Pacific Pests, Pathogens & Weeds - Mini Fact Sheet Edition

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Coffee berry borer (118)

Photo 1. Adult coffee bean borer, *Hypothenemus hamperi*, about 1.5 mm long and covered with stiff hairs.

Photo 2. Adult *Hypothenemus hampei,* about 1.5 mm long, showing its relative size to a coffee bean.

Photo 3. The life cycle of the coffee bean borer, *Hypothenemus hamperi,* takes place in the coffee bean; this photo shows the frass that accumulates as the larvae and adults eat the beans.

Photo 4. Coffee beans damaged by the coffee bean borer, H*ypothenemus hamperi*. Even a few bored beans lower quality, and if the consignment is not dried properly the beetles will continue to breed in storage and increase the damage.

Summary

- Worldwide distribution. On arabica and robusta coffee. A major beetle pest.
- The female bores into the berries to lay eggs, the larvae hatch and eat the beans, and winged female adults leave in search of other berries.
- Adults swarm, so possibly spread is in air updrafts.
- Natural enemies: the fungus *Beauvaria* appears to give the good control, compared to parasitoids or ants which have provided little control.
- Cultural control: pick berries as they ripen; collect fallen blackened berries, or break cycle over 3 months by collecting berries on the ground and stripping them from the bush; after harvest, prune to keep bushes at manageable height; destroy abandoned plantations.
- Chemical control: use *Beauvaria*, a fungus (to preserve natural enemies); or use pirimiphos methyl.

Common Name

Coffee berry borer

Scientific Name

Hypothenemus hampei

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Information from Waterhouse DF, Norris KR (1989) *Biological Control Pacific Prospects - Supplement 1.* ACIAR Monograph No. 12. Inprint Limited, Brisbane; and [1]Evaluation of non-chemical alterantives to endosulfan (2012) UNEP/POPS/POPRC.8?INF/14/Rev.1. UN/UNEP; and from Aristizabal LF, *et al.* (2016) Integrated pest management of coffee berry borer: strategies from Latin America that could be useful for coffee farmers in Hawaii. Insects 7(1).

24pp. (http://www.mdpi.com/2075-4450/7/1/6). Photo 1 Georg Goergen, IITA-Benin. Photo 2 Peggy Greb, USDA, ARS. Photo 3 Save Kona coffee! Fighting the coffee berry borer. (http://marcoinkona.com/2012/04/21/save-kona-coffee-fighting-the-coffee-berry-borer/). Photo 4 Forest and Kim Starr. Coffee Berry Borer parchment seeds with damage sample at Kula Community Centre, Maui, Hawaii. (https://www.flickr.com/photos/starr-environmental/32087834650/).

Produced with support from the Australian Centre for International Agricultural Research under project PC/2010/090: *Strengthening integrated crop management research in the Pacific Islands in support of sustainable intensification of high-value crop production*, implemented by the University of Queensland and the Secretariat of the Pacific Community.

This mini fact sheet is a part of the app *Pacific Pests, Pathogens & Weeds*

The mobile application is available from the Google Play Store and Apple iTunes.