

Telmatoscopus tetraspiculatus sp.n. and Parajungiella serbica comb.n. (Diptera: Psychodidae) from GreeceJan Ježek¹ & Vassilis Goutner²Dept. of Entomology, National Museum, Kunratic 1, CZ – 148 00 Praha 4,
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Taxonomy, new species, new combination, Greece.

Abstract. *Telmatoscopus tetraspiculatus* sp.n. (♂) is described and a differential diagnosis is presented in comparison with closely related *T. miksici* (Krek, 1979). *Parajungiella serbica* (Krek, 1985) comb.n. (♂) is recognized, briefly redescribed and diagnosed. All diagnostic characters of the two examined species are illustrated. *P. serbica* (Krek) comb.n. is registered as new to Greece.

Introduction

The investigation of moth flies in Greece is still far from finished. This paper represents a result of a joint programme in taxonomical and faunistic research of moth flies (Diptera: Psychodidae) in Greece between the National Museum in Prague (Department of Entomology) and the Aristotelian University of Thessaloniki (Department of Zoology). Two species are examined below and their taxonomical position in genera *Telmatoscopus* Eaton, 1904 and *Parajungiella* Vaillant, 1972 is fixed in the sense of Ježek (1984). The rare species *Parajungiella serbica* (Krek) comb.n. was previously based only on holotype and the author published four figures of this species in his original paper. On the basis of our considerable material the validity of the mentioned species is recognized.

The material was collected by sweeping partly during the expedition "Hellas 1986" of the Primary Organization of the Czechoslovak Union of Nature Preservation, c/o National Museum in Prague, to Greece (Peloponnese) and partly during our research in the area of Chalkidiki (Macedonia) (1989). All material studied is deposited at the Department of Entomology (Natural History), Prague (NMP).

We are following the modern terminology of genital parts in the sense of Wood (1991).

***Telmatoscopus tetraspiculatus* sp.n.**

Description: ♂. Eyes separated, dorsoventral set of frontal hairs irregularly arranged, reduced (Fig. 1). The minimum distance between eyes corresponds to one diameter of facet (Fig. 2). Ratios of distance of eye's apices to minimum width of frons as well as to faced diameter 10.2 : 1. Antennae 16-segmented. Scape (Fig. 3) almost club-shaped, widened distad. Pedicel very short, barely globular. Flagellar segments (Fig. 4) jug-sha-

ped, asymmetrical, distal segments with rather long necks. Apical antennal segment with a very long finger-like protuberance. Ratios of lengths of segments of maxillary palps 1 : 1.8 : 1.6 : 2.4, last segments annulate (Fig. 10). Terminal lobe of labium on Fig. 9. Ratio of maximal length of cibarium to length of epipharynx 1.6 : 1. Thoracal sclerites on Fig. 5. Wings (Fig. 11) narrowly lancet-shaped, 2.2 (holotype), 1.9 – 2.3 (paratypes) mm long, cubital area only inconspicuously developed, wing membrane bare. Wings clear; a patch of definite brown infuscation distad of apex of Sc with distal extension to apex between C and R₁. Some veins are strengthened. Sc uninterrupted. M₃ and Cu without a connection on M₄. R₅ ending beyond wing apex. Medial wing angle approximately 180° (BCD). Indexes of wing AB : AC : AD = 5.3 : 5.0 : 4.9; BC : CD : BD = 1 : 1.7 : 2.7 (A = end of R₅, B = radial fork, D = end of Cu). Ratio of maximal length of halteres to its maximal width 2.6 : 1. Ratios of lengths of femora, tibiae and first tarsal segments: P₁ = 1.8 : 2.2 : 1; P₂ = 2 : 2.6 : 1.2; P₃ = 1.9 : 2.9 : 1.2. Claw of P₁ on Fig. 6. Copulatory organ (Figs 7, 12) with wrinkled surface outside, basal apodeme rather short, compressed and bent from lateral view, forked in two caudal arms distad. Two transverse ribs of aedeagal complex short, each rib with one inner small canine-shaped spiculum and one sabre-shaped prick outside. Ventral lobes of aedeagal complex paired, conspicuous, rounded. Furca developed, a coalescing from two parts distinct. Gonocoxites a little arched from dorsal view, long, gonostyli (Figs 7, 8) bent, with very long thin pointed tips. Epandrium (Figs 13, 14) with a large notch caudally. Basal paired apertures developed, one paratype (Inv. No. 3848) with apertures extremely caudad. Sclerotized remnants of 10th tergite and sternite inside of epandrium conspicuously developed, U-shaped. Hypandrium narrow, cracked transversally. Epiproct small, hypoproct larger, both parts haired. Surstyli rather long, almost straight from dorsal view, a little bent from lateral view, with 9 – 12 retinaculi subapically, irregularly arranged; cluster of insertions of retinaculi prolonged.

♀. Unknown.

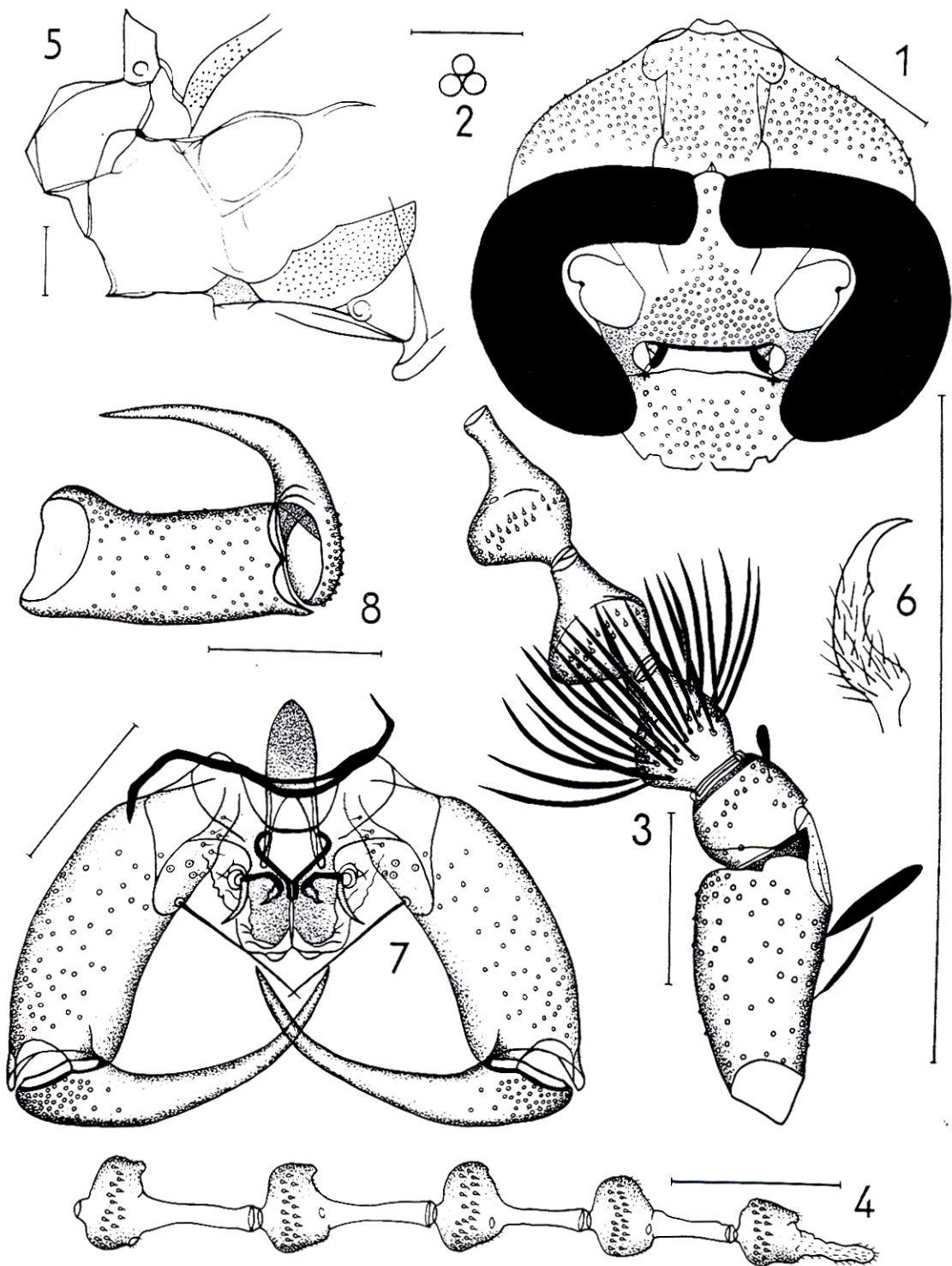
Type material: Holotype, ♂, Greece: Peloponnese, Taygetos Mts., the Motel Taygetos (Sparta – Kalamata highway), 15 - 16. vii. 1986 (Ježek) (dissected, Canadian Balsam, slide Cat. No. P5 - 33561, Inv. No. 3842) (NMP). Collected on the shaded impenetrably overgrown bank of a stream 100 - 200 m below a saddle with *Platanus*, *Juglans*, *Hedera*, *Urtica* and *Pteropsida* around (approximately 1600 m.a.s.l.). Paratypes: 6♂, the same data as holotype, dissected, Canadian Balsam, slides Cat. No. P5 33562 - 33567, Inv. No. 3843 - 3848 (NMP).

Distribution: The species is registered only from Greece so far.

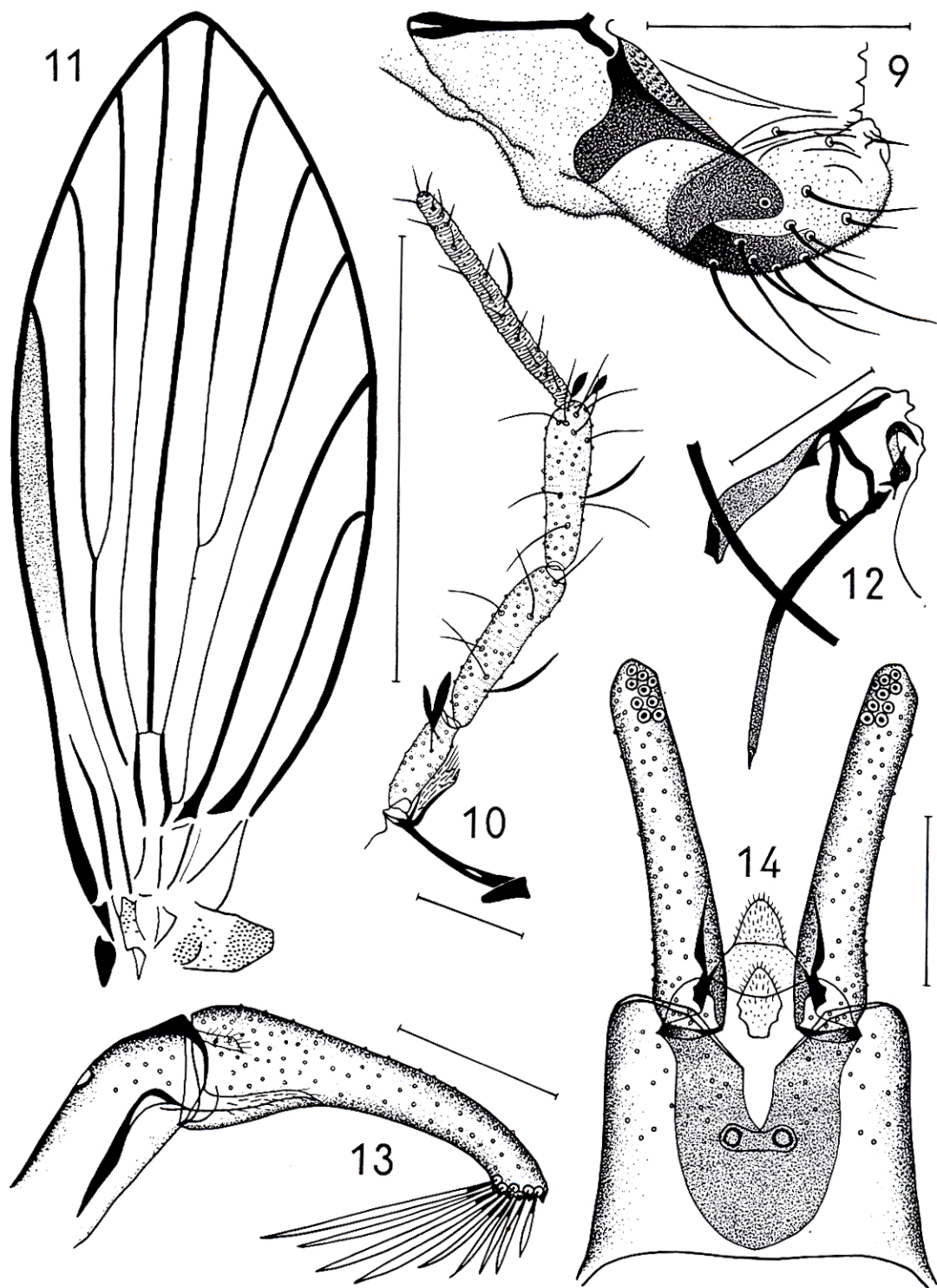
Differential diagnosis: Minimum distance between eyes (Fig. 1) corresponds to one diameter of facet (Fig. 2), thus differing from the closely related *T. miksici* (Krek, 1979) where frons is broader (= two diameters of facets). Medial wing angle (Fig. 11) 180°, hypandrium (Fig. 7) cracked transversally, two transverse ribs of aedeagal complex developed, with two pairs of pricks (Fig. 7, 12), ventral lobes rounded. *T. miksici* has medial wing angle 127°, hypandrium without a crack, paired transverse ribs of aedeagal complex completely missing, only two big divergent protuberances developed, ventral lobes pointed. Both compared species are closely related because of furca which indicates a coalescing from two parts.

Remarks: Figures are based on holotype (Inv. No. 3842).

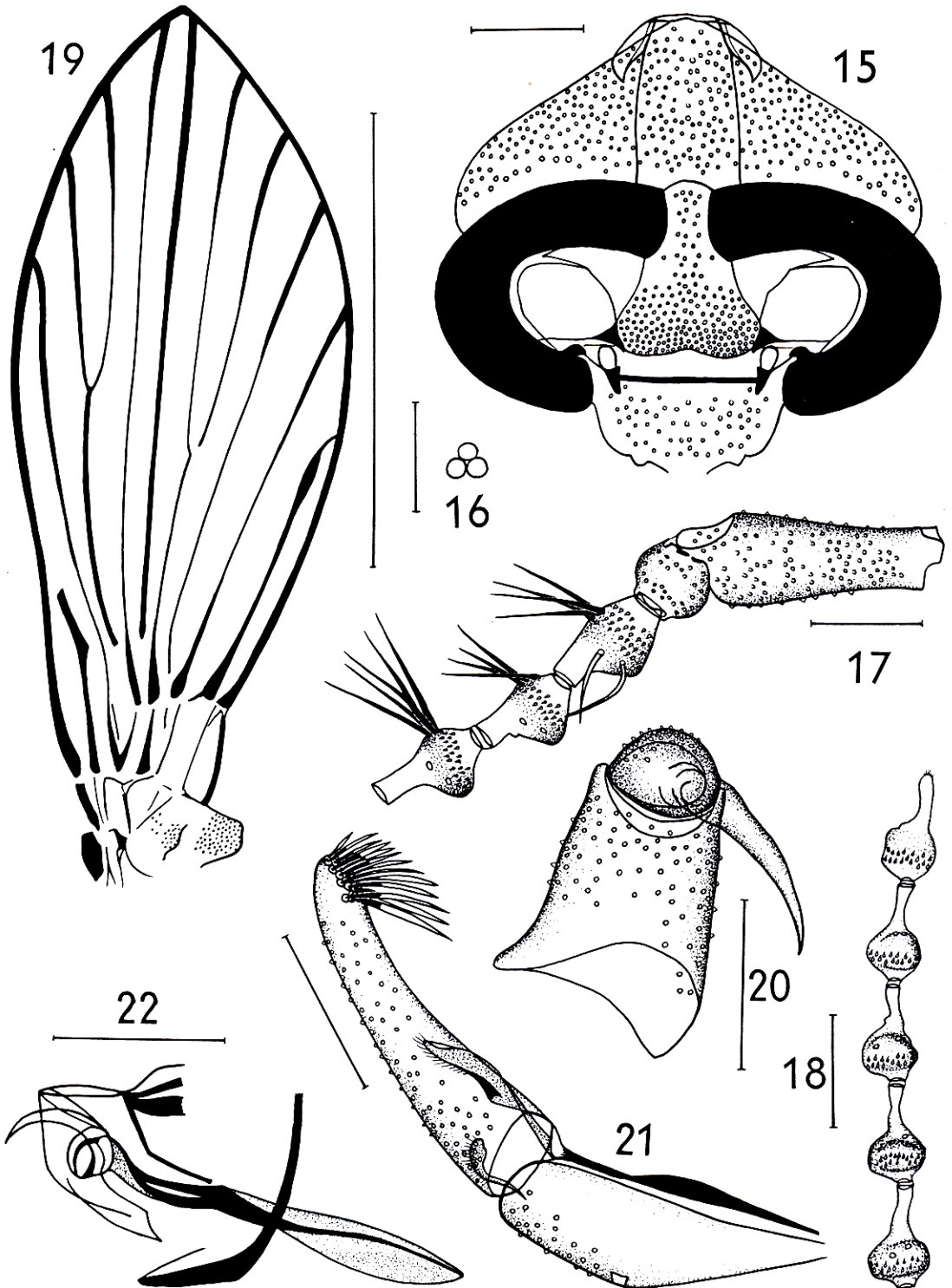
Etymology: From Greek "tetra" = four and Latin "spiculum" = prick. We have named this species after its unique morphological character: four pricks in the area of aedeagal complex.



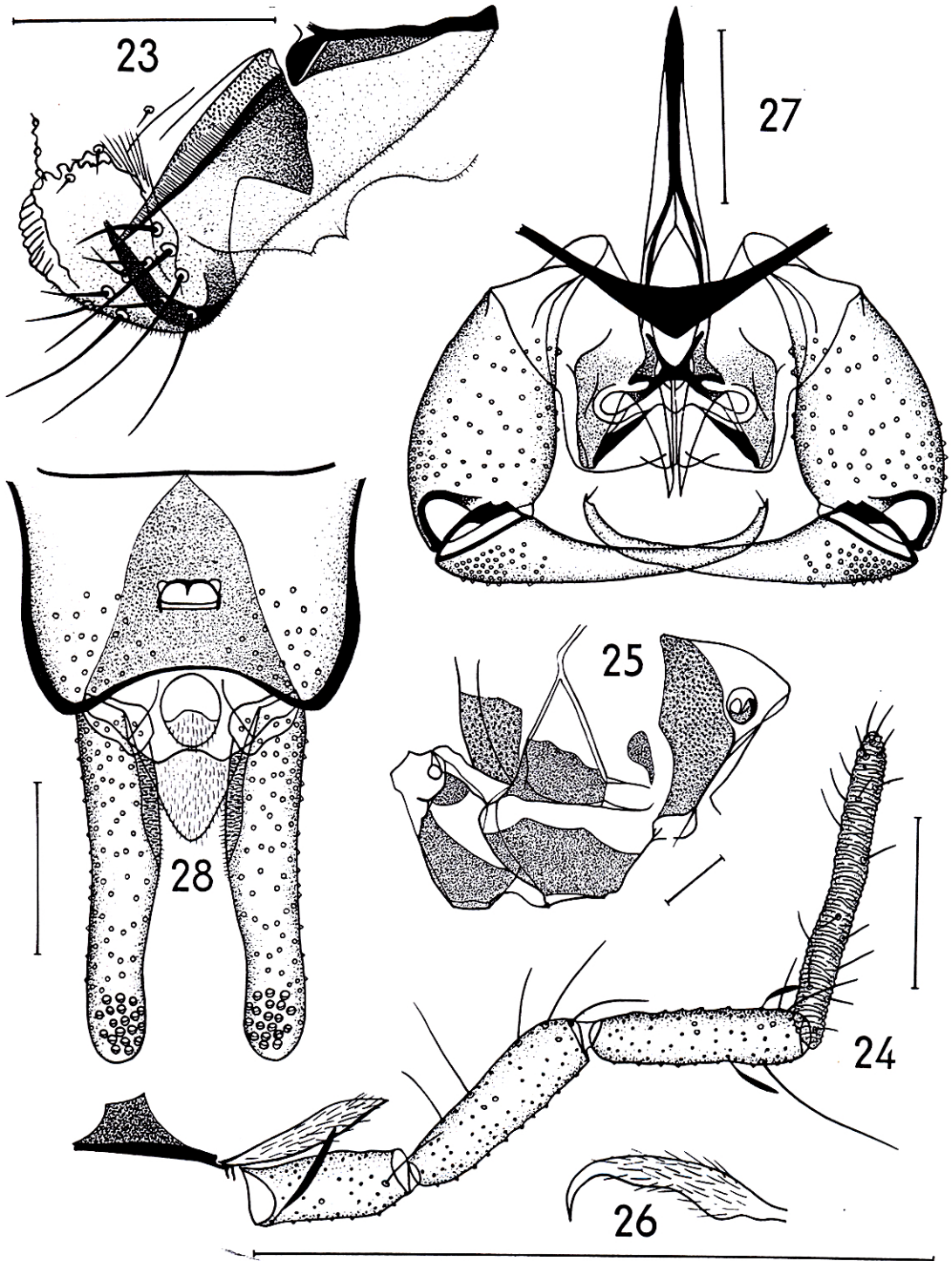
Figs 1-8: *Telmatoscopus tetraspiculatus* sp. n. ♂. 1 - head; 2 - facets; 3 - basal antennal segments; 4 - apical antennal segments; 5 - lateral view of thoracic sclerites; 6 - claw of P₁; 7 - dorsal view of aedeagal complex and gonopods; 8 - lateral view of gonocoxite and gonostyle. Scales 0.1 mm.



Figs 9 - 14: *T. tetraspiculatus* sp.n. ♂. 9 - terminal lobe of labium; 10 - maxilla and palpus maxillaris; 11 - wings; 12 - lateral view of aedeagal complex; 13 - lateral view of epandrium and surstylus; 14 - dorsal view of epandrium and surstyli (retinaculi omitted). Scales 0.1 mm., in Fig. 11 - 1 mm.



Figs 15 - 22: *Parajungiella serbica* (Krek) comb.n. ♂ . 15 - head; 16 - facets; 17 - basal antennal segments; 18 - apical antennal segments; 19 - wing; 20 - lateral view of gonocoxite and gonostyle; 21 - lateral view of epandrium and surstylus; 22 - lateral view of aedeagal complex. Scales = 0.1 mm., in Fig. 19 - 1 mm.



Figs 23 – 28: *P. sebica* (Krek) comb.n. ♂. 23 – terminal lobe of labium; 24 – maxilla and palpus maxillaris; 25 – lateral view of thoracic sclerites; 26 – claw of P1; 27 – dorsal view of aedeagal complex and gonopods; 28 – dorsal view of epandrium and surstyli (retinaculi omitted). Scales 0.1 mm.

Parajungiella serbica (Krek, 1985) comb.n.

Panimerus serbicus Krek, 1985: 188.

Description: ♂. Eyes separated, frons with irregularly arranged broad dorsoventral set of hairs (Fig. 15). The minimum distance between eyes corresponds to more than two facet diameters (Fig. 16). Ratios of distance of apices of eye's ends to minimum width of frons mostly 10 : 2.3, to facet diameter 10 : 1. Antennae 16-segmented. Scape (Fig. 17) almost cylindrical, somewhat widened distad, long. Pedicel almost globular. Flagellar segments (Fig. 18) pitcher-shaped, asymmetrical, distad segments with rather long necks. Apical antennal segment with a long finger-like protuberance. Sensory filaments long, needle-shaped, paired. Ratios of lengths of segments of maxillary palps 1 : 1.4 : 1.3 : 2.0. Last segment of maxillary palpus annulate (Fig. 24). Terminal lobe of labium on Fig. 23. Ratio of maximal length of cibarium to length of epipharynx 1.6 : 1. Corniculi inconspicuous (Fig. 15). Thoracal sclerites pigmented in some parts (Fig. 25). Wings (Fig. 19) widely lancet-shaped, clear, 1.7 - 2.1 mm long, cubital area not conspicuously developed, wing membrane bare. Some veins strengthened. Sc uninterrupted. M₃ and Cu without a connection on M₄. R₅ extends distally to reach wing margin a little behind apex of the wing. Ratio of maximal length of halteres to its maximal width 2.9 : 1. Ratios of lengths of femora, tibiae and first tarsal segments: P₁ = 1.8 : 2.1 : 1; P₂ = 2 : 2.8 : 1.1; P₃ = 2 : 3.1 : 1.1. Tarsal claw of P₁ on Fig. 26. Basal apodeme of male genitalia narrow from dorsal view (Fig. 27), widened from lateral view (Fig. 22), straight, with a pointed proximal top. Distal part of basal apodeme forked in two caudal arms. Furca developed. Aedeagal complex with two conspicuous diagonal sclerites. Sabre-shaped protuberances very short, bent. Gonocoxites (Figs 20, 27) rather short, thick in the middle. Gonostyli bent, with long thin pointed tips, bearing a subapical seta. Epandrium haired (Figs 21, 28). Basal paired apertures partially fused, conspicuously bordered. Sclerotized remnants of 10th tergite and sternite inside of epandrium developed, trapezoidal. Hypandrium narrow, with a broader triangular part in the middle. Epiproct small, circular. Hypoproct large, tongue-shaped. Both parts haired. Surstyli long, almost straight, subapically with 17 - 22 retinaculi, irregularly arranged.

♀. Unknown.

Type material: Krek (1985) briefly described the species on the basis of a holotype from Serbia, Temska (Pirot - Knjaževac highway), 420 m.a.s.l., 25. vii. 1981 (Krek), vegetation on banks of a brook, deposited at Sarajevo University (Bosna - Hercegovina) in author's collection. We have not examined this specimen.

Material examined: 34♂, Greece, Chalkidiki, NE of Lake Volvi, Orfanou Bay, 25. iv. 1989 (Ježek & Goutner), swamps with *Equisetum*, *Juncus* and *Mentha* shaded by *Alnus*, *Populus* and *Platanus*; Cat. No. P5 33568 - 33601, Inv. No. 3705 - 3728, 3795 - 3798, 3806, 3813 - 3814, 3821, 3827 - 3828 (NMP). Mostly dissected except slides Inv. No. 3705, 3710, 3719, 3727, 3728, 3798, 3813, 3814, 3821, 3828, Canadian Balsam.

Distribution: The species is known only from Serbia and Greece so far.

Differential diagnosis: *Parajungiella serbica* (Krek, 1985) comb.n. differs from *P. abchazica* Ježek, 1985 by index length of scape (Fig. 17) to its minimum width being 4.1, fore wing margin quite clear, medial fork of wing incomplete (Fig. 19), hypandrium with a triangular broader part in the middle, two diagonal sclerites of aedeagal complex developed (Figs 22, 27), protuberances of aedeagal complex convergent from dorsal view. *P. abchazica* has index of length of scape to its minimum width 11.4, fore wing margin

clouded, medial fork complete, hypandrium without a triangular part, two diagonal sclerites missing, protuberances of male copulatory organ divergent from dorsal view.

Remarks: Figures are based on slide Inv. No. 3795.

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Souhrn

V práci je uveden popis *Telmatoscopus tetraspiculatus* sp.n. (♂) a redeskribce *Parajungiella sebica* (Krek, 1985) comb.n. (♂). Oba druhy jsou stavbou aedeagálního komplexu nezaměnitelné s jinými příbuznými druhy. Prezentují se diferenciální diagnózy zmíněných druhů ve srovnání s *T. miksici* (Krek, 1979) a *P. abchazica* Ježek, 1985. Všechny důležité diagnostické znaky jsou zakresleny. *P. sebica* (Krek) comb.n. je novým druhem pro faunu Řecka.

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