

Powdery Mildew on crape myrtle

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The Texas A&M System, U.S. Department of Agriculture and the County Commissioners Courts of Texas cooperating.



FIG. 1

Disease Pathogen Name: *Erysiphe australiana*

Pathogen Type: Fungus

Period of Primary Occurrence: spring

- Primarily during spring (disease development favored by succulent new growth during warm days, cool nights with extended period of dry weather)
- May also occur throughout the growing season

Description / Symptoms

- Powdery mildew is one of the most common problems of crape myrtle
- Surfaces of infected leaves, stems and flower buds become covered with a white or grayish powdery, mealy-to-dusty growth (Fig. 1-5)
- Young shoots and leaflets are most susceptible
- Growth on leaves ranges from small-to-large, irregular-to-circular patches depending on disease severity
- Rapidly growing, lush foliage resulting from overfertilization is more susceptible and results in more severe disease level (Figs. 1-5)
- In contrast, powdery mildew tends to be more restricted on plants grown under low fertility levels
- Leaves become stunted and may attain only 1/3 of normal size and are abnormally thickened
- Pin head size fruiting growth first appears white turning to yellow then to brown or black
- Infected portions often have a reddish discoloration under the white coating (Fig. 4)
- New foliage may indicate curling or twisting before fungus growth is evident to the unaided eye
- Flower stems are stunted and buds fail to develop flowers under severe disease levels
- Defoliation may occur



FIG. 2



FIG. 3



FIG. 4

Conditions Favoring Disease Development

- Dry, mildly warm daytime temperature with cool, humid nights
- Water on leaf surfaces is not necessary — only high humidity
- Crowded growing conditions which limit air flow and increase humidity

Best Management Practices (BMP)

NON-CHEMICAL CONTROL

- When replacing a plant(s) or establishing new plants, select cultivars with powdery mildew resistance
- Plant in full sun - 6 hours minimum
- Do not use overhead watering system
- Remove diseased twigs and branches where possible, if only a few shoots are infected
- Remove sprouts (suckers) at the base of the plant as they occur, since they are very susceptible to powdery mildew. Once these sprouts become infected, the fungus easily spreads to the upper portions of the plant
- Practice selective pruning to maintain an open canopy to improve air flow and reduce humidity
- Avoid heavy applications of fertilizer during the summer growing season — don't induce late-season tender growth
- Space plants apart to ensure good air circulation
- Remove and properly dispose (through curbside trash) of infected leaves and branches
- Practicing good garden sanitation is a must in controlling powdery mildew

CHEMICAL CONTROL

- Once most leaves have matured, disease level may not be severe enough to warrant chemical control
- If disease is severe enough to warrant chemical control, select a fungicide containing one of the following:
 - propiconazole (Ferti•lome Liquid Systemic Fungicide)
 - thiophanate-methyl (Ferti•lome Halt Systemic Fungicide or Green Light Systemic Fungicide)
 - triadimefon (Green Light Fung-Away), copper-based fungicides (Ferti•lome Black Spot & Powdery Mildew Control or Concern Copper Soap Fungicide RTU)
 - Safer Garden Fungicide RTU)
 - lime sulfur (Hi-Yield Lime Sulphur Spray)
- Plants should be inspected on a regular basis
- Fungicides for powdery mildew control provide greatest effectiveness when applications are started soon after the initial onset of disease infection occurs. Multiple applications may be required
- A combination insecticide + fungicides such as acephate + triforine (ex. Ortho Orthenex Insect & Disease Control) will control powdery mildew as well as aphids and resultant sooty mold



Html

<http://aggie-horticulture.tamu.edu/southerngarden/lager.html>

'Top Eight' Crape Myrtle Cultivars (for Texas and Louisiana)

Louisiana State University

The information given herein is for educational purposes only. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by the Texas AgriLife Extension Service is implied.

Use pesticides only according to the directions on the label. Individuals who use chemicals are responsible for ensuring that the intended use complies with current regulations and conforms to the product label. If the information does not agree with current labeling, follow the label instructions. The label is the law.

Always remember to read and heed six of the most important words on the label: "KEEP OUT OF REACH OF CHILDREN"

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