

First record of a crab spider (Thomisidae) preying on a scorpion

Primer registro de una araña cangrejo (Thomisidae) depredando sobre un escorpión

Wilson R. Lourenço¹, Antonio D. Brescovit²,
Cristina A. Rheims² & John L. Cloudsley-Thompson³

¹ Département de Systématique et Evolution, USM 0602, Section Arthropodes (Arachnologie), Muséum national d'Histoire naturelle, CP 053, 61 rue Buffon 75005 Paris, France – a.arachne@mnhn.fr

² Laboratório de Artrópodes, Instituto Butantan, Av. Vital Brazil, 1500, 05503-900, São Paulo, SP, Brazil. abresc@terra.com.br; cris.rheims@butantan.gov.br

³ 10 Battishill Street, Islington, London N1 1TE, United Kingdom

An exhaustive list of the predators of scorpions was published by Polis *et al.* (1981) and the theme was later dealt with by McCormick & Polis (1990). These authors established that approximately 150 taxa, mainly composed of Vertebrates, prey on scorpions. They gave the percentages of scorpion predators represented in each group of vertebrates. These include birds (37%), lizards (34%), mammals (18%), frogs and toads (6%) and snakes (5%).

Records of invertebrates feeding on scorpions, however, remain more fragmented than those of vertebrates, and in most cases are inaccurate in that they lack precise identification. They include Chilopoda, Insecta – both predatory forms as well as Tenebrionidae (Cloudsley-Thompson, 1960; Williams, 1966) and other scavengers-Solifugae (Cloudsley-Thompson, 1977; Punzo, 1998) and, most-important, other scorpions. In the case of spiders, records relate mainly to black widows (*Latrodectus liliana* Melic, 2000, *Latrodectus* spp., Theridiidae) or wolf spiders (Lycosidae) (McCormick & Polis, 1990; Melic, 2000).

Back in the 1970s, while carrying out field work near the road connecting Manaus to Caracará in Amazonia, the senior author (WRL), observed an adult female crab spider *Epicadus heterogaster* (Guérin, 1829), family Thomisidae, in its retreat located in the nearby vegetation. The spider was feeding on a juvenile buthid scorpion.

The spider was identified by the junior authors (ADB & CAR), while the scorpion was identified by the senior author (WRL) as *Tityus metuendus* Pocock, 1897 one of the most common species in this area of Amazonia. The scorpion specimen represented a second instar juvenile, with a total length of 8-9 mm. It is possible that the scorpion first climbed on to the vegetation around the retreat, and was then captured by the spider which had been hidden in the vegetation. Buthid scorpions, particularly juveniles, are very active climbers. This behaviour has previously been observed in *T. metuendus* (Lourenço, 1997). The present case of predation may therefore be considered as accidental. *Epicadus heterogaster* is probably not a regular predator of scorpions but a generalist hunter that feeds mainly on insects, using the sit-and-wait foraging technique (Höfer & Brescovit, 2001).

References: CLOUDSLEY-THOMPSON, J.L. 1960. Notes on Arachnida, 35 - A scorpion eaten by a beetle. *Entomologist's monthly Magazine*, **95** (1959): 223. • CLOUDSLEY-THOMPSON, J.L. 1977. Adaptational biology of Solifugae (Solpugida). *Bulletin of the British*



Fig. 1. The spider *Epicadus heterogaster* (Guérin, 1829) in its natural habitat.

arachnological Society, **4** (2): 61-71. • HÖFER, H. & A.D. BRESCOVIT 2001. Species and guild structure of a Neotropical spider assemblage (Araneae) from Reserva Ducke, Amazonas, Brazil. *Andrias*, **15**: 99-119. • LOURENÇO, W.R. 1997. Additions à la faune de scorpions néotropicaux (Arachnida). *Revue suisse de Zoologie*, **104** (3): 587-604. • MCCORMICK, S.J. & G.A. POLIS 1990. Prey, predators, and parasites. Pp. 294-320. In: G.A. Polis (ed.), *The biology of scorpions*. Stanford Univ. Press, Stanford. • MELIC, A. 2000. El género *Latrodectus* Walckenaer, 1805 en la península Ibérica (Araneae: Theridiidae). *Revista Ibérica de Aracnología*, **1**: 13-30. • POLIS, G.A., W.D. SISSOM & S.J. MCCORMICK 1981. Predators of scorpions: field data and a review. *Journal of Arid Environments*, **4**: 309-326. • PUNZO, F. 1998. The biology of camel spiders (Arachnida, Solifugae). Kluwer Academic Pub., Boston, London: 312 pp. • WILLIAMS, S.C. 1966. Burrowing habitat of the scorpion *Anuroctonus phaeodactylus* (Wood) (Scorpionida: Vaejovidae). *Proceedings of the California Academy of Sciences*, **34** (4): 419-428.

First record of a crab spider (Thomisidae) preying on a scorpion

W.R. Lourenço, A.D. Brescovit, C. A. Rheims & J.L. Cloudsley-Thompson



Fig. 1. The spider *Epicadus heterogaster* (Guérin, 1829) in its natural habitat.

Sobre la aparente extinción 'atlántica' de la araña viuda negra y primer registro de la especie para Navarra y La Rioja (Araneae: Theridiidae: *Latrodectus*)

A. Melic, E. Baquero & R. Jordana



Fig. 1. *Latrodectus tredecimguttatus* (Rossi, 1790). Olite (Navarra).