



## PHALACROCOCCUS HOWERTONI, A NEW GENUS AND SPECIES OF SOFT SCALE (HEMIPTERA: COCCIDAE) FROM FLORIDA

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### ABSTRACT

A new soft scale genus *Phalacrocooccus* Hodges & Hodgson **gen. nov.** and a new species *Phalacrocooccus howertoni* Hodges & Hodgson **sp. nov.**, is described from Florida, United States. The adult female and adult male, male and female second-instars, first-instars, and pupa are described and illustrated. Host records, biology, and distribution information are provided.

Key Words: Soft scales, *Phalacrocooccus howertoni*

### RESUMEN

Se describe un nuevo género de escama blanda, *Phalacrocooccus* Hodges & Hodgson **gen. nov.** y una nueva especie, *Phalacrocooccus howertoni* Hodges & Hodgson **sp. nov.**, de la Florida, Estados Unidos. Se describen e ilustran los adultos hembra y macho, los segundos estadios de la ninfa de la hembra y el macho, el primer estadio y la pupa. Se provee un registro de las plantas hospederas, la biología e información sobre la distribución.

The Coccidae (soft scales) are the third largest family of scale insects (Hemiptera: Sternorrhyncha: Coccoidea) with approximately 1200 described species (Ben-Dov 1993). There are approximately 106 species (representing 29 genera) of soft scales known from the United States (Miller et al. 2007) and 43 species have been found in Florida (representing 18 genera) (Ben Dov et al. 2009; SCALENET Region Query).

Soft scale insects can be serious pests, especially when they are invasive species. Miller & Miller (2003) noted that there were 42 introduced soft scale species in the United States of which 41 were considered to be pests. Records maintained in the entomology section of the Florida Department of Agriculture & Consumer Services, Division of Plant Industry (FDACS-DPI) indicate that there have been approximately 255 invasive arthropod species introduced into Florida over the last 20 years. Of those introductions, only 1 soft

be established in the natural environment counties, where it has been recorded from plant host species in 34 families (Table 1).

### MATERIALS AND METHODS

#### Sample Collections And Specimen Preparation

Field specimens were obtained from collections made by FDACS-DPI plant inspectors and University of Florida extension personnel. Live specimens were collected from natural areas and nursery settings. Specimens were cleared in potassium hydroxide (KOH), stained in Muzie's stain (equal portions of acid fuchsin, eosin, and lignin pink in aqueous solution), and dehydrated in a series of ethyl alcohol baths and oil, and mounted in Canada Balsam. Descriptions for each of the life stages are based on mounted specimens. Illustrations follow the