earth-wise guide to
Fungal
Leaf Spot

**Description**
Circular to irregular lesion with a dry, brown or black raised center; randomly scattered damage exclusively at leaf margins or veins is not likely to be fungal leaf spot.

**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.

---

**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

---

**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

---

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

### Why Grow Green?

The Grow Green program educates Austin area residents on the LEAST TOXIC approach to pest management and responsible fertilizer use. The goal is to reduce the amount of landscape chemicals that runoff into waterways or leach into our groundwater and degrade water quality.

Grow Green is a partnership between the City of Austin Watershed Protection and Development Review Department and Texas AgriLife Extension Service. Call 974-2550 or 854-9600 for more information or visit our website at www.growgreen.org.

---

### 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)

**Hazards:**
- Birds
- Bees, pets
- Soil mobility
- Environmental persistence

<table>
<thead>
<tr>
<th>Product Name</th>
<th>active ingredient(s) / concentrations</th>
<th>human toxicity</th>
<th>aquatic life</th>
<th>birds, bees, pets</th>
<th>soil mobility</th>
<th>environmental persistence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bonide® Remedy</td>
<td>Potassium bicarbonate 85%</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>SureFire® Garden Fungicide</td>
<td>Sulfur</td>
<td>O</td>
<td>?</td>
<td>O</td>
<td>O</td>
<td>N/A</td>
</tr>
<tr>
<td>Safer® Garden Fungicide</td>
<td>Sulfur 12%</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>N/A</td>
</tr>
<tr>
<td>Concern® Copper Soap Fungicide®</td>
<td>Copper octonate 0.08%</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Bayer Advanced™ Disease Control for Roses, Flowers &amp; Shrubs Concentrate</td>
<td>Tebuconazole 2.9%</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Scotts® Lawn Fungus Control</td>
<td>Thiophanate-methyl 2.3%</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Green Light® Fung-Away</td>
<td>Triadimefon (bayleton) 0.5%†</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>GardenTech® Sevin® Daconil® Ready-to-Use</td>
<td>Chlorothalonil 0.087%</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Spectracide Immunox® Plus Insect &amp; Disease Control</td>
<td>Myclobutanil 0.78%</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td></td>
<td>Permethrin 1.25%</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

---

Products rated by Grady J. Glenn, Ph.D., B.C.E., of the Pesticide Safety Education Program, Texas AgriLife Extension Service who can be reached for questions at (979) 862-1035. The rating system was developed by Philip Dickey of the Washington Toxics Coalition.