BUG BIZ
Pest Management and Insect Identification Series
LSU AgCenter Research · Extension · Teaching

Tinocallis kahawaluokalani, Crapemyrtle Aphid (Hemiptera: Aphididae)

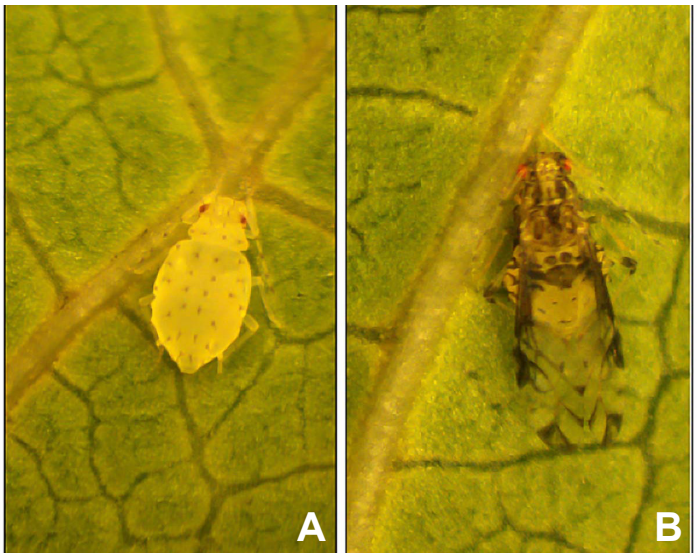
Giovana Franco, Forest Huval, Chris Carlton and Gene Reagan

Description

The crapemyrtle aphid, *Tinocallis kahawaluokalani* (formerly in the genus *Sarucallis*), is native to eastern Asia and is found on crape myrtle trees throughout the United States. The nymphs are pale yellow to green and have black spikes on their top (dorsal) surfaces. Adults are winged, light green, and possess black patterns on the head, thorax, wings and abdomen. Crapemyrtle aphid adults measure up to one-sixteenth of an inch (1.6 mm) in body length. Eggs are minute, one-fiftieth of an inch (0.5 mm) in length and are laid in rows on twigs or in between the bark grooves.

Life Cycle

The adults reproduce asexually (in the absence of males, without mating) during warmer months. A single female can give live birth to approximately 70 nymphs during her life. Developmental time is temperature-dependent, which means that it can take from 14 days at 65 degrees Fahrenheit (18 degrees Celsius) to five days at 90 degrees Fahrenheit (32 degrees Celsius) for a newborn nymph to develop into an adult. When temperatures start to drop during fall, males are generated, and sexual reproduction occurs. After mating, females lay eggs that will overwinter on host trees.



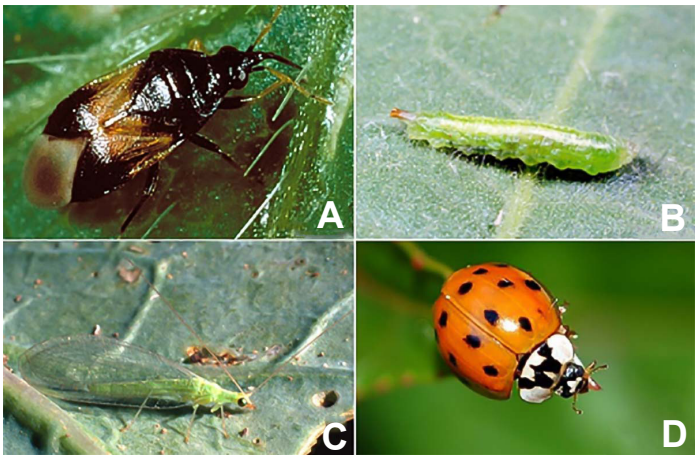
Life stages of the crapemyrtle aphid: A, nymph; B, adult. Giovana Franco, LSU AgCenter.

Ecological Significance and Pest Status

Crape myrtles (genus *Lagerstroemiae* sp.) are among the most common woody ornamental plants in the southeast region of the United Stated because of their attractive bark, leaves and flowers. Sap sucking pests, such as the crapemyrtle aphid and the crapemyrtle bark scale, may result in aesthetic damage and cause a slow decline in overall plant health.

The crapemyrtle aphid is specific to crape myrtles and is not known to vector diseases. Large infestations can lead to changes in color of leaves (green to shades of yellow or red), premature leaf drop and sooty mold growth because of large amounts of sugar rich honey-dew excretions. These impacts can lead to reduced vigor and visual appeal of the plants.

Crapemyrtle aphid eggs on crape myrtle branch. Jim Baker, North Carolina State University, Bugwood.com.



Common natural enemies of the crapemyrtle aphid: A, Minute pirate bug (Phil Sloderbeck, Kansas State University, Bugwood.com); B, Syrphid larva (Clemson University - USDA Cooperative Extension Slide Series, Bugwood.com); C, Green lacewing adult (Alton N. Sparks, Jr., University of Georgia, Bugwood.com); D, Asian ladybeetle adult (Jon Yuschock, Bugwood.com).

Control

Generalist predators play a key role keeping the aphid population at low numbers. Natural enemies such as the Asian ladybeetle (*Harmonia axyridis*), minute pirate bugs (*Orius* spp.), syrphid flies (*Diptera: Syrphidae*) and green lacewings (*Chrysoperla* sp.) are voracious predators that feed on different pest species, especially aphids. Therefore, maintaining some aphids on crape myrtles might help sustain viable populations of these beneficial predators. Parasitic wasps do not commonly attack this aphid species, in contrast to other aphids. Use of resistant cultivars may reduce aphid impacts, and local horticulturists can advise which ones to select.

Large populations of the aphid that are not brought under control by natural enemies may require chemical treatment. Always read the labels and carefully follow the instructions. Among chemical treatments, insecticidal soap is highly recommended because it substantially increases aphid mortality and does not harm beneficial natural enemies. Current insecticide product recommendations for managing aphids on crape myrtles and other flowering plants are provided in the annual LSU AgCenter Insect Pest Management Guide.

References

Alverson, D. R., and R. K. Allen. 1992. Bionomics of the Crapemyrtle Aphid (Homoptera: Aphididae). Journal of Entomological Science 27: 445-457.

Herbert, J. J., R. F. Mizell, and H. J. McAuslane. 2009. Host Preference of the Crapemyrtle Aphid (Hemiptera: Aphididae) and Host Suitability of Crapemyrtle Cultivars. Environmental Entomology 38:1155-116.

Louisiana Insect Pest Management Guide – LSU AgCenter. 2019. https://www.lsuagcenter.com/~/media/system/4/9/6/c/496c381f03be739dc3d77b0a1a893309/2019pestmgmtguide_finalpdf.pdf

Mizell R. F. 2007 Impact of *Harmonia axyridis* (Coleoptera: Coccinellidae) on native arthropod predators in pecan and crape myrtle. Florida Entomologist 90: 524-536.

Authors
Giovana Franco, Forest Huval, Chris Carlton and Gene Reagan

William B. Richardson, LSU Vice President for Agriculture
Louisiana State University Agricultural Center
Louisiana Agricultural Experiment Station
Louisiana Cooperative Extension Service
LSU College of Agriculture

Pub. 3718 (500) 4/20