

SCIENTIFIC NOTE

First Record of the Coffee Berry Borer, *Hypothenemus hampei* (Ferrari) (Coleoptera: Scolytidae), in Pará Nut, *Bertholletia excelsa* (Lecythidaceae)

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Primeiro Registro da Broca-do-Café, *Hypothenemus hampei* (Ferrari) (Coleoptera: Scolytidae), em Castanha-do-Pará, *Bertholletia excelsa* (Lecythidaceae)

RESUMO - Este trabalho registra a ocorrência de *Hypothenemus hampei* (Ferrari) em amêndoas armazenadas da castanha-do-Pará, no Sudeste do Pará. O inseto obteve sucesso na infestação e reprodução na castanha-do-Pará. Com base nessa constatação, o uso da castanha-do-Pará pode ser uma alternativa para a criação da broca-do-café. Além disso, cabe alertar para os cuidados com armazenamento dessas amêndoas para se evitar a infestação pelo inseto.

PALAVRAS-CHAVE: Praga, grão armazenado, criação massal

ABSTRACT - We report the occurrence of *Hypothenemus hampei* (Ferrari) attacking Pará nuts stored in the southeast of Para state. The coffee berry borer successfully colonized and reproduced using Pará nuts as a food source. Based on this observation, the Pará nuts can be used as an alternative food source in rearing the coffee berry borer. Also, attention should be brought to need of proper storage of these nuts to avoid infestation by this pest.

KEY WORDS: Pest, stored grain, mass rearing

The coffee berry borer (CBB) *Hypothenemus hampei* (Ferrari) is only associated to coffee berries as its natural host (Benassi 1989, Bergamin 1943, Cantor *et al* 2001). However, Benassi & Carvalho (unpublished) reported that CBB can colonize and reproduce inside fruits of *Euterpe oleraceae* (Arecaceae). Based on the literature, there is no previous record of *H. hampei* infesting Pará nut seeds *Bertholletia excelsa* (Lecythidaceae). In July 2006, we bought Brazil nut seeds stored at a Bandeirantes settlement project (Marabá, Pará, Brazil) (05S21'12", 50W35'03"). These nuts were harvested between January and February 2006, and maintained under the conditions of the farmer's house with improper moisture and temperature control.

We observed by chance several little Scolytidae beetles leaving the nuts after exposing them to the sun light. We then kept the seeds within plastic containers to allow for reproduction in order to obtain more specimens for identification. From an advanced decomposed dry nut, we collected 130 adult females, nine adult males and two pupae. From a non decomposing nut and not as dry as the previous described nut we collected 312 adult females, 29 adult males, and uncountable eggs, larvae and pupae. The specimens were identified as *Hypothenemus hampei*, and voucher specimens were deposited at the Museu Regional

de Entomologia (UFVB; Viçosa, MG, Brazil).

The mass reproduction of CBB is a delicate problem involving research into the development and preparation of artificial diets (Brun 1993, Villacorta & Barrera 1993, 1996, Portilla 1999). The mass rearing of *H. hampei* is an important matter to support further studies on this species, but mainly to allow for the production of its parasitoids, such as *Cephalonomia stephanoderis* Betrem (Hymenoptera: Bethyridae), *Prorops nasuta* Waterston (Hymenoptera: Bethyridae) and *Phymasticus coffea* La Salle (Hymenoptera: Eulophidae), which are all important natural enemies with potential for use in applied biological control.

The observations made on the successful development and reproduction of *H. hampei* on *B. excelsa* nuts indicate a new opportunity to develop rearing methods, and the costs of insect rearing on artificial diets and nut diets should be compared. In addition, it is also important to consider that *H. hampei* has the potential to become a future problem for stored Pará nuts.

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