



Dialeurodes pongamiae - A new species of whitefly (Hemiptera: Aleyrodidae) from India

R. Sundararaj* and **D. Vimala#**

Forest Protection Division, Institute of Wood Science and Technology, 18th Cross, Malleswaram, Bengaluru 560 003, India. Email: rsundariwst@gmail.com; #Southern Regional Centre, Zoological Survey of India, Chennai, Tamil Nadu. Email: vimala2904@gmail.com

ABSTRACT: A new whitefly species, *Dialeurodes pongamiae* breeding on *Pongamia pinnata* from Bengaluru (Karnataka: India) is described and illustrated.

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KEYWORDS: Aleyrodidae, *Dialeurodes*, *Pongamia pinnata*

During the course of a survey in 2012 a whitefly breeding on *Pongamia pinnata* in Bengaluru (Karnataka, India) was collected and found to be new to science. It is described with illustrations as a new species viz., *Dialeurodes pongamiae*.

Dialeurodes pongamiae sp. nov. (Figs. 1 - 4)

LSID urn:lsid:zoobank.org:act:F9D74306-32F8-4874-BBAB-E428EB32C8F7

Puparium: White, without wax secretion; elliptical, anterior region more narrowed than posterior region and oval, broadest at first abdominal segment region; 1.22 - 1.31 mm long and 1.01 - 1.12 mm wide; found singly and scattered one or two per leaf on the under surface of leaves.

Margin: Margin crenulate, 17 – 18 crenulations in 0.1 mm, thoracic and caudal tracheal pore regions indicated as invaginated clefts with chitinized rim having internal teeth. Anterior and posterior marginal setae each 7 µm long.

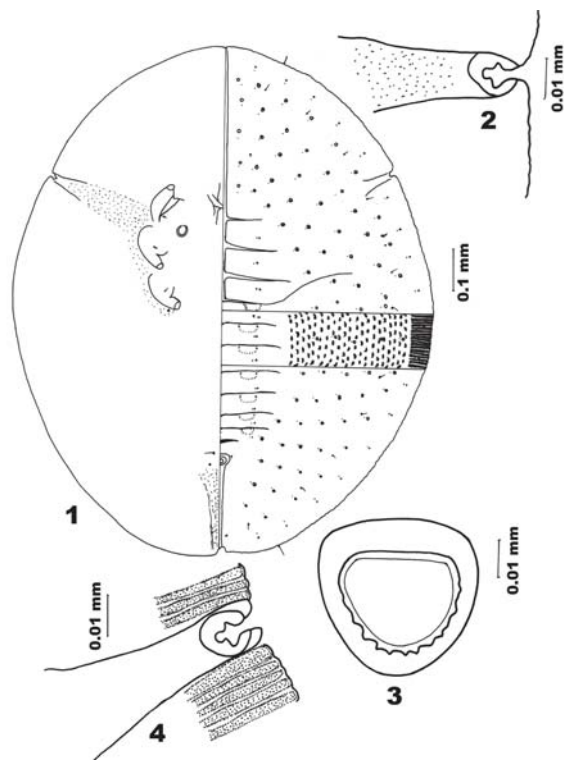
Dorsum: Submargin with tubular ridges having granules; subdorsum with semi-circular shaped

microtubercles, arranged in rows; submedian area smooth. Abdominal and thoracic segment sutures distinct extending up to inner sub dorsal area. Submedian pockets present in abdominal segment sutures I – VII. Longitudinal moulting suture reaching margin and transverse moulting suture bends upwards on submedian area and reaching outer subdorsum. Five rows of germinate pores on sub dorsum, a row each of pores and porettes on submargin and submedian area. Thoracic tracheal furrows indicated. Caudal tracheal furrow funnel shaped 208 µm long, 20 µm wide at its widest end.

Chaetotaxy: Four pairs of minute pointed setae-cephalic, first abdominal, eighth abdominal setae cephalolaterad of vasiform orifice and submarginal caudal setae posterior-laterad of caudal furrow each 2µm long. Subdorsum with a row of 12 pairs of minute pointed setae, each 5 µm long..

Vasiform orifice: Subcircular, as long as wide, (39 - 41 µm), lateral and posterior wall of orifice, with a

* Author for correspondence



Figs. 1 - 4. Line diagram, *Dialeurodespongamiae* sp. nov.
1. Puparium, 2. Thoracic tracheal fold with stipples,
3. Vasiiform orifice, 4. Margin at thoracic tracheal pore region

comb of inner teeth; operculum subcordate, wider than long broader at the anterior and narrows posteriorly, 21 - 25 μm long, 24 - 28 μm wide, filling entirely the orifice and obscuring lingula.

Venter: Paired ventral abdominal setae 12 μm long, 52 μm apart. First and eighth abdominal spiracles visible. Thoracic and caudal tracheal folds distinct with stipples, stipples at the thoracic fold extending upto the end of metathoracic legs. Antennae reaching base of prothoracic legs. Base of pro, meso and metathoracic legs each with a pair of minute setae, 3 μm long. Adhesive sacs visible.

Material examined: Holotype - India: Karnataka: Bangalore, one puparium, mounted on slide, on

Pongamia pinnata, 10.i.2012, R. Sundararaj, will be deposited in the collection of National Bureau of Agricultural Insect Resources (NBAIR), Bangalore, India. Paratypes: 11 mounted puparia, data same as holotype, deposited one each in the collections of National Forest Insect Collection, Forest Entomology Division, Forest Research Institute, Dehradun (NFIC# 22063); Zoological Survey of India, Kolkata (5644/H15) and the remaining in the collection of Institute of Wood Science and Technology, Bangalore.

Host: *Pongamia pinnata*.

Distribution: India: Karnataka.

Etymology: Named after its host plant genus

Comments: This species resembles *D. loganiacei* Pushpa & Sundararaj in the presence of dense microtubercles and row of minute setae on subdorsum. It also resembles *D. sepangensis* Corbett in shape, thoracic and caudal tracheal pore regions with internal teeth, a row of minute setae and anterior curving of transverse moulting suture but differs from it in colour, crenulate margin, operculum entirely filling the orifice, lingula concealed and by the presence of semi-circular shaped microtubercles on subdorsum.

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REFERENCE

Pushpa R. and Sundararaj R. (2011) Description of two new aleyrodids of the genus *Dialeurodes* Cockerell (Aleyrodidae: Hemiptera) from India. *Entomon* 36 (1-4): 71-76.