

## First record of *Pleistodontes imperialis* Saunders, 1882 (Hymenoptera: Chalcidoidea, Agaonidae) in the Canary Islands

### Primera cita de *Pleistodontes imperialis* Saunders, 1882 (Hymenoptera: Chalcidoidea, Agaonidae) en las Islas Canarias

With few exceptions, each species of *Ficus* L. (Urticales, Moraceae) is thought to have co-speciated with its obligate pollinator (Hymenoptera: Agaonidae) (LOPEZ-VAAMONDE *et al.*, 2002). This mutualism is obligate and species specific though, fig ripening of species of *Ficus* outside their places of origin is an indirect evidence for the introduction of their pollinator wasps. In the Canary islands, massive maturation of “laureles de indias” figs (*Ficus microcarpa* L.f.) was shown in the 80’s due to the introduction of the agaonid *Eupristina verticillata* Waterston, 1921 (MONTELONGO-PARADA, 1996; BAEZ, 1998).

At the beginnings of this century, ripened figs of *Ficus rubiginosa* Desf. ex Vent. have been observed on the island of Tenerife, and this species was recently cited as naturalized in Puerto de la Cruz (VERLOOVE & REYES-BETANCORT, 2011). These events encouraged us to attempt to confirm the probable presence of its pollinator, *Pleistodontes imperialis* Saunders, 1882 (Hymenoptera: Agaonidae), a fact corroborated here.

The Family Agaonidae is represented in the Canary Islands by other four species: *Eupristina verticillata* Waterston, 1921, *Josephiella microcarpae* Beardsley & Rasplus, 2001, *Phylotrypesis caricae* (Linnaeus, 1758) and *Walkerella microcarpae* Boucek, 1993 (ARECHAVALETA *et al.*, 2010).

*Pleistodontes* has over 25 species of small wasps endemic in Southeast Asia and Australia, which are figs pollinators of *Ficus* species subgen. *Urostigma* (Gasp.) Miq. sect. *Malvanthera* Corner (WIEBES, 1991; LOPEZ-VAAMONDE *et al.*, 2002) where *Ficus rubiginosa* belongs (DIXON *et al.*, 2001). *Pleistodontes imperialis* is endemic to Australia (including Lord Howe Island) and it has been introduced to Hawaii, New Zealand, EEUU (California) and Israel (LOPEZ-VAAMONDE *et al.*, 2002). For mainland Spain, their presence has been gathered by KJELLBERG *et al.* (2001) but without precise location (see electronic appendix).

We have confirmed *P. imperialis* presences on the islands of Tenerife (Puerto de la Cruz and Santa Cruz) parasitizing both *F. rubiginosa* forms (f. *rubiginosa* and f. *glabrescens* (F.M. Bailey) D.J. Dixon), and Lanzarote (Arrecife) parasitizing the typical form. We do not know their way of introduction but it seems that females may travel long distances carried by the winds (GARDNER & EARLY, 1996). That fact rise the question of its possible presences in other islands of the archipelago where *F. rubiginosa* is been used as ornamental (at least in Gran Canaria and Fuerteventura islands). Further ongoing studies are necessary to know to what *P. imperialis* clade our material belongs (HAINE *et al.*, 2006).

**Material Examined:** SPAIN, Islas Canarias: Lanzarote, Arrecife, *ex Ficus rubiginosa*, 18.xi.2012 (A. Reyes leg.); same data but: 17.vii.2011 (A. Reyes leg.). Tenerife, Puerto de la Cruz, Jardín de Aclimatación de la Orotava, *ex Ficus rubiginosa*, 26.iv.2011 (A. Reyes leg.), same data but: 13.v.2011 (A. Reyes leg.), *ex Ficus rubiginosa* f. *glabrescens*, 06.xi.2011 (A. Reyes leg.). Tenerife, Santa Cruz de Tenerife, Parque García Sanabria, *ex Ficus rubiginosa*, 30.v.2011 (A. Reyes leg.).

The material examined is deposited in collections of the Natural History Museum of London.

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