

Insecta, Lepidoptera, Riodinidae, Nymphiidini, *Aricoris terias* (Godman, 1903): First records from Brazil and updated geographic distribution map

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ABSTRACT: This paper provides the exact location of the first records from Brazil of *Aricoris terias* (Godman, 1903) and an updated geographic distributional map of the species, extending the known range of the species over 1300 km. This is also the first record of this species on a wet forest environment.

The genus *Aricoris* Westwood, 1851 currently comprises 22 species arranged in five monophyletic species groups (Hall and Harvey 2002; Callaghan and Lamas 2004). Previously, *Aricoris* was believed to be monotypic, since the type-species, *A. constantius* (Fabricius, 1793) has a highly modified wing pattern. For the same reason, when Godman (1903) described *A. terias* (Godman, 1903) (Figure 1) he was not quite sure if his new species really belonged to *Aricoris*. Miller and Miller (1972), unaware of Godman's description, described a new genus and species, *Eiseleia pichanalensis* L. Miller and J. Miller, 1972, a synonymy of *A. terias*. Most of the species currently on *Aricoris* were described in other genera and later relocated to *Audre* Hemming, 1934 (Hemming 1934). Hall and Harvey (2002) were the first to present a series of synapomorphies uniting these species of *Aricoris*, *Audre*, and *Eiseleia* in a monophyletic clade under *Aricoris*, the oldest available name. *A. terias* forms, along with *A. constantius*, the "*constantius*" group, which are basal to and rather unlike other *Aricoris* species groups (Hall and Harvey 2002). These species present greasy wings and signa as an elongated triangle at wall of the corpus bursae (Hall and Harvey 2002). Miller and Miller (1972) describes *A. terias* as a weak flier, most likely found on open areas of the *chaco* with xerophytic vegetation and therefore unlike *A. constantius*, but similar to some other *Aricoris*.

Present distributional data of *A. terias* restricts its range to dry and open areas of the *chaco seco* of Paraguay (without locality, Godman 1903) and Argentina (Figure 2); the only reliable records available are from a series of eleven specimens from Pichanal, province of Salta (Miller and Miller 1972) and a single specimen from San Bernardino, province of Córdoba (at Coleção Entomológica Padre Jesus Santiago Moure, DZUP, Universidade Federal do Paraná), both Argentina. The lack of faunal information

for vast areas of Southern Cone obstructs the knowledge of the continuity among sampled areas.



FIGURE 1. *Aricoris terias* collected in the municipality of Loanda, state of Paraná, Brazil; male: dorsal (A), ventral (B).

The first record of *A. terias* in Brazil is an individual observed by MUP in November, 2008, at Fazenda Barra do Moeda (FIBRIA - MS), Três Lagoas, Mato Grosso do Sul, Brazil (exact location: 20°60'05.85" S, 51°48'21.37" W). A female specimen was collected on the same site on 17th March 2009, at around 13:30 h. The area is close to the boundaries with the state of São Paulo, and is a transitional zone between the Atlantic semi deciduous forest and the Cerrado. The collection site was a six years old eucalyptus stand *ca.* two km away from the closest natural area, a *cerradão* (savanna forest) fragment near the western bank of the Paraná River. The specimen is deposited at Museu de Zoologia da Universidade Estadual de Campinas "Adão José Cardoso" (ZUEC-LEP), UNICAMP.

The most recent record of *A. terias* in Brazil is a male individual collected by DRD on 12th December 2009, in a expedition to northwestern Paraná, caught around 17:00 h; right after a heavy rain shower in the edge of a forest fragment at RPPN (which stands for Particular Reserve of Natural Heritage) Fazenda Matão, 25 km east of Loanda, Paraná, Brazil (exact location: 22°54'55.42" S,

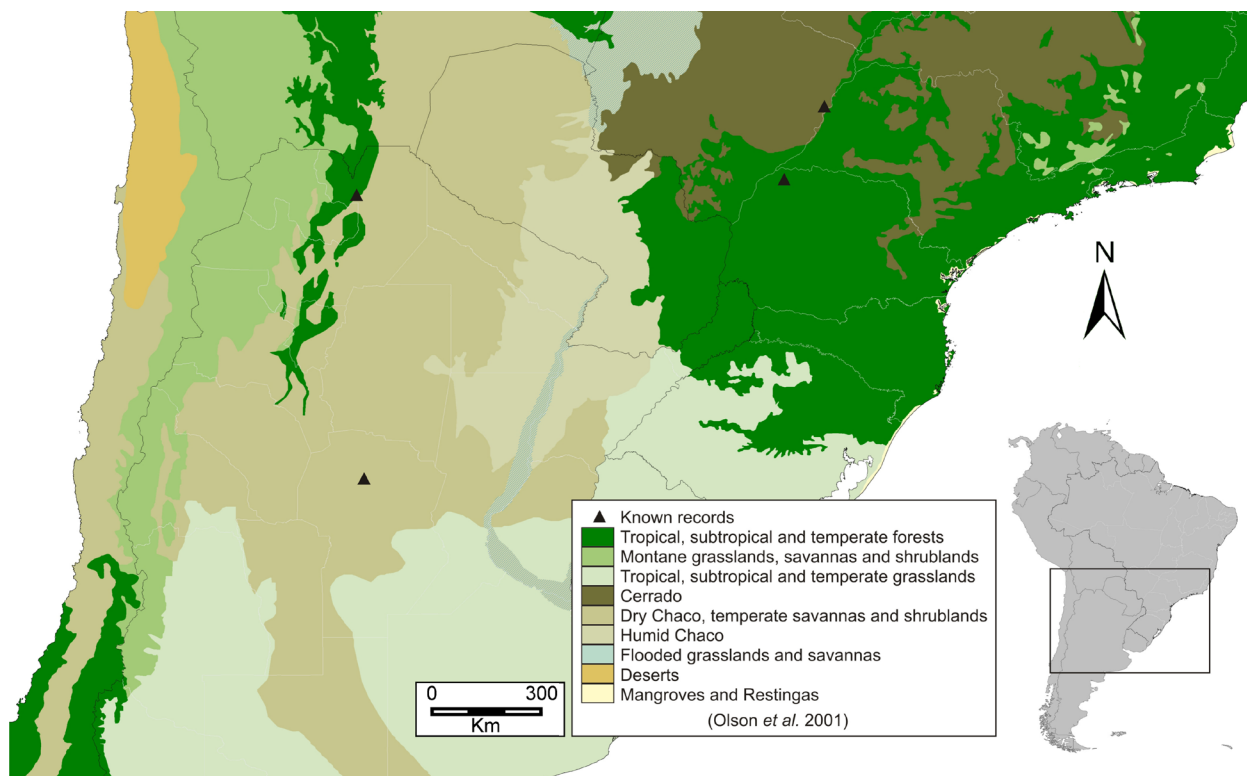


FIGURE 2. *Aricoris terias* known geographic distribution and associated ecoregions (Olson et al. 2001).

52°52'57.37" W) (Figure 2). The area was originally part of the Atlantic semi-deciduous forest, but currently is a highly fragmented landscape, semi-isolated amid pastures and sugarcane plantations. The specimen is deposited at Coleção Entomológica Padre Jesus Santiago Moure (DZ 20.870), UFPR.

This last record of *A. terias* is especially relevant considering the history of extensive sampling in the state of Paraná and adjacent areas (Mielke and Casagrande 1997; Carneiro et al. 2008; Nuñez-Bustos 2009). This is also the first record of *A. terias* outside the Dry Chaco where the species is normally associated, extending the range of this species to a much different wet forest habitat (Figure 2). Similar dry and open areas in Brazil (the Cerrado) are only found dozens of kilometers northwards, in the states of São Paulo and Mato Grosso do Sul. This is not completely unexpected, even considering the divergence of habitats, since the larva of these butterflies may not feed on plants. If greasy wings are a good indicator of aphytophagy as suggested by Hall and Harvey (2002), the distribution of *A. terias* may be correlated not to a host plant, but to one or more taxa of ants.

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