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### **Crape myrtle bark scale 2015**

One of the most common plants in the southern landscape is the crape myrtle. These trees bloom freely all summer and have beautiful fall foliage and outstanding bark in the winter, if pruned properly. They have long been considered a bullet-proof plant for the south, being drought tolerant and seemingly indestructible. The past two years have changed that a bit. Winter damage took its toll the past two years, but the plants have rebounded and bloomed nicely, albeit a tad late this season. But a new insect pest was found almost two years ago in Arkansas, and we are getting more and more reports of crape myrtle scale attacking from central Arkansas southward.

The crape myrtle bark scale was first noticed in a north Dallas, Texas, suburb in 2004 and started its northern migration, spreading quickly across the south. In October 2013, the insect was confirmed in Germantown, Tennessee and finally in Little Rock, Ark., in January 2014. Since then we have found cases in counties from Pulaski County southward to Miller County, with a recent rash of discoveries.

Many gardeners first start noticing a black sooty mold on the stems or trunks of their plants. This black substance is called sooty mold and is a by-product of sucking insects including scale and aphids. As these insects feed, they give off a sweet substance called honeydew. Wherever this honeydew lands, a black sooty mold will form. Aphids can also be a problem on crape myrtles at the end of summer, but they are not cause for much concern. If that sooty mold is accompanied with white specks on the trunks or branches, that is the crape myrtle bark scale, and is cause for concern.

Since the insect is relatively new, we don't have extensive data to tell us if one variety of crape myrtle is more susceptible than another, or if there are certain conditions that make it more of an issue. If spotted early, females appear as white or gray felt-like growths on small twigs to large trunks, often appearing near pruning wounds or in branch crotches on older wood. If left undetected, the spread can become fairly extensive and heavy infestation will result in white crusted clusters of insects which may blanket small stems and be quite visible on the trunks.

If you get up close or use a magnifying glass, you will see that the adult is white to gray in color and there may be dozens of pink eggs or crawlers under some of the larger white scale covers. The covering of the adult scale is composed of white threads produced by the female that become

felted or matted into a thick whitish scale covering over the entire body. The adult females under this covering are now attached and incapable of moving. She continues to feed by sucking sap out of the tree and lays eggs under the covering, after which the female dies. In a normal season this should occur in late April to mid-May. With our unusual winter and cool spring, this could have been delayed some this year. When the eggs hatch the small nymphs have legs and are mobile and are called crawlers. These crawlers emerge from under the “mother scale” and begin to move. The females find their new location on the tree and become attached and start the process all over. Males develop wings and find a female, mate and then die. At this time, the actual number of generations completed in a year for this species is unknown, but it is suspected that there may be at least two generations in Arkansas.

Scale insects will not kill a tree, but they can weaken it to the point where they don't bloom as freely or with as large a bloom. Long term effects are not known since it is a new pest. If you spot it on your tree you should do something about it. If you have small limbs which are heavily infested prune them off and dispose of them. Do not put them in a compost pile, or put them out on the curb for yard-waste pick-up. In a perfect world, burning the debris would be the best way to eradicate the pest, but unfortunately we can't burn refuse in the city. Left exposed in an open truck or put on the curb for yard waste pickup leads to a possibility that the millions of tiny crawlers could be easily spread to neighboring properties, thus accelerating the spread of this invasive insect. Instead, double bag the cuttings and put them in your regular trash pickup. If you have scale insects on the main trunk of the tree, use a soft brush with soapy water and clean the trunk. This will get crawlers off, and also remove the black sooty mold. Once all the leaves have fallen off the tree later this fall or early winter, spray the entire tree thoroughly with a dormant oil, saturating the trunk and stems. As crape myrtles age, they do have peeling bark. This peeling bark is attractive, but also can harbor overwintering insects, which may not be smothered out with the oil, so pay particular attention to these areas when spraying.

In the spring as the tree begins to fully leaf out, use a soil drench with a systemic insecticide such as Imidacloprid (Merit<sup>®</sup> or Bayer Advanced<sup>™</sup> Tree and Shrub Insect Control), thiomethoxam (Meridian<sup>®</sup>) and dinotefuran (Greenlight Tree and Shrub Insect Control with Safari). These products will be taken up by the tree and moved throughout the system of the tree, and have shown good results in controlling the scale. Be aware, once the insects die, they will still be on the plant, but no longer causing damage and not spreading. Currently we don't believe that a properly applied soil insecticide (following label directions) will have any significant impacts on foraging bees. We are continuing to monitor for any changes. Only treat a tree that has the insect problem—don't spray preventatively. Researchers are also continuing to look for less susceptible varieties of crape myrtle and safer, less expensive treatments for this scale insect.

Crape myrtles will continue to be a recommended plant for the south, and hopefully in time, we can eradicate this new crape myrtle bark scale, or find resistant varieties. Until that time, monitor the crape myrtles in your yard, and treat if you find them. If you need more information, contact your

local county extension office. Here is also a link to our fact sheet with more information:  
<http://www.uaex.edu/publications/PDF/fsa-7086.pdf>