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Chlorophorus is a genus of longhorn beetles in the family Cerambycidae (subfamily Cerambycinae) that contains several important pests. Longhorn beetles, or cerambycids, are characterized by their long antennae, absence of a beak, and characteristic tarsi. Beetles in the subfamily Cerambycinae can usually be separated by their generally prognathous head with truncate terminal palpomeres.

Chlorophorus annularis, the bamboo borer, is widely distributed throughout Asia, has been imported into Australia, and is found in Hawaii. Eggs are laid on dried bamboo used for decorative material and in clearings and burned forest. Larvae feed extensively under the outer layer of the bamboo. Due to a lengthy development (up to 2 years), adults often emerge once the bamboo has been harvested and used for furniture or in buildings. Adults range from 10–15 mm in length and have distinct brown and pale banding coloration. Species of bamboo (*Bambusa* spp.) are the primary host; however, some species of *Citrus*, other fruit trees (eg. *Pyrus* spp.), and sugar cane (*Saccharum officinarum*) have been recorded as hosts.

A visually similar species, *C. strobilicola*, is known as the slender-banded pinecone longhorn beetle. Native to India, this beetle lays eggs on the cones of longleaf Indian pine (*Pinus roxburghii*). Larvae feed and pupate within the cone. *Chlorophorus strobilicola* larvae have been intercepted in North America on pine cones used in potpourri products from India.

Visual surveys of host plants and cones are the best method to detect the presence of larvae and pupae, once inspected, any adult specimens should be retained for identification. These beetles have unique hosts, are striking in color, and are unlikely to be confused with any other North American cerambycid. Suspect beetles should be pinned, clearly labeled and forwarded to a trained coleopterist for final identification.



Fig. 1: Damage to cones by larvae of *Chlorophorus strobilicola* (Photo by Steven Valley, Oregon Department of Agriculture).



Fig. 2: Exit holes of *C. annularis* in dried bamboo furniture (Photo from Suma, P. & S. Bella, 2018)

Adult specimens should be screened for beetles of the appropriate size, color, and shape. Beetles meeting all of the following requirements should be pinned, clearly labeled and forwarded for final identification. No native North American cerambycids have the same coloration and pattern as these *Chlorophorus* species.

- 1) Beetles measure between 10.0–15.0 mm in length (Fig. 3).
- 2) Beetles have an overall shape that is similar to the outline depicted in Fig. 3.
- 3) Beetles are elongate with heads much narrower than pronotum and densely pubescent elytra (Figs. 4-6).
- 4) Beetles are dark reddish-brown to nearly black, with yellow stripes on elytra and pronotum outlining dark spots on posterior 3rd of elytra (*C. annularis*) (Figs. 4, 5) OR beetles are red to dark reddish-brown with pale yellow or white striped pubescence on elytra forming transverse band across apical half of elytra (*C. strobilicola*) (Figs. 4, 6).

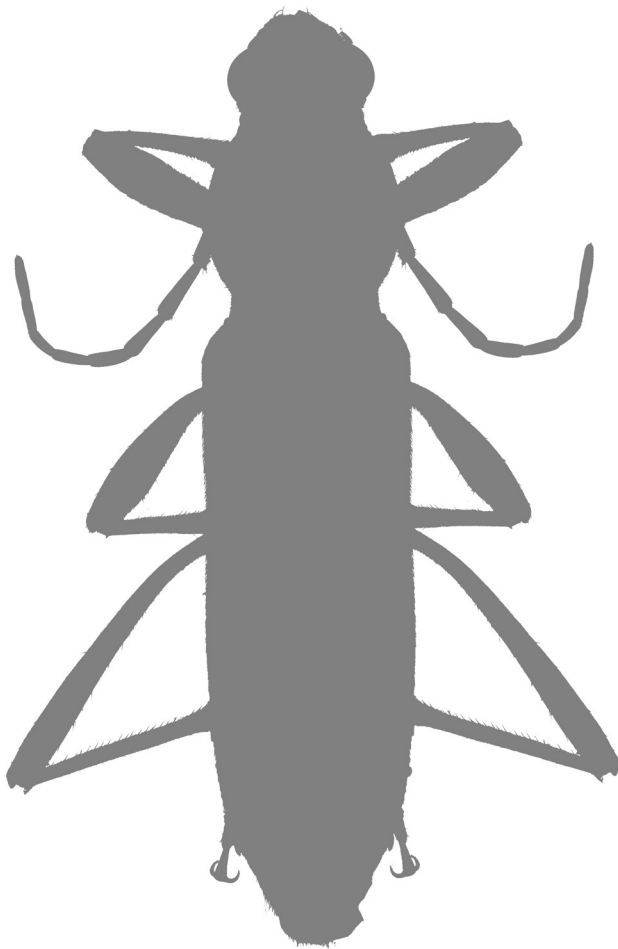


Fig. 3: Outline of an adult *Chlorophorus*.  actual size



Fig. 4: *Chlorophorus annularis* (top) and *Chlorophorus strobilicola* (bottom).



Fig. 5: Color variation and yellow banding forming a dark spot in apical third of elytra in *Chlorophorus annularis*. (Left photo by Steven Valley, Bugwood.org)

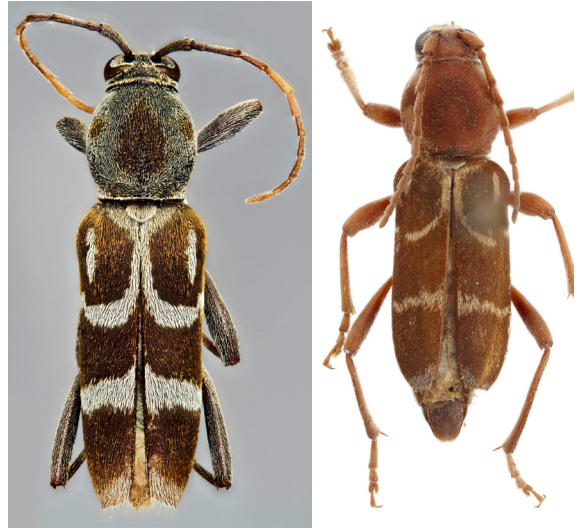


Fig. 6: Color variation and pale yellow or white banding forming transverse band across apical half of elytra in *Chlorophorus strobilicola*. (Left photo by Steven Valley, Bugwood.org)

Citation

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References for more information on *Chlorophorus annularis* and *C. strobilicola*

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Acknowledgments

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