

<http://dx.doi.org/10.11646/zootaxa.3764.4.10>
<http://zoobank.org/urn:lsid:zoobank.org:pub:E9FA2F10-84AB-4E78-946A-0CAD85B129A2>

A new species of *Aricoris* Westwood, [1851] belonging to “*chilensis*” group (Lepidoptera: Riodinidae)

RICARDO RUSSO SIEWERT¹, DIEGO RODRIGO DOLIBAINA¹, OLAF HERMANN HENDRIK MIELKE¹, MIRNA MARTINS CASAGRANDE¹ & ALFRED MOSER²

¹ Laboratório de Estudos de Lepidoptera Neotropical, Departamento de Zoologia, Universidade Federal do Paraná, P.O. Box 19.020, ZIP Code 81.531-980, Curitiba, Paraná, Brazil.

E-mail: ricardo.siewert@gmail.com; dirodrido@hotmail.com; omhesp@ufpr.br; mibras@ufpr.br

² Avenida Wilhelm Rotermund, 1045, ZIP Code 93.030-000, São Leopoldo, Rio Grande do Sul, Brazil.

E-mail: a.moser@ensinger.com.br

Abstract

A new species of Riodinidae from the grasslands of South Brazil, Paraguay and Argentina, *Aricoris schneideri* sp. nov., is described.

Key words: Aricorina, grasslands, Nymphidiini, south Brazil

Introduction

The genus *Aricoris* Westwood, 1851, a basal member of the tribe Nymphidiini, subtribe Aricorina, comprises 24 valid species occurring in South and Central America, especially in open dry areas (Hall & Harvey 2002; Callaghan & Lamas 2004; Callaghan 2010; Kaminski & Carvalho-Filho 2012). A phylogenetic study for the genus was provided by Hall & Harvey (2002) and five monophyletic species groups were proposed: *constantius*, *colchis*, *chilensis*, *aurinia* and *epulus*. The *chilensis* species group includes three small species restricted to austral South America, *A. chilensis* (C. Felder & R. Felder, 1865), *A. notialis* (Stichel, 1910) and *A. cinericia* (Stichel, 1910). All species belonging to this group share a indented forewing inner margin in M_3 –CuA₁, ventral hindwing postdiscal band with a continuous white mark around its medial disjunction and the invaginated pocket between *ostium bursae* and *papillae analis* with a restrict sclerotinization (Hall & Harvey 2002). This species group is known for occurring in open areas from Bolívia, Chile, Paraguay, Argentina and Uruguay (Hayward 1949; Hall & Harvey 2002; Bentancur-Viglione 2009; Núñez-Bustos & Volkmann 2011).

Analyzing the material from the grasslands of southern Brazil, a new species belonging to the *chilensis* species group and closely related to *A. cinericia* was found. This paper aims to describe it.

Material and methods

The specimens studied had their abdomen removed and cleared in a 10% potassium hydroxide (KOH) solution for further dissection and removal of the genitalia to analyze its structures. The illustrations were prepared with the aid of a camera lucida attached to a stereoscopic microscope.

All examined material belong to the following institutions:

USNM National Museum of Natural History, Smithsonian Institution, Washington, USA.

CENB Colección Ezequiel Núñez Bustos, Buenos Aires, Argentina.

CLAM Coleção de Lepidoptera Alfred Moser, São Leopoldo, Brazil.

male and the female described by Schneider (1937) are not conspecific and should represent two distinct species. By having the wing pattern dorsally orange, the female could represent a different species occurring in the austral South America, while the male has features only found in *A. cinericia*. In addition, Schneider (1937) mentions that specimens were collected in a small “desert”, similar to the xerophile environment of the *A. cinericia*’s records in Corrientes and Entre Ríos (Núñez Bustos, comm. pers.). All these evidences shows that *H. arenarum* did not represent *A. schneideri* sp. nov., but a synonym of *A. cinericia*, however, the absence of any information about the number of individuals used by Schneider (1937) or from the type material preclude the assertion of the identity of this taxon.

Acknowledgements

We are grateful to Ezequiel Núñez Bustos for sharing information about *A. cinericia* from Argentina and loan of some specimens, as well as Helena P. Romanowski for donation of a male and female of *A. cinericia* from Rio Grande do Sul. We thank to Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) for the fellowship granted to the authors.

References

- Bentancur-Viglione, M.G. (2009) Lista de los Papilionoidea y Hesperioidea del Uruguay (Insecta: Lepidoptera). *SHILAP - Revista de Lepidopterología*, 37 (145), 23–40.
- Callaghan, C.J. (2010) A re-evaluation of the *Aricoris constantius* group with the recognition of three species (Lepidoptera: Riodinidae). *Zoologia*, 27 (3), 395–402.
<http://dx.doi.org/10.1590/s1984-46702010005000002>
- Callaghan, C.J. & Soares, A. (2001) A review of the Cinericiiformes section of the genus *Audre* Hemming and the description of a new subspecies (Riodinidae). *Revista Brasileira de Zoologia*, 18 (3), 755–763.
<http://dx.doi.org/10.1590/s0101-81752001000300012>
- Callaghan, C.J. & Lamas, G. (2004) Riodinidae. In: Lamas, G. (Ed.) *Checklist: Part 4A. Hesperioidea—Papilionoidea*. In: Heppner, J.B. (Ed.), *Atlas of Neotropical Lepidoptera 5A*. Association for Tropical Lepidoptera/Scientific Publishers, Gainesville, pp. 141–170.
- D’Abrera, B.L. (1994) *Butterflies of the Neotropical Region. Part VI. Riodinidae*. Black Rock, Hill House, Victoria, 879–1096 p.
- Dolibaina, D.R., Mielke, O.H.H. & Casagrande, M.M. (2011) Borboletas (Papilionoidea e Hesperioidea) de Guarapuava e arredores, Paraná, Brasil: um inventário com base em 63 anos de registros. *Biota Neotropica*, 11 (1), 1–14.
<http://dx.doi.org/10.1590/s1676-06032011000100031>
- Hall, J.P.W. & Harvey, D.J. (2002) Basal subtribes of the Nymphidiini (Lepidoptera: Riodinidae): phylogeny and myrmecophily. *Cladistics*, 18 (6), 539–569.
[http://dx.doi.org/10.1016/s0748-3007\(02\)00105-6](http://dx.doi.org/10.1016/s0748-3007(02)00105-6)
- Hayward K.J. (1949) Nuevas especies y formas de ‘Riodinidae’ de Argentina y Bolivia (Lep. Rhop.). *Acta Zoologica Lilloana*, 8, 197–201.
- Kaminski, L.A. & Carvalho-Filho, F.S. (2012) Life History of *Aricoris propitia* (Lepidoptera: Riodinidae) - A myrmecophilous butterfly obligately associated with fire ants. *Psyche*, 1–10.
<http://dx.doi.org/10.1155/2012/126876>
- Núñez-Bustos, E. & Volkmann, L. (2011) Mariposas diurnas escasas y asociadas a determinados ambientes de montaña de Argentina central con nuevos registros para el área de estudio (Lepidoptera: Papilionoidea y Hesperioidea). *SHILAP - Revista de Lepidopterología*, 39 (155), 245–262.
- Schneider, H. (1937) Beschreibung zweier neuer Eryciniden der Gattung *Hamearis* Hbn. aus Uruguay. *Entomologische Rundschau*, 55 (12), 137–138.
- Schweizer, F. & Kay, R.G.W. (1941) Lepidópteros del Uruguay. *Anales del Museo de Historia Natural de Montevideo*, 5 (2), 1–14.
- Stichel, H.F.E.J. (1910) Vorarbeiten zu einer Revision der Riodinidae Grote (Erycinidae Swains.) (Lep. Rhop.). *Berliner entomologische Zeitschrift*, 55, 9–103.
<http://dx.doi.org/10.1002/mmnd.192719260503>