

## Palaearctic species of the *Rhaphium albifrons* group (Diptera, Dolichopodidae)

### Палеарктические виды группы *Rhaphium albifrons* (Diptera, Dolichopodidae)

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**Ключевые слова:** Dolichopodidae, *Rhaphium*, Палеарктика, новый вид, определитель.

**Abstract.** A review of nine species of the *Rhaphium albifrons* species group in the Palaearctic Region is presented, of which two new species, *R. tianshanicum* Negrobov, Grichanov et Selivanova, **sp.n.** from Kazakhstan and *R. caucasicum* Negrobov, Grichanov et Selivanova, **sp.n.** from Russian Caucasus, are described. Male genitalia of *R. brevicorne* Curtis, 1835 are illustrated in detail, and *R. fluviatile* Vaillant, 1983 is synonymized under *R. brevicorne* (Loew, 1850). A key to the species group is provided, new records for previously known species are given.

**Резюме.** Дан обзор палеарктических видов группы *Rhaphium albifrons*, которая содержит 9 видов, включая два новых для науки. Виды группы отличаются от других видов рода следующими признаками: задние тазики с крепкой белой щетинкой, лоб с белым или серым опушением, нотолейрон груди матово-чёрный, церки самца раздвоены от основания. Описаны и иллюстрированы *R. tianshanicum* Negrobov, Grichanov et Selivanova, **sp.n.** из Южного Казахстана и *R. caucasicum* Negrobov, Grichanov et Selivanova, **sp.n.** с Северного Кавказа. Детальное строение гипопигия *R. brevicorne* Curtis, 1835 показано и обсуждено. *Rhaphium fluviatile* Vaillant, 1983, **syn.n.** синонимизирован с *R. brevicorne* (Loew, 1850). Приведены определитель и новые указания для известных видов группы.

## Introduction

The *Rhaphium* Meigen, 1803 is mainly Holarctic genus with about 190 known species [Yang et al., 2006]. Negrobov [1979] published the last revision and key to Palaearctic species of the genus. The *Rhaphium albifrons* species group as a part of the former genus (or subgenus) *Xiphandrium* Loew, 1857 was firstly proposed by Grichanov [2004] for Swedish

species. Naglis [2009] included four Palaearctic species in that group. Later one more new species of the group from the Russian Altai was described [Negrobov et al., 2011]. Here we describe two new species of *R. albifrons* species group from Kazakhstan and Russian Caucasus and redefine the limits of the group, which now comprises 9 closely related species. Male genitalia of *R. brevicorne* Curtis, 1835 are illustrated in detail. *Rhaphium fluviatile* Vaillant, 1983 is placed in synonymy to *R. brevicorne* (**syn.n.**). New records for known species are provided.

## Material and methods

Morphological terminology follows Cumming and Wood [2009]. The relative lengths of the podomeres should be regarded as representative ratios and not measurements. Body length is measured from the base of the antenna to the tip of abdominal segment 7. Wing length is measured from the base to the wing apex. Male genitalia were macerated in 10 % KOH. Figure showing the male genitalia in lateral view are oriented as they appear on the intact specimen (rotated 180° and lateroflexed to the right), with the morphologically ventral surface of the genitalia facing up, dorsal surface down, anterior end facing right and posterior end facing left. Scale bar length is measured in millimetres. Information on world distribution for each species listed follows Grichanov [2003–2012]. Type localities are provided and country lists are arranged alphabetically.

The holotypes and paratypes of the new species and other material cited are housed at the Zoological Institute of the Russian Academy of Sciences,

St. Petersburg, Russia [ZIN], Department of Zoology, Tel Aviv University, Israel [TAU]; Natural History Museum, Berlin, Germany [MFN]; Voronezh State University, Voronezh, Russia [VSU]; Zoological Museum of Moscow State University, Moscow, Russia [ZMU], All-Russian Institute of Plant Protection, St. Petersburg, Russia [VIZR].

## Systematics

### *Rhaphium* Meigen, 1803

#### *Rhaphium albifrons* species group

**Diagnosis.** Size 2–3 mm. The *albifrons* species group is a part of the former genus (or subgenus) *Xiphandrium*, differing distinctly from other Palearctic *Rhaphium* in the following combination of characters: hind coxa with a strong white lateral seta; mid coxa with light apical setae, often forming spine; fore basitarsus without comb of strong setae; frons with white or grey pruinosity (anterior view), sometimes dense; face silvery-white or grey; male arista-like stylus at most 2–3 times as long as or shorter than basal height of postpedicel; thoracic notopleuron matt-black; cercus bilobate from base.

#### *Rhaphium albifrons* Zetterstedt, 1843

*Rhaphium albifrons* Zetterstedt, 1843: 479;

*Xiphandrium albifrons* (Zetterstedt, 1843): Strobl, 1893: 149, type locality: Norway: «Scandinavia boreali – Norvegia Gamaes Vaerdaliae»;

= *Xiphandrium sagax* Gerstäcker, 1864: 146, synonymized by Becker, 1918: 235–236, type locality: Germany: Kreuth;

= *Rhaphium sagax* (Gerstäcker, 1864); Negrobov 1979: 482;

= *Xiphandrium breviseta* Becker, 1891: 289, synonymized by Becker, 1918: 236–237, type locality: Switzerland: Zermatt;

= *Rhaphium breviseta* (Becker, 1891); Negrobov 1979: 482;

= *Rhaphium (Xiphandrium) sagittiferum* Vaillant, 1983: 273, synonymized by Naglis, 2009: 202, type locality: France: «en bordure des sources du Fontanil, affluent du ruisseau de Theys, lequel se jette dans l'Isère près de Tencin».

**Material.** **Azerbaijan:** 1♂, 2♀♀ — Yardımlı, Kürəkçi, 24. V.2009, Grichanov, Tomkovich [ZMU]; **Russia:** 1♂ — Baikal, Abukeikha, 24.VI.1941, Chernovskii [ZIN].

**Distribution.** Afghanistan, Austria, Azerbaijan, Belgium, Czech, Finland, France, Germany, Hungary, Norway, Poland, Romania, Russia: Baikal, Karelia, Leningradskaya Oblast, Sweden, Switzerland.

**Remarks.** Material identified by Grichanov as *R. fissum* [Grichanov, Tomkovich, 2009] was re-examined by male genitalia preparation. As a result, *R. fissum* is here excluded from Azerbaijan, while *R. albifrons* is recorded from the country for the first time.

#### *Rhaphium albomaculatum* (Becker, 1891)

*Xiphandrium albomaculatum* Becker, 1891: 291, type locality: Switzerland: «Sedrum, oberes Rheinthal»;

*Rhaphium albomaculatum* (Becker, 1891): Negrobov 1979: 483;

= *Rhaphium (Xiphandrium) montium* Vaillant, 1983: 273, type locality: France: «en bordure d'un affluent gauche du Rhône et près de la source de ce fleuve en Suisse», synonymized by Naglis, 2009: 202.

**Distribution.** Austria, Czech, Finland, France, Germany, Ireland, Norway, Russia (Krasnodar), Slovakia, Switzerland, UK.

### *Rhaphium brevicorne* Curtis, 1835

Figs 1–6.

*Rhaphium brevicorne* Curtis, 1835: 568, type locality: England: Isle of Wight;

*Xiphandrium brevicorne* (Curtis, 1835): Loew, 1857: 35–36;

= *Rhaphium dissectum* Loew, 1850: 129, type locality: Italy: «Sicilien bei Messina», synonymized by Haliday, in: Walker et al., 1851: 199, and by Loew, 1857: 31;

= *Xiphandrium dissectum* (Loew, 1850); Becker, 1918: 242, as synonym of *Xiphandrium brevicorne*;

= *Xiphandrium pectinatum* Becker, 1908: 49 (nec Loew, 1859), type locality: Spain: Canary Islands, La Palma;

= *Rhaphium pectinatum* (Becker, 1908) (nec Loew, 1859), synonymized by Negrobov, 1979: 488; Naglis, 2009: 202, as synonym of *R. fluviatile*;

= *Rhaphium (Xiphandrium) fluviatile* Vaillant, 1983: 272, type locality: France: «en bordure de l'Isère, entre Montbonnot et Domène», **syn.n.**;

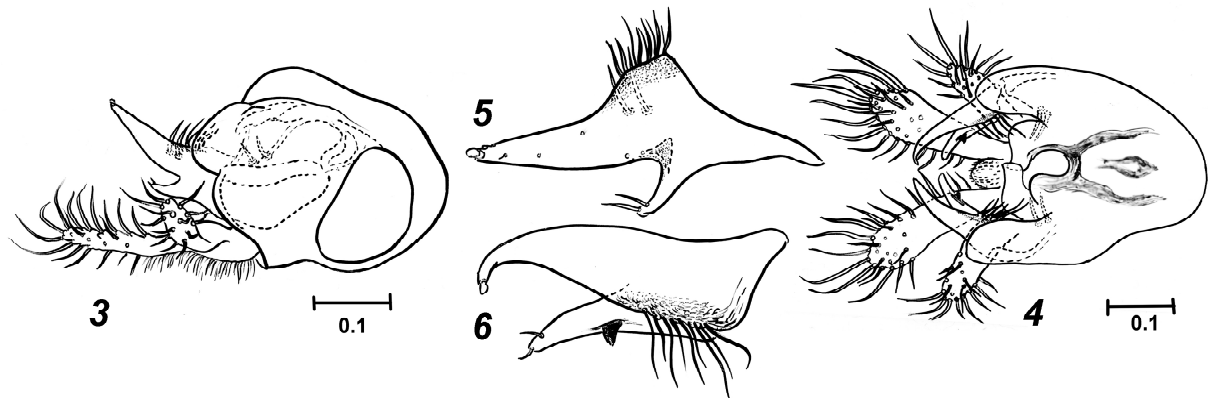
*Xiphandrium angusticorne* Becker, 1918: 239 (nec Loew, 1850), misidentification;

*Rhaphium angusticorne* Negrobov, 1979: 483 (nec Loew, 1850), misidentification.

**Material.** **Israel:** 1♂ — Yavne'el, 24.VI.1981, M. Kaplan [TAU]; **Greece:** 2♂♂, 1♀ — Crete, Heraklion env., 3, 7.VI.2000, I. Shamshev [VIZR]; **Tajikistan:** 1♂ — «Hissar ridge, Varzob gorge, Takob, Tajik University biostation, 2–4.VI.2010, K. Tom-



Figs 1–2. *Rhaphium brevicorne*: 1 — habitus; 2 — antenna.  
Рис. 1–2. *Rhaphium brevicorne*: 1 — внешний вид; 2 — усик.



Figs 3–6. *Rhaphium brevicorne*: 3 — hypopygium, left lateral; 4 — hypopygium, ventral; 5 — surstylus, left lateral; 6 — surstylus, ventral.  
Рис. 3–6. *Rhaphium brevicorne*: 3 — гипопигий слева; 4 — гипопигий вентрально; 5 — сурстийль слева; 6 — сурстийль вентрально.

kovich» [ZMU]; 1♂ — Gissar Range, Varzob river, kordon Kondara env., 1200 m, 27.VI.1979, Grichanov; 5♂♂ — Gissar Range, Kondara gorge, 1200 m, 24.VI.1979, Grichanov; 2♂♂ — Nurek reservoir, Dashti-Khanaka env., 900 m, 13.VI.1979, Grichanov; 2♂♂ — Gissar Range, Romit reserve, Sardaimiona gorge, 1200 m, 30.V, 16.VI.1979, Grichanov; 1♂ — Gissar Range, Romit reserve, Sorbo gorge, 1200 m, 1.VI.1979, Grichanov [VSU]; 1♂ — Khorog, Gunt river, Shugnan, 2000 m, 25.IX.1943, Stackelberg; 1♂ — Stalinalabad, loessial hills, 18.IV.1943, Stackelberg [ZIN].

**Distribution.** Algeria, Belgium, Germany, France incl. Corsica, Greece incl. Crete and North Aegean, Iraq, Ireland, Israel, Italy, Lebanon, Netherlands, Russia (Krasnodar), Spain incl. Canary Is., Sweden, Tajikistan, Turkey, UK. Firstly recorded for Israel.

**Remarks.** Vaillant [1983] distinguished his new species *R. fluviatile* from *R. brevicorne* by different length of dorsal and ventral lobes of male surstylus, comparing them with Fig. 1692 in Negrobov [1979]. However, he did not detect that Fig. 1692 was turned over during reproduction, whereas the true position of surstylus was shown on Fig. 1694. Naglis [2009] also overlooked that printing error, when restored *R. pectinatum* (Becker, nec Loew) from synonymy with *R. brevicorne*, but placing the name in synonymy to *R. fluviatile* due to *pectinatum* homonymy. All published pictures of *brevicorne* surstylus were drawn rather schematically and in different projections, not showing very important bristles and processes. Therefore, we give here new pictures for the species male genitalia (Figs 3–6) based on Mediterranean and Middle Asian specimens in order to exclude future misinterpretations. It is also worth noting, that compiling a Catalogue of Palearctic Dolichopodidae, Negrobov [1991] overlooked that Becker [1918] recorded his *R. pectinatum* from Lebanon and Sweden in addition to Canaries and France. As a result, the former two countries were missing in all subsequent catalogs and checklists describing the *R. brevicorne* distribution.

#### *Rhaphium fissum* Loew, 1850

*Rhaphium fissum* Loew, 1850: 128, type locality: Germany;  
*Xiphandrium fissum* (Loew, 1850): Loew, 1857: 35–36;  
= *Xiphandrium bilamellatum* Becker, 1918: 241, type locality: «Ober Osterreich; Wolfelsgrund, Schlesien» (Austria; Poland);  
= *Rhaphium bilamellatum* (Becker, 1918); Negrobov, 1979: 500, synonymized by Negrobov, 1979: 500.

**Distribution.** Austria, Bulgaria, Czech, Denmark, Estonia, France, Georgia, Germany, Greece, Hungary, Ireland, Italy, Korea, Morocco, Netherlands, Norway, Poland, Roma-

nia, Russia: Baikal, Leningradskaya Oblast, Slovakia, Spain, Sweden, Switzerland, Tajikistan, «Yugoslavia».

#### *Rhaphium gruniniani* Negrobov, 1979

*Rhaphium gruniniani* Negrobov, 1979: 504.

**Type locality:** Russia: «Südöstlicher Altai, Mittellauf des Flusses Ulanrich».

**Distribution.** Russia: Altai.

#### *Rhaphium sibiricum* Negrobov, Barkalov et Selivanova, 2011

*Rhaphium sibiricum* Negrobov, Barkalov et Selivanova, 2011: 273, type locality: Russia: «Republic Altai, Ulaganskij District, Kurajskij mountain range».

**Distribution.** Russia: Altai.

#### *Rhaphium sichotense* Negrobov, 1979

*Rhaphium sichotense* Negrobov, 1979: 524, type locality: Russia: «Primorje, Naturschutzgebiet Sichote-Alin, 57 km W Ternej, das Ufer des Flusses Serebrjanka».

**Distribution.** Russia: Primorskii Krai.

#### *Rhaphium tianshanicum* Negrobov, Grichanov et Selivanova, sp.n.

Figs 7–10.

**Material.** Kazakhstan: holotype, ♂ — Northern Tian-Shan, Alma-Atinskii reserve, Kamennoe gorge, sweeping grass at mountain rivulet, 2000 m, 28.VII.1978, Grichanov (ZIN); paratypes: 1♂ — idem (VSU); 1♂ — Turgen' env., 60 km E Alma-Ata, at rivulet, above 2000 m, 12.VII.1969, Gorodkov, (ZIN).

**Description.** ♂. Length (mm): body 2.5–2.7, wing 2.6–2.7.

Head. Face silvery-white, its width in middle part less than height of postpedicel; proboscis dark-brown; palpi dark, with black hairs and silvery pollen at apex; frons green, white pollinose; antenna black; postpedicel elongate-triangular, approximately 5 times longer than its width at base; arista-like stylus simple, apical, covered with short hairs, hardly longer than width of postpedicel at base; ratio of postpedicel length to its basal width to stylus length: 59/12/13; lower postocular setae white.

Thorax metallic green; mesonotum with violet shade, shining along margins, insignificant grey pollinose; notopleura mat-black; thoracic pleura densely grey pollinose; propleura with group of long white hairs; mesonotum anteriorly without additional hairs; 4 pairs of strong dorsocentrals;

2 rows of long acrostichals, posterior setae longer than distance between acrostichal rows; scutellum with 2 strong black marginal bristles and 2 small lateral setae on each side.

Legs almost completely yellow; coxae brown, tips of tarsi dark, fore and hind femora with narrow dark dorsal strip, pulvilli white; coxae with white hairs; mid coxa with white apical spine; hind coxa with strong white seta and thin hairs; fore femur without long setae and hairs; fore tibia with 2 short anterodorsal, 1 short posterodorsal and row of short posteroventral setae; fore basitarsus simple, without strong setae; length ratio of fore tibia to tarsal segments (from 1<sup>st</sup> to 5<sup>th</sup>) — 31/16/9/4/3/4; mid femur without long hairs, with a short preapical seta anteriorly and a short preapical posteriorly; mid tibia with 2 anterodorsal and 2 posterodorsal setae; mid tarsi simple; length ratio of mid tibia to tarsal segments (from 1<sup>st</sup> to 5<sup>th</sup>) — 42/22/10/7/4/3; hind femora with short anterior preapical seta; hind tibia simple, with 2 short anterodorsal and 2 short posterodorsal setae; hind basitarsi simple, without strong setae; length ratio of hind tibia to tarsal segments (from 1<sup>st</sup> to 5<sup>th</sup>) — 57/15/15/10/7/5.

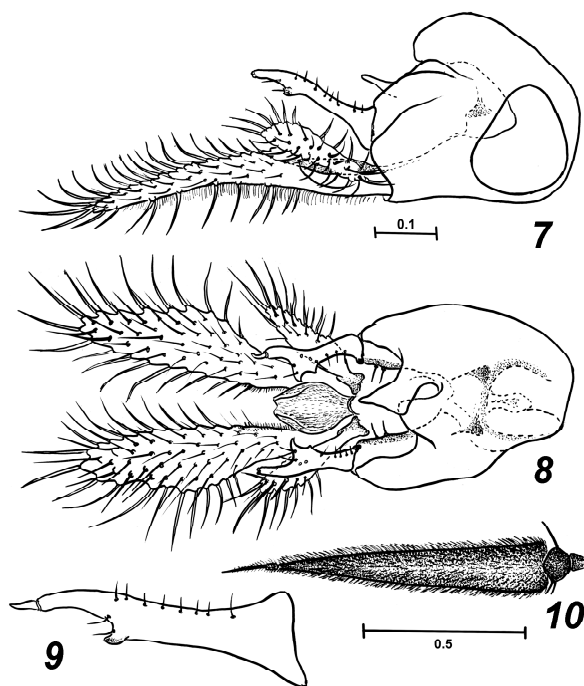
Wings hardly darkened; R<sub>4+5</sub> and M<sub>1+2</sub> veins converging, parallel at apex. M<sub>1+2</sub> almost straight in distal part; length ratio of costal sections between R<sub>2+3</sub> and R<sub>4+5</sub> to that between R<sub>4+5</sub> and M<sub>1+2</sub> — 18/7; distal part of CuA<sub>1</sub> longer than cross-vein dm-cu — 28/13; halter yellow; lower calypter yellow with white cilia.

Abdomen dark green with bronze shade, brown pollinose, with black setae, with white hairs at base and ven-

trally; epandrium, surstylus and cercus dark brown; epandrium about as long as wide; surstylus long, with short ventral tooth in distal quarter; cercus longer than epandrium, divided into 2 lobes covered with light hairs; dorsal cercal lobe much longer than ventral lobe; ventral lobe short oval.

Female unknown.

**Diagnosis.** *R. tianshanicum* sp.n. reliably differs from the related species by male genitalia structure only. Its surstylus has some similarity with that of *R. albifrons*, but the cercus of the latter is much shorter, the surstylus nearly reaches apex of longer cercal lobe. The cercus about twice longer than surstylus in *R. tianshanicum* sp.n. The new species keys to *R. gruniniani* and *R. fissum*, differing in narrow, almost cylindrical in basal half surstylus (see key below).



Figs 7–10. *Rhabdium tianshanicum* sp.n.: 7 — hypopygium, left lateral; 8 — hypopygium, ventral; 9 — surstylus, left lateral; 10 — antenna.

Рис. 7–10. *Rhabdium tianshanicum* sp.n.: 7 — гипопигий слева; 8 — гипопигий вентрально; 9 — сурстийль слева; 10 — усик.



Figs 11–12. *Rhabdium caucasicum* sp.n.: 11 — habitus; 12 — head.

Рис. 11–12. *Rhabdium caucasicum* sp.n.: 11 — внешний вид; 12 — голова.



*Rhaphium caucasicum* Negrobov,  
Grichanov et Selivanova, sp.n.

Figs 11–15.

**Material.** Russia: *Kabardino-Balkaria*, holotype, ♂ — Bezengi, 43°10' N, 43°14' E, 19.VI.2001, Grichanov (ZIN); paratypes: idem, 2♂♂ (ZIN).

**Description.** ♂. Length (mm): body 2.9, wing 3.0. Similar to *Rhaphium tianshanicum* sp.n. in all respects except as noted below.

Head. Antenna with postpedicel band-like, pointed at apex, more than 7 times longer than its width at base; length ratio of antennal segments and stylomeres: 6/10/94/3/19.

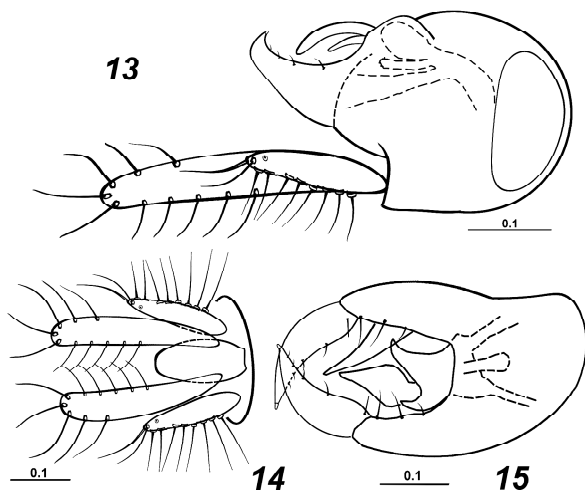
Legs mainly blackish-brown; yellow: fore coxa in distal half, fore and mid femora at base and at apex, fore tibia at base and hind femora at base; fore tibia with a short anterodorsal, 2 short posterodorsals and row of short posteroventral setae including 1 elongate seta at middle; length ratio of fore tibia to tarsal segments (from 1<sup>st</sup> to 5<sup>th</sup>) — 82/38/24/13/10/10; mid tibia with 2 strong anterodorsal and 2 short posterodorsal setae; length ratio of mid tibia to tarsal segments (from 1<sup>st</sup> to 5<sup>th</sup>) — 110/51/28/19/13/11; hind tibia with 2 anterodorsal, 2 posterodorsal and 3–5 very short ventral setae; length ratio of hind tibia to tarsal segments (from 1<sup>st</sup> to 5<sup>th</sup>) — 141/38/40/26/18/12.

Wing brownish; length ratio of costal sections between R<sub>2+3</sub> and R<sub>4+5</sub> to that between R<sub>4+5</sub> and M<sub>1+2</sub> — 42/19. Distal part of CuA<sub>1</sub> longer than cross-vein dm-cu — 69/22.

Abdomen. Epandrium, surstylus and cercus black. Epandrium slightly longer than wide; surstylus elongate-triangular (lateral aspect), with its pointed apex strongly curved towards opposite side of epandrium, simple, with only few short setae; cercus longer than epandrium, divided into two lobes covered with black hairs and setae; dorsal cercal lobe about twice longer than ventral lobe; ventral lobe narrow.

Female unknown.

**Diagnosis.** *R. caucasicum* sp.n. may be distinguished from all other species of the *albifrons*-group by the crossing elongate-triangular surstyli devoid of distinct processes and strong setae.



Figs 13–15. *Rhaphium caucasicum* sp.n.: 13 — hypopygium, left lateral; 14 — cerci, ventral; 15 — epandrium and surstyli, ventral.

Рис. 13–15. *Rhaphium caucasicum* sp.n.: 13 — гипопигий слева; 14 — церки вентрально; 15 — эпандрий и сурстили вентрально.

DOUBTFUL SPECIES OF *RHAPHIUM*

*Rhaphium angusticorne* Loew, 1850

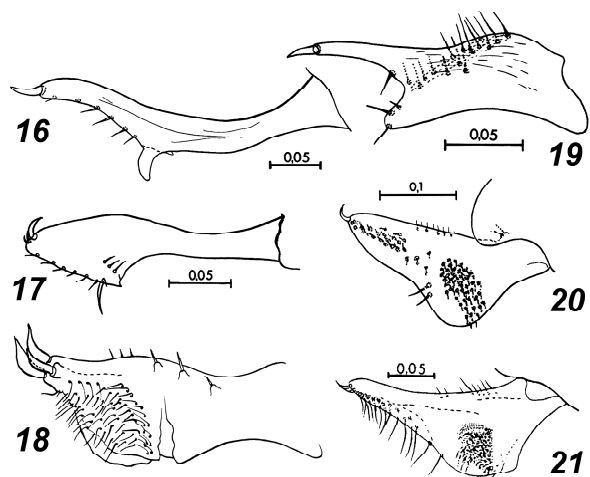
*Rhaphium angusticorne* Loew, 1850: 127, type locality: Italy: «Sicilien bei Messina»;

*Xiphandrium angusticorne* (Loew, 1850): Loew, 1857: 35–36.

**Remarks.** Types of the species were probably never studied and redescribed after their first description. Descriptions of «*R. angusticorne* type» [MFN] by Becker [1918] and Negrobov [1979] strongly contradict original description by Loew [1850], but fully corresponding with his description of *R. dissectum* [Loew, 1850] collected together with *R. angusticorne* («Sicilien bei Messina»). *R. dissectum* was placed in synonymy to *R. brevicorne* by Loew [1857] himself. It is worth noting that Loew's description of *R. angusticorne* has no reliable diagnostic characters, and the author compared his new species with «*R. rufipes*» Meigen, 1824 (now a synonym of *Syntormon pumilus* (Meigen, 1824)). Anyway, *R. angusticorne* with its shining frons and entirely hidden genitalia differs from the *albifrons* species group.

KEY TO MALES OF THE *RHAPHIUM ALBIFRONS* SPECIES GROUP

1. Antennal stylus 2-3 times as long as basal height of postpedicel ..... 2
- Antennal stylus shorter or slightly (at least 1.5 times) longer than basal height of postpedicel ..... 3
2. Postpedicel 4–5 times longer than high at base; stylus more than half length of postpedicel, sometimes as long as postpedicel; outer lobe of cercus broad, oval, short; inner lobe of cercus broad, slightly longer; surstylus biapiculate, with acute apices; body 2.2–2.5 mm (Figs 1–6) ..... *Rh. brevicorne*
- Postpedicel 6.5 times longer than high at base; stylus less than half length of postpedicel; outer lobe of cercus half as long as inner lobe; inner lobe narrow; surstylus broad at base, narrowed toward rounded apex; body 2.2 mm (Fig. 21) ..... *Rh. sichotense*



Figs 16–21. *Rhaphium* spp., surstylus: 16 — *Rh. albifrons*, 17 — *Rh. albomaculatum*, 18 — *Rh. sibiricum*, 19 — *Rh. fissum*, 20 — *Rh. gruniniani*, 21 — *Rh. sichotense*.

Рис. 16–21. *Rhaphium* spp., сурстили: 16 — *Rh. albifrons*, 17 — *Rh. albomaculatum*, 18 — *Rh. sibiricum*, 19 — *Rh. fissum*, 20 — *Rh. gruniniani*, 21 — *Rh. sichotense*.

3. Inner lobe of cercus at least 3 times as long as outer lobe; outer lobe short and broad; surstylus securiform, in distal half 2 times wider than in basal half; body 2.3–2.4 mm (Fig. 17) ..... *Rh. albomaculatum*  
 — Inner lobe of cercus at most 2 times as long as outer lobe; surstylus usually narrowed apically, at apex at most as wide as at base ..... 4
4. Surstylus narrow, nearly reaching apex of longer cercal lobe, with small inner projection; femora yellow; body 2.0–2.3 mm (Fig. 16) ..... *Rh. albifrons*  
 — Cercus much longer than surstylus; femora usually partly dark ..... 5
5. Surstyli elongate-triangular, hooked, with crossing apices; body 2.9 mm (Figs 13–15) ..... *Rh. caucasicum* sp.n.  
 — Surstyli differently shaped, with apices directed distally or distoventrally ..... 6
6. Surstylus at apex as wide as at base, slightly narrowed in basal half; body 2.7–2.8 mm (Fig. 18) .... *Rh. sibiricum*  
 — Surstylus narrowed apically ..... 7
7. Surstylus narrow, almost cylindrical in basal half; body 2.5–2.7 mm (Figs 7–9) ..... *Rh. tianshanicum* sp.n.  
 — Surstylus strongly widened in basal half ..... 8
8. Surstylus subtriangular, with rounded apex; femora partly dark; body 2.3–2.5 mm (Fig. 20) ..... *Rh. gruniniani*  
 — Surstylus trapezoid, with drawn-out pointed apex; femora yellow; body 2.4–2.7 mm (Fig. 19) ..... *Rh. fissum*

## Discussion

Having bilobate male cercus, the *albifrons* species group is very close to the *ensicorne* species group (*R. ensicorne* Meigen, 1824 is the type species of the former genus *Xiphandrium*). At present the two groups are distinguished mainly by black (in *ensicorne* group) or white colour of the outer seta on the hind coxa. The species of the *albifrons* group inhabit mainly temperate belt of the Palaearctic Region from the Canaries and British Isles to the Russian Far East, being often endemics of certain mountainous regions. Some widely distributed species of this group show a certain extent of variability in leg coloration, length ratio of antennal postpedicel and stylus, ratio of postpedicel length and width, as it was firstly noted by Becker [1918] for *R. pectinatum* Becker, 1908 (nec Loew, 1859) considered here a synonym of *R. brevicorne*. Therefore, a study of male genitalia (especially surstylus) is usually necessary for the reliable identification of those species. At the same time, their surstyli are often remarkably curved, hiding their true shape and armament. As a result, a number of described species were placed in synonymy to the old species by subsequent authors. Some old records of widely distributed species (such as *R. albifrons*, *R. brevicorne* and *R. fissum*) must be confirmed.

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