

Short communication

Chilocoris quadraticollis Linnavuori, 1993 (Hemiptera: Heteroptera: Cydnidae): first records from the Democratic Republic of Congo with first data on its biology

JERZY A. LIS

Center for Biodiversity Studies, Department of Biosystematics, Opole University 45-052 Opole, Oleska 22

e-mail: cydnus@uni.opole.pl

Abstract: *Chilocoris quadraticollis* Linnavuori, 1993 (Hemiptera: Heteroptera: Cydnidae) was collected for the first time in the Democratic Republic of Congo. This species was hitherto known only from the type-locality in the Republic of the Congo. First data on its biology are also provided.

Key words: Hemiptera, Heteroptera, Cydnidae, *Chilocoris quadraticollis*, faunistics, new record, biology, anthill, Hymenoptera, Formicidae, *Myrmicaria*, Democratic Republic of Congo, Afrotropical Region.

Chilocoris quadraticollis was originally described from the Republic of the Congo by Linnavuori (1993), and since that time, no other specimens of this species were sampled and identified. In addition, its biology was completely unknown.

Browsing through the Cydnidae material borrowed several years ago from the Royal Museum for Central Africa, Tervuren (Belgium), two females of this species collected in the Democratic Republic of Congo (former Zaire) were found.

Ch. quadraticollis can be easily recognised among all Afrotropical species of the genus *Chilocoris* Mayr, 1865 by its pronotum shape, i.e., its lateral margins have distinct insinuation at mid-length (Fig. 1).

Material examined: one female: Dans nid de Myrmicaria; Coll. Mus. Congo, Kivu: Butembo, terr. Lubero 1740 m., R.P.M.J. Célis, XI-1955; one female: Congo belge: Kivu, Kinyamahura (Djomba), 1800 m., 23-viii-1934, G.F. de Witte: 551.

Remarks on biology: What was very important was that one female was sampled from an ant nest of a species representing the genus *Myrmicaria* Saunders, 1842 (Hymenoptera: Formicidae: Myrmicinae). However, our knowledge of burrower bugs associated with ants was very limited, as only two cydnid species representing the genus *Amnestus* Dallas, 1851 (Cydnidae: Amnestinae) were hitherto reported in association with ants in Brazil (Froeschner 1975). Therefore, it was impossible to state whether *Ch. quadraticollis* habitually shared the nest of a species of ant and could

be regarded as a myrmecophile (Kronauer & Pierce 2011), or were only an occasional inhabitant of the anthill.



Fig. 1. The specimen of *Chilocoris quadraticollis* collected in Kivu: Butembo, terr. Lubero.

Distribution (Fig. 2): The species was known until now only from a single locality in the Republic of the Congo (Linnavuori 1993); its two additional localities were herein, for the first time, reported from the Democratic Republic of Congo.



Fig. 2. *Chilocoris quadraticollis,* known African records (white star in black circle [②] – literature record; black stars [★] – new localities in the Democratic Republic of Congo.

Acknowledgements

I thank Dr. Ugo Dall'Asta (the Royal Museum for Central Africa, Tervuren, Belgium) for the loan of the material used in this study.

References

Froeschner R. 1975. Three new species of burrowing bugs found in association with ants in Brazil (Hemiptera: Cydnidae). *Journal of the Kansas Entomological Society* **48**: 105-110.

Kronauer D. J. C., Pierce N. E. 2011. Myrmecophiles. *Current Biology* **21**(6): R208-R209.

Linnavuori R.E. 1993. Cydnidae of west, central and north-east Africa (Heteroptera). *Acta Zoologica Fennica* **192**: 1-148.



This work is licensed under a Creative Commons Attribution 4.0 International License http://creativecommons.org/licenses/by/4.0/