# Cueva® Fungicide Concentrate

## Flowable Liquid Copper Fungicide

## Listed by the Organic Materials Review Institute (OMRI) for use in organic production. ACCEPTED

Doc ID 536992

### FOR REGISTRATION

NOV 18, 2013

#### **ACTIVE INGREDIENT:**

New York State Department CAS Reg. No. 20543-04-8 OTHER INGREDIENTS Division of Materials Management 90.0% TOTAL Pesticide Product Registration 100.0%

metallic copper equivalent

one gallon contains 0.16 lbs. metallic copper equivalent

## **KEEP OUT OF REACH OF CHILDREN CAUTION**

See Inside Booklet for Additional Precautionary Statements, Directions for Use, and Storage and Disposal Instructions

#### Net Contents: 2.5 gallons (9.46L)

EPA REG. NO. 67702-2-70051 EPA EST. NO. 48498-CA-1 **BATCH CODE** 

Manufactured for Certis USA L.L.C. 9145 Guilford Rd, Suite 175 Columbia, MD 21046

Cueva® is a trademark of W. Neudorff GmbH KG



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FOR ORGANIC PRODUCTION

FIRST AID		
IF IN EYES	<ul> <li>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.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>	
IF ON SKIN OR CLOTHING	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>	
IF SWALLOWED	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to by a poison control center or doctor.</li> </ul>	

Have the product container or label with you when calling a poison control center or doctor or going for treatment. For emergency information concerning this product, call the toll free Hot Line Number 1-800-255-3924.

· Do not give anything to an unconscious person.

#### PRECAUTIONARY STATEMENTS

#### **Hazards to Humans and Domestic Animals**

CAUTION: Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes or clothing. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

Personal Protective Equipment (PPE): Some materials that are chemicalresistant to this product are listed below. If you want more options, follow the instructions for category A on an EPA chemical resistance category selection sheet. Mixers/loaders and other handlers must wear the following: long-sleeved shirts, long pants, chemical resistant gloves made of any waterproof material, such as polyvinyl chloride, nitrile rubber or butyl rubber, and shoes plus socks. 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. Discard clothing and other absorbent material that have been drenched or heavily contaminated with the product's concentrate. Do not reuse them.

## **User Safety Recommendations**

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using
- 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**

This product is toxic to fish and aquatic organisms and may contaminate water through runoff. 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 by disposal of equipment washwaters or rinsate. This product may contaminate water through runoff. Poorly draining soils with shallow water tables are more prone to produce runoff that contains this product. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.

#### STORAGE AND DISPOSAL

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

Pesticide Storage: Store in a secure place, away from open fire or flame. Keep container closed and reseal after use. Product may be damaged by freezing. Do not store product below 4°C. If spilled, use absorbent material and dispose of in an approved manner.

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

Container Handling: Nonrefillable container. Do not reuse or refill this container. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 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 puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

#### **DIRECTIONS FOR USE**

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

Do not apply this product in a manner that will contact workers or other persons, either directly or through drift. Only protected workers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Read and follow all applicable directions and precautions on this label before using.

#### Agricultural Use Requirements

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

**Entry-Restrictions:** Do not enter or allow worker entry into treated areas during the restricted-entry interval of 4 hours.

PPE required for early-entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, wear: long sleeved shirt, long pants, shoes, socks and chemical-resistant gloves made of any waterproof material, such as polyvinyl chloride, nitrile rubber, or butyl rubber.

#### 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.

Do not enter or allow others to enter until sprays have dried.

#### **GENERAL INFORMATION**

- CUEVA® FUNGICIDE CONCENTRATE can be applied up to the day of harvest
- Fixed copper is one of the oldest fungicides, used to control a wide range of listed fungal and bacterial\* plant diseases. CUEVA® FUNGICIDE CONCENTRATE is a patented, fixed copper fungicide, made by combining a soluble copper fertilizer with a fatty acid. The copper and the fatty acid combine to form a copper salt of the fatty acid, known technically as a true soap. The copper soap fungicide controls listed diseases using low concentrations of copper. The net result is an effective vegetable, fruit fungicide. CUEVA® FUNGICIDE CONCENTRATE decomposes to form soluble copper, and fatty acid, both of which can be used by microbes and plants.
- CUEVA® FUNGICIDE CONCENTRATE controls listed diseases of a wide range
  of plants, including many vegetables and fruit. As with most fungicides, CUEVA®
  FUNGICIDE CONCENTRATE acts to protect plants from infection. Therefore, it
  is important to have CUEVA® FUNGICIDE CONCENTRATE on the leaf or fruit
  before the pathogen is able to cause an infection.
- -Fruit trees: Controls peach leaf curl, brown rot, fireblight, scab, blossom blight, leaf and fruit spot
- -Vegetables: Controls powdery mildew, downy mildew, Botrytis, Alternaria leaf blight and Septoria leaf spot.
- -Use as a dormant spray for peach leaf curl.
- A wide range of bacteria\* and fungi attack plants, however, they generally only
  cause a few types of diseases. When using CUEVA® FUNGICIDE CONCENTRATE,
  it is important to identify the type of disease in order to use the best method of
  disease control.
- The active ingredient in this product is exempt from the requirement for a tolerance when used (primarily) as a fungicide to growing crops using good agricultural practices.
- Controls diseases that may go dormant and overwinter.
- For use on field crops, nuts and fruit, including citrus and berries.
- \* Non-public health bacteria

#### **DIRECTIONS FOR USE**

Shake well before use. Most conventional liquid pesticide plant sprayers can be used to apply CUEVA® FUNGICIDE CONCENTRATE to plants. A spreader may be used to improve the spreading of CUEVA® FUNGICIDE CONCENTRATE on hard to wet plants.

#### Tank Mixing CUEVA® FUNGICIDE CONCENTRATE with Other Pesticides

Read and follow all applicable directions and precautions on the label of other products, before mixing with CUEVA® FUNGICIDE CONCENTRATE.

CUEVA® FUNGICIDE CONCENTRATE can be applied up to day of harvest. When tank-mixed with products, do not apply that product closer to harvest than is permitted or stated on the other product's label.

Pour CUEVA® FUNGICIDE CONCENTRATE into spray tank at least half filled with water using adequate agitation. When mixed with other products proven or known to be compatible, wettable powders should be added first, followed in order by flowables (such as CUEVA® FUNGICIDE CONCENTRATE), and then emulsifiable concentrates.

CUEVA® FUNGICIDE CONCENTRATE can be mixed with Bravo® (WP, 720, 500), Captan, Daconil® 2787, Ferbam, maneb (WP or Flowable), Dithane® M-45, Manzate® 200, sulfur (wettable or flowable), organo phosphates, Thiodan®, Bacillus thuringiensis Berliner, Guthion®, Pydrin®, Diazinon®, malathion for use on the crops listed on this label, in accordance with the most restrictive of label limitations and precautions. Do not exceed label dosage rates. This product cannot be mixed with any product containing a label prohibition against such mixing. Do not mix CUEVA® FUNGICIDE CONCENTRATE with chelated or liquid fertilizers. Use caution when using product with other fungicides and insecticides. Observe all cautions and limitations on all products used in mixtures.

#### Chemigation

Apply this product only through sprinkler systems, including center pivot, lateral move, end tow, side (wheel) roll, traveler, bug gun, solid set, or hand move. Do not apply this product through any other type of irrigation system.

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

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

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

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

Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back flow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior the pesticide introduction. There shall be a complete physical break (air gap) between the flow 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.

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow.

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

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.

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

The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

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.

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

## Directions for use on Vegetables, Herbs, Field Crops, Nuts, Fruits including Citrus and Berries

Mix 0.5 to 2.0 gallons of CUEVA® FUNGICIDE CONCENTRATE with 100 gallons of water. Apply 50 to 100 gallons of diluted spray per acre. (For application by aircraft, apply 5-25 gallons of diluted spray to one acre. Apply at least 1 quart CUEVA® FUNGICIDE CONCENTRATE per acre.) For best control, begin treatment 2 weeks before disease normally appears or when weather forecasts predict a long period of wet weather. Alternatively, begin treatment when disease first appears, and repeat at 7 to 10 day intervals for as long as needed, following crop-specific application notes. Use the 2.0 gallon rate of CUEVA® FUNGICIDE CONCENTRATE, at the minimum retreatment interval for the crop, following heavy rain or when the amount of disease is increasing rapidly. If possible, time applications so that 12 hours of dry weather follow application. Use the higher rate to control diseases that may go dormant and overwinter.

CUEVA® FUNGICIDE CONCENTRATE may cause some copper toxicity on some plant species.

### Fruit and Nut Crops

Crop	Disease Controlled	Specific Use Instructions
Almonds	Bacterial spot, Bacterial canker ( <i>Pseudomonas syringae</i> ), Brown rot, Blossom blight, leaf and fruit spots, Coryneum blight (shot-hole), Anthracnose	For bacterial canker, apply as a dormant spray as buds begin to swell, repeating at the bud burst stage, and weekly thereafter as needed, up to six sprays. In fall spray again at 10 and 80% of leaf fall. For brown rot blossom blight apply full cover spray at delayed dormant (bud swell), popcorn, full bloom and petal fall stages. During wet weather, additional bloom sprays may be necessary. Do not apply more than 6000 gallons of diluted spray per acre per year. Do not reapply within 5 days during the growing season or within 7 days during the dormant season.
Blueberries	Gray mold, mucor fruit rot, Rhizopus fruit rot	Apply at the start of flowering and continue every 7 to 10 days until harvest. Do not apply more than 2800 gallons of diluted spray per acre per year. Do not reapply within 7 days.
Caneberries (Blackberries, Raspberries)	Gray mold, mucor fruit rot, Rhizopus fruit rot	Apply at the start of flowering and continue every 7 to 10 days until harvest. Do not apply more than 3335 gallons of diluted spray per acre per year. Do not reapply within 7 days.
Citrus (Grape- fruit, Lemon, Lime, Orange, Pummelo, Tangerine)	Melanose spot, greasy spot, citrus scab, Alter- naria brown spot, citrus canker, <i>Phytophthora</i> brown rot, and <i>Septoria</i> .	Repeat every 2 weeks if necessary. May cause phytotoxicity if conditions are conducive, when mixed with other products.  Do not apply more than 4200 gallons of diluted spray per acre per year. Do not reapply within 7 days.
Currants, Gooseberries	Powdery mildew	Do not apply more than 3335 gallons of diluted spray per acre per year. Do not reapply within 10 days.
Grapes	Downy mildew, black rot, phomopssis cane, leaf spot, powdery mildew, gray mold	Begin treatment when new growth reaches 1/2 inch and repeat at 7 to 14 day intervals throughout the growing season.  Use Precaution: Do not mix CUEVA® FUNGICIDE CONCENTRATE with lime. Certain Vinifera and French Hybrid varieties may be sensitive to copper sprays resulting in marginal leaf burn. Before spraying these varieties, consult your State Experiment Station or make test sprays. Do not apply more than 6670 gallons of diluted spray per acre per year. Do not reapply within 3 days.
Pome Fruits (Apples, Pears, Quince)	Anthracnose, Cedar Apple Rust, Fireblight, Scab, Sooty Blotch, Flyspeck, Quince Rust	For fireblight control, apply Cueva® in the dormant period, during bloom, or in-season cover spray applications. May cause russeting of susceptible apple varieties. Do not exceed the 1.0 gallon of product/ 100 gallons water use rate.  Do not exceed one application during the fall, late dormant period. Do not exceed one application between silver tip and green tip growth stages.  Do not apply more than 10,670 gallons of diluted spray per acre per year. Do not reapply within 5 days.

### Fruit and Nut Crops (continued)

Crop	Disease Controlled	Specific Use Instructions
Strawberries	Gray mold, mucor fruit rot, Rhizopus fruit rot, angular leaf spot, leaf scorch, mycosphaerella leaf spot, phomopsis leaf blight, powdery mil- dew, septoria leaf spots, anthracnose fruit rot	Apply at the start of flowering and continue every 7 to 10 days until harvest. Do not apply more than 2730 gallons of diluted spray per acre per year. Do not reapply within 7 days.
Stone Fruits (Apricots, Cherries, Peaches, Nectarines, Plums)	Bacterial spot, Bacterial canker (Pseudomonas syringae), Brown rot, Blossom blight, leaf and fruit spots, Coryneum blight (shot-hole), Anthracnose	For bacterial canker, apply as a dormant spray as buds begin to swell, repeating at the bud burst stage, and weekly thereafter as needed, up to six sprays. In fall spray again at 10 and 80% of leaf fall. For brown rot blossom blight apply full cover spray at delayed dormant (bud swell), popcorn, full bloom and petal fall stages. During wet weather, additional bloom sprays may be necessary. For peach leaf curl apply as a dormant spray in late fall during a period of dry weather. Do not apply more than 6000 gallons of diluted spray per acre per year. Do not reapply within 5 days during the growing season or within 7 days during the dormant season.
Walnuts	Blight	Make first application when leaflets start to unfold (prior to, but no later than 1% pistulate bloom) and repeat weekly as needed, especially until seasonal rainfall stops. When rain threatens, additional applications are important, applied before or immediately after the rain. Do not apply more than 8400 gallons of diluted spray per acre per year. Do not reapply within 7 days.

## Vegetables, Herbs and Field Crops

Crop	Disease(s) Controlled	Application Notes
Artichoke	Powdery mildew, bacterial spot, bacte- rial soft rot and bot- tom rot	For powdery mildew, plants that are very susceptible should be sprayed twice a week during the first 2 weeks after emergence, and weekly thereafter.
Bean, Pea	Anthracnose leaf and fruit spot, Ascochyta leaf and pod spot, Bacterial blights (halo, common and brown spot), Downy mildew, Gray mold (Botrytis), Powdery mildew, White mold (Sclerotinia)	For powdery mildew, plants that are very susceptible should be sprayed weekly. For white mold, to prevent floral infection, apply CUEVA® FUNGICIDE CONCENTRATE at 25% bloom. For peas, do not apply more than 1318 gallons of diluted spray per acre per year. For beans, do not apply more than 1580 gallons of diluted spray per acre per year. Do not reapply within 7 days.
Beet, Chard, Spinach	Cercospora leaf spot, Downy mildew, Pow- dery mildew, White rust	For beets, do not apply more than 2620 gallons of diluted spray per acre per year. For spinach, do not apply more than 1318 gallons of diluted spray per acre per year. Do not reapply within 10 days on beets or within 7 days on spinach.
Carrot	Alternaria leaf blight, Bacterial leaf blight, Cercospora leaf blight	Do not apply more than 1668 gallons of diluted spray per acre per year. Do not reapply within 7 days.
Celery and celeriac	Bacterial leaf spot, Cer- cospora (early) blight, Septoria (late) blight	Do not apply more than 1768 gallons of diluted spray per acre per year. Do not reapply within 7 days.

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Crop	Disease(s) Controlled	Application Notes
Corn	Alternaria blight, Anthracnose, Asco- chyta leaf and pod spot, Bacterial blights (halo, common, and brown spot), Bacte- rial leaf spot, Downy mildew, Gray mold, Southern leaf blight, Cercospora leaf blight	Do not apply more than 1400 gallons of diluted spray per acre per year. Do not reapply within 7 days.
Crucifer Crops (Bok Choy, Broccoli, Brussels sprouts, Canola, Cauliflower, Cabbage, Kale, Kohlra- bi, Mustard, Pak-choi, Rape, Ruta- baga, Turnip)	Alternaria blight, Bac- terial leaf spot, Downy mildew, Powdery mildew, White mold (Sclerotinia)	For white mold, to reduce floral infection apply CUEVA® FUNGICIDE CONCENTRATE at 25% bloom. Do not apply more than 884 gallons of diluted spray per acre per year. Do not reapply within 7 days.
Cucurbits (Cucumbers, Cantaloupe, Squash, Pumpkin, Zucchini)	Alternaria blight, scab, Angular leaf spot, Antracnose, Downy mildew, Gray mold, Ulocladium leaf spot, Bacterial spot, Powdery mildew	On plants that are very susceptible to powdery mildew, spray the plants every 5 days during the first 2 weeks after emergence and weekly thereafter. Do not apply more than 1750 gallons of diluted spray per acre per year. Do not reapply within 5 days.
Ginseng	Alternaria blight, Botrytis blight, Phy- tophthora, Powdery mildew	Do not apply more than 1750 gallons of diluted spray per acre per year. Do not reapply within 7 days.
Herbs (chives, coriander, dill, lavender, mint, parsley, rosemary)	Anthracnose, Alternaria blight, Bacterial Blight, Botrytis, Downy mildew, Leaf scorch, Leaf spot, Rhizoctonia Leaf blight	Begin applications when environmental conditions favor disease development. Repeat applications every 10 to 14 days as needed to prevent disease infection. Do not apply more than 884 gallons of diluted spray per acre per year. For dill, do not apply more than 1317 gallons of diluted spray per acre per year. For parsley, do not apply more than 667 gallons of diluted spray per acre per year.
Нор	Anthracnose leaf and fruit spot, Cercospora leaf spot, Downy mil- dew, Powdery mildew	Do not apply more than 884 gallons of diluted spray per acre per year. Do not reapply within 10 days.
Lettuce, Chicory, Endive	Bacterial soft rot and bottom rot, Downy mildew, Powdery mildew, Septoria leaf spot	For powdery mildew, plants that are very susceptible should be sprayed twice a week during the first 2 weeks after emergence and weekly thereafter. Use Precaution: Use lower rate on copper sensitive varieties of lettuce. Do not apply more than 2670 gallons of diluted spray per acre per year. Do not reapply within 5 days.
Onion, Garlic, Leek, Shallot	Botrytis leaf blight, Downy mildew, Neck rot, Bacterial soft rot	Do not apply more than 2000 gallons of diluted spray per acre per year. Do not reapply within 7 days.
Peanuts	Leaf spots (early and late), web blotch, Sclerotinia blight	For leaf spots and web blotch, begin spray when disease first appears, or for best control begin early, usually 25 to 40 days after emergence and repeat at 10 to 14 days until harvest. For Sclerotinia blight, make first application at first bloom and repeat every 7 to 14 days until harvest. Use higher rates of CUEVA® FUNGICIDE CONCENTRATE where Sclerotinia blight infection is expected to be heavy. Do not apply more than 1580 gallons of diluted spray per acre per year. Do not reapply within 7 days.

#### Vegetables, Herbs and Field Crops (continued)

Crop	Disease(s) Controlled	Application Notes
Tomato, Potato, Egg- plant, Pepper	Anthracnose, Bacterial speck, Bacterial spect, Cercospora leaf spot, Early blight, Gray mold, Late blight, Leaf mold, Septoria leaf spot.	Use 2.0 gallons CUEVA® FUNGICIDE CONCENTRATE in 50 to 100 gallons of water when spraying to control late blight. On tomatoes, do not apply more than 5800 gallons of diluted spray per acre per year. On potatoes, do not apply more than 8338 gallons of diluted spray per acre per year. On eggplant, do not apply more than 2635 gallons of diluted spray per acre per year. On peppers, do not apply more than 3953 gallons of diluted spray per acre per year. On tomatoes and peppers, do not reapply within 3 days. On potatoes, do not reapply within 5 days. On eggplant, do not reapply within 7 days.
Tobacco	Blue mold (Downy mildew)	CUEVA® FUNGICIDE CONCENTRATE can be used on tobacco in transplant beds or on field grown plants. Do not apply more than 2668 gallons of diluted spray per acre per year. Do not reapply within 10 days.

- Powdery mildews tend to occur on the upper leaf surfaces, as though a white powder was sprinkled onto the plant. Powdery mildews can form a dense, white, cottony mass, making the whole leaf appear white. They are also commonly found on stems. Powdery mildews rarely kill plants. Most fungal diseases require water to infect plants. Powdery mildews are unique in that they do not require water for infection. Shade and dense plantings also promote powdery mildew. Powdery mildews commonly occur on the following plants: bean, beet, broccoli, Brussels sprouts, cauliflower, cabbage, cantaloupe, chicory, cucumber, currant, endive, gooseberry, grape, hop, kale, kohlrabi, lettuce, pea, pumpkin, rutabaga, squash, strawberry, turnip, zucchini.
- Downy mildews tend to occur on the lower leaf surfaces. Downy mildews are much finer than powdery mildews, and appear as fine white cotton, similar to duck down. Downy mildews can rapidly kill plant leaves during wet, cool weather, but are inhibited by hot dry weather. Downy mildews commonly occur on the following plants: bean, beet, broccoli, Brussels sprouts, cauliflower, cabbage, cantaloupe, chard, chicory, chive, cucumber, endive, garlic, grape, hop, kale, kohlrabi, leek, lettuce, onion, pea, pumpkin, rutabaga, shallot, spinach, squash, tobacco, turnip, zucchini.
- Leaf and fruit spots are small brown or black spots on the leaf or fruit. They commonly occur on apple and pear (scab). These spots can be caused by a range of fungal and bacterial\* plant diseases. Leaf and fruit spots are commonly caused by fungi belonging to the following genera: Alternaria, Cercospora, Colletotrichum, Cylindrosporium, Gloeosporium, Glomerella, Gnomonia, Marssonia, Mycosphaerella (Didymella), Phomopsis, Phyllosticta, Septoria, and Sphaceloma. Spots on leaves and fruit can expand and grow together. Leaf spot pathogens require water to infect plants. During wet weather, spots can develop into a blight, very rapidly, killing leaves, flowers and stems.
- Rusts are small orange blisters that appear on plant leaves, and that are full
  of orange powder. The orange powder is rust spores. Towards the end of the
  season, black spores are often produced. Rust is commonly found on grasses.
- Fruit rots commonly occur on strawberries, raspberries, and other fruit. They appear as soft, rotten areas on the fruit. Often the causal fungus can be seen growing and producing spores on the surface of the rotting area. Rots are often caused by fungi belonging to the following genera: Aspergillus, Botrytis, Monilinia, Mucor, Penicillium, Rhizopus and Sclerotinia.
- \* Non-public health bacteria

#### **NOTICE TO BUYER**

Seller warrants that this product conforms to the chemical description on this label and is reasonably fit for the purposes stated on this label only when used in accordance with directions under normal use conditions. This warranty does not extend to use of this product contrary to label directions, or under abnormal use conditions, or under conditions not reasonably foreseeable to seller. To the extent consistent with applicable law, buyer assumes all risk of any such use. Seller makes no other warranties, either expressed or implied.