

PEST ALERT

FDACS-P-02293

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Florida Department of Agriculture and Consumer Services Division of Plant Industry

Pseudaonidia curculiginis (Green) (Hemiptera: Coccomorpha: Diaspididae), an armored scale detected in South Florida

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INTRODUCTION

On April 16, 2026, an FDACS-DPI inspector collected scale insects from the leaves of field-grown king palm, *Archontophoenix alexandrae* (F.Muell.) H.Wendl. & Drude (Arecaceae), in Broward County, Florida (LIST 04162026-03228). The clump of king palms sampled is estimated to be around 15 to 20 years old and is of unknown origin per the property owner. Slide-mounted specimens were identified as the Southeast Asian species *Pseudaonidia curculiginis* (Green) (Hemiptera: Coccomorpha: Diaspididae), a **new Western Hemisphere record**. Originally described from Indonesia (Green, 1904), this species of armored scale insect has also been reported in Malaysia, Mongolia, the Philippines, Singapore, Thailand, Vanuatu and Vietnam (reviewed in García Morales et al., 2016). Williams and Miller (2007) mention a slide from the USNM from Puerto Rico on *Cocos nucifera* L. collected in 1997, but they were uncertain that the data were correct and did not assert that this species was present in the Western Hemisphere without further evidence. *Pseudaonidia curculiginis* has never been intercepted by FDACS-DPI to our knowledge, nor are there slides of this species in the Florida State Collection of Arthropods. This species is polyphagous, recorded to feed on six plant families including Arecaceae, Hypoxidaceae, Magnoliaceae, Marantaceae, Orchidaceae and Rubiaceae (reviewed in García Morales et al., 2016). Palms, calatheas, gardenias, magnolias, orchids and more may be suitable hosts in Florida.

SURVEY AND IDENTIFICATION

The adult female scale cover, or test, is convex, circular and dark brown to black in color with a brown margin (Fig. 1). Lighter brown exuviae of the first and second immature instars are centrally incorporated into the cover, as in other members of the family Diaspididae (Fig. 1). Host plant epidermis may make the test appear lighter in color (Fig. 1). The adult female body of *P. curculiginis* is mauve brown in color and turbinate in shape with the pygidium (abdomen) tapering to a rectangular apex (Fig. 3). This species was found on the leaves of the host, often near the midvein or margin of the leaf on both the abaxial (Fig. 1a, b) and adaxial surfaces (Fig. 1c), on the rachis (Fig. 2a) and heavily infesting the petiole (Fig. 2b). Most scale insect species cannot be identified to the species level without slide-mounted specimens (Fig. 3). Two other species of *Pseudaonidia* Cockerell occur in Florida: *P. duplex* (Cockerell) and *P. trilobitiformis* (Green). These are also polyphagous species found on many plant hosts (reviewed in García Morales et al., 2016). In life, both species have a brown test and are lighter in comparison to *P. curculiginis* (see color photographs in Miller and Davidson (2005)). Once slide mounted, *P. duplex* and *P. trilobitiformis* are readily differentiated by their distinctly reticulated dorsomedial pygidium; this reticulation is absent in *P. curculiginis* (Fig. 3). Other armored scale genera occurring in Florida with dark circular tests that may be confused with *P. curculiginis* in the field include, but are not limited to: *Acutaspis* Ferris, *Chrysomphalus* Ashmead, *Furcaspis* (Cockerell), *Melanaspis* (Cockerell) and *Mycetaspis* (Comstock). The palm on which *P. curculiginis* was found was also heavily infested with *Fiorinia phantasma* Cockerell & Robinson, a major pest of palms and other hosts first detected in Florida in 2018 (Ahmed and Miller, 2018). Adult females of this species are easily distinguished by their elongate light brown test (Fig. 2b).



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NATURAL ENEMIES

There are no known natural enemies recorded for *P. curculiginis* but the two congeners in Florida (*P. duplex* and *P. trilobitiformis*) are attacked by a suite of chalcidoid parasitoid wasps throughout their cosmopolitan ranges (UCD Community, 2023).

REFERENCES

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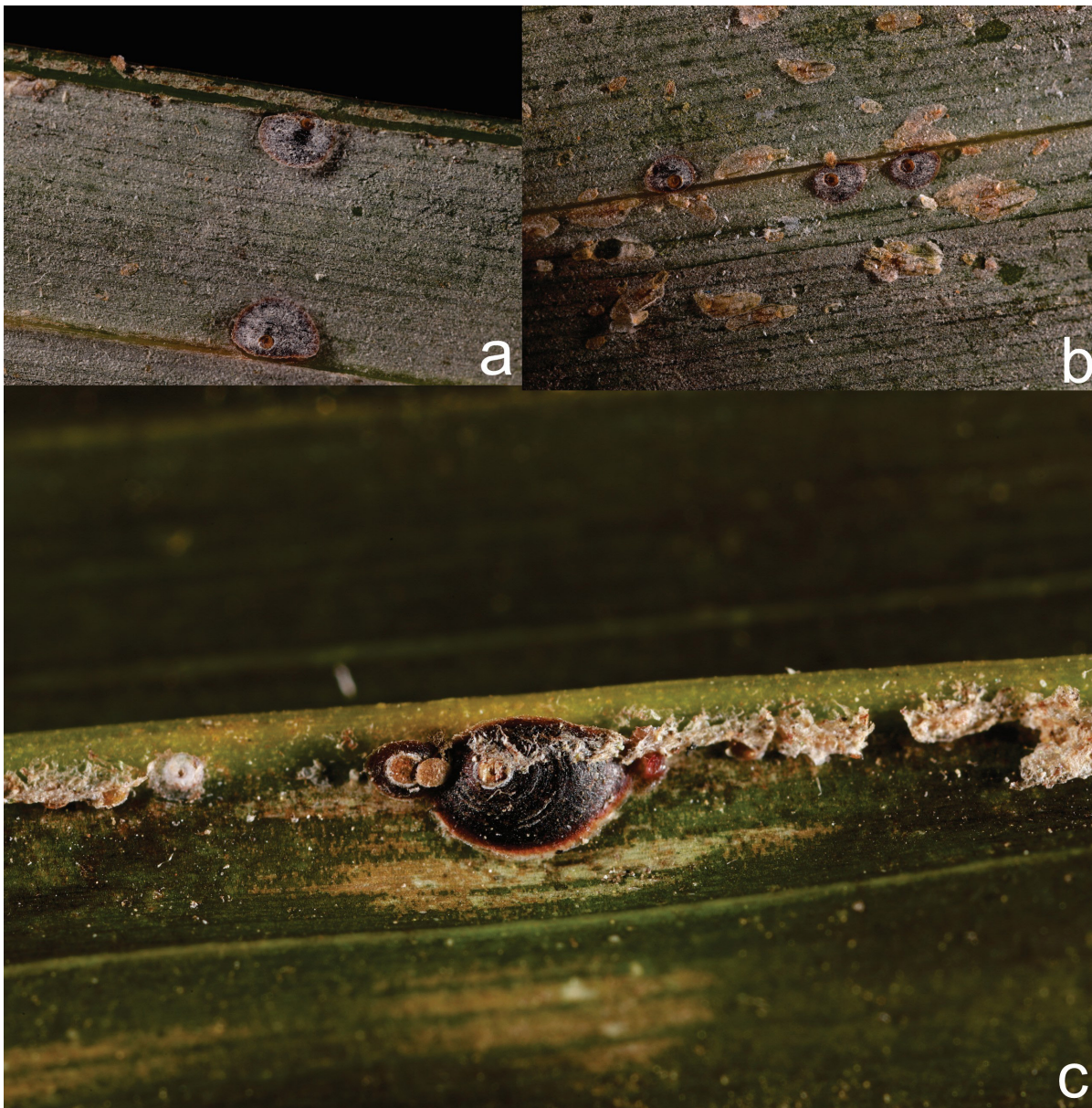


Figure 1. *Pseudaonidia curculiginis* (Green) on king palm, *Archontophoenix alexandrae* (F.Muell.) H.Wendl. & Drude, in Broward County, Florida. (a) Two adult females on the abaxial surface of the leaflet, (b) *Pseudaonidia curculiginis* in a mixed infestation with a second species of armored scale insect, *Fiorinia phantasma* Cockerell & Robinson, and (c) an adult female (right) and nymph (left) on the midvein of the adaxial surface of the leaflet. Photos by Erin C. Powell, FDACS-DPI.



Figure 2. *Pseudaonidia curculiginis* (Green) on king palm, *Archontophoenix alexandrae* (F.Muell.) H.Wendl. & Drude, in Broward County, Florida. Heavily infesting (a) the rachis of the host and (b) the petioles at the base of the host palms.
Photos by Justin Harvey, FDACS-DPI.



Figure 3. Slide-mounted adult female *Pseudaonidia curculiginis* (Green) from king palm, *Archontophoenix alexandrae* (F.Muell.) H.Wendl. & Drude, in Broward County, Florida.
Photo by Erin C. Powell, FDACS-DPI.