

## **A False Powder-post Beetle, *Xylopsocus capucinus* (Fabricius) (Insecta: Coleoptera: Bostrichidae)<sup>1</sup>**

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### **Introduction**

*Xylopsocus capucinus* (Fabricius) has previously been intercepted at ports of entry into the U.S. on many occasions in a wide variety of plant materials. However, Fisher (1950) stated that it "has not become established in the United States." On 14 March 1978, specimens were collected from cassava branches at Homestead, Florida, by J. Peña, and subsequent surveys indicate that the species is definitely established as a part of the Florida fauna.

### **Distribution**

Occurs throughout most of the tropical areas of the world. Lesne (1901:633) listed it from the Indomalayan area to the Madagascar region with specific locations as follows: Madagascar, Comores, Seychelles, Reunion, Mauritius, Sikkim, Coromandel, Nilghiri, Sri Lanka, Myanmar, Vietnam, Laos, Cambodia, Nicobar, Sumatra, Java, Sumbawa, Borneo, Celebes, Philippines, Ternate, Batjan, Ceram, Amboine, Kei, Arou, New Guinea, Trobriand, Woodlark, d'Entrecasteaux, Louisiade,

New Hebrides, Espiritu-Santo, New Caledonia, Sierra Leone, South America (Guiana and eastern Brazil).

Fisher (1950:141) listed the following records: India, Ceylon, China, Thailand, Indochina, Myanmar, Taiwan, Philippines, nearly all Malaysian and Melanesian Islands, and Madagascar. He listed it as introduced into the eastern and western coasts of Africa, Guiana, Venezuela, Trinidad, and Brazil.

In Florida, it is presently known only from the area around Homestead (Dade County).

### **Description**

Adult: Length 3 to 5.5 mm; width 1.4 to 1.7 mm. Shape cylindrical and similar in general appearance to other common species of the family Bostrichidae found in Florida. Because of this similarity, field identification is impractical, and specimens should be submitted to taxonomists for identification.

The body color is black or reddish (particularly the elytra, venter, antennae, and palpi). The apical elytral declivity (sloping) is abruptly, obliquely

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**Figure 1.** Dorsal view of adult *Xylopsocus capucinus* (Fabricius), a false powder-post beetle. Credits: Lyle J. Buss, University of Florida



**Figure 3.** Lateral view of adult *Xylopsocus capucinus* (Fabricius), a false powder-post beetle. Credits: Lyle J. Buss, University of Florida



**Figure 2.** Lateral view of adult *Xylopsocus capucinus* (Fabricius), a false powder-post beetle. Line equals 2mm. Credits: Division of Plant Industry

deflexed, flattened, without tubercles or callosities (swollen lumps). The lateral margins of the declivity are strongly elevated, crenulate toward top, and completely enclose the declivity. This arrangement is distinctive from other U.S. Bostrichidae.

The larva has been described and illustrated by Gardner (1933).

## Biology

Beeson and Bhatia (1937) indicated that it was not common in India, but it emerged mainly between May and November without marked peaks of abundance. The life cycle there is apparently annual but may extend to two years, with stragglers in the third year. Additional biological data were given by Miller (1934), who stated that the life cycle is eight weeks when the larva feeds in Derris roots. He also recorded a reduviid bug (*Peregrinator biannulipes* Montr. & Sign.) as a predator on *X. capucinus*.

Most damage appears to be caused to lumber or to plants already damaged by lightning, cold, or other insect injury. Kalshoven (1963b) listed it from piles of teak poles where the sapwood layer became honeycombed throughout. Most references mention dry branches and stems being most often infested. Marin Acosta (1975) listed it in unhealthy avocado trees and in stems of grape where its presence was shown by little masses of gum (in rolled strips) in their openings.

## Hosts

According to Fisher (1950), Lesne (1924) recorded this species living in the wood of *Morus alba* L. and in trunks of "Kimoungoue" in east Africa, in bamboo, litchi (*Litchi chinensis* Sonn.), and in grape (*Vitis* sp.) in Brazil. Miller (1934) recorded it attacking *piquia* (*Caryocar villosum* Pers.), rambutan (*Nephelium lappaceum* L.), rubber (*Hevea brasiliensis* (Willd. ex A. Juss) Muell. Arg.),

*Dipterocarpus* sp., *Derris* sp., guava (*Psidium guajava* L.), *Casuarina equisetifolia* J.R. Forst. & G. Forst., *Syzygium malaccensis* (L.) Merrill & L.M. Perry, cinnamon (*Cinnamomum zeylanicum* Blume), *Indigofera anil* L., cashew nut (*Anacardium occidentale* L.), durian (*Durio zibethinus* J. Murr.), *Tephrosia candida* DC., *Gardenia jasminoides* Ellis, tamarind (*Tamarindus indica* L.), *Hibiscus rosa-sinensis* L., and mango (*Mangifera indica* L.).

Beeson and Bhatia (1937) reported it as also attacking *Artocarpus hirsutus* Lam., *Ficus* sp., *Mallotus philippiensis* Muell. Arg., *Delonix elata* (L.) Gamble, *Santalum album* L., *Shorea robusta* Gaertn.f., *Sindora wallichii* Benth., *Swietenia mahagoni* (L.) Jacq., *Tectona grandis* L.f., *Terminalia myriocarpa* Heurck & Muell. Arg., and *Vitex negundo* L. Guagliumi (1967) recorded it in avocado seed and stems and branches of cotopriz (*Talisia oliviformis* Radlk.).

The Florida host has only been cassava, in dry branches (presumably cold killed).

## Management

As presently known, the species does not appear to be a serious economic pest. Infested cassava branches were destroyed by burning.

For more information see Insect Management Guide for Powderpost Beetles (<http://edis.ifas.ufl.edu/IG119>).

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