

PEST ALERT

FDACS-P-02116

Pest Alert created June 2019

Florida Department of Agriculture and Consumer Services Division of Plant Industry

***Nipaecoccus viridis* (Newstead), lebbeck mealybug, (Coccoidea: Pseudococcidae), updated pest alert**

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INTRODUCTION

The first report of lebbeck mealybug in Florida occurred in 2009 where Cooperative Agricultural Pest Survey (CAPS) Specialists Andrew Derksen (DPI) and Karolynne Griffiths (USDA) collected this New Western Hemisphere Record on November 13, 2009 from Palm Beach County on host plant dodder, *Cuscuta exaltata*. Since then there are 89 records of this species from over 40 host plant species in four counties in Florida (Broward, Martin, Miami Dade, Palm Beach) (FDACS-DPI database). On June 14, 2019, a citrus sample with lebbeck mealybug was collected by Lauren Diepenbrock (University of Florida) (E2019-3408-1) in Highlands County, Florida after noticing heavy infestation of white wax on branches and citrus fruits (Fig. 1). This find represents a new county record and is the first occurrence of lebbeck mealybug in commercial citrus.

DESCRIPTION

Approximately 4 mm long by 3 mm wide with body color black, purple to blue green with thick white or pale-yellow wax. Females produce an ovisac (Fig. 1) with a wax that is sticky when touched. In high densities (Fig. 1), waxy secretions may appear as a continuous layer of wax which will obscure individual mealybugs. Wax may turn yellow in older infestations.

Specimens do turn black in 70% alcohol. This might be a good, quick field diagnostic, but species confirmation will require slide mounting (Stocks and Hodges 2009).

HOST PLANTS AND GEOGRAPHICAL DISTRIBUTION

It has been reported from over 45 host plant families including several species of citrus from at least 63 countries all over the world. (García Morales et al., 2016).

ECONOMIC IMPORTANCE

This is an agricultural pest in many parts of the world on a variety of agricultural crops. In Florida, citrus, cotton, ornamentals and tropical plants would all be potential impacted crops. In citrus growing areas of Jordan, where this insect had been a pest prior to introduction of biological controls, it caused such extensive damage that groves were burned in an effort to eradicate it (Stocks 2013). Losses in citrus groves are mainly due to premature fruit drop. In South Africa, infested citrus acreage demonstrated losses of up to 50% of the crop (Cilliers and Bedford, 1978).



**Florida Department of Agriculture and Consumer Services
Nicole “Nikki” Fried, Commissioner**

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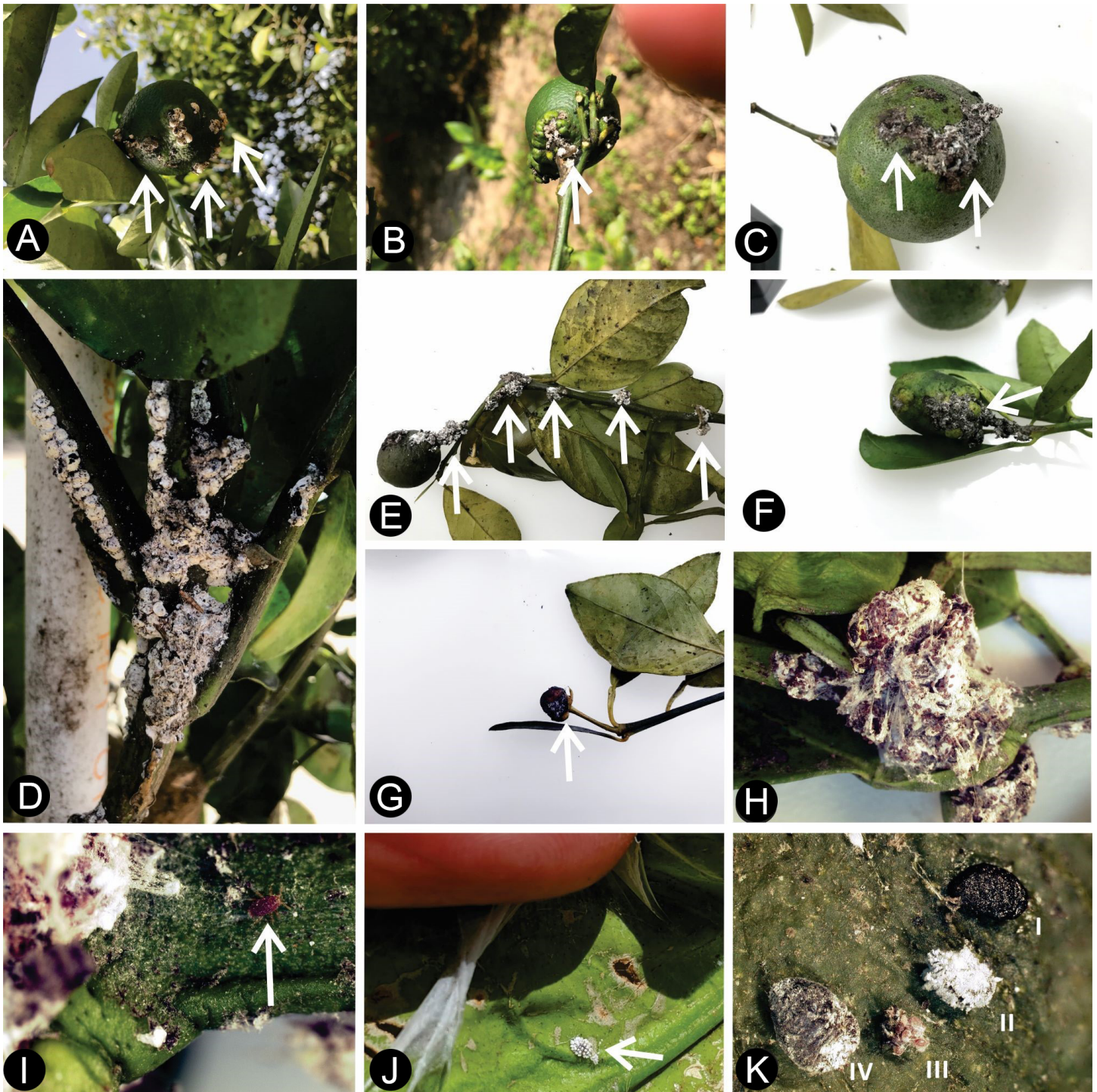


Fig-1. (A-G) Infestation of *Nipaecoccus viridis*, lebbeck mealybug and its field diagnostic characters. Infestation in field from sweet orange, *Citrus sinensis* on mature and premature fruits and branches; (H) Naked eye view of egg mass with white wax; (I) naked eye view of 1st instar; (J) naked eye view of 2nd instar; (Ki) naked eye view of female turned black in 70% alcohol, (Kii) young female with white wax, (Kiii) egg mass and (Kiv) gravid female without wax.

Photograph courtesy of Lauren M. Diepenbrock, University of Florida, Greg Hodges, Muhammad Z. 'Zee' Ahmed, FDACS-DPI.