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The Genus *Philephedra* Cockerell, in Florida

(HOMOPTERA: COCCOIDEA: COCCIDAE)[1]

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INTRODUCTION: The soft scale genus ***Philephedra*** was originally described as a subgenus of ***Pulvinaria*** by Cockerell (1898), with ***Pulvinaria ephedrae*** as the type species. Cockerell (19Ø2) later elevated the subgenus to generic level. Nakahara and Gill (1985) transferred 5 species from ***Lichtensia*** to ***Philephedra***, and described 2 new species of ***Philephedra*** from Florida. The genus ***Philephedra*** now contains 9 species known only from the New World (Nakahara and Gill, 1985). The new species from Florida described by Nakahara and Gill (1985) are ***Philephedra floridana*** and ***tuberculosa***.

DESCRIPTION: The genus ***Philephedra*** was placed in the tribe Pulvinariini by Nakahara and Gill (1985), which includes species that produce ovisacs. The adult female (Fig. 1) of ***floridana*** is found on leaves, and the ovisac is long and slender with the sides nearly parallel. Overall, the ovisac is about 3.5 times longer than wide and the female body is covered by white cottony wax (Nakahara and Gill, 1985). In comparison, ***tuberculosa*** (Fig. 2) is much larger than ***floridana***. The ovisac of ***tuberculosa*** is about 2 times longer than wide, but is about 2 times wider than the ovisac of ***floridana***. *P.* ***tuberculosa*** can be found on the leaves, stems, and fruits, but ***floridana*** is known only from leaves. *P.* ***tuberculosa*** females are yellow, yellowish green, yellowish brown, or dark brown (Nakahara and Gill 1985). Male nymphs of ***tuberculosa*** (Fig. 3) are yellowish brown, under glassy covers, and are found on the undersides of leaves where they are frequently surrounded by wax filaments which appear similar to fungal hyphae.

ECONOMIC IMPORTANCE: Soft scale insects damage plants by the removal of the plant sap and the excretion of honeydew, which serves as a medium for sooty mold fungi to grow in. The ***Philephedra*** scales appear to contribute more damage in the form of unsightly appearance of large white masses and sooty mold fungi than by the direct removal of plant sap. Only a small amount of damage has been observed from ***tuberculosa*** on ornamentals, and it is primarily a regulatory problem.

DISTRIBUTION: *P.* ***floridana*** is known from Ft. Pierce, Florida. *P.* ***tuberculosa*** is known from Florida and Texas; Colombia, Costa Rica, Guatemala, Mexico, Nicaragua, and Venezuela.

HOSTS: *P.* ***floridana*** is known only from ***Conocarpus erectus*** L. (buttonwood). However, ***tuberculosa*** has been reported on numerous hosts and can be considered a true polyphagous scale insect.

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CONTROL: The scales are easily controlled with malathion (personal communication, J. E. Pena). Additionally, there appear to be several predators and some parasitoids of ***tuberculosa*** in Florida.

LITERATURE CITED

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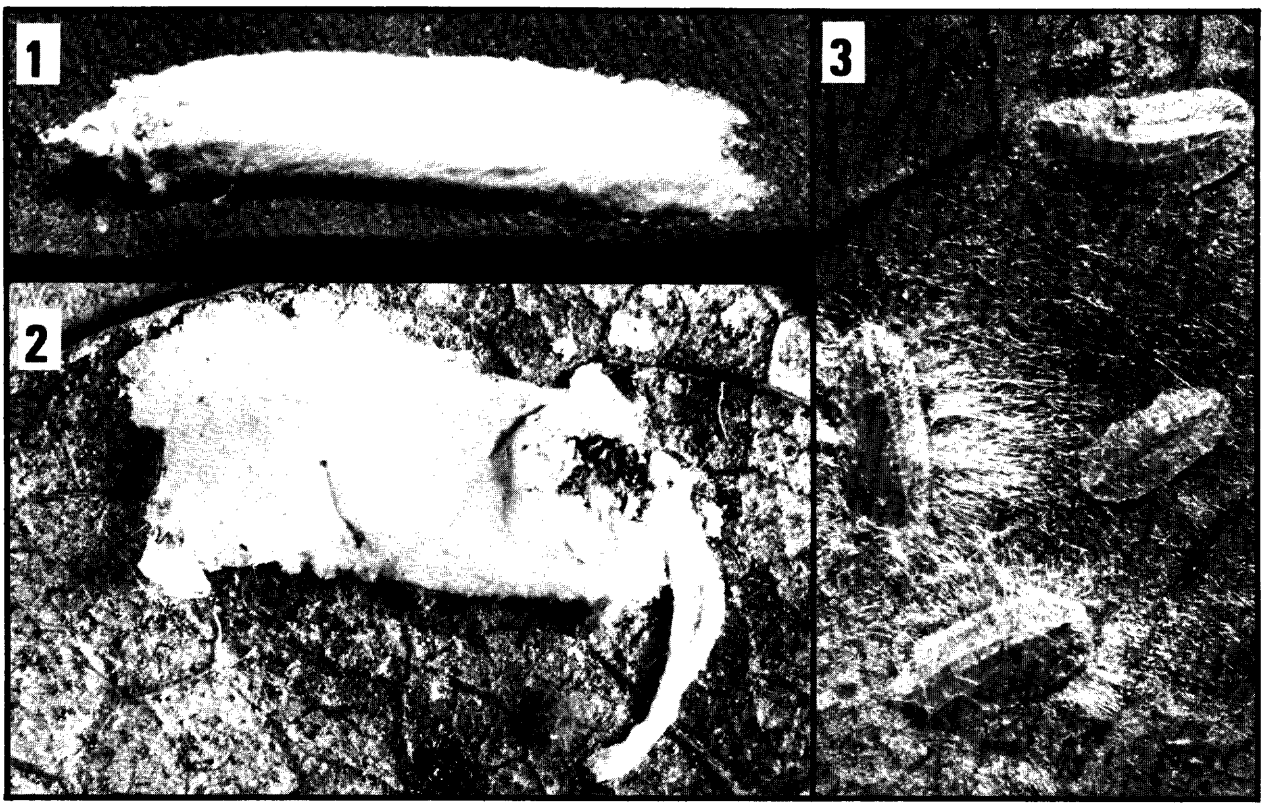

Fig. 1-3. ***Philephedra*** spp.: 1) ***P. floridana***, adult female; 2) ***P. tuberculosa***, adult female; 3) ***P. tuberculosa***, male nymphs under glassy covers. All from Nakahara and Gill, 1985.