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**ASIANIDIA MELLIFERAE SP. N. (HOMOPTERA: AUCHENORRHYNCHA,
CICADELLIDAE), A NEW LEAFHOPPER FROM MADEIRA**

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With 1 Plate

ABSTRACT. *Asianidia melliferae* sp. n. has been found in Madeira associated with *Euphorbia mellifera*, a Macaronesian endemic plant of the laurel woods (laurissilva). This almost certainly monophagous species is closely related to both *Asianidia atlantica* (CHINA, 1938) and *A. chrysanthemii* (LINDBERG, 1954), from which it can be easily separated by the structure of the aedeagus.

RESUMO. O presente trabalho descreve uma nova cigarrinha para a Ciência e encontrada na Madeira - *Asianidia melliferae* n. sp. Esta nova espécie, próxima de *Asianidia atlantica* (CHINA, 1938) e de *A. chrysanthemii* (LINDBERG, 1954) e das quais se distingue facilmente pela estrutura do edeago, encontra-se associada a *Euphorbia mellifera*, uma planta macaronésica que na Madeira existe apenas nas zonas húmidas e sombrias das florestas de laurissilva.

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Leafhoppers within *Asianidia* Zachvatkin (*Erythroneura* Fitch or *Zygina* Fieber of the authors) offer a very interesting case of adaptive radiation in Macaronesia (Madeira and the Canaries). The genus, with 26 described species so far, has 22 endemics in Macaronesia, of which eight have been described from the Madeiras. This must be, however, just a fraction of the total number, since other species await description (REMANE, 1984; QUARTAU, 1996a, b).

Another remarkable aspect is that these leafhoppers have colonized a wide range of interesting plants, a large proportion of which are also endemic to Madeira or the Canaries.

The following is the description of a new species recently found on *Euphorbia mellifera* in Madeira - *Asianidia melliferae* sp. n.

Asianidia melliferae sp. n. (Figs. 1-2)

Uniformly opaque yellowish. Head, pronotum, scutellum and elytra pale yellowish. Abdomen and legs also yellowish, without markings. Length of male 3.13 - 4.13 mm; female 3.06 - 4.59 mm.

Male with the typical aedeagus of the *A. atlantica* (CHINA, 1938) group, which terminates in an enlarged lobe with two pairs of small extensions (Figs. 1-2).

Ecology. This is almost certainly a monophagous species only living on *Euphorbia mellifera*, a rare and characteristic plant of the Macaronesian laurel woods (laurisilva), growing in moist, shady places of sheltered ravines in Madeira.

Material examined.- Holotype ♂, Ribeiro Bonito, S. Jorge, 10.X.1993, J.A. QUARTAU. Paratypes, 14 ♂♂, 62 ♀♀, same data as holotype; idem, 20.III. 1995, 10 ♂♂, 19 ♀♀, J.A. QUARTAU. Holotype and one paratype female in Museu Municipal do Funchal (H.N.), remaining paratypes with the authors.

By the structure of the aedeagus the new species belongs undoubtedly to the *A. atlantica* group, which in Madeira besides *atlantica* also includes *A. chrysanthemii* (LINDBERG, 1954). The former *Asianidia* species lives on *Artemisia arborecens*, an endemic littoral plant, and the latter on *Argyranthemum* spp., namely *A. pinnatifidum* ssp. *pinnatifidum*, also an endemic of Madeira found on wet cliffs and ravines at medium and high altitudes. *A. melliferae* sp. n. can be easily distinguished from both *A. atlantica* and *A. chrysanthemii* by the much smaller basal extensions of the apical enlarged lobe of the aedeagus, which in the new species are much smaller (Cf. Figs. 1-2 and 3-4).

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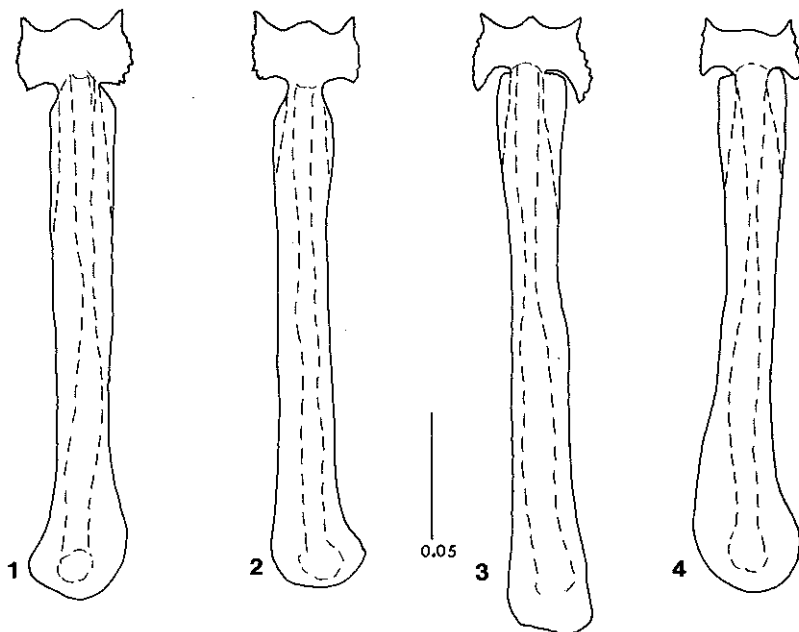


Plate 1 - 1. Aedeagus of the holotype of *A. melliferae* sp.n., posterior view. Ribeiro Bonito, S. Jorge, Madeira, 10.X.93, J. A. QUARTAU. 2. Aedeagus of a paratype of *A. melliferae* sp.n., same data as holotype. 3. Aedeagus of *A. chrysanthemii* (LINDBERG), posterior view. Queimadas, Madeira, 8.V.93, J. A. QUARTAU. 4. Aedeagus of the holotype of *A. atlantica* (CHINA), posterior view. Ilhéu Chão, Desertas, WOLLASTON, B. M. 1855-7. Scale in mm.