

## SHORT COMMUNICATION

## New data on the scale insects (Hemiptera, Coccoidea) of Tenerife, Canary Islands

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The Canary Islands is a volcanic archipelago located just off the northwest coast of mainland Africa, 100 km west of the border between Morocco and the Western Sahara. The archipelago consists of seven islands (from largest to smallest): Tenerife, Fuerteventura, Gran Canaria, Lanzarote, La Palma, La Gomera and El Hierro. The Canary Islands are legally an autonomous region of Spain, although geographically they are part of the African Continent.

The scale insect (Hemiptera: Coccoidea) species fauna currently known from the Canary Islands (Ben-Dov et al. 2012) include 103 species as follows: Asterolecaniidae (1); Coccidae (18), Dactylopiidae (1), Diaspididae (60), Eriococcidae (3), Monophlebidae (2), Ortheziidae (1) and Pseudococcidae (16 species).

This short communication presents new data on 16 species of scale insects, belonging to 5 families of the Coccoidea (Hemiptera) which were collected by the author on April 1995 in the course of a short visit to Tenerife Island. Three species, indicated below with an asterisk \*, are recorded here for the first time from the Canary Islands. Slide-mounted specimens of all the species recorded here are deposited in the Coccoidea Collection, Department of Entomology, Agricultural Research Organization, Bet Dagan, Israel. The collection number of each record is indicated in the Material Examined section.

## FAMILY COCCIDAE

***Ceroplastes rusci* (L.)**

The fig wax scale is a widely-distributed and highly polyphagous soft scale in the Palaearctic region, developing on host plants belonging to 46 plant families. It was recorded from the Canary Islands by Lindinger (1911).

Material examined: Tabaibe, *Ficus carica* (Moraceae), 7.iv.1995, C-5091

***Coccus hesperidum* L.**

The brown soft scale was apparently first recorded from the Canary Islands by Lindinger (1911).

Material examined: Chio, *Amygdalus communis* (Rosaceae), 5.iv.1995, C-5090; Santa Cruz, *Laurus canariensis* (Lauraceae), 3.iv.1995, C-5062.

***Parasaissetia nigra* (Nietner)**

This soft scale, commonly named the nigra scale is one of the most widely-distributed and highly-polyphagous scale insect species (Ben-Dov et al., 2012). It is a regulated pest in the European Union.

Material examined. Orotava Valley, *Musa* sp. (Musaceae), 2.iv.1995, C-5065.

***Pulvinaria hydrangeae* Steinweden \***

The cottony hydrangea scale was first described from specimens taken at California, USA, but later records indicated that it is also distributed in the Australasian, Oriental and Palaearctic regions (Ben-Dov et al. 2012). This first record from the Canary Islands, was taken off fig tree, which is a new host plant record for this soft scale species.

Material examined: Candelaria, *Ficus* sp. (Moraceae), 2.iv.1995, C-5063

FAMILY DACTYLOPIIDAE

***Dactylopius coccus* Costa**

The present record was collected from a neglected *Opuntia* plantation in the Island. The cochineal scale was introduced to the Canary Islands at the beginning of the 19<sup>th</sup> century, and the Canary Islands became a significant centre of commercial cultivation of the Cochineal scale (Greenfield 2004).

Material examined: Grandilla, *Opuntia* sp. (Cactaceae), 5.iv.1995, C-5087.

FAMILY DIASPIDIDAE

***Aonidiella atlantorum* Matile-Ferrero & Balachowsky**

Matile-Ferrero & Balachowsky (1972) originally described this species from material collected off a species of *Euphorbia* at Puertito de Guimar on the eastern coast of Tenerife. The present records were taken at a locality on the south-western coast of the island.

Material examined: Los Cristianos, *Euphorbia* sp. (Euphorbiaceae), C-3005.

***Diaspis echinocacti* (Bouclé)**

The cactus scale also named prickly pear scale is widely distributed in all territories of the tropical and subtropical regions of the world (Miller & Gimpel 2009). It has been previously recorded from the Canary Islands by Balachowsky (1954).

Material examined: Candelaria, *Opuntia* (Cactaceae), 7.iv.1995, C-3018.

***Lepidosaphes ulmi* (L.)**

The oyster shell scale, also named apple mussel scale, is widely distributed in the Palaearctic and Nearctic regions on numerous host plant species that belong to about 50 families. It has been recorded from the Canary Islands by Carnero-Hernandez & Perez-Guerra (1986). The material listed here presents a new host plant record for this armoured scale, which was collected at a remarkable altitude of 2000 meters.

Material examined: Parc National del Teide, Llano de Ucana, 2000 meters above sea level, *Retama* sp. (Fabaceae), 5.iv.1995, C-2994.

FAMILY ERIOCOCCIDAE

***Eriococcus araucariae* Maskell**

Commonly known also as the araucaria mealybug, this scale insect exhibits a great host-specificity to plants of *Araucaria* (Miller & Gimpel 2000). This species was listed among the scale insects occurring in the Canary Islands by Izquierdo et al. (2001: 190).

Material examined: Los Mercedes, *Araucaria* sp. (Araucariaceae), 3.iv.1995, C- 5085.

FAMILY PSEUDOCOCCIDAE

***Dysmicoccus grassii* (Leonardi)**

The accepted name of this species, *Dysmicoccus grassii* and its junior synonym, *D. alazon* Williams, both were described from banana fruit imported to Italy and England, respectively. Marotta (1992) showed that the latter was a junior synonym.

Material examined: Orotava Valley, *Musa* sp., (Musaceae), 2.iv.1995, C-5068.

***Ferrisia malvastra* (McDaniel) \***

The Malvastrum mealybug was recorded from territories in the Afrotropical, Australian, Nearctic, Neotropical and Oriental regions (Ben-Dov et al. 2012). In recent years it was also recorded from the Palaearctic region (Ben-Dov 2005; Beltrà & Soto 2011). The present new record from

the Canary Islands might be an indication that it is more widely distributed in the Palaearctic.

Material examined: Candelaria, on roots of *Lotus glaucus* (Fabaceae), 8.iv.1995, C-5084; C-5086. Candelaria, on plant of Fabaceae, 8.iv.1995, C-5103.

***Phenacoccus menieri*** Matile-Ferrero & Balachowsky

This mealybug was originally described from specimens collected off *Euphorbia canariensis* at the Tenerife Island (Matile-Ferrero & Balachowsky 1972). The present record provides new distribution and hostplant records for this species.

Material examined: Arafo (10 km north of), *Hypericum* sp. (Hypericaceae), 2.iv.1995, C-5066.

***Planococcus vovae*** (Nasonov)

First recorded from the Canary Islands as *Alloccoccus inamabilis* by Carnero-Hernandez & Perez-Guerra (1986). This mealybug was recorded mainly from host plants that belong to the family Cupressaceae.

Material examined: Candelaria, *Cupressus sempervirens* (Cupressaceae), 7.iv.1995, C-5089.

***Pseudococcus longispinus*** (Targioni Tozzetti)

Earlier records of the long-tailed mealybug from the Canary Islands (Carnero-Hernandez & Perez-Guerra 1986) indicated that it common and widespread in Tenerife.

Material examined: Candelaria, 2.iv.1995, on leaves of *Ficus* sp. (Moraceae), C-5015.

***Pseudococcus viburni*** (Signoret)

Earlier records of the obscure or glasshouse mealybug from the Canary Islands (Carnero-Hernandez & Perez-Guerra 1986; Matile-Ferrero & Oromi 2001) were under its junior synonym *P. affinis* (Maskell). Here it is recorded and listed under its currently-accepted name.

Material examined: Puerto de la Cruz, on plant of the Asteraceae, 4.iv.1995, C-5069.

***Puto superbus*** (Leonardi) \*

This scale insect, commonly named the superb mealybug, is a component of the mealybug fauna in the Palaearctic region, where it was recorded off host plants belonging to 23 families (Ben-Dov et al., 2012). The present new record from the Canary Islands represents the most western territory of its distribution in the Palaearctic region.

Material examined: Pico del Ingleso, host plant not identified, 3.iv.1995, C-5088.

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New scale insects of Tenerife

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