Janet B. Carson Extension Horticulture Specialist Arkansas Democrat-Gazette Crape myrtle bark scale 2016

Last year we started publicizing a new pest problem on crape myrtles. The crape myrtle bark scale (CMBS) was beginning to attack crape myrtles in Pulaski County and a few southern counties. This insect pest was first discovered in the United States in Dallas, Texas in 2004 and started its northern and eastern 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. Fast forward to the summer of 2016 and we now have confirmed reports in many counties across the state including: Garland, Miller, Clay, and this year Saline (Benton), Sebastian (Fort Smith), Crittenden (Marian and West Memphis), and Greene counties (Paragould). In central Arkansas a week has not gone by without new reports of the insect pest. We are trying to keep an accurate record of where crape myrtle bark scale is across the south and in Arkansas in particular. If you have a suspected susceptible tree and your county is not highlighted on this map: <u>https://www.eddmaps.org/cmbs/distribution.cfm</u> please take a picture of the tree with symptoms and/or a sample in to your local county extension office, or email me a picture jcarson@arkansasonline.com.

There has been quite a bit of misinformation about this pest, with some gardeners removing the trees when they spot the problem. There is no need to remove your trees if you find the insect. The insect can be treated very effectively once you see it, but treatment is necessary. While the crape myrtle bark scale insects will not kill the tree, they definitely reduce the amount and size of the blooms and the copious amount of black sooty mold that is covering the trunks makes them much less attractive. Long term effects are not known since it is a new pest. We are seeing it now on dwarf crape myrtles as well as the standard or tree forms.

Often the first indication of a problem is a black sooty mold on the stems or trunks of the plants. This black substance is called sooty mold and grows on 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, the stems, leaves and trunk get very sticky and then a black sooty mold will form. 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 action.

Systemic insecticides work very well to control the bark scale, but the timing is most effective when applied in late winter/early spring. If you are just now spotting the problem, you can clean off the trunk with warm, soapy water to remove the black sooty mold. Once all the leaves have fallen, saturate the tree with a dormant oil. This should kill many of the crawlers and adults, but won't kill them all. Then treat with a systemic insecticide in late March through early May with a product containing Imidacloprid (Merit[®] or Bayer Advanced[™] Tree and Shrub Insect Control), thiomethoxam (Meridian[®]) 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. There is no need to do preventative treatment, so only treat a tree that has the insect problem—but do monitor all the crape myrtles in your yard. The sooner you can catch the problem, the easier and quicker the problem can be solved. Research is ongoing at many southern universities studying the insect and its control. In Arkansas research has shown that one application of imidacloprid has provided at least two years of control. They treated a single, large 'Natchez' crape myrtle tree (19 1/4" diameter at breast height; this was a large multi-stem plant) with a labeled rate of an imidacloprid formulation (cost per tree - \$2.59.) This systemic insecticide was applied as a soil drench in mid-April 2015 and as of late October 2016 they are still observing good scale control. While natural predators appear to help in the control of this scale insect pest, it will require some kind of chemical treatment (e.g. dormant oil; soil drench of systemic insecticide) to reduce the population to a level that natural predators can effectively manage.

If left undetected or untreated, the CMBS will spread rapidly. A 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. It is suspected that there may be at least two generations in Arkansas.

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.

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. There is no need to remove the crape myrtles in your yard if you have the problem. Crape myrtle bark scale is easily managed if you learn to identify it and use proper recommended control measures. 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