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NEW RECORD OF *HYPOGEOCOCCUS PUNGENS* (HEMIPTERA: PSEUDOCOCCIDAE) IN THE DOMINICAN REPUBLIC WITH COMMENTS ON SPECIFIC CHARACTERS

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The mealybug *Hypogeococcus pungens* Granara de Willink (Hemiptera: Pseudococcidae) (Fig. 1) is thought to be native to South America (Zimmermann et al. 2010) and is closely related to *Hypogeococcus festerianus* (Lizer & Trelles), which was introduced into Australia and South Africa as a biological control agent against invasive cacti from the subfamily Cactoideae. However, these species are very similar, and the actual species identity might have been confused due to taxonomic uncertainty and differences in host plant specificity (Zimmermann et al. 2010).

Hypogeococcus pungens was reported in Florida in 1984 and Hawaii in 2005 (Hodges & Hodges 2009), and Puerto Rico in 2005 (Zimmermann et al. 2010). *H. pungens* occurs in Argentina, Brazil, Paraguay and Peru, where it is found on Cactaceae and several other ornamental plant families, including Portulacaceae (*Portulaca* spp.), Apocyanaceae (*Mandevilla* sp.) and Polygonaceae (*Alternanthera* spp.) (Williams & Granara de Willink 1992). ScaleNet also cited Guadeloupe, Martinique, France, Greece, Italy and Spain as countries where *H. pungens* can be found. This species previously reported as a species of little economic significance (Hodges & Hodges 2009), is now causing severe damage in Puerto Rico to several species of native columnar cacti in the subfamily Cactoideae (Zimmermann & Pérez Sandi Cuen 2010). Additional unpublished reports suggest that *H. pungens* is causing serious damage to native cactus plants in Puerto Rico (A. L. Roda, unpublished data). This species poses a potentially serious threat to the rich diversity of cacti in Mexico if were to become established there (Zimmermann & Pérez Sandi Cuen 2010).

There are no prior literature reports that *H. pungens* has been collected or intercepted from plants that originated in the Dominican Republic. This new record is based on a single sample from 21 May 2010 on the host *Gomphrena globosa* L. (Amaranthaceae) from a garden in the city of Santo Domingo (N 18° 28' 03.6" W 69° 56' 32.1"; 62 m asl). Matile-Ferrero & Étienne (2006) reported this species on the same host in Guadeloupe and

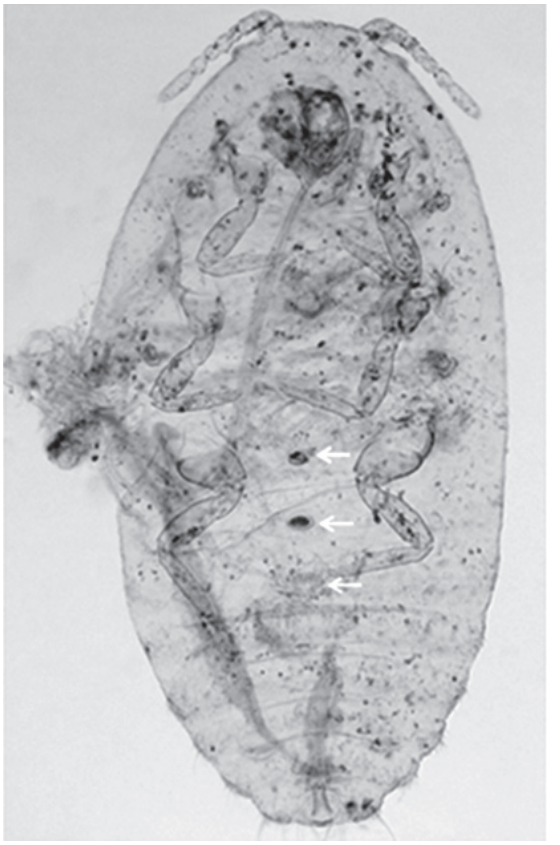


Fig. 1. Ventral views of a slide mounted *Hypogeococcus pungens* with arrows pointing to its 3 circuli.

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Martinique. A subsequent record of this mealybug from 2 Apr 2011 was collected on *Opuntia moniliformis* (L.) Haw. ex Steud, a native cactus found in the subtropical dry forest area of the Dominican Republic in the city of Pedernales (N 18° 2' 4.68" W 71° 44' 42.55") (Serra 2013).

Hypogeococcus pungens differs from its congeners in having 3 circuli (Fig. 1), whereas other species possess a single circulus (Williams & Granara de Willink 1992).

Summary

The mealybug *Hypogeococcus pungens* Granara de Willink (Hemiptera: Pseudococcidae) is a new record for the Dominican Republic, based on specimens collected on 21 May 2010 from the ornamental plant *Gomphrena globosa* L. (Caryophyllales: Amaranthaceae), in Santo Domingo.

Keywords: Mealybug, Cactaceae, Opuntia, Caribbean

Resumen

La especie *Hypogeococcus pungens* Granara de Willink (Hemiptera: Pseudococcidae) fue encontrada el 21 de mayo del 2010 como un nuevo record para la República Dominicana, especímenes fueron colectados en Santo Domingo sobre la planta ornamental *Gomphrena globosa* L. (Caryophyllales: Amaranthaceae).

Palabras Clave: Cochinilla o Piojo harinoso, Cactaceae, Opuntia, Cáribe

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