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**EC01-1881 2002 Guide for Home Garden, Landscape and Lawn Fungicides**

John E. Watkins  
*University of Nebraska-Lincoln, jwatkins1@unl.edu*

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2002 Guide for Home Garden, Landscape and Lawn Fungicides

John E. Watkins
Extension Plant Pathologist

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# Home Garden Vegetables

## General Purpose Fungicides for Foliar Leaf Spots and Blights

*(Days required between last application and harvest)*

### Contact Fungicides

<table>
<thead>
<tr>
<th>Fungicide</th>
<th>Crucifers (0)</th>
<th>Dry onion and green onion (7)</th>
<th>Garlick (7), leek and shallot (14)</th>
<th>Dry onion (7), green onion (14)</th>
<th>Parsnip (10)</th>
<th>Potato (0)</th>
<th>Tomato (0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorothalonil</td>
<td>Dry beans (42)</td>
<td>Cucurbits (0)</td>
<td></td>
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<tr>
<td></td>
<td>Snap beans (7)</td>
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<tr>
<td></td>
<td>Crucifers (0)</td>
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<td></td>
<td>Carrots (0)</td>
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<tr>
<td></td>
<td>Celery (7)</td>
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<tr>
<td></td>
<td>Sweet corn (14)</td>
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</tr>
<tr>
<td>Maneb</td>
<td>Crucifers (7)</td>
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<tr>
<td></td>
<td>Cucurbits (5)</td>
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<tr>
<td></td>
<td>Eggplant (5)</td>
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<tr>
<td></td>
<td>Peppers (7)</td>
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</tr>
</tbody>
</table>

### Mancozeb

- Asparagus (rust) - (apply after harvest)
- Corn, sweet and popcorn (7)
- Dry onions (7)
- Cucurbits (5)

### Liquid copper (apply in the evening when cooler)

- Snap and dry beans (0)
- Celery (0)
- Cucurbits (0)
- Beets (0)
- Crucifers (0)

### Organic Fungicides

- Neem Oil (apply in morning or evening)
  - All vegetables (0)

### Sulfur (apply in the evening when cooler)

- Snap and Dry Beans (0)
- Pears (0)

### Other Products

- Bordeaux Mixture (apply in the evening when cooler)
  - Potatoes (0)
  - Tomato (0)
Home Garden Fruits

Tree Fruits and Nut Trees
(Days required between last application and harvest)

• Broad Spectrum Contact Fungicides
  
  **Bordeaux Mixture** (dormant and early sprays)
  Apples (do not apply after 1/4 inch green stage)
  Pears (apply during bloom period)
  Apricots, plums, sour cherries (early cover spray; do not use on Japanese plums)
  Pecans (when catkins show)
  
  **Chlorothalonil** (early sprays)
  Apricot, nectarine, peach (bloom stage)
  Cherry and plum (delayed dormant spray just before bloom, full bloom, petal fall)
  
  **Lime Sulfur** (early spray)
  Apples and pears (cluster bud and pre-bloom)
  Cherries and plums (cluster bud and pre-bloom)
  
  **Captan** (pre-bloom and cover sprays)
  Apple (7)
  Cherry and peach (14)
  
  **Neem Oil** (cover sprays; apply in morning or evening)
  All fruits (0)
  
  **Ferbam** (pre-bloom and cover sprays)
  Apples and pears (7)
  
  **Liquid Copper** (early sprays)
  Sour cherries (bud, bloom, petal fall)
  Peaches (late dormant to pink bud)

• Tree Fruit Systemic Fungicides
  
  **Propiconazole**
  Apple*
  Cherry
  Pecan
  Walnuts
  
  *(Apply only to non-bearing trees that will not produce fruit for at least one year.)*
  
  **Myclobutanil**
  Apple (14)
  Apricots (0)
  Cherry (0)
  Peaches (0)
  Plums (0)
  
  **Dormant Treatments for Peach Leaf Curl**
  Bordeaux Mixture
  Lime Sulfur
  Ferbam
  Liquid Copper
Small Fruits
(Days required between last application and harvest)

• Broad Spectrum Contact Fungicides

Bordeaux Mixture
- Grapes (pre-bloom, post-bloom, mid summer)
- Strawberry (apply up to harvest)

Maneb (early cover sprays)
- Grapes (do not apply within 66 days of harvest)

Lime Sulfur (dormant and early sprays)
- Grapes (new shoots 4-6 inches)
- Raspberries and blackberries (new shoots 8-12 inches)
- Currants and gooseberries (before and after bloom)

Captan (pre-bloom and cover sprays)
- Strawberries (14)
- Grapes (14)

Mancozeb (66) (early cover sprays)

Ferbam (pre-bloom and cover sprays)
- Grapes (7)

Liquid Copper (early sprays)
- Raspberries and blackberries (0)
- Grapes (0)
- Strawberries (0)

Home Landscape Ornamentals

General Purpose Fungicides for Foliar Diseases of Bedding Plants and Perennial Flowers

• Contact Fungicides

Chlorothalonil - wide host range

Maneb - wide host range

Mancozeb - wide host range

Neem Oil - all bedding plants and perennials

Sulfur - apply in evening when cooler; wide host range

Captan
- Chrysanthemums

Ferbam
- Snapdragons
- Carnations
- Chrysanthemums

Peony

Tulip
### Liquid Copper
- Philodendron
- Begonia
- Chrysanthemums
- Gardenia
- Pachysandra

**Bordeaux Mixture** (early and cover sprays)
- Iris
- Chrysanthemum
- Lilies
- Dahlias
- Tulips

### Systemic Fungicides
- **Bayleton** - wide host range
- **Propiconazole**
  - Chrysanthemums
  - Delphinium
  - Snapdragons
  - Sweet William
- **Triforine (Funginex)** - wide host range
- **Myclobutanil** - wide host range

### General Purpose Fungicides for Foliar Diseases of Roses and Shrubs

#### Contact Fungicides
- **Chlorothalonil**
  - Azalea
  - Dogwood
  - Euonymus
  - Firethorn (Pyracantha)
  - Flowering Almond and Quince
- **Maneb**
  - Dogwood
  - Rose
- **Mancozeb**
  - Azalea
  - Dogwood
  - Euonymus

**Neem Oil** (apply in morning or early evening)
- All shrubs and roses

**Sulfur** (apply in evening when cooler)
- All shrubs and roses

**Captan**
- Azalea
  - Rose

**Ferbam**
- Rose
Liquid Copper (apply in evening when cooler)
  Azalea
  Cotoneaster
  Euonymus

Bordeaux Mixture (one to three early sprays)
  Barberry
  Boxwood

*Systemic Fungicides*

Bayleton - wide host range

Thiophanate - methyl
  Azalea
  Firethorn (Pyracantha)
  Rose
  Rhododendron

Propiconazole
  Rose
  Dogwood

Triforine (Funginex)
  Azalea
  Euonymus
  Lilac
  Rhododendron
  Rose

Myclobutanil - wide host range

*Specialty Treatments*

Peony Blights (Early spring)
  Bordeaux Mixture (Botrytis)
  Maneb (Botrytis and Phytophthora)
  Mancozeb (Botrytis and Phytophthora)
  Ferbam (Botrytis)

Bulb, Corm and Rhizome Dip Treatments
  Thiophanate-methyl

Soil Drench Treatments
  Thiophanate-methyl

Powdery Mildews
  Bayleton
  Neem Oil
  Sulfur (apply in the evening when cooler)
  Triforine (Funginex)
  Propiconazole*

Fire Blight (Bloom period)
  Streptomycin Sulfate

*See host list for propiconazole in the section under “Bedding Plants and Perennial Flowers” and “Roses and Shrubs.”
Home Landscape Trees

Fungicides for Use on Evergreen Diseases

• Pines

_Sphaeropsis Tip Blight_ (opening of shoot buds and again in two weeks; third week of April and first week of May)
- Bordeaux Mixture
- Liquid Copper
- Thiophanate-methyl (systemic)

_Needle Blight_ (new needles emerging and again in three weeks; early and late May)
- Liquid Copper

_Brown Spot Needle Blight_ (new growth 1/2 - 2 inches and repeat in three to four weeks)
- Mancozeb
- Chlorothalonil

_Gall Rust_ (early summer and again in two weeks)
- Bayleton (systemic)

• Juniper and Cedar

_Cedar Apple Rust_ (July and August application)
- Bordeaux Mixture
- Bayleton (systemic)
- Liquid Copper
- Myclobutanil (systemic)

_Phomopsis Stem Blight_
- Mancozeb
- Thiophanate-methyl (systemic)

_Cercospora Needle Blight_ (when new growth starts in spring, repeat monthly to September)
- Liquid Copper
- Mancozeb

• Spruce

_Rhizosphaera Needle Cast_ (new growth 1/2 - 2 inches and repeat in three to four weeks)
- Bordeaux Mixture
- Chlorothalonil

• Fir

_**Swiss Needle Cast (Douglas Fir)**_ (new growth 1/2 - 2 inches and repeat in three to four weeks)
- Chlorothalonil
- Mancozeb

_Needle Rust_ (apply every 21 days in May-June)
- Myclobutanil (systemic)
- Bayleton (systemic)
- Propiconazole (systemic)

_Rhabdocline Needle Cast_ (new growth 1/2 - 2 inches and repeat in three to four weeks)
## Shade Tree Anthracnose, Leaf Spots; Leaf Blister and Rusts

### Broad Spectrum Contact Fungicides
- Bordeaux Mixture (bud break)
- Lime Sulfur (bud break)
- Chlorothalonil (bud break)
- Liquid Copper (bud break; cover sprays as needed)
- Mancozeb (leaf expansion; cover sprays as needed)

### Systemic Fungicides
- Bayleton (powdery mildews and rusts; cover sprays when leaves expanded)
- Thiophanate-methyl (bud break; cover sprays as needed)
- Propiconazole (oak leaf spot; cover sprays as needed)
- Myclobutanil (rusts and powdery mildews; cover sprays as needed)
- Triforine (Funginex) (popular rust; every 14 days July - September)

## Flowering Trees — Crabapple, Hawthorn, Ornamental Pears

### Rusts, Scab, Leaf Spots
- Chlorothalonil (green tip; cover sprays in May)
- Lime Sulfur (bud swell; early cover sprays)
- Bayleton (systemic; green tip; cover sprays in May)
- Thiophanate-methyl (Crabapple rust) (systemic; green tip; cover sprays in May)
- Mancozeb (green tip; cover sprays in May)
- Propiconazole (systemic; green tip; cover sprays in May)
- Myclobutanil (systemic; pre-bloom; bloom, petal fall)

### Fire Blight
- Streptomycin Sulfate (bloom period)

## Home Lawn Fungicides

### Leaf Spot and Melting Out
- **Contact Fungicides** (every seven days during May)
  - Mancozeb
  - Maneb
- **Systemic Fungicides** (every 14 days during May)
  - Thiophanate-methyl

### Necrotic Ring Spot*
- **Systemic Fungicides** (irrigate into root zone)
  - Thiophanate-methyl (April 15-30 and again May 15-30)
• **Dollar Spot**
  
  **Contact Fungicides** (every seven days on an as needed basis)
  Mancozeb
  
  **Systemic Fungicides** (every 14-21 days on an as needed basis)
  Benomyl
  Propiconazole
  Thiophanate-methyl
  Myclobutanil

• **Powdery Mildew**

  **Systemic Fungicides** (every 14-21 days on an as needed basis)
  Propiconazole
  Triadimefon
  Myclobutanil

• **Brown Patch**

  **Contact Fungicides** (every seven days on an as needed basis)
  Mancozeb
  Maneb

  **Systemic Fungicides** (every 14-21 days on an as needed basis)
  Benomyl
  Propiconazole
  Thiophanate-methyl
  Triadimefon
  Myclobutanil

• **Summer Patch**

  **Systemic Fungicides**
  (In May when soil temperature at 2 inches is 65°F; repeat in 30 days; irrigate into root zone)
  Thiophanate-methyl
  Triadimefon
  Myclobutanil

• **Rust Diseases**

  **Contact Fungicides** (every 7-14 days July-September as needed)
  Mancozeb
  Maneb

  **Systemic Fungicides** (every 21-28 days July-September as needed)
  Propiconazole
  Thiophanate-methyl
  Triadimefon
  Myclobutanil

• **Stripe Smut**

  **Systemic Fungicides** (apply twice in early spring and again in early autumn)
  Myclobutanil
  Propiconazole
  Thiophanate-methyl

*Note: Application Methods for Necrotic Ring Spot and Summer Patch*
For wettable powders, emulsifiable concentrates, flowables or dry flowables apply in at least 5 gal water/1000 square feet, or wash fungicides off of the leaves and into the root zone with a light irrigation (1/8 - 1/4 inch). Apply granular products when the turf is dry, then irrigate with 1/2 inch water.
• Contact Fungicides

**Bordeaux Mixture**
- Acme Bordeaux Mixture
- Black Leaf Bordeaux Powder
- Dragon Bordeaux Mixture

**Captan**
- Acme Liquid Fruit Tree Spray
- Dragon Fruit Tree Spray
- Dragon Captan Wettable
- Dragon Rose and Flower Dust
- Earl May Fruit Tree Spray
- Ortho Home Orchard Spray
- American Captan Garden Fungicide
- Security Captan Garden Spray
- Green Up Captan Garden Spray
- HiYield Captan 50% WP Fungicide
- Bonide Fruit and Ornamental WP
- ferti-lome Fruit Tree Spray

**Chlorothalonil**
- Acme Multi-Purpose Fungicide
- Ortho Multi-Purpose Fungicide Daconil 2787 Plant Disease Control
- Bonide Liquid Fungicide Daconil 2787
- Earl May Fung-onil Multi Purpose Fungicide
- Bonide Fung-onil Multi Purpose Fungicide
- Dragon Daconil 2787
- ferti-lome Broad Spectrum Liquid Fungicide
- Pennington Multi-Purpose Fungicide
- Security Fungi-Gard
- ferti-lome Tripple Action Insecticide-miticide-fungicide

**Ferbam**
- Security Ferbam Fungicide
- Dragon Ferbam Wettable Fungicide

**Mancozeb**
- Green Light Broad Spectrum Mancozeb Fungicide
- Bonide Mancozeb Flowable with Zinc
- Bonide Mancozeb Vegetable and Ornamental Fungicide
- Dragon Mancozeb Disease Control
- Acme Lawn and Ornamental Fungicide

**Maneb**
- Acme Maneb Tomato and Vegetable Fungicide
- Earl May Tomato Blight Control
- Earl May Tomato and Vegetable Dust
- Earl May Rose and Flower Dust (Maneb + Sevin)
- Early May Bug Dust (Maneb + Sevin)
Liquid Copper (Copper Hydroxide, Copper Oleate, Copper Salts)
Bonide Liquid Copper Fungicide
Bonide Copper 4E Fungicide
Dragon Copper Fungicide
ferti-lome Blackspot Powdery Mildew Control
Acme Copper Fungicide
Dragon Tomato and Vegetable Dust
Hi Yield Copper Fungicide
American Copper Fungicide
Black Leaf Liquid Copper Copper Fungicide

Lime Sulfur
Acme Lime Sulfur Spray
Bonide Oil and Lime Sulfur Spray
Ortho Dormant Disease Control Lime-Sulfur Spray
Early May Lime Sulphur Spray

Sulfur
Dragon Wettable or Dusting Garden Sulphur
ferti-lome Dusting Sulfur
ferti-lome Rose, Flower and Vegetable Dust
Safer Garden Fungicide
Ortho Garden Sulfur Dust
Bonide Sulfur Plant Fungicide
Bonide Liquid Fungicide
Green Light Wettable Powder

Specialty Organic Products
Natural Guard Nematode Control (Chitin)
Green Light Powdery Mildew Killer (Neem Oil)

Agricultural Antibiotics
Bonide Fire Blight Spray (Streptomycin Sulfate)
ferti-lome Fire Blight Spray (Streptomycin Sulfate)

• Systemic Fungicides
  Benomyl
  American Benomyl Systemic Fungicide
  Acme Benomyl Systemic Fungicide for Lawns
  Bonide Benomyl Lawn Fungicide Granules
  Hi Yield Benomyl
  Hi Yield Benomyl Systemic Fungicide
  Security Benomyl Spray

  Propiconazole (Banner)
  ferti-lome Liquid Systemic Fungicide

  Thiophanate-methyl
  Green Light Fung-Away II Systemic Lawn Fungicide
  Green Light Systemic Fungicide Disease Control
  Dragon Systemic Fungicide 3336
  ferti-lome Halt Systemic Rose, Flower, Lawn, Ornamental Fungicide
  Bonide Bonomyl Systemic Fungicide
  Scotts Fungo Systemic Fungicide
  Scotts Lawn Fungus Control

  Myclobutanil
  Spectrum Spectracide Immunox Multi-Purpose Fungicide
Triadimefon (Bayleton)
- Green Light Fung-Away Systemic Fungicide
- Green Light Fung-Away Systemic Lawn Fungicide Spray
- Bonide Lawn Fungicide with Bayleton
- Bonide Bayleton Systemic Fungicide
- HiYield Lawn Fungicide Granules

Triforine
- Ortho Rose Pride Funginex Rose and Shrub Disease Control Concentrate
- Ortho Rose Pride Orthonex Insect and Disease Control Concentrate
- Ortho Rose Pride Orthonex Insect and Disease Control

Note: The labels for specific products may differ somewhat with the different brand names of that product, so the home gardener should check the product label before buying a product.

This list is presented for information only and no endorsement is intended for products listed nor criticism meant for products not listed. Consult the product label before buying and using a specific fungicide.