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The genus *Amnestus* Dallas (Hemiptera: Heteroptera: Cydnidae: Amnestinae) in Mexico, with the description of eleven new species from Chiapas

CRISTINA MAYORGA MARTINEZ¹ & LUIS CERVANTES PEREDO²

¹Instituto de Biología, U.N.A.M. Apartado Postal 70-153, CP 04510 Mexico, DF. E-mail: mayorgac@ib.unam.mx

²Instituto de Ecología, A.C. Carretera Antigua a Coatepec # 351, CP 91070 Xalapa, Veracruz, Mexico.

E-mail: luis.cervantes@inecol.mx

Abstract

The genus *Amnestus* is one of the most diverse genera of burrowing bugs. In recent years it has been possible to obtain great quantities of specimens, including some new species, due to collecting in special habitats and using different trapping techniques. In this paper we describe eleven new species for the state of Chiapas, Mexico. Full descriptions, illustrations of dorsal habitus, fore and hind legs, prosternal carina, external scent efferent system, and paramere of the new species: *A. carinopilosus*, *A. chiapensis*, *A. cristobalensis*, *A. denticulatus*, *A. laevifemoralis*, *A. longinoi*, *A. lorenae*, *A. marcelae*, *A. puncticarinatus*, *A. santiagensis*, *A. septemclavatus*, are included. *Amnestus bergrothi* and *Amnestus stali* are redescribed, also illustrated, and lectotypes assigned, because they were originally described based on females. The original description of *Amnestus dallasi* is also included, because it was described based on one female and it is the only specimen known. Brief descriptions of the other 14 Mexican known species and their distribution are also included. A key and a general discussion to separate the 28 Mexican species are also provided.

Key words: burrowing bugs, biodiversity

Resumen

El género *Amnestus* es uno de los géneros de chinches cavadoras más diversos. En años recientes ha sido posible obtener una gran cantidad de especímenes, incluyendo algunas nuevas especies, gracias a la colecta en hábitats muy especializados y por el uso de técnicas de muestreo diferentes. Aquí se describen 11 nuevas especies para el estado de Chiapas, México. Se incluyen, descripciones; ilustraciones de la vista dorsal, patas anteriores y posteriores, carina prosternal, peritremo, y paramero de las nuevas especies: *A. carinopilosus*, *A. chiapensis*, *A. cristobalensis*, *A. denticulatus*, *A. laevifemoralis*, *A. longinoi*, *A. lorenae*, *A. marcelae*, *A. puncticarinatus*, *A. santiagensis*, *A. septemclavatus*. *Amnestus bergrothi* y *Amnestus stali* son redescritas, también ilustrados y se designan lectotipos, ya que originalmente fueron descritas, basadas en hembras. La descripción original de *Amnestus dallasi* también se incluye porque fue descrita basándose en una sola hembra y es el único espécimen que se conoce. Breves descripciones de las otras 14 especies mexicanas conocidas y su distribución también se presentan. Una clave y una discusión general para separar las 28 especies Mexicanas son también incluidas.

Palabras clave: chinches cavadoras, biodiversidad

Introduction

Amnestus Dallas (1851) and *Lattinestus* Eger (2008) are the only two extant genera in the subfamily Amnestinae. The species of *Amnestus* are recognized by their small size, and by the four or five marginal pegs on the jugs (Froeschner, 1960), while those of *Lattinestus* are distinguished by the lack of ocelli, and by the hemelytral membrane which is greatly reduced, occupying 1/7 or less of hemelytral length (Eger, 2008).

Froeschner (1960) revised the *Amnestus* and included 20 species distributed from western Ontario in Canada, through the United States, Mexico, Central America, Antilles and South America to Argentina. He also treated four

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References cited

- Distant, W.L. (1880–1893) Rhynchota. Hemiptera-Heteroptera. In: Godman, F.D. & Salvin, O. (Eds.), *Biologia Centrali Americana. Vol. 1*. London, 462 pp.
- Eger, J.E. (2008) A new genus and three new species of burrowing bugs (Hemiptera: Heteroptera: Cydnidae: Amnestinae). *Proceedings of the Entomological Society of Washington*, 110 (4), 940–947.
<http://dx.doi.org/10.4289/0013-8797-110.4.940>
- Froeschner, R.C. (1960) Cydnidae of the Western Hemisphere. *Proceedings of the United States National Museum*, 111, 337–680.
<http://dx.doi.org/10.5479/si.00963801.111-3430.337>
- Froeschner, R.C. (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.
- INEGI (2005) Informacion Geografica. Aspectos del territorio estatal con base en el marco geoestadistico. Available from: <http://www.inegi.org.mx/sistemas/mexicocifras/> (accessed 18 February 2014)
- Kment, P. & Vilimova, J. (2010) Thoracic scent efferent system of Pentatomoidea (Hemiptera: Heteroptera): a review of terminology. *Zootaxa*, 2706, 1–77.
- Lis, J.A. (1998) *Amnestus raunoi* n. sp. from Iran, the first Old World representative of the New World subfamily Amnestinae (Hemiptera: Heteroptera: Cydnidae). *Entomologica Fennica*, 9, 5–7.
- Mayorga, C. (2002) Revision generica de la familia Cydnidae (Hemiptera-Heteroptera) en México, con un listado de las especies conocidas. *Anales del Instituto de Biología, Universidad Nacional Autónoma de México Serie Zoología*, 73 (2), 157–192.
- Mayorga, C. & Cervantes, L. (2001) Life cycle and description of a new species of *Amnestus* Dallas (Hemiptera-Heteroptera: Cydnidae) associated with the fruits of several species of *Ficus* (Moraceae) in Mexico. *Journal of the New York Entomological Society*, 109 (3–4), 392–402.
[http://dx.doi.org/10.1664/0028-7199\(2001\)109\[0392:lcadoa\]2.0.co;2](http://dx.doi.org/10.1664/0028-7199(2001)109[0392:lcadoa]2.0.co;2)
- Mayorga, C. & Cervantes, L. (2005) Description of six new species of *Amnestus* Dallas (Hemiptera-Heteroptera: Cydnidae) from Mexico. *Journal of the New York Entomological Society*, 113 (3–4), 159–173.
[http://dx.doi.org/10.1664/0028-7199\(2005\)113\[0159:dosnso\]2.0.co;2](http://dx.doi.org/10.1664/0028-7199(2005)113[0159:dosnso]2.0.co;2)
- Mayorga, C. & Cervantes, L. (2006) Cydnidae (Hemiptera: Heteroptera) del centro de Investigaciones Costeras La Mancha, Actopan, Veracruz, México. *Revista Mexicana de Biodiversidad*, 77, 205–214.
- Mayorga, C. & Cervantes, L. (2009) Two new species of *Amnestus* from Guatemala, with new records for some other Guatemalan burrower bugs (Hemiptera: Heteroptera: Cydnidae). *Zootaxa*, 2311, 19–37.
- Mayorga, C., Cervantes, L. & Lis, J.A. (2012) *Amnestus raunoi* J. A. Lis, the only representative of the Amnestinae in the Old World: a synonym of *Amnestus pusillus* Uhler (Hemiptera: Heteroptera: Cydnidae). *Zootaxa*, 3445, 67–68
- Pluot-Sigwalt, D. & Lis, J.A. (2008) Morphology of the spermatheca in the Cydnidae (Hemiptera: Heteroptera): Bearing of its diversity on classification and phylogeny. *European Journal of Entomology*, 105, 279–312.
<http://dx.doi.org/10.14411/eje.2008.038>