

**New data on the genus *Stilpon* LOEW (Diptera: Hybotidae)
from the Palaearctic region, with description of
a new species from Tajikistan**

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Abstract

A new species of the genus *Stilpon* LOEW, belonging to the *S. graminum* group, is described from Tajikistan: *S. gussakovskii* sp. nov. One more new species possessing yellow thorax and reduced wings lacking vein R2+3 was discovered but it has not been named due to insufficient materials available (a female only). *S. graminum* (FALLÉN) is recorded for the first time from the East Siberia (Jakutia) and the Russian Far East (Amur Province, south of Primorsk Territory).

Keywords: Empidoidea, Hybotidae, *Stilpon*, new species, new records, Palaearctic, Russia, Tajikistan.

Introduction

The genus *Stilpon* LOEW includes 11 species described from the Palaearctic region. All these species are known from Europe only. This paper presents first data on the genus from the Asiatic part of the realm, including two species new to science. The study is based on the Diptera materials deposited in the Zoological Institute of Russian Academy of Sciences (St. Petersburg). Pinned specimens were examined only. The flies were collected by sweep netting and were represented in few numbers that is usual for such a kind of *Stilpon* samples. It is evident that in the future undescribed species may be found from the Asiatic part of the Palaearctic realm when more extensive techniques of collecting (e.g., pitfall traps, water traps or Malaise traps) will be improved.

For details of the methods, including morphological terms and descriptive format, we refer to the paper published recently by the authors (SHAMSHEV &

GROOTAERT, 2004). In the description of a new species given below, right and left side of the male terminalia are based on the unrotated position viewed posteriorly, such that in the illustrations the right surstylus appears on the readers left side and vice versa. The male terminalia are figured in their unrotated position.

Systematic account

Stilpon gussakovskii sp. nov.

(Figs 1-7)

Material examined. Holotype male [label printed in Cyrillic]: Stalinabad [= Dushanbe], Tajik. [Tajikistan], 15.IV.[1]942, GUSSAKOVSKY. – In the Zoological Institute of the Russian Academy of Sciences (St.Petersburg, Russia). Paratypes. 2 males, 1 female, same data as in holotype; 1 male, 1.IV.942, same locality as in holotype; 1 male, Stalinabad, submountain area, Tajik. [Tajikistan], 20.III.942.

Derivatio nominis: The new species is named after the collector.

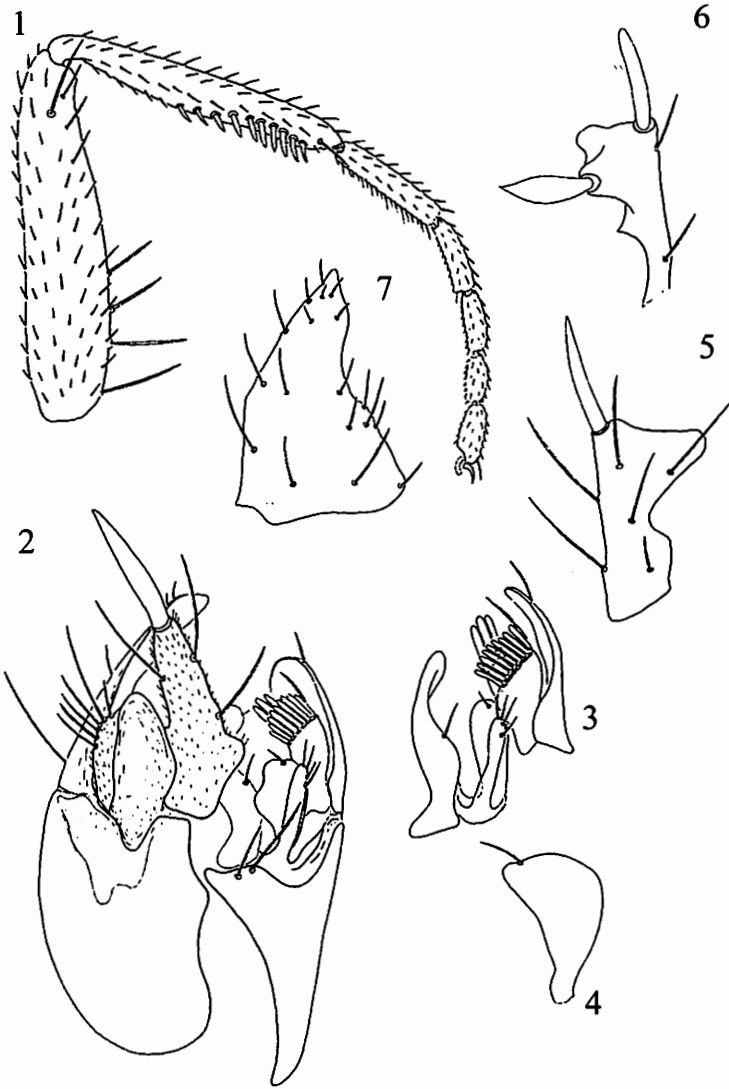
Diagnosis: Species with black thorax. Legs with hind femur brownish in apical part and hind basitarsus black, otherwise yellow. Wing lacking prominent pattern. Male: mid femur with 2 brownish, moderately long, ventral bristles in basal half nearer to middle and 2 longer, yellow bristles near base; abdomen lacking gland-like structures; left cercus with 2 spines.

Male. Body length 1.5-1.6 mm, wing length 1.4-1.5 mm.

Head black in ground-colour. Occiput subshining, finely greyish pollinose. Vertical bristles moderately long, black. Frons sublinear with slightly divergent sides above, rather broad, nearly 4 times as broad as anterior ocellus, entirely tomentose. Anterior ocellar bristles moderately long. Clypeus silvery white tomentose. Antenna with scape and pedicel yellow, postpedicel and style brown. Palpus silvery white, with rather short, black, subapical bristle.

Thorax black in ground-colour. Scutum entirely tomentose. Postpronotal bristle long, inclinate. Dorsocentral bristles multiserial, complete posteriorly. Acrostichal bristles 2-serial, complete posteriorly.

Legs largely yellow; hind femur brownish in apical part, hind basitarsus black. Mid coxa with 2 yellow bristles on outer side. Hind trochanter lacking spinules. Fore femur markedly thickened, with rows of moderately long antero- and posteroventral bristles. Mid femur (Fig. 1) slender, with 2 brownish, moderately long, ventral bristles in basal half nearer to middle and 2 longer, yellow bristles near base. Hind femur (viewed laterally) evenly thickened toward middle, with 1 row of moderately long, anteroventral bristles. Fore tibia spindle-like, with ordinary setation. Mid tibia with row of black, ventral spinules and 1 longer subapical spinule. Hind tibia with unmodified posterior apical comb, clothed with ordinary setulae. Hind basitarsus somewhat thickened.



Figs 1-7. *Stilpon gussakovskii* sp. nov.: male. 1, mid leg, anterior view; 2, hypopygium, ventral view; 3, left surstylus, right lateral view; 4, upper lobe of left surstylus, lateral view; 5, left cercus, right lateral view; 6, same, left lateral view; 7, right surstylus, dorsal view. Scale 0.1 mm.

Wing normally developed, covered with uniform microtrichia; more or less uniformly, finely infusate. Costal vein with moderately long setulae along anterior margin. Vein R2+3 about 3 times longer than Rs. Distance between apices of veins R2+3 and R4+5 somewhat shorter than distance between apices of veins R1 and R2+3. Veins R4+5 and M1+2 divergent and arcuate in apical part. Halter with black knob and yellow stem.

Abdomen largely brownish yellow, clothed in scattered dark setulae, pregenital segments darker and with somewhat longer bristles.

Hypopygium (Fig. 2) brown. Hypandrium with 1 long, spine-like and 1 short bristles in apical part. Epandrium completely divided. Left epandrial lamella small, fused to hypandrium, with 2 long bristles in apical part. Left surstylus (Figs 3, 4) with upper lobe divided; lower part with markedly developed surstylar comb and additional internal apophysis bearing 3 long spines, upper part rather elongate oval, with 1 subapical bristle. Right surstylus (Fig. 7) rather large, subtriangular, pointed at apex, bearing several long bristles, lacking spines. Left cercus (Figs 5, 6) unbranched, elongate oval, with 1 spine at apex and 1 similar spine on internal tubercle. Right cercus unbranched, short, digitiform, lacking spines, bearing several long marginal bristles in apical part. Phallus short.

Female. Body length 1.5 mm, wing length 1.4 mm. Clypeus and palpus finely whitish pubescent. Otherwise as in male, except for sexual differences. Terminalia shortened, cercus brownish.

Distribution and seasonal occurrence. Tajikistan. Collected in early spring, with dates ranging from March 20 to April 15.

Remarks. *S. gussakovskii* can be readily distinguished from all species known from the Palaearctic region by a combination of the characters given above in the diagnosis. The relationships of the new species are not quite clear beyond inclusion within the *S. graminum* species group (CUMMING & COOPER, 1992; SHAMSHEV & GROOTAERT, 2004).

Stilpon graminum (Fallén, 1815)

Material examined. [Russia] Yakutia: [labels in Cyrillic] 1 male, dachn. p. Sergelyakh, 5 v. of Yakutsk, "Etinnyakh Lake, Yakutian Expedition of Academy of Sciences", 25.VIII.1926, leg. L. BIANKI; Amur Province: Klimoutsy, 40 km W of Svobodny, 25.VIII.1958, leg. ZINOV'EV; Primorsk Territory: 2 males, 2 females, Kedrovaya Pad' Nature Reserve, 5.VII.1982; 1 male, Vityaz', 13.VII.1982, all leg. KERZHNER.

Remarks. This species is widespread and common in Europe, including the European part of Russia (CHVÁLA & KOVALEV, 1989). It is recorded here for the first time from the extreme eastern border of the Palaearctic region (south of the Russian Far East) and from East Siberia (Jakutia). The specimens taken from Amur Province were collected in oak forest whereas those found in

Primorsk Territory were collected on soil among old leaves. The latter possesses narrowed and pointed wings that has been already known for this species (CHVÁLA, 1975).

Stilpon sp.

Material examined. 1 female, Tajikistan, Staraya prist. bl. Jilikul', Vakhsh, 15.VII.1944, leg. GUSSAKOVSKY.

Female. Body length 0.9 mm, wing length 0.7 mm. Head black in ground-colour. Occiput densely greyish pollinose. Vertical bristles short. Frons sublinear with slightly divergent sides above, broad, nearly 5 times as broad as anterior ocellus, entirely tomentose. Ocellar bristles very short. Antenna with scape and pedicel yellow, postpedicel and style brownish. Palpus pale yellow. Thorax with pleurae brownish yellow, mesoscutum entirely yellow and tomentose. Postpronotal bristle rather short, inclinate. Dorsocentral bristles multiserial, complete posteriorly. Acrostichal bristles 2-serial, complete posteriorly. Legs wholly yellow. Hind trochanter lacking spinules. Fore femur markedly thickened, with rows of moderately long antero- and posteroventral bristles. Mid femur slender, with 3 brownish yellow, ventral bristles in basal half (2 longest near base of femur). Hind femur (viewed laterally) evenly thickened toward middle. Fore tibia spindle-like, with ordinary setation. Mid tibia lacking ventral spinules. Hind tibia with unmodified posterior apical comb, clothed with ordinary setulae. Tarsomeres of all legs unmodified. Wing shortened, very narrow, largely deeply infusate, hyaline at apex, costal vein with setulae along anterior margin. Veins thick, complete, vein R2+3 absent; vein R1 very short, about 2 times shorter than Rs; vein R4+5 meeting costa just before wing apex, divergent with vein M1+2 which is meeting costa just beyond wing apex, both veins evenly arcuate in apical part. Halteres absent (?). Abdomen yellow to brownish yellow, with scattered, minute setulae; terminalia brownish, shortened, cercus brown.

Remarks. This is undoubtedly a new species. However, we consider that it would be prematurely to name it after a single female specimen. The unnamed species is the only one known from the Palaearctic that has yellow thorax. This feature is quite common, for instance, among the Oriental species of the genus (SHAMSHEV & GROOTAERT, 2004). Additionally, in this species the wings are greatly reduced and lack vein R2+3. An abbreviated vein R2+3 is present in *S. paludosa* (PERRIS) and *S. delamarei* (SÉGUY) known from the Pyrenees only (SÉGUY, 1950). In having a shortened female terminalia, this species may belong to a *Stilpon* lineage joining the *S. graminum* and *S. seeluang* groups (SHAMSHEV & GROOTAERT, 2004).

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