

On the identity of an invasive leafhopper on Hawaii (Hemiptera, Cicadellidae, Nirvaninae)

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Abstract

The invasive Hawaiian nirvanine leafhopper (Hemiptera: Cicadellidae) is identified as *Sophonia orientalis* (Matsumura). Related taxa are discussed and the following nomenclatorial changes made: *Pseudonirvana furcilinea* Kuoh & Kuoh, 1983, a junior synonym of *Nirvana longitudinalis* Distant, 1908, **new synonymy**; *Quercinirvana* Ahmed & Mahmood, 1970, a junior synonym of *Sophonia* Walker, 1870, **synonymy revived**; *Quercinirvana longicephala* Ahmed & Mahmood, **status revived**.

Key words: Hemiptera, Cicadellidae, *Sophonia*, Hawaii

Introduction

In recent years an introduced species of the nirvanine leafhopper genus *Sophonia* has reached pest proportions on a wide range of plants in Hawaii and has also been introduced onto the Atlantic island of Madeira (North Africa), French Polynesia, and the USA (California) (see CABI Crop Protection Compendium, 2004). In recent economic literature (e.g., Garrison 1996, Duan & Messing 2000, Jones *et al.* 2000, and Yang *et al.* 2002), this species has been referred to as *S. rufofascia* Kuoh & Kuoh (1983), a species previously synonymised with *S. orientalis* (Matsumura, 1912). These nominal species were originally described from China and Taiwan respectively.

In order to confirm the identity of the above introduced species, material of *Sophonia* from the USA (Hawaii and California), China, Taiwan, and Madeira (BMNH and UASB) was examined. These specimens (Figs 1–11, USA and Madeira specimens) were found to