

***Crenidorsum aroidephagus* Martin & Aguiar sp. nov.**
(Sternorrhyncha: Aleyrodidae), a New World whitefly species now
colonising cultivated Araceae in Europe, Macaronesia and
The Pacific Region

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Abstract

Crenidorsum aroidephagus Martin & Aguiar **sp. nov.**, a New World native, is here described, colonising several members of the plant family Araceae in Central and South America, southern USA, the Pacific Region and Madeira. It is becoming a minor problem for growers of ornamental-foilage plants. It has recently been discovered in the glasshouse of a botanic garden in Germany. Two Asian species, *Aleurotrachelus micheliae* (Takahashi) and *A. turpiniae* (Takahashi) are here transferred to *Crenidorsum* (both **comb. nov.**).

Key words: whiteflies, *Crenidorsum*, new species, new combinations, Araceae, ornamental plants.

Introduction

Several requests for identification submitted to the United States Department of Agriculture (USDA) and The Natural History Museum, London (BMNH) have concerned an undescribed whitefly species which colonises various members of the plant family Araceae. The pale puparia, which do not secrete visible waxy material, are usually found scattered over the lower surfaces of the leaves, often being difficult to detect. Its presence in Hawaii, in 1978, was first reported by L. Nakahara (1981a), who also stated that it is known in Florida. Also in Hawaii, Paulson & Kumashiro (1985) briefly described the puparium, presented scanning electron microscope and habitus photographs, but still listed it only as *Crenidorsum* sp. A then-undescribed Araceae-feeding species of *Aleurotulus* was also similarly reported from Hawaii in 1978, by L. Nakahara (1981b), but this was

Depositories

BMNH - The Natural History Museum, London SW7 5 BD, UK

ICLAM - Insect Collection, Laboratório Agrícola da Madeira, 9135-260 Camacha, Madeira

USNM - United States Department of Agriculture, Beltsville, Maryland 20705, USA
(Sternorrhyncha collections of the United States National Museum of Natural History, Washington DC)

BBA - Federal Biological Research Centre for Agriculture and Forestry, D-14532 Kleinmachnow, Germany

APHIS - US Department of Agriculture (APHIS, PPQ), South San Francisco, California 94080, USA

***Crenidorsum aroidephagus* Martin & Aguiar sp. nov. (Figs 1-3)**

Crenidorsum sp. L. Nakahara, 1981a: 336; Paulson & Kumashiro, 1985: 110, 119.

PUPARIUM (Fig. 1). *Habitus*. Scattered under leaves, not in distinct feeding groups. Puparia do not secrete any visible dorsal or peripheral wax coating, being cryptic when feeding and silvery when the adults have emerged. Shortly before emergence, the eyes of the adult can be clearly seen through the puparial cuticle, along with the developing body structure (Paulson & Kumashiro 1985: 119, Fig. 3F).



FIGURE 1. Computer-montage image of slide-mounted puparium of *Crenidorsum aroidephagus* Martin & Aguiar **sp. nov.** ex-*Philodendron gloriosum*, Berlin Botanic Garden, with lingula unfolded and excluded from vasiform orifice.

of the puparium used in this paper. We are indebted to John Dooley (APHIS) for his kind donation of material in connection with this paper, and for sending electronic file images of quarantine interception samples. We would also like to record our thanks to Henriette Wilke (Berlin Botanic Gardens) and Barbara Jaeckel (Plant Protection Service, Berlin) for information on the habitus appearance of colonies, and for collecting study material from Berlin Botanic Gardens.

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