

An Orchid Mealybug, *Pseudococcus dendrobiorum* Williams (Hemiptera: Pseudococcidae)

INTRODUCTION: University of Florida Insect Diagnostician Lyle Buss submitted this NEW HEMISPHERE and NEW CONTINENTAL US RECORD on April 2, 2009 to the Division of Plant Industry. The initial collection of this specimen was made by a University of Florida researcher on March 27, 2009 on a *Phalaenopsis* orchid (*Phalaenopsis* species) (Fig. 1).

DESCRIPTION: Adults and immatures of this mealybug are grayish-pink in color. Wax filaments are present around the entire body, with the two or three pairs of filaments at the tip of the abdomen being slightly longer than the rest (Figs. 2-3). A patch of white waxy secretion is often present on the roots surrounding the mealybug (Figs. 1-3).

HOSTS: restricted to the following members of the Orchidaceae: *Ascoglossum* sp., *Cymbidium* sp., *Dendrobium* sp., *Phalaenopsis* sp., *Pholidota* sp. and *Promatocalpum* species.

SIMILAR MEALYBUGS: There are several mealybugs that are reported as occurring on orchids, and in Florida the most commonly encountered mealybugs on orchids are: pineapple mealybug (*Dysmicoccus brevipes*), longtailed mealybug (*Pseudococcus longispinus*), Jack Beardsley mealybug (*Pseudococcus jackbeardsleyi*), orchid mealybug (*Pseudococcus microcirculus*) and the obscure mealybug (*Pseudococcus viburni*). Live specimens of *Pseudococcus dendrobiorum* most closely resemble the pineapple mealybug in appearance. The presence of a faint dark stripe on the dorsum of the mealybug along with the lack of “long” wax filaments on the tip of the abdomen are common both in *D. brevipes* and *P. dendrobiorum*.



FIGURE 1. *Phalaenopsis* orchid with mealybug (*Pseudococcus dendrobiorum*) infestation on roots.



FIGURE 2. Adult female of *Pseudococcus dendrobiorum*.



FIGURE 3. Adult females of *Pseudococcus dendrobiorum*. Note thick wax filaments arising from tip of abdomen.

BIOLOGY: Very little is known about the biology of this mealybug species. This mealybug is native to warm climates and would likely have multiple generations throughout a given year. According to our initial observations, this mealybug lives on the roots of orchids.

ECONOMIC IMPORTANCE: Predicting the economic significance of this mealybug is difficult due to the lack of information on the economic impact of this mealybug. Like many mealybugs, heavy infestations could cause dieback or death of host plants.

DISTRIBUTION: Australasian: Australia, Hawaiian Islands and Papua New Guinea. Oriental: India, Indonesia, Malaysia, Philippines, Sri Lanka and Thailand. Palaeartic: South Korea.