



New record of *Aleuroclava citrifolii* (Corbett) (Hemiptera: Aleyrodidae) from India

D. Vimala, R. Sundararaj* and S. Prabakaran¹

Southern Regional Centre, Zoological Survey of India, Chennai, Tamil Nadu;

¹Forest and Wood Protection Division, Institute of Wood Science & Technology,
Bangaluru 560 003, India. Email: rsundariwst@gmail.com

ABSTRACT: The whitefly *Aleuroclava citrifolii* (Corbett) has been reported for the first time from India on *Memecylon umbellatum* and *Exocoecaria agallocha*.

© 2017 Association for Advancement of Entomology

KEY WORDS: *Aleuroclava citrifolii*, *Memecylon umbellatum*, *Exocoecaria agallocha*

The Indian whitefly fauna comprises 444 species under 64 genera. Among the whitefly genera of India the genus *Aleuroclava* Singh is represented by 68 species (Revathi and Sundararaj, 2016). During the survey a species of *Aleuroclava*, *A. citrifolii* (Corbett) was found breeding on *Memecylon umbellatum* and *Exocoecaria agallocha* and it has been redescribed with illustrations. This species so far known from Pakistan is reported for the first time from India.

Aleuroclava citrifolii (Corbett) (Fig.1 – 5)

Aleurolobus citrifolii Corbett 1935, *Stylops*, 4: 8-10.

Aleurotuberculatus citrifolii (Corbett) Mound and Halsey, 1978: 81.

Aleuroclava citrifolii (Corbett) Martin, 1999: 32.

Puparium: Black, without any wax secretion; elliptical, broadest at metathoracic segment region, tapering at anterior and caudal end, 0.56 - 0.70 mm long, 0.40 - 0.54 mm wide; found singly on under surfaces of leaves.

Margin: Smooth, thoracic tracheal pores indicated by invaginated clefts while caudal tracheal pore

distinct. Anterior and posterior marginal setae invisible.

Dorsum: Entire dorsum densely and finely granulated; submargin distinctly separated from dorsal disc by a prominent ventral fold, dense granules forming papillae-like structures (about 34 pairs); abdominal and cephalic segments without median tubercles; prothorax with a pair of small submedian tubercle with trilobed structure. Thoracic and abdominal segment sutures distinct, extending beyond submedian area; dense granules along all segment sutures and form faint rhachis. Longitudinal moulting suture reaching margin and transverse moulting suture reaching submargin. Thoracic tracheal furrows indicated, caudal tracheal furrow funnel shaped, with irregular structures, 63 μ m long, 22 μ m wide at its broadest end. Pores and porettes discernible.

Chaetotaxy: Four pairs of pointed setae- cephalic setae 4 μ m long, first abdominal setae 9 μ m long, eighth abdominal setae 9 μ m long and submarginal caudal setae 25 μ m.

Vasiform orifice: Subcordate wider than long, 40-42 μ m long and 45-47 μ m wide; with granules at

* Author for correspondence

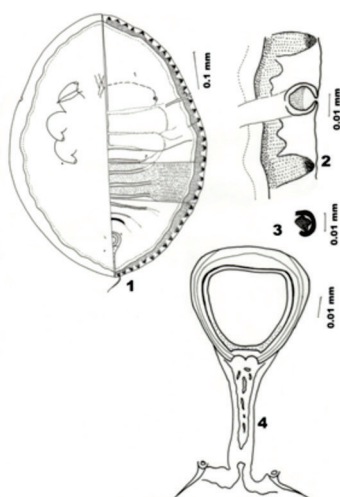


Fig.1-4-Line diagrams: *Aleuroclava citrifolii* (Corbett): 1. Puparium; 2. Margin at thoracic tracheal pore region; 3. submedian tubercle on prothorax; 4. Vasiform orifice

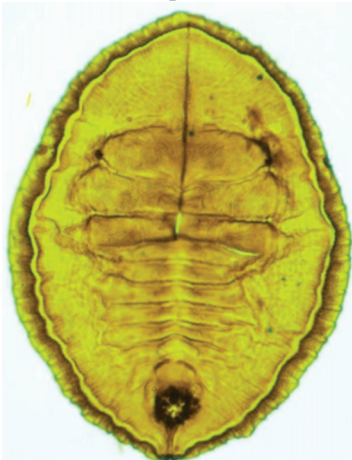


Fig.5: Mounted puparium of *Aleuroclava citrifolii* (Corbett)

the posterior-lateral region; operculum similarly shaped (30-32 μm long and 35 -36 μm wide), filling entirely the orifice and obscuring lingula.

Venter: A pair of ventral abdominal setae 4 μm long, 20 μm apart. Thoracic and caudal tracheal folds not discernible. Antennae reaching base of prothoracic legs. I and VIII abdominal spiracles visible.

Material examined: India: Odisha: Bitharkani National Park, seven puparia on *Exocoecaria agallocha*, 7.iii.2012, T. G. Revathi; Bitharkani

National Park, three puparia on *Memecylon umbellatum*, 7.iii.2012, T.G. Revathi.

Hosts: *Citrus* sp. (**Rutaceae**) (Corbett, 1935), *Murraya exotica* (Rutaceae) (Hussain and Khan, 1945), *Morus alba* (Moraceae) and *Rosa indica* (Rosaceae) (Qureshi, 1982); *Memecylon umbellatum* (Melastomataceae) and *Exocoecaria agallocha* (Euphorbiaceae) (new host records).

Distribution: Pakistan: Faisalabad (Corbett, 1935); Jhelum Lahore, Multan, Muzaffargarh, Sialkot (Hussain and Khan, 1945); Peshawar (Qureshi, 1982); India: Odisha (new distribution record).

ACKNOWLEDGEMENTS

The authors are grateful to the Director and Group Co-ordinator (Research), Institute of Wood Science and Technology, Bangaluru for the facilities provided. Financial assistance provided by the Ministry of Environment, Forest and Climate Change, Govt. of India for conducting this research work is acknowledged.

REFERENCES

- Corbett G.H. (1935) Three new aleurodids (Hem.). *Stylops* 4: 8-10.
- Hussain M. A. and Khan A.W. (1945) The citrus Aleyrodidae (Homoptera) in Punjab and their control. *Memoirs of the Entomological Society of India* 1: 1-41.
- Martin J.H. (1999). The whitefly fauna of Australia (Sternorrhyncha: Aleyrodidae). A taxonomic account and identification guide. Technical Paper, Division of Entomology, Commonwealth Scientific and Industrial Research Organization, Canberra. 38: 197 pp.
- Mound L. A. and Halsey S.H. (1978) Whitefly of the World. A systematic catalog of the Aleyrodidae: (Homoptera) with host plant and natural enemy data. British Museum (Natural History)/John Wiley & Sons, Chichester. 340 pp.
- Qureshi J. I. (1982) *Aleurotuberculatus* (Homoptera: Aleyrodidae) of Pakistan. *Pakistan Journal of Zoology* 14(1): 45-57. 226.
- Revathi T.G. and Sundararaj R. (2016). New record of a genus and two species of whiteflies (Hemiptera: Aleyrodidae) from India. *Entomon.* 41(2): 121-124.