

## First record of *Austroleon dispar* Banks, 1909 (Neuroptera: Myrmeleontidae) from Brazil

## Nelson W. Perioto<sup>1,2\*</sup>, Rogéria I.R. Lara<sup>1</sup> and Ana L.S. de Oliveira<sup>2</sup>

1 Agência Paulista de Tecnologia dos Agronegócios, APTA Centro Leste. Av. Bandeirantes, 2419. 14030-670. Ribeirão Preto, SP, Brazil.

- 2 Universidade Estadual Paulista "Júlio de Mesquita Filho" (UNESP), Faculdade de Ciências Agrárias e Veterinárias, Programa de Pós-graduação em
  - Agronomia (Entomologia Agrícola). Via de Acesso Prof. Paulo Donato Castellane, s/n. 14888-900. Jaboticabal, SP, Brazil.
- \* Corresponding author. E-mail: nperioto2@gmail.com

**ABSTRACT:** The present note extends the geographic range of *Austroleon dispar* Banks, 1909 to Brazil based on the examination of three females and one male collected in the Estação Ecológica Jataí, Luiz Antônio, São Paulo. The present finding indicates that *A. dispar* is associated with dry ecosystems, at least in part of its geographic distribution.

Banks (1909) erected *Austroleon* (Neuroptera: Myrmeleontidae) which is a little genus restricted to South America, with three species (Krivokhatsky *et al.* 2002): *A. immitis* (Walker, 1853), *A. dispar* Banks, 1909 and *A. lizeri* (Navás, 1920).

The specimens examined match with *A. dispar* (Figure 1) in the key of identification proposed by Stange (2010). This species can be recognized by the mid femoral sensory hair longer than tarsus and subequal to that in the fore femur; posterior area of hind wing for most of distance much higher than the of fringe setae's length on the posterior vein. Nothing is known about its biology.

The sampling were made between 2007-2009 at Estação Ecológica de Jataí (EEJ) (Figure 2) located in Luís Antônio, São Paulo, Brazil (21°30' S and 21°40' S, and 47°40' W and 47°50' W) (Pires *et al.* 2000). Habitats of the EEJ include dry mesophytic semideciduous forest and the Brazilian savannah (Kronka *et al.* 2005); remnants of *Eucalyptus* sp. and *Pinus* sp. cultivars; and aquatic habitats

located near Mogi-Guaçu River. The climate is Köpen AW type (tropical with wet summers and dry winters) and the total annual rainfall of 1,433 mm is concentrated between November and April; the mean annual temperature is 21.7°C (Cavalheiro *et al.* 1990).

Six Townes' style Malaise traps (Townes 1972), two in areas of Brazilian savannah and same number in savannah woodland vegetation and riparian vegetation, were set at EEJ to collect continuously. The insects, however, were removed every two weeks. Two females (collected at April of 2007 and November of 2009), and one male (February of 2007) of *A. dispar* were collected in traps located in areas of Brazilian savannah and one female (May 2009) in savannah woodland vegetation, the driest areas among the studied environments. The sampling efforts amounts to 2,190 trap-days and 547,5 trap-days/exemplar.

The genus *Austroleon* is now represented in Brazil by *A. dispar* and *A. immitis. A. dispar* had only been found in Argentina (Mendoza), Paraguay (Hayes) and Bolivia

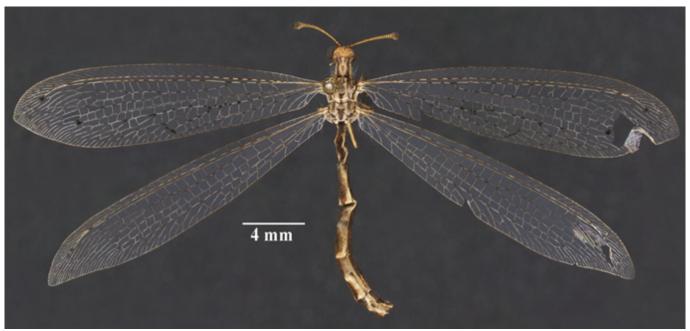
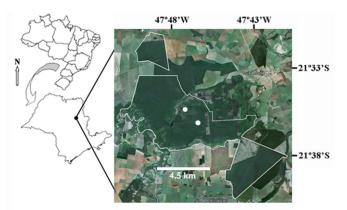


FIGURE 3. Austroleon dispar Banks, 1909, dorsal view.

(Stange 2010). This note extends the range of *A. dispar* about 2,500 km NE from Mendoza and 1,100 km E from Hayes.

The examined specimens have been deposited in the collection of the Museu de Zoologia da Universidade de São Paulo (MZSP) (São Paulo, SP, Brazil). C.R.F. Brandão, curator. Permanent license to collect zoological material (IBAMA) number 16473-1.



**FIGURE 2.** Map of Brazil showing state of São Paulo and, in detail, aerial photography of the Estação Ecológica de Jataí (EEJ). White line outlines the EEJ; white spots indicate the places where specimens of *Austroleon dispar* Banks, 1909 were collected.

**ACKNOWLEDGMENTS:** We thank to the Instituto Nacional de Ciência e Tecnologia dos Hymenoptera Parasitoides da Região Sudeste Brasileira (Hympar/Sudeste – CNPq/Fapesp/Capes) for the financial support.

## LITERATURE CITED

- Banks, N. 1909. New genera and species of tropical Myrmeleontidae. Journal of the New York Entomological Society 17:1-4.
- Cavalheiro, F., M.V. Ballester, A.V. Krushe, S.A. Melo, J.L. Waechter, C.J. da Silva, M.C. D'Arienzo, M.S. Suzuki, R.L. Bozelli, T.P. Jesus and J.E. Santos. 1990. Propostas preliminares referentes ao plano de zoneamento e manejo da Estação Ecológica do Jataí. Acta Limnologica Brasiliensia 3: 951-968.
- Krivokhatsky, V.A., S.A. Belokobylskij, M.B. Dianov, A.L. Lobanov and G.S. Medvedev. 2002. System ZInsecta. World Wide Web electronic publication. Electronic Database accessible at http://www.zin.ru/ projects/zinsecta/eng/ZInsecta.asp. Captured on 23 April 2012.
- Kronka, F.J.N., M.A. Nalon and C.K. Matsukuma. 2005. Inventário florestal da vegetação natural do Estado de São Paulo. São Paulo: Secretaria do Meio Ambiente/Instituto Florestal, Imprensa Oficial. 200 p.
- Pires, A.M.Z.C.R., J.É. dos Santos and J.S.R. Pires. 2000. Caracterização ambiental de uma Unidade de Conservação. Estação Ecológica de Jataí, Luiz Antônio, SP; p. 59-72 In J.E. dos Santos and J.S.R. Pires (org.). Estudos Integrados em Ecossistemas: Estação Ecológica de Jataí. São Carlos: Rima Editora.
- Stange, L.A. 2010. Preliminary report on the Myrmeleontidae (Neuroptera) of Paraguay. *Insecta Mundi* 114: 1-14.
- Townes, H.A. 1972. A light-weight Malaise trap. *Entomological News* 83: 239-247.

RECEIVED: May 2012

ACCEPTED: October 2012

PUBLISHED ONLINE: March 2013 EDITORIAL RESPONSIBILITY: Rodrigo M. Feitosa