

Disease and Insect Control for Roses

Disease control is an important part of maintaining beautiful and healthy roses. Homeowners will have to contend with black spot and powdery mildew on their roses almost every year. Regular fungicide applications are needed to control both of these diseases. These treatments should also control Botrytis blight and other foliage diseases.

Protecting the foliage from early spring infections is the key to season-long black spot and powdery mildew control. To accomplish this goal, begin fungicide spray programs shortly after bud-break and continue at regular intervals until the first hard frost.

Generally, you should make fungicide applications at 10- to 14-day intervals during dry weather, depending on the fungicide used. During rainy weather, a 5- to 7-day interval between applications may be needed to maintain disease control. See Table 1 for specific spray intervals for recommended fungicides.

To ensure complete coverage of the foliage, spray roses until the fungicide drips off the leaves. Fungicide performance may be improved by adding a commercially available spreader-sticker or liquid detergent ($\frac{1}{2}$ tablespoon per gallon).

Chlorothalonil and folpet may burn the leaves of some rose varieties, especially at temperatures above 90°F. To avoid this problem, use either of these fungicides at half the label rate and mix them with Benlate at $\frac{1}{2}$ tablespoon per gallon.

There are no controls for existing crown gall infections. Fumigate infested areas before replanting with roses or other woody ornamentals. Root dips of Galltrol or a similar product may be used at planting to protect roses for short periods of time.

Good sanitation practices can reduce disease problems. When buying new roses, select only disease-free bushes. Remove and destroy any plants damaged by crown gall. Carefully prune out any stem cankers on roses in late winter and place fresh mulch around the plants.

Lime sulfur (1:15 dilution) applied in late winter when the roses are dormant will also help reduce early season powdery mildew problems. Always

surface irrigate roses to avoid spreading black spot and other diseases.

Mite And Insect Control

The recommendations in Table 2 are for controlling some common pests that feed on roses. Well-kept, healthy plants may not be less susceptible to insect attack, but they may recover more quickly from insect damage. Regular and thorough inspection of plants is essential if pests are to be controlled at a low infestation level.

Proper pest identification is necessary to know which chemical to apply as well as the proper application time. When spraying, thorough coverage is important in controlling rose pests. Apply pesticides only according to label directions and only when pests are present. Read the entire label.

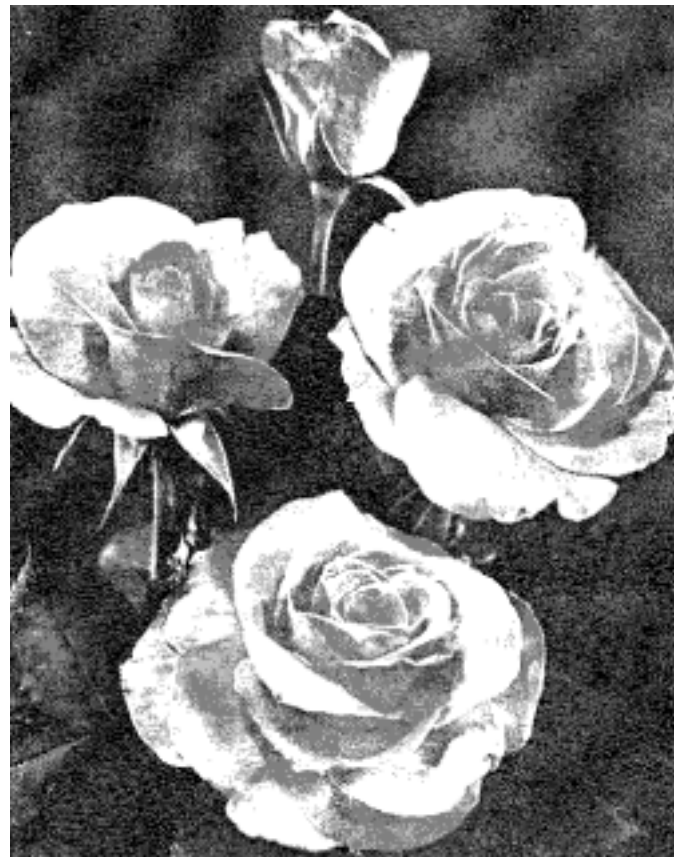


Table 1. Disease Control For Roses.

Disease/Chemical	Rate Of Application		Comments
	Per Gal.	Per 100 Gal.	
Blackspot			
benomyl			Apply at budbreak. Repeat at 7- to 14-day intervals until frost. For best results, stay on 7-day spray intervals. Shorten spray intervals during wet weather. Chlorothalonil and folpet may scorch foliage during summer.
BENLATE 50W	1 T.	1 lb.	
TERSAN 1991 50W	1 T.	1 lb.	
chlorothalonil			
BRAVO 4.17F	2 t.	2 pt.	
DACONIL 2787	2 t.	2 pt.	
DACONIL 2787 75W	2½ t.	1½ lb.	
DACONIL MULTIPURPOSE FUNGICIDE 29.6F	2¼ t.		
folpet			
PHALTAN 75W	1 T.		
FOLPET 50W	1-2 T.	1-2 lb.	
mancozeb			
DITHANE M-45, 80W	2 t.	1½ lb.	
FORE 80W	2 t.	1½ lb.	
triforine			
FUNGINEX ROSE DISEASE CONTROL 6.5E	1 T.		
TRIFORINE 18.2E		12-18 fl. oz.	
Botrytis Blight			
benomyl			Regular blackspot sprays should control botrytis blight. Shorten spray intervals to 7 days for best protection. Remove blighted blooms and shoots. Problems occur during wet, overcast weather.
BENLATE 50W	½ T.	½ lb.	
TERSAN 1991 50W	½ T.	½ lb.	
chlorothalonil			
BRAVO 4.17F	2 t.	2 pt.	
DACONIL 2787 4.17F	2 t.	2 pt.	
DACONIL 2787 75W	2½ t.	1½ lb.	
iprodione			
CHIPCO 26019 50W		1-2 lb.	
DCNA			
BOTRAN 75W		½-¾ lb.	
thiophanate-methyl + mancozeb			
ZYBAN 75W	2½ t.	1½ lb.	
DUOSAN 75W	2½ t.	1½ lb.	
Powdery Mildew			
benomyl			Regular blackspot sprays should control powdery mildew. Otherwise, apply at first sign of disease and repeat at 5- to 14-day intervals.
BENLATE 50W	½ T.	½ lb.	
TERSAN 1991 50W	½ T.	½ lb.	
copper oleate			
POWDERY MILDEW CONTROL 15S	1 T.		
dinocap			
KARATHANE WD 19.5W	⅔ T.	6-8 oz.	
dodemorph			
MILBAN 39E	1 qt.		

Table 1. Disease Control For Roses. (continued)

Disease/Chemical	Rate Of Application		Comments
	Per Gal.	Per 100 Gal.	
fenarimol RUBIGAN A.S. 1.0E		4-12 fl. oz.	Rubigan may affect leaf growth during cool, overcast weather.
triadimefon BAYLETON 25W	1/10-1/5 t.	2-4 oz.	
triforine FUNGINEX ROSE DISEASE CONTROL 6.5E TRIFORINE 18.2E	1 T.	1 1/2 pt. 12-18 fl. oz.	
Canker None labeled			Maintain good plant vigor. Prune out diseased canes. Use dormant spray of lime-sulfur.
Crown Gall Agrobacterium radiobactor Strain 84 NORBAC 84 GALLTROL	See Comments		Refer to label for directions. Root-dip for bare-root stock. Effectiveness may be limited. Destroy infected plants. Replace with crown gall-resistant ornamentals.

Table 2. Insect Control For Roses.

Pest	Pesticide	Amount To Use Per Gallon Or As Stated	Comments	
Aphids	acephate ORTHENE Turf, Tree and Ornamental Spray	2 t.	Begin treatment when aphids first attack plants early in the spring. Repeat as needed.	
	diazinon 25EC	2 t.		
	dimethoate CYGON 2E	2 t.		
	malathion 57EC	1 T.		
Caterpillars (<i>Bacillus thuringiensis</i>)	carbaryl* SEVIN 50WP SEVIN 5D	2 T. See Comments	Treat when young larvae are present. Dust lightly but thoroughly.	
	DIPEL, THURICIDE	See Comments	See label.	
	Bud, blossom, and leaf-feeding beetles	carbaryl* SEVIN 50WP SEVIN 5D malathion 57EC1	2 T. See Comments T.	Treat as needed. Dust lightly but thoroughly.
Spider Mites		insecticidal soap 50.5EC dicofol KELTHANE 18.5EC	4 oz. 2 t.	Follow label directions. Keep area free of weeds. Direct spray to underside of leaves. Repeat treatment every two weeks as needed. Alternate chemicals once or twice during the season.
		insecticidal oil, such as SunSpray ULTRA Fine		
Thrips		dienochlor PENTAC 50W PENTAC AQUAFLOW	2 t. 2/3 t.	Repeat treatment every 28 days as needed.
	acephate ORTHENE Turf, Tree and Ornamental Spray	1 T.	Destroy old rose blossoms. Treat every 3 to 5 days as needed.	
	diazinon 25EC	2 t.		
dimethoate CYGON 2E	2 t.			

*Watch for buildup of spider mites if carbaryl is used when mites are present.

T. = tablespoon t. = teaspoon

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Use pesticides **only** according to the directions on the label. Follow all directions, precautions, and restrictions that are listed. Do not use pesticides on plants that are not listed on the label.

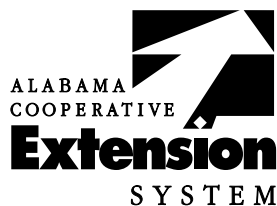
The pesticide rates in this publication are recommended **only** if they are registered with the Environmental Protection Agency and the Alabama Department of Agriculture and Industries. If a registration is changed or cancelled, the rate listed here is no longer recommended. Before you apply any pesticide, check with your county Extension agent for the latest information.

Trade names are used **only** to give specific information. The Alabama Cooperative Extension System does not endorse or guarantee any product and does not recommend one product instead of another that might be similar.

For more information, call your county Extension office. Look in your telephone directory under your county's name to find the number.

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