

PEST ALERT

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Florida Department of Agriculture and Consumer Services Division of Plant Industry

Pseudaulacaspis rubra (Maskell), an armored scale insect detected in South Florida

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INTRODUCTION

On January 15, 2025, FDACS-DPI inspector Stephanie Paz collected armored scale insects on mature mango trees (*Mangifera indica* L.) (Anacardiaceae) in a suburban Miami neighborhood. These specimens were identified as *Pseudaulacaspis rubra* (Maskell) (Hemiptera: Diaspididae), a **new western hemisphere record**. *Pseudaulacaspis rubra* is a species of armored scale insect of Asian origin, previously recorded only from India and Sri Lanka (Ali, 1970; García Morales et al., 2016). This insect had not been intercepted previously by FDACS-DPI and this is the first collection from the Florida landscape in our records (01152025-00305). Additional material was collected on April 22, 2025 (04222025-03631).

HOST PLANTS AND BIOLOGY

Thus far, this scale has only been recorded from mango in Florida. In its native range, it has also been reported on nutmeg (*Myristica fragrans* Houtt.) (Myristicaceae) (Green 1922), and showy mistletoes (*Loranthus* Jacq., nom. cons. (Green 1908); *Helixanthera intermedia* (Wight) Danser (Sankaran 1984)) (Loranthaceae). This pest settles to feed on the young stems of the host plant. Feeding damage may include twig dieback, reduced vigor, chlorosis, and even plant death in heavy infestations.

SURVEY AND IDENTIFICATION

The test, or scale cover, is thick and white, with brown exuviae incorporated in the test of the second-instar female and the adult female (Fig. 1). The test may be masked by a thin layer of the host plant epidermis, making it less conspicuous (Fig. 1a). This is a large armored scale insect with the test measuring 2.0 mm in diameter (Green 1908). The adult female body inside the test is legless, round and white to yellow in color, with the pygidium (abdomen) reddish brown, and measures 0.75–0.85 mm long (Fig. 1, 2).

It was found in mixed infestation with a common armored scale on mangos, the mango white scale (*Aulacaspis tubercularis* Newstead) (Hemiptera: Diaspididae). It may be confused with this species on mango, but *A. tubercularis* is more likely to be on the leaves of the host plant than the stems. *Aulacaspis tubercularis* also tends to have a thin, transparent white cover while the cover of *P. rubra* is thick and opaque. The female body shape is also markedly different, with *P. rubra* having a broad oval-turbinate body and the body shape of *A. tubercularis* with a distinct rectangular parallel-sided head and thorax tapering to an elongate abdomen. Three other species of *Pseudaulacaspis* MacGillivray are present in the Florida landscape, two of which (*Pseudaulacaspis cockerelli* (Cooley) and *Pseudaulacaspis pentagona* (Targioni Tozzetti)) are recorded on mango as well (García Morales et al. 2016). The external morphology of these species is all very similar, and specimens should be slide-mounted to confirm identification (Fig. 2; see illustrations in Miller et al. 1991). Specimens can be sent to DPI's Entomology section for positive identification. Forms and instruction for sample submission can be found at www.FDACS.gov/DPIsamples.



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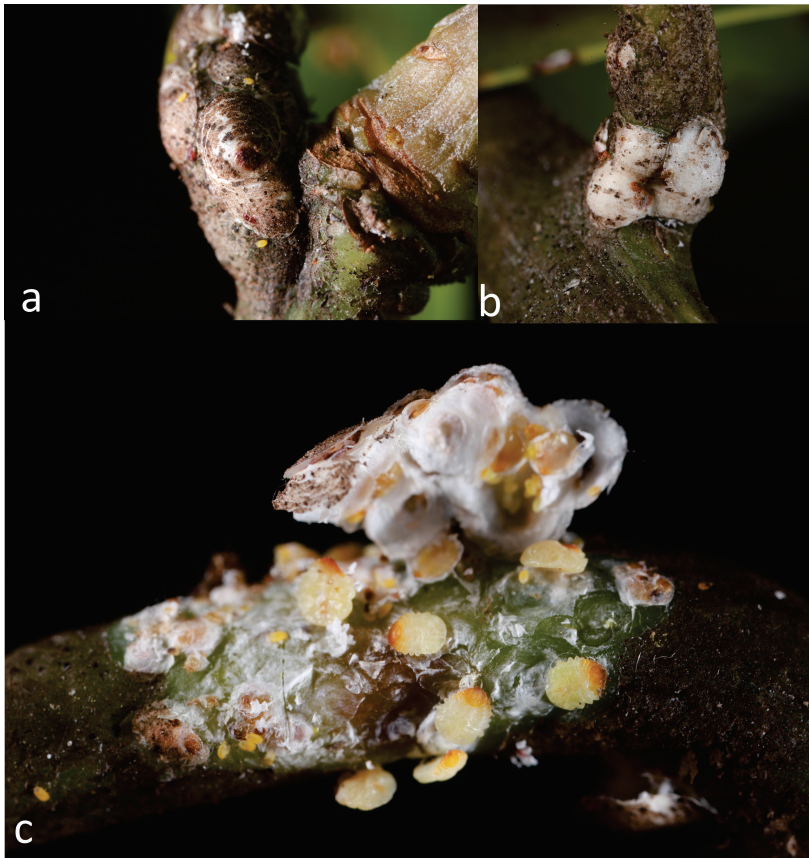


Figure 1. *Pseudaulacaspis rubra* (Maskell) on *Mangifera indica* from Miami, Florida. (a) Adult female tests or covers masked by the epidermis of the host plant. Small yellow crawlers (first-instar nymphs) are also visible. (b) Bright white tests of adult females. (c) The tests flipped over, exposing the adult female bodies. Crawlers are also present. Photos by Erin C. Powell, FDACS-DPI.



Figure 2. A slide-mounted adult female of *Pseudaulacaspis rubra* (Maskell). Photo by Erin C. Powell, FDACS-DPI.