Fulgora laternaria (Alligator Bug)

Order: Hemiptera (True Bugs)

Class: Insecta (Insects)

Phylum: Arthropoda (Arthropods)



Fig. 1. Alligator bug, Fulgora laternaria.

[http://www.factzoo.com/insects/peanut-head-bug-talented-defensive-tactics.html, dowmloaded 5 April 2017]

TRAITS. The adult *Fulgora laternaria* measures up to 10cm. It has yellow-brown tones, mottled with black and white patterned marks and a waxy head, thorax and abdomen region. The insect has a bulging head like a peanut's shell (Henderson, 2010). From above it resembles the head of a caiman with false eyes in side view (Fig. 1). Its wing span reaches a maximum of 15cm, and there are large yellow eyespots on the surface of the hind wings (Fig. 2).

DISTRIBUTION. Mainly inhibits the dry or tropical forests of Central and South America (Fig. 3), including Brazil, Panama, Honduras, Mexico, and Trinidad and Tobago (O'Brien, 1988; Henderson, 2010).

HABITAT AND ACTIVITY. The tropical insect is usually found disguised and at rest during daylight hours on the trunks of *Hymenaea courbaril* or quapinol trees. Their body is positioned in a vertical manner where its head with the great anterior protuberance is elevated at an angle from the substratum of the tree. This is the resting bug position (Hogue, 1984). They can produce sounds by knocking their hollow heads on the bark of the tree trunk. At dusk the alligator bug becomes active.

FOOD AND FEEDING. These organisms are phloem-feeders, sucking plant sap from their host plant. The tubular articulated rostrum is specially evolved for the suction of sap. Their tree host of

choice are very large dicots to which they are strongly associated showing fidelity toward *Hymenaea courbaril* or quapinol tree. When host specificity was explored by Forster and Johnson (1986) large congregations of adults were observed on the trunk of the quapinol tree.

REPRODUCTION. The mature female whose eggs have been fertilized by a male will lay her eggs on the bark of the host *Hymenaea courbaril* or quapinol tree. She proceeds to coat her egg masses with a waxy substance providing them with a defence mechanism to ensure their survival against harsh environmental conditions or predation (O'Brien, 2002).

BEHAVIOUR. The alligator bug as it is commonly known is disguised to match the large tree trunks on which they rest during daylight hours in attempts to make itself inconspicuous. If danger approached such as its predacious attackers which include by fly- catchers and the epipyropid moths, the bug engages its defence machineries. The bug would first display the large eye spots on its hind wings along with its big hallow cuticle protuberance behind the head which resembles a caiman is also used to ward of threats (Peason, 1989). If the attacker remains persistent a foul-smelling chemical is released from the bug. This chemical is produced from the resin the animal consumes.

APPLIED ECOLOGY. Fulgora laternaria is common throughout its wide range of habitats during months such as July where the warm temperatures provide the ideal environment for members of the species to feed and reproduce. The species face no major threats and is not on the International Union for Conservation of Nature's Red List of threatened species.

REFERENCES

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Fig. 2. Eyespots on the hind wings of the alligator bug, *Fulgora laternaria*. [http://eol.org/data_objects/14303247 downloaded 27 February 2017]

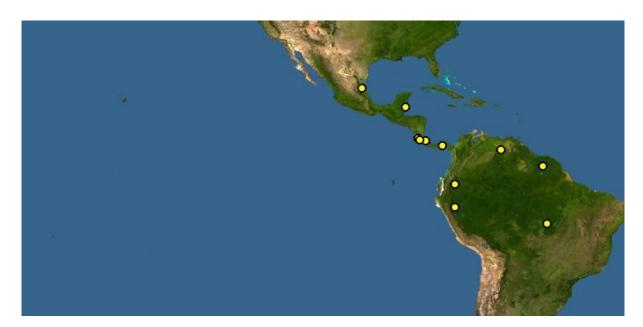


Fig. 3. Fulgora laternaria geographic distribution.

 $[\underline{http://www.discoverlife.org/tmp/Map_of_Fulgora_laternaria.jpg}\ downloaded\ 7\ March\ 2017]$

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