

U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs

Biopesticides and Pollution Prevention Division (7511P) 1200 Pennsylvania Ave., N.W.

Washington, D.C. 20460

X Registration
Reregistration
(under FIFRA, as amended)

EPA	Reg.	Num	ber:
-----	------	-----	------

Date of Issuance:

73049-522

12/17/2021

Term of Issuance:

Unconditional

Name of Pesticide Product:

Zorda WG Biological Fungicide

Name and Address of Registrant (include ZIP Code):

Valent BioSciences LLC 1910 Innovation Way, Suite 100 Libertyville, IL 60048-6316

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Biopesticides and Pollution Prevention Division prior to use of the label in commerce. In any correspondence on this product, always refer to the above EPA Registration Number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA or the Act).

Registration is in no way to be construed as an endorsement or recommendation of this product by the U.S. Environmental Protection Agency (EPA). In order to protect health and the environment, the Administrator, on his or her motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under the Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

- 1. Submit and/or cite all data required for registration or registration review of your product when the EPA requires all registrants of similar products to submit such data.
- 2. Make the following labeling change before you release this product for shipment:
 - Revise the EPA Registration Number to read, "EPA Reg. No. 73049-522."
- 3. Submit one (1) copy of the final printed labeling for the record before you release this product for shipment.

Signature of Approving Official:

DANIEL
SCHOEFF

Date: Digitally signed by DANIEL SCHOEFF
Date: 2021.12.17
12:13:09-05'00'

Date:

Dote:

Date:

Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
Date:
D

Page 2 of 2 EPA Reg. No. 73049-522 Action Code Case No. 00144611

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

Your release for shipment of this product constitutes acceptance of these terms. If these terms are not complied with, this registration will be subject to cancellation in accordance with FIFRA section 6. A stamped copy of the labeling is enclosed for your records. Please also note that the record for this product currently contains the following acceptable Confidential Statement of Formula (CSF):

Basic CSF dated 12/14/2021

If you have any questions, please contact Bibiana Oe by phone at (202) 566-1538 or via email at oe.bibiana@epa.gov.

Sincerely,

DANIEL SCHOEFF

Digitally signed by DANIEL SCHOEFF
Date: 2021.12.17 12:13:36

for Jeannine Kausch, Product Manager 92 Microbial Pesticides Branch Biopesticides and Pollution Prevention Division (7511P) Office of Pesticide Programs

Enclosure

[Text in brackets [] indicates optional language or language intended for explanatory purposes to facilitate label review. Thus, this language will often not appear on final printed labeling. Also, this page is present (page 1) to delineate sublabels and will not appear on the final printed labeling.]

${\bf Zorda^{TM}\,WG}\\ {\bf BIOLOGICAL\,FUNGICIDE}\\$

[Alternative brand names: ZordaTM Biological Fungicide / Bactericide and ZordaTM Turf and Ornamentals]

MASTER LABEL

ZordaTM is a [broad-spectrum] biological fungicide [/] [bactericide] for the [control] [and] [/] [or] [suppression] of plant pathogenic microbes.

Sublabel I: Zorda™ WG Biological Fungicide - For Turf and Ornamental Uses

ACTIVE INGREDIENT:	By Wt.
Bacillus amyloliquefaciens strain PTA-4838*	74.81%
OTHER INGREDIENTS:	<u>25.19%</u>
TOTAL:	100.00%

^{*}Contains a minimum of 1.65 x 10¹⁰ colony forming units per gram [CFU/g] of product.

KEEP OUT OF REACH OF CHILDREN CAUTION

ACCEPTED

Dec 17, 2021

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under

EPA Reg. No. 73049-522

${\bf Zorda^{TM}\,WG}\\ {\bf BIOLOGICAL\,FUNGICIDE}$

[Alternative brand name: **ZordaTM Biological Fungicide** / **Bactericide**]

ACTIVE INGREDIENT:	By Wt
Bacillus amyloliquefaciens, strain PTA-4838*	74.81%
OTHER INGREDIENT:	25.19%
TOTAL:	100.00%

^{*}Contains a minimum of 1.65 x 10¹⁰ colony forming units per gram [CFU/g] of product.

KEEP OUT OF REACH OF CHILDREN CAUTION

See succeeding panel for First Aid, additional Precautionary Statements, Directions for Use and Storage/Disposal Statements

Net weight: Lot No.:

Not for sale or use after [date stamped here will be 6 months after the date of manufacture]

EPA Reg. No.: 73049-LEE EPA Est. No.: 33762-IA-01

Manufactured For: Valent BioSciences LLC 1910 Innovation Way, Suite 100 Libertyville, IL 60048 USA 1-800-323-9597

	FIRST AID
If in Eyes	Hold eye open and rinse slowly and gently with water for 15-20 minutes.
	• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
	• Call a poison control center or doctor for treatment advice.
	Move person to fresh air.
If Inhaled	• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.
	Call a poison control center or doctor for treatment advice.
If on Skin or	Take off contaminated clothing.
Clothing	• Rinse skin immediately with plenty of water for 15-20 minutes.
	• Call a poison control center or doctor for treatment advice.
	HOTLINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-315-9819 (24 hours) for emergency medical treatment and/or transport emergency information. For all other information, call 1-800-323-9597.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS **CAUTION**

Causes moderate eye irritation. Harmful if inhaled. Avoid contact with eyes or clothing. Avoid breathing dust or spray mist. 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. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Protective eyewear
- Waterproof gloves
- Shoes plus socks

Mixers/loaders and applicators must wear a minimum of a NIOSH-approved particulate filtering face piece respirator with any R or P filter; or a NIOSH-approved elastomeric articulate respirator with any R or P filter; or a NIOSH-approved powered air-purifying respirator with an HE filter. Repeated exposures to high concentrations of microbial proteins can cause allergic sensitization.

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

ENGINEERING CONTROLS:

When handlers use closed systems in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.607(d)], the handler PPE requirements may be reduced or modified as specified in the WPS.

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

USER SAFETY RECOMMENDATIONS

Users should:

- 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

For terrestrial uses: Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high-water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

DIRECTIONS FOR USE

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

READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.

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 State or Tribal agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

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

Do not enter or allow worker entry into treated areas during the restricted-entry interval 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
- Waterproof gloves
- Shoes plus socks
- Protective eyewear

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. Keep unprotected persons out of the treatment areas until sprays have dried.

PRODUCT INFORMATION

ZordaTM WG Biological Fungicide (hereafter referred to as Zorda) contains a minimum of 1.65 x 10¹⁰ Colony Forming Units (CFUs) of the bacterium *Bacillus amyloliquefaciens* strain PTA-4838. When applied according to the label directions, Zorda [controls] [or] [suppresses] a broad range of fungal [and bacterial] pathogens to provide protection from harmful diseases.

As a microbial product containing live spores of the protective bacterium *Bacillus amyloliquefaciens*, Zorda will produce the best results when applied preventively (before a disease outbreak occurs).

Zorda can be applied as a foliar spray, either standalone or in combination with other registered products in a rotation or as tank mixes. For improved performance, use as part of a spray program in rotation with other registered fungicides [and bactericides] with unrelated modes of action.

Incorporation of adjuvants, in particular spreader-stickers, to ensure improved coverage can further enhance disease control. All types of spray equipment commonly utilized for the application of foliar sprays can be used to apply Zorda.

Many factors, including disease pressure, the environment (weather) and the condition of the crop can impact the level of control. Adjust spray intervals and use rate accordingly, with higher rates and more frequent applications if high disease pressure is expected.

Re-application may be required in case of heavy rain events shortly after a treatment. Product should be used as soon as possible after opening the package.

FOLIAR APPLICATION DIRECTIONS

Always read and follow the label instructions regarding application rates and restrictions. For best disease control performance, apply Zorda preventively (before or during the initial stages of disease). [Apply the higher labeled rates when increased pest pressure is expected based on predicted weather conditions or other factors].

Application equipment must be clean and free of previous pesticide deposits before applying Zorda. Determine the required amount of product based on desired application rate and acreage to be treated. Fill tank with water to at least half the final volume. Add product(s) in mix order referenced in Mixing Order for Tank Mix Partners by Formulation Type section (see below) to the spray tank and mix if necessary, for complete dissolution. Add remaining water to reach the desired spray volume (10-100 gallons of prepared spray solution per acre). If prepared spray solution is stored for extended periods of time, agitate before use.

Always use spray volumes high enough to ensure thorough coverage of all treated plant surfaces. Complete coverage is crucial for efficient disease control or suppression.

GREENHOUSE APPLICATION DIRECTIONS

Zorda can be used as a foliar spray in the greenhouse. Please refer to the "Foliar Applications Directions" above for more information. As crop safety has not been confirmed on all cultivars, plant compatibility testing is recommended when spraying on a cultivar in the greenhouse for the first time.

COMPATIBILITY WITH OTHER AGRICULTURAL PRODUCTS

Do not tank mix Zorda with other products unless compatibility has been verified. If considering tank mixing Zorda with other products, use the following compatibility jar test before mixing an entire tank: Add water from the same water source to a clear glass or plastic jar. Add the products in correct proportions. Mix thoroughly and let stand for a minimum of 15 minutes. Separation, gelling, or generation of heat are all signs of incompatibility.

Consult with your Valent Agricultural Specialist for potential pesticide interactions.

Always read and follow all label directions and precautions for each product. When using combinations of products, the most restrictive label limitations and precautions must be followed. Do not mix Zorda with any product that has a prohibition against tank mixing. For further information, consult your Valent Agricultural Specialist.

MIXING ORDER FOR TANK MIX PARTNERS BY FORMULATION TYPE

- 1) Carrier (water)
- 2) Wettable granules (dry flowables)
- 3) Wettable powders
- 4) Aqueous solutions
- 5) Emulsifiable concentrates
- 6) Adjuvants

CROP APPLICATION DIRECTIONS

AGRICULTURAL/ COMMERCIAL USES:

Root and Tuber Vegetables

Arracacha; arrowroot; artichoke, Chinese; artichoke, Jerusalem; beet, garden; beet, sugar; burdock, edible;

canna, edible; carrot; cassava, bitter and sweet; celeriac (celery root); chayote (root); chervil, turnip-rooted; chicory; chufa; dasheen (taro); ginger; ginseng; horseradish; leren; parsley, turnip-rooted; parsnip; potato; radish; radish, oriental (daikon); rutabaga; salsify (oyster plant); salsify, black; salsify, Spanish; skirret; sweet potato; tanier (cocoyam); turmeric; turnip; yam bean; yam, true; including cultivars, varieties and/or hybrids of these commodities

and/or myorids of these co		
Pest	S	Application Rate
	Erwinia carotovora / Pectobacterium	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre
Aerial stem rot	carotovora [*]	•
Alternaria Leaf Blight /		
Black Rot / Black Crown		
Rot	Alternaria spp.[*]	
Bacterial Leaf Spot /		
Bacterial Leaf Blight	Xanthomonas spp.[*]	
Black Dot	Colletotrichum spp.[*]	
Brown Leaf Spot	Alternaria alternata[*]	
	Peronospora spp.[*];	
Downy Mildew	Plasmopara spp.[*]	
Early Blight	Alternaria solani[*]	
Gray Mold	Botrytis spp.[*]	
Late Blight	Phytophthora infestans[*]	
Leaf Spot	Cercospora spp.[*]	
Powdery Mildew	Erysphe spp.[*]	
Ramularia	Ramularia spp.[*]	
Rhizoctonia Stem Canker	Rhizoctonia solani[*]	
and Crown Rot		
Rust	Uromyces spp.[*]	
	Sclerotinia	
White Mold	sclerotiorum[*]	

^{*}Not for use in CA

Bulb Vegetables

Chive (fresh leaves, Chinese, fresh leaves); daylily, bulb; elegans hosta; fritillaria (bulb, leaves); garlic (bulb, great-headed bulb and serpent bulb); kurrat; lady's leek; leek; wild leek; lily, bulb; onion (Beltsville bunching, bulb, Chinese, bulb, fresh, green, macrostem, pearl, potato bulb, tree, tops and Welsh tops); shallot (bulb and fresh leaves); including cultivars, varieties and/or hybrids of these commodities

Pe	ests	Application Rate
Bacterial Leaf Streak	Pseudomonas spp.[*]	
Botrytis Neck Rot	Botrytis spp. [*]	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre
Botrytis Leaf Blight	Botrytis squamosa [*]	_
Downy Mildew	Peronospora spp.[*]	
Onion Purple Blotch	Alternaria porri[*]	
Powdery Mildew	Erysiphe spp.[*];	
	Leveillula taurica[*]	
Rust	Puccinia porri[*]	

	Stemphylium Leaf Blight	Stemphylium
	/ Stalk Rot	vesicarium[*]
	White Rot	Sclerotium cepivorum[*]
ſ	Xanthomonas Leaf	Xanthomonas spp.[*]
	Blight	

^{*}Not for use in CA

Leafy Vegetables

Amaranth (Chinese and leafy); arugula; aster, Indian; blackjack; broccoli (Chinese and raab) cabbage (abyssinian, Chinese bok choy and seakale); cat's whiskers; cham-chwi; cham-na-mul; chervil, fresh leaves; chipilin; chrysanthemum, garland; cilantro, fresh leaves; collards; corn salad; cosmos; cress (garden and upland); dandelion, leaves; dang-gwi, leaves; dillweed; dock; dol-nam-mul; ebolo; endive; escarole; fameflower; feather cockscomb; good king henry; hanover salad; huauzontle; jute, leaves; kale; lettuce (bitter, head and leaf); maca, leaves; mizuna; mustard greens; orach; parsley, fresh leaves; plantain, buckhorn; primrose, English; purslane (garden and winter); radicchio; radish, leaves; rape greens; rocket, wild; shepherd's purse; spinach (Malabar, New Zealand and tanier); Swiss chard; turnip greens; violet, Chinese, leaves; watercress**; including cultivars, varieties and/or hybrids of these commodities

I	Pest	Application Rate
Anthracnose	Colletotrichum spp.[*]	
Alternaria Leaf Spot	Alternaria brassicicola]*]	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre
Bacterial Blight /	Xanthomonas spp.[*];	
Bacterial Leaf Spot	Pseudomonas	
	syringae[*]	
Botrytis	Botrytis spp.[*]	
Bottom Rot	Rhizoctonia solani[*]	
Downy Mildew	Bremia lactucae[*];	
	Peronospora spp.[*]	
Leaf Spot	Cercospora spp.[*]	
Powdery Mildew	Leveillula taurica[*]	
Pink Rot	Sclerotinia	
	sclerotiorum[*]	
Sclerotinia Head and	Sclaerotinia spp.[*]	
Leaf Drop		
White Rust	Albugo occidentalis[*]	

^{*}Not for use in CA

Brassica (Cole) 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; including cultivars,

^{**} Do not apply to flooded fields

varieties and/or hybrids of these commodities

Pe	est	Application Rate
Alternaria Leaf Spot	Alternaria spp.[*]	
Anthracnose	Colletotrichum spp.[*]	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre
Bacterial Leaf Spot and		
Blight	Pseudomonas spp.[*]	
Bacterial Rot	Erwinia spp.[*]	
	Xanthomonas	
Black Rot	campestris[*]	
Gray Mold	Botrytis spp.[*]	
	Cercospora	
Cercospora Leaf Spot	brassiciola[*]	
Downy Mildew	Peronospora spp.[*]	
Pin Rot	Alternaria spp.[*]	
Powdery Mildew	Erysiphe polygoni[*]	
Southern Blight	Sclerotium rolfsii[*]	
White Rust	Albugo candida[*]	
	Xanthomonas	
Xanthomonas Leaf Spot	campestris[*]	

^{*}Not for use in CA

Legume Vegetables (Succulent or Dried)

Bean (*Lupinus* spp.) (includes grain lupin, sweet lupin, white lupin, and white sweet lupin); bean (*Phaseolus* spp.) (includes field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean); bean (*Vigna* spp.) (includes adzuki bean, asparagus bean, blackeyed pea, catjang, Chinese longbean, cowpea, Crowder pea, moth bean, mung bean, rice bean, southern pea, urd bean, yardlong bean); broad bean (fava bean); chickpea (garbanzo bean); guar; jackbean; lablab bean (hyacinth bean); lentil; pea (*Pisum* spp.) (includes dwarf pea, edible-podded pea, English pea, field pea, garden pea, green pea, snowpea, sugar snap pea); pigeon pea; soybean; soybean (immature seed); sword bean; including cultivars, varieties and/or hybrids of these commodities

Pe	ests	Application Rate
Asian Soybean Rust	Phakopsora pachyrhizi[*]	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre
Bacterial Brown Spot	Pseudomonas syringae pv. syringae[*]	
Bacterial Pustule /		
Bacterial Blight	Xanthomonas spp.[*]	
Brown Spot	Septoria glycines[*]	
	Peronospora	
Downy Mildew	manshurica[*];	

	Phytophthora
	nicotianae[*]
Gray Mold	Botrytis spp.[*]
	Pseudomonas savastanoi
	/ Pseudomonas syringae
Halo Blight	pv. phaseolicola
Leaf Spot	Cercospora spp.[*]
Powdery Mildew	Erysiphe spp.[*]
	Uromyces
	appendiculatus[*];
Rust	Puccinia spp.[*]
	Sclerotinia
White Mold	sclerotiorum[*]

^{*}Not for use in CA

Fruiting Vegetables

African eggplant; bush tomato; cocona; currant tomato; eggplant; garden huckleberry; goji berry; groundcherry; martynia; naranjilla; okra; pea eggplant; pepino; pepper (includes bell pepper, chili pepper, cooking pepper, pimento, sweet pepper); roselle; scarlet eggplant; sunberry; tomatillo; tomato; tree tomato; including cultivars, varieties and/or hybrids of these commodities

P	est	Application Rate
Anthracnose	Colletotrichum spp.[*]	
Bacterial Canker	Clavibacter	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre
	michiganensis[*]	
Bacterial Speck	Pseudomonas syringae	
	pv. tomato[*]	
Bacterial Spot / Blight	Xanthomonas spp.[*]	
Buckeye Rot	Phytophthora spp.[*]	
Early Blight	Alternaria solani[*]	
Gray Mold	Botrytis cinerea[*]	
Late Blight	Phytophthora	
	infestans[*]	
Leaf Mold	Fulvia fulva / Passalora	
	fulva[*]	
Phytophthora Blight	Phytophthora capsici[*]	
Powdery Mildew	Leveillula taurica[*]	
Southern Blight	Sclerotium rolfsii[*]	
Target Spot	Corynespora	
	cassiicola[*]	
White Mold	Sclerotinia	
	sclerotiorum[*]	

^{*}Not for use in CA

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 and winter (includes butternut squash, calabaza, hubbard, acorn, spaghetti)); watermelon; including cultivars, varieties and/or hybrids of these commodities

1	Pests	Application Rate
Alternaria Leaf Spot	Alternaria spp.[*]	
Angular Leaf Spot	Pseudomonas syringae[*]	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre
Anthracnose	Colletotrichum lagenarium[*]	
Bacterial Fruit Blotch	Acidovorax avenae[*]	
Cercospora Leaf Spot	Cercospora citrullina[*]	
Downy Mildew	Pseudoperonospora	
	cubensis[*]	
Gray Mold	Botrytis cinerea[*]	
Gummy Stem Blight	Didymella bryoniae[*]	
Phytophthora Blight	Phytophthora capsici[*]	
Plectosporium Blight	Plectosporium	
	tabacinum /	
	Plectosphaerella	
	cucumerina [*]	
Powdery Mildew	Erysiphe spp.[*];	
	Sphaerotheca spp.[*]	
Southern Blight	Sclerotium rolfsi[*]	

^{*}Not for use in CA

Citrus Fruit

Calamondin; citron; citrus hybrids; grapefruit; Japanese summer grapefruit; kumquat; lemon; lime (Australian desert, Australian finger, Australian round, Brown River finger, mount white, New Guinea wild, Russell River, sweet, and Tahiti lime); Mediterranean mandarin; orange, (sour and sweet); pummelo; satsuma mandarin; tachibana orange; Tahiti lime; tangelo; tangerine (mandarin); tangor; trifoliate orange; uniq fruit; including cultivars, varieties and/or hybrids of these commodities

Pests		Application Rate
Alternaria brown Spot	Alternaria alternata[*]	
Anthracnose	Colletotrichum	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre
	gloeosporioides[*]	
Bacterial Blast	Pseudomonas	
	syringae[*]	
Black Spot	Guignardia citricarpa /	
	Phyllosticta citricarpa[*]	
Citrus Canker	Xanthomonas spp.[*]	

Greasy Spot	Mycosphaerella citri[*]
Melanose	Diaporthe citri[*]
Post Bloom Fruit Drop	Colletotrichum
	acutatum[*]
Powdery Mildew	Oidium
	citri[*];Fibroidium
	tingitaninum /
	Acrosporium
	tingitaninum [*]
Citrus Scab	Elsinoe fawcetti[*]

^{*}Not for use in CA

Pome Fruit

Apple; azarole; crabapple; loquat; mayhaw; medlar; pear; pear, Asian; quince; quince, Chinese; quince, Japanese; tejocote; including cultivars, varieties and/or hybrids of these commodities

Japanese; tejocote; including cultivars, varieties and/or nyorids of these commodities		
Pests		Application Rate
Alternaria blotch	Alternaria mali[*]	
Apple Scab	Venturia spp.[*]	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre
Bitter Rot	Colletotrichum spp.[*]	
Black Rot / Frogeye Leaf	Botryosphaeria obtuse[*]	
Spot		
Brooks spot	Mycosphaerella pomi[*]	
Bull's-Eye Rot	Neofabraea spp.[*]	
Cedar-Apple Rust	Gymnosporangium	
	juniperi-virginianae[*]	
Fire Blight	Erwinia amylovora[*]	
Flyspeck	Schizothyrium pomi[*]	
Gray Mold	Botrytis spp.[*]	
Powdery Mildew	Podosphaera	
	leucotricha[*]	
Sooty Blotch	Sooty Blotch Disease	
	complex[*]	
White Rot	Botryosphaeria	
	dothidea[*]	

^{*}Not for use in CA

Stone Fruit

Apricot; apricot, Japanese; capulin; cherry (black, Nanking, sweet and tart); Jujube, Chinese; nectarine; peach; plum (American, beach, Canada, cherry, Chickasaw, Damson, Japanese, Klamath and prune); plumcot; sloe; including cultivars, varieties and/or hybrids of these commodities

Pests Application Rate	

Alternaria Spot / Fruit	Alternaria alternata[*]	
Rot		[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lb per acre
Anthracnose	Colletotrichum spp.[*]	
Bacterial Canker	Pseudomonas spp.[*]	
Bacterial Spot / Bacterial	Xanthomonas spp.[*]	
Leaf Spot		
Brown Rot Blossom	Monilinia spp[*]	
Blight and fruit rot		
Cherry Leaf Spot	Blumeriella jaapii[*]	
Fruit Brown Rot	Monilinia fruticola[*]	
Gray Mold	Botrytis spp.[*]	
Leaf Curl	Taphrina deformans[*]	
Powdery Mildew	Sphaerotheca	
	pannosa[*];	
	Podosphaera spp.[*]	
Rusty Spot	Podosphaera	
	leucotricha[*]	
Scab	Cladosporium	
	carpophilum[*]	
Shot Hole	Wilsonomyces	
	carpophilus[*];	
	Xanthomonas pruni[*]	

^{*}Not for use in CA

Berry and Small Fruit

Amur river grape; aronia berry; bayberry; bearberry; bilberry; blackberry (including Andean blackberry, arctic blackberry, bingleberry, black satin berry, boysenberry, brombeere, California blackberry, Chesterberry, Cherokee blackberry, Cheyenne blackberry, common blackberry, coryberry, darrowberry, dewberry, Dirksen thornless berry, evergreen blackberry, Himalayaberry, hullberry, lavacaberry, loganberry, lowberry, Lucretiaberry, mammoth blackberry, marionberry, mora, mures deronce, nectarberry, Northern dewberry, olallieberry, Orgeon evergreen berry, phenomenalberry, rangeberry, ravenberry, rossberry, Shawnee blackberry, Southern dewberry, tayberry, youngberry, zarzamora, and cultivars, varieties and/or hybrids of these); blueberry (highbush and lowbush); buffalo currant; buffaloberry; che; Chilean guava; chokecherry; cloudberry; cranberry** (including highbush); currant (black and red); elderberry; European barberry; gooseberry; grape; honeysuckle, edible; huckleberry; jostaberry; Juneberry (Saskatoon berry); kiwifruit (fuzzy and hardy); lingonberry; maypop; mountain pepper berries; mulberry; muntries; native currant; partridgeberry; phalsa; pincherry; raspberry (black and red); riberry; salal; schisandra berry; sea buckthorn; serviceberry; strawberry; wild raspberry; including cultivars, varieties and/or hybrids of these commodities

Pests		Application Rate
Alternaria Fruit Rot	Alternaria tenuissima[*]	
Angular Leaf Spot	Xanthomonas	[1.5] $[2]$ $[2.5]$ $[2.75]$ $[3]$ $[3.5]$ $[2-3]$ lbs. per acre
	fragariae[*]	
Anthracnose	Colletotrichum	
	gloeosporioides[*];	

	Colletotrichum
	acutatum[*]
Bacterial Canker	Pseudomonas spp.[*]
Botrytis Blight / Gray	Botrytis spp.[*]
Mold	Don you spp.[]
Botryosphaeria Dieback;	Botryosphaeria spp.[*];
Macrophoma Rot	Diploida spp.[*];
Wacrophoma Rot	Lasiodiplodia spp.[*];
	Neofusicoccum spp.[*];
	Dothiorella spp.[*];
	Sphaeropsis spp.[*]
Black Rot	Guignardia bidwelii[*]
Common Leaf Spot	Ramularia tulasneii[*]
Downy Mildew	
	Plasmopara viticola[*]
Esca Black Measles	Phaeoacremonium
	spp.[*]; Phaeomoniella
Evitimo	spp.[*]
Eutypa	Eutypa lata[*]
Gray Mold	Botrytis spp.[*]
Leaf Rust	Pucciniastrum
I CC 1	vaccinia[*]
Leaf Scorch	Diplocarpum earliana[*]
Leaf Spot	Mycospaerella
14	fragariae[*]
Mummy Berry	Monilinia vaccinii-
	corymbosi[*]
Phomopsis	Phomopsis spp.[*]
Powdery Mildew	Unicula / Erysiphe
	necator[*];
	Microsphaera alni[*];
	Sphaerotheca
	macularis[*]
Sclerotinia	Sclerotinia
	sclerotiorum[*]
Sooty Mold	Pathogens belonging to
	the Order
	Dothiodeales[*]
Sour Rot	Sour rot complex[*]
Summer Bunch Rot	Aspergillus spp.[*];
	Alternaria spp.[*];
	Cladosporium spp.[*];
	Penicillium spp.[*];
	Rhizopus spp.[*]

^{*}Not for use in CA

Tree Nuts

^{**} Do not apply to flooded fields

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

Pes	sts	Application Rate
Alternaria Leaf Spot	Alternaria alternata[*]	
Anthracnose	Colletotrichum spp.[*]	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre
Bacterial Canker	Pseudomonas	[[1.5] [2] [2.5] [2.75] [5] [5.5] [2 5] 103. per acre
	syringae[*]	
Bacterial Spot	Xanthomonas spp.[*]	
Blossom and Shoot	Botrytis cinerea[*]	
Blight		
Botryosphaeria Blight	Botryosphaeria	
	dothidea[*]	
Brown Rot	Monilinia spp.[*]	
Hull Rot	Rhizopus spp. [*];	
	Monilinia spp.[*]	
Jacket Rot / Green Fruit	Disease Complex[*]	
Rot		
Pecan Scab	Cladosporium	
	carygenium[*]	
Powdery Mildew	Sphaerotheca	
	pannosa[*];	
	Podosphaera spp.[*]	
Rust	Tranzschelia discolor[*]	
Rusty Spot	Podosphaera	
	leucotricha[*]	
Scab	Cladosporium spp.[*]	
Shot Hole	Wilsonomyces	
	carpophilus[*];	
	Xanthomonas pruni[*]	
Walnut Blight	Xanthomonas	
	campestris[*]	

^{*}Not for use in CA

Cereal Grains (Including Forage, Fodder or Straw from Cereal Grains)

Barley; buckwheat; corn; millet, pearl; millet, proso; oats; popcorn; rice**; rye; sorghum (milo); teosinte; triticale; wheat; wild rice**; including cultivars, varieties and/or hybrids of these commodities

Pests		Application Rate
Bacterial Blight and Streak	Xanthomonas spp.[*]	

Blast	Magnaporthe grisea /	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre
	Pyricularia oryzae[*]	
Brown Rot, Leaf Spots	Cercospora spp.[*]	
Brown Rust	Puccinia hordei[*]	
Common Rust	Puccinia sorghi[*]	
Crown Rust	Puccinia coronate[*]	
Head Scab	Fusarium spp.[*]	
Leaf Rust	Puccinia triticina[*]	
Northern Leaf Blight	Setosphaeria turcica /	
	Exserohilum turcicum[*]	
Powdery Mildew	Erysiphe graminis[*]	
Sheath Spot	Rhizoctonia oryzae[*]	
Sheath Blight	Rhizoctonia solani[*]	
Smut	Tilletia barclayena[*]	
Southern Leaf Blight	Bipolaris maydis[*];	
	Cochliobolus	
	hererostrophus[*]	
Southern Rust	Puccinia polysora[*]	
Stem Rot	Sclerotium oryzae[*]	
Stem Rust	Puccinia graminis[*]	
Stripe Rust	Puccinia striiformis[*]	
Tan Spot	Pyrenophora tritici-	
dal - C	repentis[*]	

^{*}Not for use in CA

Non-Grass Animal Feed

Alfalfa; bean, velvet; clover (*Trifolium* spp., *Melilotus* spp.); kudzu; lespedeza; lupin; sainfoin; trefoil; vetch; vetch, crown; vetch, milk; including cultivars, varieties and/or hybrids of these commodities

veten, veten, ere vin, veten, mink, merating earlivers,		varieties and of hydrias of these commodities
P	ests	Application Rate
Bacterial Wilt	Clavibacter michiganense	
	[*]	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre
Powdery mildew	Erysiphe spp.[*]	
Spring Black Stem	Phoma medicaginis /	
	Ascochyta	
	medicaginicola [*]	
White mold	Sclerotinia	
	sclerotiorum[*]	

^{*}Not for use in CA

Herbs and Spices

Allspice; angelica; anise (seed); anise, star; annatto (seed); balm (lemon balm); basil; borage; burnet;

^{**} Do not apply to flooded fields

camomile; caper buds; caraway; caraway, black; cardamom; cassia (bark and buds); catnip; celery seed; chervil (dried); chive; chive, Chinese; cinnamon; clary; clove buds; coriander leaf (cilantro or Chinese parsley); coriander seed (cilantro); costmary; culantro (leaf); culantro (seed); cumin; curry (leaf); dill (dillweed); dill (seed); fennel (common); fennel, Florence (seed); fenugreek; grains of paradise; horehound; hyssop; juniper berry; lavender; lemongrass; lovage (leaf); lovage (seed); mace; marigold; marjoram (includes sweet or annual marjoram, wild marjoram or oregano, and pot marjoram); mint; mustard (seed); nasturtium; nutmeg; parsley (dried); pennyroyal; pepper, black; pepper, white; poppy (seed); rosemary; rue; saffron; sage; savory, summer and winter; sweet bay; tansy; tarragon; thyme; vanilla; wintergreen; woodruff; wormwood; including cultivars, varieties and/or hybrids of these commodities

Pe	sts	Application Rate
Alternaria Leaf Blight	Alternaria spp.[*]	
Anthracnose	Colletotrichum spp.[*]	[1.5] [2] $[2.5]$ [2.75] [3] $[3.5]$ [2 – 3] lbs. per acre
Bacterial Diseases	Erwinia spp.[*];	
	Xanthomonas spp.[*];	
	Pseudomonas spp.[*]	
Botrytis	Botrytis spp.[*]	
Downy Mildew	Peronospora spp.[*]	
Powdery Mildew	Erysiphe spp.[*]	
Sclerotinia	Sclerotinia spp.[*]	
Leaf Spot	Cercospora spp.[*]	
Rusts[*]	Puccinia spp. and	
	others[*]	

^{*}Not for use in CA

Oilseeds

Borage; calendula; castor oil plant; Chinese tallowtree; cottonseed; crambe; cuphea; echium; euphorbia; evening primrose; flax seed; gold of pleasure; hare's ear mustard; jojoba; lesquerella; lunaria; meadowfoam; milkweed; mustard seed; niger seed; oil radish; poppy seed; rapeseed; rose hip; safflower; sesame; stokes aster; sunflower; sweet rocket; tallowwood; tea oil plant; vernonia; including cultivars, varieties and/or hybrids of these commodities

Pests		Application Rate
Alternaria Leaf Spot	Alternaria spp.[*]	
Bacterial Pustule,	Xanthomonas spp.[*]	[1.5] $[2]$ $[2.5]$ $[2.75]$ $[3]$ $[3.5]$ $[2-3]$ lbs. per acre
Bacterial Blight		
Bacterial Speck	Pseudomonas spp.[*]	
Downy Mildew	Peronospora spp.[*];	
	Plasmopara halstedii[*]	
Leaf Spot	Corynespora	
	cassiicola[*]	
Powdery Mildew	Oidium lini[*]	
Pod and Stem Blight	Diaporthe	
	<pre>phaseolorum[*];</pre>	
	Phomopsis longicolla[*]	

Rust		Albugo spp.[*]; Puccina
		spp.[*]; Melampsora
		lini[*]
White 1	Mold	Sclerotinia
		sclerotiorum[*]

^{*}Not for use in CA

Stalk, Stem and Leaf Petiole Vegetables

Agave; aloe vera; asparagus; bamboo, shoots; cardoon; celery; celery, Chinese; celtuce; fennel, Florence, fresh leaves and stalk; fern, edible, fiddlehead; fuki; artichoke, globe; kale, sea; kohlrabi; palm hearts; prickly pear, pads; prickly pear, Texas, pads; rhubarb; udo; zuiki; including cultivars, varieties and/or hybrids of these commodities

Pests		Application Rate
Anthracnose	Colletotrichum spp.[*]	
Alternaria Leaf Spot	Alternaria spp.[*]	[1.5] $[2]$ $[2.5]$ $[2.75]$ $[3]$ $[3.5]$ $[2-3]$ lbs. per acre
Bacterial Crown Rot	Erwinia chrysanthemi[*]	
Botrytis Blight / Gray	Botrytis spp.[*]	
Mold		
Phytophthora Spear and	Phytophthora spp.[*]	
Crown Rot		
Powdery Mildew	Leveillula taurica[*]	
Ramularia Leaf Spot	Ramularia cynarae[*]	
Rust	Puccinia asparagi[*]	
Watery Soft Rot	Sclerotinia spp.[*]	

^{*}Not for use in CA

Tropical and Subtropical Fruit, Edible Peel

Acai; acerola; achachairu; African plum; agritos; almondette; ambarella; apak palm; appleberry; araza; arbutus berry; babaco; bacaba palm; bacaba-de-leque; bayberry, red; bignay; bilimbi; borojo; breadnut; cabeluda; cajou, fruit; cambuca; carandas-plum; carob; cashew apple; Ceylon iron wood; Ceylon olive; cherry-of-the-Rio-Grande; Chinese olive, black; Chinese olive, white; chirauli-nut; ciruela verde; cocoplum; date; Davidson's plum; desert-date; doum palm coconut; false sandalwood; feijoa; fig; fragrant manjack; gooseberry, Abyssinian; gooseberry, Ceylon; gooseberry, Indian; gooseberry, otaheite; governor's plum; grumichama; guabiroba; guava; guava berry; guava, Brazilian; guava, cattley; guava, Costa Rican; guava, para; guava, purple strawberry; guava, strawberry; guava, yellow strawberry; guayabillo; illawarra plum; imbe; imbu; Indian-plum; jaboticaba; Jamaica-cherry; jambolan; jelly palm; jujube, Indian; kaffir-plum; kakadu plum; kapundung; karanda; kwai muk; lemon aspen; mangaba; Marian plum; mombin, Malayan; mombin, purple; mombin, yellow; monkeyfruit; monos plum; mountain cherry; nance; natal plum; noni; olive; papaya, mountain; pataua; peach palm, fruit; persimmon, black; persimmon, Japanese; pitomba; plum-of-Martinique; pomerac; rambai; rose apple; rukam; rumberry; sea grape; sentul; sete-capotes; silver aspen; starfruit; Surinam cherry; tamarind; uvalha; water apple; water pear; water berry; wax jambu; including cultivars, varieties and/or hybrids of these commodities

Pests Application Rate	P.P.
------------------------	------

Leaf Spot	Cercospora cladosporioides[*]	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre
Olive Knot	Pseudomonas savastanoi pv. savastanoi [*]	

^{*}Not for use in CA

Tropical and Subtropical Fruit, Inedible Peel

Abiu; aisen; akee apple; atemoya; avocado; avocado, Guatemalan; avocado, Mexican; avocado, West Indian; bacury; bael fruit; banana; banana, dwarf; binjai; biriba; breadfruit; Burmese grape; canistel; cat's-eyes; champedak; cherimoya; cupuacu; custard apple; dragon fruit; durian; elephant-apple; etambe; granadilla; granadilla, giant; ilama; inga; jackfruit; jatoba; karuka; kei apple; langsat; lanjut; longan; lucuma; lychee; mabolo; madras-thorn; mammy-apple; manduro; mango; mango, horse; mango, Saipan; mangosteen; marang; marmaladebox; matisia; mesquite; mongongo, fruit; monkey-bread-tree; monstera; nicobar-breadfruit; paho; pandanus; papaya; passionflower, winged-stem; passionfruit; passionfruit, banana; passionfruit, purple; passionfruit, yellow; pawpaw, common; pawpaw, small-flower; pelipisan; pequi; pequia; persimmon, American; pineapple; pitahaya; pitaya, pitaya, amarillo; pitaya, roja; pitaya, yellow; plantain; pomegranate; poshte; prickly pear, fruit; prickly pear, Texas, fruit; pulasan; quandong; rambutan; saguaro; sapodilla; sapote, black; sapote, green; sapote, mamey; sapote, white; sataw; satinleaf; screw-pine; Sierra Leone-tamarind; soncoya; soursop; Spanish lime; star apple; sugar apple; sun sapote; tamarind-of-the-Indies; velvet tamarind; wampi; white star apple; wild loquat; including cultivars, varieties and/or hybrids of these commodities

Application Rate Pests Anthracnose Colletotrichum spp.[*] Bacterial Canker *Xanthomonas* spp.[*]; [1.5] [2] [2.5] [2.75] [3] [3.5] [2-3] lbs. per acre Erwinia spp.[*] Bacterial Blight *Pseudomonas* spp.[*] Botrytis Fruit Rot Botrytis spp.[*] Heart Rot Alternaria spp.[*] Leaf and Fruit Spots Cercospora spp., *Gloeosporium* spp.[*]; Pestalotia spp.[*] Powdery Mildew Sphaerotheca pannosa[*] Scab Sphaceloma spp.[*] Sclerotinia Sclerotinia sclerotiorum[*] Black Sigatoka Mycosphaerella fijiensis[*]

^{*}Not for use in CA

Peanut		
Including those grown for oil production		
Pests	Application Rate	

Early Leaf Spot	Cercospora	
	arachidicola.[*]	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre
Late Leaf Spot	Cercosporidium	
	personatum[*]	
Rhizoctonia Limb Rot	Rhizoctonia solani[*]	
Rust	Puccinia arachidis[*]	
Sclerotinia blight	Sclerotinia minor, S.	
	sclerotiorum.[*]	
Web Blotch	Phoma arachidicola[*]	
Southern stem rot	Sclerotium rolfsii[*]	
(southern blight)		

^{*}Not for use in CA

Hemp		
Pe	ests	Application Rate
Gray Mold / Bud Rot	Botrytis cinerea[*]	
Powdery Mildew	Podosphaera macularis / Sphaerotheca macularis[*]	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre
White Mold	Sclerotinia sclerotiorum[*]	

^{*}Not for use in CA

Hops		
1	Pests	Application Rate
Downy Mildew	Pseudoperonospora humuli[*]	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre
Powdery Mildew	Podosphaera macularis / Sphaerotheca macularis[*]	

^{*}Not for use in CA

Coffee		
Pes	its	Application Rate
Anthracnose	Colletotrichum spp.[*]	
Bacterial Blight	Pseudomonas syringae[*]	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre
Botrytis Flower Blight	Botrytis spp.[*]	
Cercospora Leaf Spot	Cercospora spp.[*]	

(Coffee Berry Disease	Colletotrichum
		coffeanum[*]
	Coffee Rust	Hemileia vastatrix[*]

^{*}Not for use in CA

	Suga	rcane
F	ests	Application Rate
Gumming Disease	Xanthomonas spp.[*]	
Red Rot	Colletotrichum	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre
	falcatum[*]	
Rust	Puccinia	
	melanocephala[*]	

^{*}Not for use in CA

	Tob	pacco	
Pests		Application Rate	
Angular Leaf Spot	Pseudomonas spp.[*]		
Anthracnose	Colletotrichum and	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre	
	Glomerella spp.[*]		
Blue Mold / Downy	Peronospora		
Mildew	tabacina.[*]		
Brown Spot	Alternaria spp.[*]		
Frogeye Leaf Spot	Cercospora		
	nicotianae[*]		
Collar Rot	Sclerotinia		
	sclerotiorum[*]		
Gray Mold	Botrytis cinerea[*]		
Powdery Mildew	Erysiphe		
	cichoracearum[*]		
Target Spot	Rhizoctonia solani[*]		

^{*}Not for use in CA

Storage and Disposal

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

Pesticide Storage: Keep container tightly closed when not in use. This product consists of living microbes. Place container in a cool, dry place. but do not exceed 95°F (35°C). Do not freeze. Tightly close opened package.

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

Container Handling: Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling if available, or dispose of empty bag in a sanitary landfill or by incineration.

NOTICE TO USER

Seller makes no warranty, express or implied, of merchantability, fitness or otherwise concerning the use of this product other than as indicated on this label. To the extent consistent with applicable law, user assumes all risks of use, storage or handling not in accordance with accompanying directions.

© 2021 Valent BioSciences LLC

$\begin{tabular}{ll} Zorda^{TM} WG \\ BIOLOGICAL FUNGICIDE \\ \end{tabular}$

[Alternative Brand Name: **ZordaTM WG Turf and Ornamentals**]

[Sub-Label I]

ACTIVE INGREDIENT:	By Wt
Bacillus amyloliquefaciens strain PTA-4838*	74.81%
OTHER INGREDIENTS:	<u>25.19%</u>
TOTAL:	100.00%

^{*}Contains a minimum of 1.65 x 10¹⁰ colony forming units per gram [CFU/g] of product

KEEP OUT OF REACH OF CHILDREN CAUTION

Net weight: Lot No.:

EPA Reg. No.: 73049-LEE EPA Est. No.: 33762-IA-01

Not for sale or use after [date stamped here will be 6 months after the date of manufacture]

Manufactured For: Valent BioSciences LLC 1910 Innovation Way, Suite 100 Libertyville, IL 60048 USA 1-800-323-9597

	FIRST AID
If in Eyes	 Hold eye open and rinse slowly and gently with water for 15-20 minutes.
	• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
	Call a poison control center or doctor for treatment advice.
	Move person to fresh air.
If Inhaled	 If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for treatment advice.
If on Skin or	Take off contaminated clothing.
Clothing	• Rinse skin immediately with plenty of water for 15-20 minutes.
	• Call a poison control center or doctor for treatment advice.
	HOTLINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-315-9819 (24 hours) for emergency medical treatment and/or transport emergency information. For all other information, call 1-800-323-9597.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Causes moderate eye irritation. Harmful if inhaled. Avoid contact with eyes or clothing. Avoid breathing dust or spray mist. 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. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Protective eyewear
- Waterproof gloves
- Shoes plus socks

Mixers/loaders and applicators must wear a minimum of a NIOSH-approved particulate filtering face piece respirator with any R or P filter; or a NIOSH-approved elastomeric articulate respirator with any R or P filter; or a NIOSH-approved powered air-purifying respirator with an HE filter. Repeated exposures to high concentrations of microbial proteins can cause allergic sensitization.

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

ENGINEERING CONTROLS

When handlers use closed systems in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.607(d)], the handler PPE requirements may be reduced or modified as specified in the WPS.

IMPORTANT

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

USER SAFETY RECOMMENDATIONS

Users should:

- 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

For terrestrial uses: Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high-water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

DIRECTIONS FOR USE

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

READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.

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 State or Tribal agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

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

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

Do not enter or allow worker entry into treated areas during the restricted-entry interval 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
- Waterproof gloves
- Shoes plus socks
- Protective eyewear

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. Keep unprotected persons out of the treatment areas until sprays have dried.

PRODUCT INFORMATION

ZordaTM WG Biological Fungicide (hereafter referred to as Zorda) contains a minimum of 1.65 x 10¹⁰ Colony Forming Units (CFUs) of the bacterium *Bacillus amyloliquefaciens* strain PTA-4838. When applied according to the label directions, Zorda [controls] [or] [suppresses] a broad range of fungal [and bacterial] pathogens to provide protection from harmful diseases.

As a microbial product containing live spores of the protective bacterium *Bacillus amyloliquefaciens* strain PTA-4838, Zorda will produce the best results when applied preventively (before a disease outbreak occurs).

Zorda can be applied as a foliar spray, either standalone or in combination with other registered products in a rotation or as tank mixes. For improved performance, use as part of a spray program in rotation with other registered fungicides [and bactericides] with unrelated modes of action.

Incorporation of adjuvants, in particular sticker / spreaders, to ensure improved coverage, can further enhance disease control. All types of spray equipment commonly utilized for the application of foliar sprays can be used to apply Zorda.

Many factors, including disease pressure, the environment (weather) and the condition of the crop can impact the level of control. Adjust use spray intervals and use rate accordingly, with higher rates and more frequent applications if high disease pressure is expected.

Re-application may be required in case of heavy rain events shortly after a treatment.

Product should be used as soon as possible after opening the package.

FOLIAR APPLICATION DIRECTIONS

Always read and follow the label instructions regarding application rates and restrictions. For best disease control performance, apply Zorda preventively (before or during the initial stages of disease). [Apply the higher labeled rates when increased pest pressure is expected based on predicted weather conditions or other factors].

Application equipment must be clean and free of previous pesticide deposits before applying Zorda. Determine the required amount of product based on desired application date and acreage to be treated. Fill tank with water to at least half the final volume. Add product(s) in mix order referenced in Mixing Order for Tank Mix Partners by Formulation Type section (see below) to the spray tank and mix if necessary, for complete dissolution. Add remaining water to reach the desired spray volume (10 – 100 gallons per acre of prepared spray solution). If prepared spray solution is stored for extended periods of time, agitate well before use.

Always use spray volumes high enough to ensure thorough coverage of all treated plant surfaces. Complete coverage is crucial for efficient disease control or suppression.

GREENHOUSE APPLICATION DIRECTIONS

Zorda can be used as a foliar spray in the greenhouse. Please refer to the "Foliar Applications Directions" above for more information. As crop safety has not been confirmed on all cultivars, plant compatibility testing is recommended when spraying on a new cultivar in the greenhouse for the first time.

COMPATIBILITY WITH OTHER AGRICULTURAL PRODUCTS

Do not tank mix Zorda with other products unless compatibility has been verified. If considering tank mixing Zorda with other products, use the following compatibility jar test before mixing an entire tank: Add water from the same water source to a clear glass or plastic jar. Add the products in correct proportions. Mix thoroughly and let stand for a minimum of 15 minutes. Separation, gelling, or generation of heat are all signs of incompatibility.

Consult with your Valent Agricultural Specialist for potential pesticide interactions.

Always read and follow all label directions and precautions for each product. When using combinations of products, the most restrictive label limitations and precautions must be followed. Do not mix Zorda with any product that has a prohibition against tank mixing. For further information, consult your Valent Agricultural Specialist.

MIXING ORDER FOR TANK MIX PARTNERS BY FORMULATION TYPE

- 1) Carrier (water)
- 2) Wettable granules (dry flowables)
- 3) Wettable powders
- 4) Aqueous solutions
- 5) Emulsifiable concentrates
- 6) Adjuvants

CROP APPLICATION DIRECTIONS

Optional Applications for Ornamentals and Woody ornamentals and Turfgrass and other grasses.

Ornamentals and Woody Ornamentals

Ornamentals such as flowering plants, annual plants and bedding plants, potted and cut flowers, topical foliage

Woody ornamentals such as broadleaves – shrubs and trees, conifers – shrubs and trees

Pests		Application Rate	
Anthracnose	Colletotrichum spp.[*]	Outdoor uses:	
	Erwinia spp.; Pseudomonas	[1.5] [2] [2.5] [2.75] [3] [3.5] [1.5 – 3] lbs.	
Bacterial Diseases	spp.[*]; Xanthomonas spp.[*]	per acre	
	Diplocarpon		
Black Spot of Rose	rosae[*]		
Blossom Blight	Monilinia spp.[*]	Greenhouse Use:	
	Peronospora	Low to medium disease pressure:	
	spp.[*]; Plasmopara	0.6 oz./gal	
Downy Mildew	viburni[*]	(4.5 g/L)	
Gray Mold	Botrytis spp.[*]		
	Alternaria spp.[*]; Cercospora	High disease pressure:	
	spp.[*]; Entomosporium	1.2 oz./gal	
spp.[*]; Myrothecium		(9.0 g/L)	
Leaf Spot	spp.[*]; Septoria spp.[*]		
	Erysiphe spp.[*];		
	Microsphaera spp.[*]; Oidium		
	spp.[*]; Podosphaera		
Powdery Mildew	spp.[*]; Sphaerotheca spp.[*];		
Rust	Puccinia spp.[*]		
Scab	Venturia spp.[*]		

^{*}Not for use in CA

Turfgrass and Ornamental Grasses

Bluegrass; Bentgrass; Bermudagrass; Dichondra; Fescue; Orchardgrass; *Poa annua*; Ryegrass; St. Augustine; Zoysia; mixtures and other grasses, ornamental turf

I	Pests	Application Rate
Anthracnose	Colletotrichum graminicola[*]	
Dead Spot	Ophiosphaerella agrostis[*]	[1.5] [2] [2.5] [2.75] [3] [3.5] [1.5 – 3] lbs.
Brown Patch	Rhizoctonia solani[*]	per acre
	Gloeocercospora	
Copper Spot	sorghi[*]	
	Lanzia spp.[*]; Clarireedia	
	homoeocarpa / Sclerotinia	
Dollar Spot	homeocarpa[*]	
Fusarium Patch	Fusarium nivale[*]	
Gray Leaf Spot	Pyricularia grisea[*]	

Gray Snow Mold	Typhula spp.[*]	
	Bipolaris spp.[*]; Drechslera	
Melting Out Leaf Spot	spp.[*]	
Necrotic Ring Spot	Leptosphaeria korrae[*]	
Pink Patch	Limonomyces roseipellis[*]	
Pink Snow Mold	Microdochium nivale[*]	
Powdery Mildew	Eryspiphe graminis[*]	
Pythium Blight / Root Rot	Pythium spp.[*]	
Red Thread	Laetisaria fuciformis[*]	
Rust	Puccinia spp.[*]	
Southern Blight	Sclerotium rolfsii[*]	
	Leptosphaeria korrae[*];	
	Leptosphaeria narmari[*];	
	Ophiosphaerella	
Spring Dead Spot	herpotricha[*]	
	Ustilago striiformis[*];	
Stripe Smut	Urocystis agropyri[*]	
Summer Patch / Poa Patch	Magnaporthe poae[*]	
Take-all Root Rot	Gaeumannomyces graminis[*]	
Yellow Patch	Rhizoctonia cerealis[*]	
Yellow Tuft / Downy		
Mildew	Sclerophthora macrospora[*]	

^{*}Not for use in CA

Storage and Disposal

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

Pesticide Storage: Keep container tightly closed when not in use. This product consists of living microbes. Place in a cool, dry place, do not exceed 95°F (35°C). Do not freeze. Tightly close opened package.

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

Container Handling: Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling if available, or dispose of empty bag in a sanitary landfill or by incineration.

NOTICE TO USER

Seller makes no warranty, express or implied, of merchantability, fitness or otherwise concerning the use of this product other than as indicated on this label. To the extent consistent with applicable law, user assumes all risks of use, storage or handling not in accordance with accompanying directions.

© 2021Valent BioSciences LLC