

The Tethinidae species in the collection of the Zoological Institute in St. Petersburg (Insecta: Diptera: Tethinidae)

With 7 Plates

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Abstract. Specimens of eight Tethinidae species are established in the collection of the Zoological Institute, Russian Academy of Sciences in St. Petersburg, collected from 1908 to 1976 in East Europe and the Palaearctic part of Asia. Three of them are new for science: *Tethina gobii* spec. nov., *Tethina luteosetosa* spec. nov., and *Tethina multipilosa* spec. nov. For the resting five species, new localities are recorded enlarging their ranges in Asia. Additional taxonomic notes are given for *Rhichnoessa thula* (SASAKAWA) comb. nov. from Sakhalin.

Introduction

There are not many publications about the Tethinidae species in East European and the Asiatic parts of the Palaearctic Region. Some informations are given in CZERNY (1928), and a little much more in Soós (1978, 1984). Six species are published for Japan (SASAKAWA, 1986), but two of them – *Pseudorhichnoessa spinipes* MALLOCH, 1914 and *Tethina orientalis* (HENDEL, 1934) penetrate in Japan from Oriental region. Thus, totally 14 Palaearctic species are known from East Europe and the Asiatic part of the Palaearctic region:

1. *Pelomyiella cinerella* (HALIDAY, 1837) – Mongolia, China (Tibet);
2. *P. mallochi* (STURTEVANT, 1923) – Europe, Mongolia, China (Tibet), North America;
3. *P. mongolica* Soós, 1978 – Mongolia;
4. *P. obscurior* (BECKER, 1907) – China (Tibet);
5. *P. nigra* Soós, 1978 – Mongolia;
6. *Tethina czernyi* (HENDEL, 1934) – Transcaspia, Mongolia, Turkey;
7. *T. ochracea* (HENDEL, 1913) – Turkey;
8. *T. incisuralis* (MACQUART, 1851) – Syria;
9. *T. nigripes* CZERNY, 1928 – Lebanon, Syria;
10. *T. saigusai* SASAKAWA, 1986 – Japan;
11. *T. thula* SASAKAWA, 1986 – Japan;
12. *Haraismoptera vulpina* HENDEL, 1907 – Saudi-Arabia;
13. *Dasyrhichnoessa platypes* SASAKAWA, 1986 – Japan;
14. *D. yoshiyasui* SASAKAWA, 1986 – Japan.

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As it can be seen, the first 5 species are known chiefly from Mongolia and Tibet, the other 5 species from the Mediterranean region in Asia, and 4 species from Japan.

We found a small Tethinidae collection in the Zoological Institute of the Russian Academy of Sciences in St. Petersburg, containing specimens collected from the years 1908 to 1976 from Ukraine and Transcaucasus (Armenia, Georgia and Azerbaijan) to Far East (Sakhalin), mainly in Central Asia, Mongolia and Tibet. The result of our investigation are given in a systematic list below, including faunistic and taxonomic notes and drawings.

The material studied is deposited in the Zoological Institute of Russian Academy of Sciences in St. Petersburg; when the species are presented with more specimens, a couple of them are deposited also in the Institute of Zoology of Bulgarian Academy of Sciences in Sofia.

Systematic review

Genus *Pelomyiella* HENDEL, 1934

Pelomyiella mallochii (STURTEVANT, 1923)

Material studied. 18 specimens (7 ♂♂, 16 ♀♀). Ukraine – (near bank of Danube): 2 ♂♂, 11 ♀♀, Vilково, Izmail region, 27. V 1926, leg. Chernavin; Russia: 5 ♂♂, West Siberia, Omsk region, Severnaya, near salt lake, 8. VII. 1922, leg. Reinhart.

Distribution. The species is known from the Nearctic region, Europe and from Asia (Mongolia and Tibet).

Pelomyiella obscurior (BECKER, 1907)

Material studied. 2 ♂♂, 1 ♀. China: Gobi: 1 ♂, lectotype (designated by Soós, 1978), 3–20. VII. 1895, Orogyn Syrtyn, S. of Nanshan, leg. Roborovsky et Kozlov; 1 ♂, 1 ♀, Dyn-Yuan-In, Northern Alashan, 1–4. VI. 1908 (near boundary to Mongolia), leg. Kozlov.

Taxonomic notes. The specimens from Dyn-Yuan-In have 2 longer orbital bristles, smaller cheeks and shorter third part of the costal vein.

Genus *Tethina* HALIDAY, 1838

Tethina czernyi (HENDEL, 1934)

Material studied. 24 specimens (14 ♂♂ and 10 ♀♀). Turkmenia: Kyzyl-Atrek, 1 ♀, 8. V. 1947, leg. Borchsenius; Island Kulagin in Kyzylagach gulf of Caspian Sea, 10 ♂♂, 1 ♀, 2. V 1937, leg. Tugarinov; Ashgabad, 3 ♀♀, 25. V 1934, leg. V Popov; Tadjikistan: Kurgan-Tjube, 4 ♂♂, 4 ♀♀, 29. III. 1944, leg. A. Stackelberg; Uzbekistan: 1 ♀, Khiva, 29. II. 1927, leg. L. Zimin.

Taxonomic notes. The population from Ashgabad shows some peculiarities: surstyli are more large and strongly haired; *ta-tp* is equal to apical part of *Cu*, or a little shorter. The specimens from Island Kulagin have large and very setigerous surstyli; *ta-tp* is longer than apical part of *Cu*; *vi* and *pstm* black.

Distribution. Europe and Asia (Turkey, Transcaucasus, and Mongolia). New regions: Central Asia: Turkmenia, Uzbekistan, Tadjikistan. The species is distributed around the salt basin and on the salt ground. These new localities cover a considerable part of the species range in Asia from East Mediterranean region and Transcaspia to Mongolia. This mosaic localities make an isolated population, with male genitalia varying in a large limit.

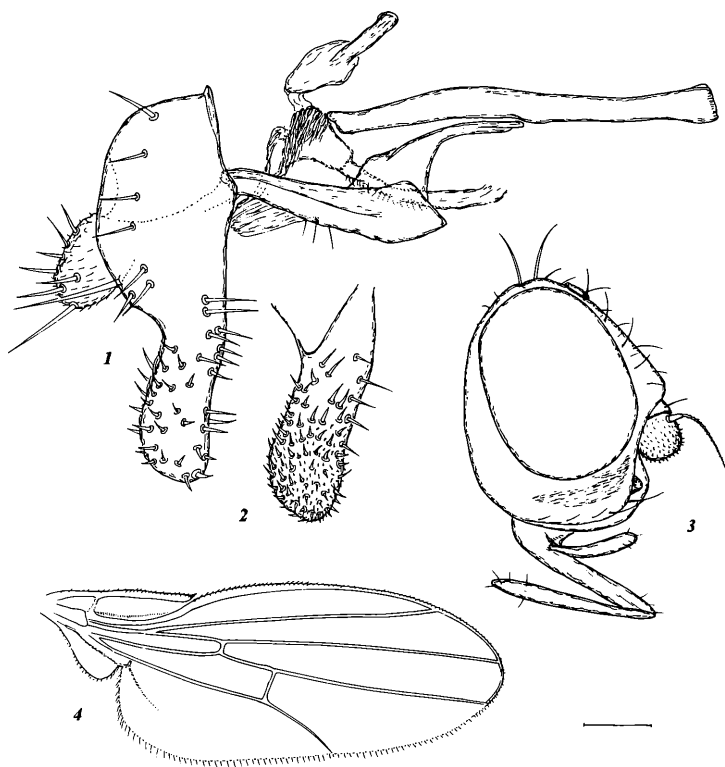


Plate 1: *Tethina gobic* spec. nov., male.

1-2 - male genitalia: 1 - male complex from right; 2 - left surstylus from inner side; 3 - head from right; 4 - wing.

***Tethina gobic* spec. nov. (Plate 1)**

Diagnosis. Gena narrow, face protruding before the middle of the first flagellomere, facial callus clearly conical, acrostichals biseriated; tibiae and tarsi yellow, 5th tarsal joint dark; surstyli enlarged apically.

Description. Male. Head (Fig. 1/3) in profile higher than long. Antennae yellow, first flagellomere rounded, arista yellow, short haired. Face yellow, in the lower half grey, in the middle part protruding to the end of the basal half of the first flagellomere. Facial orbit narrow as the diameter of arista. The facial callus short, well pointed but not passing before the facial protruding. Genae yellow, lightly silvery dusted, 1.25 times wider than the height of the first flagellomere; the fat band not so clear, tapering backward. Peristomal hairs brown, 4-5 in numbers and 2 vibrissa-like long bristles. Eyes higher than long, about 3.3 times higher than the gena. Frons longer than width, lightly narrowed forward, yellow in the first half, the rest back part brown, ocellar triangle protruding, grey dusted; 4 orbital bristles equal in length, lateroclinated; ocellar bristles small, a little longer than orbitals; inner and outer vertical bristles strong, equal in length, about 2 times longer than orbitals. Proboscis slender, elongated, palpi yellow.

Thorax dorsally and laterally densely grey silvery dusted. Bristles black. Chaetotaxy genotypic: praescutellar dorsocentral 2 times stronger than the rest; acrostichals incomplete, rare, biseriated; praescutellar acrostichal pair equal in length to the resting; intraalar uniseriated. Apical scutellar bristles equal to the laterals. Supracoxal setae above first coxa well visible. Legs bicoloured, coxae grey dusted with yellow apex; femorae grey dusted with yellow ends; tarsi yellow, only 5th tarsal segment dark

brown. Wings lightly lemon-yellowish with yellow veins; $R4+5$ and M parallel; $R4+5$ reaching costa just before the wings apex (Fig. 1/4); transverse veins light, $ta-tp$ 1.6 times longer than tp ; apical part of Cu about 2.5 times longer than tp .

Abdomen black, grey dusted with short black hairs. Terga 4th equal to terga 5th. Male genitalia (Fig. 1/1,2) like those of *T. strobliana* (Fig. 5/2–5), but the surstylus is enlarged in the apical half, strongly setigerous. Hypandrial arch narrow, elongated, ejaculatory apodeme, comparatively small. Body length: 2.5 mm.

Material studied. Mongolia, 1 ♂, holotype, Gobi Altai Aimak, Shargyn-Gobi, 10 km NE. and E. Bajan, salt ground, 23. VIII. 1967, leg. Zaitzev.

Comparative diagnosis. The species is similar to *T. strobliana* (MERCIER), but has a complex of well distinguishing peculiarities giving below.

Differences between both species	
<i>T. gobii</i> spec. nov. (Plate 1)	<i>T. strobliana</i> (MERCIER) (Plate 5)
Acrostichals:	
2 rows	4 rows
Gena:	
Grey-yellowish, narrow, equal to the wide of the first flagellomere	Yellow, wide, 1.5 times wider than the first flagellomere
Relation eye/gena:	
Eye large, 3.3 times higher than the width of the gena (Fig. 1/3)	Eye comparatively small, 2.3 times higher than gena (Fig. 5/1)
Proboscis (labellum):	
Brown, slender, elongated, longer than palpi, equal to the mouth opening (Fig. 1/3)	Yellow, shorter than palpi and 2 times shorter than the mouth opening (Fig. 5/1)
Wings:	
$ta-tp$ = 1.6 times tp ; Cu – apical part 2.5 times tp ; ta behind of the middle of D (Fig. 1/4)	$ta-tp$ = 2.5 times tp ; Cu – apical part 1.66 times tp ; ta before the middle of D
Surstyli:	
Enlarging apically, densely setigerous on the both sides (Fig. 1/1–2)	Enlarging backwards in the middle part, normally haired (Fig. 5/2–5)
Hypandrium, lateral view:	
Narrow, elongated (Fig. 1/1)	Comparatively short, wide (Fig. 5/4)

Tethina gobii spec. nov. is similar to *T. czernyi* too in having 2 rows of acrostichal bristles, but the genae are evidently narrower than those of *T. czernyi*.

Tethina incisuralis (MACQUART, 1851)

Material studied. 24 specimens (14 ♂♂ and 10 ♀♀). Turkmenia: Molla-Kara near Dzhebel, 1 ♂, 6. VI. 1934; 8 ♂♂, 3 ♀♀, 9. VI. 1934; 4 ♂♂, 1 ♀, 10. VI. 1934; 2 ♀♀, 11. VI. 1934; 2 ♀♀, 15. VI. 1934; Dzhebel, 2 ♀♀, 17. VI. 1934; leg. V. Popov; 20 km N. of Kyzyl-Arvat, 1 ♂, 4. IV. 1952, leg. Steinberg.

Distribution. The species is known from Europe, North Africa (Cap Verde Isl. and Canary Isl.), and Asia (Syria). The new localities continue its range to the East in Central Asia.

Taxonomic notes. The black band on the end top of the third tibia is strongly outlined, taking just a $\frac{1}{4}$ of the length of the tibia. The two basal abdominal terga predominantly yellow, the rest with brown basal half, silvery grey distal half and yellow apical edge.

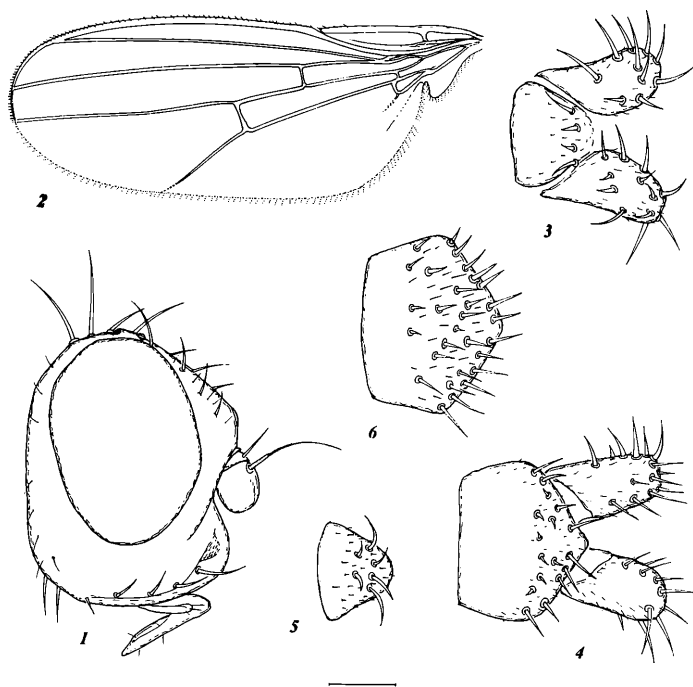


Plate 2: *Tethina luteosetosa* spec. nov., female.

1 – head from right; 2 – wing; 3–6 – female terminalia with variation in setigerous of epi- and hypoproct; 3,4 – specimens from Turkmenia: 3 – epiproct and cerci; 4 – hypoproct and cerci; 5,6 – specimens from Mongolia: 5 – epiproct, 6 – hypoproct; female terminalia from above (3,5) and from below (4,6).

***Tethina luteosetosa* spec. nov. (Plates 2, 3)**

Diagnosis. Predominantly yellow-grey, including legs and antennae, all bristles and hairs yellow, eyes vertical, face with rounded carina in lower half, epandrium with strong short thorns, basiphallus bottle-shaped.

Description. Male. Head (similar to Fig. 2/1) 1.22 times higher than long with yellow frons, antennae and face. Antennae with first flagellomere lightly elongated, apically rounded, arista yellow. Face produced on the lower half, reaching before the middle of the first flagellomere. The shining facial callus wedge-shaped, situated in the middle part of the facial carina. Frons yellow to orange yellow, with parallel sides, on the back half and on the orbital band silvery-yellowish. Chaetotaxy yellow: 2 upcurved orbital bristles; 3 pairs frontal equal in length to the orbitals; anterior ocellar bristles situated behind and outside of the first ocellus; posterior ocellar hairs short, brought together, situated at the back line of the hind ocelli; postvertical bristles convergent, situated closer to inner vertical bristles than each to the other, the distance between postverticals is longer than the distance between back ocelli. Genae wide, 1.5 times wider than the height of the first flagellomere, yellow with 3–4 yellow short but strongly peristomal hairs, and 2 vibrissa-like bristles under facial callus. Mouth, proboscis and palpi yellow; proboscis short, palpi slender. Eyes in profile almost vertical, higher than long, about 3.5 times higher than the width of the gena. Occiput silvery yellow without silvery-grey spots. Thorax yellow-grey dusted. Bristles yellow. Chaetotaxy: acrostichal setae 5 pairs in two rows; the remaining chaetotaxy genotypic including the 2 supracoxal hairs; 4 scutellar bristles subequal in length (apical only a little longer than lateral). Legs totally yellow, both first femorae thickened; second tibia with 3 brown apical ventral spurs: the median long, the resting short; second tarsus with brown lateral

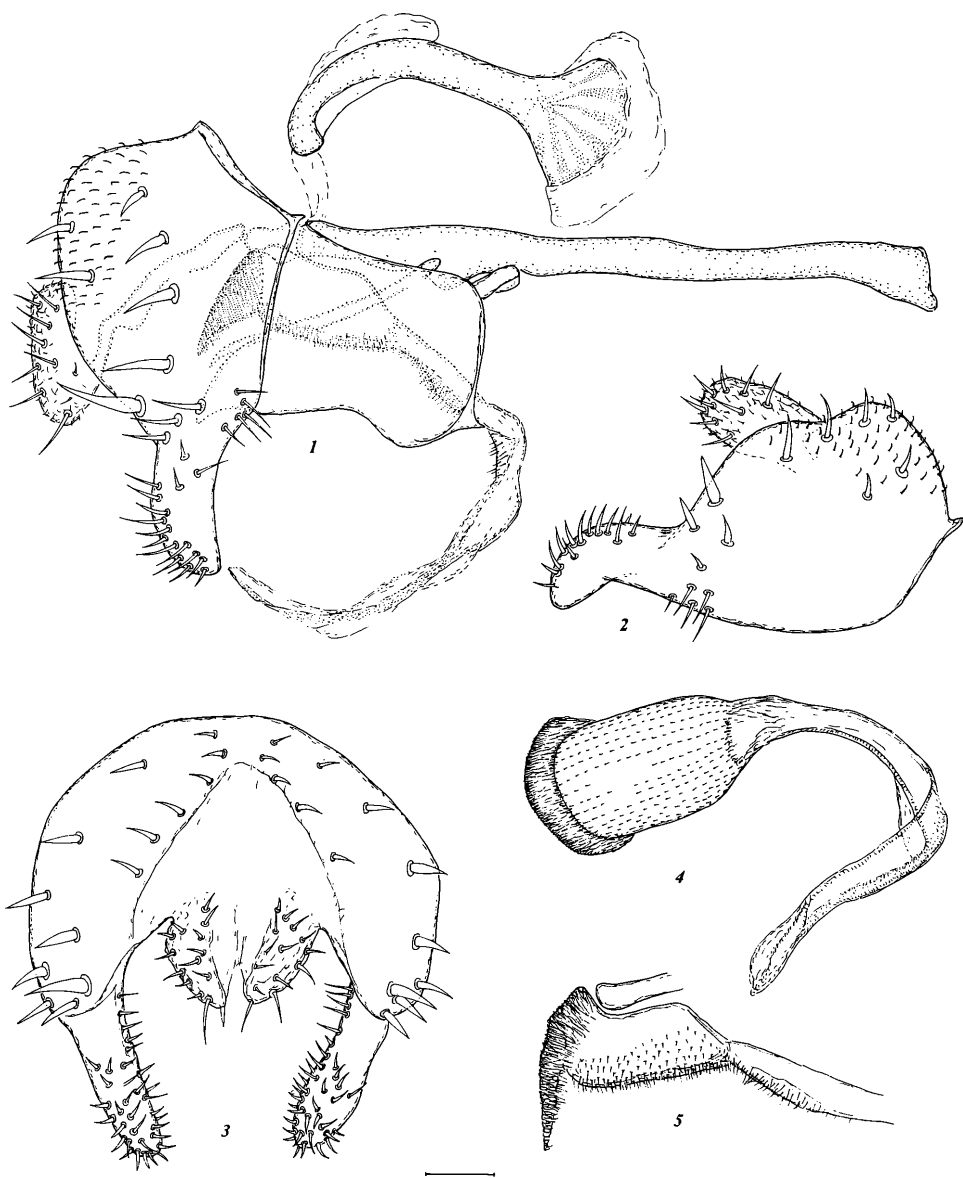


Plate 3: *Tethina luteosetosa* spec. nov., male.

1 – genitalian complex from right (type specimens from Mongolia); 2 – variation of the epandrium (Turkmenia); 3 – epandrium, view apical; 4,5 – aedeagus from below (4) and from right (5).

apical spurs on the each joint. Wings (Fig. 2/2) comparatively short, about 2 times longer than thorax (mesonotum + scutellum), yellow hyalin; vein yellow too. Second and third parts of costal vein with small black brown thorns; $R4+5$ and $M1+2$ approximated in the apical one-quart; $ta-tp$ 1.5 times longer than tp ; the last section of the Cu 2.5 times longer than tp ; the both two cross veins light. Halteres yellow.

Abdomen brownish-grey and yellow-grey dusted. The posterior part of the 2nd, and the beginning of the 3rd terga with yellow band; 3rd and 4th with yellow apical band; 5th almost entirely yellow. Male terminalia externally light brown and mostly shining. Epandrium (Fig. 3/1–3) with normally deve-

loped, but stout bristles; cerci with short bristles; basiphallus (Fig. 3/4,5) elongated, bottle-shaped in dorsoventral view, laterally sack-like with short hairs on the ventral surface, passing on the distiphallus too (Fig. 3/5). Hypandrium large, wide, ejaculatory apodeme large.

Body length: 2.17 mm.

Females like the males. The facial callus not so clear underlined. Face protruded in the lower one-third (Fig. 2/1). Thorax of the specimens from Turkmenia (Molla-Kara) are predominantly yellow. Mesonotum with a dark band anteriorly, before the mesonotal transverse line; scutellum predominantly yellow, grey dusted, with pale yellow apex. The females from Mongolia (Lake Adgiin-Zagan-Nur) have entirely yellow scutellum. Legs yellow; the first and the third femora not thickened. 5th tarsal segment brown. Second tibia with ventral apical spur and 4 short thorns. Wings: the last part of *Cu* about 2.5–3 times longer than *tp*. Abdomen brownish with yellow apical band, yellowish and uniformly haired. The first 2–3 abdominal segments yellow; basal part of the 5th and the 6th grey, apical half yellow. Female terminalia with short basal and ventral plates bearing short thorns; cerci short too, almost cylindrical, short haired (Fig. 2/3–6).

Body length: 2.40–3.40 mm.

Material studied. Holotype: Mongolia, ♂, 17. VIII. 1969, Bajan-Khongor Aimak, 24–35 km E of Talyu-Bilgekh-Bulak, leg. M. Kozlov. Paratypes: Mongolia (42 specimens: 28 ♂♂ + 14 ♀♀): 5 ♂♂ – the same places and data with holotype; 1 ♂, pass in the Mountain Ongon-Ulan-Ula, 11. VIII. 1969, leg. Zaitzev; 1 ♀, Ekhin-gol, 11–14. VIII. 1969, leg. Zaitzev; 1 ♀, eastern coast of Lake Adgiin-Zagan-Nur, on *Tamarix*, leg. Kerzhner; South-Gobi Aimak: 22 ♂♂, 12 ♀♀, Bordzon-Gobi, 80 km SSE. of Nomgon, 5–8. VIII. 1967, meadow with *Phragmites* and *Nitraria*, leg. Zaitzev. Turkmenia (27 specimens – 11 ♂♂, 16 ♀♀): Molla-Kara near Dzhebel, 10 ♂♂, 13 ♀♀, 9. VI. 1934; 1 ♂, 3 ♀♀, 6. VI. 1934, leg. V. Popov.

Distribution. West Turkmenia and Southern Mongolia.

Taxonomic notes. Males: The cuneiform golden band on the gena in some specimens from Bajan-Gobi is not so clear. The first 3 abdominal segments brown, the 4th with $\frac{2}{3}$ apical part yellow; epandrium large with small number of thorns above the surstyli (Fig. 3/2). The females from Mongolia have a more setigerous epi- and hypoproct (Fig. 2/5,6). Body length: 2.17–2.40 mm.

Tethina multipilosa spec. nov. (Plate 4)

Diagnosis. Antennae yellow, acrostichals black in 4 complete rows, wings comparatively short, only twice longer than the thorax, tibiae yellow, surstyli densely setigerous.

Description. Male. Head (Fig. 4/1) high and short, 1.3 times higher than long, with yellow face and cheeks. Antennae yellow, including both scape and pedicel, only the first flagellomere around the arista light brownish. Arista brownish. Frons yellow, on the posterior half yellow-brown with grey dusted ocellar swelling, lightly narrowing forward with arched sides and silvery-grey orbital plate. Occiput dark grey with small, elliptic silvery spots. Chaetotaxy: the first pair of ocellar bristles strong, the second pair small, fine; postverticals small, convergent; 3 pairs of frontal bristles smaller than orbitals; 4–5 short orbital bristles, decreasing in length anteriorly; inner and outer vertical bristles strong, about twice longer than orbitals. The face in profile projecting before the middle of the first flagellomere; facial callus shining, well visible. Gena yellow, comparatively narrow, 1.2 times wider than third flagellomere, with a row of yellow sparse short peristomal hairs, two brown strong vibrissa like bristles; shining golden band wide tapering backward. Eyes 1.3 times higher than long and about 3 times higher than gena (Fig. 4/1). Proboscis and palpi yellow, labellum slender and elongated so long as the lower margin of the head. Palpi slender and long, reaching to two-third of the labella, sideways flattened and in profile with parallel sides.

Thorax silvery grey-yellowish dusted, black haired. Acrostichal hairs in 4 irregular rows: 5–6 pairs in two well outlined median rows and two irregular rows outside of the middle, with separate hairs. Four strong dorsocentral bristles and 2 intraalar rows with widely spaced hairs. Wings (Fig. 4/2) with lightly

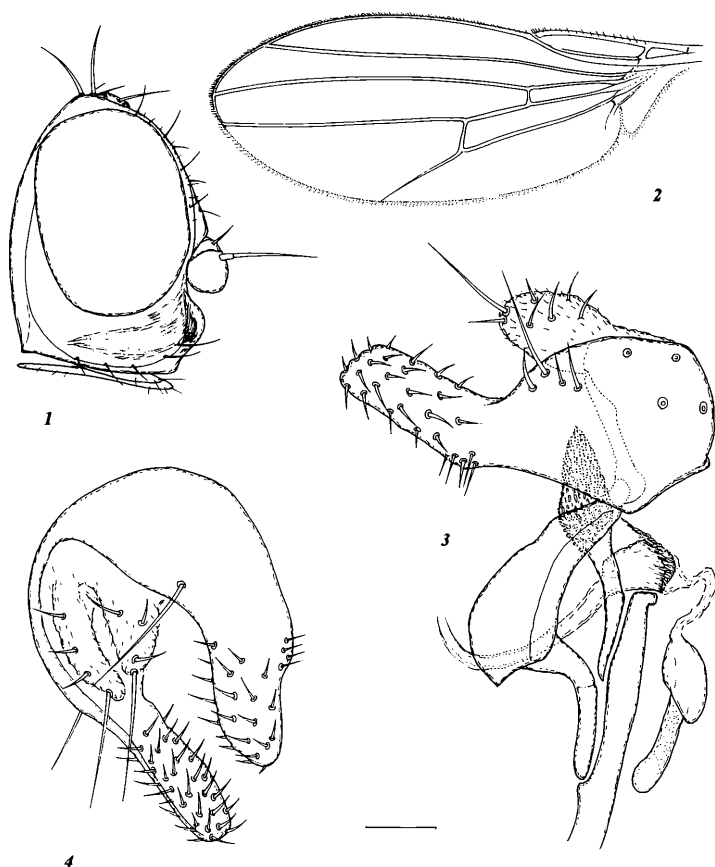


Plate 4: *Tethina multipilosa* spec. nov., male.

1 – head from right; 2 – wing; 3 – male genitalia from right; 4 – epandrium, view lateroapical.

yellowish membrane, and yellow veins. Costal vein in apical quarter with a little more well developed dark spines, longer than those of the basal part. $R2+3$ long, $R4+5$ and $M1+2$ lightly approximated apically; $R4+5$ ending at the top of the wing; $ta-tp$ two times longer than tp ; apical part of Cu 3 times longer than tp . Legs bicoloured: Coxa grey with yellow apex; two fore femorae black; two first tibiae and tarsi yellow; the last tarsal joint 1.5 times longer than the four other ones (in the investigated specimen third legs are missing).

Abdomen brown with yellow apical edge; the four first terga longer than the 5th. Male terminalia (Fig. 4/3,4): Front side of epandrium in profile with well formed anteroventral obtuse angles; a pair of very long bristles to each epandrium and cerci. Surstyli long with parallel sides, covering with comparatively long spines, particularly thick on the inner side (Fig. 4/4). Cerci with one very long and several shorter bristles. Hypandrium well sclerotized, in profile narrow, elongated (Fig. 4/3). Basi-phallus small, hairs of distiphallus comparatively short.

Body length: 2.25 mm.

Material studied. Holotype, ♂, 23.VIII.1967, Mongolia, Gobi-Altai-Aimak (Shargyn-Gobi, 10 km NE. and E. of Bajan), leg. Zaitzev, from soil ground.

Comparative diagnosis. The species is similar to *T. strobliana*, distinguishing well from the latter by the next peculiarities: 1) The protruding of the face passing the middle of the first flagellomere, by *T. strobliana* it only reaches to the middle (Fig. 5/1). 2) The wings are comparatively shorter than those

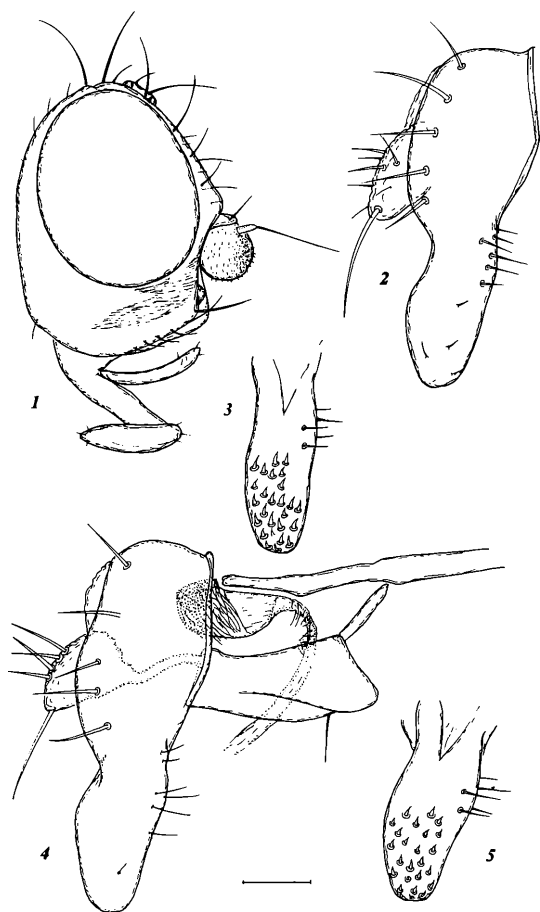


Plate 5: *Tethina strobliana* (MERCIER, 1923).

1 – head from right; 2–5 – variation of the male genitalia, view from right: 2,3 – specimens from Mongolia; 4,5 – specimens from Tadzikistan; 2 – epandrium from right; 4 – epandrium with parameres; 3,5 – left surstyli from inner side.

of *T. strobliana* which are more than 2 times longer than thorax. 3) The front side of epandrium is angular, by *T. strobliana* epandrium is more right (Fig. 5/2,4). 4) The thorns of surstyli are longer than those of *T. strobliana* (Fig. 4/4; Fig. 5/2–5).

Tethina strobliana (MERCIER, 1923) (Plate 5)

Material studied. 17 specimens (11 ♂♂, 6 ♀♀). Tadzikistan: 6 ♂♂, 2 ♀♀, Kurgan-Tjube, 29. III. 1944, leg. Stackelberg; Turkmenia: 1 ♂, 16. IV. 1951, Lake Yaskha, Uzboi, on *Tamarix*, leg. Steinberg; 1 ♀, Ashgabad, 25. V. 1934, leg. V. Popov; 1 ♂, 1 ♀, 4. IV. 1952, 20 km N. Kyzyl-Arvat, leg. Steinberg; Kazakhstan: 1 ♂, 4. VIII. 1928, River B. Almatinka near Alma-Ata, leg. Shnitnikov; Uzbekistan: 2 ♂♂, Buchara, Farab, 17. IV. 1913, leg. A. Holbeck; Ukraine (the Crimea): 1 ♀, Vladimirovka, 19. V. 1923, leg. Dobzhanski et Shepet; Russia: 1 ♀, Taganrog (on Azov Sea), 19. VIII. 1921, 1 ♀, 22. VII. 1921, leg. ? (illegible).

Distribution. The species is known from Europe only, from the Atlantic shore to Poland and the Black Sea coast. New region: Central Asia: Tadzikistan, Turkmenia, Kazakhstan, Uzbekistan. These

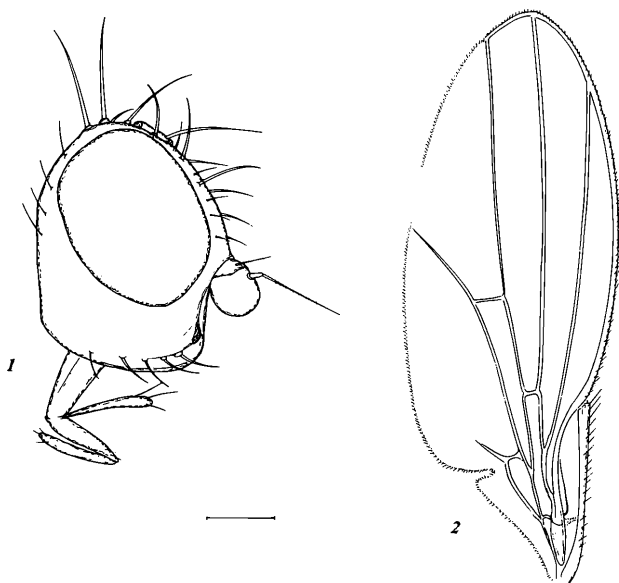


Plate 6: *Rhicnoessa thula* (SASAKAWA, 1986), male: 1 – head from right; 2 – wing.

regions enlarge the known distribution of the species considerably forward to East, outlining an European – Ancient Mediterranean range.

Taxonomic notes. The male from Kurgan-Tjube (29. III. 1944) has 4 acrostichal rows.

Genus *Rhicnoessa* LOEW, 1862

Rhicnoessa cinerea LOEW, 1862

Material studied. Ukraine: 2 ♀♀, 24. V 1926, Krivaja Balka near Odessa, leg. L. Zimin.

Distribution. The Mediterranean and Black Sea coast.

Rhicnoessa thula (SASAKAWA, 1986) **comb. nov.** (Plates 6, 7)

Tethina thula SASAKAWA, 1986, p. 436 (by original designation)

Material studied. Russia, Far East, Southern Sakhalin: Pravda, 12 km of Kholmsk (Rakuma, 12 km of Maoko), 1 ♀, 7. IX. 1946, 1 ♂, 4 ♀♀, 9. IX. 1946, leg. Strelkov; sea coast, wrack after storm.

Distribution. Japan: Hokkaido. New region: Russian Far East: South Sakhalin.

On the basis of specimens from Sakhalin we give below additional taxonomic remarks and drawings, making this description comparable with the West Palearctic species.

Diagnosis. Dark grey with yellow-brownish face, long black bristles and hairs, well developed ocellar and postocellar bristles, surstyli small, epandrium large, basiphallus pear-like.

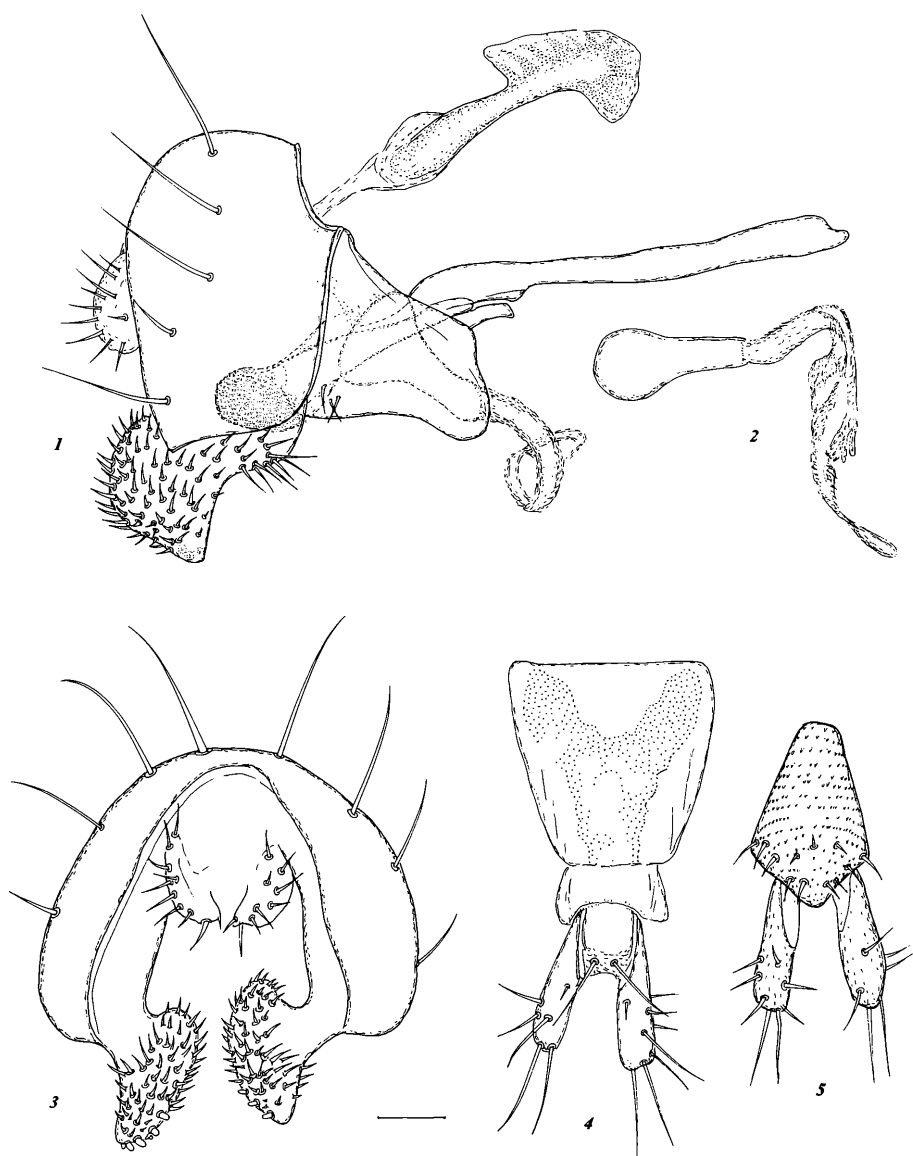


Plate 7: *Rhicnoessa thula* (SASAKAWA, 1986).

1-3 - male: 1 - genitalian complex from right; 2 - aedeagus separated from the complex; 3 - epandrium apically; 4,5 - female: 4 - 7th tergite with ovipositorial complex dorsally; 5 - subventral plate and cerci from below.

Scales Plates 1-7: 0.04 mm for the genitalia

Description. Head in profile 1.57 times higher than long, with long black hairs and bristles. Eyes rounded, oblique, two times higher than width of the gena. Face yellow-silvery, in profil slightly concave in the upper half and lightly roundly protruded in the lower part (Fig. 6/1). Gena comparatively wide, silvery yellow, without fat shining band, about 1.5 times wider than the height of the first flagellomere. Proboscis short, brown with yellow labellum and elongated palpi. Occiput dark brown with 2 small pear-like silvery spots. Chaetotaxy: 2 orbital bristles long and laterocline, 2 pairs ocellar bristles equal in length to the orbitals; 2 post-vertical convergent bristles, wide situated, close to inner

vertical ones, the distance between post-verticals and inner verticals is equal to the distance between inner and outer verticals; 3 pairs of long frontal convergent to cruciated bristles.

Thorax black, densely grey-brown dusted from above and from the side with black bristles and hairs. Chaetotaxy: black, long and strong; acrostichal hairs in 4 sparse rows. Legs predominantly brown, femora and tibiae brown, tarsi yellow-brownish, the last two joints black-brown. Wings yellow-hyaline with yellow veins and thick black pilosity along the costal vein: the first costal part with sparse hairs in length equal to the width of the costa; the next two parts of the costa with short pilosity, shorter than the width of the costal vein; $R2+3$ and $R4+5$ light approximated apically; $ta-tp$ approximately equal to the apical part of Cu and 2.5 times longer than tp . Halteres yellow-brown.

Abdomen brown-grey dusted with mat reflection; the front four terga 2 times longer than the 5th; apical edge of the terga yellow, bear. Chaetotaxy: black rear praeapical bristles long. Male genitalia: Epandrium large, brown-grey, shorter than the 5th terga, with small surstyli and cerci, and four long bristles on each side (Fig. 7/1,2); surstyli with thick and short thorns on both sides; on the inner-ventral part with cylindrical short growth. Aedeagus with pear-like basiphallus, without well visible epiphallus; ejaculatory apodeme large; distiphallus comparatively short, membranous as in congeners. Aedeagal apodema comparatively short. Cerci membranous, with comparatively short bristles.

Body length: 2.1 mm.

Female like the male. The first flagellomere on the dorsal half and on the apical part dark-brown. The second pair of the ocellar bristles about $\frac{1}{2}-\frac{2}{3}$ of the length of the first, but 2 times longer than post-vertical hairs; 3 long orbital and 2–3 intrafrontal bristles. Eyes 2.3 times higher than width of the gena. Praescutellar acrostichal bristles as long as dorsocentral ones. Femorae not thickened. Acrostichal and intraalar hairs more regular and thick. Abdomen dark brown with yellow apical bear band. Terga 4 and 5 equal in length. The 8th segment with Y-shaped sclerotized terga. Cerci longer than hypoproct (Fig. 7/3,4).

Body length: 1.7–2.2 mm.

Taxonomic notes. SASAKAWA (1986) gives a short description of *Rh. thula* comparing it with close related species *Rh. saigusai* (SASAKAWA, 1986), comb. nov. Both species seem to belong to genus *Rhinoessa* having small surstyli, large epandrium, elongated basiphallus and 2 pairs of ocellar bristles (except postvertical ones) (BESCHOVSKI, 1993).

Rh. thula is well distinguishable from the Mediterranean representative of the genus: *Rh. cinerea* LOEW, having all bristles and hairs black, a narrower gena, and pear-like basiphallus. Thus, the Palaearctic genus *Rhinoessa* forms two disjunct distributed species groups: *Rh. saigusai* and *Rh. thula* in the Far East, and *Rh. grisea* (FALLÉN, 1823) and *Rh. cinerea* LOEW, 1862¹⁾ in the European-Atlantic coast and the Mediterranean region.

Conclusion

Totally, 8 species are established in the Tethinidae collection of the Zoological Institute in St. Petersburg, collected from different regions of East Europe and Asia. Three of the species are new for science, and for the other five ones new localities are given. So, 17 tethinid species are established for East Europe and Asiatic part of the Palaearctic region. Two geographically isolated groups are established in the limits of the genus *Rhinoessa* – in the Far East and in the Atlantic-Mediterranean area of the Palaearctic region.

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¹⁾ MUNARI (1996, p. 2) considers this taxon as a junior synonym of *Rh. grisea* (FALLÉN, 1823).

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