## ALMEIDAIA AIDAE MIELKE AND CASAGRANDE (LEPIDOPTERA: SATURNIIDAE): FIRST RECORD FOR PARAGUAY<sup>1</sup>

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ABSTRACT: Details of the first Paraguayan record of this little known Saturniid are presented.

KEYWORDS: Laguna Blanca, Para La Tierra, new record, Cerrado, Atlantic Forest

Almeidaia aidae Mielke & Casagrande, 1981 is a distinctive and beautiful Saturniid moth (Saturniidae: Arsenurinae). It is one of two very similar, but enigmatic species in the genus *Almeidaia* Travassos, 1937 both of which are known from very few specimen records. Their distinctiveness is recognized by their classification in their own tribe, Almeidaiini.

A. aidae was first collected in 1962 by Sr. Pedro Pompeu da Silva in Rio Verde, Mato Grosso do Sul, Brazil, and identified at that time as the only known species in the genus, A. romualdoi Travassos, 1937. It was not described as a separate species until Mielke and Casagrande (1981) detailed the differences. Almeidaia aidae is smaller than A. romualdoi, with less elongated wings (male 43mm, female 47mm), a yellowish-brown head and slightly different tone to the forewing coloration. The external morphology of A. aidae was described in a series of publications by Camargo et al. (2005a, 2005b, 2006).

Furtado (2004) detailed the life cycle of this species, raising larvae on *Pseudobombax longiflorum* (Mart. and Zucc.) A. Rob. and *Eriotheca gracilipes* (K. Schum.) A. Rob. (Bombacaceae), two species of trees which are common in the cerrado of Brazil and Paraguay (F. Mereles *pers. comm.*). The former was considered the principal host of the species. Of note is the extremely rapid development of the larvae, which takes just 10 days, the short adult lifespan of approximately 10 days and the extended pupal period of almost a year (nearly 345 days).

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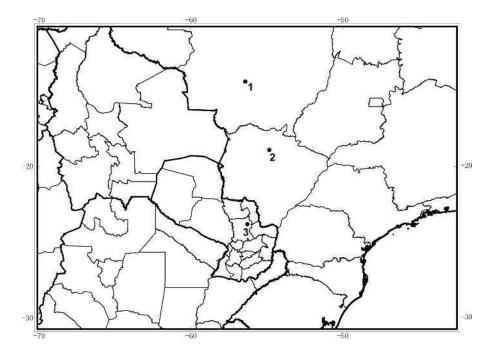


Fig. 1: Map of known localities for *Almeidaia aidae* Mielke & Casagrande. 1. Diamantino, Mato Grosso State, Brazil. 2. Rio Verde, Mato Grosso do Sul State, Brazil. 3. Reserva Natural Laguna Blanca, Departamento San Pedro, Paraguay.

This extremely rare species in collections is apparently endemic to the cerrado region where it was previously known from only two localities in Brazil: Rio Verde, Mato Grosso do Sul and Diamantino, Mato Grosso (Alto Rio Arinos) (Furtado, 2004). The same author notes the annual appearance of this species in the latter locality in late August and early September, a month or so prior to the end of the dry season. The appearance of this species for such a short period at a time of year not considered a peak time for collecting undoubtedly contributes to its rarity in collections.

On 2 September, 2010 a male specimen of *Almeidaia aidae* was collected at a light trap by Karina Atkinson at Para La Tierra Research Station, Laguna Blanca, Departamento San Pedro, Paraguay (S 23° 48' 45.4", W 56° 17' 41.7"). The specimen concurs with the description provided by Mielke and Casagrande (1981) and has a forewing costal length of 41mm. This is the first record for Paraguay and is the first record of the genus *Almeidaia* outside of Brazil. The specimen is housed in the Para La Tierra collection with specimen number CZPLT-i-195. The light trap was located close to the main building facing a patch of dry cerrado forest in an area of transition from cerrado to Atlantic Forest vegetation.

The date of the Paraguay record concords with those reported for Brazil. Despite continuous fieldwork at Laguna Blanca since the establishment of the Para La Tierra station in April 2010, there have been no further records of the species (up to February 2012), supporting the theory of a single, short flight time per year. This record represents a range extension of approximately 548 km (see Figure 1) to the southwest of the current documented range.

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