

#### U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs

Biopesticides and Pollution Prevention Division (7511M)

1200 Pennsylvania Ave., N.W.

Washington, D.C. 20460

**NOTICE OF PESTICIDE:** 

X Registration

\_\_\_\_ Reregistration

(under FIFRA, as amended)

EPA Reg. Number: Date of Issuance:

94485-10

9/12/2024

Term of Issuance:

Unconditional

Name of Pesticide Product:

Companion Extreme

Name and Address of Registrant (include ZIP Code):

DPH Biologicals, LLC 21417 County Road 1950 East Princeton, NJ 61356

**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.

Registration is in no way to be construed as an endorsement or recommendation of this product by the U.S. Environmental Protection Agency. 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.

Signature of Approving Official:

Digitally signed by Alexandra Boukedes

Alyandera Bouledes Date: 2024.09.12 14:28:45

-04'00'

Alexandra Boukedes, Product Manager 92

Microbial Pesticides Branch

Biopesticides and Pollution Prevention Division (7511M)

Office of Pesticide Programs

Date:

9/12/2024

Page 2 of 2 EPA Reg. No. 94485-10 Action Case No. 00496396

- 2. Make the following labeling change before you release this product for shipment:
  - Revise the EPA Registration Number to read, "EPA Reg. No. 94485-10."
- 3. Submit one (1) copy of the final printed labeling for the record before you release this product for shipment.

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 statements or claims substantially differing from statements or claims made in connection with obtaining a FIFRA section 3 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 07/18/2024

If you have any questions, please contact Hannah Dean via email at dean.hannah@epa.gov.

Sincerely,

Digitally signed by Alexandra Boukedes Date: 2024.09.12
14:29:08 -041001

Alexandra Boukedes, Product Manager 92 Microbial Pesticides Branch **Biopesticides and Pollution** Prevention Division (7511M) Office of Pesticide Programs

Enclosure

[Bracketed information is optional text.] Text separated by/denotes and/or options.

## COMPANION® EXTREME

[ABNs: BellaTrove Companion® Extreme, Prephyte]

Bacillus amyloliquefaciens strain	Group	<b>BM02</b>	Fungicide
ENV503	•		J

## **Active Ingredient**

 Bacillus amyloliquefaciens strain ENV503\*
 1.30%

 Other Ingredients
 98.70%

 Total:
 100.000%

## KEEP OUT OF REACH OF CHILDREN

#### **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 1-800-222-1222 for emergency medical treatment information. For information on this pesticide product (including general health concerns or pesticide incidents), call the National Pesticide Information Center at 1-800-858-7378, npic@ace.orst.edu, 8:00AM to 12:00PM Pacific Time, Monday through Friday. See website for details: <a href="http://npic.orst.edu">http://npic.orst.edu</a>.

(See [back panel][side panel][interior/inside panel/page] for additional precautionary statements)

#### Another quality product for:

DPH Biologicals LLC	Net Contents:
21417 County Road 1950 East	
Princeton, IL 61356 USA	1 oz (28.4 g), 2 oz (57 g), 3 oz (85 g), 4 oz (113 g), 5
	oz (142 g), 6 oz (170 g), 8 oz (227 g), 5 lb. (2.26 kg),
[phone number/www.dphbio.com]	20 lb. (9 kg), 50 lb (22.7 kg), 100 lb. (45.45 kg), 200
	lb. (90.7 kg) (as applicable)
EDA Designation No. 04495 DNI	EDA Establishment No. (os applicable)

EPA Registration No. 94485-RN

[Lot Code/Batch No.\_\_\_\_\_] A C

[Barcode *as applicable*]

EPA Establishment No. (as applicable)

## ACCEPTED

Sep 12, 2024

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

EPA Reg. No. 94485-10

<sup>\*</sup>Contains a minimum of 5.5 x 10<sup>10</sup> Colony Forming Units (CFU) per gram of product

[Bracketed information is optional text.] Text separated by/denotes and/or options.

#### PRECAUTIONARY STATEMENTS

## **Personal Protective Equipment (PPE):**

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks

Mixer/loaders and applicators must wear a minimum of a NIOSH-approved particulate filtering facepiece respirator with any N, R, or P filter; OR a NIOSH-approved elastomeric particulate respirator with any N, R, or P filter; OR a NIOSH-approved powered air-purifying respirator with an HE filter. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.

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 Controls:** When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protections Standard (WPS) for agricultural pesticides, 40 CFR 170.607 (d and e), 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**

User should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Users should remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing. Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

**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 OF 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 protect 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.

[Bracketed information is optional text.] Text separated by/denotes and/or options.

#### 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 (REI). The requirements in this box only apply to the 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 four (4) hours.

EXCEPTION: If the product is soil injected or soil incorporated, the Worker Protections Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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
- Shoes plus socks
- Chemical Resistant Gloves (made of any waterproof material)

#### 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 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 treated areas until spray has dried.

# PRODUCT INFORMATION AGRICULTURAL CROPS

#### **Product Description:**

Companion® Extreme is a broad-spectrum biological fungicide [and bactericide] for the prevention, control or suppression of many soilborne and foliar diseases on the labeled agricultural crops. Apply as a foliar spray or as a soil drench alone or in alternating spray program with other EPA-registered products. Companion® Extreme contains the active ingredient *Bacillus amyloliquefaciens* strain ENV503, a plant growth-promoting rhizobacterium that quickly establishes beneficial colonies on the plant's root and leaves. It protects the roots

[Bracketed information is optional text.] Text separated by/denotes and/or options.

from invading pathogens, stimulates healthier roots and improves nutrient uptake. *Bacillus amyloliquefaciens* strain ENV503 is also known to trigger the plant's immune system [(Induced Systemic Resistance (ISR)].

Companion® Extreme can be used on all plant material and is most effective when applied prior to the onset of disease. Use Companion® Extreme in combination and/or rotation with chemical fungicides [and bactericides] to enhance disease control and reduce the occurrence of resistance.

For use on the labeled field-grown agricultural crops including: vegetables, herbs, small fruits, berries, fruit and nut trees, and other species listed on this label. For use in greenhouse production and hydroponics.

Follow the most restrictive of the labeling limitations and precautions of all products used in mixture.

#### **Modes of Action:**

Companion® Extreme has multiple modes of action in preventing, controlling or suppressing plant diseases. Its active ingredient, *Bacillus amyloliquefaciens* strain ENV503, produces broad-spectrum antibiotic lipopeptides (iturin) that disrupt pathogen cell-wall formation and is competitive, fast-colonizing rhizosphere bacterium that occupies the plant's root hairs and leaves. It also prevents the growth and antagonistic effects of soilborne and foliar pathogens. *Bacillus amyloliquefaciens* strain ENV503 is known to stimulate phytohormones, which trigger the plant's systemic resistance to disease (Induced Systemic Resistance – ISR), the defense mechanisms of the plant for prolonged periods of time.

#### **PGPR** (Plant Growth-Promoting Rhizobacteria):

*Bacillus amyloliquefaciens* strain ENV503 is within the Plant Growth-Promoting Rhizobacteria (PGPR) classification. PGPR are free-living bacteria that has beneficial effects on plants as they increase plant productivity, enhance crop fertility, growth and root development.

#### **DISEASE LIST**

#### Acidovorax avenae citrulli

- Bacterial Fruit Blotch

#### Actinidia delicioso

- Blight

## Aecidium cantensis

- Deforming Rust

## Agrobacterium rubi

- Cane Gall

## Agrobacterium tumefaciens

- Crown Gall, Walnut Gall

## Agrobacterium vitis

- Crown Gall

## Albugo candida

- White Blister, Rust

Albugo occidentalis

## Mycosphaerella spp.

- Black Sigatoka

## Mycosphaerella citri

- Greasy Spot

## Mycosphaerella fijiensis

- Sigatoka

## Mycosphaerella musicola

- Yellow Sigatoka

## Mycosphaerella pomi

- Brook's Spot

## Oidium spp.

- Powdery Mildew

## Oidiopsis spp.

- Powdery Mildew

Ophiosphaerella korrae

[Companion® Extreme; EPA Reg. No 94485-RN] [Master label date September 10, 2024]

[Bracketed information is optional text.] Text separated by/denotes and/or options.

- White Rust

#### Albugo spp.

- Blight (Pod & Stem)

#### Alternaria alternata

- Brown Spot, Leaf Spot, Stem-End Rot, Late Blight

#### Alternaria citri

- Brown Spot, Leaf Spot, Stem-End Rot

#### Alternaria spp.

 Black Root Rot, Early Blight, Leaf Spot/Target Spot, Black Point, Onion Purple Blotch

#### Alternaria tenuissima

- Rot

## Angiosorus solani

- Thecaphora Smut

## Aphanomyces spp.

- Black Root Rot, Early Blight

## Armillaria spp.

- Root Rot

#### Arthuriomyces peckianus

- Orange Rust

## Ascochyta spp.

- Ascochyta Leaf Scorch (Spot), Spring Black Stem

## Aspergillus niger

- Black Mold Rot

## Aspergillus spp.

- Black Mold Rot, Hull Rot

## Basidiomycete spp.

- White Patch

## Bipolaris spp.

 Helminthosporium Leaf Spot/Melting Out

## Blumeria spp.

- Powdery Mildew

## Blumeriella jaapii

- Cherry Leaf Spot

## Botryosphaeria spp.

- Bot Canker, Dieback

## Botrytis cinerea

 Crown Rot, Damping-off Fungus, Gray Mold, Leaf Blight, Bud Rot, Blight

## Botrytis dothidea

- Botryosphaeria Rot

- Necrotic Ring Spot

## Phakospora pachyrhizi

- Rust

#### Pantoea stewartia

- Stewart's Wilt

#### Pectobacterium spp.

- Brown Rot

#### Penicillium spp.

- Fruit Rot

#### Peronospora manshurica

- Downey Mildew

## Peronospora sparse

- Downey Mildew

## Peronospora spp.

- Downy Mildew

## Phaeosphaeria nodorum

- Leaf and Glume Blotch

#### Phizactonia spp.

- Root Rot

#### Phoma andigena

- Leaf Spot

## Phoma lingum

- Blackleg

## Phoma spp.

- Pink Root, Web Blotch

## Phomopsis spp.

- Leaf Blight, Pod and Stem Blight, Gangrene, Scab

## Phomopsis viticola

- Phomopsis

## Phomopsis tuberivora

- Red Crown Root

#### Phullactinia guttata

- Powdery Mildew

## Phymatotrichopsis omnivore

(Cotton-Texas) Root Rot

## Phytophora spp.

- Damping-off Fungus

## Phytophthora aerial blight

[Bracketed information is optional text.] Text separated by/denotes and/or options.

## Botrytis squamosa

Neck Rot

## Botrytis spp.

 Crown Rot, Damping-off Fungus, Gray Mold, Leaf Blight, Botrytis Bunch Rot, Flower Blight

#### Bremia lactucae

- Blue Mold

## Candidatus liberibacter spp.

- Citrus Greening (*Huanglongbing* (HLB))

## Ceratobasidium spp.

- Brown Rot, Leaf Spot, Smut

## Cercosporin brassicicola

- Leaf spot

## Cercospora spp.

 Cercosppora Leaf Spot, Gray Leaf Spot, Berry Blotch

## Cercosporidium spp.

Leaf Spot

## Ceratocystis fimbriata

- Ceratocystis Canker

## Cladosporium carpophilum

- Scab

## Cladosporium caryigenum

- Pecan Scab

## Cladosporium spp.

- Black Point, Black Mold

## Clavibacter michiganensis

- Goss's Wilt, Ring Rot

## Cochliobolus spp.

- Brown Rot, Leaf Spot, Smut

#### Colletotrichum acutatum

- Post-Bloom Fruit Drop

#### Colletotrichum coccodes

- Black Dot

## Colletotrichum graminicola

- Anthracnose

#### Colletotrichum orbiculare

- Anthracnose, Stem Blight

## Colletotrichum spp.

- Blight, Leaf Spot and Rot, Brown Rot, Foot Rot, Crown and Root Rot

## Phytophthora citricola

- Crown and Root Rot

#### Phytophthora megasperma

- Crown and Root Rot

## Phytophthora spp.

 Late Blight, Blackeye/Buckeye Rot, Brown Rot, Foot Rot, Crown and Root Rot, Leaf Spot and Rot, Downy Mildew, Leaf Blight

## Plasmodiophora brassicae

- Corky Root, Clubroot

## Plasmopara viticola

- Downey Mildew

## Podosphaera leucotricha

- Rusty Spot

## Podosphaera spp.

- Powdery Mildew

## Podosphaera xanthii (formerly called

## $Sphaerotheca\ fuliginea)$

- Powdery Mildew

## Polyscytalum pustulans

- Skin Spot

## Pseudocercosporella capsellae

- White Leafspot

## Pseudoperonospora cubensis

- Downy Mildew

## Pseudoperonospora spp.

- Downy Mildew

## Pseudomonas syringae

- Halo Blight, Angular Leaf Spot

## Pseudomonas syringae van Hall pv. Panici

- Rice Bacterial Brown Spot

#### Pseudomonas spp.

- Canker, Blight. Leaf Streak

## Puccinia asparagi

- Rust

## Puccinia graminus

- Stem Rust, Black rust, Cereal Rust

## Puccinia pittleriana

- Common Rust

## Puccinia porri

[Bracketed information is optional text.] Text separated by/denotes and/or options.

- Anthracnose, Bitter Rot, Stem End Rot, Stem Blight

## Collototrichum trifolii

- Anthracnose

## Curvularia spp.

- Fading Out

## Cylindrocladium parasiticum

- Cylindrocladium Black Rot

## Diaporthe ampelina (Phomopsis viticola)

- Cane and Leafspot

## Diaporthe citri

- Melanose

## Diaporthe spp.

- Blights (Pod & Stem)

## Dickeya solani

- Brown Rot

## Didymella bryoniae

- Gummy Stem Blight

## Diplodia natalensi

- Diplodia Stem-end Rot

## Diplodia seriata

- Grapevine Trunk Disease

## Dreschslera erythrospila

- Red Leaf Spot

## Drechslera spp.

- Brown Rot, Leaf Spot, Smut

## Elsinoe fawcettii

- Scab

## Entyloma spp.

- Brown Rot, Leaf Spot, Smut

## Erwinia amylovora

- Fire Blight

#### Erwinia chrysanthemi

- Crown Rot

## Erwinia tracheiphilia

- Bacterial Wilt

#### Erwinia spp.

 Cucurbit Wilting, Soft Rot, Angular Leaf Spot, Bacterial Soft Rot

## Erysiphe chichoracearum

- Powdery Mildew

Erysiphe cruciferaru

- Rust

## Puccinia spp.

- Rust, Black Stem Rust, Red Rust, Leaf Rust

#### Puccinia triticata

- Leaf Rust, Brown Rust

#### Pucciniastrum Americanum

- Late Leaf Rust

#### Pyrenocheata spp.

- Corky Root

## Pyrenocheata lycopersi

- Corky Root

## Pyricularia grisea

- Fading Out

## Pyricularia oryzae

- Rice Blast

#### Ralstonia solanacearum

- Wilt

## Pythium spp.

- Root Rot, Damping-off Fungus, Pythium, Black Rot

#### Ralstonia solanacearum

- Brown Rot

#### Ramularia spp.

- Areolate Leafspot, Ramularia

## Ramularia gossypii

- Aerolate Mildew

#### Rhizoctonia spp.

 Brown Patch, Yellow Patch, Bottom Rot, Damping-off Fungus, Head Wilt, Wilt

#### Rhizoctonia solani

 Root Rot, Bottom/Stem Rot, Areolate Leaf Spot, Target Spot

## Rhizopus spp.

- Hull Rot

#### Schizothyrium pomi

- Flyspeck

## Scleophthora spp.

- Yellow Turf

#### Sclerotinia minor

- Lettuce Drop, Leaf and Stem Blight *Sclerotinia sclerotiorum* 

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[Bracketed information is optional text.] Text separated by/denotes and/or options.

- Powdery Mildew

## Erysiphe spp.

- Powdery Mildew

## Eutypa lata

- Eutypa

#### Fusarium nivale

- Fusarium Patch

## Fusarium oxysporum

- Fusarium Wilt

#### Fusarium solani

- Fuarium Root Rot, Stem Rot, Sudden Death Syndrome (SDS)

## Fusarium spp.

 Crown Rot, Root Rot, Fusarium Wilt, Sudden Death Syndrome (SDS), Foot Rot, Seedling Blight, Head Blight, Bacterial Blight, Basal Rot, Dampingoff Fungus, Pink Root, Stem Canker, Fusarium Wilt, Cone Tip Blight

## Gaeumannomyces graminis

- Take All Root Rot/Patch

## Gibberella fuji-Kuro

- Baknae Disease

## Gibberella spp.

- Head Blight, Head Scab

## Gloeodes pomigena

- Sooty Blotch

## Golovinomyces cichoracearum (formerly called Erysiphe cichoracearum)

- Powdery Mildew

## Golovinomyces spp.

- Powdery Mildew

## Guignardia bidwellii

- Black Rot

#### Gymnoconia nitens

- Orange Rust

## Gymnosporangium juniperi

- Cedar Apple Rust

## Hyaloperonospora parasitica

- Downy Mildew

## Helminthosporium spp.

- White Mold

#### Sclerotinia spp.

- Dollar Spot, Blight, Twig Blight, Fruit Rot, Root Rot, White Mold, Dollar Spot, Head and Leaf Drop, Pink Rot

## Sclerotium cepivorum

- White Rot

#### Sclerotium rolfsii

- Southern Blight, Stem Rot

## Sclerotium spp.

- Crown Rot, Stem Rot

## Septoria glycines

- Brown Spot

## Septoria lycopersici

- Septoria Leaf Spot

## Septoria spp.

- Septoria Leaf Blotch

## Sphaerotheca macularis

- Powdery Mildew

## Sphaceloma spp.

- Scab

## Spongospora subterranean

- Powdery Scab

## Stagonospora nodorum (formerly called Septoria nodorum)

- Leaf and Glume Botch

## Stemphylium spp.

- Stemphylium Leaf Spot

## Streptomyces spp.

- Common Scab

## Synchytrium endobioticum

- Wart

## Taphrina deformans

- Leaf Curl

## Thanatephorus spp.

- Sheath Spot/Blight

#### Thielaviopsis basicola

- Black Root Rot

## Tilletia barclayana

- Smut

[Bracketed information is optional text.] Text separated by/denotes and/or options.

 Leaf Rot, Crown Rot, Root Rot, Northern Corn Leaf Blight, Silver Scurf

#### Hemileia vastatrix

- Coffee Rust

## Lactisaria fuciformis

- Red Thread

#### Leveillula Taurica

- Powdery Mildew

## Leveillula spp.

- Powdery Mildew

## Leptosphaeria maculans

- Blackleg

## Leptospaerulina briosiai

- Leaf Spot

## Macrophomina spp.

- Charcoal Rot, Vascular Rot, Root Rot

## Magnaporthe poae

- Summer Patch

## Magnaporthe spp.

- Stem Rot

## Microsphaera alni

- Powdery Mildew

## Monomilinia fructicola

- Brown Rot, Blossom Blight, Fruit Blight

## Monomilinia laxa

- Brown Rot, Blossom Blight, Fruit Blight

## Monilinia vaccinii-corymbosi

- Mummy berry

## Monilinia spp.

- Brown Rot, Blossom Blight, Hull Rot

## Monosporascus cannonballus

- Root Rot

## Mycosphaerella spp.

- Black Sigatoka

#### Tilletia tritici

- Bunt, Stinking Smut

## Tranzschelia discolor

- Almond Leaf Rot

#### Ulocladium atrum

- Ulocladium Blight

#### Uncinula necator

- Powdery Mildew

## Uncinula spp.

- Powdery Mildew

## Uromyces appendiculatus

- Rust

#### Uromyces betae

- Rust

## Uromyces spp.

- Rust

## Ustilago spp.

- Smut

## Verticillium spp.

- Wilt

#### Waitea circinanta

- Brown Ring Patch

## Wilsonomyces carpophilus

- Shot Hole

## Xanthomonas campestris

- Bacterial Blight/Leaf Spot, Black Rot

## Xanthomonas axonopodis pv citri

- Citrus Canker

## Xanthamonas oryzae

- Rice Bacterial Blight

## Xanthomonas campestris

- Leaf Spot

## Xanthomonas spp.

- Bacterial Leaf Spot, Leaf Blight, Canker, Gumming Disease

## Zygophiala jamaicensis

- Flyspeck

[Bracketed information is optional text.] Text separated by/denotes and/or options.

## INTEGRATED PEST (DISEASE) MANAGEMENT (IPM)

Companion® Extreme is an important tool in sound disease management whenever fungicide use is necessary. Apply Companion® Extreme alone or in combination and/or rotation with chemical fungicides. This will result in reduced susceptibility to disease and overall reduction in the use of chemical fungicides. Consult local agricultural authorities for specific IPM strategies developed for your crop(s) and location.

#### RESISTANCE MANAGEMENT

For resistance management, Companion® Extreme contains a Group BM02 fungicide/bactericide. Any fungal/bacterial population[s] may contain individuals naturally resistant to Companion® Extreme and other Group BM02 fungicides/bactericides. A gradual or total loss of pest control may occur over time if these fungicides/bactericides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay fungicide/[and bactericide] resistance, take one or more of the following steps:

- Rotate the use of Companion® Extreme or other Group BM02 fungicides/[and bactericides] within a growing season sequence with different groups that control the same pathogens
- Use tank mixtures with fungicide/bactericide of a different group that are equally effective on the target pest when such use is permitted. Use at least the minimum application rate as labeled by the manufacturer.
- Adopt an integrated disease management program for fungicide/ bactericide use that includes scouting, uses historical information related to pesticide use, and crop rotation, and which considers host plant resistance, impact of environmental conditions on disease development, disease thresholds, as well as cultural, biological and other chemical control practices.
- Where possible, make use of predictive disease models to effectively time fungicide/bactericide applications. Note that using predictive models alone is not sufficient to manage resistance.
- Monitor treated fungal and bacterial populations for resistance development.
- Contact your local extension specialist or certified crop advisor for any additional pesticide resistancemanagement and/or IPM recommendations for specific crops and pathogens.

#### PREHARVEST INTERVAL – AGRICULTURAL USE

Companion® Extreme can be applied up to and including the day of harvest.

## MIXING AND APPLICATION INSTRUCTIONS

#### **Foliar & Soil Spray Application**

Apply Companion® Extreme with spray equipment, including hand-held sprayers; boom sprayers; aerial application systems; specified irrigation systems; and fertigation systems. Fit sprayers applying Companion® Extreme with a strainer size of 50-mesh. For proper application, determine the number of acres to be treated, the label use rate and select appropriate volume to give good canopy penetration and coverage of plant parts to be protected. Prepare only the amount of spray solution required to treat the measured acreage. See equipment

[Bracketed information is optional text.] Text separated by/denotes and/or options.

manufactures instructions for proper use and calibration of equipment, prior to application of Companion® Extreme.

#### Tank Mixing:

Special care must be taken when tank mixing.

- 1) Prepare no more spray mixture than is required for the immediate operation, by determining the treatment rates as indicated in the directions for use and make proper dilutions.
- 2) Thoroughly clean spray equipment before using this product. Remove scale, pesticide residues, and other foreign matter from the chemical supply tank and entire injector system. Flush with clean water. Failure to provide a clean tank, void of scale or residues, can cause product to lose effectiveness or strength.
- 3) Companion® Extreme must be diluted with water prior to use. The manufacturer recommends that the user makes a slurry in water prior to adding to the spray tank.
- 4) Partially fill the spray tank with clean water to the ¾ level and then add the specific amount of Companion® Extreme to the tank as required. Add the remaining water. Mix thoroughly. Maintain agitation continuously while spraying.
- 5) Avoid allowing the spray mixture to stand for prolonged periods of time prior to use to avoid settling. Vigorously agitate the mixture to redisperse the product prior to application if the mixture has settled. DO NOT allow spray mixture to stand overnight.

Application Instructions for the Biocapsule Mixing System

- 1. Depress Biocapsule application button and inject product into the mixing container.
- 2. Shake mixing container vigorously to ensure adequate distribution of the product throughout the mixture.
- 3. Once mixture is adequately mixed and uniform, apply to the appropriate application equipment per the instructions above for standard foliar and spray application.

## **Compatibility:**

Companion® Extreme is compatible with many fertilizers, micronutrients, organic materials, wetting agents, adjuvant, surfactants, most fungicides, herbicides and insecticides, however do not combine with other materials if there is no previous experience, or use of the combination to show it is physically compatible and non-injurious under your conditions. Check for compatibility with other products. Companion® Extreme has been evaluated for phytotoxicity on a variety of crops under various normal growing conditions. However, testing all crop varieties, in all mixtures and combinations is not feasible. Therefore, prior to treating entire crop, test a small portion of the crop for sensitivity. Consult your DPH Biologicals LLC representative for more information on Companion® Extreme compatibility with pesticides, surfactants and fertilizers.

#### **Restriction:**

DO NOT mix with copper-based fungicides, concentrated acids such as sulfuric acid, solvents, oxidizing agents or bactericides. Consult specific product labels for additional information or restrictions concerning tank mixing. Observe the most restrictive of the labeling limitations and precautions of all products used in mixtures.

APPLICATIONS AS A FOLIAR OR SOIL SPRAY FOR FIELD CROPS		
		Product Application Rate,
Crop	Disease	Timing & Frequency
Berries including: Bingleberry,	Black Root Rot	0.8  oz - 2.5  oz per Acre
Black Satin Berry, Blackberry,	- Alternaria spp.	
Boysenberry, Cherokee Blackberry,	- Thielaviopsis basicola	60 g – 180 g per Hectare
Chesterberry, Cheyenne Blackberry,	Crown Gall	
Coryberry, Darrowberry, Dewberry,	- Agrobacterium tumefaciens	For suppression, begin
Dirksen Thornless Berry,	Cane Gall	applications when
Himalayaberry, Hullberry,	- Agrobacterium rubi	environmental conditions are
Lavacaberry, Loganberry, Lowberry,	Canker	conducive to disease
Lucretiaberry, Mammoth	- Pseudomonas spp.	development.
Blackberry, Marionberry,	Crown Rot	
Nectarberry, Olallieberry, Oregon	- Botrytis spp.	Apply every 7 – 14 days.
Evergreen Berry, Phenomenalberry,	- Fusarium spp.	
Rangeberry, Ravenberry, Rossberry,	- Sclerotium spp.	Apply through standard
Shawneed Blackberry and	Damping-off Fungus	spray equipment ranging
Youngberry, Blueberry, Cranberry,	- Phytophora spp.	from $3-50$ gal. water per
Currant, Elderberry, Strawberry,	- Pythium spp.	Acre. When more diluted or
Gooseberry, Huckleberry,	Downy Mildew	concentrated spray solutions
Raspeberry (Black and Red) and	- Peronospora sparse	are needed for the type of
Cultivars, Varieties and/or Hybrids	Early Blight	equipment being used,
of these. Except for Grapes (Wine,	- Alternaria spp.	follow the "Mixing and
Table and Raisin), Kiwifruit.	Fruit Rot	Application Instructions" section on this label.
	- Alternaria tenuissima	section on this label.
	Fusarium Wilt	
	- Fusarium spp.	
	- Fusarium oxysporum Gray Mold	
	- Botrytis cinerea	
	Late Leaf Rust	
	- Pucciniastrum Americanum	
	Leaf Blight	
	- Botrytis cinerea	
	Leaf Spot and Rot	
	- Phytophthora aerial blight	
	Mummy Berry	
	- Monilinia vaccinii-corymbois	
	Orange Rust	
	- Arthuriomyces peckianus	
	- Gymnoconia nitens	
	Powdery Mildew	
	- Sphaerotheca macularis	
	- Microsphaera alni	
	Root Rot	
	- Pythium spp.	
	Wilt	
	- Verticillium spp.	

[Bracketed information is optional text.] Text separated by/denotes and/or options.

## Brassica (Cole) Leafy Vegetables including: Broccoli, Chinese Broccoli, Broccoli Raab, Brussels Sprouts, Cabbage, Chinese Cabbage (Bok Choy and Napa), Chinese Mustard Cabbage (Gai Choy), Cauliflower, Cavalo Broccolo, Collards, Kale, Kohlrabi, Mizuna, Mustard Greens, Mustard Spinach and Rape Greens, and Cultivars. Varieties, and Hybrids of these.

#### Anthracnose

Colletotrichum spp.

### **Blackleg**

- Phoma lingum
- Leptosphaeria maculans

## Black Root Rot, Early Blight, Leafspot/Target Spot

- Alternaria spp.
- Psedudomonas spp.
- Xanthomonas campestris
- Xanthomonas spp.

#### **Black Rot**

Xanthamonas campestris

## Blight, Leaf Spot and Rot

Phytophthora aerial blight

#### Corky Root, Clubroot

Plasmodiophora brassicae

## Crown Rot, Damping-off Fungus, Gray Mold, Leaf Blight

- Botrytis cinerea
- Fusarium spp.
- Pythium spp.

#### **Downy Mildew**

- Hyaloperonospora parasitica
- Peronospora spp.

#### **Fusarium Wilt**

Fusarium Oxysporum

#### **Powdery Mildew**

Erysiphe cruciferaru

## Rot, Root Rot, Black Rot

- Pythium spp.
- Erwinia spp.
- Xanthomonas campestris

#### White Blister

Albugo candida

#### White Leafspot

Pseudocercosporella capsellae

#### White Mold, Southern Blight

Sclerotinia spp.

#### Wirestem

- Rhizoctonia solani
- Rhizoctonia spp.

0.8 oz - 2.5 oz per Acre

60 g - 180 g per Hectare

For suppression, begin applications soon after emergence or transplant and when environmental conditions are conducive to disease development.

Apply every 7 - 14 days.

Apply through standard spray equipment ranging from 3 - 50 gal. water per Acre. When more diluted or concentrated spray solutions are needed for the type of equipment being used, follow the "Mixing and Application Instructions" section on this label.

## Cucurbit Vegetables including: Chayote, Chinese Waxgourd, Citron Melon, Cucumber, Gherkin, Edible Gourds (includes Chinese Okra, Cucuzza, hechima and Hyotan), Momordica spp. (includes Balsam Apple, Balsam Pea, Bitter Melon and Chinese Cucumber),

### **Angular Leaf Spot**

Pseudomonas syringae

## Anthracnose, Leaf and Stem Blight

- Colletotrichum spp.
- Colletotrichum orbiculare

#### **Bacterial Fruit Blotch**

Acidovorax avenae (subsp. Citrulli)

**Bacterial Wilt** 

0.8 oz - 2.5 oz per Acre

60 g - 180 g per Hectare

For suppression, begin applications soon after emergence or transplant and

[Companion® Extreme; EPA Reg. No 94485-RN] [Master label date September 10, 2024]

[Bracketed information is optional text.] Text separated by/denotes and/or options.

Muskmelon (includes True Cantaloupe, Cantaloupe, Casaba, Crenshaw Melon, Golden Pershaw Melon, Honeydew Melon, Mango Melon, Persian Melon, Pineapple Melon, Santa Claus Melon, Snake Melon and Hybrids and/or Cultivars of Cucumis melo), Pumpkin, Summer Squash (includes Crooknexk Squash, Scallop Squash, Straightneck Squash, Vegetable Marrow and Zucchini), Winter Squash (includes Acorn Squash, Butternut Squash, Calabaza, Hubbard Squash and Spaghetti Squash) and Watermelon includes Cultivars, Hybrids and/or Varieties of these.

- Erwinia tracheiphilia
- Verticillium spp.

## **Black Root Rot, Early Blight**

- Alternaria spp.

## Charcoal Rot, Vascular Rot, Root Rot

- Macrophomina spp.

## Late Blight, Leaf Spot and Rot

Phytophthora spp.

## Crown Rot, Damping-Off Fungus, Gray Mold, Leaf Blight

- Botrytis cinerea

#### **Downy Mildew**

- Pseudoperonospora cubensis

#### **Fusarium Wilt**

Fusarium oxysporum

#### **Gummy Stem Blight**

- Didymella bryoniae

## Cucurbit Wilting, Soft Rot, Angular Leaf Spot, Bacterial Soft Rot

- Erwinia spp.

#### **Powdery Mildew**

- Golovinomyces spp.
- · Podosphaera spp.

#### **Root Rot**

- Monosporascus cannonballus
- Pythium spp.
- Erwinia spp.

# Brown Patch, Bottom Rot, Damping-off fungus, Head Wilt, Wilt,

- Rhizoctonia spp.
- Verticillium spp.

## Vine Blight

- Monosporascus cannonballus

when environmental conditions are conducive to disease development.

Apply every 7 - 14 days.

Apply through standard spray equipment ranging from 3 – 50 gal. water per Acre. When more diluted or concentrated spray solutions are needed for the type of equipment being used, follow the "Mixing and Application Instructions" section on this label.

Citrus Fruits including: Citron, Citrus Hybrids, Grapefruit, Kumquat, Lemon, Lime, Mandarin, Orange, Pummelo, satsuma Mandarin, Tangelo, Tangerine and Cultivars, Varieties and/or Hybrids of these.

#### Angular Leaf Spot, Soft Rot

- Erwinia spp.

## Brown Spot, Leaf Spot, Stem-End Rot

- Alternaria alternata
- Alternaria citri

#### **Black Mold Rot**

- Aspergillus spp.
- Penicillium spp.

## Citrus Greening (Huanglongbing (HLB))

- *Candidatus Liberibacter* spp.

### **Post-Bloom Fruit Drop**

- Colletotrichum acutatum

## Root Rot, Fusarium Wilt

- Fusarium spp.
- Phymatotrichopsis omnivore
- *Amarillaria* spp.

**Brown Rot, Foot Rot** 

0.8 oz - 2.5 oz per Acre

60 g - 180 g per Hectare

For suppression, begin applications at the onset of first new foliar flush on all citrus varieties and when environmental conditions are conducive to disease development.

Apply every 7 - 14 days.

Apply through standard spray equipment ranging from 3 – 50 gal. water per

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Phytophthora spp.

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	Damping-off Fungus, Root Rot  - Pythium spp.  Areolate Leaf Spot  - Rhizoctonia solani  Blight, Twig Blight, Fruit Rot, Root Rot  - Sclerotinia spp.  Bacterial Leaf Spot, Canker  - Xanthomonas campestris	concentrated spray solutions are needed for the type of equipment being used, follow the "Mixing and Application Instructions" section on this label.
	- Xanthomonas spp.  Citrus Canker - Xanthomonas axonopodis pv. Citri  Greasy Spot - Mycosphaerella citri  Diplodia Stem-end Rot - Diplodia natalensi	
	Melanose - Diaporthe citri  Scab - Elsinoe fawcettii  Cotton (Texas) Root Rot - Phymatotrichopsis omnivore  Charcoal Rot, Vascular Rot, Root Rot - Macrophomina spp.  Wilt - Verticillium spp.  Brown Patch, Bottom Rot, Damping-off Fungus, Wilt - Rhizoctonia spp.	
(D) (1911 11 1911 4		0.0
Tree (edible and inedible nut bearing) including: Almond,	Almond Leaf Rust - Tranzschelia discolor	0.8 oz – 2.5 oz per Acre
Beechnut, Brazilian Pine, Bur Oak,	Almond Scab	60 g – 180 g per Hectare
Butternut, Cashew, Chestnut, Chinquapin, Coconut, Hazelnut, Macadamia nut, Pecan, Pequi, Pine nut, Pistachio, Sapucaia nut, Tropical Almond, Walnut (black and English), and Cultivars, Varieties, and/or Hybrids of these.	- Cladosporium carpophilum  Anthracnose - Colletotrichum spp.  Blight - Xanthomonas campestris  Bot Canker, Dieback, Canker - Botryosphaeria spp Pseudomonas syringae	For suppression, begin applications after foliage establishment and when environmental conditions are conducive to disease development.
	Brown Rot Blossom Blight	Apply every 7 – 14 days.
	- Monolinia laxa  Bud Rot  - Fusarium spp.  Ceratocystis Canker  - Ceratocystist fimbriata  Damping-off Fungus, Root Rot  - Pyhium spp.  - Fusarium spp.  - Phytopthora spp.	Apply through standard spray equipment ranging from 3 – 50 gal. water per Acre. When more diluted or concentrated spray solutions are needed for the type of equipment being used, follow the "Mixing and

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Acre. When more diluted or

	T	1
	- Rhizoctonia spp.	Application Instructions"
	Hull Rot	section on this label.
	- Monilinia spp.	
	- Phomopsis spp.	
	- Rhizopus spp.	
	- Aspergillus spp.	
	Leaf Spot	
	- <i>Cercospora</i> spp.	
	- Alternaria spp.	
	- Macrophoma spp.	
	1 11	
	- Phomopsis spp.	
	- Ramularia spp.	
	Oakroot Fungus	
	- Armillaria mellea	
	Pecan Scab	
	- Cladosporium caryigenum	
	Powdery Mildew	
	- Phyllactinia guttata	
	Root Rot	
	- Armillaria spp.	
	- Fusarium spp.	
	_ = =	
	- Phytophthora spp.	
	- Pythium spp.	
	- Rhizoctonia spp.	
	Wilt	
	- Verticillium dahlia	
Grape (Wine, Table and Raisin),	Alternaria Cone Disorder	0.8  oz - 2.5  oz per Acre
Hops, Kiwifruit, Passionfruit.	- Alternaria alternata	0.0 02 2.3 02 per 7 tere
Hops, Kiwiii uit, 1 assioini uit.		60 ~ 100 ~ non Heatons
	Black Rot	60 g – 180 g per Hectare
	- Guignardia bidwellii	
	Blight	For suppression, begin
	- Actinidia deliciosa	applications after foliage
	- Pseudomonas spp.	establishment and when
	Black Mold	environmental conditions are
	- Cladosporium spp.	conducive to disease
	Botrytis Bunch Rot	development and repeat.
	- Botrytis spp.	
	Canker	Apply every $7 - 14$ days.
	- Pseudomonas syringae	
	Cone Tip Blight	Apply through standard
	- Fusarium spp.	spray equipment ranging
	Crown Gall	from 3 – 50 gal. water per
	- Agrobacterium tumefaciens	Acre. When more diluted or
	- Agrobacterium vitis	concentrated spray solutions
	Crown, Root Rot	are needed for the type of
	- Phytophthora spp.	equipment being used,
	- Phytophthora citricola,	follow the "Mixing and
	- Phytophthora megasperma	Application Instructions"
	Damping-off, Root Rot	section on this label.
	1 2 7	Section on this facet.
	- Pythium spp.	
	Downey Mildew	

[Bracketed information is optional text.] Text separated by/denotes and/or options.

	1	
	- Peronospora spp.	
	- Plasmopara viticola	
	- Pseudoperonospora spp.	
	Grapevine Trunk Disease	
	- Diplodia seriata	
	-	
	Eutypa	
	- Eutypa lata	
	Grape Cane and Leafspot	
	- Diaporthe ampelina (Phomopsis	
	viticola)	
	Gray Mold	
	- Botrytis cinerea	
	Phomopsis	
	- Phomopsis viticola	
	Powdery Mildew	
	- Uncinula necator	
	- Sphaerotheca macularis	
	Red Crown Root	
	- Phomopsis tuberivora	
	Root Rot, Vascular Rot, Fruit Rot,	
	<b>Bottom Rot</b>	
	- Armillaria spp.	
	- Fusarium spp.	
	- Phytophthora spp.	
	- Pythium spp.	
	, , , , ,	
	- Rhizoctonia spp. White Mold	
	- Sclerotinia sclerotium	
	Wilt	
	- Verticillium spp.	
Herbs and Spices including:		0.8  oz - 2.5  oz per Acre
Allspice, Angelica, Anise, Annatto,	Black Root Rot, Early Blight	
Basil, Chamomile, Caraway,	- Alternaria spp.	60 g – 180 g per Hectare
Cardamom, Cassia, Celery Seed,	Crown Rot, Damping-off Fungus, Gray	
Chervil (Dried), Chives, Cinnamon,	Mold, Leaf Blight	For suppression, begin
Coriander, Cumin, Curry, Dill,	- Botrytis cinerea	applications soon after
Fennel, Fenugreek, Horehound,	Root Rot, Vascular Rot, Bottom Rot	emergence or transplant and
Hyssop, Juniper Berry, Lavender,	- Pythium spp.	when environmental
Lemongrass, Lovage, Mace	- Phizactonia spp.	conditions are conducive to
Marigold, Marjoram, Mustard,	- Pseduomonas spp.	disease development and
Nasturtium, Nutmeg, Oregano, parsley (Dried), Pepper, Rosemary,	- Xanthomonas spp.	repeat.
Rue, Saffron, Sage, Savory, Sweet	- Erwinia spp.	Apply every 7 – 14 days.
Bay, Tansy, Tarragon, Thyme,	- Armillaria spp.	Apply every / - 14 days.
Vanilla, Wintergreen, Woodruff and	- Rhizoctonia spp. Blight, Leaf Spot and Rot	Apply through standard
Wormwood and Cultivars, Varieties,	- Phytophthora spp.	spray equipment ranging
and Hybrids of these.	- Fnytopninora spp. - Alternaria spp.	from 3 – 50 gal. water per
and 11 office of those.	- Auernaria spp. - Cercospora spp.	Acre. When more diluted or
Mint	- Cercospora spp. - Colletotrichum spp.	concentrated spray solutions
	- Concionation spp.	Toncontacted Spiny Bolditons

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		1 10 1
	- Septoria spp.	are needed for the type of
	Fusarium Wilt	equipment being used,
	- Fusarium oxysporum	follow the "Mixing and
	Downy Mildew	Application Instructions"
	- Phytophthora spp.	section on this label.
	- Peronospora spp.	
	Rust	
	- Puccinia spp.	
	Powdery Mildew	
	1	
	- Oidium spp.	
	Wilt	
	- Verticillium spp.	
Fruiting Vegetables including:	Anthracnose	0.8  oz - 2.5  oz per Acre
Eggplant, Groundcherry, Okra,	- Colletotrichum spp.	0.0 02 2.3 02 per riere
		60 100 11
Pepino, Pepper (includes Bell	Bacterial Speck	60 g – 180 g per Hectare
Pepper, Chili Pepper, Cooking	- Pseudomonas syringae	
Pepper, Pimento and Sweet Pepper),	Black Mold Rot	For suppression, begin
Tomatillo, Tomato and Cultivars,	- Aspergillus spp.	applications soon after
Varieties and/or Hybrids of these.	Black Root Rot, Early Blight	emergence or transplant and
varieties and/or Hybrids of these.	, , ,	
	- Alternaria spp.	when environmental
	Canker	conditions are conducive to
	- Clavibacter michiganensis	disease development.
	Crown Rot, Damping-off Fungus, Gray	1
	Mold, Leaf Blight	Apply avery 7 14 days
	1	Apply every 7 – 14 days.
	- Botrytis cinerea	
	Root Rot, Vascular Rot, Fruit Rot,	Apply through standard
	Bottom Rot	spray equipment ranging
		from $3-50$ gal. water per
	- Fusarium spp.	Acre. When more diluted or
	- Macrophomina spp.	
	- Phytophthora spp.	concentrated spray solutions
	- Pythium spp.	are needed for the type of
		equipment being used,
	- Rhizoctonia spp.	follow the "Mixing and
	Late Blight, Blackeye/Buckeye Rot in	Application Instructions"
	Tomatoes	section on this label.
	- Phytophthora spp.	section on this label.
	Fusarium Wilt	
	- Fusarium oxysporum	
	Root Rot, Bottom/Stem Rot	
	- Rhizoctonia solani	
	Leaf and Stem Blight	
	- Sclerotinia minor	
	Bacterial leaf Spot	
	- Xanthomonas spp.	
	Powdery Mildew	
	- Golovinomyces spp.	
	- Leveillula spp.	
	* *	
	- Oidiopsis spp.	
	- Podosphaera spp.	
	Septoria Leaf Spot	
	- Septoria lycopersici	
	Sepiona iyeobersici	

	Southarn Dlight	
	Southern Blight	
	- Septoria lycopersici Wilt	
Leafy Vegetables (Except Brassica	- Verticillium spp.  Anthracnose	0.8 oz – 2.5 oz per Acre
Vegetables) including: Amaranth,	- Colletotrichum spp.	0.8 0Z – 2.3 0Z per Acre
Arugula, Cardoon, Celery, Celtuce,	Black Root Rot, Early Blight	60 g – 180 g per Hectare
Chervil, Chinese Celery,	- Alternaria spp.	oo g – 100 g per Hectare
Chrysanthemum (Edible-Leaved and	- Thielaviopsis basicola	For suppression, begin
Garland), Corn Salad, Cress (Garden	Crown Rot, Damping-off Fungus, Gray	applications soon after
and Upland), Dandelion, Dock	Mold, Leaf Blight	emergence or transplant and
(Sorrel), Endive (Escarole), Fennel	- Botrytis cinerea	when environmental
Lettuce (Head and Leaf), Orach,	- Xanthomonas spp.	conditions are conducive to
Parsley, Purslane (Garden and	- Erwinia spp.	disease development.
Winter), Radicchio, Rhubarb,	- Pseduomonas spp.	disease de veropinent.
Spinach, Spinach (New Zealand and	- <i>Phytophthora</i> aerial blight	Apply every 7 – 14 days.
Vine) and Swiss Chard, and	Root Rot	Tippij Cicij / Ti dajs.
Cultivars, Varieties, and Hybrids of	- Pythium spp.	Apply through standard
these, including Those Grown for	Downy Mildew, Blue Mold	spray equipment ranging
Seed Production.	- Bremia lactucae	from $3-50$ gal. water per
	- Peronospora spp.	Acre. When more diluted or
	Powdery Mildew	concentrated spray solutions
	- Golovinomyces spp.	are needed for the type of
	- Podosphaera spp.	equipment being used,
	Blight, Leaf Spot and Rot	follow the "Mixing and
	- Phytophthora aerial blight	Application Instructions"
	- Cercospora spp.	section on this label.
	Root Rot, Bottom/Stem Rot	
	- Rhizoctonia solani	
	Lettuce Drop	
	- Sclerotinia minor	
	Wilt	
	- Fusarium oxysporum	
	- Verticillium spp.	
	Rust	
	- Puccinia spp.	
	Sclerotinia Head and Leaf Drop, White	
	Mold, Pink Rot	
	- Sclerotinia spp.	
	Target Spot	
	- Rhizoctonia solani	
	White Rust	
	- Albugo occidentalis	
	Root Rot, Vascular Rot, Fruit Rot,	
	Bottom Rot	
	- Fusarium spp.	
	- Phytophthora spp.	
	- Pythium spp.	
	- Rhizoctonia spp.	

[Bracketed information is optional text.] Text separated by/denotes and/or options.

Legume Vegetables including:	Bacterial Blight, Spot, Pustule	0.8 oz – 2.5 oz per Acre
Bean Broad Bean, Chickpea, Guar,	- Xanthomonas spp.	0.0 02 2.3 02 pci 7 kere
Jackbean, Lentil, Pea, Pigeon Pea	Cylindrocladium Black Rot	60 g – 180 g per Hectare
and Soybean	- Cylindrocladium parasiticum	oog 100 g per Heetare
and boybean	Rot, Black Mold Rot, Black Root Rot, Bottom	For suppression, begin
	Stem Rot, Early Blight	applications soon after
	- Aspergillus spp.	emergence or transplant and
	- Fusarium spp.	when environmental
	- Phytophthora spp.	conditions are conducive to
	- Pythium spp.	disease development.
	- Rhizoctonia spp.	disease development.
	- Selerotinia spp.	Apply every 7 – 14 days.
	- Macrophomina spp.	Tippiy every / 14 days.
	- Alternaria spp.	Apply through standard
	Crown Rot, Damping-off Fungus, Gray	spray equipment ranging
	Mold, Leaf Blight, White Mold	from 3 – 50 gal. water per
	- Botrytis cinerea	Acre. When more diluted or
	- Sclerotinla spp.	concentrated spray solutions
	Root Rot	
		are needed for the type of
	<ul><li>Pythium spp.</li><li>Blight, Leaf Spot, Late Leaf Spot, Rot</li></ul>	equipment being used, follow the "Mixing and
		Application Instructions"
	- Phytophthora aerial blight	section on this label.
	- Cercospora spp.	section on this label.
	<ul><li>Cercosporidum spp.</li><li>Sclerotinia minor</li></ul>	
	- Septoria spp.	
	- Xanthomonas campestris Wilt	
	- Fusarium spp.	
	- Ralstonia solanacearum	
	- Verticillium spp.	
	Spring Black Stem	
	- Ascochyta medicaginicola	
	Sudden Death Syndrome (SDS)	
	- Fusarium spp.	
	Powdery Mildew	
	- Golovinomyces spp.	
	- Gotovinomyces spp. - Podosphaera spp.	
	- Foaospnaera spp. Rust	
	<ul><li><i>Uromyces</i> spp.</li><li><i>Puccinia</i> spp.</li></ul>	
	- Phakaspora pachyrhizi <b>Web Blotch</b>	
	- Phoma arachidicola	
Bulb Vegetables including: Fresh	Black Root Rot, Early Blight	0807 2507 par Agra
	, ,	0.8  oz - 2.5  oz per Acre
Leaves Chive, Garlic, Leek, Onion,	- Alternaria spp.  Prove Botch Pottom Bot Domning off	60 a 190 a non Hostons
Shallot and Cultivars, Varieties	Brown Patch, Bottom Rot, Damping-off	60 g – 180 g per Hectare
and/or Hybrids of these.	fungus, Head Wilt, Wilt,	For aumpression hasin
	- Rhizoctonia spp.	For suppression, begin
	- Verticillium spp.	applications when
	Crown Rot, Neck Rot, Damping-off	environmental conditions are

[Companion® Extreme; EPA Reg. No 94485-RN] [Master label date September 10, 2024]

[Bracketed information is optional text.] Text separated by/denotes and/or options.

## Fungus, Gray Mold, Leaf Blight

- Botrytis cinerea
- Botrytis squamosa

#### **Root Rot**

- Pythium spp.
- Fusarium spp.
- Phytophthora spp.

## Blight, Leaf Spot and Rot

- Phytophthora aerial blight

## **Leaf and Stem Blight**

- Sclerotinia minor

## **Bacterial Blight/Leaf Spot**

- Xanthomonas campestris
- Xanthomonas spp.

## Soft Rot, Angular Leaf Spot, Bacterial Soft Rot, White Rot

- Erwinia spp.
- Pseudomonas spp.
- Sclerotium cepivorum

#### **Downy Mildew**

- Peronospora spp.

#### Rust

- Puccinia porri

#### Pink Root

- Phoma spp.

conducive to disease development.

Apply every 7 - 14 days.

Apply through standard spray equipment ranging from 3 – 50 gal. water per Acre. When more diluted or concentrated spray solutions are needed for the type of equipment being used, follow the "Mixing and Application Instructions" section on this label.

## **Root and Tuber Vegetables**

including: Arracacha, Arrowroot, Artichoke, Beet, Sugar Beet, Carrot, Cassava, Celeriac, Chayote (Root), Chervil (Turnip-Rooted), Chicory, Chufa, Dasheen, Ginger, Ginseng, Horseradish, Parsnip, Potato, Radish, Rutabaga, Salsify, Skirret, Sweet Potato, Turmeric, Turnip and Yam and cultivars, varieties, and hybrids of these.

## Anthracnose, Bitter Rot, Stem End Rot, Stem Blight

- Colletotrichum spp.

## Bacterial Leaf Spot, Blight

- Xanthomonas spp.
- Cercospora spp.

#### **Black Dot**

Colletotrichum coccodes

#### **Brown Spot, Black Pit**

- Alternaria alternata

## Black Root Rot, Early Blight

- Alternaria spp.
- Aphanomyces spp.

## Cercospora Leaf Blotch

- Cercospora spp.

#### Club Root

- Plasmodiophora brassicae

## **Common Rust, Deforming Rust**

- Puccinia pittleriana
- Aecidium cantensis

## Crown Rot, Damping-off Fungus, Gray Mold, White Mold, Leaf Blight

- Botrytis spp.
- Erwinia chrysanthemi
- Phytophthora spp.
- Sclerotinia sclerotium

 $0.8\ oz-2.5\ oz\ per\ Acre$ 

60 g - 180 g per Hectare

For suppression, begin applications when environmental conditions are conducive to disease development and repeat.

Apply every 7 - 14 days.

Apply through standard spray equipment ranging from 3 – 50 gal. water per Acre. When more diluted or concentrated spray solutions are needed for the type of equipment being used, follow the "Mixing and Application Instructions" section on this label.

[Companion® Extreme; EPA Reg. No 94485-RN] [Master label date September 10, 2024]

	- Ulocladium atrum	
	Downy Mildew	
	- Peronospora spp.	
	Gangrene	
	- Phomosis spp.	
	Leaf Spot	
	- Phoma andigena	
	- Septoria lycopersici	
	Powdery Scab, Common Scab	
	- Streptomyces spp.	
	- Spongospora subterranea	
	Powdery Mildew	
	- Erysiphe cichoracearum	
	- Leveillula Taurica	
	- Golovinomyces spp.	
	Ramularia	
	- Ramularia spp.	
	Root Rot, Brown Rot, Charcoal Rot, Ring	
	Rot, Stem Rot, Soft Rot, Ring Rot	
	- Pythium spp.	
	- Dickeye solani	
	- Erwinia spp.	
	- Pectobacterium spp.	
	- Pseudomonas spp.	
	- Ralstonia solanancearum	
	- Macrophomina spp.	
	- Fusarium spp.	
	- Rhizoctonia solani	
	- Erwinia spp.	
	- Clavibacter michiganensis	
	- Seclerotium rolfsii	
	Rust	
	- Uromyces betae	
	Silver Scurf	
	- Helminthosporium spp.	
	Skin Spot,	
	- Polyscytalum pustulans	
	Thecaphora Smut	
	- Angiosorus solani	
	Wart  Synchytrium andahiatiaum	
	- Synchytrium endobioticum Wilt	
	- Verticillium spp.	
Tropical and Subtropical Fruits	Anthracnose	0.8 oz – 2.5 oz per Acre
Inedible Peel (Except Banana,	- Colletotrichum spp.	
Passion Fruit and Plantain)	Black Sigatoka	60 g – 180 g per Hectare
including: Mango, Papaya,	- <i>Mycosphaerella</i> spp.	
Avocado and Pineapples, Coconut,	Leaf Spot, Fruit Rot, Heart Rot	For suppression, begin
Date, Fig, Guava, Olive, Palm, and	- Alternaria spp.	applications soon after
	• •	

[Bracketed information is optional text.] Text separated by/denotes and/or options.

Cultivars, Varieties, and Hybrids of these.

#### Coffee

#### **Banana and Plantain**

## Blight, Canker

- Pseudomonas spp.
- Xanthomonas spp.

## Botryosphaeria Rot

Botryosphaeria dothidea

## **Botrytis Flower Blight**

Botrytis spp.

#### **Brook's Spot**

- Mycosphaerella pomi

## Brown Rot, Blossom Blight, Fruit Blight

- Monilinia laxa
- Monilinia fructicola

## Crown Rot, Damping-off Fungus, Gray Mold, Leaf Blight

Botrytis cinerea

#### Fire Blight

- Erwinia amylovora

#### **Flyspeck**

- Schizothyrium pomi
- Zygophiala jamaicensis

#### **Gray Mold**

- Botrytis cinerea

#### **Leaf Curl**

- Taphrina deformans

## Leaf Spot, Berry Blotch

- Cerospora spp.
- Blumeriella jaapii

#### **Powdery Mildew**

- Golovinomyces cichoracearum (formerly called Erysiphe cichoracearum)

#### **Rusty Spot**

- Podophaera leucotricha

#### **Sooty Blotch**

- Gloeodes pomigena

#### Scab

- Venturia spp.
- Cladosporium carpophilum
- Sphaceloma spp.

#### **Shot Hole**

- Wilsonomyces carpophilus

## Sigatoka

Mycosphaerella filiensis

## Root Rot, Vascular Rot, Fruit Rot, Bottom

#### Rot

- *Armillaria* spp.
- Fusarium spp.
- Phytophthora spp.
- Pythium spp.
- Rhizoctonia spp.

#### Rust

emergence or transplant and when environmental conditions are conducive to disease development.

Apply every 7 - 14 days.

Apply through standard spray equipment ranging from 3 – 50 gal. water per Acre. When more diluted or concentrated spray solutions are needed for the type of equipment being used, follow the "Mixing and Application Instructions" section on this label.

	77 17 1 1 1 1 1	
	- Hemileia vastatrix <b>Wilt</b>	
	- Fusarium oxysporum	
	- Verticillium spp.	
	Yellow Sigatoka	
Compal Chains including Dorlar	- Mycosphaerella musicola Ascochyta Leaf Scorch (Spot)	0.0
Cereal Grains including: Barley, Buckwheat, Corn (Sweet, Dried	- Ascochyta spp.	0.8  oz - 2.5  oz per Acre
Field), Millet, Pearl	Bacterial Blight/Streak	60 100 11
Millet (peral, proso), Oats, Popcorn,	- Xanthomonas spp.	60 g – 180 g per Hectare
Rice, Rye, Sorghum, Sweet Corn,	Baknae Disease	
Teosinte Triticale, Wheat, Wild Rice	- Gibberella fuji-Kuro	For suppression, begin
and Cultivars, Varieties, and Hybrids of these.	Black Point	applications soon after
Tryonus of these.	- Alternaria spp., Cladosporium spp. Brown Rot, Leaf Spot, Smut	emergence or transplant and
	- Ceratobasidium spp.	when environmental
	- Cochliobolus spp.	conditions are conducive to
	- Drechslera spp.	disease development.
	- Entyloma spp.	7 14 1
	Bunt, Stinking Smut	Apply every $7 - 14$ days.
	- Tilletia tritici	A 1 (1 1 1 1 1
	Charcoal Rot, Vascular Rot, Root Rot	Apply through standard
	- Macrophomina spp.	spray equipment ranging
	Crown Rot, Damping-Off Fungus,	from 3 – 50 gal. water per
	Gray Mold, Leaf Blight - Botrytis cinerea	Acre. When more diluted or
	Foot Rot, Seedling Blight, Head Blight	concentrated spray solutions
	- Fusarium spp.	are needed for the type of
	Leaf Rust, Black Stem Rust, Red	equipment being used,
	Rust	follow the "Mixing and
	- Puccinia spp.	Application Instructions"
	Leaf Spot	section on this label.
	- Cercospora spp. - Cercosporidium spp.	
	Leaf and Glume Blotch	
	- Phaeosphaeria nodorum	
	- Stagonospora nodorum (formerly	
	Septoria nodorum)	
	Gray Leaf Spot	
	- Cercospora spp. Gross's Wilt	
	- Clavibacter michiganensis	
	Halo Blight	
	- Pseudomonas syringae	
	Head Blight and Head Scab	
	- Gibberella spp. Northern Corn Leaf Blight	
	- Helminthosporium spp.	
	Powdery Mildew	
	- Blumeria spp.	
	Root Rot	
	- Pythium spp.	
	Blight, Leaf Spot and Rot	
	- Phytophthora aerial blight	
	- Phytophthora spp.	
	Root Rot, Bottom / Stem Rot	
	- Rhizoctonia solani	

	Rice Bacterial Blight	
	- Xanthomonas oryzae	
	Rice Bacterial Brown Spot	
	- Pseudomonas syringae van	
	Hall pv. panici	
	Rice Blast	
	- Pyricularia oryzae	
	Septoria Leaf Blotch	
	- Septoria spp. Sheath Spot/Blight	
	- Rhizoctonia spp.	
	- Thanatephorius spp.	
	Smut	
	- Tilletia barclayana	
	Stem Rot	
	- Magnaporthe spp. - Sclerotium spp.	
	Stewart's Wilt	
	- Pantoea stewartii	
	White Mold	
	- Sclerotinia spp.	
	Wilt	
Constant Constant for Constant Const	- Verticillium spp.	0.0 - 2.5 - 2.5 - 2.5
Grasses Grown for Seed, Sod	Anthracnose	0.8  oz - 2.5  oz per Acre
Production, Pasture and Forage	- Colletotrichum spp.	60 ~ 100 ~ man Hastons
Grasses	Brown Patch, Yellow Patch	60 g – 180 g per Hectare
Sugaraana	- Rhizoctonia spp.	For symmetries basis
Sugarcane	Brown Ring Patch	For suppression, begin
	- Walled Circinala	applications soon after
	Dollar Spot	emergence or transplant and
	- Sclerotinia spp.	when environmental conditions are conducive to
	Fading Out	
	- Curvularia spp.  Gray Leaf Spot	disease development.
	- Pyricularia grisea	Apply every $7 - 14$ days.
	Gumming Disease	Apply every 7 – 14 days.
	- Xanthomonas spp.	Apply through standard
	Helminthosporium Leaf Spot/Melting Out	spray equipment with no less
	- Bipolaris spp.	than 50 gal. water per Acre.
	Powdery Mildew	man 50 gai. water per riere.
	- Blumeria spp.	
	- Erysiphe spp.	
	Red Leaf Spot	
	- Dreschslera erythrospila	
	Red Thread	
	- Laetisaria fuciformis	
	Rust	
	- Puccinia spp.	
	- Uromyces spp.	
	Smut	
	- Ustilago spp.	
	Yellow Tuft	
	- Scleophthora spp.	
	Necrotic Ring Spot	
	O 1	1

		T
	- Ophiosphaerella korrae	
	Take All Root Rot/Patch	
	- Gaeumannomyces graminis	
	White Patch	
	- Basidiomycete spp.	
	Summer Patch	
	- Magnaporthe poae	
	Fusarium Patch	
	- Fusarium spp.	
	Pythium	
NT A 1 17 1 1 1	- Pythium spp.	0.0 2.5
Nongrass Animal Feeds including:	Alternaria Leaf Spot	0.8  oz - 2.5  oz per Acre
Alfalfa, Bean (velvet), Clover,	- Alternaria spp.	
Kudzu, Lespedeza, Lupin, Sainfoin,	Anthracnose	60 g – 180 g per Hectare
Trefoil, Vetch and Cultivars,	- Colletotrichum trifolii	
Varieties, and Hybrids of these.	Cercospora Leaf Spot	For suppression, begin
	- Cercospora spp.	applications soon after
	Leaf Spot	emergence or transplant and
	- Leptospaerulina briosiai	when environmental
	Powdery Mildew	conditions are conducive to
	- Oidium spp.	disease development.
	- Erysiphe spp.	discuss de cropinoni
	Stemphyllium Leaf Spot	Apply every $7 - 14$ days.
	- Stemphyillium spp.	Apply every 7 – 14 days.
	- Stemphyttium spp.	Apply through standard
		Apply through standard
		spray equipment with no less
	A (1	than 50 gal. water per Acre.
Stalk and Stem Vegetables	Anthracnose	0.8  oz - 2.5  oz per Acre
including: Agave, Aloe,	- Colletotrichum spp.	
Asparagus, Bamboo, Cardoon,	Black Root Rot, Early Blight	60 g – 180 g per Hectare
Celery, Celtuce, Fennel, Fern,	- Alternaria spp.	
Fuki, Kale, Kohlrabi, Palm Heart,	- Thielaviopsis basicola	For suppression, begin
Prickly Pear, Rhubarb, Udo,	Crown Rot, Damping-off Fungus, Gray	applications soon after
	Mold, Leaf Blight	emergence or transplant and
Zuiki, and Cultivars, Varieties,	- Botrytis cinerea	when environmental
and Hybrids of these.	- Xanthomonas spp.	conditions are conducive to
	- Erwinia spp.	disease development.
	- Pseduomonas spp.	1
	- <i>Phytophthora</i> aerial blight	Apply every $7 - 14$ days.
	Root Rot	1-pp1, 0.01, 1 - duys.
	- Pythium spp.	Apply through standard
	Downy Mildew, Blue Mold	
	- Bremia lactucae	spray equipment ranging
		from 3 – 50 gal. water per
	- Peronospora spp.	Acre. When more diluted or
	Powdery Mildew	concentrated spray solutions
	- Golovinomyces spp.	are needed for the type of
	- Podosphaera spp.	equipment being used,
	Blight, Leaf Spot and Rot	follow the "Mixing and
	- Phytophthora aerial blight	Application Instructions"
1		
	- Cercospora spp.	section on this label.

	D1::	1
	- Rhizoctonia solani	
	Lettuce Drop	
	- Sclerotinia minor	
	Wilt	
	- Fusarium oxysporum	
	- Verticillium spp.	
	Rust	
	- Puccinia spp.	
	Sclerotinia Head and Leaf Drop, White	
	Mold, Pink Rot	
	- Sclerotinia spp.  Target Spot	
	- Rhizoctonia solani	
	White Rust	
	- Albugo occidentalis	
	Root Rot, Vascular Rot, Fruit Rot,	
	Bottom Rot	
	- Fusarium spp.	
	- Phytophthora spp.	
	- Pythium spp.	
	- Rhizoctonia spp.	
<b>Fiber Crops</b> including: Cotton,	Anthracnose	0.8  oz - 2.5  oz per Acre
Flax, and Hemp, and Cultivars,	- Collectotrichum spp.	
Varieties, and Hybrids of these.	Bacterial Blight	60 g – 180 g per Hectare
J	- Psedudomnas cannabina	
	- Xanthamonas spp.	For suppression, begin
	Brown Blight	applications soon after
	- Alternaria alternata	emergence or transplant and
		when environmental
	Brown Leaf Spot and Stem Canker	conditions are conducive to
	- Ascochyta spp.	disease development.
	Gray Mold	
	- Botrytis cinerea	Apply every $7 - 14$ days.
	Hemp Leaf Spot	
	- Bipolaris spp.	Apply through standard
	Olive Leaf Spot	spray equipment ranging
	- Cercospora cannabis	from 3 – 50 gal. water per
	Powdery Milldew	Acre. When more diluted or
	- Leveillula spp.	concentrated spray solutions
	- Sphaerotheca spp.	are needed for the type of
	Stemphylium Leaf and Stem Spot	equipment being used,
	- Stemphylium botryosum	follow the "Mixing and Application Instructions"
	Leaf Spot, White Leaf Spot, Yellow Leaf	section on this label.
	Spot	section on this later.
	_	
	- Phomopsis ganjae	
	- Septoria spp.	
	- Xanthmonas campestris	
	Root Rot, Vascular Rot, Fruit Rot,	
	Bottom Rot	

[Bracketed information is optional text.] Text separated by/denotes and/or options.

	T .	
	- Fusarium spp.	
	- Macrophomina spp.	
	- Phytophthora spp.	
	- Pythium spp.	
	- Rhizoctonia spp.	
	- Sclerotium spp.	
	Wilt	
	- Verticillium spp.	
	- veruennum spp.	
Oilseed including: Castor,	Bacterial Speck	0.8 oz – 2.5 oz per Acre
I —		0.8 02 – 2.3 02 per Acre
Cottonseed, Flax, Mustard,	- Pseudomonas syringae	60 g – 180 g per Hectare
Rapeseed, Poppy, Safflower,	Blight (Pod and Stem)	oo g – 100 g per Hectare
Sesame, Sunflower, and cultivars,	- Albugo spp.	For suppression, begin
varieties, and/or hybrids of these.	- Diaporthe spp.	applications soon after
	- Phomopsis spp.	emergence or transplant and
	Brown Spot	when environmental
	- Septoria glycines	conditions are conducive to
	Club Root	disease development.
	- Plasmodiophora brassicae	disease development.
	Cercospora Leaf Spot	Apply every 7 14 days
		Apply every $7 - 14$ days.
	- Cercospora spp.	Apply through standard
	Downey Mildew	spray equipment ranging
	- Peronospora manshurica	from 3 – 50 gal. water per
	Leaf Spot	Acre. When more diluted or
	- Corynespora cassicola	concentrated spray solutions
	Pustule	are needed for the type of
	- Xanthomonas spp.	equipment being used,
	Root Rot	follow the "Mixing and
	- Fusarium ssp.	Application Instructions"
	- Phytophthora spp.	section on this label.
	- Pythium spp.	section on this label.
	- Rhizoctonia spp.	
	Rust	
	- Puccinia spp.	
	- Uromyces appendiculatus	
	White Mold	
	- Sclerotinia sclerotium	
	Wilt	
	- Verticillium spp.	
Pome and Stone Fruits	Anthracnose	0.8  oz - 2.5  oz per Acre
including: Apple, Azarole,	- Colletotrichum spp.	
Crabapple, Loquat, Mayhaw,	Leaf Spot, Fruit Rot, Heart Rot	60 g – 180 g per Hectare
Medlar, Pear, Asian Pear,	- Alternaria spp.	
Quince, Tejocote, Apricot,	Blight, Canker	For suppression, begin
Quince, rejocote, Apricot, Bigit, Canker		applications soon after
1	- Pseudomonas spp.	emergence or transplant and
Plumcot, Prune, Cherry, and	- Xanthomonas spp.	when environmental
	Botryosphaeria Rot	

[Companion® Extreme; EPA Reg. No 94485-RN] [Master label date September 10, 2024]

[Bracketed information is optional text.] Text separated by/denotes and/or options.

# Cultivars, Varieties, and/or Hybrids of these.

- Botryosphaeria dothidea

## **Botrytis Flower Blight**

- Botrytis spp.

## **Brook's Spot**

- Mycosphaerella pomi

## Brown Rot, Blossom Blight, Fruit Blight

- Monilinia laxa
- Monilinia fructicola

## **Cedar Apple Rust**

- Gymosporangium juniper

#### Fire Blight

- Erwinia amylovora

## **Flyspeck**

- Schizothyrium pomi
- Zygophiala jamaicensis

## **Gray Mold**

- Botrytis cinerea

#### **Leaf Curl**

- Taphrina deformans

## Leaf Spot, Berry Blotch

- Cerospora spp.
- Blumeriella jaapii

#### **Powdery Mildew**

- Golovinomyces spp.
- Leveillula spp.
- Oidiopsis spp.
- Podosphaera spp.

#### **Rusty Spot**

- Podophaera leucotricha

## **Sooty Blotch**

- Gloeodes pomigena

#### Scab

- *Venturia* spp.
- Cladosporium carpophilum
- Sphaceloma spp.

#### **Shot Hole**

- Wilsonomyces carpophilus

## Sigatoka

- Mycosphaerella filiensis

## Root Rot, Vascular Rot, Fruit Rot, Bottom Rot

- Armillaria spp.
- *Fusarium* spp.
- Phytophthora spp.
- Pythium spp.
- Rhizoctonia spp.

#### Rust

conditions are conducive to disease development.

Apply every 7 - 14 days.

Apply through standard spray equipment ranging from 3 – 50 gal. water per Acre. When more diluted or concentrated spray solutions are needed for the type of equipment being used, follow the "Mixing and Application Instructions" section on this label.

[Bracketed information is optional text.] Text separated by/denotes and/or options.

- Wilt	Hemileia vastatrix	
ı	Verticillium spp.	

# HOW TO APPLY AS A FOLIAR, DIP, SOIL DRENCH, AND DRIP APPLICATION(S)

**Agriculture Applications:** Observe the most restrictive of the labeling limitations and precautions of all products used in mixtures.

## **Foliar Application**

Apply as a spray for suppression or control of fungal and bacterial diseases of foliage, flower, developing fruit and other above-ground parts of plants. Mix Companion® Extreme with sufficient amounts of water to cover treated area. Apply direct sprays to provide thorough coverage of crop canopy to run off. Companion® Extreme can be mixed or rotated with other fungicides to improve efficacy and reduce resistance. Companion® Extreme can be applied up to and including the day of harvest.

## **Soil Application**

**Drench Application:** For disease control and suppression of soilborne diseases of seedlings, roots, crown, and stems. Start applications of Companion® Extreme at crop emergence or when transplant plugs are set. Repeat at 7-14 day intervals or for as long as environmental conditions are favorable for disease development. Use sufficient water to provide through coverage of roots and crown. For established plants, begin application prior to disease development and when environmental conditions are conducive to disease. Apply in sufficient water to obtain adequate coverage.

- <u>Soil or Seedline Drench, or banded spray (in-furrow) at planting:</u> Seedlings: Mix into field transplant water and drench at the time of planting of seeds. Drench in a seedline or banded spray (in-furrow) at time of planting plug, starter plant, or bare-root transplant. See section of "In-Furrow/Banding" below for additional instructions.
- <u>Dip (bare-root plants)</u>: Mix 0.4 0.8 oz. of dry product into 100 gallons of water and mix well. Submerge transplant in mix for 1-5 minutes and plant immediately. The whole plant can be dipped, if desired. Companion® Extreme can be used in a tank mix or rotational program with other registered products.
- Plug Drench/Dip: Mix 0.4 0.8 oz. of dry product in 100 gallons of water and mix well. Soil drench plug trays, plants in flats or pots in the greenhouse or nursery any time prior to transplanting. Submerge in mix for 30 seconds. The whole plug tray can be dipped, if desired. Can be tank mixed with other registered pesticides.

[Bracketed information is optional text.] Text separated by/denotes and/or options.

- <u>Drip (trickle), micro sprinklers or any type of sprinkler irrigation:</u> Apply any time after planning or transplanting. See "Chemigation Instructions" for additional information Add to stock solution.
   Inject during the last half of irrigation cycle so that Companion® Extreme is in the root zone and not lost to deep percolation.
- <u>Soil Spray:</u> spray on soil surface for established plants, vines and trees for root disease pressure.
   Follow application with sufficient irrigation water to ensure penetration into root zone. See rates for specific crops.
- <u>Injection:</u> inject directly into root zone with deep root feeding shank or knife.

**In-Furrow/Banding:** Mix with transplant water. Apply as an in-furrow drench in sufficient water to obtain thorough coverage of the open furrow to cover the soil. Apply at time of planting plug, starter plant or cutting. In-furrow applications are more effective against soil-borne disease that may develop later in the growing season.

Spray directly onto soil using single or multiple nozzles. Adjust to provide through coverage of soil surface surrounding plants. Limit band to 4 inches to 6 inches wide or drench over seed line centered over the planting furrow. Can be applied directly over seeds prior to soil cover and plastic. Begin applications when conditions first become favorable for disease development. Volume of water required will depend on the application equipment used. Apply on 7 - 14 day intervals or as required.

## Nursery, Greenhouse, Shade House Crops

<u>Foliar Diseases:</u> Mix 0.8 - 1.6 oz. of Companion® Extreme in 100 gallons of water and mix well. Foliar spray entire plant to the point of runoff. For preventative control, begin applications when plant emerges and repeat every 7 - 28 days. During high disease pressure repeat application every 7 days with higher label rate.

<u>Drench Application:</u> Mix 0.8 - 1.6 oz. of Companion® Extreme in 100 gallons of water. Apply as a drench to soil media in trays, plug trays, flats or beds for prevention, control, or suppression of soilborne diseases of seedlings of vegetable or other food transplant crops. Apply immediately after seeding or germination, or when sticking cuttings. Reapply every 7 - 28 days or as needed. See "Plug Dip/Drench" rates above.

<u>Cutting or root dip:</u> Dip basal end of cuttings or bare roots (individually or in bunches) in a suspension of 0.015 - 0.03 oz. (0.4 - 0.8 grams) of Companion® Extreme in one gallon of water. Immerse for 5 - 10 seconds immediately before planting or sticking.

[Bracketed information is optional text.] Text separated by/denotes and/or options.

#### **CHEMIGATION**

## **Overall Requirements –**

- 1) Apply this product only through sprinkler (including center pivot, lateral move, end tow, side (wheel) roll, or hand move); flood (basin), furrow or border; or drip (trickle) irrigation systems. Do not apply this product through any other type of irrigation system.
- 2) Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
- 3) If you have questions about calibration, you should contact State Extension Services specialist, equipment manufacturers or other experts.
- 4) 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.
- 5) 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.

## Specific Requirements for Chemigation Systems Connected to 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 services 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, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- 3) The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 4) The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 5) They system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stop, 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.

[Bracketed information is optional text.] Text separated by/denotes and/or options.

## **Specific Requirements for Sprinkler Chemigation –**

- 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, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 3) The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 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 that will stop the water pump motor when the water pressure decreases to the point where pesticide distribution id 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 filled with a system interlock.
- 7) Do not apply when wind speed favors drift beyond the area intended for treatment.

## Specific Requirements for Flood (Basin), Furrow and Border Chemigation –

- 1) System using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity such as a drop structure of weir box to decrease potential for water source contamination from backflow if water flow stops.
- 2) The systems utilizing a pressurized water and pesticide injection system must meet the following requirements:
  - a. 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.
  - b. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
  - c. 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.
  - d. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
  - e. The irrigation line or water pump must include a functional pressure switch that will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
  - f. 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 filled with a system interlock.

[Bracketed information is optional text.] Text separated by/denotes and/or options.

## **Specific Requirements for Drip (Trickle) Chemigation –**

- 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, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 3) The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 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 that 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 filled with a system interlock.

## Application Instructions for All Types of Chemigation -

- 1) Remove scale, pesticide residues, and other foreign matter from the chemical supply tank and entire injector system. Flush with clean water. Failure to provide a clean tank, void of scale or residues, may cause product to lose effectiveness or strength.
- 2) Determine the treatment rates as indicated in the directions for use and make proper dilutions. Product can be applied continuously or at any time during the water application.
- 3) Prepare a solution in the chemical tank by filling the tank with the required water and then adding product as required. The product will immediately go into suspension without any required agitation.

[Bracketed information is optional text.] Text separated by/denotes and/or options.

#### STORAGE AND DISPOSAL

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

**Pesticide Storage:** Store in a dry place out of direct sunlight and away from heat sources. Keep from overheating or freezing.

**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:**

#### (For containers $\leq$ 20 lb.)

Refillable Container. Refill this container with Companion® Extreme only. Do not reuse this 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 refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a 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. Do not burn, unless allowed by state and local ordinances. If burned, stay out of smoke.

#### (For containers > 20 lb.)

Nonrefillable 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 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 reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. If burned, stay out of smoke.

### (For Biocapsule mixing system containers)

Nonrefillable container. Do not reuse or refill this container. Triple Rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.. Then offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. If burned, stay out of smoke.

[Bracketed information is optional text.] Text separated by/denotes and/or options.

## [Warranty and Disclaimer Notice

The directions for use of this product are believed to be adequate and must be followed carefully, it is impossible to eliminate all risk inherently associated with the use of this product. Crop injury, ineffectiveness, or other unintended consequences may result due to such factors as weather conditions, presence or absences of other materials, or the manner of use or application, all of which are beyond the control of DPH Biologicals LLC, the manufacturer, or the seller.

To the extent consistent with applicable law, the products sold to you are furnished "as is" by DPH Biologicals LLC. The manufacturer and the seller are subject only to the manufacturer's warranties, if any, which appear on the label of the product sold to you. Except as warranted by this label, DPH Biologicals LLC, the manufacturer, or the seller makes no warranties, guarantees, or representations of any kind to the buyer or the user, either express or implied, or by usage of trade, statutory or otherwise, with regard to the product sold tor use of the product, including, but not limited to merchantability, fitness for a particular purpose or use, or eligibility of the product for any particular trade usage. To the extent consistent with applicable law, Buyer's or user's exclusive remedy, and DPH Biologicals LLC, the manufacturer's or the seller's total liability shall be limited to damages not exceeding the cost of the product. No agent or employee of DPH Biologicals LLC, or the seller is authorized to amend the terms of this warranty disclaimer or the product's label or to make a presentation or recommendation different from or inconsistent with the label of this product.

To the extent consistent with applicable law, DPH Biologicals LLC, the manufacturer, or the seller shall not be liable for consequential, special, or indirect damages resulting for the use, handling, application, storage, or disposal of this product or for damage in the nature of penalties, and buyer and the user waive any right that they may have to such damages.]

[Bracketed information is optional text.] Text separated by/denotes and/or options.

## **Marketing Claims:**

#### General

- [Companion® Extreme for [Agricultural] [Use]/[non-Agricultural Crops]/[,Greenhouses]/[, Hydroponics]/[,Ornamentals (Field and Container Grown)]]
- [For Agricultural Use]
- [For use on Ornamentals]
- [For Prevention, Control or Suppression of Soil and Foliar Diseases]
- [Activates ISR (Induced Systemic Resistance) in Plants]
- [Stimulates healthier roots and improves nutrient uptake]
- [Quickly establishes beneficial colonies on roots and leaves]
- [Activates the plant's defense/immune system (Induced Systemic Resistance [ISR])]
- [A plant growth-promoting rhizobacteria (PGPR)]
- [Provides both anti-fungal and anti-bacterial activity]
- [Can be used for foliar and soil applications in field, nursery, greenhouse, hydroponics and forest production sites]

## **Agricultural Crops**

- [For Use on food, forage and flowering crops, tree fruit and nuts]
- [For Use on: [species listed on product label]]
- [Exempt from MRLS]

#### Logo(s):



