

TWO NEW SPECIES OF *VICTRIX* STAUDINGER, 1879 (LEPIDOPTERA, NOCTUIDAE) FROM ASIA

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Abstract: Two new species of the genus *Victrix* Staudinger, 1879, belonging to the subgenus *Poliobrya* Hampson, 1908, *V. tunkina* **sp.n.** from Buryatia and *V. aigaizhala* **sp.n.** from Kazakhstan are described. A diagnostic comparisons are made with *V. (P.) umovii* (Eversmann, 1846), *V. (P.) patula* (Püngeler, 1906), *V. (P.) svetlanae* Koshkin & Pekarsky, 2020, *V. (P.) mongolica* (Boursin, 1961) and *V. (P.) fabiani* Varga & Ronkay, 1989.

Key words: Lepidoptera, Noctuidae, Bryophilinae, *Victrix, Poliobrya,* Buryatia, Altai, Kazakhstan, new species

INTRODUCTION

Poliobrya Hampson, 1908 is a subgenus of Victrix, distributed from Northern Europe, the European part of Russia, and the Ural region to Central Asia, Mongolia and Siberia. The taxonomic knowledge of Poliobrya has been increased in the last decades (Boursin 1961, Varga & Ronkay 1989, Varga & Ronkay 1991, Pekarsky et al. 2014, Volynkin et al. 2019, Koshkin & Pekarsky 2020, and Dvořák & Pekarsky 2020). Present paper contains the description of two new Poliobrya species and the illustrations of the holotype of Cryphia mongolica Boursin, 1961. The assumption that C. mongolica belongs to the genus Victrix (subgenus Poliobrya Hampson, 1908) was first suggested in 2014 by Pekarsky at al. It is attributed here to genus Victrix (subgenus Poliobrya), stat. rev.

Abbreviations: HNHM = Hungarian Natural History Museum Budapest (Hungary); AV = slide made by Anton Volynkin (Barnaul, Russia); EK = Evgeny Koshkin (Khabarovsk, Russia); GR = Gábor Ronkay (Budapest, Hungary); MDS = Marek Dvořák (Smrčná, Czech Republic); MNHU = Museum für Naturkunde der Humboldt-Universität zu Berlin (Germany); NHMW = Naturhistorisches Museum Wien (Vienna, Austria); NMPC = National Museum of the Czech Republic, Prague, Czech Republic; OP = Oleg Pekarsky (Budapest, Hungary); PGM = Péter Gyulai (Miskolc, Hungary); LSNK = Landessammlungen für Naturkunde, Karlsruhe; RL = slide made by László Ronkay (Budapest, Hungary); ZISP = Zoological Institute of Russian Academy of Sciences (St. Petersburg, Russia).

SYSTEMATIC PART

Victrix (Poliobrya) tunkina sp. n.

(Figs 7-10)

Type material. Holotype: Male (Fig. 7), [Russia] Tunkinsk Weissgbg., südwestl Irkutsk, 2000 m, Juli, ex. coll. Bang-Haas, Slide OP3785m (coll. MNHU).

Paratypes, 18. Mongolia, Zayhan Aimak, West Hangay Mts., 10 km E From Uliastay. Bogdyn gol River, h-1830m, 26.VI.2004, leg. Saldaitis, Slide Behounek 5839m (coll. G. Behounek/ZSM); 1&, Russia, Altai, Kosh-Agachsky District, E. Koshkin, Slide OP3792m (coll. E. Koshkin); 18, Russia, Altai Mts., Kosh-Agachsky distr., 4 km W of Kurai vill., h=1630, 50°14'23.64"N, 87°52'1.32"E, at light, 17–18.VII.2016, leg. S.A. Knyazev (coll. NHMW); 2d, Russia, Altai Republic, Kosh-Agach District, Chagan-Uzun env., Krasnaja Gorka, 1870 m, 50°05′00″N, 88°25′15″E, 4.VII.2014, leg. M. Dvořák; 5♂, Russia, Altai Republic, Ulagan District, Aktash vill., grassy steppe, rocks, 1400 m, 50°19′12″N, 87°36′00″E, 21.VI.2015, leg. M. Dvořák, Slides OP3770m, (coll. M. Dvořák), 1&, with the same data, slide OP4440m (coll. O. Pekarsky); 10, Russia, Altai Republic, Kosh-Agach District, 15 km SW Kurai vill., Dzhangyskol lake, 1830 m, 50°10′49"N, 87°44′19"E, 24-25.VI.2015, leg. M. Dvořák; 1d, Russia, Altai Republic, Kosh-Agach District, Chagan-Uzun vill., 5 km SE Krasnaja Gorka hill, 50°05'00"N, 88°25'15"E, 1870 m, 29.VI.2015, leg. M. Dvořák; 18, Russia, Altai Republic, Ulagan District, Aktash vill., 50°19'12"N, 87°36'00"E, grassy steppe, rocks, 24.VI.2019, 1400 m, leg. M. Dvořák; 10, Russia, Altai Republic, Kosh-Agach District, Kurai vill., 15 km SW Dzhangyskol lake, 50°10'49"N, 87°44'19"E, 1830 m, 29-30.VI.2019, leg. M. Dvořák (coll. M. Dvořák); 5σ, 19, Russia, Altai Republic, Aktash vill., 50°19'12"N, 87°36'00"E, grassy steppe, rocks, 1400 m, 21.VI.2015, leg. Jan Šumpich, Slides OP4460m, OP4461f; 2ở, Russia, Altai Republic, Kosh-Agach Distr., Kurai env. 15 km SW Dzhangyskol lake or Salagana lake, 50°10′49″N, 87°44′19″E, coniferous forest/steppe, 24–25.VI.2015, 1830 m, leg. Jan Šumpich; 1&, Russia, Altai Republic, Kosh-Agach Distr. Beltir env., 16 km W Chagan valley, 49°57′06"N, 87°53′39"E, coniferous forest/rocks, 4.VII.2015, 2150 m, leg. Jan Šumpich; 1&, Russia, Altai Republic, Kosh-Agach Distr., Chagan-Uzun env., Krasnaja Gorka hill, 50°05′00″N, 88°25′15″E, rocky steppe, 1870 m, 29.VI.2015, leg. Jan Šumpich; 1 σ , Russia, Altai Republic, Aktash vill., 50°19′12″N, 87°36′00″E, grassy steppe, rocks, 24.VI.2019, 1400 m, leg. Jan Šumpich; 1♂, Russia, Altai Republic, 18 km SW of Ulagan, 50°32'32"N, 87°46'44'E, boreal forest, 1700 m, 28.VI.2019, leg. Jan Šumpich; 28, Altai Republic, Kurai env. 15 km SW, Dzhangyskol lake, 50°10′49″N, 87°44′19"E, coniferous forest/steppe, 29–30.VI.2019, 1830 m, leg. Jan Šumpich; 5♂, Altai Republic, Chagan-Uzun env., Krasnaja Gorka hill, 50°05′00″N, 88°25′15″E, rocky steppe, 1870 m, 1–3.VII.2019, leg. Jan Šumpich (coll. NMPC).

Diagnosis. The new species can be distinguished from the externally similar *V.* (*P.*) svetlanae Koshkin & Pekarsky, 2020 by somewhat narrower, more elongated forewings with acute apex and oblique outer margin, from *V.* (*P.*) umovii (Eversmann, 1846) also by the very dark brown, almost blackish ground colour of forewing with well-developed white fascia, from *V.* (*P.*) patula (Püngeler, 1906) by its significantly smaller size and wider white postmedial fascia which is bifurcate preapically. The forewings of *V.* (*P.*) svetlanae are shorter, their outer margins rounded, in *V.* (*P.*) umovii the wing shape is similar to that of the new species but with less oblique outer margin, and the forewing ground colour is pale green which is unique within the subgenus,

while in *V. (P.) patula* the wings are larger (with remarkably larger wingspan) and the light outer postmedial band is narrow.

The male genitalia, *V. (P.) tunkina* are most similar to those of *V. (P.) svetlanae* but differ from it by the smaller size of the clasping apparatus, the narrower juxta, the shorter aedeagus, and the smaller, shorter and narrower vesica with smaller and shorter cornutus on top of the noticeably smaller subterminal diverticulum; in *V. (P.) umovii* the valvae are wider than in *V. (P.) tunkina*, and the clasping apparatus is larger than in the two mentioned relatives, while in *V. (P.) patula* the clasping apparatus is much larger, and the subterminal diverticulum of the vesica is smaller with small and short cornutus on its top.

The female genitalia (Fig. 36) of the new species differ from those of *V. (P.) svetlanae* by the shorter, smaller ventral plate of antrum, the narrower ductus bursae, the less sclerotized appendix bursae, and the smaller corpus bursae; in *V. (P.) umovii* the antrum and ductus bursae are narrower and longer than in the new species.

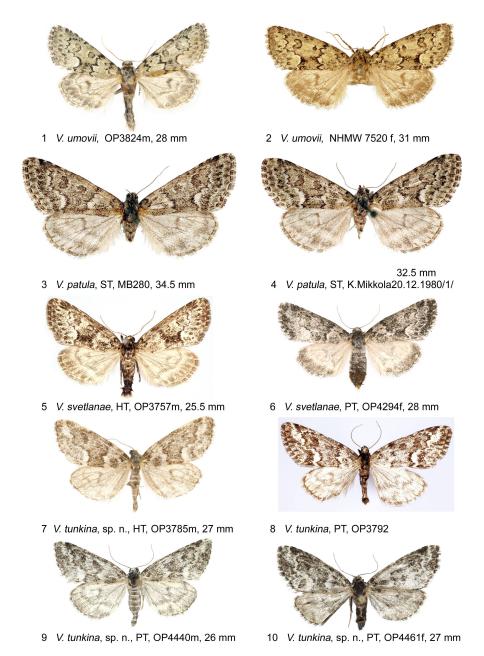
Description (Figs 7–10). Wingspan 24–27 mm. Male antennae filiform. Head, collar, thorax, tegulae, and abdomen dark brown; frons white. Forewing elongated, narrow, with apex acute; outer margin oblique. Ground colour dark brown, wing pattern well developed and sharply marked. Crosslines distinctly marked, dark brown: basal and subbasal area dark brown, subbasal line zigzagged, antemedial line dentate with wide outer fascia, postmedial line oblique, wavy-curved, dentate in lower part and serrate with wide whitish fascia, subterminal line sinuous, rather diffuse; terminal line represented by a row of dark brown streaks. Reniform and orbicular stigmata well marked, large, dark brown. Cilia dark brown chequered with groups of cream-white scales. Hindwing greyish brown, lighter than forewing; discal spot less distinct, large, curved, dark brown; transverse line greyish-brown, diffuse; cilia whitish.

Male genitalia (Figs 16–18). Uncus medium-long, strong, laterally flattened, moderately curved, its tip finely pointed; tegumen as long as vinculum; vinculum V-shaped; valva wide, with sub-parallel margins, valval apex broad; setose, its outer margin near straight with small dents, its lower extremity acutely pointed; juxta nearly trapezoidal/drop-shaped; sacculus broad. Aedeagus tubular, elongated, narrow, straight; vesica membranous, its main part elongated, tubular, terminal area wrinkled, subterminal diverticulum small, topped with narrow, elongated cornutus.

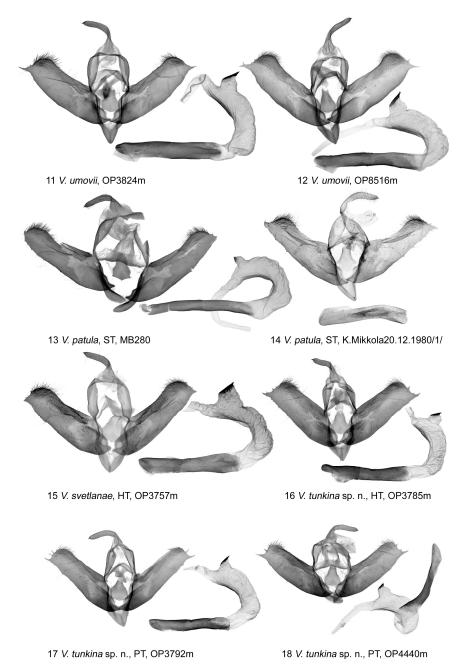
Female genitalia (Fig. 36). Ovipositor large, rather quadrangular, covered with thin hair-like setae; anterior apophyses long, curved, posterior apophyses thinner and longer than anterior ones. Antrum broad, ventral plate large, elongated and anteriorly rounded; subgenital plate (8th abdominal segment) wide, well sclerotized; ductus bursae belt-like, curved with sclerotized lateral edge; corpus bursae ovoid; appendix bursae small, membranous.

Distribution. Russia (Buryatia, Altai), Mongolia.

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



Figures 1–10. Victrix spp, adults. 1) V. umovii, male, Russia, Saratov district (PGM); 2) V. umovii, female, Russia, Stavropol reg., Samara (NHMW); 3) V. patula, male, ST, China, Xinjiang, Korla (MNHU); 4) V. patula, male, ST, China, Xinjiang, Korla (MNHU); 5) V. svetlanae, male, HT, Russia, Khabarovsk Krai (ZISP); 6) V. svetlanae, female, PT, Russia, Khabarovsk Krai (OP); 7) V. tunkina, HT, Buryatia, Tunkinsk (MNHU); 8) V. tunkina, PT, Altai, Kosh-Agachsky Dist. (EK); 9) V. tunkina, PT, Altai Republic, Ulagan Dist. (MDS); 10) V. tunkina, PT, Altai Republic, Aktash (NMPC).



Figures 11–18. Victrix spp, male genitalia. 11) V. umovii, Russia, Saratov dist. (PGM); 12) V. umovii Orenburg prov., Sol-Iletsk dist. (OP); 13) V. patula, ST, China, Xinjiang, Korla (slide Ch. Boursin, remonted by Oleg Pekarsky) (MNHU); 14) V. patula, ST, China, Xinjiang, Korla (MNHU); 15) V. svetlanae, HT, Russia, Khabarovsk Krai (ZISP); 16) V. tunkina, HT, Buryatia (MNHU); 17) V. tunkina, PT, Altai, Kosh-Agachsky Dist. (EK); 18) V. tunkina, PT, Altai Republic, Ulagan Dist. (MDS).

Victrix (Poliobrya) aigaizhala sp. n.

(Figs 25-28)

Type material. Holotype: Male (Fig. 25), E Kazakhstan, NW Tarbagatai, Kyzylpas Mts, Aigaizhal Mt., 1100–1150 m, N47°52′, E081°29′, 1–2.VI.2012, leg. R. Yakovlev, Slide OP3185m (coll. O. Pekarsky).

Paratypes. 3*d*°, with the same data as Holotype, Slides OP4274m, OP4412m (coll. O. Pekarsky).

Diagnosis. The new species can be distinguished from the externally similar *V.* (*P.*) *mongolica* (Boursin, 1961), *V.* (*P.*) *akbet* Volynkin, Titov & Cernila, 2019 and *V.* (*P.*) *fabiani* Ronkay & Varga, 1989 by its larger size, robust body, greyish irrorated light orange-brown colouration of the forewings, and the remarkably broader median area with more expressed, thicker median fascia. *Victrix* (*P.*) *mongolica* has, in comparison with *V.* (*P.*) *aigaizhala*, slenderer body, characteristic orange-yellowish brown forewing ground colour, whereas *V.* (*P.*) *fabiani* has dark brownish suffused forewings with blurred dark pattern, and *V.* (*P.*) *akbet* is characterised by the generally dark grey suffused forewings with only a few orange-brownish irroration.

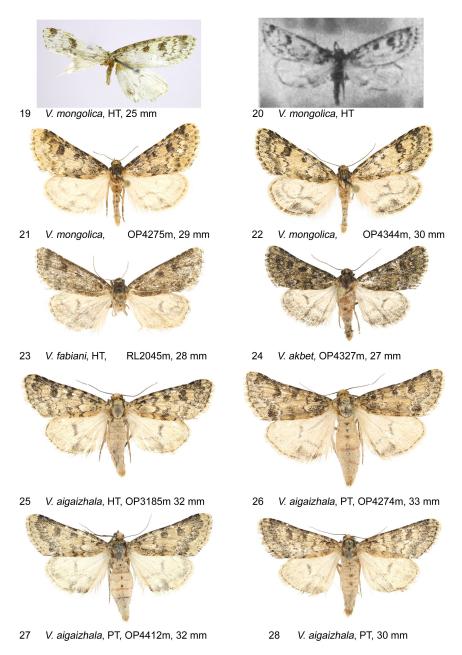
In the male genitalia, *V.* (*P.*) aigaizhala differs from its above-mentioned relatives by its significantly larger genital structures with longer, wider and more massive valvae, longer uncus, larger and apically (dorsally) more tapering juxta, longer and stronger aedeagus, and the larger and basally more ample vesica.

Description (Figs 25–28). Wingspan 32–33 mm. Male antennae filiform. Head, collar, thorax, and abdomen light brown, tegulae greyish suffused dark brown. Forewing elongated, with apex acute; outer margin oblique. Ground colour light orange-brown, wing pattern well developed. Crosslines sharply defined, dark brown: basal and subbasal area dark brown, subbasal line strong, dentate, antemedial line dentate near costa, curved at base with yellowish brown almost cream-white outer fascia, medial line thick, diffuse, postmedial line oblique, wavy-curved, dentate with light yellowish-brown fascia, subterminal line sinuous; terminal line a row of dark brown streaks. Reniform and orbicular stigmata large and well marked, dark brown surrounded by light yellowish scales. Cilia dark brown chequered with groups of light brown groups of scales. Hindwing light yellowish brown with greyish brown crosslines being lighter than on the forewings; discal spot large, elongated, slightly curved, dark brown; transverse line greyish brown; cilia light brown.

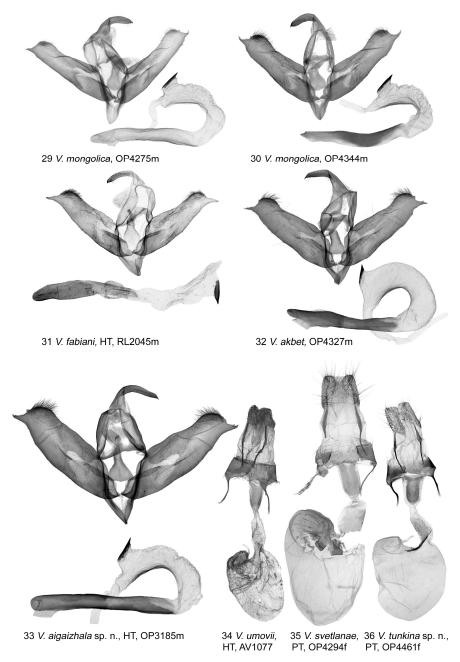
Male genitalia (Fig. 33). Uncus strong, long, curved, its tip finely pointed; tegumen broad, as long as vinculum; vinculum V-shaped; valva large, massive, elongated, valval apex rounded, setose, its margin concave with a few small dents, outer extension pointed; juxta subdeltoidal, apical process long and tapering dorsally; sacculus broad. Aedeagus tubular, elongated, narrow, straight; vesica membranous, its main part elongated, tubular, terminal area with wrinkled, sclerotized area, subterminal diverticulum medium large, rectangular, topped with a narrow, elongated cornutus having long base and fine tip.

Distribution. East Kazakhstan, Tarbagatai area.

Etymology. The species name refers name of the mountain where the type series was collected.



Figures 19–28. Victrix spp, adults. 19) V. mongolica, female, HT, Äußere Mongolei, Schawyr, Ost-Tanuola (LSNK); 20) V. mongolica, female, HT (after Boursin 1961); 21) V. mongolica, male, Mongolia, Arkhangay aimak (GR); 22) V. mongolica, male, Mongolia, Arkhangay aimak (GR); 23) V. fabiani, male, HT, Mongolia, Central Aimak (HNHM); 24) V. akbet, male, Kazakhstan, Pavlodar Reg., Bayanaul dist., (OP); 25) V. aigaizhala, male, HT, Kazakhstan, Tarbagatai (OP); 26) V. aigaizhala, male, PT, Kazakhstan, Tarbagatai (OP); 28) V. aigaizhala, male, PT, Kazakhstan, Tarbagatai (OP).



Figures 29–36. Victrix spp, male and female genitalia. 29) V. mongolica, Mongolia, Arkhangay Aimak (GR); 30) V. mongolica, Mongolia, Arkhangay Aimak (GR); 31) V. fabiani, HT, Mongolia, Central Aimak (HNHM); 32) V. akbet, Kazakhstan, Pavlodar Reg., Bayanaul dist., (OP); 33) V. aigaizhala, HT, Kazakhstan, Tarbagatai (OP); 34) V. umovii, HT, S European part of Russia, "Simbirsk" (ZISP); 35) V. svetlanae, PT, Russia, Khabarovsk Krai (OP); 36) V. tunkina, PT, Altai Republic, Aktash (NMPC).

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