

**NEW HETEROPTERA (INSECTA: HEMIPTERA)
RECORDS FROM COLOMBIA**
**Nuevos registros de Heteroptera (Insecta: Hemiptera) para
Colombia**

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ABSTRACT

Two species of the genus *Vilga* Stål and the genus *Dicysta* Champion are recorded for the first time from Colombia.

Key words. Hemiptera, Heteroptera, Colombia insects, *Dicysta*, *Vilga*.

RESUMEN

Se registran por primera vez para Colombia dos especies del género *Vilga* Stål, y por primera vez el género *Dicysta* Champion.

Palabras clave. Hemiptera, Heteroptera, Insectos de Colombia, *Dicysta*, *Vilga*.

INTRODUCTION

The Heteroptera, or “true bugs”, are among the most diverse groups within the Hemiptera, and are usually identified by the strong odor produced by the metathoracic scent glands (Schuh & Slater 1995). The Hemiptera is the fifth largest group of insects with at least 80.000 described species (Gaston 1991), with the Heteroptera being the largest group with more than 35.000 species (Slater 1982). The true bugs that occur in Colombia are poorly known. The data for many groups is sparse and no comprehensive account or checklist exists for the country. Here, two species of the genus *Vilga* Stål and the genus *Dicysta* Champion are recorded for the first time from Colombia. The specimens were examined during curatorial activities at the MUJ and IAVH collections. The acronyms of depositary institutions are as follow: Instituto de Ciencias Naturales, Universidad Nacional de Colombia, Bogotá, Colombia (UNCB);

Laboratorio de Entomología, Museo de Historia Natural, Pontificia Universidad Javeriana, Bogotá, Colombia (MUJ); Instituto Alexander Von Humboldt, Villa de Leyva, Colombia (IAVH); and National History Museum, Smithsonian Institution, Washington D.C., USA (USNM).

***Vilga* Stål (Coreidae: Pseudophloeinae)**

The Pseudophloeinae can be distinguished from other Coreidae subfamilies by having the tibiae terate, without a dorsal sulcus; lack of a median dorsal impression on the head; enlarged posterior abdominal angles of the seventh segment; eighth female paratergite without a functional spiracle; particular genitalic characters; and by the structure of the scent-gland auricle, in which the peritreme has a dorsal ridge entire or shortly bilobed, not with a Y-shape (Dolling 1977, 1978, 1986). The subfamily includes 28 genera distributed in all geographic areas, except non-tropical Australia (Dolling 1986). The species of

Pseudophloeinae are frequently associated with Fabaceae herbs, although no host-records exist for Neotropical species (Dolling 1977, 1978, 1986). Pseudophloeinae includes three genera in the New World: *Coriomeris* Westwood, *Ceraleptus* Costa, and *Vilga* Stål. The first two are Holarctic (Froeschner 1963, Dolling & Yonke 1976, Dolling 1977), while *Vilga* is Neotropical, with *V. mexicana* Distant 1893 ranging from Southern Arizona to El Salvador (Dolling 1977, 1986). The projecting lobe of the seventh abdominal tergum of the males unites the species included in *Vilga* (Dolling 1977). The genus includes 13 species accommodated in six subgenera (Dolling 1977, 1986). Dolling (1977) commented that specimens of this genus are rare in collections, maybe due to cryptic habitats.

In Colombia only *V. dissimilis* Distant, 1893 has been previously reported (Dolling 1977). *V. westwoodi* (Kolenati, 1845) (Fig. 1A), which is a widespread taxon in the Neotropics, has been recorded from Trinidad, Bolivia, Argentina, Paraguay, and Brazil; and *V. divaricata* Distant, 1893 has been recorded from Panama and Guyana (Dolling 1977). The specimens of *V. divaricata* and *V. westwoodi* listed below represent the first species records from Colombia.

Specimens examined: *Vilga divaricata*: **COLOMBIA. Tolima:** 1♂, Melgar, 450 m, 5-III-91, [MUJ]; 1♂, Melgar, Base Aérea, 18 jun 1974, H. León, leg. [UNCB]. *Vilga westwoodi*: **COLOMBIA. Meta:** 1♂, Villavicencio, 8 oct 1970, P. Rodríguez T., leg. [UNCB]; 1♂, Acacías, Vda. Alto A., 730 m, 6 dic 1985, A. Sanchez, leg. [UNCB]; 2♂♂, Cumaral, via a Veracruz, 4°9'N 73°20'W, Vda. Laguna Brava, Fca. El Campin, 400 m, 23 oct 1994, M. Ospina [IAVH]; 1♀, PNN La Macarena, Caño La Curia, 580 m, 24 dic 1993, F. Fernández [IAVH]; [**Boyacá:**] 1♀, Laguna P'alagua, Pto. Boyaca, 10 nov 1976, H. Bernal, leg. [UNCB]; **Cundinamarca:** 1♂, Medina, Vda. Choapal alt. 540 m, 29 jul

1986, [curso] *Sist. avanzada* [UNCB]; 1♂, Sasaima, C. Cordova [UNCB].

***Dicysta* Champion (Tingidae)**

The Tingidae are called “lace bugs” due to the delicate body reticulation found in many of their species (Drake & Ruhoff 1965, Schuh & Slater 1995). Madrigal (1978) listed and commented the species present in Colombia, based partially in the world catalogue of Drake and Ruhoff (1965). The genus *Dicysta* has been so far recorded from Panama, Peru, Brazil, Paraguay, Australia, and New Caledonia (Drake & Ruhoff 1965, Guilbert 1997). Species of this genus have frequently been associated with Bignoniaceae species (Drake & Ruhoff 1965). After Champion's (1897) description of the monotypic *Dicysta*, Drake (1922, 1922a), Drake & Hambleton (1935, 1939, 1940), Drake & Poor (1939), and Monte (1940) added several new species from the Neotropical region. The genus has never been revised and includes 14 described species (Drake & Ruhoff 1965, Guilbert 1997). The specimen studied (Figs. 1B, 1C) is the first generic record from Colombia. It was collected at a Malaise trap in a tropical dry forest of the Caribbean coast.

Several *Dicysta* specimens were examined at the USNM and compared to the Colombian specimen: *D. amica* (holotype), *D. cara* (holotype), *D. fonsecai*, *D. hollandi*, *D. lauta* (holotype), *D. limata* (holotype), *D. neocaledonica*, *D. sagillata* (holotype), *D. serrata*, *D. smithi*, *D. vitrea*, *D. parilia* (holotype) and *D. peruviana* (holotype). It was not possible to assign it to any of the species examined in the collection. The only species that could not be examined was *D. brasiliensis*, although from its description (Drake 1922) it differs from the Colombian specimen in that the hemelytra is widened near the apex (not widened in the Colombian specimen), and that the portion connecting the inflated part of the middle carina bears three areoles (no areoles in the Colombian specimen).

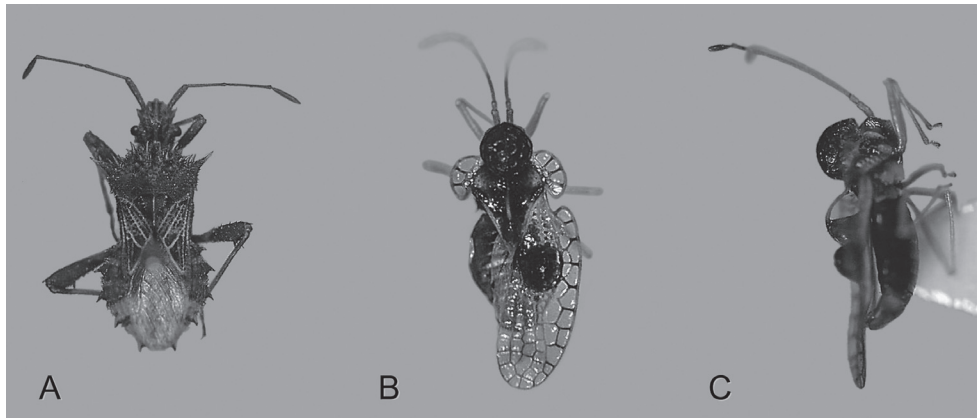


Figure 1. Dorsal photographs of *Vilga* and *Dicysta*. A., *V. westwoodi*, male, dorsal view; B., *Dicysta* sp., male, dorsal view, C. *Dicysta* sp., lateral view.

Some differences distinguish the Colombian specimen from other *Dicysta* species: the hemelytral tubercles are conical rather than concave anteriorly; the median carina is flat in the first half and inflated in the posterior half. The most similar species is *D. sagillata*, sharing with it the large hemispherical hood; the anterior part of the median carina without cells; the prominent hemelytral tubercles; and the paranota not strongly recurved. The examined specimen differs from *D. sagillata* in the shape of the tubercles of the hemelytra, which are conical instead of concave anteriorly; in the more flattened and expanded paranota; and in having a rather different coloration pattern. With additional specimens further studies may prove that this is a new, yet undescribed, species.

Specimen examined: COLOMBIA. Bolívar: 1♂, SFF Los Colorados, 300 m, 9°51'33"N 73°06'38"W, agosto 1996, Bosque seco, [trampa] Malaise, F. Escobar, leg. IAVH.

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LITERATURE CITED

- CHAMPION, G. C. 1897-1901. Insecta. Rhynchota. Hemiptera-Heteroptera. Volume II. Pp. xvi + 1-416, 22 plates In: Godman, F. D. & Salvin, O. (eds.), *Biologia Centrali-Americana*. Printed by Taylor & Francis. London.
- DOLLING, W. R. 1977. A revision of the Neotropical genus *Vilga* Stål (Hemiptera: Coreidae). *Systematic Entomology* 2: 27-44.
- DOLLING, W. R. 1978. A revision of the Oriental pod bugs of the tribe Clavigrallini (Hemiptera: Coreidae). *Bulletin of the British Museum (Natural History), Entomology series* 36(6): 281-321.
- DOLLING, W. R. 1986. The tribe Pseudophloeini (Hemiptera: Coreidae) in the Old World tropics with a discussion of the distribution of the Pseudophloeinae. *Bulletin of the British Museum (Natural History), Entomology series* 53(3): 151-212.
- DOLLING W. R. & T. R. YONKE. 1976. The genus *Coriomeris* in North America. *Annals of the Entomological Society of America* 69(6): 1147-1152.
- DRAKE, C. J. 1922. IX. The genus *Dicysta* Champion (Hemiptera). *Annals of the*

- Carnegie Museum 13(3-4): 269-273.
- DRAKE, C. J. 1922a. Neotropical Tingitidae with descriptions of three new genera and thirty-two new species and varieties (Hemiptera). *Memoirs of the Carnegie Museum* 9 (2): 351-378, 1 plate.
- DRAKE, C. J. & E. J. HAMBLETON. 1935. New Brazilian Tingitidae (Hemiptera) (Part II). *Archivos do Instituto Biologico* 6: 141-154.
- DRAKE, C. J. & E. J. HAMBLETON. 1939. Twenty new Brazilian Tingitidae (Hemiptera) (Part V). *Arquivos do Instituto Biologico* 10: 153-163.
- DRAKE, C. J. & E. J. HAMBLETON. 1940. New Brazilian Tingitidae (Hemiptera) (Part VI). *Revista de Entomologia* 11 (1-2): 533-537.
- DRAKE, C. J. & M. E. POOR. 1940. Six new South American Tingitidae (Hemiptera). *Revista de Entomologia* 11 (1-2): 226-231.
- DRAKE, C. J. & F. A. RUHOFF. 1965. Lacebugs of the World: A Catalogue (Hemiptera: Tingidae). *United States National Museum Bulletin* 243: 1-634.
- FROESCHNER, R. C. 1963. The genus *Ceraleptus* Costa in the Western Hemisphere. *Journal of the Kansas Entomological Society* 36 (2): 109-113.
- GUILBERT, E. 1997. Two new species of *Dicysta* (Hemiptera, Tingidae) from New Caledonia. *Zoosystema* 19 (2-3): 515-521.
- MADRIGAL, J. A. 1978. Chinchas de encaje (Hemiptera: Tingidae) de Colombia. *Revista Colombiana de Entomología* 4 (3-4): 76-95.
- MONTE, O. 1940. Tingitideos novos ou poco conhecidos da fauna Americana. *Arquivos do Instituto Biologico* 11: 283-300.
- SCHUH, R. T. & J. A. SLATER. 1995. *True bugs of the world (Hemiptera: Heteroptera). Classification and natural history*. Cornell University Press, Ithaca, New York.
- SLATER, J. A. 1982. Hemiptera. Pp. 417-447 in: Parker, S. P. (ed.), *Synopsis and classification of living organisms*. McGraw-Hill, New York.

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