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A new Isochlora Staudinger, 1882 species from Kyrgyzstan (Lepidoptera, Noctuidae, Heliothinae)

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Abstract – *Isochlora balinti* sp. n. (Kyrgyzstan) is described. The adults and the genitalia of the *Isochlora glaciale* (BOURSIN, 1940) species-group are illustrated. With 11 figures.

Key words - Isochlora, new species, Central Asia, Kyrgyzstan.

INTRODUCTION

The *Isochlora* STAUDINGER, 1882 generic complex has long been considered as a moderately large phyletic lineage, comprising about a dozen of species of mostly Inner Asian-Tibetan distribution. The recent exploration of the nocturnal lepidopteran fauna of the Central Asian high mountains and the Tibetan plateau resulted in the discovery of several new taxa (CHEN 1999, HREBLAY *et al.* 1998, GYULAI & RONKAY 1997, 2001) belonging to this complex. The last comprehensive checklist of the genus was published by GYULAI & RONKAY (2006), listing altogether 38 species arranged into three subgenera, *Isochlora*, *Chamyla* STAUDINGER, [1900]1899, and *Grumia* ALPHÉRAKY, 1892. In that checklist, two species, *I. glaciale* (BOURSIN, 1940) and *I. salki* (GYULAI et RONKAY, 1997), were placed into the subgenus *Chamyla*. The discovery of the third species of this lineage supports distinction of this species group from the other members of *Chamyla* and the transfer to *Isochlora* (s. str.), nearby the *leuconeura-ossicolor* species group. Moreover, the actual grouping of the species of the subgenera *Chamyla* and *Isochlora* requires a further revision, especially as the genitalia of the type species of the subgenus, *Chamyla idia* STAUDINGER, [1900]1899 (= *arctomys* ALPHÉRAKY, 1897) shows close connections with the type species of *Isochlora*, *I. viridis*. Thus, the revision of the entire genus would be desirable. However as more than half of the taxa belonging to the genus were discovered and described in the last fifteen years, it seems plausible to wait with the monographic treatment of *Isochlora* until the increase of the species numbers stopped.

The two other species of the lineage are known from the Himalayan-Sino-Tibetan region. The newly discovered *Isochlora balinti* sp. n. is the first member of the group which occurs outside the supposed main centre of speciation of the entire genus.

DESCRIPTION OF THE NEW SPECIES

Isochlora balinti sp. n.

(Figs 1-4, 9)

Type material – Holotype: male, Kyrgyzstan, Yssyk-Köl region, Inner Tien Shan Mts, Terskey-Ala-Too Mts, 10 km SW of Barskoon-pass, 3820 m, N41°50'32, E77°43'54, 17.VII.2007, leg. J. BABICS & T. CSÖVÁRI, slide No. RL9299; deposited in the Hungarian Natural History Museum (HNHM), Budapest, Hungary. Paratypes: 3 males, Kyrgyzstan, with the same data as the holotype; slide No. BJ292, deposited in HNHM.

Diagnosis – The new species differs from the related *I. salki* GYULAI et RONKAY, 1997, and *I. glaciale* (BOURSIN, 1940) by its darker, better discernible olive-brown antemedial and postmedial crosslines and the conspicuous light greyish-ochreous cilia on both wings (Figs 1–6). The male genitalia of *I. balinti* sp. n. (Fig. 9) differ from those of *I. salki* (Fig. 11) by their trapezoidal fultura inferior, narrower, evenly tapering valva, longer, more flattened harpe and the shorter, thicker uncus; from those of *I. glaciale* (Fig. 10) by their shorter but broader uncus being broadest at medial third (that of *I. glaciale* it is evenly tapering from its base towards apex), shorter and narrower vinculum and the somewhat different shape of the harpe (that of *I. balinti* is slightly tapering towards apex while in *I. glaciale* the harpe is apically more dilated, rather sponge-biscuit-like).



Figs 1-4. Isochlora balinti sp. n., Kyrgyzstan, Yssyk-Köl region. 1-3 = Paratypes, 4 = Holotype

Description – Male (Figs 1–4). Wingspan 35–38 mm, length of fore wing 17–20 mm. Head and thorax olive-greyish with whitish and dark grey hairs. Palpi short, slender; antenna dark brownish grey, strongly bipectinate. Fore wing elongated, apex pointed, outer margin finely concave below apex. Ground colour dark olive-grey with variably strong greyish irroration, weakest in marginal field. Wing pattern well-discernible; antemedial and postmedial crosslines dark olive-brown, broad but diffuse, stripe-like, slightly sinuous; subterminal line deleted; reniform stigma small, greyish white; veins covered by darker grey scales. Terminal line more or less distinct, dark greyish-brown; cilia greyish-ochreous, conspicuously paler than ground colour. Hind wing dark brownish grey, veins darker grey, transverse line and discal spot present but diffuse, poorly visible. Terminal line dark greyish-brown; cilia much paler greyish-ochreous. Underside of wings pale whitish-grey, hind wing lighter, inner area of fore wing, traces of discal spots and transverse lines present but diffuse.

Female unknown.



Figs 5–6. 5 = Isochlora glaciale (BOURSIN, 1940), China, Quinghai, 4200 m, Anemaquen Shan, 50 km W Maquen city, 20–28.VII.1998., leg. NYKL, 6 = Isochlora salki GYULAI et RONKAY, 1997, paratypus, China, Gansu, Quilianshan, Jiayuguah, 100 km S Jingtienshan, 3600–4100 m, 22.07–25.07.93., leg. ULRICH SALK, slide No. RL5819



Figs 7–8. Habitat pictures of *Isochlora balinti* sp. n., Kyrgyzstan, Yssyk-Köl region, Inner Tien Shan Mts, Terskey-Ala-Too Mts, 10 km SW of Barskoon-pass, 3820 m Male genitalia (Fig. 9). Uncus short, strong, parallel bordered, heavily sclerotized, apically finely hooked. Tegumen rather low but broad, more or less triangular, with well-developed, broadly rounded penicular lobes. Fultura inferior sclerotised, strong, trapezoidal, with fine but prominent dorso-medial extension. Vinculum strongly sclerotised, shortly V-shaped. Valva elongated, evenly tapering, distal third narrowly triangular with apex widely rounded; cucullus setose; corona missing. Sacculus short, strong. Harpe sclerotised, long, flattened, more or less digitiform, with apex finely rounded; erect part running parallel with ventral margin; basal plate long, thin. Aedeagus relatively long, cylindrical, carinal plates short. Vesica broadly tubular, everted forward, bent laterad at medial section at right side; basal half inflated, outer curve armed with three, wide-based, finely peaked cornuti having rounded basal plates and short, acute peaks (one of them triple-peaked).



Fig. 9. Isochlora balinti sp. n., male genitalia



Fig. 10. Isochlora glaciale (BOURSIN, 1940), male genitalia

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Fig. 11. Isochlora salki GYULAI et RONKAY, 1997, male genitalia

Bionomics and distribution – The four known specimens were collected during the same night with portable light traps. The moths were found in the subalpine zone (Figs 7–8), in mid-July, in frosty weather. The new species is the first non-Tibetan member of the species group, it is known from the type locality only, from the Inner Tien Shan Mts, the south- eastern area of the lake Yssyk region, near by the Chinese border (Kyrgyzstan, Yssyk-Köl region).

Etymology – The new species is named in honour of ZSOLT BÁLINT (HNHM, Budapest, Hungary), leader of the project Biophot in the HNHM.

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