

Scientific Note: Clearwing moths (Lepidoptera: Sesiidae) of Laos. I. *Akaisphecica melanopuncta* O. Gorbunov & Arita, 1995 (Sesiidae: Sesiinae: Osminiini)

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Abstract: The results of a lepidopterological expedition to Laos in 2005 are presented as the first notes of a planned series. *Akaisphecica melanopuncta* O. Gorbunov & Arita, 1995 (Lepidoptera, Sesiidae) is recorded for Laos for the first time. Illustrations of imago and habitat are presented.

Key words: Lepidoptera, Sesiidae, *Akaisphecica melanopuncta*, Laos, new record

INTRODUCTION

The clearwing moth fauna of Southeast Asia, in spite of many works published in the last three decades (Gorbunov, 1988; Arita & Gorbunov, 1995a,b, 1998, 2000a,b, 2001, 2002, 2003; Gorbunov & Arita, 1995a,b,c, 1999, 2000, 2001, 2002, 2005; Kallies & Arita, 2001, 2004a,b, 2005, 2006; Arita *et al.*, 2003), remains poorly known. As to the sesiid fauna of Laos, it is practically unknown; there is no single publication concerning the clearwing moths of this interesting country, and we found only one reference about finding of *Vietomelittia soljanikovi* O. Gorbunov, 1988 in the province of Vientiane (Arita & Gorbunov, 2000).

In April–May 2005 I visited Laos together with my friend Alexey N. Zamesov. We visited the province of Khammouane [= Khammouang] in the small village of Ban Khou-Kham (also known as Ban Na-Hin). The village is situated at the southern margin of a large area of primary tropical forest on limestone. Despite the fact that the forest was in close proximity to the village, it was in rather pristine condition without visible fellings and landfills (Fig. 1).

April is the warmest month of the dry season, which continues usually from November to May in that part of Indo-China. In the year of our visit the air temperature reached 46°C



Fig. 1: Primary tropical forest north of Ban Khou-Kham (Ban Na-Hin), 200 m, 18°13' N, 104°31' E, 08.IV.2005.

on some days. It is possible that this was the reason why a huge number of insects, especially Lepidoptera and Hymenoptera, were gathered on the ground. One could see hundreds of different species of Lycaenidae sitting in the shade between

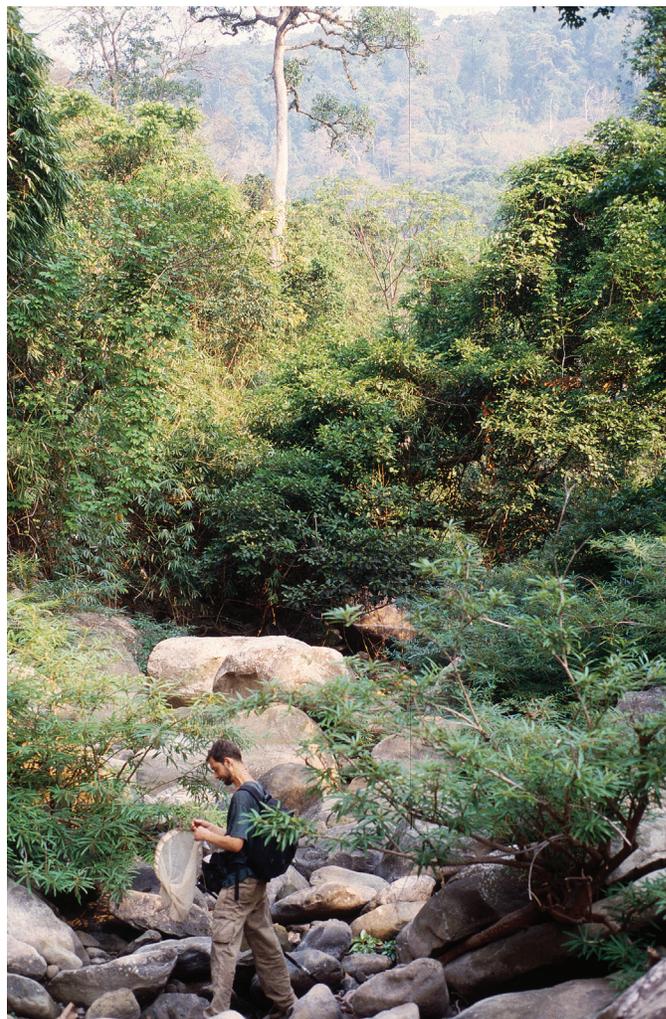
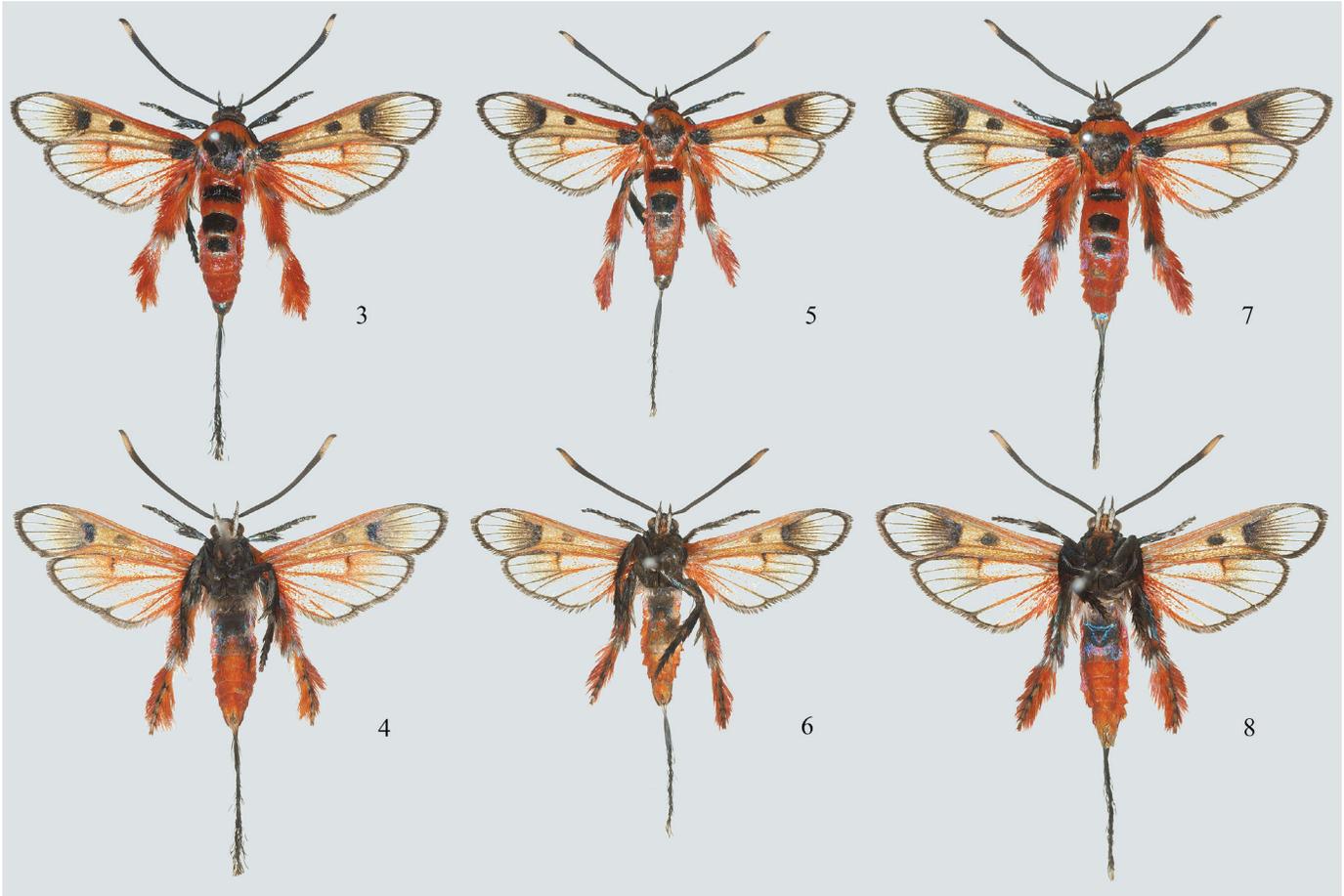


Fig. 2: Habitat of *Akaisphecica melanopuncta* O. Gorbunov & Arita, 1995 and other Sesiidae at Ban Khou-Kham (Ban Na-Hin), 200 m, 18°13' N, 104°31' E, 09.IV.2005. Alexey N. Zamesov collecting butterflies.



Figs. 3-8: *Akaisphecía melanopuncta* O. Gorbunov & Arita, 1995. 3) ♂, Laos, Khammouane Prov., Ban Khoun-Kham (Ban Na-Hin), 200 m, 18°13' N, 104°31' E, 09.IV.2005, O. Gorbunov leg. Sesiidae picture No 0683–2014. Alar expanse 26.1 mm; 4) ditto, underside. Sesiidae picture No 0684–2014; 5) ♂, same locality, 23.IV.2005, O. Gorbunov leg. Sesiidae picture No 0681–2014. Alar expanse 23.2 mm; 6) ditto, underside. Sesiidae picture No 0682–2014; 7) ♂, same locality, 25.IV.2005, O. Gorbunov leg. Sesiidae picture No 0685–2014. Alar expanse 27.2 mm; 8) ditto, underside. Sesiidae picture No 0686–2014.

buttress roots of tall dipterocarp trees at noon. Wet soil along the nearly dry streams was covered with many wasps, bees, flies, butterflies and some moths, including clearwing moths. The behavior of the clearwing moths on the wet soil was rather aggressive and they often banished other insects, including wasps, from their preferred resting sites. Such behavior was very characteristic of males of *Heterosphecía melissoides* (Hampson, 1893). Unfortunately, males only were encountered in these gatherings, but these were in great number and comprised not less than a dozen species, of which we collected more than a thousand specimens. After a precise determination, information on all collected species will be published in a series of papers, of which the present one is the first.

All collected material is deposited in the author's collection (COGM).

***Akaisphecía melanopuncta* O. Gorbunov & Arita, 1995
(Figs. 2–8)**

"*Akaisphecía melanopuncta* Gorbunov et Arita, sp. nov." — Gorbunov & Arita, 1995: 19, figs. 1, 2, 3a–d, 4. Type locality: "Vietnam, Vang Lom, 11.IV.[19]50, ...". Holotype ♂ (MHNG).

Arita & Gorbunov, 2000a: 50 (*Akaisphecía*); Pühringer & Kallies, 2004: 14 (*Akaisphecía*).

This beautiful species was described from a series of three specimens collected by the French entomologist J. Romieux in Vietnam in 1950. Dr. Jean Romieux [1893–1951], "a geologist by profession, worked as a prospector in many parts of the world. As a voluntary worker for the Geneva Museum he collected many minerals and ethnological objects, which form part of the Museum collection. He was also a keen entomologist. He died suddenly in 1951, in Marseille, on his way home from the Far East. His Lepidoptera collection is deposited in the Geneva Museum" (Baldizzone & Van Der Wolf, 2005). Unfortunately, we could not find the type locality for this species, "Vang Lom", on any maps of Vietnam. However, we know that in the last years of his life Romieux worked in the coal mines in Quảng Ninh Province in northeastern Vietnam, and it seems likely that the type locality of this species is somewhere in that province. The type series was collected in the first half of April (Gorbunov, Arita, 1995), and the holotype of the species is deposited in the Muséum d'Histoire Naturelle Genève, Switzerland (MHNG).

The specimens from Laos that we collected were flying over wet sand between the large rounded stones of a dry stream bed (Fig. 2), which likely becomes a strong mountain river in the rainy season. Flying individuals resembled red bumble-bees (*Bombus haemorrhoidalis* Smith, 1852), but with a long black sting.

To add to the original description of the species, we observed that freshly collected specimens are brighter and that both the terminal tergite of the abdomen and spiraling projections are dark grey with strong silvery-blue sheen (Figs 3–8). Besides that, the individual variability is somewhat broader than that in the type series: alar expanse: 23.2–27.5 mm; body length: 11.8–14.0 mm; forewing: 10.1–12.5 mm; antenna: 7.4–9.0 mm.

Bionomics. The larval host plant is unknown. Imago on the wing in April. Males come to wet soil to feed.

Habitat. Primary monsoon semi deciduous tropical forest with *Dipterocarpus alatus*, *Hopea odorata*, *H. fenea* (Dipterocarpaceae), *Lagerstroemia cochinchinensis* (Lythraceae), *Azelia xylocarpa* (Fabaceae) and *Alstonia scholaris* (Apocynaceae).

Distribution. At present this species is known from the type locality in Vietnam and from Laos in the vicinities of the village of Ban Khou-Kham (Ban Na-Hin) in Khammouane Province. The latter locality is the second one for the species and the first record for Laos.

Material. 1 ♂ (Figs 3, 4), Laos, Khammouane Prov., Ban Khou-Kham (Ban Na-Hin), 200 m a.s.l., 18°13' N, 104°31' E, 09.IV.2005, O. Gorbunov leg. (Sesiidae picture Nos 0683-0684–2014. Photo by O. Gorbunov); 1 ♂ (Figs 5, 6), same locality, 23.IV.2005, O. Gorbunov leg. (Sesiidae picture Nos 0681-0682–2014. Photo by O. Gorbunov); 1 ♂ (Figs 7, 8), same locality, 25.IV.2005, O. Gorbunov leg. (Sesiidae picture Nos 0685-0686–2014. Photo by O. Gorbunov).

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