

# November 2017

Ornamental Updates is a monthly newsletter of the LSU AgCenter.

## Crapemyrtle Bark Scale Management Updates

*Dr. Yan Chen, Mike Merchant, Erfan Vafaie, Mengmeng Gu, and James Robbins*

Crapemyrtles are considered an essential southern plant for good reasons. Selected from *Lagerstroemia indica* or its hybrid with *L. fauriei*, these summer-flowering trees provide us spectacular flowers, colorful autumn foliage, and handsome sculptural trunks that few other plants can match. The crapemyrtle bark scale (CMBS), *Acanthococcus* (previously *Eriococcus*) *lagerstroemiae*, was first detected in TX 2004, and has quickly spread to 12 states by 2016. An article on its distribution, damage, life stage, and population trends was published in the Spring 2016 issue of Louisiana Agriculture and 2016 Hammond Research Station Field Day Book.

New infestations have been reported from Covington and Mandeville, La in 2017. In addition, other than crapemyrtles, so far CMBS is confirmed on beautyberry (*Callicarpa americana*) in open field, and pomegranate (*Punica granatum*), henna (*Lawsonia inermis*), heimia (*Heimia salicifolia*), and winged loosestrife (*Lythrum alatum*) in greenhouse tests. This has raised concerns of this pest being capable of infesting native flora of the North America.

When it comes to managing this scale, landscape professionals often prefer using neonicotinoids... [Read more here](#)

□

□

□

Trunk of a crape myrtle tree infested with the crape myrtle bark scale.  
Photo by *Dr. Yan Chen*

Life cycle of the crape myrtle bark scale includes egg, nymph (crawler), pupae, male and female.  
Photos by *Zinan Wang*

## Bacillus thuringiensis as a biopesticide applied to plants

*Dr. Dennis Ring*

*Bacillus thuringiensis* (*Bt*) is a rod shaped, gram-positive bacteria that forms a spore and is found in the soil. Classification of this bacteria includes Bacteria (domain); Eubacteria (kingdom); Firmicutes (phylum); Bacilli (class); Bacillales (order); Bacillaceae (family). *Bt* was isolated in 1901 and named in 1911. It was used as a commercial biopesticide for the first time in the United States in 1958. It is placed in IRAC group 11, microbial disruptors of insect midgut membranes. *Bt* is toxic to caterpillars, some fly larvae, and some beetle larvae but not toxic to other organisms. A few strains of *Bt* are available in products used in the United States. *Bt* var. *kurstaki* is toxic to lepidopteran (butterfly, skipper, and moth) larvae; *Bt* var. *aizawai* is toxic to wax moth larvae; *Bt* var. *israelensis* is toxic to mosquito, midge, fungus gnats, and blackfly larvae; *Bt* var. *galleriae* is toxic to larvae of May or June beetles (white grubs); *Bt* var. *tenebrionis* (or var. San Diego) is toxic to Colorado potato beetle, elm leaf beetle, and willow leaf beetle larvae. However, *Bt* var. *tenebrionis* does not kill all leaf beetles.

*Bt* strains are very specific to the insects they kill. Therefore, identification of the injurious insect is very important. The correct strain must be applied to susceptible insects.

[Read more here](#)

## Winterizing Your Lawn

*Dr. Jeff Beasley*

As the temperatures begin to cool, lawns are growing more slowly as the turf prepares for winter. During this time many people will ask if they need to winterize their lawn. Although this term can have different meanings, many people associate winterizing a lawn with the application of potassium.

Potassium (K+) is a macronutrient that is extremely important in water movement into and within the plant. It has also been shown to be important in increasing turfgrass winter survival. Potassium can help prevent freeze damage by lowering the freezing point within the turfgrass. This is similar to the idea of people living in the North applying salts to their walkways prior to snow.

Even though potassium can help increase survival of turfgrass during winter, it is not always necessary to fertilize with potassium. If a soil test shows adequate potassium levels, the addition of potassium will most likely not further increase winter survival. If a soil test shows a potassium deficiency, then potassium applications could be beneficial. If a potassium fertilizer is needed, make sure the fertilizer source has little to no nitrogen (N). Nitrogen during the fall can push turfgrass growth and exacerbate large patch. Of course winter damage is more than just freezing. Many times in Louisiana cooler temperatures in the fall and winter are accompanied by dry spells. Winter desiccation, or drying out of the turfgrass, is often the more troublesome. So check your lawn during dry winter spells and apply irrigation if necessary.

## Industry's Top 10 at Hammond Research Station Landscape Horticulture Field Day

Photos by [Ashley Edwards](#)

1. Purple Bolo Bolo

*Clappertonia ficifolia*

2. Cajun Red Rosella Hibiscus

*Hibiscus sabdariffa* var. *sabdariffa*

3. Big Leaf Tibouchina

*Tibouchina grandiflora*

4. Dragon's Breath Celosia

*Celosia argentea plumosa*

5. White Bolo Bolo

*Clappertonia ficifolia*

6. Lime Sizzler Firebush

*Hamelia patens* 'Grelmsiz' PP26247

7. Red Velvet Plant

*Aerva lanata*

8. 'Purple' Bush Morning Glory

*Ipomoea carnea*

9. Lantana 'Bloomify Rose'

*Lantana camara*

10. Intenz Classic Celosia

*Celosia argentea*

## Renew Your Pesticide Applicator Proficiency Test

Kim Pope

All licensed pesticide applicators are required to take a proficiency test in 2017. Additional dates are still available for Pesticide Applicator Proficiency Test. Please check for available dates [here](#) and for more information click the link below.

[LaDAF website](#)

Ornamental Updates in a monthly newsletter from the LSU AgCenter.  
Prepared by: [Jean Pittman B.S.](#), [Lee Rouse, B.S.](#), [Yan Chen, Ph.D.](#), [Jason Stagg, M.S](#)

LSU AgCenter Hammond Research  
Station | 21549 Old Covington Hwy,  
Hammond, LA 70403  
[\(985\) 543-4125](tel:(985)543-4125) | [WEBSITE](#) | [EMAIL](#)

[Facebook](#) [Twitter](#) [YouTube](#) [Instagram](#)

innovate . educate . improve lives

For the latest research-based information on just about anything, visit our website:

[LSUAgCenter.com](http://LSUAgCenter.com)