

NOTA / NOTE

On a recent record of *Dysodius lunatus* (Fabricius, 1794)
(Hemiptera: Heteroptera: Aradidae: Mezirinae) in Costa Rica,
with additional notes.

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Abstract: A recent record of *Dysodius lunatus* (Fabricius, 1794) (Hemiptera: Heteroptera: Aradidae: Mezirinae) in Costa Rica is reported. Additional information on the distribution and the ecology of this species as well as of the genus *Dysodius* Lepeletier & Serville, 1828 is also given. This is the fifteenth part of a series of publications about different Heteroptera in Costa Rica.

Key words: Hemiptera, Heteroptera, Aradidae, Mezirinae, *Dysodius lunatus*, distribution, ecology, Neotropical Region, Costa Rica.

Resumen: Sobre un hallazgo reciente de *Dysodius lunatus* (Fabricius, 1794) (Hemiptera: Heteroptera: Aradidae: Mezirinae) en Costa Rica, con notas adicionales. Se reporta un hallazgo reciente de *Dysodius lunatus* (Fabricius, 1794) (Hemiptera: Heteroptera: Aradidae: Mezirinae) en Costa Rica. Se aporta también información adicional sobre la distribución y la ecología de esta especie y del género *Dysodius* Lepeletier & Serville, 1828. Esta es la decimoquinta parte de una serie de publicaciones sobre diferentes heterópteros en Costa Rica.

Palabras clave: Hemiptera, Heteroptera, Aradidae, Mezirinae, *Dysodius lunatus*, distribución, ecología, Región Neotropical, Costa Rica.

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The genus *Dysodius* Lepeletier & Serville, 1828 belongs to the subfamily Mezirinae, which is the largest subfamily of the family Aradidae (Hemiptera: Heteroptera), commonly known as Flat Bugs or Bark Bugs. Most of the species within the Mezirinae have a tropical or subtropical distribution (Schuh & Slater, 1995).

Seven species of *Dysodius* have been described, all of them are distributed in the Neotropical Region (Heiss, 1990; Coscarón & Contreras, 2012, 2015; Smith-Pardo & Beucke, 2015).

Three species have been reported from Costa Rica: *Dysodius brevipes* Bergroth, 1898, *Dysodius crenulatus* (Stål, 1862) and *Dysodius lunatus* (Fabricius, 1794), commonly known as Lunate Flat Bug. Apart from Costa Rica, *D. lunatus* has been reported from Argentina, Belize, Bolivia, Brazil, Colombia, Ecuador, French Guiana, Guatemala, Guyana, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, Trinidad and Tobago and Venezuela (Heiss, 1990; Contreras & Coscarón, 2012; Coscarón & Contreras, 2012, 2015).

Occasionally, specimens of *D. lunatus* have been introduced to the United States of America on ships coming from neotropical countries (Smith-Pardo & Beucke, 2015).

D. lunatus is relatively large -up to 15 mm- and has a very depressed shape as an adaption to life on or under the bark of dead trees (Hogue, 1993), where the specimens feed on fungi. Historical drawings of *D. lunatus* can be found in the books written by Herrich-Schäffer (1848) and Champion (1897-1901).

The species is well camouflaged because of the shape and colour of its roughened integument, making it difficult to detect specimens (Hogue, 1993). Furthermore, its integument is wetttable and - just as the bark of trees- getting darker when it is wet with rain (Silberglied & Aiello, 1980). So the specimens are well camouflaged in rainy conditions, too.

On 18.5.2016, the second author was able to observe and photograph a female of *D. lunatus* (Figs. 1 and 2) near Río Blanco, province Limón, at the Caribbean coast of Costa Rica around 1:00 p.m. (local time). The specimen was found on a trunk of a tree which had been cut during the construction of a road. The site of the finding (Fig. 3) is located in a premontane wet forest with temperatures between 19 and 28°C, annual rainfalls between 2000 and 5000 mm and a dry season of 4,5 to 6 months.

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Figs. 1 & 2. - *Dysodius lunatus* (Fabricius, 1794), female. Río Blanco, Limón, Costa Rica, 18.5.2016.

Fig. 3. - Site of the finding. Río Blanco, Limón, Costa Rica, 18.5.2016.

(Photographs: José Miguel Díaz)