Atalanta (June 2001) **32** (1/2): 249-258, Würzburg, ISSN 0171-0079

Little known species of casebearer moths from Russia

(Lepidoptera, Coleophoridae)

by

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Received 24.I.2001

Summary: Genitalia characteristics are given for the first time for 5 females of Coleophoridae: *Aporiptura eurasiatica* (BALDIZZONE, 1989), *Ecebalia immersa* FALKOVITSH, 1989, *E. eichleri* (PATZAK, 1977), *E. kargani* (FALKOVITSH, 1989) and *Ionescumia acerosa* FALKOVITSH, 1989.

During the past four years I have studied material of casebearers from my expeditions to Volgo-Ural region, Kalmykia, Daghestan and Altai. Among the moths collected I found species whose females have not been described so far.

I would like to express my words of thanks to Dr. MARK I. FALKOVITSH (Russia, St. Petersburg), who made some remarks to present paper.

Aporiptura eurasiatica (BALDIZZONE, 1989)

Material

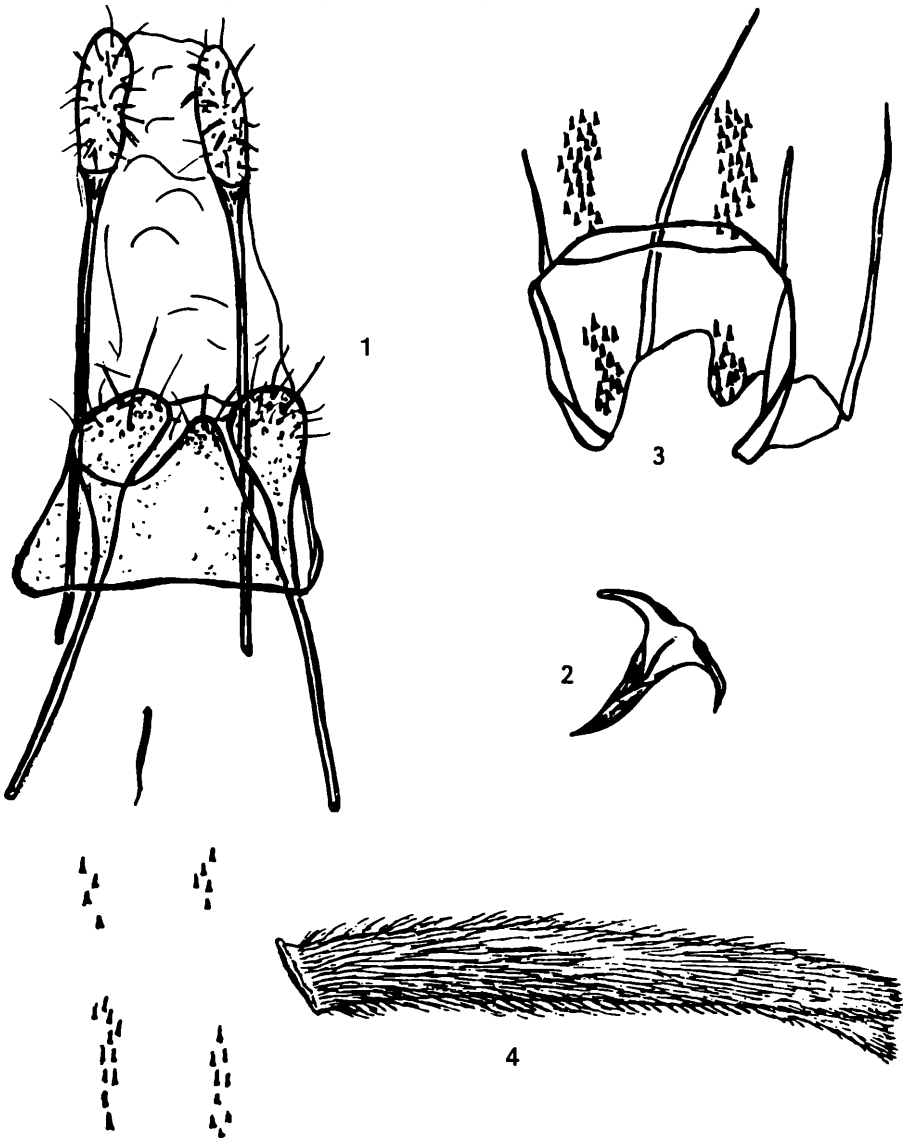
1 ♀, Russia, vic. Saratov, 27.VI.1994; 2 ♀♀, the same locality, 26.V.1996, ex larvae on *Kochia prostrata*; 2 ♀♀, the same, 3.VII.1998, ex larvae on *Kochia prostrata*; 2 ♀♀, Russia, Saratov District, vill. N. Bannovka, 140 km S Saratov, 24.VI.1996; 1 ♀, Russia, Uljanovsk District, vill. Ryabina, 29.VI.1996; 1 ♀, Russia, Altai, vill. Belen'koe, 30.V.1999; 1 ♀, Russia, Volgograd District, vic. Volgograd, 12.VI.1999 (KOMAROV).

Description

Wing expanse 8-10 mm. Head, thorax and abdomen light grey-ochreous. Palpus labialis ochreous-whitish; 2nd segment 1.2 times as long as diameter of eye; 3rd segment 0.4 times as long as 2nd one. Scapus of antenna without hairtuft; flagellum ochreous-whitish. Forewings ochreous with darker costa, apex with lighter scales. Hindwings grey; fringes yellowish grey.

Female genitalia (figs 1, 2). Papillae anales short, wide, with small and long bristles. Apophyses posteriores 1.3 times longer than apophyses anteriores. Subgenital plate of triangular shape with rounded apex. The base of the apophyses anterioris is broadened in a shape of unequal trapezia, with long rare bristles. Antrum in the shape of a rounded protuberance, very poorly sclerotized. Middle part of ductus with rod, 0.3 times as long as the apophyses anteriores. Signum large, its basal part 0.2 the length of the dorsal margin of the subgenital plate.

Abdominal tergites (fig. 3). 1st abdominal tergite with small sclerotized patches of 12-15 spinelets; on the 2nd tergite the patches of spinelets compacted, about 1.5 times longer than wide.



Figs 1–4: *Aporiptura eurasiatica* (Bldz.). 1. Female genitalia. 2. Signum. 3. Anterior abdominal tergites. 4. Larval case.

Comparision
The female of this species is related to *A. aglabitella* (CHRET.). The main differences in genitalea are the following: apophyses anteriores much longer and their upper parts wider; subgenital plate of triangular shape.

Distribution
Steppe zone of Europe and Asia (locally from Hungary to China and Korea (BALDIZZONE, 1989).

Biology
Steppe biotopes. Flight period in V to early VII in 1 generation. Larva (larval case–fig. 4) lives on the leaves of *Kochia prostrata*.

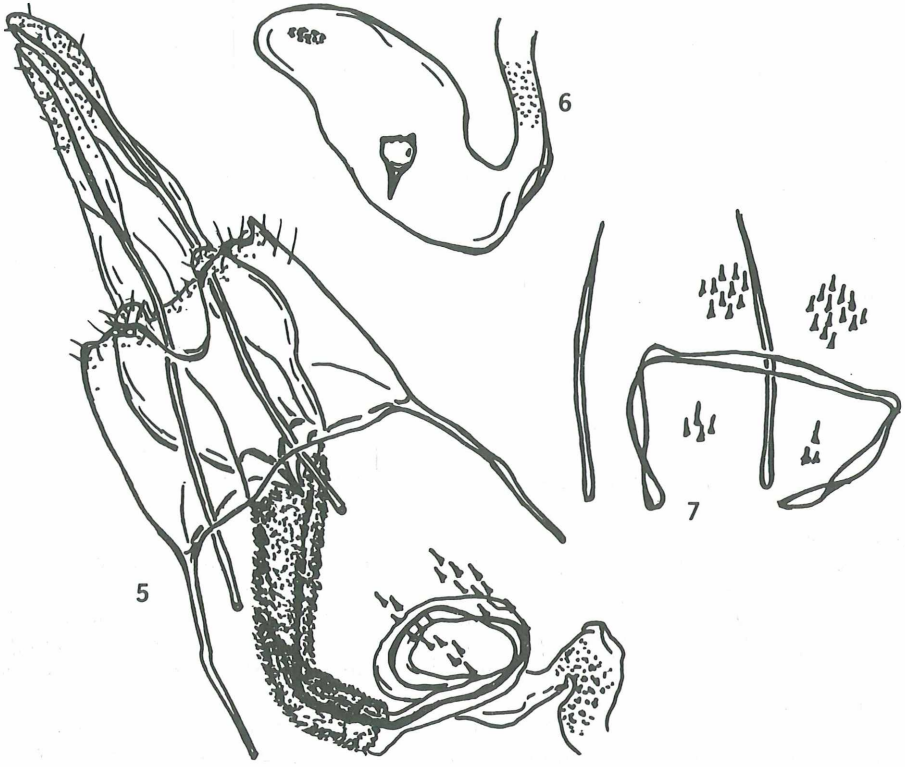
Ecebalia immersa FALKOVITSH, 1989

Material
1 ♀, Russia, Astrakhan District, mt. Bogdo, 23.VIII.1996 (KOMAROV); 2 ♀♀, Russia, Kalmykia, Chernozemel District, vill. Andratinskii, 24.IX.2000, ex larvae on *Kalidium foliatum*.

Description
Wing expanse 7.2–8.5 mm. Head, thorax, tegulae and abdomen light brown-ochreous. Labial palpus white-yellowish with light grey-ochreous scales on the inner surface. Second segment of equal diameter with the eye; 3rd segment 0.9 times as long as 2nd. Basal antennal segment with hairtuft of short seldom light yellowish scales; flagellum whitish, ringed brown. Forewings light yellowish with various brownish and tawny-ochreous scales. Hindwings grey. Fringes of wings greyish.
Female genitalia (figs. 5, 6). Ovipositor short. Papillae anales oval-narrowed, elongate and slightly sclerotized apically, covered with short rare bristles. Apophysis posterioris about 1.8 times longer than apophysis anterioris. Sternum VIII of quadrat shape with poorly sclerotized caudal groove; ostium bursae not elongate, of semi-ovate form. Antrum narrow with lateral oval-wider sclerotized streaks, proximally approaching anterior edge of subgenital plate and sclerotized apical to ductus. Upper part of ductus from plate border with lateral spined rods, 1.3× the length of apophysis anterioris; middle part of ductus with central rod ringed once and prolonged short part with small spines. Tube to ductus bursae with little sclerotized spots; signum not bigger, small patch with spinelets.
Abdominal tergites (fig. 7). 1st abdominal tergite with 3–4 spinelets; on the 2nd tergite the patches of spinelets not compact, ovate form.

Comparision
The female of this species is related to *E. kalidii* (FLKV.) and shows affinities in genitalia with *E. bagorella* (FLKV.).

Distribution
Semi-desert zone of Volgo-Ural region in Russia and Kazakhstan (FALKOVITSH, 1989).



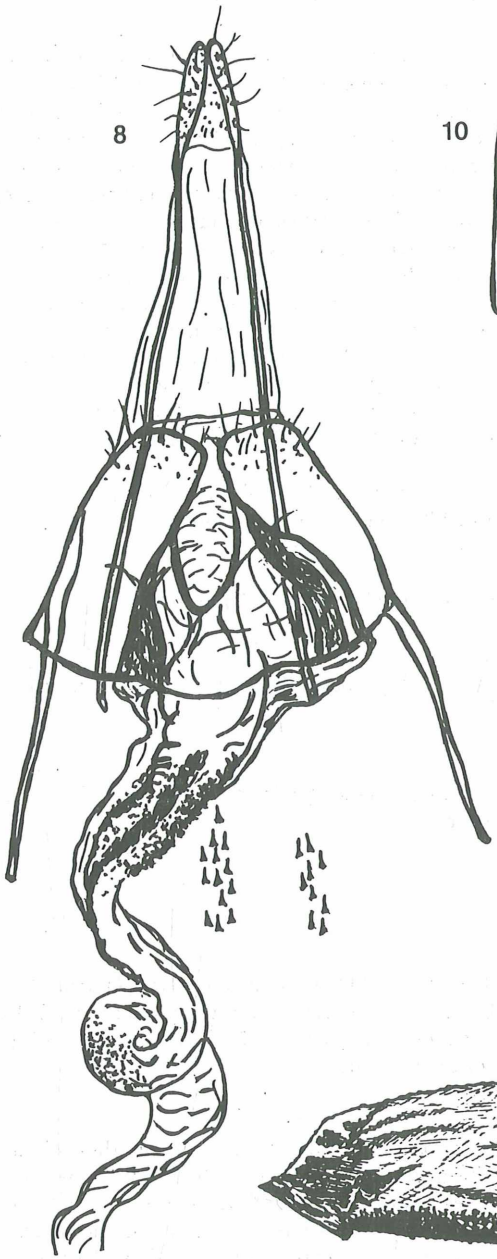
Figs 5-7: *Ecebalia immersa* Flkv. 5. Female genitalia. 6. Signum. 7. Anterior abdominal tergites.

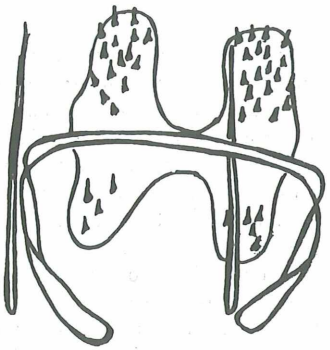
Biology
Semi-desert and dry steppe biotopes with sandy soil. Flight period in VII-VIII in 1 generation. The larva lives on the leaves of *Kalidium foliatum*.

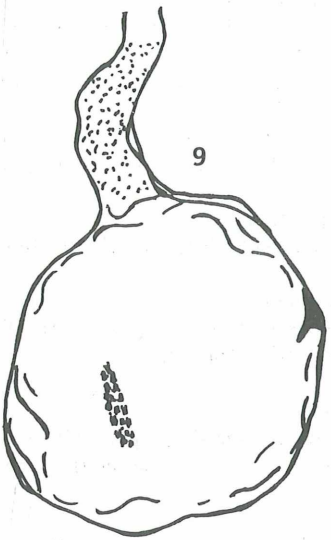
Ecebalia eichleri (Patzak, 1977)

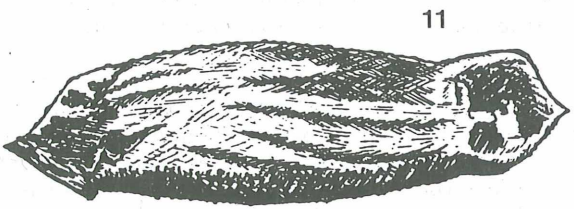
Material
3 ♀♀, Russia, Volgograd District, lake Elton, 18.IX.1994, ex larvae on *Salsola laricina*; 2 ♀♀, the same, 10.X.1998; 4 ♀♀, the same, 12.IX.2000; 1 ♀, Russia, Dagestan, Kuma river, Bishkolsk lakes, 24.IX.2000, ex larvae on *Salsola laricina*; 2 ♀♀, Russia, Kalmykia, Chernozemel District, vill. Mekleta, 24.IX.2000, ex larvae on *Salsola laricina*.

Figs 8-11: *Ecebalia eichleri* (Patz.). 8. Female genitalia. 9. Signum. 10. Anterior abdominal tergites. 11. Larval case.









Description
Wing expanse 9–11 mm. Head, thorax and abdomen light cream-coloured. Labial palpus on the outer surface light brown, grey-whitish on the inner side. Second segment 1.2 times as long as diameter of the eye; 3rd segment 0.5 times as long as 2nd. Antenna light grey, basal segment without hairtuft; flagellum whitish. Forewings light grey with yellow-brownish shades, along radial and anal veins grey-brownish streaks with darker brown scales towards apex. Fringes light grey at apex and yellow-grey towards dorsum. Hindwings light grey; fringes yellowish grey.
Female genitalia (figs. 8, 9). Ovipositor long. Papillae anales small, narrow, sclerotized in apex, covered long rare bristles. Apophysis posterioris about 2.0 times longer than apophysis anterioris. Sternum VIII of trapezoid form, sclerotized caudal with short and long bristles; ostium bursae elongate semi-ovate, proximally approaching middle part of the subgenital plate and narrowly prolonged to the posterior margin. Antrum of unequal trapezoid form with well strong sclerotized sides, tubular prolonged from the anterior margin in a short sclerotized ductus with spined lateral and central rods 1.3 length of the apophysis anterioris. Middle part of ductus with short central rod prolonged in a curl protuberance with small scrclorotized spots. Tube to ductus bursae with little sclerotized spots; signum small and an equal lenght patch with spinelets.
Abdominal tergites (fig. 10). 1st abdominal tergite with 4–4 spinelets; on the 2nd tergite the patches of spinelets more compact, about 1.2 times longer than wide.

Comparision
The female of this species shows affinities in genitalia with *E. sahariana* (Bldz.).

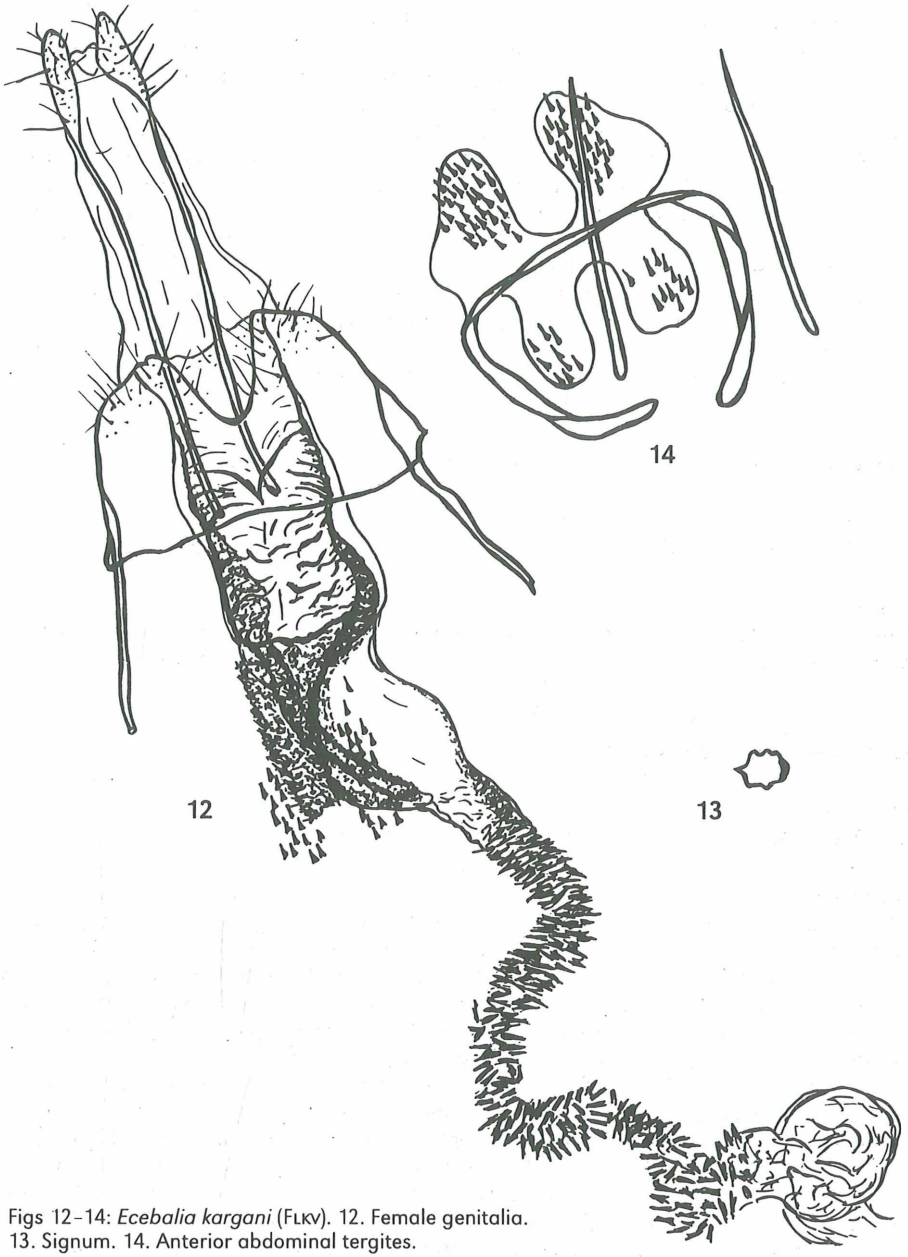
Distribution
Semi-desert zone in Transcaucasia (Patzak, 1977), Russia (Daghestan, Kalmykia, Volgograd Distr.) and Middle Asia.

Biology
Semi-desert and dry-stepped biotopes. Flight period in VIII–IX in 1 generation. Larva (larval case–fig. 11) lives on the seeds of *Salsola laricina*.

***Ecebalia kargani* (Falkovitsh, 1989)**

Material
2 ♀♀, Russia, Volgograd District, lake Elton, 18.IX.1994, ex larvae on *Salsola laricina*; 1 ♀, the same, 10.X.1998; 2 ♀♀, the same, 12.IX.2000; 1 ♀, Russia, Dagestan, Kuma river, Bishkolsk lakes, 24.IX.2000, ex larvae on *Salsola laricina*; 2 ♀♀, Russia, Kalmykia, Chernozemel District, vill. Mekleta, 24.IX.2000, ex larvae on *Salsola laricina*.

Description
Wing expanse 15–17 mm. Head, thorax and abdomen colourless ochreous. Thorax with two white flashed streaks, tegula coloured the same. Labial palpus whitish with yellow-ochreous scales on the outer surface. Second segment equal diameter of eye; 3rd segment 0.8 times as long as 2nd. Basal antennal segment and lined segments whitish with ochreous; flagellum whitish, not ringed. Forewings yellow-ochreous with mother-of-pearled or white-silvered steaks;



Figs 12–14: *Ecebalia kargani* (Flkv). 12. Female genitalia. 13. Signum. 14. Anterior abdominal tergites.

costal streak wide and narowed or cut distal; medial streak ¼ longer of field without flash scales; anal streak wider as medial one and not connected with the margin; dorsal streak narrowed to apexes; diskal spot dark brown unequal ovaled, those coloured scales along the veins in the upper wing part. Hindwings light brown-grey. Fringes of wings greyish.
Female genitalia (figs. 12, 13). Ovipositor short. Papillae anales elongate, in long rare bristles. Apophysis of equal thickness, apophysis posterioris about 2.1 times longer than apophysis anterioris. Sternum VIII of well trapezoid form, caudal margin in bristles; ostium bursae semi-oval and narrowed to the middle part of the subgenital plate. Antrum tubular, strongly sclerotized laterally, near the ends of the apophysis anterioris prolonged in a sclerotized short ductus with lateral not-compacted small spined rods and on the right side in a wide poorly sclerotized tube. The lower part of the ductus in 2.0 times long apophysis posterioris in not compacted big spines, transparent distally and ringed once. Signum small, as one patch.
Abdominal tergites (fig. 14). 1st abdominal tergite with rare 8–11 spinelets; on the 2nd tergite the patches of spinelets more compact, about 1.2–1.3 times longer than wide.

Comparision
The female of this species is related to the *E. attalicella* (Z.) species group.

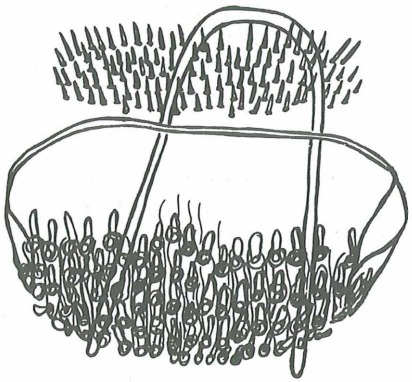
Distribution
Semi-desert zone of Middle Asia (Falkovitsh, 1989) and Russia (Volgograd Distr.).

Biology
Semi-desert biotopes. Flight period in VII–VIII in 1 generation. Larva lives on the seeds of *Salsola laricina*.

Ionescumia acerosa Falkovitsh, 1989

Material
1 ♀, Russia, Astakhan District, mt. Bogdo, 23.VIII.1996 (Komarov).

Description
Wing expanse 15–16 mm. Head, thorax, tegula and abdomen ochreous. Labial palpus whitish with ochre, not darked on the outer surface. Second segment equal diameter of eye; 3rd segment 0.5 times as long as 2nd. Basal antennal segment with hairtuft of long light ohreous scales; flagellum whit-ochreous. Forewings brown-ochreous, in the basal part more coloured. Along the costa a wide whitish streak narrowed to the apex. Dorsal margin edged narrow whitish streak. Fringes grey-ochreous. Hindwings and fringes grey-ochreous.
Female genitalia (figs. 15, 16). Ovipositor 2 times longer than segment VIII, with papillae anales narrow, elongate and sclerotized in the apex, covered with long rare bristles. Apophysis posterioris about 2.2 times longer than apophysis anterioris and narrower. All apophyses strong and well pigmented. Sternum VIII quadratic, much sclerotized along caudal and laterally; caudal margin with little and rare bristles; ostium bursae semi-oval. Tergum VIII narrow with parallel sides, caudal margin concave, oral margin angle projected; lateral-oral angles connected with the bases of the apophyses anteriores. Antrum narrow with wide sclerotized



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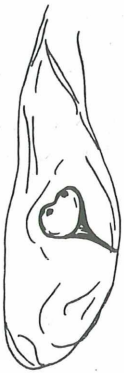

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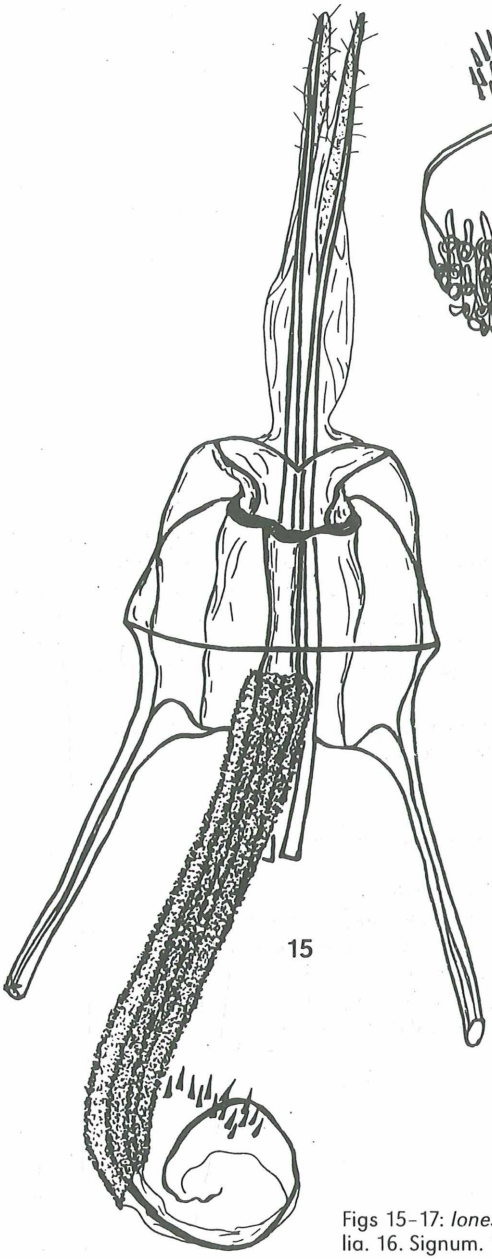

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Figs 15–17: *Ionescumia acerosa* FALK. 15. Female genitalia. 16. Signum. 17. Anterior abdominal tergites.

streaks on the sides. Caudal part of ductus with lateral small-spined rods. Midlde part of ductus with central rod ringed once. Signum big, oval in base.
Abdominal tergites (fig. 17). 1st abdominal tergite with united plate of bigs spinelets; on the 2nd tergite the patch with smaller pointed spinelets.

Comparision
The female of this species is closely related to *Ionescumia isomoera* Flkv. The main differences in genitalea are the following: subgenital plate of quadrat shape, section of ductus bursae considerably longer.

Distribution
Semi-desert zone in Russia (Astrakhan Distr.), Kazakhstan and Uzbekistan (Falkovitsh, 1989).

Biology
Semi-desert biotopes. Flight period in VII–VIII in 1 generation.

References

Baldizzone, G. (1989): Contributions to the knowledge of the Coleophoridae. L. *Coleophora eurasiatica* sp.n. and *Coleophora koreana* sp.n. – Nota lepid. **12** (1): 13–18.
Falkovitsh, M. I. (1989a): New species of casebearers (Lepidoptera, Coleophoridae) of the Turanian fauna. – Proc. Zool. inst. Acad. Sci. of USSR. **200**: 40–87 [in russian].
Falkovitsh, M. I. (1989b): New species of the casebearers (Lepidoptera, Coleophoridae) from Kazakhstan and Middle Asia. – Revue d'Entomologie de l'URSS. **68** (4): 759–774 [in russian].
Patzak, H. (1977): Coleophoriden vom Kaukasus und aus Transkaukasion (Lepidoptera, Coleophoridae). – Deutsche Ent. Zeit. **24** (4/5): 277–281.

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