

PEST ALERT

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Florida Department of Agriculture and Consumer Services
Division of Plant Industry

***Thysanofiorinia leei* (Diaspididae: Cocomorpha: Hemiptera), lychee leei scale, a new U.S. continental record in Florida and potential pest of Florida lychee**

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INTRODUCTION

Recently, samples of *Thysanofiorinia leei* Williams were submitted by Shannan Webb (FDACS-DPI) on February 28 and April 16, 2019 from Broward County. These samples represent a new U.S. continental record for *T. leei*. Subsequently, positive samples were collected in Broward, Charlotte, Collier and Lee counties. It is unknown if *T. leei* will become a pest of significance for lychee trees in Florida.

HOST PLANTS

Thysanofiorinia leei is reported from two hosts, namely *Litchi chinensis* Sonn. and *Nephelium* sp. (Sapindaceae) (García et al. 2016) but has only been detected on lychee in Florida.

IDENTIFICATION

Species in the genus *Thysanofiorinia* are pupillarial where adult female resides in the shed skin of the second instar. Therefore, only the first- and second-instar shed skins are present in fully mature females. The scale is subcircular to oval, pale yellow brown to green with the prominent exuviae of the first instar of the same color and lying at the anterior end (Fig 1).

DAMAGE

Symptoms of armored scale infestations include leaf chlorosis, leaf abscission, stem and limb dieback (Fig 1).

MANAGEMENT

Generally, the most effective control of armored scales is with biological control agents such as predatory beetles and parasitoid wasps. Chemical control and use of horticultural oils can be effective but is best implemented when armored scales are crawlers or first instar nymphs. Second instars, eggs and adults are usually resistant to insecticide applications (Crane et al. 2005).

REFERENCES

- Crane, J.H., Balerdi, C.F., and Maguire, I. (2005). Lychee Growing in the Florida Home Landscape. EDIS Publication HS6, http://edis.ifas.ufl.edu/document_mg051. Horticultural Sciences Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida.
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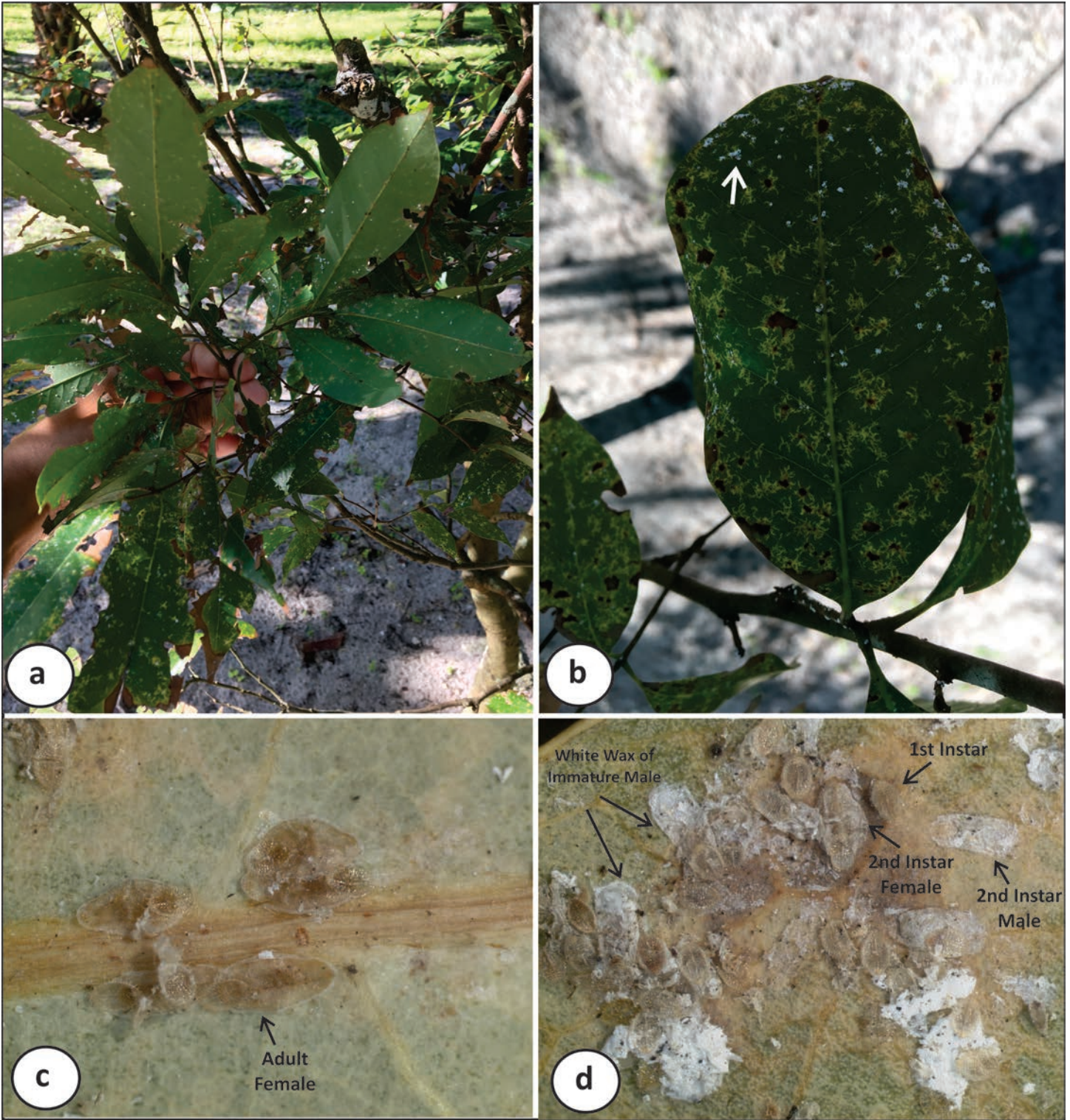


Fig-1. (1a) Infestation of lychee leei scale, *Thysanoflorinia leei* on lychee tree (E2019-1545 and E2019-1961). **(1b)** Close-up of leaf showing white wax. **(1c)** Close-up of adult female along the mid rib of leaf. **(1d)** Infestation containing different life stages of lychee leei scale. Slide-mounted view of pygidium of adult female. Photo by of Shannan Webb and Muhammad Z. 'Zee' Ahmed, FDACS-DPI.