
SHORT COMMUNICATION

**The occurrence of *Dialeurodes citrifolii*
and *Aleurochiton pseudoplatani*
(Hemiptera: Aleyrodidae) in Lebanon –
important new records in the
Europe-Mediterranean Region**

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An account of the whitefly fauna of Europe and the countries bordering the Mediterranean Basin was published by Martin *et al.* (2000). Whilst the manuscript was in press, one sample of whiteflies from each of *Acer tauricolum* and *Citrus* sp. were received from Lebanon by the author. The *Acer* sample comprised *Aleurochiton pseudoplatani* Visnya, a notable record extending the known distribution of the genus *Aleurochiton* beyond continental Europe. The *Citrus* sample included *Aleurothrixus floccosus* (Maskell) and *Paraleyrodes minei* Iaccarino, both species already treated in the Martin *et al.* (2000) account. Also present were puparia of *Dialeurodes citrifolii* (Morgan) which is a new record for the whole Europe-Mediterranean area. The purpose of this note is to record the presence of these two species in the Middle East area, with information on *D. citrifolii* presented in a form that complements the main account given by Martin *et al.* (2000), enabling its recognition.

The key to whitefly species given by Martin *et al.* (2000) may be modified, as below, to include *D. citrifolii*; following this modification to the key is a short account of *D. citrifolii*, following the format of Martin *et al.* (2000).

48. Thoracic and caudal tracheal openings at margin in the form of indentations or pores, each occupied by several blunt teeth (figs 1–2); caudal furrow (dorsal) sculptured by rounded-polygonal markings (fig. 2) 48a
- Thoracic and caudal tracheal openings at margin in form of distinct pores which are smooth or very finely crenate internally; caudal furrow (dorsal) only faintly marked, not sculptured 49

- 48a Subdorsal pair of setae posterior to vasiform orifice (arrowed on fig. 2) usually each placed lateral to caudal furrow by at least width of vasiform orifice; first abdominal setae always absent. Almost invariably on *Citrus* spp. *Dialeurodes citrifolii*
- Subdorsal pair of setae posterior to vasiform orifice placed immediately adjacent to caudal furrow; often with cephalic, mesothoracic and first abdominal setae very long and hair-like, but sometimes these are minute. On *Viburnum tinus* and *Arbutus unedo* *Dialeurodes setiger*

***Dialeurodes citrifolii* (Morgan)**
(figs 1–2)

Aleyrodes citrifolii Morgan, 1893: 70–74.

Dialeurodes citrifolii (Morgan) Quaintance & Baker, 1914: 97.

Distribution. Europe and Mediterranean countries: Lebanon. Elsewhere in Palaearctic Region: Japan, Madeira; Oriental Region: China, Hong Kong, India, Vietnam; Pacific Region: Hawaii, Marianas, Western Samoa; Neotropical Region: Argentina, Brazil and widely distributed in the Caribbean, Central and northern South America; Nearctic Region: Bermuda, USA (California, Florida, Louisiana, Mississippi, North Carolina, Texas).

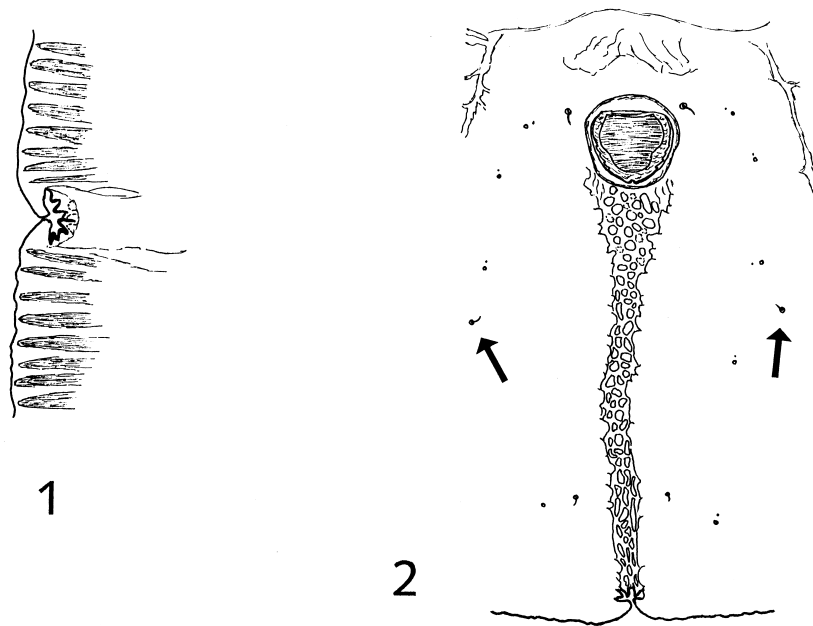
Host plants. *Dialeurodes citrifolii* is almost always associated with *Citrus*, but has also been recorded from hosts in the Moraceae and Rubiaceae (Mound & Halsey, 1978).

Comments. The quoted distribution given above is based upon the Natural History Museum collection, with published records from the following sources: China, India, Japan (Penny, 1922), Vietnam (Silvestri, 1927), Brazil (Peracchi, 1971), Hawaii (L. Nakahara, 1981), USA (Paulson & Kumashiro, 1985), Bermuda (S. Nakahara & Hilburn, 1989), Madeira (Aguiar, 1998). A record for Great Britain (Bowman & Bartlett, 1978) involved only transient populations in glasshouses in southern England.

Quaintance & Baker (1916) opined that *D. citrifolii* is of Oriental origin, on the basis of its affinities, but acknowledged that Woglum's collecting in India, Ceylon [Sri Lanka] and other Oriental locations had failed to yield any specimens. Jensen (1999) published the first cladistic

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Figs 1–2. *Dialeurodes citrifolii*, puparium. 1, Thoracic tracheal opening at margin; 2, postero-dorsal detail, with subdorsal pair of eighth abdominal setae arrowed.

analysis of whitefly puparia, using an assemblage of species included within *Dialeurodes* sensu lato. Jensen concluded that *D. citrifolii* did not fall within any of the groupings that his analysis had demonstrated, so its affinities are yet to be defined. Given this, and the fact that most material of *D. citrifolii* in the Natural History Museum whitefly collection (richest in Old World material) is from New World localities, the geographical origin of this species appears particularly uncertain.

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