

NOTA CIENTIFICA

The first known female of *Megathecla gigantea* (Hewitson, 1867) (Lepidoptera: Lycaenidae: Eumaeini)

Primera hembra conocida de *Megathecla gigantea* (Hewitson, 1867) (Lepidoptera: Lycaenidae: Eumaeini)

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Abstract

The first known female of the extremely rare Amazonian species *Megathecla gigantea* (Hewitson, 1867) (Lepidoptera: Lycaenidae: Eumaeini), from Peru, Loreto, Tierra Hermosa is reported herein. Some notes are given on its behavior and habitat.

Keywords: Brazil, Ecuador, *Thecla gigantea*, Peru.

Resumen

Se reporta la primera hembra conocida de la extremadamente rara especie amazónica *Megathecla gigantea* (Hewitson, 1867), de Perú, Loreto, Tierra Hermosa. Se ofrece algunas notas sobre su comportamiento y hábitat.

Palabras clave: Brasil, Ecuador, *Thecla gigantea*, Perú.

Megathecla gigantea (Hewitson) is one of the largest Neotropical hairstreaks (male forewing length >25 mm), as its name would imply. It was described in 1867 from Brazil, «Pará», by British lepidopterist William Chapman Hewitson [1806-1878], based on an unstated number of males that had been collected by celebrated British naturalist Henry Walter Bates [1825-1892] (Hewitson, 1867). In all probability, Bates found these specimens in the vicinity of the city of Belém (S 01°27', W 48°29'), Pará.

Hewitson included *M. gigantea* in the omnibus genus *Thecla* Fabricius, 1807, which today belongs to the primarily Palearctic tribe

Theclini (Eliot 1973). D'Abbrera & Bálint (*in* D'Abbrera, 2001) proposed the new monobasic genus *Gulliveria* for *T. gigantea*. Unfortunately, that name is a junior homonym of the fish genus *Gulliveria* Castelnau, 1878. Robbins (2002) introduced the replacement name *Megathecla* and added *Papilio cupentus* Stoll, 1781 (= *P. annulatus* Gmelin, [1790]) to *Megathecla*—even though it has a distinct ventral wing pattern—because males of both species share a scent pad, *sensu* Robbins (1991), within the discal cell, similar genitalia (Fig. 3), and a similar hue of blue on the dorsal wings.

Hewitson (1867) indicated there were males of *M. gigantea* in his collection and that of Bates. Kirby (1879) listed two individuals in Hewitson's collection, which are deposited in the Natural History Museum, London (BMNH). One of Bates' specimens is also in the BMNH (via the Godman & Salvin Collection) and is labeled «Para, L. Amazon, H.W. Bates». Both hindwings are glued onto the body, and the right hindwing is small and

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Figure 1. Lectotype male of *Megathecla gigantea*; Brazil, Pará (BMNH). Upperside at left, underside at right.



Figure 2. Female of *M. gigantea*; Peru, Loreto, Tierra Hermosa, 140 m, 9 Dec 2003, J. J. Ramírez leg. (MUSM). Upperside at left, underside at right.

presumably from another individual. Finally, there is a male in the Oxford University Museum, Cambridge (OXUM) that may have been part of the original type series, but it has no data. D’Abrera (1995) illustrated the Hewitson specimens in the BMNH and incorrectly regarded one of them as the holotype. To fix one of the type series as the unique name-bearer, we designate as lectotype of *M. gigantea* the male whose underside was illustrated by D’Abrera (Fig. 1). We select this specimen because it possesses an abdomen and because the Bates Collection specimen appears to be a composite.

Megathecla gigantea is recorded from the Amazonian lowlands of Brazil (Pará), eastern Ecuador (Napó), and northeastern Peru (Loreto). Despite this broad distribution, the species is exceedingly rare, with fewer than eight specimens known in the world’s major museums. Draudt (1919) did not see one while

preparing his monographic treatment of the American Lycaenidae and based his description and illustrations on information previously published (Hewitson, 1867). Nothing has been published about its life history, behavior, or ecological preferences, nor does the species appear to have otherwise been illustrated.

On a few occasions, one of us (JJR) has seen putative males of *M. gigantea* flying in small plots of young and old secondary forest, adjacent to mature rain forest, in the department of Loreto, in Peru. The first encounter occurred in November 2002, at a site (San Salvador) located 5 km NNW of the town of Contamana (S 07°19', W 075°01', 180 m), on the Río Ucayali, whereas all sightings in 2003 and 2004 were in the vicinity of Tierra Hermosa (S 03°34', W 073°13', 140 m), north of the city of Iquitos. All individuals were flying around the canopies of small trees, at heights of 10-15 m, beyond the reach of a net. On December 9th,

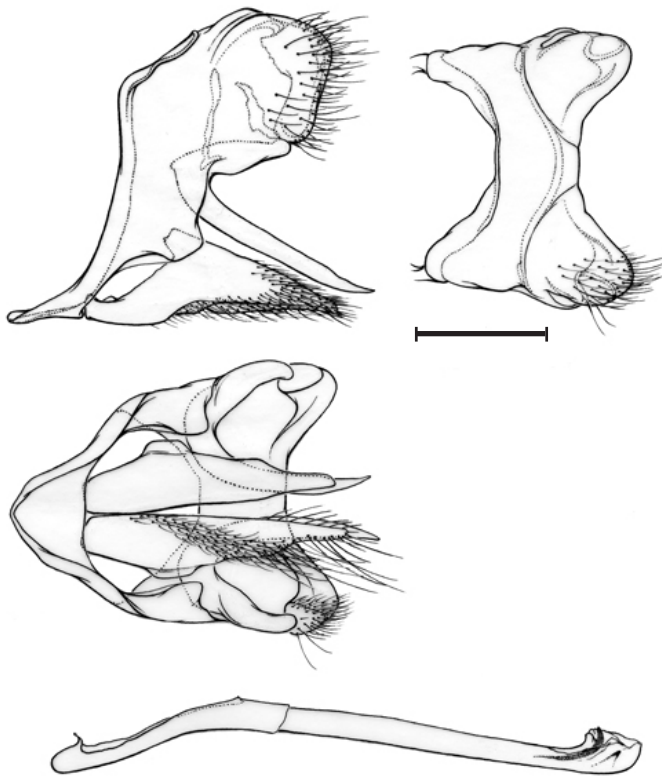


Figure 3. Male genitalia of *M. gigantea* in lateral aspect, labides and tegumen in dorsal aspect, male genitalia in ventral aspect, and penis in lateral aspect. Scale 1mm.

2003, a large individual was seen flying in a labored way, at a height of *ca.* 2,5 m over the ground, in an open field adjacent to mature forest in Tierra Hermosa, settling often but only for a few seconds on several low shrubs. As it looked like a somewhat worn individual of a pericopine moth (Arctiidae: Pericopinae), not much attention was paid to it, until it came near enough to notice it represented an unusual species, especially as it was seen rubbing slightly its hindwings when settled. Upon capture at 12:26 pm and subsequent recognition of its true identity, JJR experienced an emotion similar to that felt by famous British evolutionist Alfred Russel Wallace [1823-1913], when securing a female of *Ornithoptera croesus* Wallace, 1859 in the island of Batchian (Bacan), one of the Moluccas (Maluku), Indonesia, in October 1858: «...none but a naturalist can understand the intense excitement I experienced when I at length captured it. On taking it out of my net and

opening the glorious wings, my heart began to beat violently, the blood rushed to my head, and I felt much more like fainting than I have done when in apprehension of immediate death. I had a headache the rest of the day...» (Wallace, 1869: 342).

This individual, with a forewing length of 32 mm (Fig. 2), is the first documented female of *M. gigantea*, and is deposited in the collections of the Museo de Historia Natural, Universidad Nacional Mayor de San Marcos, Lima (MUSM). The collections previously held two old males, captured at some unknown date (likely in the 1930s), in the vicinity of Iquitos, Loreto (S 03°45', W 073°15'W, 100-120 m). The female is similar to the male but larger, without the very large forewing scent pad and scent patch, and greatly reduced blue coloration on the wings above. We associate the two sexes because they have the same underside wing pattern that is shared with no other Lycaenidae.

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