Crepe Myrtle Bark Scale

Since 2013, in the city of Germantown, there has been a suspicious decrease in the health and appearance of one of the South's ubiquitous flowering tree species, the crepe myrtle. If you live in the Mid-South, you most likely have a crepe myrtle in your yard or certainly in your neighborhood. For years, these trees have been "bullet proof" without any major natural insect enemies or diseases. We have seen the same issue spread into other parts of the Memphis-Metropolitan area as well as Fayette County and North Mississippi. Shrubs, grass, walkways, and vehicles underneath the canopies of these crepe myrtles may show a sticky substance and look to be turning black along with the tree itself. The pest causing this damage is called Crepe Myrtle Bark Scale (CMBS).

A few facts about CMBS

- Adult female, what you may see on the tree, are round and gray-white in color
- Adult female is immobile – no wings or legs
- Adult male has wings but doesn't feed
- Immobile in its adult stage
- The eggs are laid underneath the insect.
- After hatching, the juvenile crawlers will find a spot and then mature
- Two-three generations throughout the season

Where did they come from?

CMBS is more than likely a scale species found on crepe myrtles native to Asia. The original U.S discovery was made outside of Dallas, Texas in 2004. It has since spread to Louisiana, Oklahoma, Georgia, Arkansas, and was first identified in Germantown, Tennessee in 2013. During the 2014 season, infestations were identified in Collierville, Cordova, Fayette County, and as far west as the Highland-Poplar area in Memphis. Even though the juvenile crawlers are mobile, they do not venture very far from where they hatch. The most probable ways for the scale to cross such long distances is by birds and transplanted crepe myrtles. If purchasing a crepe myrtle, be sure to inspect your plant for any symptoms to ensure you are not inviting it into your landscape.

Damage they cause

Damage occurs in two ways. The scale insect uses its straw-like mouth part to pull sap from the vascular tissue of the tree and a fungus called sooty mold grows on a secretion made by the scale referred to as "honeydew". While the sooty mold does not attack the plant it is covering, it will create

an artificial shade that blocks sunlight and obstructs the trees ability to produce food. The death of a tree has not been documented however, we have seen significant amounts of dieback in severe cases that have gone untreated.

How can they be controlled?

- Please note that the timing of treatments is essential. Applications have to be made while leaves are on the tree which is typically mid to late April through the end of October. Insecticides that contain the active ingredient Imidacloprid can be applied as a soil drench around the base of the tree or injected into the root zone. Instructions on the product to water ratio and total amount to be applied can be found on the label. When applying a soil drench, be sure to pull any mulch away from the trunk to ensure the product can reach the root system. This treatment will give the tree at least twelve months of control.
- Be sure to water enough to keep the top few inches of the soil moist for five to seven days after treatment. It can take four to five weeks for the insecticide to travel throughout the canopy before control is achieved. The scale and sooty mold will remain on the trees even after the scale has died but will fall off as the crepe myrtles shed their bark. Depending on how long an infestation has gone untreated, it may take one or more seasons until the trees are back to “normal” in appearance.
-  Field studies show that if Imidacloprid is applied at the correct rates as stated in the label and are applied in the proper manner, it will not transfer to the flowers or pollen at toxic levels; furthermore, bees and other pollinators will not be harmed. This insecticide should not be applied to the leaves and canopy of the tree. These guidelines will help keep the pollinators and other beneficial insects unharmed.
- Washing crepe myrtles should only be a compliment to the insecticide soil drench and not the only means for controlling the bark scale. Hand washing or pressure washing can remove the adult female, eggs clusters, and buildup of the black sooty mold enhancing the aesthetics of the tree. If washing by hand, add 1-2 oz. of Dawn dish washing liquid into 4 gallons of warm to hot water and scrub the trunks and branches using a soft bristle brush with an extended handle. Infested crepe myrtles can be washed anytime of the year however; washing during winter dormancy will result in less debris and cleanup. Be aware that the sooty mold may not come off.

Source of information: Texas A&M AgriLife Extension Service