UF IFAS Extension
UNIVERSITY of FLORIDA

EENY553
doi.org/10.32473/EDIS-in991-2013

Mealybug *Vryburgia trionymoides* (DeLotto) (Insecta: Hemiptera: Pseudococcidae)[1]

Ian Stocks[2]

The Featured Creatures collection provides in-depth profiles of insects, nematodes, arachnids and other organisms relevant to Florida. These profiles are intended for the use of interested laypersons with some knowledge of biology as well as academic audiences.

Introduction

On several occasions in 2011, succulents (Crassulaceae) for sale at retail stores in Florida were found with infestations of the mealybug *Vryburgia trionymoides* DeLotto. A traceback revealed that the succulents originated in California, where this mealybug is known as an occasional greenhouse pest. *Vryburgia trionymoides* was first detected in Florida in 2002 at several discount retailers in Volusia, Lake, and Palm Beach counties, and was not detected again until 2005, again in Volusia County. After 2005, *Vryburgia trionymoides* was not seen again in Florida until 2011, when it was spotted in Nassau County.



Figure 1. Adult females of *Vryburgia trionymoides* on a succulent leaf. Credit: Lyle J. Buss, UF/IFAS Entomology and Nematology Department

Distribution

Described originally from Kenya, this species is presumed to be native to Africa. Outside of Africa, it has been intercepted in South Korea (Soo Jung Suh, personal communication, National Plant Quarantine Service, Republic of Korea), once in the US from Mexico (Greg Evans, personal communication, USDA-APHIS-PPQ), and is considered at least locally established in parts of southern California (Gillian Watson, personal communication).

Description

This mealybug is pinkish-purple, with a light coating of white wax over the body, and thick white filaments arising from the tip of the abdomen. The pinkish-purple body color may be obscured by the powdery wax coating. Other mealybug species likely to be encountered on Crassulaceae include *Planococcus citri* (Risso) (citrus mealybug), *Phenacoccus solani* Ferris (solanum mealybug), and several species of *Pseudococcus*. In general, identification requires slide-mounting to observe morphological characteristics.

Biology

Little is known about the biology of this species. It is most commonly collected on succulent plants in the family Crassulaceae. Occasionally, the similar species *Vryburgia brevicruris* (McKenzie), known from California, is found infesting succulents in Florida. Specimens intercepted or found in retail stores often were well-hidden in the axillary region near the stem, making detection more challenging.



Figure 2. Succulents from California at a Florida distribution center ready for shipment to retailers.
Credit: Ian Stocks, Florida Department of Agriculture and Consumer Services, Division of Plant Industry

Hosts

Asclepiadaceae—*Caralluma dummeri* (N. E. Br.) A.C. White and B. Sloane, *Huernia* sp. Aizoaceae—*Aeonium* spp., *Carpobrotus* spp.; *Lithops* spp. Crassulaceae—*Aeonium* spp., *Crassula* spp., *Dudleya* spp., *Echeveria* spp., *Graptopetalum* sp., x *Pachyveria*, *Sempervivum* spp. Asteraceae—*Senecio* spp. Liliaceae—*Aloe* sp., x *Amarcrinum* (Gillian Watson, personal communication, CDFA)

Economic Importance

There are no published reports of economic losses caused by this species. Gillian Watson (personal communication, CDFA) reports that even though an untreated infestation can kill a plant, it has not had an economic effect on succulent production in California.

Natural Enemies

There is no published report of natural enemies. The Universal Chalcidoidea Database contains records for four species of parasitoids associated with an unidentified *Vryburgia* species, and one species (*Anagyrus fusciventris* Girault) for the related mealybug *Vryburgia lounsburyi*, which is also known from California. *Anagyrus fusciventris* is recorded from Florida, and a second species, identified only as *Aphycus* sp., is listed from Florida.

Selected References

Anonymous. 1994. California plant pest and disease report. California Department of Food and Agriculture. (February 2019.)

DeLotto G. 1961. New Pseudococcidae (Homoptera: Coccoidea) from Africa. Bulletin of the British Museum (Natural History) Entomology 10: 211–238.

Laflin H, Gullan PJ, Parrella MP. 2004. Mealybug species (Hemiptera: Pseudococcidae) found on ornamental crops in California nursery production. Proceedings of the Entomological Society of Washington 106: 475–477.

[1] This document is EENY553 (originally published as DPI Entomology Circular 424), one of a series of the Department of Entomology and Nematology, UF/IFAS Extension. Original publication date April 2013. Revised June 2016, July 2022, and December 2025. Visit the EDIS website at https://edis.ifas.ufl.edu for the currently supported version of this publication.

[2] Ian Stocks, taxonomic entomologist, Florida Department of Agriculture and Consumer Services, Division of Plant Industry, and affiliate faculty, UF/IFAS Department of Entomology and Nematology; UF/IFAS Extension, Gainesville, FL 32611.

The Institute of Food and Agricultural Sciences (IFAS) is an Equal Opportunity Institution authorized to provide research, educational information, and other services only to individuals and institutions that operate in compliance with applicable federal and state non-discrimination laws and policies. For more information on obtaining other UF/IFAS Extension publications, contact your county's UF/IFAS Extension office. U.S. Department of Agriculture, UF/IFAS Extension Service, University of Florida, IFAS, Florida A&M University Cooperative Extension Program, and Boards of County Commissioners Cooperating. Andra Johnson, Dean for UF/IFAS Extension.