

New and notable European *Trichopria* Ashmead, 1893 (Hym., Proctotrupeoidea, Diapriidae)

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Following recent research on the R. W. T. Schlick Collections of the Zoologisk Museum, Copenhagen, the G. F. Møller Collection of Gøteborg Museum and on material from a recent entomological survey in Germany, *Trichopria atrata* is described here as new to science and *Trichopria rubrithoraca* Szabó, 1960, is redescribed and recorded from Denmark for the first time.

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Trichopria atrata sp. n.

(Figs 1-7)

Trichopria sp. indet. 3. Notton, 1992: 65. In Greil-er *et al.*

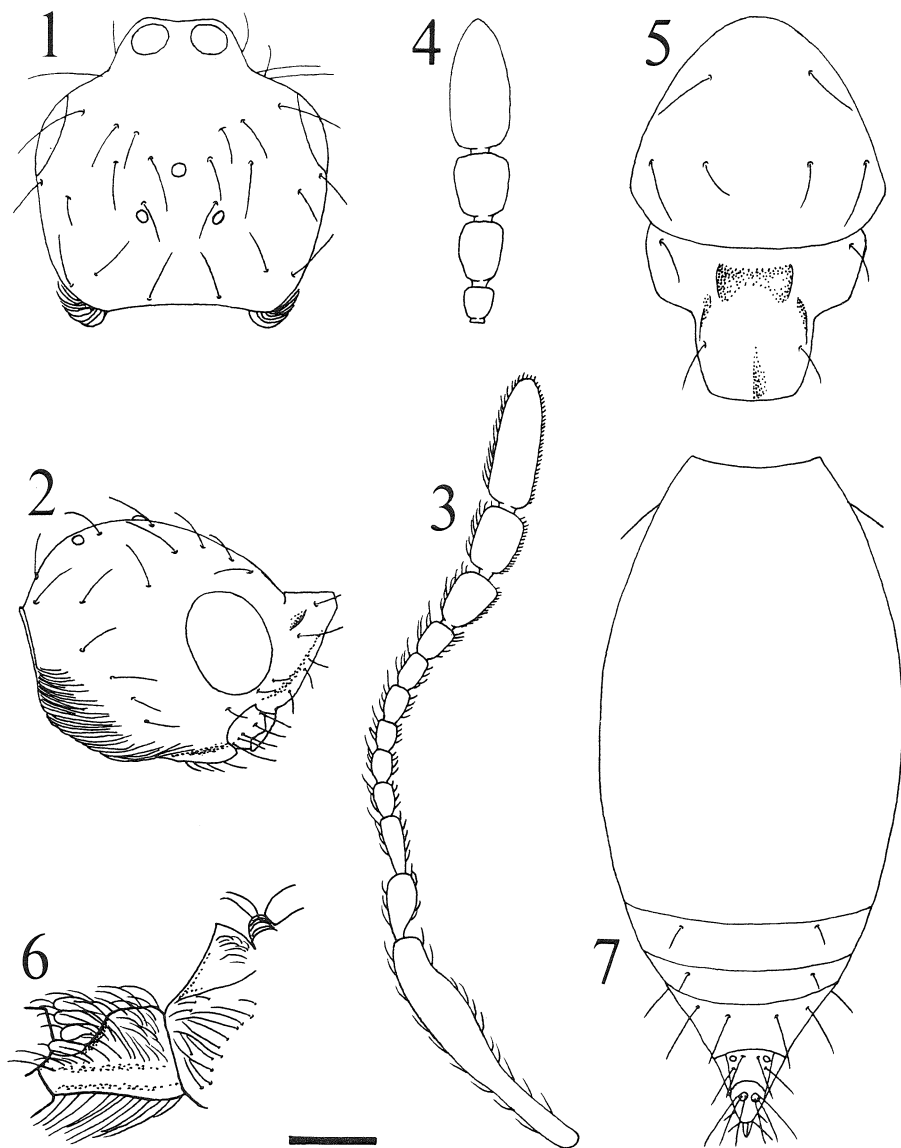
Female. Head dorsoventrally compressed, about as long as wide seen from above (fig. 1), 1.3 times as long as wide seen from the side (fig. 2), smooth and shiny with long scattered hairs, about as wide as the mesosoma; two pairs of medio-frontal bristles, similar to those of *Trichopria miron* (Nixon, 1980); genal pubescence moderately developed; eye moderately large, rounded, oval, separated from occipital margin by about 1.6 times its width; malar space narrow, about 0.25 times eye width. Antenna (figs 3 & 4), with scape distinctive, in profile, base very slender, expanded in apical half, with a slight constriction sub-apically, about as long as the next six joints; pedicel about 2.3-2.5 times as long as wide; third antennal joint about 1.3-1.5 times as long as wide; ninth antennal joint slightly wider than the eighth; tenth to twelfth thickened, forming a distinct three-jointed club, which is unusual in that it is wider when seen dorsally than laterally; tenth antennal joint 1.4 times, eleventh 1.4 times and twelfth 2.5 times as long as wide seen from the side (fig. 3); tenth 1.2 times, eleventh 1.0 times and twelfth 2.2 times as long as wide seen from above (fig. 4); antennal pubescence generally very short and adpressed, not more than about half as long as the joint width.

Pronotum with a thick collar of pubescence; mesoscutum (fig. 5) smooth and shining, with three pairs of bristles; scutellum with a shallow transverse pit, its disc quite convex, weakly keeled in hind third; propodeal keel raised anteriorly, forming a right-angled tooth (fig. 6); dorsal propodeal areas mostly bare; side of pronotum and mesopleuron smooth and shining; metapleuron covered in adpressed, regularly arranged hairs. Wing normally developed, extending well past the apex of the gaster; setation of subcostalis similar to that of *Trichopria cameroni* (Kieffer, 1909) with six closely spaced setae in apical two-thirds.

Petiole coarsely striate, strongly humped anteriorly (fig. 6), similar in shape to that of *T. miron*, covered with hairs over most of its length and with a few large hyaline scales apically; gaster narrow, tapered to a long point, slightly greater in length than the mesosoma and petiole combined; second tergite taking up about front 0.7 of gaster (fig. 7).

Colour. Body black, tegula and base of gaster blackish brown; antenna blackish brown with base of first antennal joint yellowish and second to ninth antennal joint brown; legs brown with coxae and clubs of femora and tibiae darker and tarsi yellow; wing with subcostalis pale yellow, marginalis brown and membrane hyaline; pubescence of gena, pronotum, metapleuron and petiole whitish.

Length 1.7-2.1 mm (holotype 1.9 mm).



Figs 1-7. *Trichopria atrata* sp. n., ♀. - 1, head, dorsal view; 2, head, lateral view; 3, antenna; lateral view; 4, apex of antenna, dorsal view (setae omitted); 5, mesoscutum and scutellum, dorsal view; 6, propodeum and petiole, lateral view; 7, gaster, dorsal view (scale bar: 0.1 mm).

Male. Unknown.

HOLOTYPE ♀, [Denmark], 6/12 [18]93, Vf [Vesterfæled, Copenhagen], Coll. R. W. Schlick. Carded on its venter, with host puparium on same mount. In Zoologisk Museum, Copenhagen. **Paratypes** (3 ♀): ♀, [Denmark], Vf [Vesterfæled, Copenhagen], 1/12 [18]93 (R. W. T. Schlick) (Zoologisk Museum, Copenhagen); ♀,

[Sweden], Wlp [Wallerup, ?Skåne], 9/[18]68 [C. G. Thomson] (G. F. Möller collection, Göteborg Museum); ♀, Germany, Kraichgau region, north-east of Karlsruhe, suction trap, 3-year-old mown fallow, 26.vi.1991 (H.-J. Greiler) (Author's collection). **Non-type material:** ♀, [Sweden], Wir [Virestad, Skåne], 8/[18]68 [C. G. Thomson] (G. F. Möller collection, Göteborg Museum).

Biology. Each of the Danish specimens was carded with its host puparium on the card mount, showing that this species is a solitary endoparasite of small Dipteran puparia, probably Sphaeroceridae. Dates of capture included June, August and September (it is not clear whether the December dates of the Danish specimens are collection or emergence dates).

Distribution. From the few records presented here, this species has occurred locally in Denmark, Germany and Sweden.

Comments. This species does not key in Kieffer (1916), but can be distinguished from other European species of the genus by its combination of strongly elongate three-jointed club, dorsoventrally flattened head, and scutellar pit. *T. miron* has a similar head profile but lacks an elongate club and has no scutellar pit. Perhaps the species in the region with the most similar antennal club is *Trichopria melanopa* (Kieffer, 1911) but this has an almost round head profile and two pairs of mesoscutal bristles.

The name is derived from the Latin adjective *atratus*, meaning clothed in black.

Trichopria rubrithoraca Szabó, 1960

(Figs 8-13)

Redescription of female. Head strongly laterally compressed, widest at eyes, a little wider than mesosoma, 1.3-1.5 times as long as wide seen from above (fig. 8), slightly longer than high seen from the side (fig. 9), smooth and shiny with long scattered hairs; occipital pubescence weak, hardly visible dorsally; eye small, rounded, oval; distance between occipital margin and eye slightly more than twice the width of the eye; malar space about 0.7 times width of eye; ocelli smooth, hardly visible, arranged in a triangle which varies from almost equilateral to having the sides clearly longer than the base. Antenna (figs 10 & 11) with first to ninth joints bearing scattered, sparse, semidecumbent hairs about as long as joint width; scape as long as next five joints together, expanded in apical 0.7, slightly curved; pedicel twice as long as wide; third joint 1.5-1.7 times as long as wide, narrower than pedicel; fourth to eighth joints as wide as the third, 1.3-1.5 times as long as wide, ninth joint slightly wider than the eighth; tenth to twelfth joints strongly thickened, forming a club with the tenth tapered, elongate, the eleventh almost quadrate and the twelfth elongate conical.

Mesosoma (fig. 12). Pronotum with thick col-

lar of hair; mesoscutum smooth and shiny, with three pairs of bristles (sometimes missing but punctures show where they have been); scutellum with a shallow transverse pit, disc slightly tectiform in hind 0.3; propodeal keel raised anteriorly in a weak triangular tooth; dorsal propodeal areas mostly bare, but with a small area of pubescence anteriorly; side of pronotum and mesopleuron smooth and shining, metapleuron densely covered with adpressed, regularly arranged, backwards directed setae. Wing submacropterous, variable in length, reaching to about the apex of large tergite or the apex of the gaster, narrow, scarcely 0.7 of the width of the gaster; submarginal vein with three erect bristles.

Petiole covered over whole length with dense white hairs; gaster (fig. 13) longer than mesosoma and petiole together, smooth and shiny; large tergite taking up about front 0.8 of gaster; apex of gaster moderately abruptly tapered; apical tergites with long scattered hairs.

Colour. Head and gaster blackish brown; mesosoma varying from reddish to blackish brown; pronotal and metapleural pubescence whitish; petiole reddish with white pubescence; antenna yellow except for three club joints which are blackish-brown; legs yellow; wing with veins yellowish and membrane tinged slightly brownish.

Length 1.2-1.7 mm (holotype 1.2 mm).

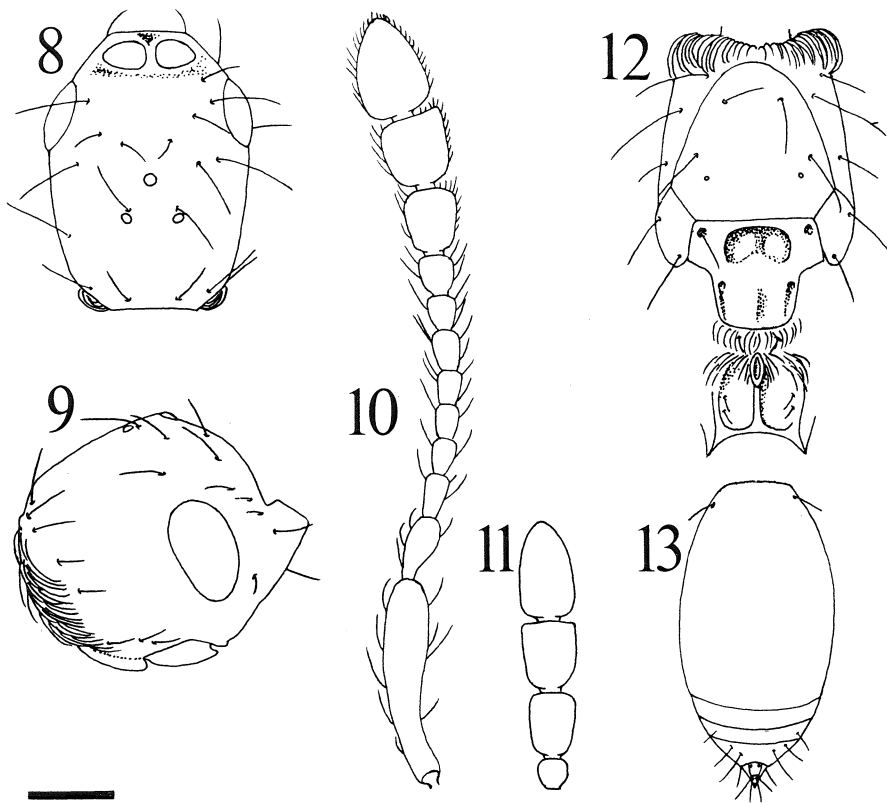
Male. Unknown.

Material seen. Holotype ♀, [Hungary], Budapest, 1959.iii.14, Remetehegy Avarból, Rostait (S. Mahunka) (Hungarian Natural History Museum). Non-type ♀, [Denmark], A [Amagerfælled], 26/9 [18]80 (R. W. Schlick) (Zoologisk Museum, Copenhagen).

Biology. Host unknown. The holotype was sieved from fallen leaves. This species has been captured in March and September.

Distribution. The Danish specimen represents a considerable extension to the known range of this species since the type locality is in Hungary. The status of the species in Denmark is unclear, given the date and small number of records.

Comments. A redescription was considered necessary because an examination of the holotype showed that Szabó's description was inaccurate in several points, and because of the intraspecific variation revealed by the new Danish specimen. The holotype differed from Szabó's description in having the head 1.5 times longer than wide, the ocelli forming a triangle with the sides clearly longer than the base, the scape as



Figs 8-13. *Trichopria rubrithoraca* Szabó, 1960, ♀ - 8, head, dorsal view; 9, head, lateral view; 10, antenna, lateral view; 11, apex of antenna, dorsal view; 12, mesosoma, dorsal view; 13, gaster, dorsal view (scale bar: 0.1 mm, figs 8-12; 0.2 mm, fig. 13).

long as the next five antennal joints together, the scutellum with a small, shallow transverse pit and the scutellar disc slightly tectiform in the hind 0.3. The Danish specimen differed from the holotype in having the head relatively shorter, the ocelli in a more equilateral triangle, the third antennal joint slightly longer, the scutellar pit slightly deeper, the mesosoma darker and in being 0.5 mm longer. The observed differences between the two specimens are considered to be within the range of intraspecific variability, given the wide range in body size and associated allometric variation which normally occurs within species of this genus.

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