

Predation of the snake *Erythrolamprus almadensis* (Wagler, 1824) by the tarantula *Grammostola quirogai* Montes De Oca, D'Elia & Pérez-Miles, 2016

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Erythrolamprus almadensis (Serpentes: Dipsadidae) is a medium-size non-venomous snake that rarely exceeds 60 cm in total length and is widely distributed from mid-western Brazil to Uruguay, Argentina, Paraguay and Bolivia (Carreira et al., 2005). *Grammostola quirogai* (Araneae: Theraphosidae) is a large species of tarantula that is distributed from extreme southern Brazil (new record) to Uruguay (Montes de Oca et al., 2016). Herein, we report a predation event involving *E. almadensis* and *G. quirogai*.

At 1330 h on 23 October 2015, the three first authors found a specimen of *E. almadensis* that was being preyed upon under a rock by an adult female *G. quirogai* in a region of grasslands with hills and rocky outcrops called Serra do Caverá (-30.3594°S, -55.2500°W, WGS 84, 301 m elev.), in the municipality of Rosário do Sul, state of Rio Grande do Sul, southern Brazil. The snake (snout-vent length 390.60 mm) was found dead, with severe damage to the anterior and middle regions of its body. The spider was feeding on these areas; therefore, they were in an advanced stage of decomposition due to the extracorporeal digestion process carried out by this arachnid (Fig 1).

In Serra do Caverá, individuals of several species of theraphosid spiders use rocks in contact with the ground as retreats, mainly the sedentary adult females. They rarely leave the safety of these holes, which are coated with thin web layers that extend beyond the adjacent regions of the hole (LMB, pers. obs.). Most likely, the snake was surprised upon entering the spider's environment and hence subdued by it.

Although reptiles' predation events by invertebrates, especially spiders, are widely documented (e.g., Bauer, 1990; Armas, 2000; Maffei et al., 2010; Vieira et al., 2012), snakes are not common items in the diet of these animals. In regard to tarantulas, there are few reports in the literature, and among them, most involve these animals in captivity, as in the experiments of Brazil and Vellard (1926) with individuals of the genus *Grammostola* Simon, 1892. West (1992) also reported the predation of the fer-de-lance viper *Bothrops atrox* (Linnaeus, 1758) by the Goliath Bird Eater *Theraphosa blondi* (Latreille, 1804) in Venezuela. However, this was a simulated predator encounter that did not characterize a natural situation. To the best of our knowledge, we present here the first documented case involving the predation of a snake by an individual of the Theraphosidae family in nature. Both specimens were collected (SISBIO 50666-1). The snake was deposited at the Herpetological Collection of the Department of Biology of the Universidade Federal de Santa Maria (ZUFMSM4269).

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Figure 1. *Grammostola quirogai* predating the snake *Erythrolamprus almadensis*. Photography: GFD.

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