

# LIQUID COPPER FUNGICIDE

## Where to use

- For Roses, Fruits & Vegetables
- Ornamentals and Turf
- Controls Powdery Mildew, Black Spot and Rust!

Contains Cueva(TM) Fungicide Concentrate, a trademark of W. Neudorff GmbH KG

EPA Est. No. 4-NY-1  
EPA Reg. No. 67702-2-4

Buyers Guarantee Limited to  
Label Claims.

Distributed by  
**BONIDE PRODUCTS, INC.**  
Oriskany, NY 13424

Pint



## FIRST AID

<b>IF IN EYES</b>	<ul style="list-style-type: none"><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>
<b>IF ON SKIN OR CLOTHING</b>	<ul style="list-style-type: none"><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>
<b>IF SWALLOWED</b>	<ul style="list-style-type: none"><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><li>• Do not give anything by mouth to an unconscious person</li></ul>
<b>IF INHALED</b>	<ul style="list-style-type: none"><li>• Move person to fresh air.</li><li>• If person is not breathing call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li><li>• Call a poison control center or doctor for further treatment advice.</li></ul>

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

## PRECAUTIONARY STATEMENTS

### Hazards to Humans and Domestic Animals

**Caution:** Harmful if swallowed, absorbed through skin or inhaled. Wash thoroughly with soap and water after handling. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. Remove contaminated clothing and wash clothing before reuse.

### Environmental Hazards

This product may be toxic to fish and aquatic organisms. Do not apply directly to water. Do not contaminate water by disposal of equipment washwaters.

## STORAGE AND DISPOSAL

**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 materials and dispose of in an approved manner.

**Disposal:** *If empty:* Do not reuse this container. Place in trash or offer for recycling if available. *If partly filled:* Call you local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

## DIRECTIONS FOR USE

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

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

## DIRECTIONS FOR USE

### Application Directions

Shake well before use. Most conventional liquid pesticide plant sprayers can be used to apply Bonide Liquid Copper Fungicide to plants.

To control **powdery mildews**, use a solution of 0.5 to 2.0 fluid ounces of Bonide Liquid Copper Fungicide in a gallon of water. For best control, start spraying before the disease is visible or when mildew is first visible on the plant. Spray all plant parts thoroughly, and repeat every 7 to 10 days. On plants that are very susceptible to powdery mildew, such as greenhouse-grown cucumber, it is best to spray the plants twice a week during the first 2 weeks after emergence, and weekly thereafter. On outdoor plants, re-apply after rain.

To control **downy mildews, leaf and fruit spots, blights, and rust**, use a solution of 0.5 to 2.0 fluid ounces of Bonide Liquid Copper Fungicide in a gallon of water. Ensure that all surfaces of the plant are thoroughly sprayed. 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. Re-apply after rain. Use 2 fluid ounces per gallon of water, sprayed every 7 days or less, following heavy rain or when the amount of disease is increasing rapidly. This higher rate should be used for preventing late blight on potato and related plants. If possible, time applications so that at least 12 hours of dry weather follows application.

To prevent **fruit rots**, use a solution of 0.5 to 2.0 fluid ounces of Bonide Liquid Copper Fungicide in a gallon of water. Ensure that all surfaces of the plant are thoroughly sprayed. Apply at the start of flowering and continue every 7 to 10 days until harvest. Fungicidal sprays are especially warranted when weather forecasts predict a long period of wet weather. Re-apply after rain.

**Directions for Use on Ornamentals and Turf  
Diseases Controlled, Listed by Plant:**

<b>Ornamental Plant</b>	<b>Common Name</b>	<b>Diseases Controlled</b>
Aechmea faciaa	Urn plant, bromeliad	Anthracnose leaf and fruit spot, Bacterial leaf spot and blight
Aeschynanthus pulcher	Lipstick vine	Botrytis blight, Leaf spot (fungal)
Aglaonema species	Chinese evergreen	Anthracnose leaf and fruit spot, Bacterial leaf spot and blight, Leaf spot (fungal), Rhizoctonia blight, Soft rot
Anthurium species	Tailflower	Anthracnose leaf and fruit spot, Bacterial leaf spot and blight, Leaf spot (fungal), Rhizoctonia blight, Soft rot
Apelandra squarrosa	Zebra plant	Botrytis blight, Leaf spot (fungal), Rhizoctonia blight

### Diseases Controlled, Listed by Plant Continued:

Ornamental Plant	Common Name	Diseases Controlled
Araucaria heterophylla	Norfolk Island pine	Colletotrichum needle blight
Asplenium nidus	Bird's nest fern	Bacterial leaf spot and blight
Brassaia actinophylla	Schefflera	Anthracnose leaf and fruit spot, Bacterial leaf spot and blight, Leaf spot (fungal) Rhizoctonia blight
Caladium species	Caladium	Bacterial leaf spot and blight, Rhizoctonia blight
Calathea species	Rattlesnake plant	Bacterial leaf spot and blight, Leaf spot (fungal)
Caryota mitis	Fishtail palm	Bacterial leaf spot and blight, Leaf spot (fungal)
Chamaedorea species	various palms	Leaf spot
Chrysalidocarpus lutescens	Areca palm	Leaf spot
Cissus species	Grape ivy	Anthracnose leaf and fruit spot, Botrytis blight, Downy mildew, Powdery mildew, Rhizoctonia blight
Codiaeum variegatum	Croton	Anthracnose leaf and fruit spot, Bacterial leaf spot and blight
Cordyline terminalis	Ti plant	Anthracnose leaf and fruit spot, Leaf spot (fungal)
Chryptanthus species	Bromeliad, earthstar	Anthracnose leaf and fruit spot
Dieffenbachia species	Dieffenbachia	Bacterial leaf spot and blight, Leaf spot (fungal) Rhizoctonia blight
Dracaena species	Dracaena, Corn plant	Bacterial leaf spot and blight, Botrytis blight, Leaf spot (fungal)
Epipremnum aureum	Pothos, Devil's ivy	Bacterial leaf spot and blight, Rhizoctonia blight

### Diseases Controlled, Listed by Plant Continued:

<b>Ornamental Plant</b>	<b>Common Name</b>	<b>Diseases Controlled</b>
Euphorbia milii	Euphorbia	Rhizoctonia blight
Fatsia japonica	Japanese fatsia	Bacterial leaf spot and blight, Leaf spot (fungal) Rhizoctonia blight
Ficus benjamina	Weeping fig	Leaf spot (fungal)
Ficus elastica	India-rubber tree	Leaf spot (fungal), Botrytis blight
Fittonia verschaffeltii	Nerve plant	Rhizoctonia blight
Hedra helix	English ivy	Anthracnose leaf and fruit spot, Bacterial leaf spot and blight, Botrytis blight, Leaf spot (fungal), Rhizoctonia blight
Hoya carnosa	Wax plant	Botrytis blight, Leaf spot (fungal), Rhizoctonia blight
Maranta leuconeura	Prayer plant	Leaf spot (fungal)
Monstera deliciosa	Swiss cheese plant	Bacterial leaf spot and blight, Anthracnose leaf and fruit spot, Rhizoctonia blight, Soft rot
Nephrolepis exaltata	Boston fern	Bacterial leaf spot and blight, Botrytis blight, Rhizoctonia blight
Peperomia species	Peperomia	Leaf spot (fungal), Rhizoctonia blight
Philodendron species	Philodendron	Anthracnose leaf and fruit spot, Botrytis blight, Leaf spot (fungal)
Pilea species	Aluminum plant	Bacterial leaf spot and blight, Anthracnose leaf and fruit spot, Leaf spot (fungal), Rhizoctonia blight
Platycerium bifurcatum	Staghorn fern	Bacterial leaf spot and blight, Rhizoctonia blight
Polyscias species	Aralia	Anthracnose leaf and fruit spot, Bacterial leaf spot and blight, Leaf spot (fungal)

**Diseases Controlled, Listed by Plant Continued:**

<b>Ornamental Plant</b>	<b>Common Name</b>	<b>Diseases Controlled</b>
Rhapis species	Ladyfinger palm	Leaf spot (fungal)
Rhoeo spathacea	Oyster plant	Leaf spot (fungal)
Saintpaulia ionantha	African violet	Bacterial leaf spot and blight, Botrytis blight, Leaf spot (fungal), Powdery mildew
Sansevieria triafasciata	Snake plant	Bacterial leaf spot and blight, Leaf spot (fungal)
Schefflera arboricola	Dwarf Schefflera	Bacterial leaf spot and blight, Leaf spot (fungal)
Schlumbergera species	Cactus	Leaf spot (fungal)
Sedum species	Sedum	Leaf spot (fungal)
Spathiphyllum species	Spathe flower	Leaf spot (fungal), Rhizoctonia blight
Syngonium podophyllum	Nepththyis	Bacterial leaf spot and blight, Leaf spot (fungal), Rhizoctonia blight
Yucca species	yucca	Leaf spot (fungal)

The ornamental and turf species listed may be treated with Bonide Liquid Copper Fungicide. Unless otherwise stated, mix 0.5 to 2 fluid ounces in one gallon of water and spray all plant surfaces thoroughly. When necessary, repeat sprays every 7 to 10 days. Bonide Liquid Copper Fungicide may cause some copper toxicity on some plant species. Before spraying a specific plant species, consult your State Experiment Station or make a test spray.

**Directions for Use on Ornamentals and Turf**

<b>Crop</b>	<b>Diseases Controlled</b>	<b>Application Notes</b>
Pine	Needle blight	Mix at a rate of 0.5 to 2.0 fluid ounces of Bonide Liquid Copper Fungicide with one gallon water. Spray until needles are thoroughly wet with spray. Apply when new needles are just emerging.

## Directions for Use on Ornamentals and Turf Continued

<b>Crop</b>	<b>Disease Controlled</b>	<b>Application Notes</b>
Rose and Ornamental Shrubs (Such as; Crape Myrtle, Forsythia, Hydrangea, Willow, Mock-Orange, Deutzia, Pyracantha, Japanese quince, Abelia, Summersweet)	Blackspot, Downy mildew, Gray mold (Botrytis), Leafspots, Powdery mildew, Rust	Bonide Liquid Copper Fungicide may cause copper toxicity on some rose varieties. Copper toxicity appears as purple spots. For Black spot, mix at a rate of 1.44 fl. ozs. of Bonide Liquid Copper Fungicide per gallon of water. For Powdery Mildew, mix at a rate of 1.08 fl. ozs. of Bonide Liquid Copper Fungicide per gallon of water. In damp cool conditions (below 60°F), phytotoxicity is likely to occur with the use of Bonide Liquid Copper Fungicide.
Sycamore	Anthracnose leaf spot	Make first application just before buds begin to swell, and repeat twice, at 7-day intervals.
Turf	Ascochyta leaf blight, Cercospora leaf spots, Dollar spot	Mix 1.5 to 6 fluid ounces with 2.5 gallons of water and apply to 1,000 sq. ft. For best control, begin treatment 2 weeks before disease normally appears. Alternatively, begin treatment when disease first appears, and repeat at 7 to 10 day intervals for as long as needed. To reduce Ascochyta leaf blight mow less frequently, only as necessary to maintain recommended height. Water before noon to allow grass to dry. Water thoroughly only as required to avoid moisture stress. Apply Bonide Liquid Copper Fungicide when disease first appears, and repeat at 7 to 10 day intervals for as long as needed. In frequently diseased areas, prune adjacent trees and shrubs to reduce turf shading and to improve air movement.

## Directions for Use on Ornamentals and Turf Continued

Crop	Disease Controlled	Application Notes
Turf (continued)	Rust	To reduce rust mow frequently to reduce rust spore production. Water and fertilize lawn as required to avoid moisture and nutrient stress. Water before noon to allow grass to dry. Apply Bonide Liquid Copper Fungicide when disease first appears, and repeat at 7 to 10 day intervals for as long as needed. In frequently diseased areas, prune adjacent trees and shrubs to reduce turf shading and to improve air movement.

## Directions for Use on Fruits and Vegetables-Household

Unless otherwise stated below, mix 0.5 to 2.0 fluid ounces of Bonide Liquid Copper Fungicide with 1 gallon of water. Use sufficient water to ensure good coverage. 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. Use the higher rate, applied every 7 days or less, 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.

Crop	Diseases Controlled	Application Notes
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)	
Beet, Chard, Spinach	Cercospora leaf spot, Downy mildew, White rust, Powdery Mildew	
Carrots	Alternaria leaf blight, Bacterial leaf blight, Cercospora leaf blight	
Celery and Celериac	Bacterial leaf spot, Cercospora (early) blight, Septoria (late) blight	
Citrus (Grapefruit, Lemon, Lime, Orange, Pum- melo, Tangerine)	Melanose spot, greasy spot, citrus scab, alternaria brown spot, Red alga (Florida)	Apply 1-3 weeks after petal fall. Repeat every 2 weeks if necessary until the fruit is 3 inches in diameter. Do not mix Bonide Liquid Copper Fungicide with oil when applied on any citrus.

Crop	Disease Controlled	Application Notes
Corn	Southern leaf blight, Cercospora leaf spot	
Crucifer Crops (Broccoli, Brussels sprouts, Canola, Cauliflower, Cabbage, Kale, Kohlrabi, Mustard, Pak-Choi, Rape, Rutabaga, Turnip)	Alternaria blight, Bacterial leaf spot, Downy mildew, Powdery mildew, White mold (Sclerotinia)	
Cucurbits (Cucumbers, Cantaloupe, Squash, Pumpkin, Zucchini)	Alternaria blight, Angular leaf spot, Anthracnose leaf and fruit spot, Downy mildew, Gray mold, Scab, Ulocladium leaf spot, Powdery mildew	For cucumbers grown in a greenhouse, apply Bonide Liquid Copper Fungicide 2 times per week in the first 2 weeks after emergence, followed by sprays every 7 days.
Currant and Gooseberry	Anthracnose leaf and fruit spot, Phyllosticta, Septoria leaf spots, Powdery mildew	
Ginseng	Alternaria blight, Botrytis blight, Phytophthora, Powdery mildew	
Grapes	Downy mildew, Black rot, Phomopsis Cane and Leaf Spot, Powdery mildew, Gray mold (Botrytis)	Do not mix Bonide Liquid Copper Fungicide 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.
Hop	Anthracnose leaf and fruit spot, Cercospora leaf spot, Downy mildew, Powdery mildew	
Lettuce, Chicory, Endive,	Downy mildew, Septoria leaf spot, Powdery mildew, Bacterial soft rot and bottom rot	Use lower rate when disease pressure is low or on copper sensitive varieties of lettuce.
Onion, Garlic, Leek, shallot, Chives	Botrytis leaf blight, Downy mildew, Neck rot, Bacterial soft rot	
Parsley	Leaf scorch, Leaf spot	

Crop	Disease Controlled	Application Notes
Peanuts	Sclerotinia blight, Leaf spots (early and late), web blotch	
Pome Fruit Trees (Apple, Pear, Quince)		NOTICE: Bonide Liquid Copper Fungicide as used in this recommendation may cause russetting of Golden Delicious and similar susceptible apple varieties. Mild russetting of other varieties may occur. Preferred use is on non-bearing or processing varieties where russetting is not a concern. On apple do not exceed the rate of 1.0 fluid ounces Liquid Copper per gallon water.
	Anthracnose leaf and fruit spot	Apply in mid-July.
	Cedar Apple Rust, Quince Rust	The disease can also be reduced by removing nearby eastern red cedar plants ( <i>Juniperus virginiana</i> L.). On juniper cedar apple rust can be controlled by spraying plants at least 4 times between late August and late October.
	Fireblight	Spray at silver tip and bud break and repeat on 3 to 5 day intervals as needed, up to petal fall. Use the lower rate if disease pressure is light and higher rate when conditions favor heavy disease pressure.
Small Fruits (Blackberry, Blue- berry, Raspberry, Strawberry)	Scab, Sooty Blotch, Flyspeck (fruit and leaf spots)	Treat up to blossom drop. Use after blossom drop will cause russetting.
	Gray mold ( <i>Botrytis</i> ), Mucor fruit rot, Rhizopus fruit rot	Apply at the start of flowering and continue every 7 to 10 days until harvest.
Stone Fruit Trees (Almond, Apricot, Cherry, Nectarine, Peach, Plum)	Bacterial canker ( <i>Pseudomonas syringae</i> ), Brown rot blossom blight, leaf and fruit spot, Bacterial leaf spot	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 the fall spray again at 10 and 80% 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.

Crop	Disease Controlled	Application Notes
Stone Fruit Trees (Almond, Apricot, Cherry, Nectarine, Peach, Plum) continued	Anthracnose leaf and fruit spot, Coryneum blight, Peach leaf curl	Apply as a dormant spray in late fall during a period of dry weather.
Strawberry	Angular leaf spot, Leaf scorch, Mycosphaerella leaf spot, Phomopsis leaf blight, Powdery mildew, Septoria leaf spots	Spray 1 month after planting (or before flowering on established plants) and twice more at 7 to 10 day intervals.
	Anthracnose fruit rot, Gray mold (Botrytis)	Apply at the start of flowering and continue every 7 to 10 days until harvest.
Tobacco	Blue Mold (Downy Mildew)	
Tomato, Potato, Eggplant, Pepper	Anthracnose leaf and fruit spot, Bacterial speck, Bacterial spot, Cercospora leaf spot, Early blight, Gray mold, Late blight, Leaf mold, Septoria leaf spot	
Walnuts	Blight	

**NOTICE TO BUYER** - Seller warrants that this product conforms to the chemical description on this label and is reasonably fit for 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. Buyer assumes all risk of any such use. Seller makes no other warranties, either expressed or implied.