



A new species of *Euchalcia* Hübner, [1821] from Kazakhstan (Lepidoptera, Noctuidae)

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The Holarctic genus *Euchalcia* Hübner, [1821] belongs to the tribe Plusiini of the subfamily Plusiinae. The genus is one of the largest in the Plusiinae, comprising about 54 described species. The systematics of Eurasian and North African members of the genus was recently revised (Ronkay *et al.* 2008). In June 2013, in the course of faunistic studies on Noctuidae of the Tarbagatai Mts. (East Kazakhstan), a long series of an undescribed species of the genus was collected. Two additional specimens from the Dzhungarsky Alatau Mts. (South-East Kazakhstan) were found in the collection of the Siberian Zoological Museum (Novosibirsk). The species is described herein as new. It belongs to the *E. inconspicua* group within the *E. inconspicua* species-complex (Ronkay *et al.* 2008). The *E. inconspicua* group comprises two described species only: *E. inconspicua* (Graeser, 1892) and *E. anthea* L. Ronkay, G. Ronkay & Behounek, 2008. The new species is the northernmost member of the group. Institutional acronyms are as follows: AVB—coll. A.V. Volynkin, Barnaul, Russia; MČK—coll. M. Černila, Kamnik, Slovenia; NHMW—Naturhistorisches Museum, Vienna, Austria; STP—coll. S.V. Titov, Pavlodar, Kazakhstan; SZMN—Siberian Zoological Museum of the Institute of Animal Systematic and Ecology of the Siberian Branch of the Russian Academy of Sciences (Novosibirsk, Russia), ZISP—Zoological Institute of Russian Academy of Sciences, St. Petersburg, Russia.

Euchalcia matovi Volynkin & Titov, sp. n.

(Figs 1–5, 11, 12, 17, 18, 22)

Type material. Holotype: male, 09.vi.2013, E Kazakhstan, East Kazakhstan area, Urdzhar district, Tarbagatai Ridge, 6.7 km N of Kyzymbet (Alekseevka) village, mesophilous shrubby slopes, 1300 m. 47°18.365' N, 81°32.152' E, Volynkin A.V., Titov S.V. & Černila M. leg. Slide AV0865 Volynkin (Coll. ZISP). **Paratypes:** 22 males, 15 females, with the same labels as holotype, slides AV0853, AV0863, AV0864, AV0870, AV0871, AV0872, AV0873, AV0874 Volynkin (males), AV0866, AV0867, AV1177, AV1178 Volynkin (females) (Colls ZISP, AVB, STP, MČK); 2 females, 9.vii.[19]67, Kazakhstan, Dzhungarsky Alatau, I. Kostin [leg.] / *Euchalcia inconspicua*, Zolotareno det., slides AV1177, AV1178 Volynkin (females) (Coll. SZMN).

Diagnosis. The new species is the third and the smallest member of the *E. inconspicua* species-complex. Externally *E. matovi* (Figs 1–5) is close to *E. anthea* (Figs 9, 10), but differs from it by smaller size (wingspan of *E. anthea* 31–36 mm), somewhat paler, more brilliant forewing colouration and less contrast pattern; from *E. inconspicua* (Figs 7, 8) differs by smaller size (wingspan of *E. inconspicua* 32–37 mm), broader forewing in females, with less acutely pointed apex of forewing in both sexes, much paler forewing colouration with paler medial field and less contrast pattern. *E. matovi* is also externally similar to *E. shugnana* (Sheljuzhko, 1929) (Fig. 6), but differs from it by somewhat less acutely pointed apex of forewing in both sexes, broader forewing in females, more brilliant forewing colouration. The male genitalia of the new species (Figs 11, 12) are close to those of *E. inconspicua* (Figs 13, 14). The genital capsule of *E. matovi* differs by longer and narrower uncus, narrower and distally more angled valva with larger ventro-medial triangular lobes; *E. matovi* has a larger aedeagus in comparison to the genital capsule of *E. inconspicua*, the vesica of *E. matovi* is longer, and subterminal

(Fig. 16) the male genitalia differ by longer uncus, longer harpe and the vesica structure: in *E. matovi* the basal tube is much longer, subterminal cornuti longer and stronger. The female genitalia of *E. matovi* (Figs 17, 18) differ from those of *E. inconspicua* (Fig. 19) by longer ductus bursae with much stronger sclerotised bulbous anterior part; from *E. anthea* (Fig. 20) differ by shorter and not S-shaped ductus bursae and somewhat stronger sclerotised bulbous anterior part; from *E. shugnana* (Fig. 21) differ by much larger, more rounded anterior part of ductus bursae, larger appendix bursae, longer corpus bursae.

Description. Adult (Figs 1–5, 22). Wingspan 28–31 mm, length of forewing 12–14 mm. Antennae filiform. Head, thorax and abdomen ochreous; tegulae and patagia golden ochreous; Forewing broad, with pointed apex. Ground colour of forewing ochreous with metallic golden sheen; basal line thin, brown, wavy, indistinct; antemedial and postmedial lines thin, dark golden brown; antemedial line bent at A₁, postmedial line smooth curved; suffusion of the medial area varies from golden ochreous to golden brown; submarginal line thin, smooth curved, dark golden brown, with conspicuous dark golden brown shadow at inner margin; terminal line thin, dark brown; cilia ochreous or brown; orbicular, reniform and subcellular stigma conspicuous, with thin dark brown borders. Hindwing ochreous or ochreous brown; terminal band wide, dark, fuzzy; medial band thin, slightly wavy, dark brown; discal spot thin, brown, indistinct. **Male genitalia** (Figs 11, 12). Uncus narrow, long, curved, apically pointed; tegumen broad, moderately long; juxta broad, shield-like, with long conical apical process; vinculum long, V-shaped; valva moderately broad, distally narrowed, angled, with well developed ventro-medial triangular lobes; sacculus relatively small, clavus small, short, triangular; harpe long, thin; aedeagus large, moderately broad; vesica tubular, consists of broad tubular basal part and spherical subterminal bulb with three-six large subterminal cornuti and one terminal cornutus. **Female genitalia** (Figs 17, 18). Ovipositor short, conical. Apophyses posteriores and anteriores long, thin. Ostium bursae membranous; ductus bursae moderately long, tubular, rugose, with strongly sclerotised bulbous proximal plate at junction to corpus bursae; appendix bursae small, elliptical, membranous; ductus bursae membranous, sack-like, moderately long.

Distribution and bionomics. The new species is known from the south-west part of Tarbagatai Ridge in East Kazakhstan and the Dzhungarsky Alatau Mts. in South-East Kazakhstan. At the type locality, *E. matovi* inhabits mesophilous slopes with *Lonicera* and *Rosa* shrubs (Fig. 23).

Etymology. The species name is dedicated to Dr. Alexey Matov (ZISP), an expert on Asian Noctuoidea.

Acknowledgments

We thank László and Gábor Ronkay (Budapest, Hungary) for pictures of *E. inconspicua* and *E. anthea* and a critical review of the manuscript; Vladimir V. Dubatolov (SZMN, Novosibirsk, Russia) for help during work at SZMN; and Wolfgang Speidel (Witt Museum, Munich, Germany) and Péter Gyulai (Miskolc, Hungary) for critical reviews of the manuscript.

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