

A new species of the genus *Caeneressa* OBRAZTSOV, 1957 from northern Thailand (Lepidoptera, Erebidae, Arctiinae, Syntomini)

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Abstract: The new species *Caeneressa akha* sp. n. is described from northern Thailand. The female holotype, the female genital structures as well as the habitat and the map of the type locality are figured. The new species differs significantly from all other known species of this genus in wing markings and other external morphological features, as well as in the structures of the genitalia.

Key words: Lepidoptera, Erebidae, Arctiinae, Syntomini, *Caeneressa akha* sp. n., Thailand, distribution

Eine neue Art der Gattung *Caeneressa* OBRAZTSOV, 1957 von Nordthailand (Lepidoptera, Erebidae, Arctiinae, Syntomini)

Zusammenfassung: Die neue Art *Caeneressa akha* sp. n. wird aus Nordthailand beschrieben. Der weibliche Holotypus, seine Genitalstrukturen sowie das Biotop am Typenfundort und die Karte des Typenfundortes werden abgebildet. Die neue Art unterscheidet sich deutlich von allen anderen bekannten Arten dieser Gattung in der Flügelzeichnung und weiteren äußeren morphologischen Merkmalen, sowie in den Genitalstrukturen.

Introduction

In the north of Thailand, several zoogeographical regions meet, such as the South-Central Chinese region, the Indo-Burmese region, and parts of the Sundaland fauna in the south, which make this area to an biodiversity hotspot (MYERS et al. 2000, MITTERMEIER et al. 1998, DE BRUNY et al. 2014, OLSEN & DIERENSTEIN 2002, SCHINTLMEISTER 2003), and it is also a centre of endemism (TURNER et al. 2001).

Many new species could be recorded and published in the last decades from different places in Thailand, both from the northern and central parts and also the peninsular part near the border to Malaysia (e.g. SCHINTLMEISTER 2003, 2009, 2013, SCHINTLMEISTER & PINRATANA 2007, ČERNÝ & PINRATANA 2009, BUCHSBAUM et al. 2012, KÜPPERS & BUCHSBAUM 2015, and many more).

Syntomini and the genus *Caeneressa* OBRAZTSOV, 1957

Presently, the genus *Caeneressa* OBRAZTSOV, 1957 includes about 30 species (LU et al. 2012, OBRAZTSOV 1957). The taxonomic status of several species is not clearly defined (HOLLOWAY 1988).

OBRAZTSOV (1957) erected this genus with species from China and separated it from *Syntomis* OCHSENHEIMER, 1808. Some species today placed in this genus were described in the genus *Eressa* WALKER, 1854. HAMPSON (1898, 1914, 1915), and SEITZ (1912–1913) used *Syntomis* and *Eressa* for species of the later described *Caeneressa*, and no similar species could be found in the cited literature.

Species of this genus occur mainly in China and regions of Indochina and Southeast Asian like Myanmar, Vietnam, Malayan Peninsula, Borneo, and Sumatra (OBRAZTSOV 1957). All are only known west of the Wallace Line which divides the region in the Indo-Malayan and the Indo-Australian Archipelago (OLSON et al. 2001, HOLT et al. 2012, TURNER et al. 2001, DE BRUYN et al. 2014).

Caeneressa diaphana KOLLAR, 1848, with some subspecies, is the most widespread species within this genus in this area (OBRAZTSOV 1957, HOLLOWAY 1988). The nominotypical *C. diaphana* was described from Kashmir (KOLLAR 1848).

Material, methods and locality

The only known specimen of the new species was collected by net during daytime in a primary tropical rainforest near a large waterfall around Akha Hill village (see Figs. 5–6). The weather at this time was warm, about 30°C, cloudless and windless.

The terms in the description of the wing marks and patches follow OBRAZTSOV (1966).

Caeneressa akha sp. n.

(Figs. 1–3.)

Holotype ♀: North Thailand, Chiang Rai Co., Akha Hill vill., 625 m NN, 19°56'35 N, 99°40'23 E, collecting at day, 9. v. 2018, leg. U. BUCHSBAUM

Holotype presently in Collection Ulf BUCHSBAUM, Kranichfeld (CUBK), later to be transferred to Zoologische Sammlung des Bayerischen Staates, München (ZSM).

No paratypes.

Etymology: The new species is named after the local people, the Akha tribe, which lives in the mountains of the Chiang Rai region and surroundings.

Description and differential diagnosis

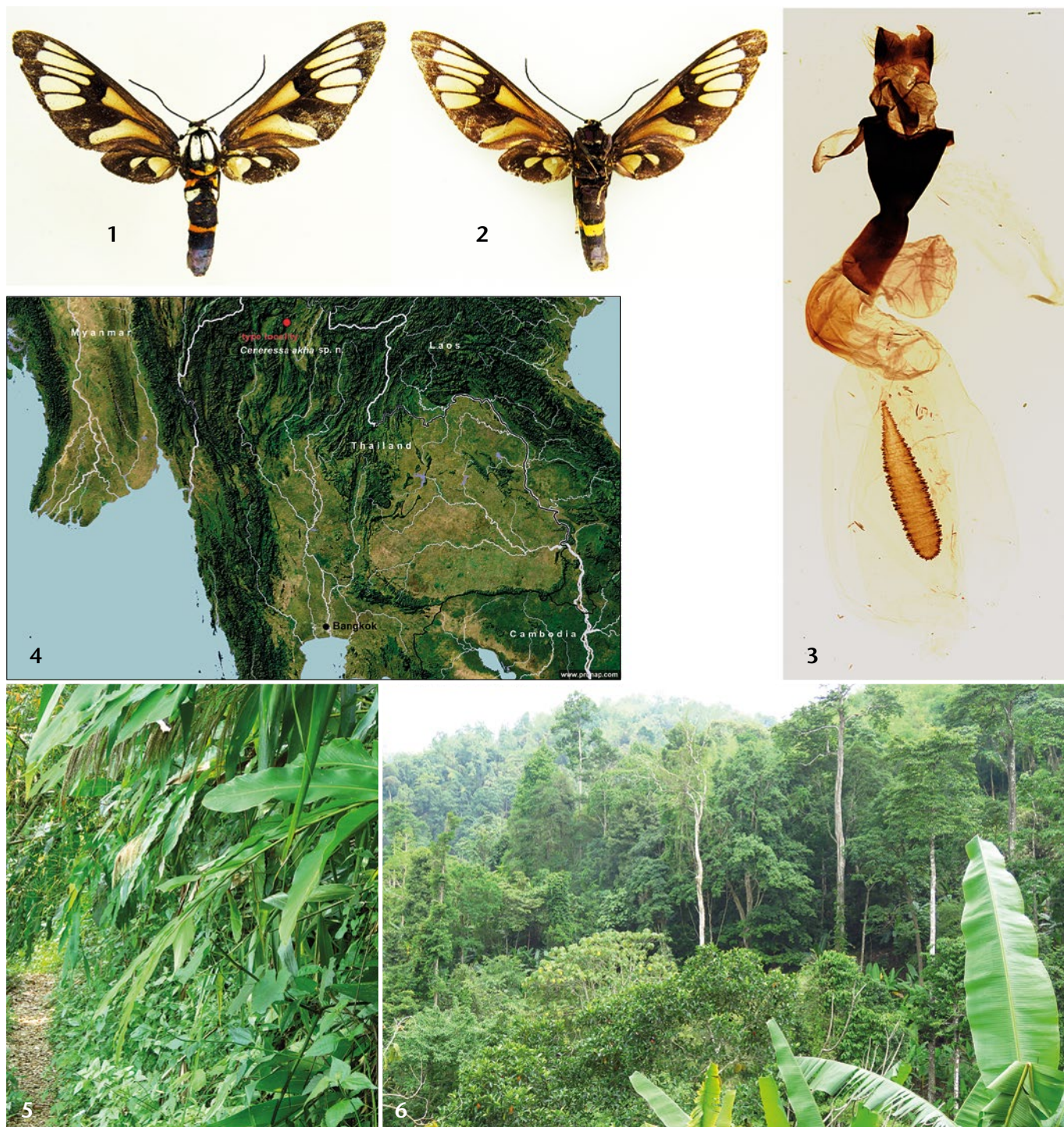
Wingspan: 51 mm, forewing length: 28 mm

Hindwing, distance from apex to apex: 27 mm, right hindwing length: 11 mm.

Head black with white frons. Patagia white. Antennae black. Eyes black.

Thorax black, tegulae and mesothorax white. Metathorax orange.

Abdomen black. First segment laterally orange. Second segment laterally white. Third segment with two small orange dots. First segment orange and last three segments metallic blue shining. Legs black, tarsi yellow orange. Tarsal claws black.



Figs. 1–2: Holotype ♀, 1: upperside, 2: underside. **Fig. 3:** Female genitalia of Holotype. **Fig. 4:** Map of the type locality. **Figs. 5–6:** Biotope and habitat (collection site) of the new species around the collection site.

Forewing ground colour black, with five elongate transparent hyaline spots. A triangle shaped hyaline spot in cell extends from almost the base to almost discoidal cell with a brown hue towards base and an angled hyaline streak in m1 and m3 which is also brownish at base. Hindwings small, ground colour black with one large hyaline basal mark and a small hyaline distal mark.

The most similar species *Caeneressa melaena* (WALKER, 1854) is larger with more and larger hyaline transparent spots. Hyaline spots paler in that species, abdomen with many white segments and without white marks on head and thorax. — *C. pratti* (LEECH, 1889) is much smaller,

with less and smaller hyaline transparent markings. All the hyaline markings paler than in *C. akha* sp. n., abdomen with yellowish and with orange yellow lateral patches (OBRAZTSOV 1957). — *C. diaphana* with more hyaline transparent patches on fore- and hindwings, abdomen with yellow orange rings on several segments and without white patches on head and thorax.

Female genitalia: Papillae anales strongly sclerotized. Posterior apophysis slim, short. Anterior apophysis longer, wider, stronger sclerotized and pointed. Corpus bursae, weakly sklerotized. Ductus seminalis and bulla seminalis rounded. Signum long, slim.

Distribution: The new species *C. akha* sp. n. is only known from the type locality and is possibly endemic in this region around Chiang Rai (Fig. 4).

Biology: Hostplants and biology unknown.

Discussion

So far known, the genus *Caeneressa* is not recorded and published from Thailand; even though this genus is widely distributed in the Indo-Chinese region from Myanmar, Laos and also Malaysia, Borneo and Sumatra (Indonesia) (HOLLOWAY 1988, OBRAZTSOV 1957, LU et al. 2012). Most species occur in China, mainly in the southeastern parts of that region. *C. diaphana* is also recorded from Taiwan (WANG 1993, HEPPNER & INOUE 1992).

OBRAZTSOV (1957) wrote that the range of *Caeneressa* is restricted from North India, Burma, China (Chusan, Zhejiang), Indochina, Taiwan to the Greater Sunda Islands (Indonesia). Species and specimens of this genus are poorly known, possibly because they are day-flying and only adapted to small areas and biotopes each.

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