

Mite Damage on three South Florida Landscape Plants: Mexican Petunia, Downy Jasmine and Black Olive

Mites aren't insects, but members of the arthropod class Arachnida, along with ticks, scorpions, and spiders. Following egg hatch, all mites (except eriophyid mites) are six legged, a stage known as a larva. After the first molt they transform into eight-legged immature stages and possess the general body form of the adult for the remainder of their development. An unusual mite family is the eriophyid mites. These are minute with an elongated, carrot-shaped form. They possess only two pairs of legs in all life stages.

Because mites are so small, the use of a magnifying hand lens (10k) will make it easier to observe them. Another technique frequently used to detect mites is to shake the stems and leaves of suspected plants above a white sheet of paper. If mites are present, they will be easily seen as small, moving spots.

Eriophyid mites are too small to be seen by the naked eyes. They feed on plants. Some produce distinctive abnormal plant growths including galls, blisters and fingerlike projections. The feeding of some eriophyid mites causes the plant to form feltlike patches of hairs on the leaves called erinea. Disorganized growths of buds or flower parts are also induced by infestation of some eriophyid mites.

In the months of May and June, samples of three species of plants were sent to the entomology and nematology laboratory in Gainesville to determine the species of mites causing plant damage. In all cases, no insects were found on any of the samples.

Mexican Petunia (*Ruellia simplex*)



Damage Description: "Bleaching" appearance of leaves and stems which are patches of white or pink erinea.

Mite Found: Eriophyid mite (*Acalitus simplex*)

Mexican Petunia (*Ruellia simplex*)



Lyle Buss

Acalitus simplex caused erinea on *Ruellia simplex*



Lyle Buss

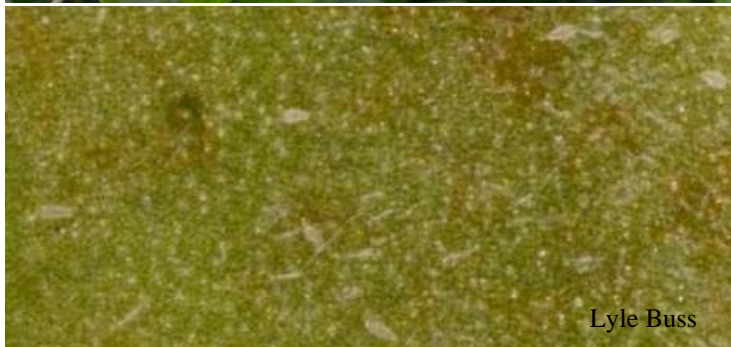
Acalitus simplex caused erinea on *Ruellia simplex*

Downy Jasmine (*Jasminum multiflorum*)



Front of leaves

Back of leaves



Eriophyid mites (*Disella ilicis*)

Lyle Buss

Damage Description: Leaves with shiny, slightly elevated blisters on top and sometimes having green rings with yellow halos

Mite Found: Eriophyid mites (*Disella ilicis*)

Black Olive (*Bucida buceras*)



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Front of leaves



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Back of leaves

Damage Description: Leaves with shiny, slightly elevated blisters on top and dark patches of eriinea on bottom

Mite Found: Eriophyid mite (*Eriophyes buceras*)

[Eriophyid mite damage](#) is also associated with the flower and fruit of black olive trees.

References

Stamps, Robert and Lance Osborne. 2009. [Selected Miticides](#) for Use on Ornamental Plants. UF/IFAS, University of Florida, Gainesville

Cranshaw Whitney. 2004. Garden Insects of North America: The Ultimate Guide to Backyard Bugs. Princeton University Press, New Jersey

Useful Links

[Chili Thrips Fact Sheet](#) A Landscaper's Guide

[Croton Scale Power Point](#)

[Erythrina Gall Wasp Power Point](#)

[Ficus Whitefly Fact Sheet](#)

[Hibiscus Insect Problems Power Point](#)

[Recent Insect Pests of South Florida \(2012\) Power Point](#)

[Spiraling Whitefly Power Point](#)

[Ficus Whitefly YouTube](#)

[Thorn Bugs on Wild Tamarind YouTube](#)

[Whiteflies and Sooty Mold YouTube](#)

['Shady Lady' Black Olive Fact Sheet](#)

[More on Mexican Petunia](#)

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<http://lee.ifas.ufl.edu/hort/GardenHome.shtml>

All pictures taken by Stephen H. Brown except where indicated