



earth-wise guide to

Fungal Leaf Spot



Blackspot on rose

description

Circular to irregular lesion with a dry, brown or black raised center; randomly scattered damage. It is unlikely to be fungal leaf spot if the damage is exclusively at the leaf margins or on the veins

attacks

Many species of garden and landscape plants

infestation

Leaves turn yellow, then brown and drop from plant; sometimes leaves drop before turning brown; spreads easily on wet foliage



Look for a raised center on a spot caused by fungus

Least Toxic Solutions

- Select disease resistant plants (see Grow Green Plant Guide)
- Avoid wetting foliage; water in the early morning so leaves dry quickly
- Space plants to allow adequate air flow
- Never prune wet plants
- Prune out small areas of diseased material and discard after pruning
- Use a bleach solution (1 part bleach to 10 parts water) to disinfect pruners after pruning a diseased plant; then oil shears to prevent rust

Not all leaf problems are caused by fungus. Fungicides are ineffective for drought-stress, chemical damage, bacterial or viral spots or insect damage

If You Must Use a Fungicide...

- Apply fungicide at the first sign of disease to prevent spreading
- Some fungicides can damage plant foliage - test on a small area before treating the whole plant
- Never use systemic fungicides on plants that you intend to eat
- Avoid applying the more toxic fungicides and avoid over-application



identify before you buy
Need help diagnosing a plant problem? Call the Texas Agrilife Extension Service @ 512-854-9600 and ask for the master gardener desk or email them at travismg@ag.tamu.edu

fungal leaf spot on photinia

product toxicity comparisons

Evaluation of active ingredients only; does not include toxicity information on inert or "other" ingredients.

Toxicity/Threat:

low
 low to moderate
 high
 highest
 NA not applicable
 ? unknown toxicity
 banned by EPA
 earth-wise

Hazards:

human toxicity
 aquatic life
 birds, bees, pets
 soil mobility
 environmental persistence

note	Product Name	active ingredient(s) / concentrations	human toxicity		aquatic life	birds, bees, pets	soil mobility	environmental persistence
			acute	chronic				
	Serenade® Disease Control	Bacillus subtilis 1.34%						
	Safer® Garden Fungicide	Sulfur 12%						N/A
	Garden-Ville® Potassium Bicarbonate	Potassium Bicarbonate						
	Bonide® Remedy	Potassium bicarbonate 85%						
	Concern® Copper Soap Fungicide®	Copper octonate 0.08%						
	Ortho® Ecosense™ Brand Disease Control	Copper Octanate 0.08%						
	Bonide® Liquid Copper Concentrate	Copper octonate 10%						N/A
	Safer® 3 in 1 Spray	Potassium salt of fatty acid 0.75% Sulfur 0.40%						
	Actinovate® SP	Streptomyces lydicus 0.037%						
	Green Light® Neem Concentrate	Neem Oil 70%						
	Bayer Advanced™ Disease Control for Roses, Flowers & Shrubs Concentrate	Tebuconazole 2.9%						
	Green Light® Fung-Away	Triadimefon (Bayleton) 0.5%						
	Bonide® Garden Dust	Copper 7% Rotenone 0.75% Other cube resins 1.5%						
	Scotts® Lawn Fungus Control	Thiophanate-methyl 2.3%						
	Green Light® Neem II Ready-to-Use	Pyrethrin .02% Piperonyl butoxide 0.20% Neem Oil 0.90%						
GardenTech® Sevin® Daconil® Ready-to-Use	Chlorothalonil 0.087%							
Spectracide Immunox® Lawn Disease Control Granules	Myclobutanil 0.39%							
Bayer Advanced™ 3 in 1 Insect, Disease & Mite Control	Tebuconazole 0.65% Imidaproclid 0.47% Tau-fulvalinate 0.61%							

most toxic

The City of Austin and the Texas AgriLife Extension Service provide this information as a comparative reference only. Listing of specific product trade names does not constitute endorsement of its use. Many other pesticides and pesticide products are available and may be suitable for use other than those listed in these tables. **Check labels carefully as trade names and active ingredients may change.**

Products rated by Grady J. Glenn, Ph.D., B.C.E., of the Pesticide Safety Education Program, Texas AgriLife Extension Service. The rating system was developed by Philip Dickey of the Washington Toxics Coalition.

why grow green?

The Grow Green program is based on Integrated Pest Management (IPM) principles that encourage the LEAST TOXIC approach to pesticide and fertilizer use. The goal is to reduce the amount of landscape chemicals that degrade water quality when they run off into waterways or leach into our groundwater.

Grow Green is a partnership between the City of Austin Watershed Protection Department and Texas AgriLife Extension Service.

Call 512-974-2550 or 512-854-9600 for more information or visit our website at

www.growgreen.org

City of Austin
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