

NOTA / NOTE

An unusual observation: A specimen of *Dysdercus mimulus*
Hussey, 1929 (Hemiptera: Heteroptera: Pyrrhocoridae)
feeding on a moth.

Torsten van der Heyden

Immenweide 83, D-22523 Hamburg, GERMANY. e-mail: tmvdh@web.de

Abstract: An observation of *Dysdercus mimulus* Hussey, 1929 (Hemiptera: Heteroptera: Pyrrhocoridae) feeding on a moth is reported. Additional information on the ecology and the distribution of this species as well as of the genus *Dysdercus* Guérin-Méneville, 1831 is also given.

Key words: Hemiptera, Heteroptera, Pyrrhocoridae, *Dysdercus mimulus*, zoophagous, distribution, ecology, Mexico.

Resumen: Una observación poco habitual: Un ejemplar de *Dysdercus mimulus* Hussey, 1929 (Hemiptera: Heteroptera: Pyrrhocoridae) alimentándose de una mariposa nocturna. Se informa sobre una observación de *Dysdercus mimulus* Hussey, 1929 (Hemiptera: Heteroptera: Pyrrhocoridae) alimentándose de una mariposa nocturna. Se aporta también información adicional sobre la ecología y la distribución de esta especie y del género *Dysdercus* Guérin-Méneville, 1831.

Palabras clave: Hemiptera, Heteroptera, Pyrrhocoridae, *Dysdercus mimulus*, zoófago, distribución, ecología, México.

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The genus *Dysdercus* Guérin-Méneville, 1831 in the family Pyrrhocoridae (Hemiptera) is widespread with species distributed in the Old World, the New World (Doesburg Jr., 1968; Adis & Froeschner, 1982) and Australia (Wilson *et al.*, 2008). All of them are showing characteristic white markings between head and thorax.

Species of *Dysdercus* are known to be phytophagous, feeding mainly on Malvaceae -for example *Hibiscus* sp. (Fig. 1) and *Gossypium* sp. (cotton)- and on Sterculiaceae and Tiliaceae. The only parts used to feed on are the ripe or ripening seeds. As many species of host plants produce seeds only periodically, most -if not all- species of the genus *Dysdercus* are (phyto-)polyphagous (Doesburg Jr., 1968).

Occasional predation (including cannibalism) has been observed. For example, *Dysdercus suturellus* (Herrich-Schäffer, 1842) has been reported as a predator, feeding on the Cotton Leafworm *Alabama argillacea* (Hübner, 1823) (Lepidoptera: Noctuidae) and preying upon the larvae and pupae of the Yellow Scallop Moth *Anomis erosa* Hübner, 1821 (Lepidoptera: Noctuidae) (Doesburg Jr., 1968).

Members of the genus are considered agricultural pests and are commonly known as Cotton Stainer Bugs or Red Cotton Bugs. These names derive from their habit of staining cotton a brownish or reddish yellow when feeding on the bolls, sometimes caused by a fungal pathogen transmitted during feeding (Wilson *et al.*, 2008).

Dysdercus mimulus Hussey, 1929 is a neotropical species and has been reported from the south of the United States of America (Florida and Texas), Mexico, Central America (Guatemala, Belize, El Salvador, Honduras, Nicaragua, Costa Rica, Panama), the Caribbean (Bahamas, Jamaica, Cuba, Haiti, the Dominican Republic) and Venezuela. Two subspecies are known: *D. mimulus mimulus* and *D. mimulus luteus* Doesburg, 1968 (Doesburg Jr., 1968).

Searching the internet, very little information on the biology and ecology of *D. mimulus* can be found.

On 16.4.2015, while taking photographs of different species of insects attracted by artificial light, Lauren Green Zárate was able to observe and photograph an unusual behaviour of a specimen of *D. mimulus*. The observation took place near Xilitla, San Luis Potosí, Mexico around 9:30 p.m. (local time).

A specimen of *D. mimulus* was feeding on a small moth ("Microlepidoptera"). In the photographs (Figs. 2 and 3), the rostrum is clearly seen, stuck into the dorsal part of the moth and -supposedly- sucking liquid from the body. Although predation has been reported for at least one other species of the genus *Dysdercus*, this behaviour is somewhat surprising.

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References

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Fig. 1. - *Dysdercus* sp. Escazú, San José, Costa Rica, 11.11.2006. (Photograph: Torsten van der Heyden).

Figs. 2-3. - *Dysdercus mimulus* Hussey, 1929. Xilitla, San Luis Potosí, Mexico, 16.4.2015. (Photographs: Lauren Green Zárate).