

“Jequitiranaboia” - *Fulgora laternaria*, Linnaeus 1758 (Hemiptera: Fulgoridae).

Carlos Henrique Marchiori¹

¹ Instituto Federal Goiano

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“Jequitiranaboia” is a species of hemipterans found in the Neotropical region. It is known by a wide variety of popular names, including lanternfly, peanut bug, peanut head fly, alligator bug, jequitiranaboia, machaca, chicharron-machaca, and cocoposa [1-5].

Fulgora Linnaeus, 1767, is a genus of insects from the fulgorid family that groups several species of large phytophagous hemipterans. It includes, among other species, the jequiranaboia (from Tupi-Guarani: iakirána = “cicada” and mboia = “snake”), a species of cicada also known as the flying snake [1-5].

In Brazil, “Jequitiranaboia” has the face of an alligator, the color of a snake, and wings with owl eyes. Present mainly in the Amazon region, it has a species known as *Fulgora laternaria*, Linnaeus 1758 (Hemiptera: Fulgoridae). It can even accidentally bite humans, but it is far from causing a lethal injury [1-5].

It is characterized by the shape of its protruding head and false peanut-shaped 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 [1-5].

It is difficult to find it during the day when it usually remains 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 [1-5].

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 develop in the heads of the specimens [1-5].

As they are related to cicadas, their reproduction may be similar. That is, from their eggs hatch larvae that spend their entire characteristic stage underground, sucking roots, and when they are ready for metamorphosis, they leave their underground shelters and climb the vegetation to emerge from their larval form, forming the “chrysalis” and from there, the adult stage [1-5].

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. Species: *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 [1-5].

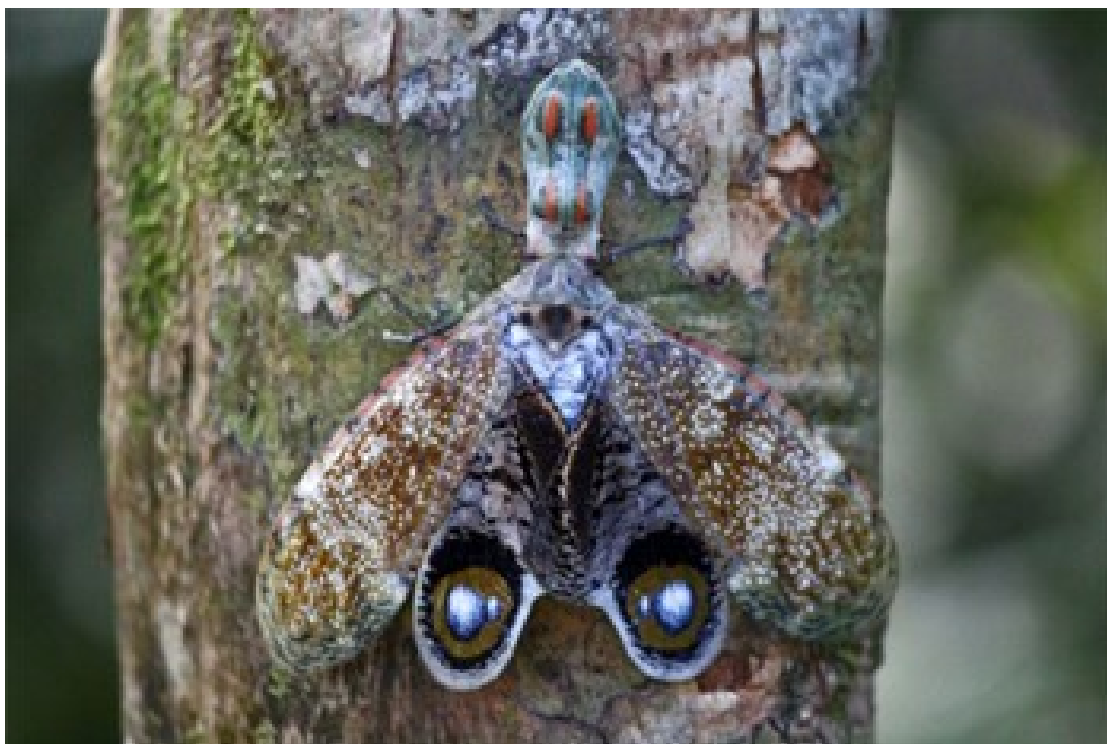


Figure 1. This insect lives in tropical forests but sometimes appears in cities attracted by urban lights. Coloring and prints on the body of the jequitiranaboia allow the animal to camouflage itself in nature, warding off predators

Source: TG Archive Photo.

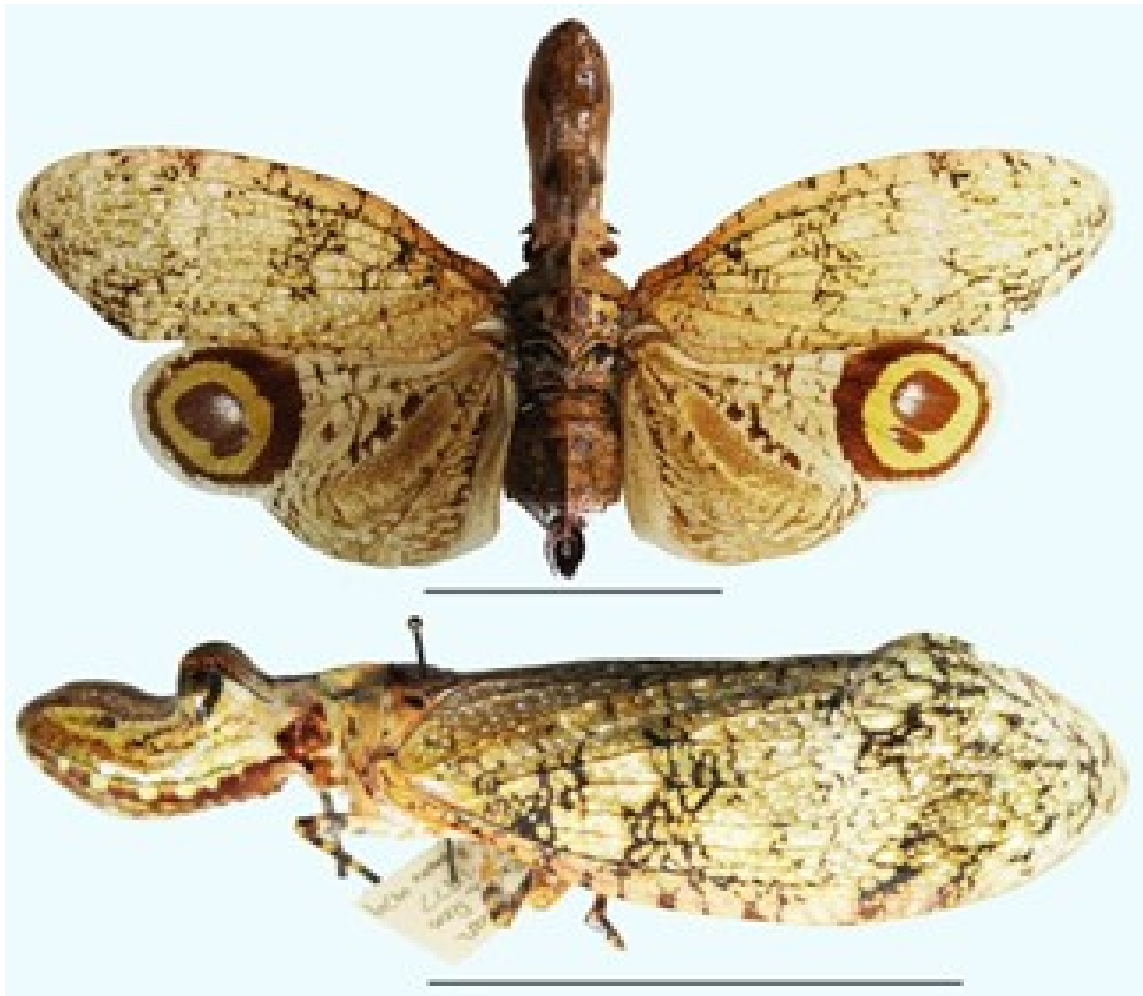


Figure 2. Specimens of the Lanternfly *Fulgora laternaria* from Mexico - the collection of the Manchester Museum.

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/SciencelsAwesomeIFLS/videos/fulgora-laternaria/4528272573888080>.

References

- [1] Virginio V, Khatourian NB, Pinelli N. Jequitiranaboia: 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 [Internet]. São Paulo: Instituto Butantan; @2023 [cited 2024 Mar 01]. Available from <https://butantan.gov.br/bubutantan/jequitiranaboia-prima-da-cigarra-essa-esquisitona-das-matas-tem-cara-de-jacare-cor-de-serpente-e-asas-com-owl's-eye>.
- [2] Santos E. The slandered Jequitiranabóia. In: Eurico S., eds. The Insects. 25th ed. Rio de Janeiro: F. Briguiet & Cia; 1961. p. 161 – 165.
- [3] O'Brien LB. New World Fulgoridae, part 1: genera with elongate head processes. Great Basin Naturalist Memoirs. 1991; (12): 135-170.

- [4] Jequitiranaboia is known as the flying snake and occurs throughout much of Brazil [Internet]. Campinas: g1 globo Notícias; @2018 [cited 2024 Mar 01] Available from <https://g1.globo.com/sp/campinas-regiao/terra-da-gente/noticia/jequitiranaboia-e-conhecida-como-cobra-voadora-e-ocorre-em-grande-parte-do-brasil.ghtml>.
- [5] Advertisement J, et al. Myths and truths about *Fulgora laternaria* [Internet]. Pelotas: XIX CIC, XII and II Scientific Exhibition, Faculdade Anhanguera de Pelotas; @2010 [2024 Mar 01]. Available from https://www2.ufpel.edu.br/cic/2010/cd/pdf/CB/CB_00309.pdf.
- [6] Costa-Neto, EM. Real and legendary facts about jequitiranabóia. Science Today. 2004; 34(201): 66 – 68.
- [8] Costa-Neto, EM. Fulgora laternaria Linnaeus, 1758 (Homóptera: Fulgoridae) in the conception of the residents of the village of Pedra Branca, Santa Terezinha, Bahia, Brazil. Journal of Environmental Sciences. 2007; (1): 35 - 56.
- [9] Haddad-Junior V, Secanho PSS, Mendes AL. Jequitiranabóia, the flying snake. Revista da Sociedade Brasileira de Medicina Tropical. 2018; 51(4): 566-567.