

Two new species of *Trjapitzinichus* Kostjukov et Kosheleva, 2006 (Hymenoptera: Eulophidae: Tetrastichinae) from the North Korea and Russia, with redescription of the genus

Два новых вида *Trjapitzinichus* Kostjukov et Kosheleva, 2006 (Hymenoptera: Eulophidae: Tetrastichinae) из Северной Кореи и России с переописанием рода

V.V. Kostjukov, O.V. Kosheleva
В.В. Костюков, О.В. Кошелева

All-Russian Research Institute of Biological Plant Protection, Krasnodar 350039 Russia. E-mails: salchia@yandex.ru, kosheleva_o@mail.ru.

Всероссийский НИИ биологической защиты растений, Краснодар 350039 Россия.

Key words: Hymenoptera, Tetrastichinae, *Trjapitzinichus*, *Aceratoneuromyia*, Russia, North Korea, new species.

Ключевые слова: Hymenoptera, Tetrastichinae, *Trjapitzinichus*, *Aceratoneuromyia*, Россия, Северная Корея, новые виды.

Abstract. The tetrastichine eulophid genus *Trjapitzinichus* Kostjukov et Kosheleva, 2006 is redescribed and compared to *Aceratoneuromyia* Girault, 1917. Two new species of *Trjapitzinichus*, *T. leleji* sp.n. from North Korea (Rygang Province) and *T. sugonjaevi* sp.n. from Russia (Primorskiy Territory), are described. A key to five known species of this genus is provided.

Резюме. Приведено переписание рода *Trjapitzinichus* Kostjukov et Kosheleva, 2006, который сравнивается с *Aceratoneuromyia* Girault, 1917. Описаны 2 новых вида *Trjapitzinichus* — *T. leleji* sp.n. из Северной Кореи (провинция Янгандо) и *T. sugonjaevi* sp.n. из России (Приморский край). Дается определительная таблица для 5 известных видов этого рода.

Introduction

Genus *Trjapitzinichus* (Hymenoptera: Eulophidae) was established by Kostjukov and Kosheleva [2006] in their work on the history of the European Tetrastichinae and the current taxonomic position of species described from the territory of the former USSR, but then they provided only a brief differential diagnosis. Therefore, here we suggest a comprehensive redescription of this genus, while also clarifying the state of the two important morphological features mentioned in its original diagnosis (malar sulcus and antennal torulus), and slightly broadening it based on the inclusion of two newly described species from the Eastern Palaearctic.

The type species of *Trjapitzinichus* is *Entedon evanescens* Ratzeburg, 1848, which was previously included in *Aceratoneuromyia* Girault, 1917 [Graham, 1991]. Two other species, *Aceratoneuromyia lakica* Kostjukov et Gunasheva, 2004 and *A. polita* Graham, 1991, were then also transferred to *Trjapitzinichus* [Kostjukov, Kosheleva, 2006].

Members of the genus *Trjapitzinichus* are only known from the Palaearctic Region while those of *Aceratoneuromyia* occur in the Palaearctic, Nearctic, Oriental and Australasian Regions [Graham, 1991; Kostjukov, Kosheleva, 2006].

Material and methods

The work is based on the results of examination of both type and non-type specimens (109 females and 14 males) of five species of *Trjapitzinichus*: *T. evanescens* (Ratzeburg, 1848), *T. politus* (Graham, 1991), *T. lakicus* (Kostjukov et Gunasheva, 2004), *T. sugonjaevi* sp.n. and *T. leleji* sp.n., among them 105 females and 14 males of *T. evanescens*. These non-type specimens were reared from puparia of *Sarcopaga* sp. (Diptera: Sarcophagidae), a natural enemy of *Dendrolimus pini* (Linnaeus, 1758) (Lepidoptera: Lasiocampidae) in Bashkortostan and were collected in Belgorod, Voronezh and Novosibirsk Provinces of Russia, and Poltava Region of Ukraine. All these specimens (including types) are deposited in the collection of Zoological Institute of the Russian Academy of Sciences, Saint Petersburg, Russia (ZISP) except for the female paratype of *T. lakicus* which is kept in the Zoological Museum of Moscow State University, Moscow, Russia.

Distribution and biology of *T. evanescens* are summarized based on the results of our study and also following Sugonjaev and Kostjukov [1976], Kostjukov [1978], and Graham [1991], and of *T. politus* according to Graham [1991] and Boyadzhiev [2003].

Morphological terminology follows Graham [1991]. Abbreviations used in the text are: POL — postero-ocellar length, i.e. the minimum distance between posterior ocelli; OOL — ocular-ocellar length, i.e. the mini-

mum distance between a posterior ocellus and eye margin; OD — maximum diameter of posterior ocellus; F₁, F₂, F₃ — funicular segments of antenna; C₁, C₂, C₃ — claval segments of antenna; SM — submarginal vein of fore wing; M — marginal vein of fore wing; ST — stigmal vein of fore wing.

Results

Trjapitzinichus Kostjukov et Kosheleva, 2006

Figs 1–4, 6, 10, 11.

Type species: Entedon evanescens Ratzeburg, 1848

Redescription. Female. Head hardly broader than mesoscutum, 2.4–2.5 times as broad as long; temple 0.14–0.30 as long as eye; POL 1.20–1.25 times OOL, OOL 2.0–2.1 times OD. Head in front view about 1.3 times as broad as high, subtrapezoidal or transversely oval. Malar space 0.6–0.7 times length of eye, malar sulcus strongly impressed, straight. Eyes 1.15–1.30 times as long as broad, separated each other by 1.5 times their length, with very short sparse pilosity or glabrous (*T. lakicus*). Length of longest seta on vertex usually 2.0–2.1 (except 1.3 in *T. lakicus*) times OD. Mouth width 1.5–2.0 times length of malar space. Antenna (Fig. 2) with scape nearly as long as height of eye, about 4.0 times as long as broad; pedicel plus flagellum not longer than breadth of mesoscutum; proximal funicle segments distinctly stouter than pedicel, distal ones a little thickened; pedicel 1.5–2.5 times as long as broad, longer than F₁; F₁ usually weakly longer than broad, F₂ quadrate, F₃ slightly transverse, except F₁ 1.3, F₂ 1.2 and F₃ 1.15 times as long as broad in *T. leleji*; clava about twice as long as broad, with spine 0.5–0.7 length of C₃, its apical seta more than twice length of spine; setae of pedicel and flagellum standing out strongly. Mesosoma (Fig. 1) 1.4–1.8 times as long as broad, not flattened or slightly flattened, propodeal slope 15°–25°. Pronotum subconical (or nearly conical in *T. lakicus*), 0.20–0.33 (0.58 in *T. lakicus*) length of mesoscutum, surface shiny, with extremely fine, superficial isodiametric reticulation, except coarse and slightly raised at edges; some setae at sides and four long ones near posterior margin (only two in *T. lakicus*); spiracle on a conical tubercle. Mesoscutal midlobe 1.2–1.3 times as broad as long, moderately convex, shiny, with extremely fine, delicately engraved reticulation of areoles at most twice as long as broad, without median line and with two long suberect adnotaular setae on each side. Scutellum 0.75–1.20 times as long as mesoscutum, 1.3–1.4 times as broad as long, rather weakly convex in profile but moderately transversely, shiny, sculptured finer than mesoscutum; submedian lines present, distinctly closer to sublateral lines than to each other, enclosing a space about twice as long as broad; usually with two (but one in *T. lakicus*) setae equal in length, each equal to distance between submedian lines; anterior pair

well behind middle pair and close to posterior setae. Dorsellum 2.15–2.40 times as broad as long, not very shiny, with excessively fine, hardly raised isodiametric reticulation and trace of longitudinal ridge. Propodeum twice or slightly more than twice as long as dorsellum and more than half length of scutellum, relatively dull, with very fine, slightly raised reticulation; median carina distinctly raised, thin and sharp except broadening in posterior third; callus with two setae near spiracle and one or two near posterior corner; spiracles moderate-sized, oval, separated by about 0.33 times (but 1.5 times in *T. lakicus*) their length from metanotum. Legs of medium length; hind coxa rather strongly oblique, twice as long as broad, with extremely fine, slightly raised, nearly isodiametric reticulation; hind femur 3.5–4.0 times as long as broad; tibiae and tarsi slender, spur of mid tibia 0.50–0.75 times as long as mesobasitarsus, apical tarsal segment slightly shorter than mesobasitarsus. Fore wing 2.3–2.5 times as long as broad; costal cell 10.0–15.0 times as long as broad; SM with three or four dorsal setae; M distinctly longer than costal cell (Figs 10, 11) (a decolorized break present between parastigma and base of M), thin distally but thickened towards base, about 4.0 times length of ST, its front edge with 9–16 setae; PM rudimentary; ST thin near base but thickening from half its length to form a sub-rhomboid stigma; speculum small, extended as a very narrow strip to ST (but extended only at base of M in *T. lakicus*), open at extreme base; cilia about 0.75 length of ST. Hind wing obtuse; cilia 0.25 (but 0.5 in *T. politus*) breadth of wing. Metasoma (Fig. 6) subcylindrical, oval or oblong and only slightly broader than high, 1.0–2.5 times as long as broad; its dorsal surface (except base of basal tergite) with very fine superficial alutaceous reticulation; apical tergite slightly broader than long; cercal setae subequal (longest cercal seta only slightly longer than the next longest, slightly curved seta in *T. politus*); ovipositor sheath barely reaching tip of last tergite; tip of hypopygium close to apex of metasoma. Body black, non-metallic. Antenna brownish with scape ventrally, pedicel beneath and at tip, testaceous (tip of pedicel and trochanters pale). Coxae black, legs otherwise testaceous with apical tarsal segments and pretarsi slightly darker. Tegula black or at least fuscous. Wings hyaline, venation testaceous, sometimes brown. Length 1.2–1.8 mm.

Male (known only in *T. evanescens*). Differs from female as follows: antenna with funicle 4-segments, scapus without ventral plaque (Figs 3, 4)

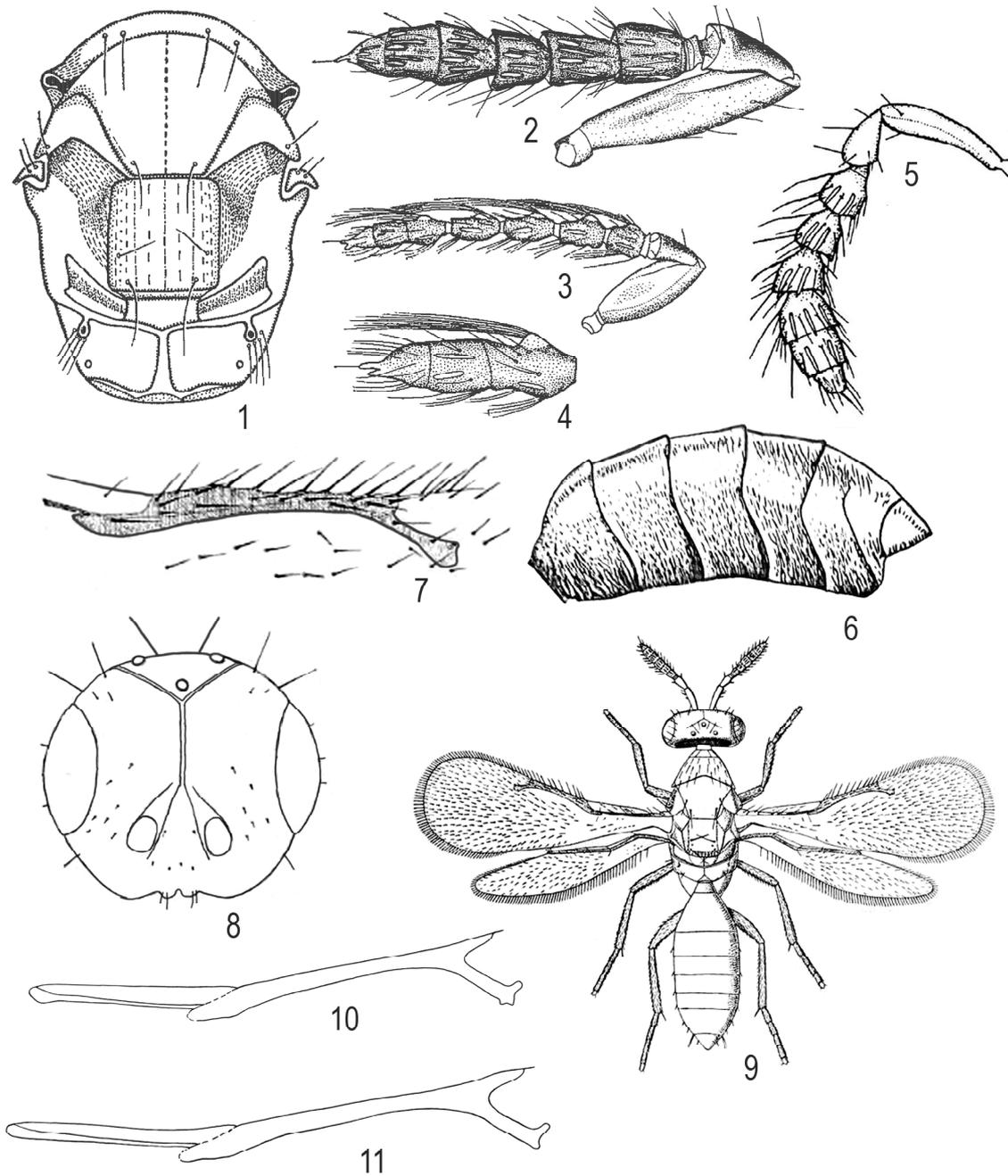
Etymology. The genus is named after the famous Russian entomologist and chalcidologist Vladimir Alexandrovich Trjapitzin. The name is a combination of Trjapitzin and *Tetrastichus*; gender: masculine.

Differential diagnosis. Among the genera of the subfamily Tetrastichinae, *Trjapitzinichus* is most similar to *Aceratoneuromyia* from which it differs by the morphological features given in Table 1.

Table 1. Diagnostic features of *Trjapitzinichus* Kostjukov et Kosheleva, 2006 (Figs 1–4, 6, 10, 11) and *Aceratoneuromyia* Girault, 1917 (Figs 5, 7–9).

Таблица 1. Диагностические признаки *Trjapitzinichus* Kostjukov et Kosheleva, 2006 (рис. 1–4, 6, 10, 11) и *Aceratoneuromyia* Girault, 1917 (рис. 5, 7–9).

<i>Trjapitzinichus</i>	<i>Aceratoneuromyia</i>
Malar sulcus strongly impressed, straight	Malar sulcus rudimentary, curved
Antennal torulus distinctly above lower eye margin	Antennal torulus distinctly below lower eye margin
Sides of pronotum with conical tubercles	Sides of pronotum without conical tubercles
Scutellum with submedian lines	Scutellum without submedian lines
Mesosoma not flattened or slightly flattened: propodeal slope 15–25°	Mesosoma strongly flattened: often mesoscutum, scutellum and propodeum in one plane



Figs 1-11. *Trjapitzinichus evanescens* (1, 2, 6 — female; 3, 4 — male) [from Sugonjaev, Kostjukov, 1976], *T. sugonjaevi* sp.n. (10, female), *T. leleji* sp.n. (11, female) and *Aceratoneuromyia australia* (5, 7-9 — female) [from Silvestri, 1910; Вошчек, 1988]: 1 — mesosoma, dorsal view; 2-5 — antennae; 6 — metasoma, lateral view; 7, 10, 11 — details of fore wing venation; 8 — head, front view; 9 — habitus, dorsal view.

Рис. 1-11. *Trjapitzinichus evanescens* (1, 2, 6 — female; 3, 4 — male) [по Sugonjaev, Kostjukov, 1976], *T. sugonjaevi* sp.n. (10, female), *T. leleji* sp.n. (11, female) and *Aceratoneuromyia australia* (5, 7-9 — female) [по Silvestri, 1910; Вошчек, 1988]: 1 — мезосома сверху; 2-5 — антенна; 6 — метасома сбоку; 7, 10, 11 — детали жилкования; 8 — голова спереди; 9 — общий вид сверху.

Trjapitzinichus leleji Kostjukov et Kosheleva, sp.n.

Fig. 11.

Type material. Holotype: female, North Korea, Ryanggang Province, Mt. Paektusan environs, Sam-ziyan hotel, lakeshore, 19.VII.1977, No 376 –grasses, Drascovith leg. (ZISP).

Description. Female. Head hardly broader than mesoscutum, 2.4 times as broad as long; temple 0.14 length of eye; POL 1.2 times as broad as long, OOL twice OD. Head in front view 1.3 times as broad as high, transversely oval. Eyes 1.3 times as long as broad, separated each other by 1.5 their length, with very short sparse setae. Malar space 0.6 as high as eye, sulcus strongly impressed, virtually straight. Mouth width 1.5 length of malar space. Setae of vertex long, the longest twice OD. Antenna with scape nearly as long as height of eye, about 4.0 times as long as broad; pedicel plus flagellum nearly as long as breadth of mesoscutum; pedicel 1.5 times as long as broad, 1.15 longer than F1; F1 1.3 times as long as broad, F2 1.2 times as long as broad, F3 1.15 times as long as broad; clava 1.5 times as long as broad, as long as funicle, with C1 and C2 nearly twice as long as broad; claval spine about 0.5 length of C3, its apical seta more than twice length of spine; setae of pedicel and flagellum standing out strongly. Mesosoma 1.4 times as long as broad, propodeal slope about 20°. Pronotum subconical, about 0.33 length of mesoscutum; with some setae at sides and with four long setae near posterior margin; spiracle on conical tubercle. Midlobe of mesoscutum 1.2 times as broad as long; without median line; with two long suberect adnotaular setae on each side. Scutellum 0.75 length of mesoscutum, 1.2 times as broad as long; submedian lines present, distinctly closer to sublateral lines than to each other, enclosing a space about twice as long as broad; setae equal in length and equal to distance between submedian lines, anterior pair well behind middle and close to posterior setae. Dorsellum about 2.15 times as broad as long. Propodeum slightly more than twice length of dorsellum and more than half length of scutellum; median carina distinctly raised; callus with two setae near spiracle and one seta near posterior corner; spiracles moderate-sized, oval, separated by about 0.3 their length from metanotum. Legs of medium length; metacoxa rather strongly oblique, twice as long as

broad; metafemur 4.0 times as long as broad; tibiae and tarsi slender; mesotibial spur 0.75 length of mesobasitarsus, apical tarsal segments slightly shorter than basitarsi in all legs. Fore wing 2.3 times as long as broad; costal cell about 15.0 times as long as broad (Fig. 11); SM with three dorsal setae; M distinctly longer than costal cell, thin distally but thickened towards base, 3.9 times length of ST, its front edge with 12 setae; PM rudimentary; ST thin near base but thickening from half its length to form a subrhomboidal stigma; speculum small, extended as a very narrow strip to ST, open at extreme base; marginal cilia 0.8 length of ST. Hind wing obtuse; marginal cilia 0.25 breadth of wing. Metasoma subcylindrical and 1.05 times broader than high, as long as broad; dorsal surface, except base of basal tergite, with very fine superficial alutaceous reticulation; last tergite broader than long; cercal setae subequal.

Body black, non-metallic. Antenna brownish with scape ventrally, pedicel beneath and at tip, from testaceous to brown. Coxae black, legs otherwise from testaceous to brown with three–four tarsal segments and pretarsus darker. Tegula black. Wings hyaline, venation from testaceous to brown.

Length 1.2 mm.

Male. Unknown.

Biology. Unknown.

Etymology. The new species is named in honour of Prof. Arkadiy Stepanovich Lelej, a well-known Russian entomologist.

Differential diagnosis. *Trjapitzinichus leleji* sp.n. is close to *T. sugonjaevi* sp.n. in having the pronotum subconical with some setae at sides and four long setae near the posterior margin. Their differences are given in the key and in Table 2.

Trjapitzinichus sugonjaevi
Kostjukov et Kosheleva, sp.n.

Fig. 10.

Type material. Holotype: female, Russia, Primorskiy Territory, Terney District, Mel'nichnyy, 45.43°N 135.51°E, 25.VI–1.VII.2001, Malaise trap, M.V. Michaylovskaya leg. (ZISP).

Description. Female. Head 1.05 times broader than mesoscutum, 2.4 times as broad as long; temple 0.14 length of

Table 2. Diagnostic features of *Trjapitzinichus sugonjaevi* sp.n. and *T. leleji* sp.n.
Таблица 2. Диагностические признаки *Trjapitzinichus leleji* sp.n. и *T. sugonjaevi* sp.n.

<i>T. sugonjaevi</i>	<i>T. leleji</i>
Pedicel 1.9 times as long as broad	Pedicel 1.5 times as long as broad
F1 1.05 times as long as broad	F1 1.3 times as long as broad
F2 as long as broad	F2 1.2 times as long as broad
F3 0.94 times as long as broad	F3 1.15 times as long as broad
Clava 2.0 times as long as broad, distinctly shorter than funicle	Clava 1.5 times as long as broad, as long as funicle
Mesosoma 1.65 times as long as broad	Mesosoma 1.4 times as long as broad
Midlobe of mesoscutum 1.4 times as broad as long	Midlobe of mesoscutum 1.2 times as broad as long
Scutellum 1.45 times as broad as long	Scutellum 1.2 times as broad as long
Costal cell about 10.0 times as long as broad	Costal cell about 15.0 times as long as broad
Stigma distinctly broader than stigmal vein, with two teeth	Stigma as broad as stigmal vein, with one tooth
Uncus 0.4 breadth of stigmal vein	Uncus 0.75 breadth of stigmal vein
Only the apical tarsal segment dark	At least three tarsal segments dark

eye; POL 1.2 times OOL, OOL twice OD. Head in front view 1.3 times as broad as high, transversely oval. Eyes 1.15 times as long as broad, separated by 1.6 times their length, with very short, sparse pilosity. Malar space about 0.7 height of eye, sulcus strongly impressed, virtually straight. Mouth width 1.5 length of malar space. Setae on vertex long, the longest twice OD. Antenna with scape as long as eye, 4 times as long as broad; pedicel plus flagellum nearly as long as breadth of mesoscutum; funicle proximally distinctly stouter than pedicel, the latter 1.9 times as long as broad, slightly longer than F1; F1 1.05 times as long as broad, F2 quadrate, F3 1.05 times as broad as long; clava twice as long as broad, slightly longer than F2 plus F3, with spine about 0.7 length of C3. Apical seta on clava more than twice length of spine; setae of pedicel and flagellum standing out strongly. Mesosoma 1.65 times as long as broad, propodeal slope about 25°. Pronotum subconical, 0.2 length of mesoscutum; with some setae at sides and four long setae near posterior margin; spiracles on conical tubercles. Midlobe of mesoscutum 1.4 times as broad as long, moderately convex; without median line; with two long suberect adnotaular setae on each side. Scutellum 0.75 length of mesoscutum, 1.45 times as broad as long, rather weakly convex in profile but moderately transversely; submedian lines present but superficial, distinctly closer to sublateral lines than to each other, enclosing a space about twice as long as broad; setae equal in length equal to distance between submedian lines, anterior pair well behind middle and close to posterior setae. Dorsellum 2.4 times as broad as long, not very shiny, with an excessively fine, hardly raised longitudinal ridge. Propodeum twice length of dorsellum and slightly more than half length of scutellum, median carina distinctly raised; callus with two setae near spiracle and two near posterior corner; spiracle moderate-sized, oval, separated by about 0.25 its length from metanotum. Legs of medium length; metacoxa rather strongly oblique, twice as long as broad; metafemur about 4.0 times as long as broad; tibiae and tarsi slender; mesotibial spur 0.75 length of mesobasitarsus, apical tarsal segment slightly shorter than basitarsus. Fore wing 2.3 times as long as broad; costal cell about 10.0 times as long as broad (Fig. 10); SM with four dorsal setae; M 1.15 times longer than costal cell, thin distally but thickened towards base, 4.1 times as long as ST, its front edge with 14 setae; PM rudimentary; ST thin near base but thickening from half its length to form a sub-rhomboidal stigma; speculum small, extended as a very narrow strip to ST, open at extreme base; disc of wing moderately densely pilose, more so distad; cilia about 0.8 length of ST. Hind wing obtuse; cilia 0.33 breadth of wing. Metasoma subcylindrical and only slightly broader than high, 1.1 times as long as broad; dorsal surface, except for base of basal tergite, with very fine superficial alutaceous reticulation; last

tergite broader than long; cercal setae subequal.

Body black, non-metallic. Antenna brownish with scape ventrally, pedicel beneath and at tip from testaceous to brown. Coxae black, legs otherwise from testaceous to brown with apical tarsal segments and pretarsi slightly darker. Tegula black. Wings hyaline, venation from testaceous to brown.

Body length 1.2 mm.

Male. Unknown.

Biology. Unknown.

Etymology. The new species is named in honour of the late Prof. Evgeniy Semenovich Sugonjaev, a well-known Russian entomologist.

Differential diagnosis. *Trjapitzinichus sugonjaevi* sp.n. is similar to *T. evanescens* in having the pronotum subconical with some setae at sides and four long ones near the posterior margin; the differences between them are given in the key and in Table 3.

KEY TO SPECIES OF *TRJAPITZINICHUS*, FEMALES
(MALE IS KNOWN ONLY FOR *T. EVANESCENS*)

1. Pronotum about 0.6 length of mesoscutum, nearly conical, with two long setae near its hind margin. Scutellum 2.15 times as broad as long and with one pair of setae. Propodeal spiracle separated by about 1.5 its length from metanotum. Length of longest seta on vertex 1.3 times OD. Eye not pubescent. — Russia (Dagestan) *T. lakicus*
— Pronotum at most a little more than 0.3 length of mesoscutum, subconical, with four long setae near posterior margin. Scutellum 1.3–1.4 times as broad as long, with two pairs of setae. Propodeal spiracle separated by about 0.3 its length from metanotum. Length of longest seta of vertex 2.0–2.1 times OD. Eye with short, sparse setae 2
2. Antenna with scape longer than height of eye, reaching anterior ocellus. M with short setae on its front edge, the longest at most 0.5 length of ST; cilia on apical margin of fore wing 0.01–0.07 breadth of wing. Metasoma 1.8–2.5 times as long as broad. — Italy, Montenegro, Bulgaria .
..... *T. politus*
— Antenna with scape at most as long as height of eye, often slightly to much shorter, not reaching anterior ocellus. M with setae of front edge normally at least as long as ST; cilia on apical margin of fore wing 0.1–0.2 breadth of wing. Metasoma 1.0–1.1 times as long as broad 3
3. Pedicel 1.5 times as long as broad; F1 1.3 times as long as broad; F2 1.2 times as long as broad; F3 1.15 times as long as broad. Clava 1.5 times as long as broad, as long as funicle. Mesosoma 1.4 times as long as broad; midlobe of mesoscutum 1.2 times as broad as long; scutellum 1.2 times as broad as long. — North Korea (Ryanggang Province).
..... *T. leleji* sp.n.

Table 3. Diagnostic features of *Trjapitzinichus evanescens* (Ratzeburg, 1848) and *T. sugonjaevi* sp.n.
Таблица 3. Диагностические признаки *T. evanescens* (Ratzeburg, 1848) и *Trjapitzinichus sugonjaevi* sp.n.

<i>T. evanescens</i>	<i>T. sugonjaevi</i>
Eye 1.3 times as long as broad	Eye 1.15 times as long as broad
Spine of clava 0.5 length of C ₃	Spine of clava 0.7 length of C ₃
Pronotum about 0.3 length of mesoscutum	Pronotum about 0.2 length of mesoscutum
Midlobe of mesoscutum about 1.3 times as broad as long	Midlobe of mesoscutum 1.45 times as broad as long
Tegula yellow with varying degree of fuscous	Tegula black
Length of body 1.4–1.6 mm	Length of body 1.2 mm

- Pedicel at least 1.9 times as long as broad; F1 1.05 times as long as broad; F2 as long as broad; F3 0.94 times as long as broad. Clava 2.0 times as long as broad, slightly longer than combined length of F2 and F3. Mesosoma at least 1.5 times as long as broad; midlobe of mesoscutum 1.4 times as broad as long; scutellum 1.45 times as broad as long 4
4. Eye 1.15 times as long as broad. Spine of clava 0.7 length of C3. Pronotum 0.2 length of mesoscutum. Midlobe of mesoscutum 1.45 times as broad as long. Propodeal spiracle separated by 0.25 its length from metanotum. Tegula black. Length of body 1.2 mm. — Russia (Primorskiy Territory) *T. sugonjaevi* sp.n.
- Eye 1.3 times as long as broad. Spine of clava half length of C3 (Fig. 2). Pronotum 0.3 length of mesoscutum. Midlobe of mesoscutum about 1.3 times as broad as long (Fig. 1). Propodeal spiracle separated by about 0.3 its length from metanotum (Fig. 1). Tegula fuscous. Length of body 1.4–1.6 mm. — Germany, Czech Republic, Hungary, Bulgaria, Ukraine (Poltava Province), Russia (Belgorod Province, Voronezh Province, Bashkortostan, Novosibirsk Province) *T. evanescens*

Acknowledgments

The authors are grateful to Dr. S.V. Triapitsyn (University of California, Riverside, California, USA), Dr. M.V. Mikhaylovskaya (Institute of Biology and Soil Sciences, Vladivostok, Russia), and Dr. Csaba Thuróczy (Kőszeg, Hungary) for providing specimens, as well as Dr. I.V. Balakhnina (All-Russian Research Institute of Biological Plant Protection, Krasnodar, Russia) for help in preparing the illustrations.

References

- Bouček Z. 1988. Australasian Chalcidoidea (Hymenoptera). A biosystematic revision of genera of fourteen families, with a reclassification of species. Wallingford, UK: CABI. 832 p.
- Boyadzhiev P.S. 2003. New records to the fauna of Eulophidae in Bulgaria (Hymenoptera, Chalcidoidea) with a checklist of all the Bulgarian species // Plovdivski Universitet «Paisij Khilendarski», Nauchni Trudove, Biologiya Animalia. Vol.39. No.6. P.80.
- Graham M.W.R. de V. 1991. A reclassification of the European Tetrastichinae (Hymenoptera, Eulophidae): revision of the remaining genera // Memoirs of the American Entomological Institute. Vol.149. P.1–323.
- Gunasheva Z.M., Kostjukov V.V. 2004. [New species of chalcid-wasp *Aceratoneuromyia lakica* (Hymenoptera, Eulophidae) from Dagestan] // Nadykta V.D., Ismailov V.Ya., Sugonyaev E.S., Levaschova G.I. (eds): Biologicheskaya Zashchita Rasteniy — Osnova Stabilizatsii Agroekosistem. Krasnodar. P.83–87. [In Russian].
- Kostjukov V.V. 1978. [5. Subfam. Tetrastichinae] // Medvedev G.S. (Ed.): Opredelitel' Nasekomykh Evropeiskoy Chasti SSSR. Vol.3. Pt.2. Leningrad: Nauka. P.430–467. [In Russian].
- Kostjukov V.V., Kosheleva O.V. 2006. [Taxonomic status of the species described in the genus *Tetrastichus* Haliday (s. l.) from the USSR and description of *Trjapitzinichus* gen. nov.] // Nadykta V.D., Ismailov V.Ya., Sugonyaev E.S., Levaschova G.I. (eds): Biologicheskaya Zashchita Rasteniy — Osnova Stabilizatsii Agroekosistem. Krasnodar. P.103–111. [In Russian].
- Silvestri F. 1910. Introduzione in Italia d'un Imenottero indiano per combattere la mosca delle arance // Bolletino del Laboratorio di Zoologia Generale e Agraria delle Reale Scuola Superior d'Agricoltura, Portici. Vol.4. P. 228–245.
- Sugonyaev E.S., Kostjukov V.V. 1976. [A note on the genus *Aceratoneuromyia* Girault (Hymenoptera, Eulophidae)] // Zoologicheskyy Zhurnal. Vol.55. No.7. P. 1110–1112. [In Russian].

Поступила в редакцию 30.03.2016