Gardening Basics

Crapemyrtle Bark Scale

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Crapemyrtle (or spelled Crape Myrtle) bark scale (*Acanthococcus lagerstroemiae*), often known by the abbreviation **CMBS**, was first found in the U.S. in McKinney, Texas, in 2004. Since that time, it has spread to 15 other states, mainly across the southeast and the District of Columbia.

CMBS is a sap-feeding insect that lives on the bark of some plants, especially crapemyrtles. Although they are its preferred host, CMBS can infect other landscape plants besides crapemyrtles, such as pomegranate, persimmon, edible figs, raspberries, beautyberry, boxwood, cleyera, privet, and St. John's wort. The insects secrete a sugary substance called honeydew that results in a black mold developing on the branches and trunk.

Identification & Lifecycle

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CMBS is found only on the stems, large twigs, and trunks. It can be confused with aphids because they both produce honeydew, but aphids feed on the new foliage growth at the ends of branches. CMBS is rarely found on the foliage.

Immature scale insects emerge from the egg, are mobile, and so are called 'crawlers'. They are pink and not easily seen by the naked eye. As they mature, they form a white, waxy felt over their bodies, making them less vulnerable to contact pesticides. At this point, they settle into branch crotches, pruning sites, and under loose exfoliating bark in order to feed. In Texas there are usually 2 or more overlapping generations per year, one in early April to mid-May and again in late summer.

Damage

The damage caused by CMBS is **aesthetic in nature and usually does not kill the plant**. Infected plants may leaf out later, flower less, and their growth may be stunted. The black mold that develops from the honeydew is ugly and attracts ants. Premature bark peeling may occur on infected crapemyrtle trees. To remove the black mold, wash the affected areas with a weak solution of water and liquid dish soap using a large brush like the type used to wash a car.

Control

Healthy crapemyrtle trees planted in full sun, with mulch, proper irrigation, and fertilization (based on soil analysis recommendations), and proper pruning have fewer infestations. Lady beetles (*Coccinellidae*) and mealybug destroyers (*Cryptolaemus montrouzieri*) are natural predators but can take several seasons to reach numbers high enough to effectively control CMBS.

There are several effective **chemical controls**, but the timing of the application is critical to their effectiveness.

- In the form of a soil drench or granules, **systemic pesticides** that contain the active ingredients Imidacloprid or Dinotefuran protect up to one year. In Texas, these must be applied in March to be effective. This type of pesticide moves up into the plant through its vascular system. How much pesticide to use, how to apply, and safety precautions for persons and animals will be stated on the label.
- **Bark sprays** with active ingredients Pyriproxyfen, Buprofezin, or Bifenthrin are most effective when the scale is in the crawler stage. This is usually mid-April to early May in Texas. Wrap double-sided sticky tape around small branches to help identify if scale exists in the crawler stage. Replace the tape weekly. If your tree is quite tall, it is best to contact a Certified Arborist to apply the treatment (see treesaregood.org). Spray should be applied in the late evening on a calm day to avoid killing pollinator insects and the applicator should wear protective gear.

Always carefully read the product's label and follow all application instructions and safety precautions.

Maintenance

Here are a few tips for healthy and beautifully blooming crapemyrtles:

Planting – the best time to plant is November-February so roots can get established so to better withstand summer

- Choose a variety of crapemyrtle that will grow to a suitable width and height for the location.
- Plant your trees in **well-drained soil with full sun exposure**, meaning at least 6 hours of direct sun daily.
- **Dig a hole two times wider than the root ball**. The tree should be **no deeper than its depth in the container** or slightly higher than the surrounding soil. Be sure the root flare is exposed (where the trunk flares out at the start of the major roots). Backfill with the same soil removed from the hole; do not add amendments such as fertilizer or compost.
- **Water thoroughly** after planting. Add a 3" to 5" layer of mulch in the root zone leaving a 2" to 4" gap between the mulch and the tree's trunk (like a donut).

Fertilizing

- In early spring, **apply a complete slow-release fertilizer** (N, P, K 19-5-9) at the rate of 2 pounds per 1000 feet of the branch spread of the tree.
- Make a second application in late fall.

Watering

- Newly planted trees should be deeply watered often. Texas A&M Forest Service has tips.
- Crapemyrtles are somewhat drought tolerant but established trees (1-2 years old) should be **deeply watered 2 inches 1 x month, allowing for rainfall**. The light watering applied to your lawn is not adequate for young trees.

Pruning

- **Be selective when pruning** in late winter or early spring to remove only broken branches, crossing branches, or crowded growth.
- Pruning encourages new growth, so **avoid pruning in early fall** before the first frost. Doing so results in freeze damage to that new growth.
- **Remove suckers** at any time that grow at the base of the tree.
- **Remove spent blooms** to encourage reblooming.

Resources

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