

## New record of nuptial gift observed in *Trechalea amazonica* (Araneae, Lycosoidea, Trechaleidae)

### Primer registro de un regalo nupcial en *Trechalea amazonica* (Araneae, Lycosoidea, Trechaleidae)

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#### Abstract

The first record of a nuptial gift in *Trechalea amazonica* F.O.P.-Cambridge, 1903, is herein presented. The observations were made in the Oriximiná, Pará, northern Brazil. Two males were found on tree trunks near the water, each holding in the chelicerae a small prey wrapped in silk. This is the second confirmed observation of the nuptial gift behavior in the family Trechaleidae, first in the genus *Trechalea* Thorell, 1869, and later in *Paratrechalea* Carico, 2005 from southern Brazil. This new observation could be used in phylogenetic and evolutionary studies for this poorly studied spider family.

**Keywords:** Araneae, nuptial gift, Neotropical region.

#### Resumen

Se presenta el primer registro de un regalo nupcial en *Trechalea amazonica* F.O.P - Cambridge, 1903. Las observaciones se hicieron en el pantanal de Oriximiná, Pará, Brasil. Se encontraron dos machos en troncos de árboles cerca del agua, cada uno cargando en los quelíceros una presa pequeña envuelta en seda. Ésta es la segunda observación confirmada del comportamiento nupcial del regalo en la familia Trechaleidae, primero en el género *Trechalea* Thorell, 1869, y más adelante adentro *Paratrechalea* Carico, 2005 del Brasil meridional. Esta nueva observación se podría utilizar en estudios filogenéticos y evolutivos para esta familia.

**Palabras clave:** Araneae, regalo nupcial, region Neotropical.

Presentado: 05/03/2009  
Aceptado: 05/06/2009  
Publicado online: 28/08/2009

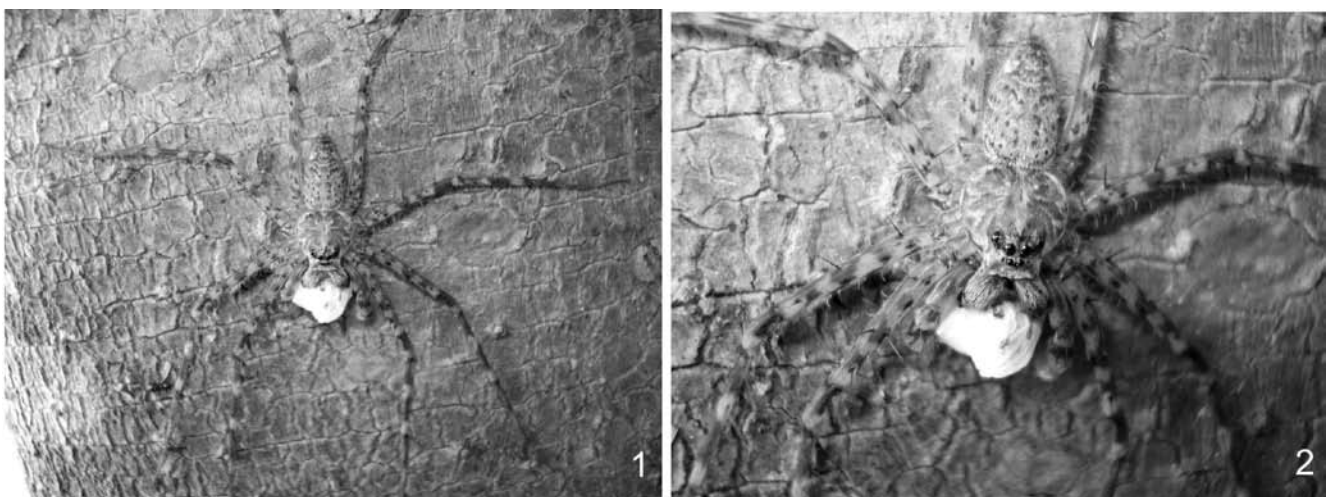
#### Introduction

The use of nuptial gifts in spiders was first observed in males of *Pisaura mirabilis* (Clerck, 1757) (Bristowe & Locket 1926). This behavior, previously known only for pisaurid spiders, has been recently reported for a few trechaleid species (Costa-Schmidt et al. 2008).

In the Neotropical region, the first record of a nuptial gift for a non-pisaurid specimen was reported by Silva (2005) for *Trechalea bucculenta* (Simon 1898), a member of the family Trechaleidae. Later, this behavior was described in detail after field observations made by Costa-Schmidt et al. (2008), for *Paratrechalea azul* Carico, 2005 and *P. ornata* (Mello-Leitão 1943), in Maquiné, Southern Brazil. Recently, Albo et al. (2009) have observed the same behavior of nuptial gift construction in populations of *Paratrechalea ornata* (Mello-Leitão, 1943) from Uruguay.

In the city of Oriximiná, northern Brasil (01°45'S, 55°50'W), two males were observed on tree trunks near the water, each holding in the chelicerae a small, wrapped prey, consisting of an immature Ctenidae spider for one of them and an immature Lycosidae spider for another one (Figs. 1, 2). The males holding the eggsacs is certainly an indication of nuptial gift behavior, since all the representatives of Trechaleidae usually eat their preys without making any wrapping, observed by Silva et al. (2005) for the predatory behavior of Trechaleidae. Also, some females were observed carrying eggsacs in tree trunks (Fig. 3) The presence of females with eggsacs indicates the activity of mature males in the area, thus it can explain the presence of many males with nuptial gifts (field observations).

The specimens were collected manually and deposited in the collection of Arachnida and Myriapoda of Museu de Ciências



Figures 1-2. *Trechalea amazonica* F.O.P.-Cambridge, 1903: 1, 2 males with nuptial gifts.



**Figures 3-4.** *Trechalea amazonica* F.O.P.-Cambridge, 1903: 3. Female carrying an eggsac. Figure 4. Area of sampling of Iripixi Lake, Oriximiná, Pará, Northern Brazil.

e Tecnologia (MCTP) of Pontifícia Universidade Católica do Rio Grande do Sul (PUCRS). The area was sampled from January 17<sup>th</sup> to February 7<sup>th</sup> in 2009 in Iripixi Lake, in the city of Oriximiná, state of Pará, Northern Brazil (Fig. 4).

**Acknowledgments**

We want to thank Francisco de Aguiar Picanço for help with the field work and Dr. James E. Carico (Lynchburg College) for comments on the manuscript. This study was supported by “Conselho Nacional de Desenvolvimento Científico e Tecnológico” (CNPq N° 140282/2008-4 for ELCS).

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