



A NEW SPECIES OF THE *ATHAUMASTA MILTINA* (PÜNGELER, 1902) SPECIES-GROUP FROM KAZAKHSTAN (LEPIDOPTERA, NOCTUIDAE, BRYOPHILINAE)

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PEKARSKY, O. 2018. A new species of the *Athaumasta miltina* (Püngeler, 1902) species-group from Kazakhstan (Lepidoptera, Noctuidae, Bryophilinae). *Entomofauna carpathica*, 30(2): 53-58.

Abstract: The present paper contains the description of a new *Athaumasta* Hampson, 1906 species from Kazakhstan, *A. kegena* **sp. n.**, the diagnostic comparison is made with *Athaumasta lithoplasta* (Hampson, 1908) **comb. n.** The genitalia of the Type (male) and the Cotype (female) of *Oederemia lithoplasta* Hampson, 1908 are studied, described and illustrated for the first time; the Lectotype and Paralectotype of *O. lithoplasta* are designated here. The taxonomic position of *A. lithoplasta* is discussed.

Key words: Lepidoptera, Noctuidae, Bryophilinae, *Athaumasta*, new species, Kazakhstan.

INTRODUCTION

The taxonomic knowledge of the *A. miltina* species-group has been increased in the last years. The first modern attempt to discuss the taxonomic position of *Polia miltina* after the note of Boursin (1940) was made by Volynkin & Pekarsky (2016). Later, the *miltina* species-group was defined within the genus *Athaumasta*, and two new species of the group were described (Pekarsky 2017).

The taxonomic content of the species group is enriched with the present studies as the generic placement of *Oederemia lithoplasta* Hampson, 1908 was revised. Together with *A. lithoplasta* and its close relative, *A. kegena* **sp. n.**, the *miltina* species-group includes now altogether five species: *A. miltina*, *A. kyrkyza* Pekarsky, 2017, *A. melyakhi* Pekarsky, 2017, *A. lithoplasta* **comb. n.** and *A. kegena* **sp. n.**

The description of the new species and the lectotype designation of *Oederemia lithoplasta* are presented below.

Abbreviations: HNHM = Hungarian Natural History Museum Budapest (Hungary); MNHU = Museum für Naturkunde der Humboldt-Universität zu Berlin (Germany); OP = Oleg Pekarsky (Budapest, Hungary); LR = slide made by László Ronkay.

SYSTEMATIC PART

Athaumasta kegena sp. n.

(Fig. 1)

Oederemia lithoplasta Hampson, 1908: Benedek & Bálint, 2009.

Type material. Holotype: Male (Fig. 1), South-East Kazakhstan, Almaty Province, mountain steppe near Kegen Pass, 2100 m, 43°10'N, 79°12'E, 4.VII.2017, leg. P. Gorbunov, slide OP3931m (coll. O. Pekarsky).

Paratypes. 1 ♂, with the same data as Holotype (coll. O. Pekarsky); 6 ♂♂, Kazakhstan, Prov. Almaty, 9 km N of Kegen pass, 1700 m, N43°10', E079°13', 28.V.2006, leg. B. Benedek, slide OP3946m (coll. G. Ronkay); 1 ♂ & 1 ♀, Kazakhstan, Prov. Almaty, Toraygir-Tau, Pass Alasay, 1300 m, 24.VI.1996, leg. Fábíán & Nádai, slides LR6159m, LR6160f (coll. Gy. Fábíán).

Diagnosis. The new species has similar wing pattern to *A. lithoplasta* and could be separated externally from it only by the wider medial area. In the male genitalia, *A. kegena* differs from the related species by its rhomboid juxta, and the larger, nearly quadrangular shaped main chamber of vesica bearing nail-like, elongated cornutus, whereas *A. lithoplasta* is characterized by its shield-like juxta and the smaller, semiglobular shape of vesica armed with thorn-like cornutus. In females, the corpus bursae of *A. kegena* is near rectangular in shape, while the shape of corpus bursae of *A. lithoplasta* is pear-like, also the apophyses anteriores of the new species are significantly longer than those of its sister species.

Description (Figs 1, 2). Wingspan 30 mm. Male antennae minutely dentate with short fasciculate cilia. Head and collar white. Thorax, tegulae, and abdomen greyish irrorated with light brown and black scales. Forewing elongated, apex pointed; outer margin evenly curved. Ground colour greyish brown, irrorated with black scales; wing pattern well developed; basal field as ground colour. Crosslines sharp: subbasal line dentate, antemedial and medial lines nearly vertical, dentate, postmedial line curved, dentate, subterminal line sinuous, serrate; terminal line a row of black streaks on veins. Reniform and orbicular stigmata filled with ground colour, with whitish marked outlines. Cilia as ground colour. Hindwing light grey with diffuse, pale grey discal spot, transverse line sharply marked; cilia white.

Male genitalia (Figs 5, 6). Uncus strong, curved, laterally flattened, slightly widened medially, its tip finely pointed; tegumen broad and relatively short; vinculum V-shaped; valva elongated, moderately broad, costal margin slightly curved, valval apex rounded; harpe narrow, elongated, with fine tip; juxta rhomboid. Aedeagus cylindrical, short, curved dorso-ventrally; vesica

membranous, its main chamber large, nearly quadrangular, armed with elongated, nail-like cornutus.

Female genitalia (Fig. 9). Ovipositor large (ca half length of the entire genitalia), hairy, with thin, short setae on apical edges. Apophyses anteriores shorter than apophyses posteriores, antrum wide, ostium bursae broad, ventral plate sclerotized, rectangular, ductus bursae elongated, membranous with some sclerotized wrinkles anteriorly, corpus bursae membranous.

Habitat. (Fig. 11) Southern exposition montane grasslands with rocky slopes sites. (P. Gorbunov, pers. comm.).

Distribution. Kazakhstan, Almaty Province.

Etymology. The species name refers to the type-locality of the taxon.

***Athaumasta lithoplasta* (Hampson, 1908) comb. nov.**

(Figs 3, 4)

Oederemia lithoplasta Hampson, 1908, Catalogue of the Lepidoptera Phalaenae in the British Museum, 7, pp. 406, 407, fig. 65 (TL as in the original description: "W. Turkestan, Taschkent").

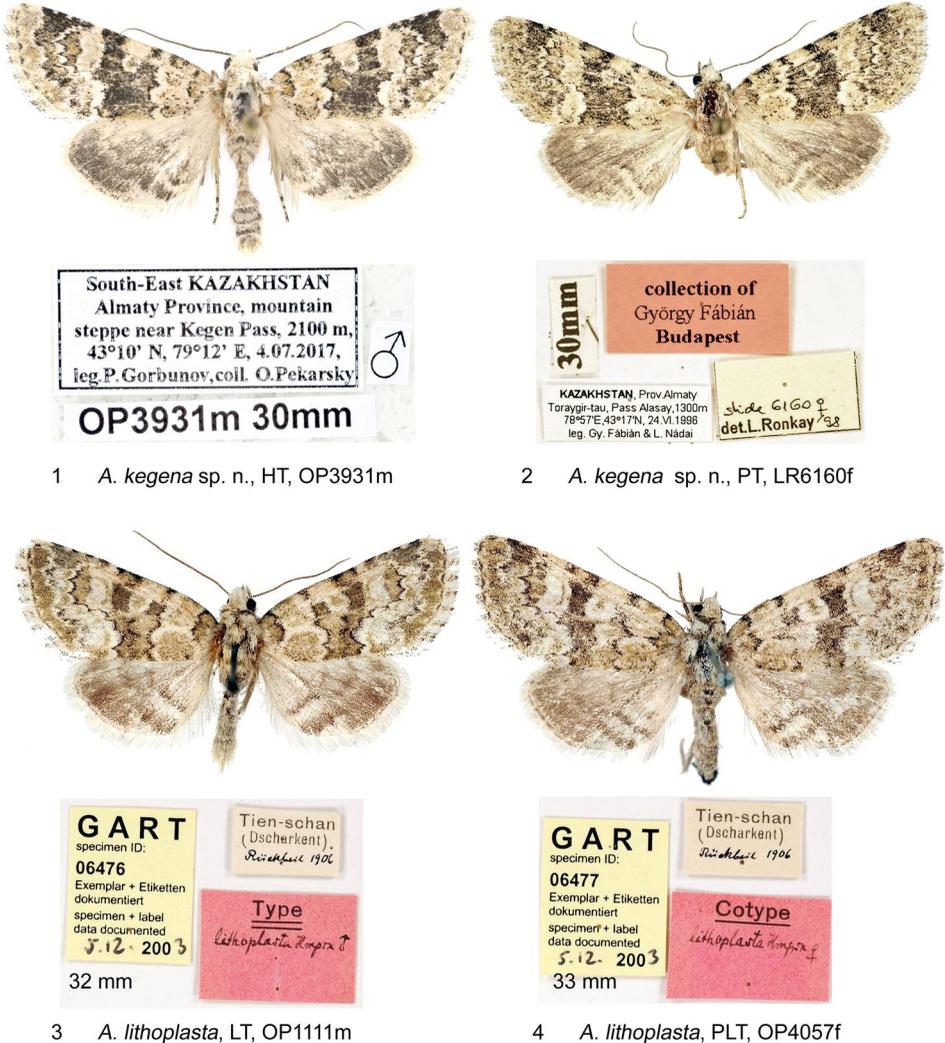
Note. The type locality of *A. lithoplasta* in original description and in the subsequent literature sources (Nye, 1975; Pool, 1989; Korb et al., 2017) is indicated as "W. Turkestan, Taschkent", however the original label shows different collecting locality: "Tien-schan (Dscharkent)" (Figs 3, 4).

Type material examined. *Oederemia lithoplasta* Hampson, 1908 **Lectotype** (Fig. 3) (here designated) male, [Kazakhstan] Tien-schan, Dscharkent [Panfilov], Rückbeil, 1906, Type, slide OP1111m (Fig. 7), **Paralectotype** (Fig. 4) (here designated) female, [Kazakhstan] Tien-schan, Dscharkent [Panfilov], Rückbeil, 1906, Cotype, slide OP4057f (Fig. 10) (coll. MNHU).

Taxonomic Note. The generic position of the taxon *lithoplasta* Hampson requires clarification. It was attributed into the genus *Victrix* by Fibiger et al. (2009). The genitalia structure of the species is, however, different from that of the type-species of the genus *Victrix*, *V. karsiana* Staudinger, 1879. The male genitalia of *A. lithoplasta* are characterized by the smaller size, wider and shorter valva with nearly parallel margins and rounded apex, the clasper is perpendicular to the valva and located on the middle of valva, the uncus is broadened medially and flattened laterally, while its tip is flattened dorso-ventrally (Figs 7, 8); whereas the clasping apparatus of *V. karsiana* is characterized by its significantly larger size (both species have similar wingspan), medially constricted, elongated valva, rather basally positioned clasper growing in the direction of valva, and the narrow uncus having simple tip. The detailed taxonomic clarification of the genus *Victrix* Staudinger, 1879 will be given in a separate publication.

ACKNOWLEDGEMENT

I thank to Dr. László Ronkay (HNHM, Budapest) for reviewing the manuscript, Gábor Ronkay and Gy. Fábián (Budapest) for the access for their extensive private collections, to Pavel Gorbunov (Ekaterinburg, Russia) for information and biotope image of *A. kegena*, to Wolfram Mey (MNHU Berlin) for access to the museum collection.



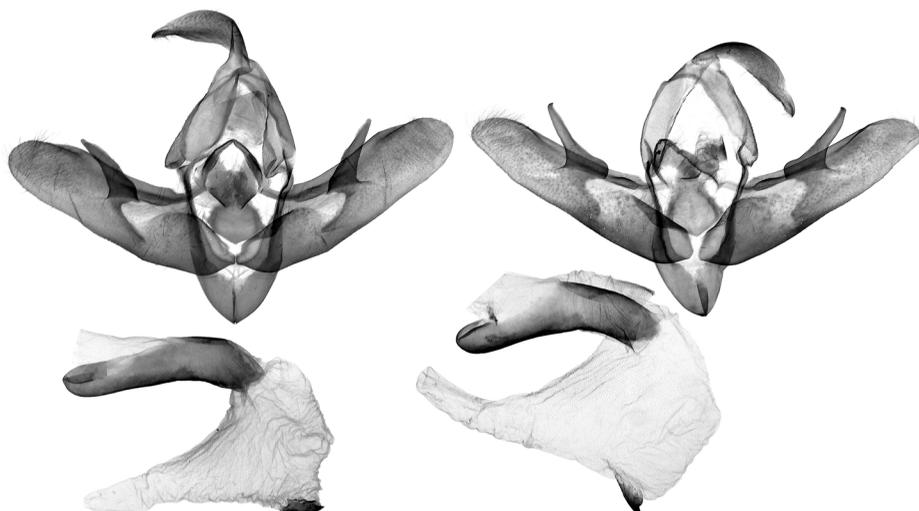
1 *A. kegena* sp. n., HT, OP3931m

2 *A. kegena* sp. n., PT, LR6160f

3 *A. lithoplasta*, LT, OP1111m

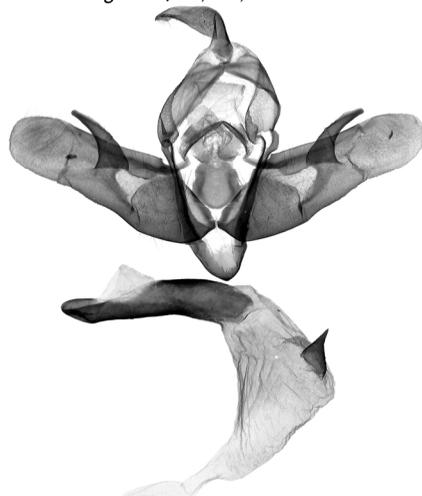
4 *A. lithoplasta*, PLT, OP4057f

Figures 1–4. *Athaumasta* spp., adults. 1, *A. kegena*, Holotype, male, Kazakhstan, Almaty prov. (OP); 2, *A. kegena*, Paratype, female, Kazakhstan, Almaty prov. (Gy. Fábián); 3, *A. lithoplasta*, Lectotype, male, Kazakhstan, Panfilov (MNHU); 4, *A. lithoplasta*, Paralectotype, female, Kazakhstan, Panfilov (MNHU).



5 *A. kegena* sp. n, HT, OP3931m

6 *A. kegena* sp. n., PT, LR6159m



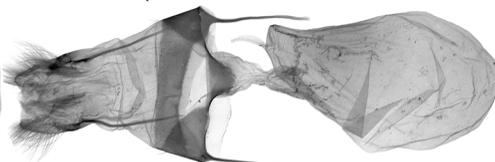
7 *A. lithoplasta*, LT, OP1111m



8 *A. lithoplasta*, OP4056m



9 *A. kegena* sp. n, PT, LR6160f



10 *A. lithoplasta*, PLT, OP4057f

Figures 5–8. *Athaumasta* spp. male genitalia. 5, *A. kegena*, Holotype, Kazakhstan (OP); 6, *A. kegena*, paratype, Kazakhstan (Gy. Fábíán); 7, *A. lithoplasta*, Lectotype, Kazakhstan (MNHU); 8, *A. lithoplasta*, Kyrgyzstan, Issyk-kul (MNHU).

Figures 9, 10. *Athaumasta* spp. female genitalia. 9, *A. kegena*, Paratype, Kazakhstan (Gy. Fábíán); 6, *A. lithoplasta*, Paralectotype, Kazakhstan (MNHU).



Figure 11. Habitat of *Athaumasta kegena*, Kazakhstan, Almaty province, near Kegen Pass.

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