



TWO NEW SPECIES OF *DRASTERIA* HÜBNER, 1818 FROM MONGOLIA AND TAJIKISTAN (LEPIDOPTERA, EREBIDAE, EREBINAE)

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Abstract: Two new species of *Drasteria*, *D. bayantooroica* sp. n. (Mongolia, Govi-Altai aimak) and *D. vakhshana* sp. n. (Tajikistan, Khatlon Province) are described. Illustrations of the male and female genitalia of the new species are provided; the characteristic vesica structures of the males are studied and illustrated. A diagnostic comparison is made with *Drasteria aberrans* (Staudinger, 1888).

Key words: Lepidoptera, Erebidae, Erebinae, Melipotini, *Drasteria*, new species, Mongolia, Tajikistan

INTRODUCTION

The taxonomic content of the genus *Drasteria* Hübner, 1818 of the subfamily Erebinae has been increased after RONKAY (1983), VOLYNKIN (2012), the revision of the genus of Central Asia and Kazakhstan (MATOV & KORB 2019) and a description of a new taxon from Kyrgyzstan (KORB & GORBUNOV 2023). The examination of the *Drasteria* material from Mongolia and Tajikistan revealed the existence of two undescribed species in the *Drasteria tenera* (Staudinger, 1877) species group, which contained formerly three species, *D. tenera* (Fig. 7), *D. aberrans* (Staudinger, 1888), and *Drasteria antiqua* (Staudinger, 1889) (Fig. 8). Present paper contains the descriptions of further two new *Drasteria* species of this group from Central Asia.

Abbreviations: GR = Gábor Ronkay (Budapest, Hungary); MNHU = Museum für Naturkunde der Humboldt-Universität zu Berlin (Germany); NHMW = Naturhistorisches Museum Wien (Vienna, Austria); OP = Oleg Pekarisky (Budapest, Hungary); TCS = Tibor Csóvári (Budapest, Hungary).

SYSTEMATIC PART

***Drasteria bayantoroica* sp. n.**

(Figs 3, 4, 10, 12)

Holotype. Male, Mongolia, Govi Altay aimak, Bayan Toroy, 1200 m, 96°49'E, 44°53'N, 16.V.1990, leg. Gy. Fábíán, M. Hreblay, L. Peregovits & G. Ronkay; slide OP9994m (coll. G. Ronkay, deposited in NHMW).

Paratypes. 2♀♀, with the same data as Holotype; slide OP9995f (coll. G. Ronkay, deposited in NHMW).

Diagnosis. The new species belongs to the *tenera* species-group (a group characterized by the very special cauliflower-like or coral-like or *Peripatus*-like configuration of the vesicas). It resembles externally *D. aberrans* (Fig. 1) and *D. vakhshana* sp. n. (Figs 5, 6) but is separable from them by both its external and genital features. The most prominent distinguishing external feature is the light brown coloration of the forewing, which is intensively grey with dark brown elements and areas in the Lectotype specimen of *D. aberrans* and light greyish-brown in *D. vakhshana*.

The specific features of the male genitalia can be found in the shape of valvae, digitus, and clasper and in the structure of the vesica. The male clasping apparatus of *D. bayantoroica* (Fig. 10) differs from those of *D. aberrans* (Fig. 9) by the smaller, well-sclerotized and drop-like costal hump on valva, the thicker, with less acute apex of digitus on right valva, the somewhat thicker clasper, and the shorter saccular extension with blunt tip. In comparison, *D. aberrans* has much larger costal sclerotized area with wider hump, thinner right digitus, thinner clasper, and somewhat longer saccular extension with acute tip; in *D. vakhshana* sp. n. (Fig. 11) the valvae are narrower and longer, without prominent costal hump and the saccular extensions are remarkably longer. In the vesica, the new species has six lateral coral-like diverticula while in *D. vakhshana* sp. n. the vesica is characterized by the presence of numerous lateral diverticula.

Description. (Figs 3, 4). External morphology. Wingspan 35-37 mm (holotype 35 mm). Head, thorax, tegulae and abdomen brown, collar dark brown. Forewing elongated with costa almost straight; apex pointed; outer margin rounded, moderately oblique. Ground colour light-brown; wing pattern strong with well-developed cross-lines; crosslines dark brown, basal line as a small group of dark brown scales; subbasal line curved; antemedial line undulate, oblique; medial line curved; postmedial line dentate; subterminal line undulate; terminal line not expressed, hardly traceable; cilia light brown. Hindwing light brown, discal spot strong, elongated, dark brown, veins well marked with brown suffusion, outer third dark brown with lighter area near the marginal patch.

Male genitalia (Fig. 10). Uncus stem strong, rod-like, medium-long, curved at first third, distal part with dense covering of hair-like setae, apex finely pointed; tegumen belt-like, longer than vinculum; juxta plate-like with two lateral anterior extensions; valva elongated and nearly elliptical, narrowed at base and apically, basal half of costa strongly sclerotized, with prominent drop-like hump, second half of costa membranous; left digitus wide with round tip, right one thick blunt tip; ampulla narrow, elongated; harpe elongated, thickening posteriorly with slightly curved tips; left saccular extension slightly longer than right one, both surpassing valval apex. Aedeagus straight, short with broadened, knob-like caecum; vesica multidiverticulate, medial part with six coral-like elongated, membranous diverticula.

Female genitalia (Fig. 12). Ovipositor large, broad, papillae anales large, hairy with thin setae; apophyses anteriores long, straight, apophyses posteriores thin, longer than apophyses anteriores. Antrum plate wide, ostium bursae large, sclerotized, with concave posterior margin; ductus bursae short; corpus bursae membranous, ovoid.

Biology and distribution. The new species occurs in the Gobi desert region of Govi-Altai Province in Mongolia.

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

***Drasteria vakhshana* sp. n.**

(Figs 5, 6, 11, 13)

Holotype. Male, Tajikistan, Dzhilikulskij distr., 150 km S of Dushanbe, Reserve Tigrovaya balka, 3.VIII.2010, leg. O. Pak; slide OP9838m (coll. O. Pekarsky).

Paratypes. 1♀, with same data as holotype; slide OP9839f (coll. O. Pekarsky); 5♂, S.-W. Tajikistan, Pjandzh river, "Tigrovaya balka" natural reservation 5.08.2000 V. Perepechaenko, slide OP10209m; 2♂, 1♀, S. Tajikistan down stream of Pianj riv. "Tigrovaya Balka" reser. 1-5.08.2006 V. Gurko lgt., slide OP10210f; 1♂, Tajikistan, Peter I Mts. 150 km S Dushanbe Tigrovaya Balka Reserve. H=200 m. At light. 9.08.2003 (coll. M. Dvořák).

Diagnosis. The new species resembles externally *D. aberrans* (Fig. 1) and *D. bayantooroica* (Figs 3, 4) but is separable from them by both the external and genital features. The most prominent distinguishing external feature is the light greyish-brown coloration of the forewing in male and uniformly greyish in female, which is dark grey with brown elements and areas in the Lectotype specimen of *D. aberrans* and light brown in *D. bayantooroica*.

The male genitalia of *D. vakhshana* (Fig. 11) differ from those of *D. aberrans* (Fig. 9) and *D. bayantooroica* (Fig. 10) by the thinner uncus, longer, narrower near rectangular valvae with less sclerotized costa, thinner left digitus, thinner and longer right digitus, longer saccular extensions and the more numerous diverticula in the distal section of the vesica (there are ten lateral coral-like diverticula). In the two related species, the uncus is thicker, the valvae are more or less elliptical with prominent, sclerotized costal hump, and the vesica possesses six postero-lateral diverticula.

Description (Figs 5, 6). Wingspan 29-32 mm (Holotype 29 mm). Head, thorax, tegulae, collar and abdomen grey. Forewing elongated, costa almost straight, with apex pointed; outer margin rounded, moderately oblique. Ground colour of forewings in male greyish brown, that of female unicolorous grey; wing pattern of male holotype sharply marked with well-developed crosslines, that of paratype female more diffuse; crosslines coffee-bean coloured with red-brown outer fascia, basal line marked by a few of dark brown scales; subbasal line curved; antemedial line arched; medial line curved, hardly traceable; postmedial line dentate; subterminal line undulate; terminal line thin, undulate, beige; cilia beige. Hindwing brown, inner part light brown; discal spot strong, elongated, dark brown; veins well marked by brown suffusion; outer third of wing dark brown with lighter area around marginal blackish patch.

Male genitalia (Fig. 11). Uncus stem thin, rod-like, medium long, curved at first third, distal part bears dense hair-like setae, with fine tip; tegumen belt-like, narrow, longer than vinculum; juxta is plate-like with two lateral anterior extensions; valva elongated, near rectangular, first half of costa moderately sclerotized, its second half membranous; left digitus thick, wide with blunt tip, right one is narrower; ampulla short, narrow; harpe elongated, thickening posteriorly; saccular extensions long and thin, pointed, surpassing valval apices. Aedeagus straight, short, with broadened caecum; vesica multidiverticulate, medial part with ten coral-like elongated and apically bilobate, membranous diverticula.

Female genitalia (Fig. 13). Ovipositor large, broad, papillae anales large, hairy with thin setae; apophyses anteriores medium long, straight, thick; apophyses posteriores thin, significantly longer than apophyses anteriores. Antrum plate wide, ostium bursae large, sclerotized, with concave posterior margin; ductus bursae short, corpus bursae membranous, near ovoid.

Biology and distribution. The new species is known only from its type-locality, Tajikistan, Vakhsh river valley.

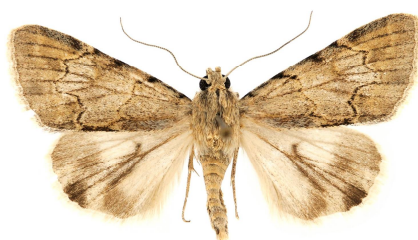
Etymology. The name of the species refers to the area of the river Vakhsh valley where the Holotype and paratype specimens were collected.



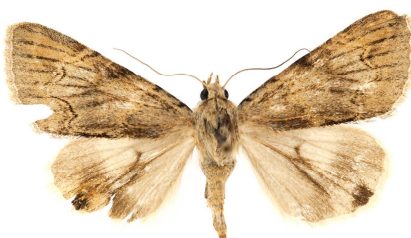
1 *D. aberrans* (Staudinger, 1888) male, LT, China, Kuldja (wingspan 30 mm)



2 *D. aberrans* (Staudinger, 1888) male, LT, labels (photo G. Ronkay)



3 *D. bayantooroica* sp. n. male, HT, Mongolia, OP9994m (wingspan 35 mm)



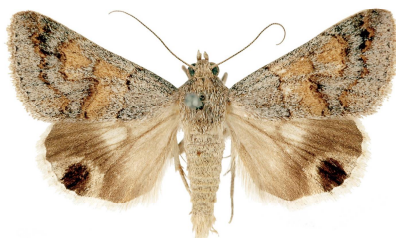
4 *D. bayantooroica* sp. n. female, PT, Mongolia, OP9995f (wingspan 37 mm)



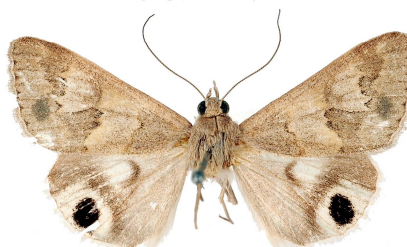
5 *D. vakhshana* sp. n. male, HT, Tajikistan, OP9838m (wingspan 29 mm)



6 *D. vakhshana* sp. n. female, PT, Tajikistan, OP9839f (wingspan 32 mm)

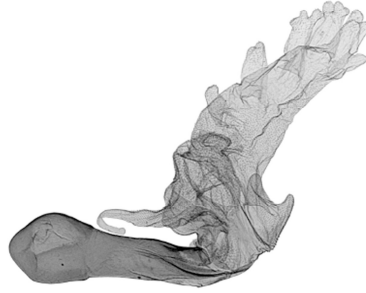
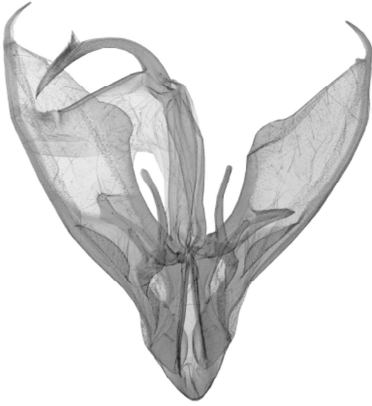


7 *D. tenera* (Staudinger, 1877) male, LT, Kazakhstan, Narün (photo G. Ronkay)

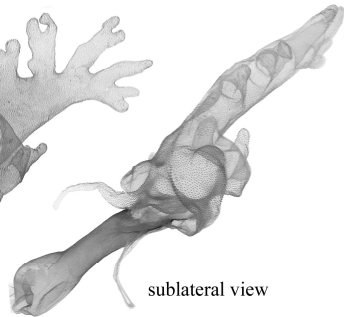
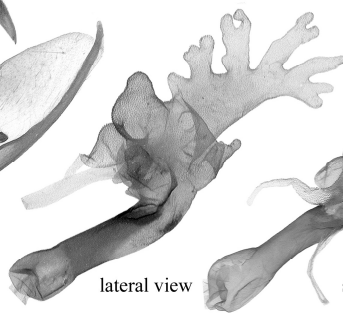


8 *D. antiqua* (Staudinger, 1889) male, LT, Issyk-Kul, RL4289m (photo G. Ronkay)

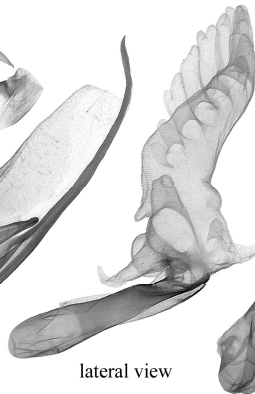
Figures 1–8. *Drasteria* spp, adults. **1)** *D. aberrans*, male, Lectotype, China, Kuldja (MNHU); **2)** *D. aberrans*, male, LT, labels (MNHU); **3)** *D. bayantooroica*, male, HT, Mongolia, Govi Altay aimak, Bayan Toroy (GR/NHMW); **4)** *D. bayantooroica*, female, PT, Mongolia, Govi Altay aimak, Bayan Toroy (GR/NHMW); **5)** *D. vakhshana*, male, HT, Tajikistan, Khatlon Province (OP); **6)** *D. vakhshana*, female, PT, Tajikistan, Khatlon Province (OP); **7)** *D. tenera*, LT, Kazakhstan, Naryn (MNHU); **8)** *D. antiqua*, LT, Issyk-Kul (MNHU).



9 *D. aberrans* LT, China, Kuldja (after Matov & Korb, 2019)

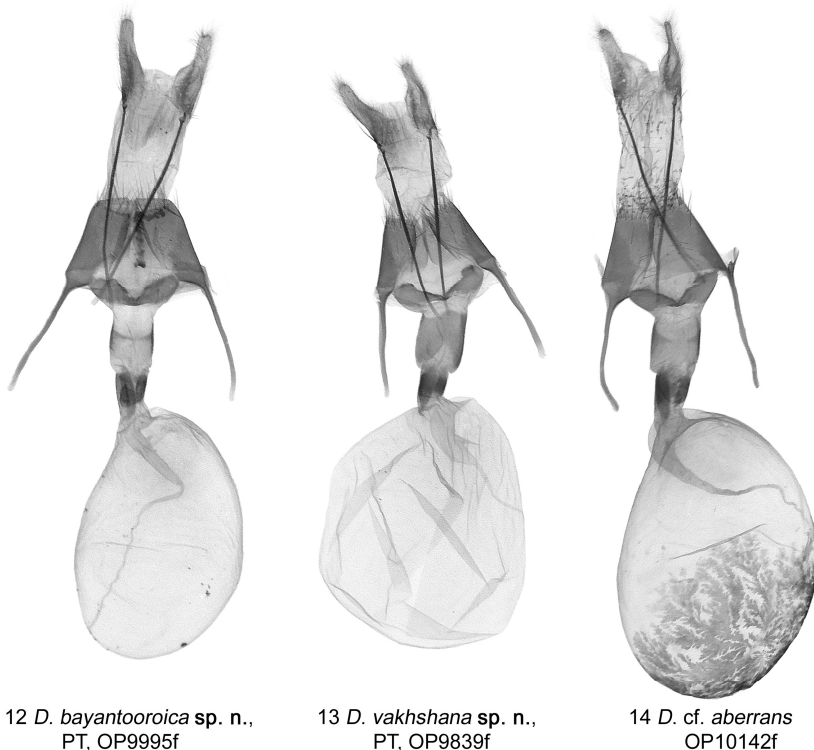


10 *D. bayantooroica* sp. n. HT, OP9994m, Mongolia



11 *D. vakhshana* sp. n. HT, OP9838m, Tajikistan

Figures 9–11. *Drasteria* spp, male genitalia. **9)** *D. aberrans*, Lectotype, China, Kuldja (MNHU); **10)** *D. bayantooroica* sp. n. HT, Mongolia, Govi Altay aimak, Bayan Toroy (GR/NHMW); **11)** *D. vakhshana* sp. n., HT, Tajikistan, Khatlon Province (OP).



Figures 12–14. *Drasteria* spp, female genitalia. **12)** *D. bayantoorica* sp. n., PT, Mongolia, Govi Altay aimak (GR/NHMMW); **13)** *D. vakshana* sp. n., PT, Tajikistan, Khatlon Province (OP); **14)** *D. sp. cf. aberrans*, Kazakhstan, Almaty Province (TCS).

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