is available, the numerous deviations in the study limit its use for quantitative purposes. Data are recommended because the chronic LOC (1.0) is exceeded for aquatic invertebrates based on comparison of water column species toxicity data to pore water EECs. Sediment chronic toxicity testing with three species is required: freshwater midge, freshwater amphipod, and marine/estuarine amphipod.

Three studies are required, each tests a different species (one with a freshwater midge, one with a freshwater amphipod, and one with a marine/estuarine amphipod).

There is not a guideline number because the 850 guidelines for chronic testing are in the process of being finalized. However, in the meantime, the Agency recommends Syngenta consider the available Agency-wide guidelines for chronic testing of freshwater and estuarine/marine organisms (see below). As indicated in 40 CFR Part 158, protocols must be submitted for review prior to initiating the studies, and in enough time to meet the submission due date.

USEPA 2000. Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates. EPA 600/R-99/064

Page 3 of 4 EPA Reg. No. 100-1313 Decision No. 486689

USEPA 2001. Methods for Assessing the Chronic Toxicity of Marine and Estuarine Sediment-associated Contaminants with the Amphipod *Leptocheirus plumulosus*. EPA 600/R-01/020

The protocols for the three studies must be submitted with enough time for the Agency to review and approve them, and for the three actual studies to be submitted within two years of the date of this letter.

- d. <u>850.4550 (Cyanobacteria toxicity) difenoconazole (TGAI).</u> There is some uncertainty about risk to aquatic plants because an acceptable study with blue green algae (cyanobacteria) is not available. There are not currently any listed non-vascular plants so the uncertainty is for non-listed species. Blue-green algae would need to be about 6-9 times more sensitive than *Navicula pelliculosa* to exceed the LOC (non-listed species) for the proposed uses, assuming that the degradates (1,2,4-triazole, triazole acetic acid, and CGA-205375) and difenoconazole are equal in toxicity. <u>This study must be submitted within one year from the date of this letter.</u>
- 3. To the Supplemental label add an expiration date which is three years from the date of this letter using the following sentence on page one of the label:

"This Supplemental label expires on 05/06/2018 and must not be used or distributed after this date".

A stamped copy of your Master and Supplemental labeling are enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one (1) copy of the final printed Master and Supplemental 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 its 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.

Page 4 of 4 EPA Reg. No. 100-1313 Decision No. 486689

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 Karen Samek by phone at (703) 347-8825, or via email at <u>samek.karen@epa.gov</u>.

Sincerely,

Tompisk

Tony Kish, Product Manager 22 Fungicide Branch Registration Division (7505P) Office of Pesticide Programs

Enclosure

GROUP 11 3 FUNGICIDES

Quadris Top® Fungicide

Active Ingredients:Azoxystrobin*Difenoconazole**Other Ingredients:70.4%Total:

*CAS No. 131860-33-8 **CAS No. 119446-68-3

Contains 1.67 lb of azoxystrobin active ingredient and 1.05 lb of difenoconazole active ingredient per gallon

KEEP OUT OF REACH OF CHILDREN.

CAUTION

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-1313

EPA Est.

2.5 gallons 264 gallons _____ gallons Net Contents



Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 100-1313

advice. advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything to an unconscious person. 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. If in eyes • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, ther continue rinsing eye. • 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.		FIRST AID					
 Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything to an unconscious person. 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. If in eyes Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, ther continue rinsing eye. Call a poison control center or doctor for treatment advice. 	If swallowed •	Call a poison control center or doctor immediately for treatment					
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		HOT LINE NUMBER					
For 24-Hour Medical Emergency Assistance (Human or Animal)							
Or Chemical Emergency Assistance (Spill, Leak, Fire or Accident)	Or Chem						
Call							
1-800-888-8372		1-800-888-8372					

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION

Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wear protective eyewear. 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.

Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are listed below.

Applicators and other handlers must wear:

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

User Safety Requirements

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

Engineering Control Statements

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.

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- 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

Difenoconazole is toxic to fish, mammals and aquatic invertebrates. Drift and runoff may be hazardous to **estuarine/marine** organisms in water adjacent to treated area.

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.

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) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.

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 materials such as polyvinyl chloride, nitrile rubber or butyl rubber.
- Shoes plus socks

PRODUCT INFORMATION

Quadris Top is a broad-spectrum product containing two fungicides. It has preventative, systemic and curative properties and is recommended for the control of many important plant diseases. Quadris Top provides excellent disease control of many leaf spots and powdery mildews. Quadris Top is applied as a foliar spray and can be used in block, alternating spray or tank-mix programs with other crop protection products. All applications should be made according to the use directions that follow.

USE PRECAUTIONS AND RESTRICTIONS

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

ATTENTION

Quadris Top 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 Quadris Top 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 Quadris Top 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.

USE INFORMATION

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 program is recommended.

Use of Adjuvants: Under certain weather conditions (particularly high temperatures) Quadris Top 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 Quadris Top with any EC product.

Efficacy: Under certain conditions conducive to extended infection periods, use another registered fungicide for additional applications if the maximum amount of Quadris Top has been used. If resistant isolates to Group 3 or 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 Management (IPM): Quadris Top 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. Consult your local agricultural authorities for additional IPM strategies established for your area. Quadris Top may be used in State Agricultural Extension advisory (disease forecasting) programs which recommend application timing based on environmental factors favorable for disease development.

Resistance Management

GROUP 11 3 FUNGICIDES

Quadris Top contains two fungicides - azoxystrobin, a strobilurin fungicide in Group 11 and difenoconazole, a triazole fungicide in Group 3. 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 rotating 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. Quadris Top should not be alternated or tank mixed with any fungicide to which resistance has already developed.

As part of a resistance management strategy:

- Apply a maximum of 4 sprays during one crop cycle.
- Apply no more than 2 sequential applications unless otherwise stated in the crop section.
- When tank mixing or alternating, use an effective partner one that provides satisfactory disease control when used alone at the mixture rate.

Rotational Crops: Please see the following table for the crop rotational restrictions:

Rotational Crops	Planting Time From Last Quadris Top Application
Bean and Pea, Dried Shelled Subgroup 6C Berry, Bushberry Subgroup 13-07B Berry, Low Growing, Subgroup 13-07G, except Cranberry Brassica (Cole) Leafy Vegetables Bulb Vegetables Carrots Chickpeas Cucurbit Vegetables Eggplant Fruiting Vegetables Crop Group 8-10 Okra Pepper Potatoes Soybeans Strawberries Sugar Beets Tomatoes Tuberous & Corm Vegetable Subgroup 1C	0 days
Cereals (Wheat, Barley, Triticale) Oats Rye Root and Tuber Vegetables, Crop Group 1 (except Carrot, Sugar Beet, and Tuberous Corm Vegetable Subgroup 1C)	30 days
Buckwheat Millet	365 days
All Other Crops Intended for Food and Feed	60 days

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 USE PRECAUTIONS AND RESTRICTIONS regarding apple phytotoxicity.

Greenhouse Use: For resistance management, do not use Quadris Top for transplant production.

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. More information on managing spray drift can be found on the Syngenta Crop Protection website under Stewardship (<u>http://www.syngentacropprotection-us.com/enviro/driftmanagement/index.asp?nav=drift_management</u>).

MIXING AND APPLICATION METHODS

Spray Equipment

Nozzles

- Equip sprayers with nozzles that provide accurate and uniform application.
- Use the same size nozzles uniformly spaced across the boom.
- Calibrate sprayer before use.
- Use screens to protect the pump and to prevent nozzles from clogging.
- On suction side of pump use screens that are *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 manufacturer's and state recommendations. For specific local directions and spray schedules, consult the current state agricultural recommendations.

Mixing Instructions

- Quadris Top 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.

Quadris Top Alone (No Tank Mix)

- Add $\frac{1}{2}$ - $\frac{2}{3}$ of the required amount of water to the spray or mixing tank.
- With the agitator running, add Quadris Top to the tank.
- Continue agitation while adding the remainder of the water.
- Begin application of the spray solution after Quadris Top has completely dispersed into the mix water.
- Maintain agitation until all of the mixture has been sprayed.

Quadris Top + Tank Mixtures: Quadris Top is usually compatible with tank-mix partners listed on this label. To determine the physical compatibility of Quadris Top 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.

Tank Mixtures: All directions for use, crops/sites, use rates, dilution rates, precautions, and limitations which appear on the tank-mix product label must be observed. The label dosage for the tank-mix partner is not to be exceeded, and the most restrictive label precautions and limitations are to be followed.

Mixing in the Spray Tank

- Add $\frac{1}{2}$ - $\frac{2}{3}$ 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 Quadris Top to the spray tank.
- Allow Quadris Top to completely disperse.
- Spray the mixture with the agitator running.

Application Instructions

Quadris Top may be applied with many 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.

Ground Application

- Apply in a minimum of 10 gal of water per acre, unless specified otherwise.
- Do not apply through any ultra-low volume (ULV) spray system.
- Thorough coverage is necessary to provide good disease control.

Aerial Application

- Use only on crops where aerial applications are indicated.
- Thorough coverage is necessary to provide good disease control.
- Apply in a minimum of 5 gallons of water per acre unless specified otherwise.
- Do not apply under conditions when uniform coverage cannot be obtained or when excessive spray drift may occur.
- Do not apply directly to humans or animals.
- Do not apply through any ultra-low volume (ULV) spray system.

ATTENTION

Quadris Top 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 Quadris Top 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 Quadris Top 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.

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.

Operating Instructions

- 1. 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.
- 2. The pesticide injection pipeline must contain a functional, automatic, quickclosing check-valve to prevent the flow of fluid back toward the injection pump.
- 3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5. 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.
- 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.

Center Pivot Irrigation Equipment

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

- Determine the size of the area to be treated.
- Determine the time required to apply ¹/₈-¹/₂ inch of water over the area to be treated when the system and injection equipment are operated at normal pressures as recommended by the equipment manufacturer. When applying Quadris Top 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 Quadris Top required to treat the area covered by the irrigation system.
- Add the required amount of Quadris Top 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 Quadris Top 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 Quadris Top 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 Quadris Top through irrigation equipment use the lowest obtainable water volume while maintaining uniform distribution.
- Determine the amount of Quadris Top required to treat the area covered by the irrigation system.
- Add the required amount of Quadris Top 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 Quadris Top 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, quickclosing 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.

SPECIFIC DIRECTIONS FOR USE

		Use Rate	
		fl oz	
Crop	Target Diseases	product/A	Remarks
Almonds	Alternaria Leaf	8-14	For blossom blight, begin applications at early bloom
	Spot		and continue through petal fall. Make no more than 2
	(A. alternata)		sequential applications before alternating to another
			fungicide with a different mode of action.
	Anthracnose		
	(Colletotrichum		For all other diseases, begin applications prior to
	acutatum)		disease onset when conditions are conducive for
	,		disease. Apply Quadris Top on a 14- to 21-day
	Blossom Blight		schedule making no more than 2 sequential
	(<i>Monilinia</i> spp.)		applications before alternating to another fungicide
	(with a non-Qol (Group 11) mode of action.
	Leaf Blight		
	(Seimatosporium		If monitoring or history indicates the presence of
	lichenicola)		Alternaria, apply 14 fl oz/A of Quadris Top in the late
			spring (mid April to beginning of May) and then repeat
	Leaf Rust		the treatment 2-3 weeks later.
	(Tranzschelia		
	discolor)		The addition of a spreading/penetrating type adjuvant
			such as a non-ionic based surfactant or crop oil
	Scab		concentrate or blend is recommended.
	(Venturia		concentrate of biend is recommended.
	carpophilia)		[Optional language if label has a rate range: If
	carpoprilla)		disease pressure is high, use the highest rate.]
	Shot Hole		מושבמשב מובששעוב וש ווועוו, עשב נווב ווועוובט ומנב.]
			Ontional language if label has a single rate and
	(Wilsonomyces		[Optional language if label has a single rate and
	carpophilus)		<i>interval range:</i> If disease pressure is high, use the
			shortest interval.]
			Ontional language if label has a rate range and
			[Optional language if label has a rate range and
			interval range: If disease pressure is high, use the
A I1 (1		<u></u>	shortest interval and highest rate.]

Application: For best results, sufficient water volume must be used to provide thorough coverage. Quadris Top can be applied by ground or aerial application. A minimum of 15 gal/A of water for ground applications is recommended. For aerial applications, a minimum of 10 gal/A of water is recommended.

- 1) Do not apply more than 56 fl oz/A of Quadris Top per crop.
- 2) Do not apply more than 0.46 lb ai/A per crop of difenoconazole-containing products.
- 3) Do not apply more than 1.5 lb ai/A per crop of azoxystrobin-containing products.
- 4) Do not apply within 28 days of harvest (28-day PHI).

		Use Rate	
		fl oz	
Crop	Target Diseases	product/A	Remarks
Bean and Pea,	Anthranose	14	Begin applications prior to disease onset
Dried Shelled	(Colletotrichum		when conditions are conducive for
(except soybean)	lindemuthianum)		disease. Apply Quadris Top on a 14-day
Subgroup 6C	Alternaria leaf spot		schedule making no more than 2
	(A. alternata)		sequential applications before alternating
To be grown for	Alternaria blight		to another fungicide with a different mode
bean, dried seed	(Alternaria spp.)		of action.
only.	Ascochyta leaf and		
-	pod spot		
Phaseolus	(Ascochyta spp.)		
Vigna	Ascochyta blight		
Pisum	(Mycosphaerella		
Lupinus	pinodes)		
	Cercospora leaf spot		
See complete list	(Cercospora		
below .	cruenta)		
See specific			
directions for			
soybeans and			
chickpea			

Application: For best results, sufficient water volume must be used to provide thorough coverage. Quadris Top can be applied by ground, chemigation, or aerial application. A minimum of 15 gal/A of water for ground applications is recommended. For aerial applications a minimum of 10 gal/A of water is recommended. For chemigation, apply in 0.1-0.25 inches/A of water. Chemigation with excessive water may lead to a decrease in efficacy.

Complete List of Bean and Pea, dried shelled (except soybean) – Subgroup 6C: Dried cultivars of bean (Lupinus); bean (Phaseolus) (includes field bean, kidney bean, lima bean, navy bean, pinto bean, tepary bean); bean (Vigna) (includes adzuki bean, blackeyed pea, catjang, cowpea, crowder pea, moth bean, mung bean, rice bean, southern pea, urd bean); broad bean; guar; lablab bean; lentil; pea (Pisum) (includes field pea); pigeon pea

- 1) Do not apply more than 56 fl oz/A of Quadris Top per crop per year.
- 2) Do not apply more than 28 fl oz/A of Quadris Top (0.23 lb difenoconazole/A/year) per crop per year for pea vines and hay.
- 3) Do not apply more than 0.46 lb ai/A/year of a difenoconazole-containing product.
- 4) Do not apply more than 1.3 lb ai/A/year of an azoxystrobin-containing product.
- 5) Do not feed or harvest cowpeas forage and hay.
- 6) Do not apply Quadris Top within 14 days of harvest (14-day PHI).

Gron	Torret Diogoso	Use Rate fl oz	Bemerke
Crop	Target Diseases	product/A	Remarks
Berry,	Powdery mildew	10-14	Begin applications prior to disease onset
Bushberry	(Microsphaera alni)		when conditions are conducive for
Subgroup 13-07B	Anthracnose (Colletotrichum		disease.
Blueberry	spp.) Septoria leaf spot (<i>S. albopunctata</i>) Alternaria leaf spot		For Monilinia and mummyberry, apply at or near flower bud swell and again at leaf bud swelling.
	(<i>A.tenuissima</i>) Leaf rust (<i>Pucciniastrum</i>		For other diseases, apply during early bloom.
	vaccinii) Monilinia blight and Mummyberry blight (<i>M. vaccinii-</i> <i>corymbosis</i>)		Apply Quadris Top on a 7- to 14-day schedule making no more than 2 sequential applications before alternating to another fungicide with a different mode of action.
			[Optional language if label has a rate range: If disease pressure is high, use the highest rate.]
			[Optional language if label has a single rate and interval range: If disease pressure is high, use the shortest interval.]
			[Optional language if label has a rate range and interval range: If disease pressure is high, use the shortest interval and highest rate.]

Application: For best results, sufficient water volume must be used to provide thorough coverage. Quadris Top can be applied by ground or aerial application. A minimum of 15 gal/A of water for ground applications is recommended. For aerial applications a minimum of 10 gal/A of water is recommended.

Complete List of Bushberry Subgroup: 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; cultivars, varieties, and/or hybrids of these.

- 1) Do not apply more than 56 fl oz/A of Quadris Top per crop per year.
- 2) Do not apply more than 0.75 lb ai/A/year of an azoxystrobin-containing product.
- 3) Do not apply more than 0.46 lb ai/A/year of a difenoconazole-containing product.
- 4) Do not apply Quadris Top within 7 days of harvest (7-day PHI).

Crop	Target Diseases	Use Rate fl oz product/ A	Remarks
Berry, Low Growing, Subgroup 13-07G, Except Cranberry	Anthracnose (<i>Colletotrichum</i> spp.)	8-14	Begin applications prior to disease onset when conditions are conducive for disease. Apply Quadris Top on a 7- to 14-day schedule making no more than 2 sequential applications before alternating
and/or hybrids of these	(Phragmidium potentillae)		to another fungicide with a different mode of action.
See complete list of low growing berries below.	Leaf Spot (<i>Cercospora</i> <i>fragariae</i>) Powdery Mildew		The addition of a spreading/penetrating type adjuvant such as a non-ionic based surfactant or crop oil concentrate or blend is recommended.
	(Sphaerotheca macularis)		[Optional language if label has a rate range: If disease pressure is high, use the highest rate.]
			[Optional language if label has a single rate and interval range: If disease pressure is high, use the shortest interval.]
			[Optional language if label has a rate range and interval range: If disease pressure is high, use the shortest interval and highest rate.]

Application: For best results, sufficient water volume must be used to provide thorough coverage. Quadris Top can be applied by ground, chemigation, or aerial application. A minimum of 15 gal/A of water for ground applications is recommended. For aerial applications a minimum of 10 gal/A of water is recommended. For chemigation, apply in 0.1-0.25 inches/A of water. Chemigation with excessive water may lead to a decrease in efficacy.

Complete List of Additional Low Growing Berries: Bearberry; Bilberry; Blueberry, lowbush; Cloudberry; Lingonberry; Muntries; Partridgeberry; Strawberry; cultivars, varieties, and/or hybrids of these.

- 1) Do not apply more than 56 fl oz/A of Quadris Top per crop per season.
- 2) Do not apply more than 0.46 lb ai/A/season of a difenoconazole-containing product.
- 3) Do not apply more than 1.0 lb ai/A/season of an azoxystrobin-containing product.
- 4) Quadris Top may be applied up to 0 day of harvest (0-day PHI).

		Use Rate	
Crop	Target Diseases	fl oz product/A	Remarks
Brassica (Cole) Leafy Vegetables Broccoli Brussels Sprouts Cabbage Cauliflower Collards Kale Mustard Greens Including all cultivars and/or hybrids of these See additional crops below.	Alternaria Diseases (<i>Alternaria</i> spp.) Anthracnose (<i>Colletotrichum</i> <i>higginsianum</i>) Cercospora Leaf Spot (<i>C. brassicicola</i>) Powdery Mildew (<i>Erysiphe polygoni</i>)	8-14	Begin applications prior to disease onset when conditions are conducive for disease. Apply Quadris Top on a 7- to 14-day schedule, making no more than 1 application before alternating to another fungicide with a non-QoI (Group 11) mode of action. The addition of a spreading/penetrating type adjuvant such as a non-ionic based surfactant or crop oil concentrate or blend is recommended. [Optional language if label has a rate range: If disease pressure is high, use the highest rate.] [Optional language if label has a single rate and interval range: If disease pressure is high, use the shortest interval.] [Optional language if label has a rate range and interval range: If disease pressure is high, use the shortest interval.]

Application: For best results, sufficient water volume must be used to provide thorough coverage. Quadris Top can be applied by ground, chemigation, or aerial application. A minimum of 15 gal/A of water for ground applications is recommended. For chemigation, apply in 0.1-0.25 inches/A of water. Chemigation with excessive water may lead to a decrease in efficacy.

Complete List of Brassica Leafy Vegetables: Broccoli; broccoli, Chinese (gai lon); broccoli raab (rapini); Brussels sprouts; cabbage; cabbage, Chinese (bok choy); cabbage, Chinese (napa); cabbage, Chinese mustard(gai choy); cauliflower; cavalo broccolo; collards; kale; kohlrabi; mizuna; mustard greens; mustard spinach; rape greens; turnip greens

- 1) Do not apply more than 56 fl oz/A of Quadris Top per season.
- 2) Do not apply more than 0.46 lb ai/A per season of difenoconazole-containing products.
- 3) Do not apply more than 0.75 lb ai/A per season of azoxystrobin-containing products.
- 4) Do not apply within 1 day of harvest (1-day PHI).

	1		
		Use Rate	
		fl oz	
Crop	Target Diseases	product/A	Remarks
Bulb Vegetables	Botrytis Leaf Blight (<i>B. squamosa</i>)	8-14	Begin applications prior to disease onset when conditions are conducive for disease. Apply Quadris Top on a 7- to 14-day schedule, making
Onion, Bulb Garlic Shallot	Cercospora Leaf Spot (<i>C. duddiae</i>)		no more than 1 application before alternating to another fungicide with a non-QoI (Group 11) mode of action.
Onion, Green Leek Welsh Onion Tops	Leaf Blotch (<i>Cladosporium allii-</i> <i>cepae</i>)		The addition of a spreading/penetrating type adjuvant such as a non-ionic based surfactant or crop oil concentrate or blend is recommended.
	Powdery Mildew (<i>Leveillula taurica</i>)		[Optional language if label has a rate range: If disease pressure is high, use the highest rate.]
	Purple Blotch (<i>Alternaria porri</i>)		[Optional language if label has a single rate and interval range: If disease pressure is high, use the shortest interval.]
	Stemphyllium Leaf Blight (<i>S. vesicarium</i>)		[Optional language if label has a rate range and interval range: If disease pressure is high, use the shortest interval and highest rate.]

Application: For best results, sufficient water volume must be used to provide thorough coverage. Quadris Top can be applied by ground, chemigation, or aerial application. A minimum of 15 gal/A of water for ground applications is recommended. For chemigation, apply in 0.1-0.25 inches/A of water. Chemigation with excessive water may lead to a decrease in efficacy.

Bulb onion subgroup 3-07A: 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; cultivars, varieties, and/or hybrids of these.

Green onion subgroup 3-07B: 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; cultivars, varieties, and/or hybrids of these.

- 1) For green onions, do not apply more than 42 fl oz/A of Quadris Top per season.
- 2) For green onions, do not apply more than 0.34 lb ai /A per season of difenoconazole-containing products.
- 3) For dry bulb onions, do not apply more than 56 fl oz/A per season of Quadris Top per crop.
- 4) For dry bulb onions, do not apply more than 0.46 lb ai/A per season of difenoconazole-containing products.
- 5) For the bulb crop group, do not apply more than 1.5 lb ai/A per season of azoxystrobin-containing products.
- 6) Do not apply within 7 days of harvest (7-day PHI).

		Use Rate	
Crop	Target Diseases	fl oz product/A	Remarks
Carrots	Alternaria Leaf Blight (<i>Alternaria dauci</i>) Cercospora Leaf Spot (<i>Cercospora</i> <i>carotae</i>)	8-14	Begin applications prior to disease onset when conditions are conducive for disease. Apply Quadris Top on a 7- to 10-day schedule making no more than 2 sequential applications before alternating to another fungicide with a different mode of action.
	Powdery Mildew (<i>Erysiphe</i> spp.)		The addition of a spreading/penetrating type adjuvant such as a non-ionic based surfactant or crop oil concentrate or blend is recommended.
	Southern Blight (Sclerotium rolfsii)		[Optional language if label has a rate range: If disease pressure is high, use the highest rate.]
			[Optional language if label has a single rate and interval range: If disease pressure is high, use the shortest interval.]
			[Optional language if label has a rate range and interval range: If disease pressure is high, use the shortest interval and highest rate.]
			For southern blight (white mold) use 14 fl oz/A.

Application: For best results, sufficient water volume must be used to provide thorough coverage. Quadris Top can be applied by ground, chemigation, or aerial application. A minimum of 15 gal/A of water for ground applications is recommended. For aerial applications a minimum of 10 gal/A of water is recommended. For chemigation, apply in 0.1-0.25 inches/A of water. Chemigation with excessive water may lead to a decrease in efficacy.

- 1) Do not apply more than 56 fl oz of Quadris Top per acre per season.
- 2) Do not apply more than 0.46 lb ai/A/season of a difenoconazole-containing product.
- 3) Do not apply more than 2.0 lb ai/A/season of an azoxystrobin-containing product.
- 4) Do not apply within 7 days of harvest (7-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A	Remarks
Chickpea (garbanzo bean)	Alternaria Blight (<i>A. alternata</i>) Ascochyta Blight (<i>A. rabiei</i>) Powdery Mildew (<i>Leveillula taurica</i>) Rust (<i>Uromyces ciceris- arietini</i>)	8-14	 Begin applications prior to disease onset when conditions are conducive for disease. Apply Quadris Top on a 14-day schedule making no more than 2 sequential applications before alternating to another fungicide with a different mode of action. The addition of a spreading/penetrating type adjuvant such as a non-ionic based surfactant or crop oil concentrate or blend is recommended. [Optional language if label has a rate range: If disease pressure is high, use the highest rate.]

Application: For best results, sufficient water volume must be used to provide thorough coverage. Quadris Top can be applied by ground, chemigation, or aerial application. A minimum of 15 gal/A of water for ground applications is recommended. For chemigation, apply in 0.1-0.25 inches/A of water. Chemigation with excessive water may lead to a decrease in efficacy.

- 1) Do not apply more than 56 fl oz of Quadris Top per acre per season.
- 2) Do not apply more than 0.46 lb ai/A/season of a difenoconazole-containing product.
- 3) Do not apply more than 1.5 lb ai/A/season of an azoxystrobin-containing product.
- 4) Do not apply within 14 days of harvest (14-day PHI).

		Use Rate	
Crop	Target Diseases	fl oz	Pomarka
Crop Citrus Fruit Crop Group 10-10 Grapefruit Lemon Lime Orange (Sour and Sweet) Tangerine Including all cultivars and/or hybrids of these See complete list of citrus fruit crops below.	Target Diseases Greasy Spot (Mycosphaerella citri)	fl oz product/A 10-15.4	RemarksQuadris Top 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 or air. An adjuvant may be added at recommended rates. A horticultural spray oil should be used to improve control of greasy spot.The addition of a spreading/penetrating type adjuvant such as a non-ionic based surfactant or crop oil concentrate or blend is recommended.[Optional language if label has a rate range: If disease pressure is high, use the highest rate.][Optional language if label has a single rate and interval range: If disease pressure is high, use the shortest interval.]
	Alternaria Leaf and Fruit Spot <i>(Alternaria citri)</i> Anthracnose <i>(Colletotrichum</i> spp.) Black Spot <i>(Guignardia</i> <i>citricarpa)</i>	10-15.4	[Optional language if label has a rate range and interval range: If disease pressure is high, use the shortest interval and highest rate.] Make no more than 2 sequential applications before alternating to another fungicide with a non-Qol (Group 11) different mode of action. Do not make more than 4 applications of Quadris Top or other Group 11 fungicides per season. Quadris Top 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 or air. An adjuvant may be added at recommended rates. A horticultural spray oil should be used to improve control of greasy spot. [Optional language if label has a rate range: If disease pressure is high, use the highest

Greasy Spot Rind	rate.]
Blotch	
(Mycosphaerella	[Optional language if label has a single rate
citri)	and interval range: If disease pressure is
	high, use the shortest interval.]
Melanose	
(Diaporthe citri)	[Optional language if label has a rate range
	and interval range: If disease pressure is
Phomopsis Stem-	high, use the shortest interval and highest
•	U
End Rot	rate.]
(Phomopsis citrii)	
	Make no more than 2 sequential applications
Post-Bloom Fruit	before alternating to another fungicide with a
Drop (PFD)	non-Qol (Group 11) different mode of action.
(Colletotrichum	Do not make more than 4 applications of
acutatum)	Quadris Top or other Group 11 fungicides
	per season.
Scab	
(Elsinoe fawcettii)	The addition of a spreading/penetrating type
	adjuvant such as a non-ionic based
	surfactant or crop oil concentrate or blend is
	· · · · · · · · · · · · · · · · · · ·
	recommended.

Application: For best results, sufficient water volume must be used to provide thorough coverage. Quadris Top can be applied by ground or aerial application. A minimum of 15 gal/A of water for ground applications is recommended. For aerial applications, a minimum of 10 gal/A of water is recommended.

Complete List of Citrus Fruit Crops: Australian desert lime; Australian finger lime; Australian round lime; Brown River finger lime; Calamondin; Citron; Citrus hybrids (*Citrus* spp., *Eremocitrus* spp., *Fortunella* spp., *Microcitrus* spp., and *Poncirus* spp).; Grapefruit; Japanese summer grapefruit; Kumquat; Lemon; Lime; Mediterranean mandarin; Mount White lime; New Guinea wild lime; Orange, sour; Orange, sweet; Pummelo; Russell River lime; Satsuma mandarin; Sweet lime; Tachibana orange; Tahiti lime; Tangelo; Tangerine (Mandarin); Tangor; Trifoliate orange; Uniq fruit; cultivars, varieties and/or hybrids of these.

- 1) Do not use Quadris Top in citrus plant propagation nurseries.
- 2) Do not apply more than 61.5 fl oz/A of Quadris Top per season.
- 3) Do not apply more than 0.5 lb ai/A per crop of difenoconazole-containing products.
- 4) Do not apply more than 1.5 lb ai/A per crop of azoxystrobin-containing products.
- 5) May be applied the day of harvest (0-day PHI).

		Use Rate	
Cron	Target Diseases	fl oz product/A	Remarks
Crop Cucurbit	Target DiseasesAlternaria Leaf Blight	10-14	Begin applications prior to disease onset when
Vegetables	(A. cucumerina)	10-14	conditions are conducive for disease. Apply Quadris Top on a 7- to 14-day schedule,
Cantaloupe	Alternaria Leaf Spot		making no more than 1 application of a Qol
Cucumber Honeydew	(A. alternata)		containing fungicide before alternating to another fungicide with a different mode of
Muskmelon Watermelon	Anthracnose (Colletotrichum		action.
Pumpkin Squash	orbiculare)		The addition of a spreading/penetrating type adjuvant such as a non-ionic based surfactant
Zucchini	Belly Rot (<i>Rhizoctonia solani</i>)		or crop oil concentrate or blend is recommended.
Including cultivars and/or hybrids of	Cercospora Leaf Spot (<i>C. citrullina</i>)		[Optional language if label has a rate range: If disease pressure is high, use the highest rate.]
these	Downy Mildew (Pseudoperonospora		[Optional language if label has a single rate and interval range: If disease pressure is high,
See additional	cubensis)		use the shortest interval.]
cucurbit crops below.	Gummy Stem Blight (<i>Didymella bryoniae</i>)		[Optional language if label has a rate range and interval range: If disease pressure is high, use the shortest interval and highest rate.]
	Myrothecium Canker (<i>M. roridum</i>)		For belly rot control, the first application should
	Phoma Blight (<i>P. exigua</i>)		be made at the 1- to 3-leaf crop stage with a second application just prior to vine tip or 10- 14 days later, whichever occurs first.
	Phyllosticta Leaf Spot (<i>P. cucurbitacearum</i>)		
	Plectosporium Blight (<i>P. tabacinum</i>)		
	Powdery Mildew (Sphaerotheca fuliginea, Erysiphe cichoracearum)		
	Septoria Leaf Blight (S. cucurbitacearum)		

Application: For best results, sufficient water volume must be used to provide thorough coverage. Quadris Top can be applied by ground, chemigation, or aerial application. A minimum of 15 gal/A of water for ground applications is recommended (20 for gummy stem blight). For chemigation, apply in 0.1-0.25 inches/A of water. Chemigation with excessive water may lead to a decrease in efficacy.

Complete List of Cucurbit Vegetables: Chayote (fruit); Chinese waxgourd (Chinese preserving melon); citron melon; cucumber; gherkin; gourd, edible (includes hyotan, cucuzza, hechima, Chinese okra); *Momordica* spp. (includes balsam apple, balsam pear, bittermelon, Chinese cucumber); muskmelon (includes cantaloupe); pumpkin; squash, summer; squash, winter (includes butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash); watermelon

- 1) Do not apply more than 56 fl oz/A of Quadris Top per season.
- 2) Do not apply more than 0.46 lb ai/A per season of difenoconazole-containing products.
- 3) Do not apply more than 1.5 lb ai/A per season of azoxystrobin-containing products.
- 4) Do not apply within 1 day of harvest (1-day PHI).

		Use Rate	
Crop	Target Diseases	fl oz product/A	Remarks
Filberts (Hazelnuts)	Eastern Filbert Blight (<i>Anisogramma</i> <i>anomala</i>)	12-14	Begin applications prior to disease onset when conditions are conducive for disease. Apply Quadris Top on a 14- to 21-day schedule making no more than 2 sequential applications before alternating to another fungicide with a non-Qol (Group 11) different mode of action. The addition of a spreading/penetrating type adjuvant such as a non-ionic based surfactant or crop oil concentrate or blend is recommended. [Optional language if label has a rate range: If disease pressure is high, use the highest rate.] [Optional language if label has a single rate and interval range: If disease pressure is high, use the shortest interval.]
			[Optional language if label has a rate range and interval range: If disease pressure is high, use the shortest interval and highest rate.]

Application: For best results, sufficient water volume must be used to provide thorough coverage. Quadris Top can be applied by ground or aerial application. A minimum of 15 gal/A of water for ground applications is recommended. For aerial applications, a minimum of 10 gal/A of water is recommended.

- 1) Do not apply more than 56 fl oz/A of Quadris Top per crop.
- 2) Do not apply more than 0.46 lb ai/A per crop of difenoconazole-containing products.
- 3) Do not apply more than 1.2 lb ai/A per crop of azoxystrobin-containing products.
- 4) Do not apply within 45 days of harvest (45-day PHI).

		Use Rate fl oz	
Crop	Target Diseases	product/A	Remarks
Fruiting Vegetables	Target Diseases Anthracnose	8-14	Begin applications prior to disease
Crop Group 8-10 A	(Colletotrichum	0-14	development and continue throughout the
and B	spp.)		season on a 7- to 10-day interval. Make no
	Spp.)		more than 2 consecutive applications
Peppers	Cercospora Leaf		before switching to another effective
Bell Pepper	Spot		fungicide with a different mode of action.
Non-Bell Pepper	(C. capsici)		
Sweet Non-Bell			The addition of a spreading/penetrating
Eggplant	Gray Leaf Spot		type adjuvant such as a non-ionic based
551	(Stemphyllium		surfactant or crop oil concentrate or blend is
Including all cultivars	solani)		recommended.
and/or hybrids of	,		
these	Powdery Mildew		[Optional language if label has a rate range:
	(Oidiopsis		If disease pressure is high, use the highest
See Tomatoes	sicula)		rate.]
section for specific			
directions.			[Optional language if label has a single rate
			and interval range: If disease pressure is
See complete list of			high, use the shortest interval.]
peppers and other			
fruiting vegetables			[Optional language if label has a rate range
below.			and interval range: If disease pressure is
			high, use the shortest interval and highest
			rate.]
			The addition of a spreading/penetrating
			type adjuvant may enhance efficacy.
	L	L	type adjuvant may enhance enhacy.

Application: For best results, sufficient water volume must be used to provide thorough coverage. Quadris Top can be applied by ground or aerial application. A minimum of 15 gal/A of water for ground applications is recommended. For aerial applications, a minimum of 10 gal/A of water is recommended.

Complete List of Peppers and Other Fruiting Vegetables: African eggplant; Bell pepper; Eggplant; Martynia; Non-bell pepper; Okra; Pea eggplant; Pepino; Roselle; Scarlet eggplant; cultivars, varieties; and/or hybrids of these.

- 1) Do not apply more than 55.3 fl oz/A/season of Quadris Top.
- 2) Do not apply more than 0.46 lb ai/A/season of difenoconazole-containing products.
- 3) Do not apply more than 1.0 lb ai/A/season of azoxystrobin-containing products.
- 4) May be applied the day of harvest (0-day PHI).

		Use Rate	
Cron	Torget Disesses	fl oz	Domorko
Crop Grapes (except Concord, Concord Seedless, and Thomcord. See Precaution under Remarks.)	Target DiseasesAlternaria Rot (A. alternata)Angular Leaf Spot (Mycosphearella angulata)Angular Leaf Spot (Mycosphearella angulata)Anthracnose (Elsinoe ampelina)Black Rot (Guignarda bidwellii)Downy Mildew (Plasmopara viticola)Leaf Blight (Pseudocercospora vitis)Phomopsis Cane and Leaf Spot (P. viticola)Powdery Mildew		RemarksFor powdery mildew, begin at bud break and apply on a 10- to 21-day interval, making no more than 2 sequential applications before alternating to another fungicide with a non-Qol (Group 11) mode of action.For Phomopsis diseases, apply at bud break before shoots are 0.5 inches in length, and then again when shoots are 5-6 inches in length.For black rot, begin when shoot length is 1-3 inches and continue on a 10-day interval.For all other diseases, begin applications prior to disease onset when conditions are conducive for disease. Apply Quadris Top on a 10- to 14- day schedule, making no more than 2 sequential applications before alternating to another fungicide with a non-Qol (Group 11) mode of action.[Optional language if label has a rate range: [Optional language if label has a single rate and interval range: If disease pressure is high, use the highest rate.] [Optional language if label has a rate range is high, use the shortest interval.] [Optional language if label has a rate range and
	(Uncinula necator) Rotbrenner (Pseudopezicula tracheiphila) Septoria Leaf Spot (S. ampelina) Suppression only: Botrytis Bunch Rot (B. cinerea)		interval range: If disease pressure is high, use the shortest interval and highest rate.] PRECAUTION: Avoid rates of methylated or ethylated vegetable oil/organosilicone adjuvants over 0.125% with Quadris Top as grape leaf injury may occur. PRECAUTION: On <i>V. labrusca, V. labrusca</i> hybrids and other non-viniferea hybrids where sensitivity is not known, the use of Quadris Top by itself or in tank mixtures with materials that may increase uptake (adjuvants, foliar fertilizers) may result in leaf burning or other phytotoxic effects. ATTENTION Quadris Top is extremely phytotoxic to certain apple varieties. Refer to caution in Use Precautions and Restrictions section of label.

Application: For best results, sufficient water volume must be used to provide thorough coverage. Quadris Top can be applied by ground or aerial application. A minimum of 15 gal/A of water for ground applications is recommended. For aerial applications, a minimum of 10 gal/A of water is recommended.

- 1) Do not apply more than 56 fl oz/A of Quadris Top per season.
- 2) Do not apply more than 0.46 lb ai/A per crop of difenoconazole-containing products.
- 3) Do not apply more than 1.5 lb ai/A per crop of azoxystrobin-containing products.
- 4) Do not apply within 14 days of harvest (14-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A	Remarks
Pecans	Downy Spot (<i>Mycosphaerella</i> <i>caryigena</i>) Liver Spot (<i>Gnomonia caryae</i>	8-14	Begin applications prior to disease onset when conditions are conducive for disease. Apply Quadris Top on a 14- to 21-day schedule, making no more than 2 sequential applications before alternating to another fungicide with a non-Qol (Group 11) mode of action.
	pv pecanae) Pecan Scab (Cladosporium caryigenum)		The addition of a spreading/penetrating type adjuvant such as a non-ionic based surfactant of crop oil concentrate or blend is recommended.
	Powdery Mildew (<i>Microsphaera</i>		[Optional language if label has a rate range: If disease pressure is high, use the highest rate.]
	penicillata) Vein Spot (Gnomomia		[Optional language if label has a single rate and interval range: If disease pressure is high, use the shortest interval.]
	nerviseda)		[Optional language if label has a rate range and interval range: If disease pressure is high, use
	Zonate Leaf Spot (Grovesinia pyramidalis)		the shortest interval and highest rate.]

Application: For best results, sufficient water volume must be used to provide thorough coverage. Quadris Top can be applied by ground or aerial application. A minimum of 15 gal/A of water for ground applications is recommended. For aerial applications, a minimum of 10 gal/A of water is recommended.

- 1) Do not apply more than 56 fl oz/A of Quadris Top per crop.
- 2) Do not apply more than 0.46 lb ai/A per crop of difenoconazole-containing products.
- 3) Do not apply more than 1.2 lb ai/A per crop of azoxystrobin-containing products.
- 4) Do not apply within 45 days of harvest (45-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A	Remarks
Pistachios	Alternaria Late Blight (<i>Alternaria</i> spp.) Panicle and Shoot Blight (<i>Botryosphaeria</i> <i>dothidea</i>) Septoria Leaf Spot (<i>S. pistaciarum</i>)	10-14	 Begin applications prior to disease onset when conditions are conducive for disease. Apply Quadris Top on a 14- to 21-day schedule, making no more than 2 sequential applications before alternating to another fungicide with a non-Qol (Group 11) mode of action. The addition of a spreading/penetrating type adjuvant such as a non-ionic based surfactant or crop oil concentrate or blend is recommended. [Optional language if label has a rate range: If disease pressure is high, use the highest rate.] [Optional language if label has a single rate and interval range: If disease pressure is high, use the shortest interval.] [Optional language if label has a rate range and interval range: If disease pressure is high, use the shortest interval.]

Application: For best results, sufficient water volume must be used to provide thorough coverage. Quadris Top can be applied by ground or aerial application. A minimum of 15 gal/A of water for ground applications is recommended. For aerial applications, a minimum of 10 gal/A of water is recommended.

- 1) Do not apply more than 56 fl oz/A of Quadris Top per crop.
- 2) Do not apply more than 0.46 lb ai/A per crop of difenoconazole-containing products.
- 3) Do not apply more than 1.5 lb ai/A per crop of azoxystrobin-containing products.
- 4) Do not apply within 14 days of harvest (14-day PHI).

Crop	Tana Dia sa sa	Use Rate fl oz	Demodes
-	Target Diseases	product/A	Remarks
Potatoes	Black Dot (Colletotrichum coccodes) Brown Spot (Alternaria alternata) Early Blight (Alternaria solani) Powdery Mildew (Erysiphe cichoracearum) Septoria Leaf Spot (S. lycopersici)	8-14	 Begin applications prior to disease development and continue throughout the season on a 7- to 14-day interval. Make no more than 2 consecutive applications before switching to another effective fungicide with a different mode of action. The addition of a spreading/penetrating type adjuvant such as a non-ionic based surfactant of crop oil concentrate or blend is recommended. [Optional language if label has a rate range: If disease pressure is high, use the highest rate.] [Optional language if label has a single rate and interval range: If disease pressure is high, use the shortest interval.] [Optional language if label has a rate range and interval range: If disease pressure is high, use the shortest interval.] [Optional language if label has a rate range and interval range: If disease pressure is high, use the shortest interval and highest rate.] The addition of a spreading/penetrating type
			adjuvant may enhance efficacy.

Application: For best results, use sufficient water volume to provide thorough coverage. Quadris Top may be applied by ground, chemigation, or aerial application.

- 1) Do not apply more than 55.3 fl oz/A/season of Quadris Top.
- 2) Do not apply more than 0.46 lb ai/A/season of difenoconazole-containing products.
- 3) Do not apply more than 2.0 lb ai/A/season of azoxystrobin-containing products
- 4) Do not apply within 14 days of harvest (14-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A	Remarks
Soybean	Aerial Blight	8-14	Begin applications prior to disease onset when
	(Rhizoctonia solani)		conditions are conducive for disease. Apply Quadris Top on a 7- to 10-day schedule making
	Alternaria Leaf Spot (<i>Alternaria</i> spp.)		no more than 2 sequential applications before alternating to another fungicide with a different mode of action.
	Anthracnose		
	(Colletotrichum truncatum)		The addition of a spreading/penetrating type adjuvant such as a non-ionic based surfactant o crop oil concentrate or blend is recommended.
	Brown Spot		
	(Septoria glycines)		[Optional language if label has a rate range: If disease pressure is high, use the highest rate.]
	Cercospora Blight		
	and Leaf Spot (<i>C. kikuchii</i>)		[Optional language if label has a single rate and interval range: If disease pressure is high, use the shortest interval.]
	Frogeye Leaf Spot		-
	(Cercospora sojina)		[Optional language if label has a rate range and interval range: If disease pressure is high, use
	Pod and Stem Blight (<i>Diaporthe</i> <i>phaseolorum</i>)		the shortest interval and highest rate.]
	Powdery Mildew (<i>Microsphaera</i> <i>diffusa</i>)		
	Rust (<i>Phakopsora</i> spp.)		

Application: For best results, sufficient water volume must be used to provide thorough coverage. Quadris Top can be applied by ground, chemigation, or aerial application. May be applied in a minimum of 2 gallons of water per acre by air. For chemigation, apply in 0.1-0.25 inches/A of water. Chemigation with excessive water may lead to a decrease in efficacy.

- 1) Do not apply more than 26.5 fl oz of Quadris Top per acre per season.
- 2) Do not apply more than 0.22 lb ai/A/season of a difenoconazole-containing product.
- 3) Do not apply more than 1.5 lb ai/A/season of an azoxystrobin-containing product.
- 4) Do not feed soybean hay, forage and silage.
- 5) Do not apply within 14 days of harvest (14-day PHI).

Crop	Target Diseases	Use Rate fl oz product/A	Remarks
Stone Fruit Apricots Cherries, Sweet Cherries, Tart Nectarines Peaches Plums Plumcot Prunes Including all cultivars and/or hybrids of these	Alternaria Spot and Fruit Rot (<i>A. alternata</i>) Anthracnose (<i>Colletotrichum</i> spp.) Brown Rot Blossom Blight and Fruit Rot (<i>Monilinia fructicola</i> , <i>M. laxa</i>) Leaf Rust (<i>Tranzschelia</i> <i>discolor</i>) Powdery Mildew (<i>Sphaerotheca</i> <i>pannosa</i> , <i>Podosphaera</i> <i>clandestina</i>) Scab (<i>Cladosporium</i> <i>carpophilum</i>) Shot Hole (<i>Wilsonomyces</i> <i>carpophilus</i>)	8-14	For brown rot blossom blight, begin applications at early bloom and continue through petal fall. For brown rot on fruit, apply as needed a maximum of two sprays during the pre-harvest period up to the day of harvest (minimum of a 7- day retreatment interval). If high inoculum and severe disease conditions persist, apply a registered fungicide that is non-Group 11 or non-Group 9. Follow the brown rot blossom blight schedule. Make additional applications on a 10- to 14-day interval from the end of petal fall to harvest. The addition of a spreading/penetrating type adjuvant such as a non-ionic based surfactant or crop oil concentrate or blend is recommended. [Optional language if label has a rate range: If disease pressure is high, use the highest rate.] [Optional language if label has a single rate and interval range: If disease pressure is high, use the shortest interval.]

Application: For best results, sufficient water volume must be used to provide thorough coverage. Quadris Top can be applied by ground or aerial application. Stone fruit diseases are most effectively controlled by ground applications. A minimum of 15 gal/A of water for ground applications is recommended. For aerial applications a minimum of 10 gal/A of water is recommended.

- 1) Do not apply more than 56 fl oz of Quadris Top per crop per season.
- 2) Do not apply more than 0.46 lb ai/A/season of a difenoconazole-containing product.
- 3) Do not apply more than 1.5 lb ai/A/season of an azoxystrobin-containing product.
- 4) Quadris Top may be applied on the day of harvest (0-day PHI).

		Use Rate	
Crop	Target Diseases	fl oz product/A	Remarks
Sugar beets	Cercospora Leaf Spot (<i>C. beticola</i>) Powdery Mildew (<i>Erysiphe polygoni</i>)	10-14	Begin applications prior to disease development and continue throughout the season on a 10- to 21-day interval. Make no more than 2 consecutive applications before switching to another effective fungicide with a different mode of action.
			[Optional language if label has a rate range: If disease pressure is high, use the highest rate.]
			[Optional language if label has a single rate and interval range: If disease pressure is high, use the shortest interval.]
			[Optional language if label has a rate range and interval range: If disease pressure is high, use the shortest interval and highest rate.]
			The addition of a spreading/penetrating type adjuvant such as a non-ionic surfactant or crop oil concentrate or blend is recommended when applying by ground or air.

Top may be applied by ground, chemigation, or aerial application. Specific Use Restrictions:

- Do not apply more than 55.3 fl oz/A/season of Quadris Top.
 Do not apply more than 2.0 lb ai/A/season of azoxystrobin-containing products.
- 3) Do not apply more than 0.46 lb ai/A/season of difenoconazole-containing products.
- 4) Do not apply within 7 days of harvest (7-day PHI).

		Use Rate	
		fl oz	
Crop	Target Diseases	product/A	Remarks
Tomatoes Tomatillo	Anthracnose (Colletotrichum spp.)	7.5-8	Begin applications prior to disease development and continue throughout the season on a 7- to 10-day interval. Make no more than 2
Including all cultivars and/or	Black Mold (A. alternata)		consecutive applications before switching to another effective fungicide with a different mode of action.
hybrids of these	Early Blight <i>(Alternaria solani)</i>		[Optional language if label has a rate range: If disease pressure is high, use the highest rate.]
See complete list of tomato crops below.	Gray Leaf Spot (Stemphylium botryosum)		[Optional language if label has a single rate and interval range: If disease pressure is high, use the shortest interval.]
	Leaf Mold <i>(Fulvia fulva)</i>		[Optional language if label has a rate range and interval range: If disease pressure is high, use the shortest interval and highest rate.]
	Powdery Mildew (Leveillula taurica)		Use of Adjuvants : Under certain weather conditions (particularly high temperatures)
	Septoria Leaf Spot (S. lycopersici)		Quadris Top in combination with high rates of silicone-based or oil containing (petroleum or crop) additives or adjuvants may cause injury.
	Target Spot (Corynespora cassiicola)		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 Quadris Top with any EC product.

Application: For best results, use sufficient water volume to provide thorough coverage. Quadris Top may be applied by ground, chemigation, or aerial application.

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.

- 1) Do not apply more than 47 fl oz/A/season of Quadris Top.
- 2) Do not apply until 21 days after transplanting or 35 days after seeding.
- 3) Do not apply more than 0.46 lb ai/A/season of difenoconazole-containing products.
- 4) Do not apply more than 0.6 lb ai/A/season of azoxystrobin-containing products.
- 5) May be applied the day of harvest (0-day PHI).

		Use Rate fl oz	
Crop	Target Diseases	product/A	Remarks
Tree Nuts Beechnut	Foliar Diseases	10-14	Begin applications prior to disease onset when conditions are conducive for disease. Apply Quadris Top on a 14- to 21-day schedule
Brazil Nut Butternut Cashew			making no more than 2 sequential applications before alternating to another fungicide with a non-Qol (Group 11) mode of action.
Chestnut Chinquapin			The addition of a spreading/penetrating type
Hickory Macadamia Walnut,			adjuvant such as a non-ionic based surfactant or crop oil concentrate or blend is recommended.
Black Walnut, English			[Optional language if label has a rate range: If disease pressure is high, use the highest rate.]
See specific Directions for			[Optional language if label has a single rate and interval range: If disease pressure is high, use the shortest interval.]
Almonds			[Optional language if label has a rate range and
Pecans Pistachios			<i>interval range</i> : If disease pressure is high, use the shortest interval and highest rate.]

Application: For best results, sufficient water volume must be used to provide thorough coverage. Quadris Top can be applied by ground or aerial application. A minimum of 15 gal/A of water for ground applications is recommended. For aerial applications, a minimum of 10 gal/A of water is recommended.

- 1) Do not apply more than 56 fl oz/A of Quadris Top per crop.
- 2) Do not apply more than 0.46 lb ai/A per crop of difenoconazole-containing products.
- 3) Do not apply more than 1.2 lb ai/A per crop of azoxystrobin-containing products.
- 4) Do not apply within 45 days of harvest (45-day PHI).

		Use Rate	
Crop	Target Diseases	fl oz product/A	Remarks
Vegetables, Tuberous and Corm, Subgroup 1C	Ascochyta Leaf Spot (A. cynarae) Black Dot (Colletotrichum	8-14	Begin applications prior to disease development and continue throughout the season on a 7- to 14-day interval. Make no more than 2 consecutive applications before switching to another effective fungicide with a different mode
For listing of	coccodes)		of action.
crops in this group, see below.	Brown Spot (Alternaria alternata)		The addition of a spreading/penetrating type adjuvant such as a non-ionic based surfactant or crop oil concentrate or blend is recommended.
See Potatoes for specific use	Early Blight <i>(Alternaria</i> spp.)		[Optional language if label has a rate range: If disease pressure is high, use the highest rate.]
directions.	Powdery Mildew (Erysiphe cichoracearum)		[Optional language if label has a single rate and interval range: If disease pressure is high, use the shortest interval.]
	Rust (Uromyces betae, Puccinia helianthi)		[Optional language if label has a rate range and interval range: If disease pressure is high, use the shortest interval and highest rate.]
Application	Septoria Leaf Spot (Septoria spp.)		

Application: For best results, sufficient water volume must be used to provide thorough coverage. Quadris Top can be applied by ground or aerial application. A minimum of 15 gal/A of water for ground applications is recommended. For aerial applications, a minimum of 10 gal/A of water is recommended.

Complete List of Vegetables, Tuberous and Corm Subgroup 1C: Arracacha, Arrowroot, Artichoke (Chinese and Jerusalem), Canna (Edible), Cassava (bitter and sweet), Chayote (root), Chufa, Dasheen, Ginger, Leren, Sweet Potato, Tanier, Tumeric, Yam (bean and true).

- 1) Do not apply more than 55.3 fl oz/A/season of Quadris Top.
- 2) Do not apply more than 0.46 lb ai/A/season of difenoconazole-containing products.
- 3) Do not apply more than 2.0 lb ai/A/season of azoxystrobin-containing products.
- 4) Do not apply within 14 days of harvest (14-day PHI).

FI oz product/acre	Lb ai azoxystrobin	Lb ai difenoconazole
7.5	0.09	0.06
8	0.10	0.07
10	0.13	0.08
12	0.16	0.10
14	0.18	0.11
15.4	0.20	0.13

Quadris Top Rate Conversion Table for Food Use

STORAGE AND DISPOSAL

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

Pesticide Storage

Store in original container only. Store in a cool, dry and well-ventilated place. Protect from excessive heat. Keep container closed when not in use. Do not store near food or feed.

Pesticide Disposal

Pesticide wastes may be toxic. Improper disposal of unused pesticide, spray mixture, or rinse water is a violation of Federal Law. If these wastes cannot be used according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance in proper disposal methods.

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 or disposal. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

Container Handling [greater than 5 gallons – mini-bulk]

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. 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 other 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 approved by state and local authorities.

Container Handling [greater than 5 gallons – bulk]

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 approved by state and local authorities.

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

Quadris Top®, the ALLIANCE FRAME the SYNGENTA Logo and the PURPOSE ICON are Trademarks of a Syngenta Group Company

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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

Quadris Top MAS TP-0215 AMEND-D-Clean - em - 5/4/15 000100-01313.20150227D.QUADRIS-TOP-TP-0215-Clean.pdf

SUPPLEMENTAL LABELING

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

GROUP 11 3 FUNGICIDES

Quadris Top® Fungicide

SCP

This supplemental label expires on XX/XX/XXXX and must not be used or distributed after this date.

Active Ingredients:	
Azoxystrobin*	
Difenoconazole**	
Other Ingredients:	70.4%
Total:	100.0%

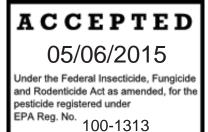
*CAS No. 131860-33-8 **CAS No. 119446-68-3

Contains 1.67 lb of azoxystrobin active ingredient and 1.05 lb of difenoconazole active ingredient per gallon

KEEP OUT OF REACH OF CHILDREN.

CAUTION

EPA Reg. No. 100-1313



All applicable directions, restrictions and precautions on the EPA-registered label are to be followed. Before using Quadris Top 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.



DIRECTIONS FOR USE

Rotational Crops: Please see the following table for the crop rotational restrictions:

Rotational Crops	Planting Time From Last Quadris Top Application
Bean and Pea, Dried Shelled Subgroup 6C Berry, Bushberry Subgroup 13-07B Berry, Low Growing, Subgroup 13-07G, except Cranberry Brassica (Cole) Leafy Vegetables Bulb Vegetables Carrot Chickpea Cucurbit Vegetables Eggplant Fruiting Vegetables Crop Group 8-10 Okra Pepper Potato Soybean Strawberry Sugar Beet Tomato Tuberous & Corm Vegetable Subgroup 1C	0 days
Cereals (Wheat, Barley, Triticale) Oats Rye Root and Tuber Vegetables, Crop Group 1 (except Carrot, Sugar Beet, and Tuberous Corm Vegetable Subgroup 1C)	30 days
Buckwheat Millet	365 days
All Other Crops Intended for Food and Feed	60 days

SPECIFIC DIRECTIONS FOR USE

		Use Rate fl oz	
Сгор	Target Diseases	product/A	Remarks
Bean and Pea,	Anthranose	14	Begin applications prior to disease onset
Dried Shelled	(Colletotrichum		when conditions are conducive for
(except soybean)	lindemuthianum)		disease. Apply Quadris Top on a 14-day
Subgroup 6C	Alternaria leaf spot		schedule making no more than 2
	(A. alternata)		sequential applications before alternating
To be grown for	Alternaria blight		to another fungicide with a different mode
bean, dried seed	(Alternaria spp.)		of action.
only.	Ascochyta leaf and		
	pod spot		
Phaseolus	(Ascochyta spp.)		
Vigna	Ascochyta blight		
Pisum	(Mycosphaerella		
Lupinus	pinodes)		
	Cercospora leaf spot		
See complete list	(Cercospora cruenta)		
below	Giuerila)		
Saa aamalata			
See complete directions for use			
for soybeans and			
chickpeas on EPA-			
registered label			
	at regulte aufficient wat	or volumo mi	ist be used to provide thorough coverage

Application: For best results, sufficient water volume must be used to provide thorough coverage. Quadris Top can be applied by ground, chemigation, or aerial application. A minimum of 15 gal/A of water for ground applications is recommended. For aerial applications a minimum of 10 gal/A of water is recommended. For chemigation, apply in 0.1-0.25 inches/A of water. Chemigation with excessive water may lead to a decrease in efficacy.

Complete List of Bean and Pea, dried shelled (except soybean) – Subgroup 6C: Dried cultivars of bean (Lupinus); bean (Phaseolus) (includes field bean, kidney bean, lima bean, navy bean, pinto bean, tepary bean); bean (Vigna) (includes adzuki bean, blackeyed pea, catjang, cowpea, crowder pea, moth bean, mung bean, rice bean, southern pea, urd bean); broad bean; guar; lablab bean; lentil; pea (Pisum) (includes field pea); pigeon pea

- 1) Do not apply more than 56 fl oz/A of Quadris Top per crop per year.
- 2) Do not apply more than 28 fl oz/A of Quadris Top (0.23 lb difenoconazole/A/year) per crop per year for pea vines and hay.
- 3) Do not apply more than 0.46 lb ai/A/year of a difenoconazole-containing product.
- 4) Do not apply more than 1.3 lb ai/A/year of an azoxystrobin-containing product.
- 5) Do not feed or harvest cowpeas forage and hay.
- 6) Do not apply Quadris Top within 14 days of harvest (14-day PHI).

		Use Rate	
		fl oz	
Crop	Target Diseases	product/A	Remarks
	Powdery mildew	10-14	Begin applications prior to disease onset
Berry, Buchharm	(<i>Microsphaera alni</i>)	10-14	when conditions are conducive for
Bushberry	Anthracnose		disease.
Subgroup 13-07B	(Colletotrichum		
Blueberry	spp.) Septoria leaf spot (<i>S. albopunctata</i>) Alternaria leaf spot		For Monilinia and mummyberry, apply at or near flower bud swell and again at leaf bud swelling.
	(A.tenuissima) Leaf rust (Pucciniastrum		For other diseases, apply during early bloom.
	vaccinii) Monilinia blight and Mummyberry blight (<i>M. vaccinii-</i> <i>corymbosis</i>)		Apply Quadris Top on a 7- to 14-day schedule making no more than 2 sequential applications before alternating to another fungicide with a different mode of action.
			[Optional language if label has a rate range: If disease pressure is high, use the highest rate.]
			[Optional language if label has a single rate and interval range: If disease pressure is high, use the shortest interval.]
			[Optional language if label has a rate range and interval range: If disease pressure is high, use the shortest interval and highest rate.]

Application: For best results, sufficient water volume must be used to provide thorough coverage. Quadris Top can be applied by ground or aerial application. A minimum of 15 gal/A of water for ground applications is recommended. For aerial applications a minimum of 10 gal/A of water is recommended.

Complete List of Bushberry Subgroup: 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; cultivars, varieties, and/or hybrids of these.

- 1) Do not apply more than 56 fl oz/A of Quadris Top per crop per year.
- 2) Do not apply more than 0.75 lb ai/A/year of an azoxystrobin-containing product.
- 3) Do not apply more than 0.46 lb ai/A/year of a difenoconazole-containing product.
- 4) Do not apply Quadris Top within 7 days of harvest (7-day PHI).

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