## **Open Peer Review on Qeios**

## Jequitiranaboia: cousin of the cicada, the face of an alligator, the color of a snake, and wings with an owl's eye.

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Potential competing interests: No potential competing interests to declare.

Jequitiranaboia" is a species of Neotropical fulgorid leafhopper. It is known by a wide variety of popular names, including lantern fly, peanut bug, peanut head fly, alligator bug, jequitiranaboia, machaca, chicharron-machaca, and cocoposa. *Fulgora* Linnaeus, 1767 is a genus of insects from the fulgorid family that groups several species of large phytophagous homopterans. It includes, among other species, the jequiranaboia (from Tupi-Guarani: iakirána = "cicada" and mboia = "snake"), a type of cicada also known as flying snakes.

In Brazil "Jequitiranaboia" a cousin of the cicada, this weirdo from the forests has the face of an alligator, the color of a snake, and wings with the eyes of an owl. Present mainly in the Amazon region, a species known as *Fulgora laternaria*, Linnaeus 1758 (Hemiptera: Fulgoridae) can even accidentally sting humans but is far from causing a lethal injury. It is characterized by the shape of its protruding head and false, peanut-like eyes and is 23 to 24 mm long to resemble a lizard. It has abundant spots in yellow, orange, brown, gray, black, and white and large false eyes on the two hind wings. When attacked, it defends itself by releasing a foul-smelling substance. Sometimes he hits his head on a tree trunk (Figures 1-3).



**Figure 1.** This insect lives in tropical forests but sometimes appears in cities attracted by urban lights. Coloring and prints on the body of the jequitiranaboia allow the animal to camouflage itself in nature, warding off predators

Source: TG Archive Photo



**Figure 2.** Specimens of the Lanternfly Fulgora laternaria from Mexico - the collection of the Manchester Museum. Sources: © The Manchester Museum and https://entomologymanchester.wordpress.com/2018/10/02/star-objects-of-our-collection-lanternflies-fulgoridae/.



Figure 3. Fulgora laternaria, Linnaeus 1758 (Hemiptera: Fulgoridae).

Source: https://www.facebook.com/ScienceIsAwesomeIFLS/videos/fulgora-laternaria/4528272573888080.

It is difficult to find it during the day when it usually rests camouflaged on tree trunks. As night falls, the "jequitiranaboias" become more active and come out to feed, sucking the stems of some plants. To do this, they use their straw-shaped mouthparts because it is rigid and sharp, this device is often confused with a stinger, as it causes pain when accidentally touching human skin. This happens because it does not have any type of anesthetic in its saliva and, like any foreign substance that meets the body, it can cause irritation.

A preferred option in the diet of birds, mammals, reptiles, and amphibians, the jequitiranaboia occurs in South America and a large part of Brazilian territory. They feed on flower nectar and plant sap and produce a luminescence, due to the photogenic bacteria that developed on the heads of the specimens.

The nine validly described species are mostly similar in appearance, with differences in the shape of the head, often quite subtle, and in the color patterns of the wings. *Fulgora castresii* Guérin-Méneville, 1837, *Fulgora cearensis* (Fonseca, 1932), Fulgora crocodilia Brailovsky & Beutelspacher, 1978, *Fulgora graciliceps* Blanchard, 1849, *Fulgora lampetis* Burmeister, 1845 (=caerulescens), *Fulgora laternaria* (Linnaeus, 1758), *Fulgora lucifera* Germar, 1821, *Fulgora riograndensis* (Fonseca, 1926) and *Fulgora servillei* Spinola, 1839.

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