Data to the Geometrid (Lepidoptera) fauna of Iran: Larentiinae and Sterrhinae

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Abstract — The description of Glossotrophia bullata sp. n., Sterrha ronkayi sp. n., Colostygia salicata hangayi ssp. n.; the first publication of the male genitalia of Glossotrophia origalis BRANDT, of the female of Sterrha elongata STGR., and of both sexes of Euphya khorassana BRANDT. With 7 figures and 1 photoplate.

I had occasion to study, in the Landesmuseum für Naturkunde, Karlsruhe, GFR, some Geometrid moths deriving from Iran, and principally from Brandt's collection. Certain new taxa have been found, and the configuration of the genitalia, hitherto unpublished, has also been ascertained. I wish to express my gratitude, also in this place, to MR. G. EBERT, for his extensive help and permission for the loan of the material.

Glossotrophia origalis Brandt, 1941 (Plate 1/A, Fig. 1)

Mitt. münch. ent. Ges. 31 (3): 868-869.

The original description may be completed as follows:

Diagnosis — Alar expanse of fore wings of the two female specimens studied: 18 and 18.5 mm, respectively (Plate 1/a).

Biology — The specimens had been collected in the middle of November.

Genitalia of: An extremely compact and heavily sclerotized clasper system. Valvae deeply incised. Aedoeagus arcuate, long and very narrow, with a small sclerotized excrescence. Sternite VIII asymmetric, with a very long, distinct, corniform process. Tergite VIII wide and squat (Fig. 1).

Examined material — 2 of of: environs of Sardze, Laristan, Iran, 200 m. — Slides Nos. 16448, 16449 (575), gen. prep. A. Vojnits.

Glossotrophia bullata sp. n. (Plate 1/G, Fig. 2)

Diagnosis — Alar expanse of fore wings of the two female specimens 18 and 17 mm, respectively. Costa of fore wing considerably arcuate preapically. Tornus angulate. Hind wing wide, rounded. Basic colour of wings slightly greyish white, with a yellowish sheen. Transverse stripes yellowish grey. Terminal field darkest of all. Discal spot elongate, brown, conspicuous on both fore and hind wings. Underside of wings pale yellowish, very shiny, pattern elements obscure. Cilia medium long (Plate 1 g).

Genitalia Q: Bursa copulatrix large, sacculiform, membranous. Antrum sclerotized.

Apophyses short. Papillae anales large and wide (Fig. 2). — of unknown.

Biology — First stages and foodplant unknown. The known specimens had been collected

Distribution — Collected in Balutchistan, Iran. — Locus typicus: Bender Tchahbahar.

Specific differences — The new species differs from Glossotrophia origalis Brandt, originating also from Iran, in the following points: somewhat smaller (origalis on the average larger by 0.5-1 mm); wings wider, especially fore wing (that of origalis definitely elongated); irrorated with grey (origalis yellowish, its discal spots smaller and blackish, the costa of fore wing with cuneiform dark spots), costal cuneiform spots absent, pattern in this area not darker than elsewhere; terminal field of both fore and hind wings with a narrow and discontiguous sinuous stripe (wide and whole is *origalis*; terminal fields of underside grey).

Holotype 9: "Iran Baloutchistan Bender Tchahbahar Dezember 1937 Coll. Brandt."—Paratype: data as for holotype. Holotype deposited in the Landessammlungen für Naturkunde, Karlsruhe; paratype in the Hungarian Natural History Museum, Budapest.

Slides Nos 16445, 16450 (QQ), gen. prep. A. Vojnits.

Sterrha ronkayi sp. n. (Plate 1/E, Fig. 4)

Diagnosis — Alar expanse of fore wings of the two females specimens 15 and 16.5 mm, respectively. Wings considerably elongate, narrow. Costa of fore wing slightly arcuate preapically, apex obtuse, termen finely but evenly arcuate, dorsum long, tornus angulate. Hind wing elongate, obtusely angulate. Basic colour of wings grey, with a slightly yellowish sericeous sheen. Transverse stripes only weakly indicated. Fore wing hardly darker than hind wing, median field being the darkest area. Underside of wings yellowish. Cilia rather long (Plate 1/E).

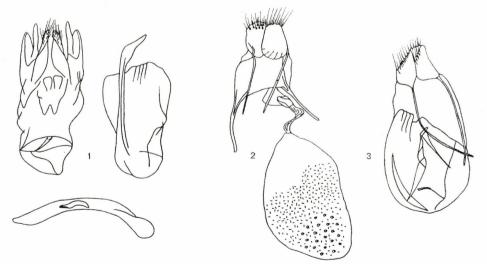
Genitalia ♀: Bursa copulatrix heavily sclerotized, long, cucumber-shaped, with longitudinal furrows and transverse spines. Apophyses medium long and robust, Papillae anales wide

(Fig. 4). — \bigcirc^{\uparrow} unknown.

Biology — First stages and foodplant unknown. The known specimens had been collected in February.

Distribution — Found in Balutchistan, Iran. — Locus typicus: Bender Tchahbahar.

Specific differences — As to habits, the new species resembles Sterrha allongata STGR., in so far as that one also displays much elongated wings, a dark coloration and small stature, but the new species is smaller, not so extremely elongated, with an obtuse apex and the absence of the dense transverse striation characteristic of allongata (Table 1c). The female genitalia show rather considerable differences; those of allongata, so far unpublished, are hereby illustrated (Fig. 3).



Figs 1-3. 1 = Male genitalia of Glossotrophia origalis Brandt, 2 = Female genitalia of Gl. bullata sp. n., 3 = Female genitalia of Sterrha allongata Stgr.

Dedication — I dedicate the new species to Dr. L. Ronkay, renowned specialist of the

Noctuid moths, Hungarian Natural History Museum.

Holotype Q: "Tran Baloutchistan Bender Tchahbahar Februar 1938 Coll. Brandt.". — Paratype: 1 Q data as for the holotype. — Holotype deposited in the Landessammlungen für Naturkunde, Karlsruhe; paratype in the Hungarian Natural History Museum, Budapest.

Slides Nos 16446, 16447 (QQ), gen. prep. A. Vojnits.

Cidaria (Colostygia) salicata hangayi ssp. n. (Plate 1/H, Fig. 5)

Diagnosis — Alar expanse of fore wings of the two known female specimens 25.5, and 26.5, respectively. Differing from the nominotypical form as follows: Colouration yellowish, yellowish brown, not grey, greenish grey or silvery grey. Fore wing with considerably more expressed ante- and postmedians, wide and white stripes, well distinct of basic colour. Basal field of hind wing evenly light, transverse striae of marginal field especially marked (Plate 1/H).

Genitalia Q: Resembling those of the nominotypical form, differring to some extent only in the sclerotized excrescence contained in the large bursa of soft walls (Fig. 5). — \mathcal{J} unknown.

Biology — First stages and foodplant unknown. The known specimens had been collected

very early, in March.

Distribution — Found in Iran. — Locus typicus: Tchoureum, ca 1000 m. Subspecific differences: see diagnosis. Without digressing to the problem of the disputed specific pair of the "montane" "salicata" and the "Mediterranean" ablutaria B., I submit that the new subspecies is of the salicata type.

Dedication — I dedicate the new subspecies to Mr. George Hangay, on the staff of the Australian Museum, Sydney, zealously enriching the Collection of Lepidoptera of the Hungarian

Natural History Museum, Budapest.

Holotype ♀: "Iran Fars Strasse Kazeroun — Bouchir Tchoureum, ca. 1000 m. März 1937 coll. Brandt" "gen. prep. No. 16434♀ det. A. Vojnits". — Paratype ♀: data as for holotype. — Holotype deposited in the Landessammlungen für Naturkunde, Karlsruhe; paratype in the Hungarian Natural History Museum, Budapest.

Slides Nos 16433, 16434 (QQ), gen. prep. A. Vojnits.

Cidaria (Euphya) khorassana Brandt, 1941 (Plate 1/I-J, Figs 6–7)

Mitt. münch. ent. Ges. 31 (3): 875, fig. 19.

The original description, lacking also a characterization of the genitalia, may be complemented as follows:

Diagnosis — Alar expanse of the fore wings of male specimen studied 31 mm, that of a female 32 mm. Costa of fore wing considerably arcuate preapically, apex definitely pointed, termen hardly arcuate, dorsum straight, tornus rounded. Hind wing elongate, obtusely angulate. Basal field of fore wing slightly darker, terminal field a somewhat lighter yellowish brown. Mainly terminal field irrorated with grey. Terminal field with a discontiguous dark brown line. Submarginal yellow, sinuous. Inner and outer transverse striae delimiting median field sinuous, outer one also with an obtuse and a sharper projection. Median field brown, widest towards costa, narrowing towards dorsum, bordered by sinuous brown lines and not much darker than basal field. Hind wing light yellowish with a sericeous sheen, transverse striae hardly discernible. Underside of wings with evenly brown basal and median fields sharply differentiated from yellow terminal field. Discal spots rather pale but discernible, but invisible on upper side of wings. Cilia striated yellow and yellowish brown, rather short. Male slightly lighter and with more elongated wings than female (Plate 1/I-J).

Genitalia of: Claspers squat, especially median part, valvae relatively small. Aedoeagus comparatively short with a sclerotized pectiniform excrescence. Sternite VIII narrow (Fig. 6). - \bigcirc : Bursa copulatrix large, elongate, walls membranous, translucent, with a sclerotized, sphaerical formation bearing short and robust spines. Ductus bursae heavily sclerotized. Both anterior and posterior

apophyses long and robust. Papillae anales large and wide (Fig. 7).

Biology — First stages and foodplant unknown; all known specimens had been captured in July. According to Brandt (1941) occurring also in August.

Distribution — Locus typicus: Binaloud range, Khorassan, Iran, 2-3000 m. The specimens studied derive from 3000 m.

Examined material — $1 \circlearrowleft$ and $1 \circlearrowleft$, Iran, Khorassan, Binaloud (Meched), 3000 m, 30. Juli 1938, coll. Brandt.

Slides Nos 16435 (\bigcirc ⁷), 16436 (\bigcirc), gen. prep. A. Vojnits.

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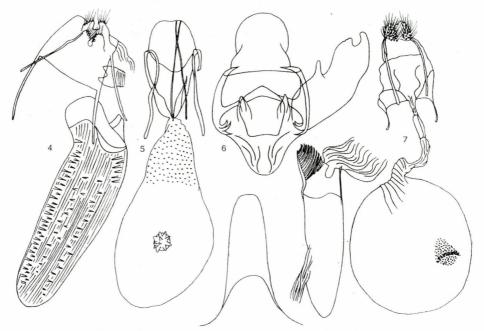
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Figs 4-7. 4 = Female genitalia of Sterrha ronkayi sp. n., 5 = Female genitalia of Colostygia salicata ssp. hangayi ssp. n., 6 = Male genitalia of Euphya khorassana Brandt, 7 = Female genitalia of Euphya khorassana Brandt

Plate 1.

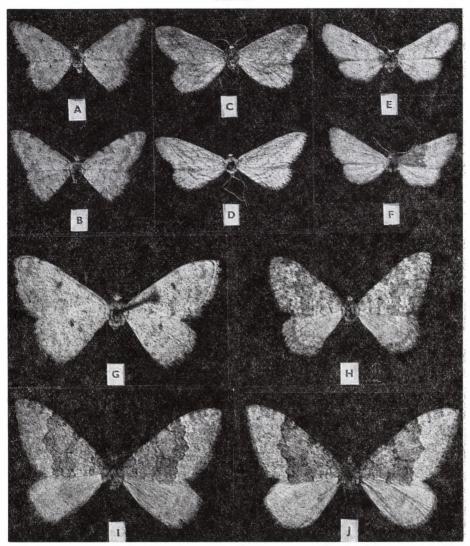


Plate 1. A-B = Glossotrophia origalis Brandt, C-D = Sterrha allongata Stgr., E-F = Sterrha ronkayi sp. n., G = Glossotrophia bullata sp. n., H = Colostygia salicata ssp. hangayi ssp. n., I = Euphya khorassana Brandt female, J = E. khorassana Brandt male