Crape myrtle bark scale

This pest is spreading quickly across the Southeast

A relatively new insect is appearing on crape myrtles (Lagerstroemia) across the Southeast. The insect was first noticed in McKinney, Texas, a north Dallas suburb, in 2004. At that time, entomologists suggested it was morphologically identical to azalea scale (Erinococcus azaleae), but noted that molecular investigation might eventually identify it as *E. lagerstroemiae*, known to be a pest on crape myrtle and pomegranate in Asia. Although the exact taxonomy is still not known, it is most commonly referred to as crape myrtle bark scale (CMBS).

Since its initial sighting, the insect has been spreading across the Southeast at an alarming rate. The insect had spread throughout most of the Dallas-Fort Worth, Texas, area by 2010. The scale was reported in Ardmore, Okla., and Shreveport, La., in 2012 and Houma, La. (60 miles southwest of New Orleans) in 2013. In October 2013, the insect was confirmed in Germantown, Tenn., (near Memphis) and in Little Rock, Ark., in January 2014.

Heightened concern about this new pest is based on the speed at which it spreads and the common use of crape myrtles in landscapes across the U.S.

**Signs of infestation**

Crape myrtle bark scale is easy to identify because in the U.S., it is the first and only bark scale to occur on crape myrtles. The adult females appear as white or gray felt-like encrustations on small twigs to large trunks, often near...
More research in the works

Gary W. Knox of the University of Florida, Quincy, received a grant from the Center for Applied Nursery Research to screen for susceptibility of crape myrtle taxa to crape myrtle bark scale (CMBS).

Objectives of Knox’s research include:
- Collect plants of species and cultivars for evaluation in a region where CMBS already is present
- Establish replicated plantings
- Inoculate plants with CMBS (quarterly, if possible, to determine if time of year of inoculation affects infestation) and evaluate monthly for level of infestation.

pruning wounds or branch crotches on older wood. On the most current growth and under heavy infestation, distribution may be more uniform. CMBS is approximately 2 mm long.

Careful examination may reveal dozens of pink eggs or crawlers under some of the larger white scale covers. Most gardeners will be alerted to CMBS by black sooty mold on the bark. This may confuse the diagnosis because black sooty mold is often associated with aphids. This felt scale is not classified as either an armored or soft scale.

Life cycle

As female nymphs mature, they secrete white threads that become felted or matted into a thick, whitish to grayish scale. Adult females under this covering are wingless and sessile. For this species of scale, eggs are laid under the covering (probably late April to mid-May in Arkansas) and the female then dies. When the eggs hatch into first instar nymphs, these nymphs have legs and antenna and are mobile, thus the term crawlers. These crawlers emerge from under the “mother scale” and disperse over a short period (one to two days). This emergence occurs beginning mid-May to early June in Arkansas; however, crawlers were observed on a warm day in January 2014. After the first molt, nymphs lose their legs and antenna and become sessile. During the last instar, males are quiescent (pupal type stage) and develop external wings. Upon emergence, males find a sessile female and mate, completing the life cycle.

Sources:
James Robbins, professor and extension horticulture specialist – Ornamentals

and John Hopkins, associate professor and extension entomologist – Urban, University of Arkansas; Mike Merchant professor and extension urban entomologist and Mengmeng Gu assistant professor and extension ornamental horticulturist, Texas A&M AgriLife Extension Service.