

NOTE BRÈVE

New evidences on the coevolution between bugs (Hemiptera : Thaumastocoridae : Xylastodorinae) and the New World Palms

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The bug family Thaumastocoridae includes 15 species in two subfamilies : the Thaumastocorinae with 9 species distributed in Australia and India, and the Xylastodorinae with 6 American and Caribbean species found from South Florida to North Argentina. These bugs are phytophagous. The species of the subfamily Thaumastocorinae live on several Dicot plant families, while those of the subfamily Xylastodorinae have been collected until now only on palms (SCHUH & SLATER, 1995). This last subfamily includes two genera, *Discocoris* and *Xylastodoris*.

Xylastodoris luteolus Barber, 1920, is a pest of the royal palm, *Roystonea regia* (Kunth) Cook in Florida and Cuba (MOZNETTE, 1921 ; BARANOWSKI, 1958). Five species of the genus *Discocoris* have been found on different palm species (table I). These include : *D. drakei* Slater & Ashlock, 1959, *D. fernandesi* Slater & Brailovsky, 1983, *D. imperialis* Slater & Schuh, 1990, *D. kormilevi* Viana & Carpintero, 1981, and *D. vianai* Kormilev, 1955.

We found two species of *Discocoris* on Amazonian palms : 1) four individuals of *D. drakei* (fig. 1) were collected on the inflorescence of *Jessenia bataua* (Martius) Burret in Peru at Jenaro Herrera (F. Kahn & K. Mejia, coll. IX-1985), department of Loreto, in the lower Ucayali River valley, and many individuals were found on the inflorescence of *Oenocarpus mapora* Karsten in Brazil, state of Pará, Belém (G. Couturier & M.S. Oliveira, coll. VI-1997), - both palm species are monoecious ; 2) many individuals of *D. fernandesi* (fig. 2) were collected on the male inflorescence of the dioecious *Mauritia flexuosa* L.f. in Brazil, near Manaus, by the road BR 174, km 12, (G. Couturier & F. Kahn, coll. VI-1996). The specimens of both bug species are deposited at the Instituto Nacional de Pesquisas da Amazônia (Manaus), EMBRAPA-CPATU (Belém), University of Connecticut (Storrs), and Muséum national d'Histoire naturelle (Paris).

Most species have been collected on the inflorescences of palms, only one species was found on the infructescence, and another on the leaves (table 1).

The new data presented above confirm a close relationship between the subfamily Xylastodorinae and the palms in the New World as was formerly suggested by SLATER & BRAILOVSKY (1983).

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Table 1. – Known localities and host plants (Palmae) of the bugs Xylastodorinae in the New World.

	Collecting place and référence	Host plant
<i>Discocoris drakei</i>	- Colombia : Buenaventura (SLATER & ASHLOCK, 1959)	unknown
	- Peru : Junin, San Ramos de Pangoa (SCHUH, 1975)	<i>Phytelephas</i> sp. (1)
	- Peru : Loreto, Jenaro Herrera (this paper)	<i>Jessenia bataua</i> (1)
	- Brazil : Belém, Pará (this paper)	<i>Oenocarpus mapora</i> (1)
<i>Discocoris fernandesi</i>	- Venezuela : Aragua, Rancho Grande, and Roraima, Bolivar Gran Sabana (SLATER & BRAILOVSKY, 1983)	unknown
	- Brazil : Manaus, Amazonas (this paper)	<i>Mauritia flexuosa</i> (1)
<i>Discocoris imperialis</i>	- Colombia : Medellin, El nueve Quibdo road (SLATER & SCHUH, 1990)	<i>Socratea montana</i> (2)
<i>Discocoris kormilev</i>	- Argentina : Ituzaingó, Prov. de Corrientes (VIANA & CARPINTERO, 1981)	<i>Butia yatai poñi</i> (3)
<i>Discocoris vianei</i>	- Argentina : Frontera, misiones (KORMILEV, 1955)	<i>Euterpe edulis</i> (1)
<i>Xylastodoris luteolus</i>	- Cuba : Santiago de las Vegas (BARBER, 1920)	unknown
	- Florida : Coconut grove (MOZNETTE, 1921), Homestead (BARANOWSKI, 1958)	<i>Roystonea regia</i> (4)

(1) on the inflorescence ; (2) on the infructescence ; (3) *Butia yatai poñi* as cited in VIANA & CARPINTERO (1981) (*Butia yatai* = *Syagrus yatai* ; *Butia poñi* = *species incerta*) ; (4) on the youngest leaf, pinnae and inflorescence.

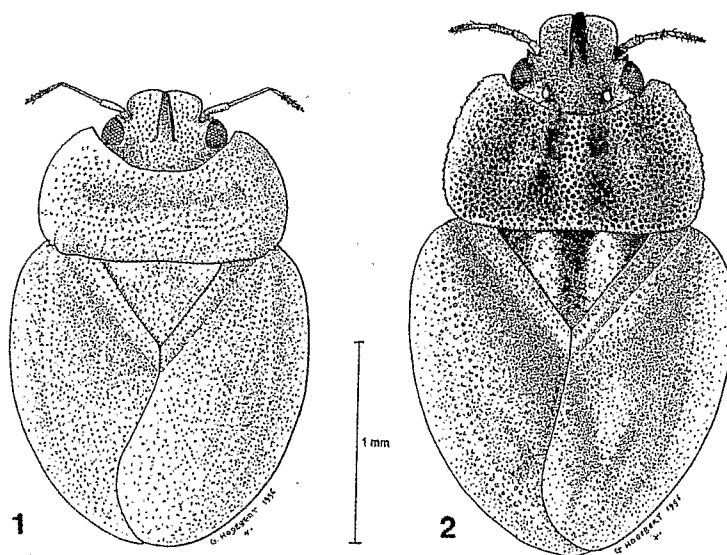


Fig. 1 et 2, habitus. – 1, *Discocoris drakei*. – 2, *Discocoris fernandesi*.

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