

## New species of gelechiid moths from Saratov Province, Russia (Lepidoptera: Gelechiidae)

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Four new species of gelechiid moths from Saratov Province are described: *Lutilabria volgensis*, *Bryotropha rossica*, *Filatima djakovica*, *F. zagulajevi*.

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The material used in this paper was collected by V. Anikin from 1985 to 1994. The holotypes of all new species are kept in the Zoological Institute, St.Petersburg.

### *Lutilabria volgensis* sp. n. (Figs 1-2)

*Holotype*. ♂, Russia, Saratov Prov., Khvalynsk Distr., 5 km N of Khvalynsk, slopes of chalk hills, 25.V.1990 (Anikin).

*Description*. Wing expanse 15 mm. Fore wings rustly-brown, without markings. Fringes light brown. Hind wings brownish grey; their fringes light brown. Thorax and tegula dark brown, head reddish brown, light yellow in front. Labial palpus light yellow beneath. Antennae dark grey with ring of golden hairs on each segment, their first segment dark brown with fascia of light hairs.

Male genitalia (Figs 1-2). Upper (large) lobe of valva sabre-shaped, reaching apex of uncus; lower (small) lobe of valva with inflated and strongly sclerotized apical margin. Uncus cut off; anellus distally membranous. Posterior margin of vinculum with complex-shaped incision, sclerotized along its margin. Saccus long, narrow, weakly inflated at apex. Aedeagus approximately as long as saccus, ball-shaped at base; its apex obliquely cut and sclerotized.

*Comparison*. The genus *Lutilabria* was described as monotypic by Povolný (1965). The male genitalia of the type species, *L. lutilabrella* (Mann, 1857), known from Europe (Switzerland, Balkan Peninsula), were figured

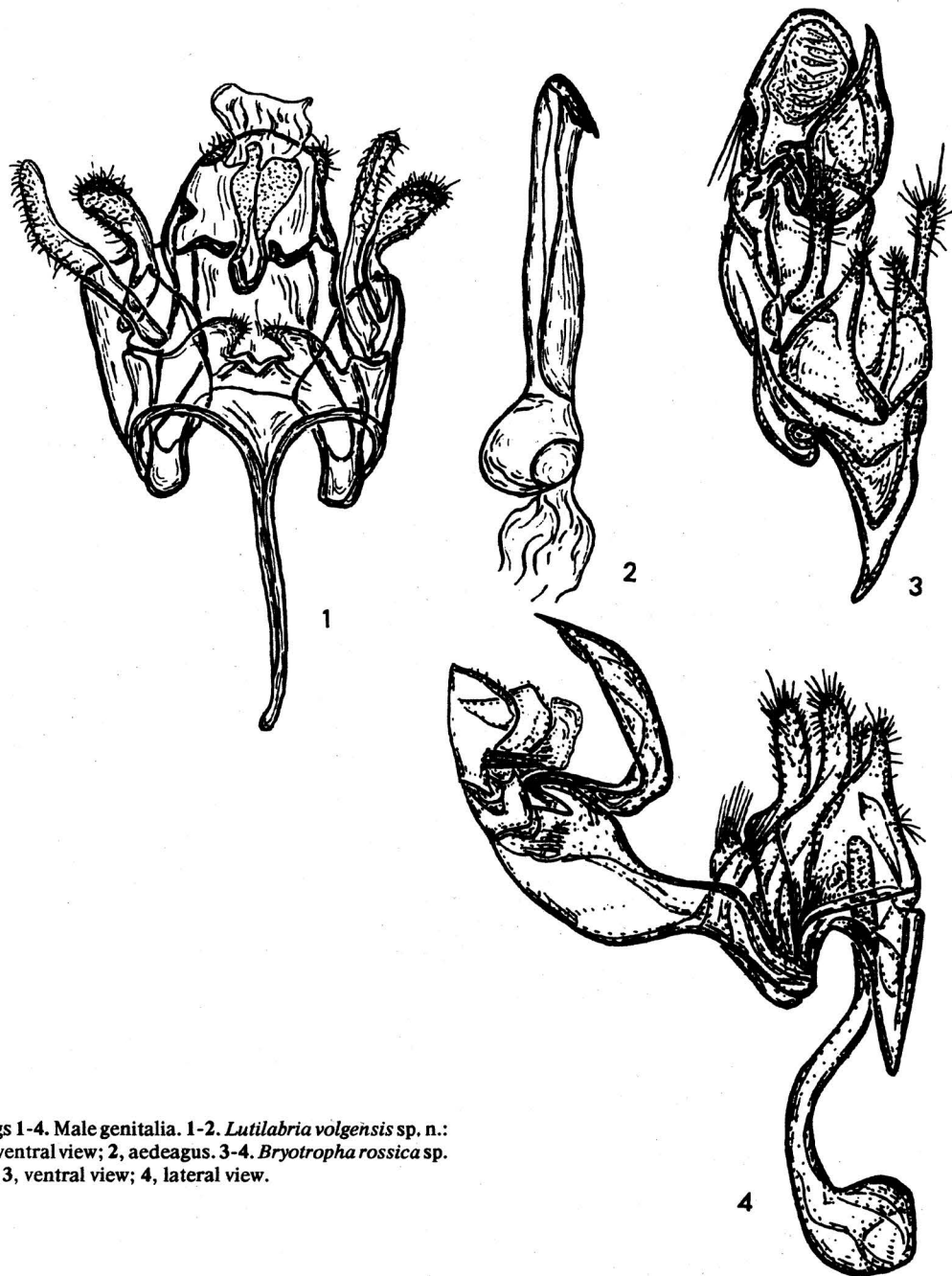
by Povolný (1965, 1967, 1968, 1978). Later a second species of this genus, *L. kaszabi*, was described (Povolný, 1978) from one male collected in Mongolia. The new species closely resembles *L. lutilabrella*, but differs in the narrowed and twice longer saccus, deeper incision with sclerotized margin on the posterior edge of vinculum and inflated apex of the lower (small) lobe of the valva. The new species may be easily distinguished from *L. kaszabi* by the straight aedeagus (arcuately bent in *L. kaszabi*). *Etymology*. The new species is named from the region where it was collected.

### *Bryotropha rossica* sp. n. (Figs 3-4)

*Holotype*. ♂, Russia, Saratov Prov., Voskresensk Distr., Chardym I., at light, 18.VII.1990 (Anikin).

*Description*. Wing expanse 12 mm. Fore wings greyish brown, with light specks formed by light apices of brownish grey scales, with three indistinct black specks and diffuse black spot at base of wing. At one third from base of wing two black patches arranged obliquely one over another. At two-thirds from base of wing one more black speck. Fringes light grey with dark apices. Hind wings grey, dull; their fringes greyish yellow. Thorax, tegula and head with broad scales of the same colour as fore wings. Labial palpus light cream-coloured, narrow apical segment covered with small dark brown scales. Antenna grey with dark grey rings.

Male genitalia (Figs 3-4). Valva digitiform, with bristles at apex; upper margin with hump-



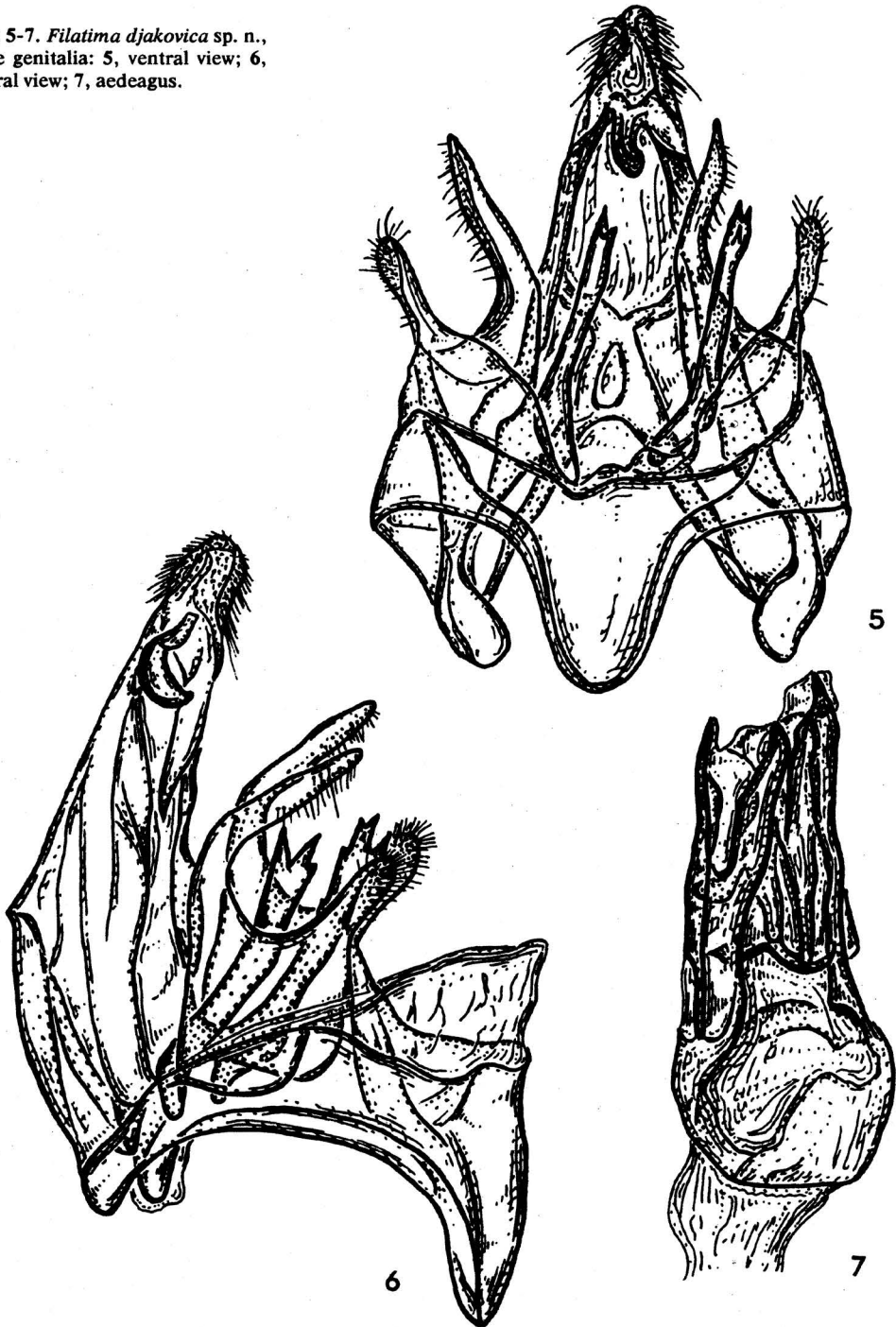
Figs 1-4. Male genitalia. 1-2. *Lutilabria volgensis* sp. n.: 1, ventral view; 2, aedeagus. 3-4. *Bryotropha rossica* sp. n.: 3, ventral view; 4, lateral view.

shaped projection at half of length; sclerotized sickle-shaped projection on lower margin absent. Uncus large, hood-shaped. Gnathos large, canoe-shaped; apex pointed and tapering far back. Posterior margin of vinculum with large triangular projection equal in length to valva; apex of vinculum bent downward, with sparse bristles. Saccus elongate, with blunt apex. Aedeagus narrow, stripe-like, ball-shaped at

base, smoothly bent before half length, 3.5 times as long as saccus.

*Comparison.* The new species differs from all known species of the genus *Bryotropha* Heine-  
mann, 1870 in the structure of valva and large  
triangular projection on posterior margin of  
vinculum. An important male diagnostic char-  
acter in this genus is the form of gnathos (in  
lateral view); for this character *B. rossica* sp. n.

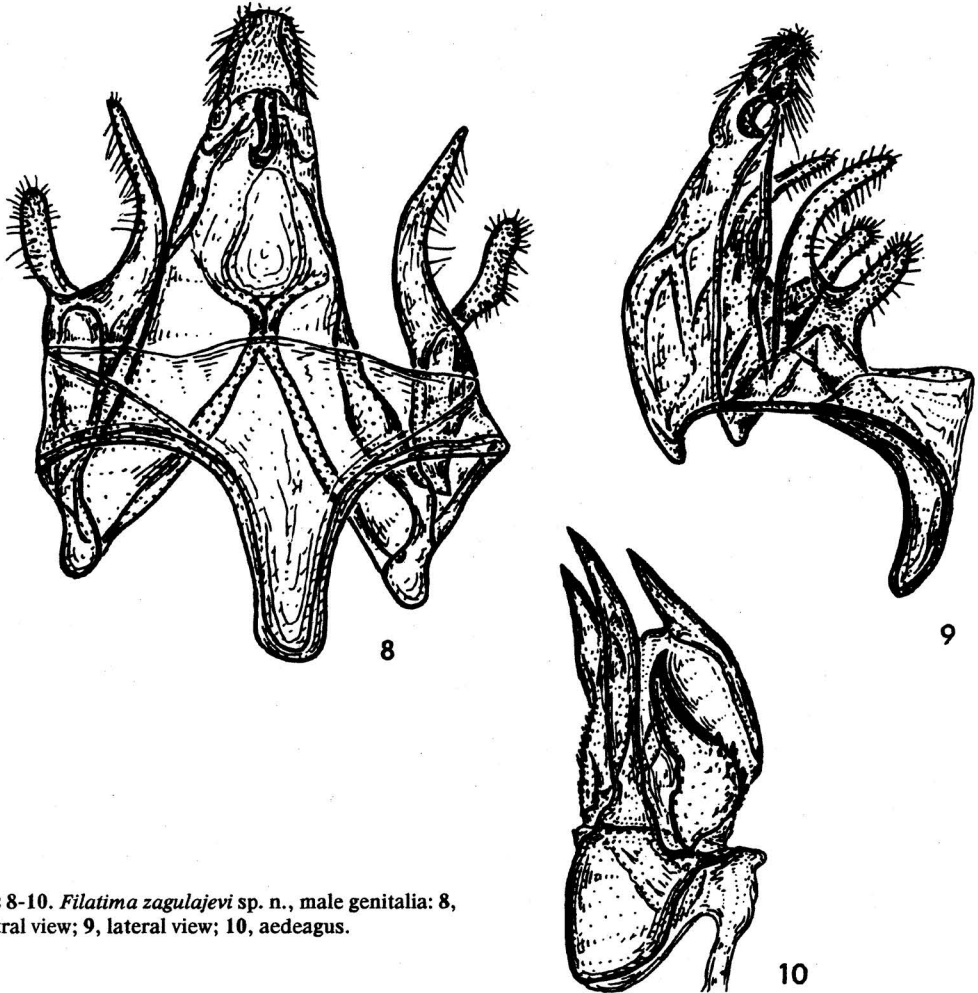
Figs 5-7. *Filatima djakovica* sp. n., male genitalia: 5, ventral view; 6, lateral view; 7, aedeagus.



may be near to *B. purpurella* (Zetterstedt, 1839) (= *flavipalpella* Tengström, 1847) distributed in the northern and middle part of Europe. The male genitalia of the latter species were figured by Svensson (1962) and Piskunov (1981).

*Filatima djakovica* sp. n.  
(Figs 5-7)

*Holotype*. ♂, Russia, *Saratov Prov.*, Krasnokut Distr., Eruslan R., Dyakovsk Nature Reserve, 15.V.1990 (Anikin).



Figs 8-10. *Filatima zagulajevi* sp. n., male genitalia: 8, ventral view; 9, lateral view; 10, aedeagus.

**Description.** Wing expanse 17 mm. Fore wings dark brown, with markings formed by black scales with red-brown encircling on longitudinal axis of wing: three markings in centre of wing and two smaller ones close to outer margin. Fringes light brown. Hind wings and their fringes dark grey. Thorax, tegula and head of the same colour as fore wings. Sickleshaped labial palpus bent upward and covered beneath with light grey and brownish scales. Antenna dark brown with light rings.

Male genitalia (Figs 5-7). Eighth segment of abdomen modified. Valva V-shaped, her lower lobe about 2.5 times shorter than upper lobe. Uncus of shape common for the genus, small; gnathos of moderate size, hook-shaped. Saccus small, with obtuse apex. Aedeagus slightly bulged at base; its apex with four large, approaching cornuti. Aedeagus 2.3 times longer than saccus. Anellus in form of two strongly

sclerotized whips; apex of one of them with three and of the other with four denticles.

**Comparison.** Of the Palaearctic species of the genus *Filatima* Busck, 1939, the new species closely resembles *F. textorella* (Chrétien, 1908) from Spain and France in the habitus and genital structure; for the latter species figures of fore wing (Povolný, 1983) and male genitalia (Sattler, 1960; Povolný, 1983; Vives Moreno, 1987) were published. However, unlike the new species, in *F. textorella* the apices of lobes of anellus are pointed, not subdivided in denticles. Of the Nearctic species of *Filatima*, the new species is similar to *F. hemicrossa* (Meyrick, 1927) from the USA (Texas), however in the latter species the apices of lobes of anellus are slightly bulging and slightly tapering downward, resembling a beak (Clarke, 1969).

*Etymology.* The new species is named from the type locality (Dyakovsk Nature Reserve, Saratov Prov., Russia).

*Filatima zagulajevi* sp. n.  
(Figs 8-10)

*Holotype.* ♂, Russia, Saratov Prov., Krasnokut Distr., Eruslan R., Dyakovsk Nature Reserve, 14.V.1990 (Anikin).

*Description.* Wing expanse 16 mm. Fore wings brownish grey, with dark brown spots with red-brown encircling: five horizontal touches along longitudinal axis of wing, among them third and fifth more distinct, the latter one geminated; one touch between third touch and posterior margin of wing; three touches on outer margin of wing, one under another, the uppermost of them brighter and more distinct. Fringes grey with brown hue. Hind wings light grey, semi-transparent, their fringes of the same colour as wings. Thorax and tegula of the same colour as fore wings; head light grey. Arched labial palpus mottled with reddish brown scales; antenna dark brown with grey rings.

Male genitalia (Figs 8-10). Eighth segment of abdomen modified. Valva V-shaped; its lower lobe 1.8 times shorter than upper lobe. Uncus small; gnathos small, hook-shaped, with obtuse apex. Aedeagus almost 3 times longer than saccus, with four large pointed cornuti, two of them with serrate pegs at margins.

*Comparison.* Of the Palaearctic species of the genus *Filatima* Busck, 1939, the new species is very similar to *F. karsholti* Ivinskis & Piskunov, 1989 from Mongolia and China (Ivinskis & Piskunov, 1989), however in the latter species the aedeagus has three cornuti, while in the new species there are four cornuti. The centre of the species diversity of the genus *Filatima* is North America; of the Nearctic species of this genus the new species is similar to *F. monopa* (Meyrick, 1927) (= *epigyptae* Meyrick, 1927) from the USA (Texas), whose male genitalia were figured by Clarke (1969), but the latter differs from the new species in the two cuneiform projections on posterior margin

of vinculum and narrower and longer aedeagus of relatively rectangular form.

*Etymology.* The new species is named after the famous Russian specialist in Microlepidoptera A.K. Zagulajev, native of the Volga region.

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