

Contribution to the knowledge of the genus *Thricops* RONDANI 1886 (Diptera: Muscidae) in Romania with description of a new species (I)

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Rezumat

Contribuții la cunoașterea genului *Thricops* RONDANI 1856 (Diptera: Muscidae) în România cu descrierea unei noi specii (I)

În lucrare se prezintă date faunistice asupra unui număr de 14 specii ale genului *Thricops* RONDANI 1856. Dintre acestea, un număr de două (*Thricops beckeri* POKORNY 1893; *T. sudeticus* SCHNABL 1888) sdunt semnalate ca noi pentru fauna României, iar *T. gregori*, ca specie nouă pentru știință.

Key words: *Thricops*, new species, faunistic data.

The genus *Thricops* RD. comprises 30 species (PONT 1986; GREGOR 1988). These are woodland, montane and alpine species, with humicolous larvae. Some faunistic records of this genus for Romania are given by STROBL (1897), TALHAMMER (1899), SUSTER (1930, 1942, 1948), ACZÉL (1938), HENNIG (1962), MIHALYI (1975), PONT (1986).

Material and method

I have been stimulated the study the genus *Thricops* in Romanian Carpathians by dr. Frantisek GREGOR (Brno). The material has been collected by sweeping and by window-traps, chrefly in Eastern and South-Western Carpathians (Retezat massif and Cerna Valley) and in southern Romania, in plain forests (Snagov and Cornetu). In this material (386 ex, 14 species) I found two species which hitherto have not been recorded on the territory of Romania, and a new species - *Thricops gregorii*.

Abbreviations. For the collecting in the principal localities and sites the following abbreviations are used (the counties and mountain massifs are mentioned between parantheses):

Căl. - Călimani (Mts, 1500-1800m, Suceava); C.M. - Câmpulung Moldovenesc (Suceava) and surroudings: CM-D = Deia (700-800m); CM-DR = Dosul Runcului (1000-1100m); CM-Mest. = pârâu (Mesteacăn, 800-1000m); CM-Sd = Sandru (700-800m); CM-VC = Valea Caselor (600m); Ret. - retezat (Mts, 1500-1650m, Hunedoara); V.P. - Valea Putnei (900-1000m, Suceava).

The other localities are given in whole transcription.

Results and discussion

In the following adnotated list of the species, the taxa new to Romania are marked with *.

Thricops aculeipes (ZETTERSTEDT 1838). Some ex. of this species, collected by A.P. MONTANDON in Sinaia are in collections of British Museum (A.PONT - pers. comm.). This is a boreo-montane species and occurs in northern Europe, in the Alps up to 2800m and in Carpathians (GREGOR & ROZKOSNY 1985).

Thricops beckeri (POKORNY 1893). (Fig. 5-8, 10-12, 15-16, 19-20).

Căl. (1700-1850m), 28-31.VIII.1976 - 2 ♀♀; 28.VII.1978 - 1♂, 1♀; 16.VII.1979 - 7♂♂, 3♀♀; 30.VII.1979 - 1♀; 15-20.VII.1981 - 2♀♀; 31.VII.1983 - 1♂; Ret.-Pietrele, 1600m, 14.VI.1979 - 1♀.

A subalpine species recorded from Alps and Carpathians. In Romania Carpathians collected from May 14 to August 31. Material studied: 10♂♂, 9♀♀.

Thricops cunctans (MEIGEN 1826). (Fig. 23).

Previous records: Zărnești (Brașov), Cârlibaba, Iacobeni (Suceava) (HENNIG 1962) (as *hirsutula* ZETT.).

New records: V.P., 17.VII.1974 (spruce crown); Căl. (1550-1850m), 28.VIII.1976 - 1♀; 31.VIII.1977 - 1♀; 16.VII.1979 - 2♀♀; 13-15.VII.1981 (*Vaccinium*, *Veratrum*) - 7♂♂, 7♀♀; Dornișoara (Suceava), 24.VII.1982 - 2♂♂; C.M.-Sd., 18.VII.1982 (meadow) - 5♂♂; 6.VI.1986 - 1♂; Moldovița (Suceava) (bogs), 31.V.1983 - 2♂♂, 2♀♀; Mestecăniș, 1000m (Suceava), 1.VII.1983 - 2♀♀; Vaduri (Neamț)(forest

edge), 11.VII.1985 - 1♀; Ret. (1600-1650m), 14.VI.1979 - 9♂♂, 29♀♀; 10-27.VII.1985 - 2♂♂, 5♀♀.

Common, known from Europe, Caucasus, Siberia to Far East and Japan.

In Romanian Carpathians collected from May 31 to August 31. Material studied: 30♂♂, 58♀♀.

Thricops diaphanus (WIEDEMANN 1817). (Fig. 24).

Previous records: PONT (1986).

New records: CM-DR, 24.VIII.1976 - 1♀; CM.D, 25.VIII.1976 - 1♂, 1♀; 8.X.1983 - 1♀; Vaduri (Neamt), 11.VII.1985 - 1♂.

A rather common Holarctic species; in central Europe extending mainly in mountains.

In Romanian Carpathians collected from July 11 to October 8. Material studied: 2♂♂, 3♀♀.

Thricops genarum (ZETTERSTEDT 1838).

Previous records: THALHAMMER (1899) [as *sundewalli* (ZETTERSTEDT 1845)].

New records: Căl. (1550-1800m), 31.VIII.1976 - 2♂♂; 21.VIII-6.IX.1977 - 1♂, 8♀♀; 28.VII.1978 - 1♂; 16.VII.1979 - 3♂♂, 3♀♀; 4.IX.1980 - 1♀; 15-23.VII.1981 - 3♂♂, 2♀♀; 21.VIII.1981 - 4♂♂, 2♀♀. Ret - Pietrele (1600-1650m), 14.VI.1979 - 2♂♂, 1♀; 10.VII.1985 - 3♂♂; 3.VIII.1985 - 2♂♂, 1♀; 17-31.VIII.1985 - 1♂, 3♀♀.

Boreoalpine species distributed in north and central Europe to East Siberia.

Collected in Romanian Carpathians from June 14 to September 6.

Material studied: 24♂♂, 26♀♀.

Thricops gregori n. sp. (Fig. 1-4, 9, 13-14, 17-18, 21).

Male holotype.

Head. Ground colour black. Eyes bare. Frons large 1/4 head width at narrowest point. Parafacialia, face and genae grey pruinose, parafrontalia, the whole hind surface of head and mentum of proboscis not grey dusted, ocellar triangle black very fine grey dusted. Interfrontalia black, when viewed obliquely slightly greyish 4 inclinate *ori* on lower two-thirds of frons, 3 pairs of long *ors* - 1 proclinate, 2 reclinate. Antennal segments black, 3rd segment 2.2 times as long as broad, arista pubescent, the longest hairs slightly longer than its basal width, parafrontalia about 1/5 of width of interfrontalia. Parafacialia at middle 1/2 as broad as 3rd antennal segment. Genae 1.3 width of 3rd antennal segment. Peristomae setae long, 1/2-1/3 as long as the vibrissae. Upper occipital setae multiserial. Palpi blackish not dilated. Frontal triangle subshining reaching slightly on level of upper *ors*.

Thorax. Ground colour black, thinly, brown-grey dusted. In dorsal hind view a black central stripe is distinctly in front of sutura, bordered with silverish bands. Reflexive patterns from irregularly delimited longitudinal stripes interrupted on sutura and notopleuron, thinly greyish dusted; scutellum thinly dusted. *dc* 2+3, 1 *pra* longer as 2nd *npl*, *stpl* 1+2, the front and the lower ones weaker, prosternum and hypopleura bare. *Acr* irregularly biserial. Prescutellar *acr* irregular, only as prolonged microsetae. Other mesonotal *mi* very sparse, with their length corresponding to that 3rd antennal segment. Scutellum long setulose, lateral margins and ventral surface bare.

Legs-black, very sparse brownish-grey dusted, *f*₁ with a row of 14-15 *pd* and 14-16 *pv*; the posterior surface of femur with irregular rows of elongate and erect *mi*, *t*₁ with 1 long submedian *pv*; *f*₂ with 12-13 short *ad*, whole front surface with erect *mi*, with one stout preapical *pd*; *t*₂ with 1 strong *ad* and 1 *pv* at 2/3 of tibia, 1 *pv* on 1/3 of tibia 2; *f*₃ with a row of about 14-16 *ad*, a row of long 8-9 *av*, 1 preapical *pd* and above it, a row of 2 setae in *pd* and dorsal position, a row of 16 *pv* setae, the first 10 basal setae weaker; *t*₃ with 4 *ad*, *av* surface with a row of 6-7 uneven long setae; calcar as long as 1/4 of the tibia length and situated at 3/4 of tibia; tarsomere 5 distinctly longer than 4 on all legs, all pulvilli meanly as long as 1/2 of tarsomere 5.

Wings - weakly smoky, not darker near base; veins blackish-brown; vein *r*₄₊₅ strongly sinuate. Costal spines developed, regularly disposed distal of costal spine; *ad* longer as *av*. Costal spine nearly 1/2 of length of *ta*. Halteres pale; squamae yellowish white, lower squama somewhat longer than upper one so that in dorsal view its margin is well visible.

Abdomen. Ground colour black. In posterior view grey dusted with irregularly demarcated patterns. Setulae strong and erect; tergites 2-5 with complete rows of marginal setae, those on segment 4 as long as the length of that segment, dorsal setae on each segment, those of segment 5, stronger. Sternite 5 and hypopygium moderately prominent.

Measurements. Length of body - 4.2mm; length of wing - 4mm. Width of head - 1.05mm; length of head 0.80mm, height - 0.95mm; costal spine - 0.15mm; frons at narrowest part - 0.20mm.

Female. Differs from the male as follows: head more spherical, dusting more dense silvery-grey. Frons about 1/2.4 of head width, parafrontalia as broad as 1/3.5 of width of frontal vitta, parafacialia 1/2 of 3rd antennae segment. Thorax with denser greyish dusting, the pattern more distinct. Thoracic setulae *mi* shorter. Legs with setulae shorter and decumbent; *f*₁ - 7-8 *pv*, 6-7 *pd* the longest *pv* longer than thickness of *f*₁; setulae on hind surface semierect; *f*₂ - 10-11 *av*, *t*₂ -

1 ad, 2 pd, 1 pv, 1 ventral; f_3 - pv absent; t_3 - 2 ad, 2 pd, pv absent. Wings with basal nervature pale yellow-brown. Abdomen uniformly greyish dusted, without the dark median stripe.

Type material. **Holotype:** ♂ Romania, East Carpathians, Calimani Mts, 1600m, 17.VIII.1988 (Natural History Museum "Gr. Antipa", Bucharest.).

Paratype: Călimani, 1550-1800m; 1♂, 1♀ (6.IX.1977), 1♂ (28.VII.1978), 1♂, 1♀ (20.VII.1981), 2♂♂ (21.VIII.1981)(all in coll. CEIANU), 1♂, 1♀ (16.VII.1979)(coll. F.GREGOR, Brno).

Thricops hirtulus (ZETTERSTEDT 1838).

Previous records: STROBL (1897), THALHAMMER (1899) [as *subrostrata* (ZETTERSTEDT 1845)].

The species is widely distributed and many also be collected in lowlands (GREGOR & ROZDOSNY 1985). In Europe it is known from north Scandinavia to Pyrenees and Romania.

Thricops lividiventris (ZETTERSTEDT 1845)

Previous records: PONT (1986 with ?).

New records: Căl. (1650m) in crown in *Pinus cembra*, 13.IX.1977 (1♀).

Boreomontane species, Holarctic in distribution; in Europe it is known from northern to central regions. Collected only in September. Material studied: 1♀.

Thricops longipes (ZETTERSTEDT 1845)

Previous records: ACZÉL (1938), SUSTER (1948), HENNIG (1962).

New records: V.P. (900m), 26.VI.1974 - 1♀; 17.VI.1977 - 2♀♀; 30.V.1981 - 2♂♂; 23.V.1983 - 2♂♂; 11.VI.1984 - 18♂♂; 28.V.1985 - 10♂♂; 4.VI.1987 - 4♂♂. V.P. (1000m), 2.VII.1976 - 1♂. Rarău (Mts, Suceava), 13.VII.1976 - 4♂♂. Căl. (1700m), 16.VII.1979 - 3♂♂, 3♀♀. CM, 3.VII.1981 - 1♂. CM-Sd., 24.VII.1982 - 1♂; 4.VIII.1982 - 1♀; 6.VI.1986 - 3♂♂. CM-V.C., 29.V.1983 - 1♂; 4.VI.1984 - 1♂; 13.VI.1987 - 3♂♂; 1.VI.1988 - 1♂. Dormișoara (Suceava), 24.VII.1982 - 1♂. Putna-Vetău (Suceava), 23.V.1985 - 1♀; Ilișești (Suceava), 6.VI.1988 - 2♂♂.

Forest and montane species, with eurosiberian distribution.

Collected in Romanian Carpathians from May 23 to August 4.

Material studied: 56♂♂, 10♀♀.

Thricops nigrifons (ROBINEAU-DESVOIDY 1830).

Previous records: ACZÉL (1938), PONT (1986).

New records: CM-Sd., 14.VII.1962 - 1♀; 18.VII.1982 - 1♂; 13.VII.1988 - 2♂♂; CM-D. (bogs), 14.VIII.1974 - 1♂. CM-V.C., 27.VII.1976 - 1♂;

12.VII.1981 - 1♂; 27.V.1985 - 3♂♂; 13.VI.1986 - 1♂; 1.VI.1988 - 2♂♂; 8-13.VI.1988 - 4♂♂. CM-pr. Morii, 3.VII.1981 - 3♂♂. V.P. (spruce krown), 17.VII.1974 - 1♀; 28.V.1985 - 1♂. Ilișești (Suceava), 6.VI.1988 - 1♂. Dragoșă (Suceava), 13.VII.1979 - 1♂.

The species is wide distributed in temperate and northern Europe, eastwards to Turkey, Iran, theUrals and West Siberia.

Collected in Romania from May 27 to August 14.

Material studied: 31♂♂, 2♀♀.

Thricops nigrifellus (ZETTERSTEDT 1838).

Previous records: (HENNIG 1962), PONT (1986).

New records: Căl. (1500-1900m), 26.VII.1975 - 1♂; 15-31.VIII.1976 (marghes and meadows) - 2♂♂, 10♀♀; 11.VIII.1977 (*Rumex alpinum*) - 1♂; 28.VII.1978 - 3♂♂; 16.VII.1979 - 20♂♂, 15♀♀; 13-23.VII.1981 (*Vaccinium*, *Rumex*) - 3♂♂, 12♀♀; 6.VIII.1981 - 1♂, 1♀; 21.VII.1983 - 5♂♂; 17.VIII.1988 - 3♂♂, 6♀♀. Rarău (Mts, 1550m), 4.VIII.1978 - 2♂♂. Vama-Păușă (Suceava), 13.VII.1979 - 1♀. Ret. (1550-1650m), 20-27.VII.1985 - 3♀♀; 3.VIII.1985 - 1♀; 24.VIII.1985 - 1♀.

A boreomontane species in Europe, extending eastwards to Turkey, the Urals and Western Siberia.

Collected in Romanian Carpathians from July 13 to August 31.

Material studied: 40♂♂, 50♀♀.

Thricops semicinereus (WIEDEMANN 1817).

Previous records: (SUSTER 1942, 1945), PONT (1986).

New records: C.M.-Bodea (forest, 800m), 5.VII.1976 - 1♀. C.M.-Mest. (900m), 24.VII.1981 - 1♀. C.M.-D., 26.V.1983 - 1♂, 1♀. C.M.-Sd., 18.VII.1982 - 5♂♂. Dragoșă (Suceava), 13.VII.1979 - 1♀. Solca (Suceava), 10.VII.1979 - 1♀. V.P.-pt. Morii, 2.VII.1981 - 1♀. Marginea, Codrul Voivodesei (Suceava), 27.VI.1984 - 1♀. Ret. (1600m), 14.VI.1979 - 1♀.

Common species in the temperate forest zone of Europe, eastwards to Turkey, Western Siberia and Mongolia.

Collected in Romanian Carpathians from May 26 to July 24.

Material studied: 6♂♂, 8♀♀.

Thricops simplex (WIEDEMANN 1817). (Fig. 22).

Previous records: PONT (1986).

New record: B.Herculane (Valea Jelărău), 7.VIII.1976 - 1♂.

Thricops sudeticus (SCHNABL 1888).

Căl. (1700-1800m), 21.VIII.1977 - 1♀; 28.VII.1978 - 1♀; 20-23.VII.1981 - 2♀♀; 17.VIII.1988 - 1♂.

Species occurring mainly in northern Europe and the mountain area of central Europe.

Collected in Călimani mounts from July 20 to August 21.

Material studied: 1♂, 4♀♀.

Thricops gregori, *T. furcatus* and *T. tatricus* belong to the species group with long surstyli and t_2 with **pd**, corresponded to the former genus *Alloeostylus* SCHNABL 1888. The genus *Thricops* s.l. comprises besides *T. gregori*, three other high mountain species with broad-fronted males - *T. tatricus* closely related to *T. gregori*, *T. beckeri* (formerly *Syllegopterula* POKORNY 1893) and *T. villosus* (HENDEL 1903) (formerly *Rhynchopsilops* HENDEL 1903) that are not closely related to *T. gregori*.

The Fig. 1-21 showed differences between two species with dichoptic males - *T. gregori* and *T. beckeri*.

The male dichoptisme characterized many mountane and alpine species of Muscidae and Callophoridae. This character is one of the complex habitual characters forming a "high mountain morphotype" of many alpine Muscoidea (GREGOR 1988).

Other species that possibly occurs in Romanian Carpathians are *T. culminum* (POKORNY 1889), *T. furcatus* (STEIN 1916), *T. innocuus* (ZETTERSTEDT 18138), *T. rostratus* (MEADE 1882).

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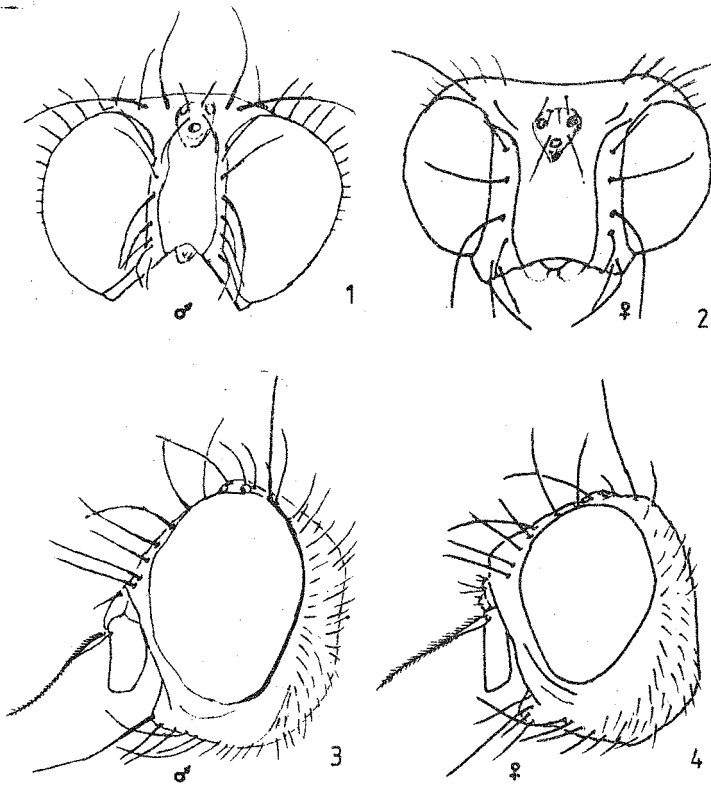


Fig. 1-4. Head frontally and laterally of *Thricops gregori* sp. n. Male holotype (Fig. 1, 3). Female paratype (Fig. 2, 4) (Orig.).

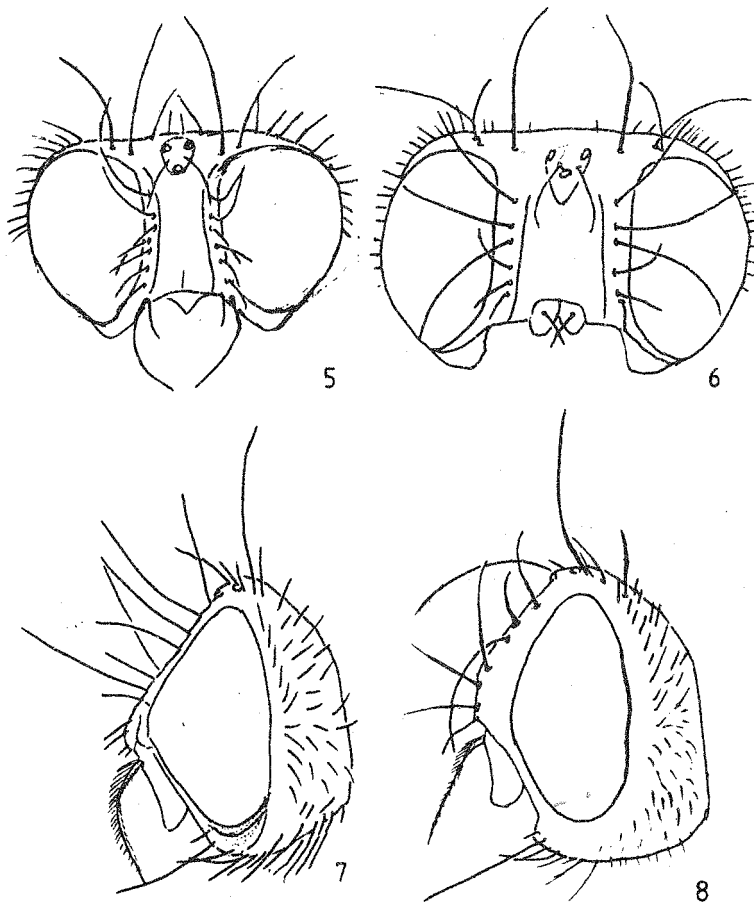


Fig. 5-8. Head frontally and laterally of *Thricops beckeri* (POKORNÝ 1893). Male (Fig. 5, 7). Female (Fig. 6, 8) (Orig.).

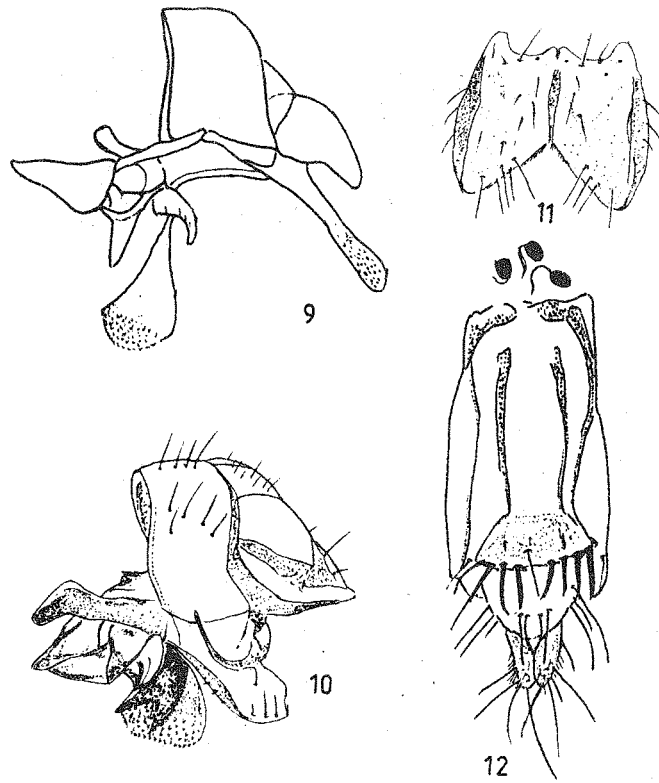


Fig. 9-12. Male genitalia laterally: Fig. 9 - *T. gregori* holotype, Fig. 10 - *T. beckeri*, Fig. 11 - *T. beckeri*, sternite V, Fig. 12 - *T. beckeri*, ovipositor (Orig.).

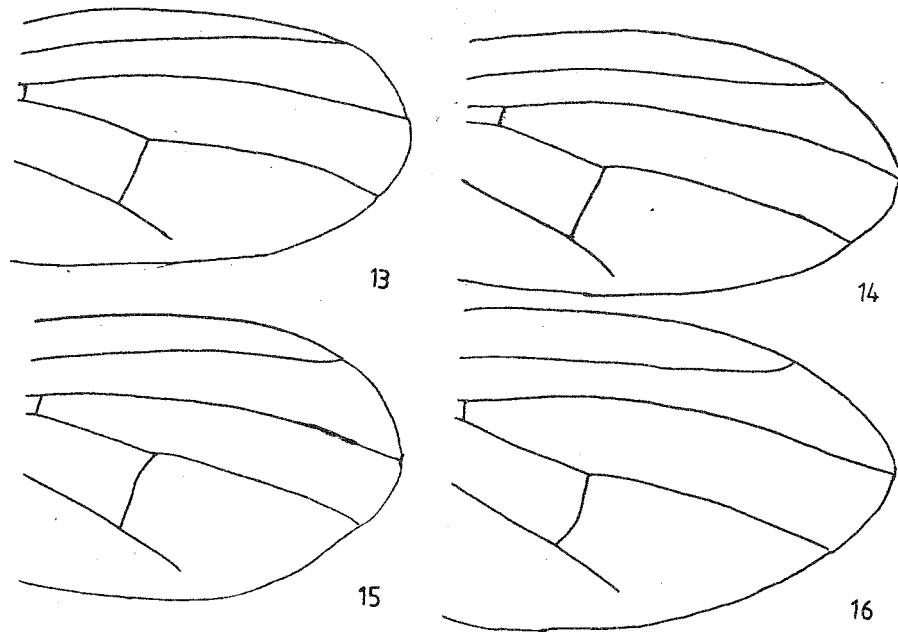


Fig. 13-16. Apical wing part of *T. gregori* (fig. 13 - male; fig. 14 - female) and *T. beckeri* (fig. 15 - male; fig. 16 - female) (Orig.).

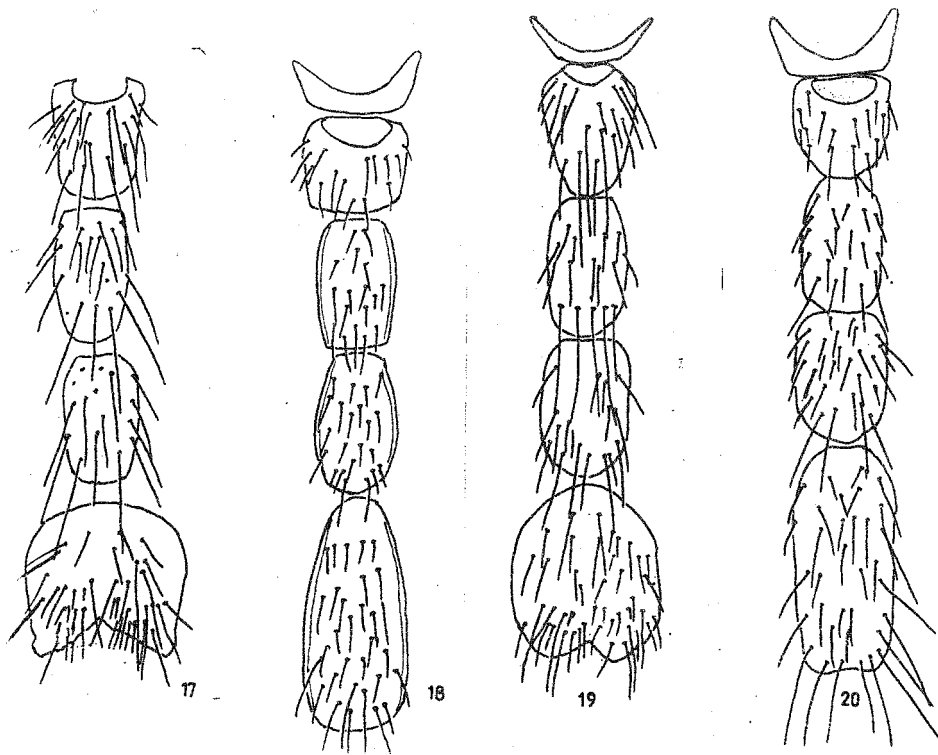


Fig. 17-20. Abdominal sternites of *T. gregori* (Fig. 17 - male; Fig. 18 - female); Abdominal sternites of *T. beckeri* (Fig. 19 - male; Fig. 20 - female) (Orig.).

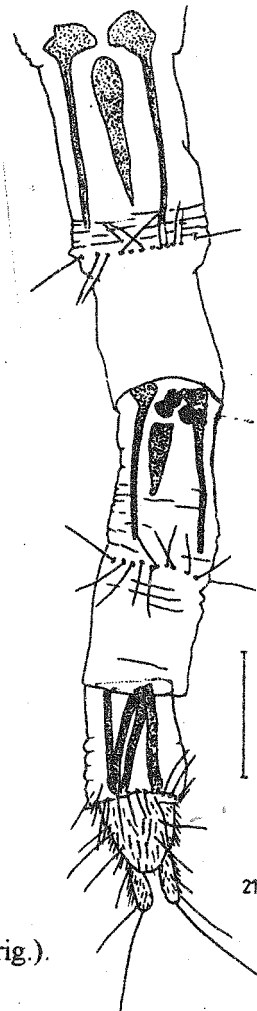


Fig. 21. *T. gregori* ovipositor (female paratype) (Orig.).

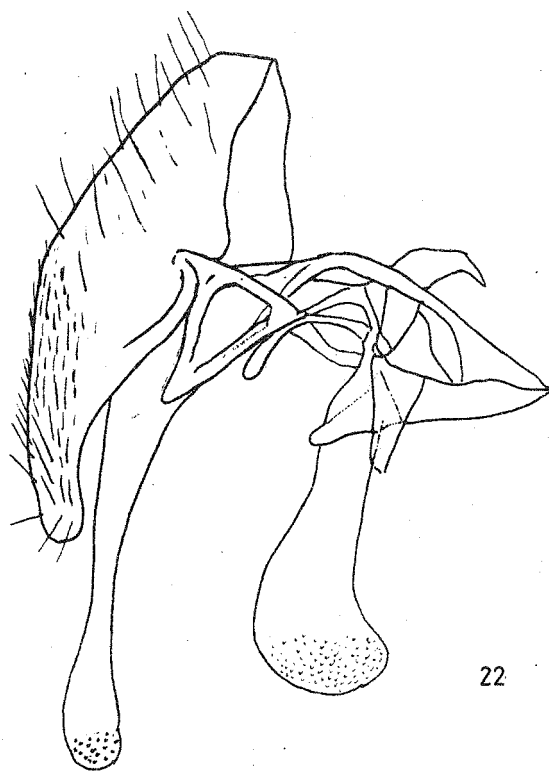


Fig. 22. *T. simplex* - male genitalia (laterally) (Orig.).

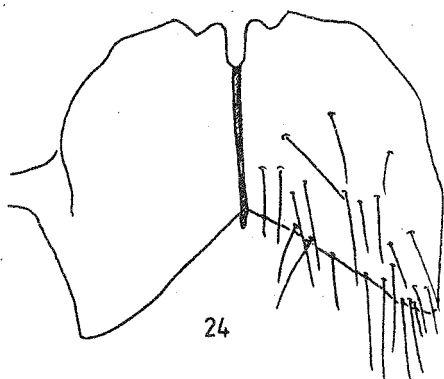
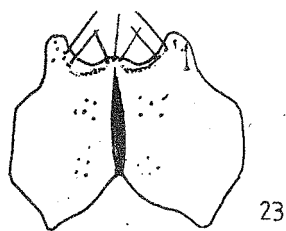


Fig. 23 - 24. *T. cunctans* - sternite V. (fig. 23); *T. diaphanus* - sternite V. (fig. 24) (Orig.).