



ZOOTAXA

3212



The Aleyrodidae (Hemiptera: Sternorrhyncha) of the Canary Islands with special reference to *Aleyrodes*, *Siphoninus*, and the challenges of puparial morphology in *Bemisia*

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Magnolia Press
Auckland, New Zealand

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(*Zootaxa* 3212)

76 pp.; 30 cm.

29 Feb. 2012

ISBN 978-1-86977-871-2 (paperback)

ISBN 978-1-86977-872-9 (Online edition)

FIRST PUBLISHED IN 2012 BY

Magnolia Press

P.O. Box 41-383

Auckland 1346

New Zealand

e-mail: zootaxa@mapress.com

<http://www.mapress.com/zootaxa/>

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ISSN 1175-5326 (Print edition)

ISSN 1175-5334 (Online edition)

Cover photo caption: Puparia of the spiralling whitefly, *Aleurodicus dispersus* Russell, with wax secretions in perfect condition, ex- Santa Cruz de Tenerife. Photographed alive by Harry Taylor, Photographic Unit, BMNH.

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Abstract

The whitefly fauna of the Canary Islands (Spain) comprises 21 named species distributed amongst 12 genera, including four species described here—*Aleyrodes bencomiae* Hernández-Suárez and Martín **sp. nov.**, *Aleyrodes laurisilvae* Hernández-Suárez and Martín **sp. nov.**, *Bemisia euphorbium* Hernández-Suárez and Malumphy **sp. nov.** and *Bemisia reyesi* Hernández-Suárez and Martín **sp. nov.** Nomenclatural changes comprise the four new species, one revalidated species (*Siphoninus finitimus* Silvestri **stat. rev.**), and two **revised synonymies** (*Siphoninus phillyreae multitubulatus* Goux becomes a junior synonym of *S. finitimus* Silvestri and is removed from synonymy with *S. phillyreae* (Haliday), and the genus *Bemisiella* Danzig becomes a junior synonym of *Asterobemisia* Trehan; both the latter genera are removed from synonymy with *Bemisia* Quaintance & Baker). Also, we have provided detailed discussions and illustrations of eight distinctive puparial forms of the *Bemisia afer* complex with scanning electron microphotographs (SEMs), line drawings and habitus photographs. In addition to the taxa described and discussed here, there are two **new records for the Canary Islands**, *Dialeurodes citri* (Ashmead) and *Paraleyrodes minei* Iaccarino. For each of the species already known and named prior to this study we include a brief account including its world distribution, its host-plant range in the Canary Islands, and further notes on host range beyond the Canaries. The general puparial morphology of each species is illustrated with a combination of line-drawings and habitus photographs. Three appendices are provided—a check list of Canarian whiteflies, a table of host plants of whiteflies in the Canary Islands, and lists of examined material for the whitefly species already known and named prior to our study.

Resumen

La fauna de moscas blancas de las Islas Canarias (España) está compuesta por 21 especies distribuidas en 12 géneros, incluyendo 4 especies que se describen en el presente trabajo—*Aleyrodes bencomiae* Hernández-Suárez and Martín **sp. nov.**, *Aleyrodes laurisilvae* Hernández-Suárez and Martín **sp. nov.**, *Bemisia euphorbium* Hernández-Suárez and Malumphy **sp. nov.** and *Bemisia reyesi* Hernández-Suárez and Martín **sp. nov.** Los cambios nomenclaturales comprenden las cuatro nuevas especies, la revalidación de una especie (*Siphoninus finitimus* Silvestri **stat. rev.**), y la revisión de dos sinonimias (*Siphoninus phillyreae multitubulatus* Goux pasa a ser sinónimo posterior de *S. finitimus* Silvestri y por tanto deja de ser sinonimia de *S. phillyreae* (Haliday) y el género *Bemisiella* Danzig pasa a ser sinónimo posterior de *Asterobemisia* Trehan dejando por tanto de ser sinonimia de *Bemisia* (Quaintance & Baker). Por otro lado se proporcionan discu-