



## SCIENTIFIC NOTE

### NEW HOST ASSOCIATION BETWEEN *Euwallaceae* sp. (COLEOPTERA: CURCULIONIDAE: SCOLYTINAE) AND *Casuarina* *cunninghamiana* Miq. (CASUARINACEAE) IN TIJUANA, BAJA CALIFORNIA NORTE, MEXICO

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### NEW HOST ASSOCIATION BETWEEN *Euwallacea* sp. (COLEOPTERA: CURCULIONIDAE: SCOLYTINAE) AND *Casuarina cunninghamiana* Miq. (CASUARINACEAE) IN TIJUANA, BAJA CALIFORNIA NORTE, MEXICO

#### Nueva asociación entre *Euwallacea* sp. (COLEOPTERA: CURCULIONIDAE: SCOLYTIDAE) y *Casuarina cunninghamiana* Miq. (CASUARINACEAE) en Tijuana, Baja California Norte, México.

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The ambrosia beetle *Euwallacea* sp. was first detected in Mexico in Tijuana, Baja California in 2015 (García *et al.*, *in press*). In accordance with the Containment Action Program, the Dirección General de Sanidad Vegetal (DGSV) through the Centro Nacional de Referencia Fitosanitaria (CNRF), in which operates the Programa Nacional de Vigilancia Fitosanitaria (PNVEF), an exploration of potential hosts was conducted with searches for the characteristic damage caused by the beetle.

Several trees of *Casuarina cunninghamiana* Miq. infested by ambrosia beetles were detected in the Centro Cultural Tijuana (N 32° 31' 46.48" and W 117° 01' 21.68"). This tree species is generally known in Mexico by the synonym: *Casuarina equisetifolia* var. *microcarpa* F. Muell. (Orwa *et al.*, 2009). The ambrosia beetles were determined as *Euwallacea* sp., probably the same population known as Kuroshio Shot Hole Borer (KSHB) which is reported in San Diego County (Eskalen 2016).

*Casuarina cunninghamiana* was previously reported by Eskalen *et al.* (2013) from Los Angeles Botanical Garden but not as reproductive host. This is the first report of this ambrosia beetle feeding and reproducing on individuals of this species and also killing trees in the area of discovery (Fig. 1). We consider this finding merits

the classification of *C. cunninghamiana* as a reproductive host of this invading species of *Euwallacea* because an emerging second generation on a dying tree was observed. For now this detection is restricted to the Centro Cultural Tijuana, but more exploration on other potential hosts and other locations is needed.

The first author has had the opportunity to revise specimens of populations from Los Angeles County (donated by the US Forest Service), San Diego County and from Tijuana Mexico and no evident external morphological differences among them were found. These primary observations on the insects are similar to those reported by Eskalen (2013) and R. J. Rabaglia (2015), personal communication. Genetic work is needed to clarify the taxonomic status of these populations.

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Figure 1. Detection of *Euwallaceae* sp., (KSHB) on *Casuarina cunninghamiana* in Tijuana, Baja California Norte, Mexico. 2015. A) Tijuana Botanical Garden, B) Adult insect in emergence hole, C) General view showing dying and living trees and D) A living tree under attack of the ambrosia beetle showing entrance holes and galleries.

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