

## ***Menacanthus tichodromae* sp. n. (Mallophaga) from the wallcreeper (*Tichodroma muraria* L. 1766)**

József RÉKÁSI

*Pannonhalma, Vár u. 2., Hungary*

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**Abstract:** A chewing louse species new to science: *Menacanthus tichodromae* sp. n. (Phthiraptera: Menoponidae) is described here on the basis of 1 female, 1 male and a 3rd instar larva collected from the wallcreeper (*Tichodroma muraria*).

**Key words:** Phthiraptera, Mallophaga, Menoponidae, wallcreeper, *Menacanthus tichodromae* sp. n.

### INTRODUCTION

According to the Zoological Records and further sources of the literature no chewing louse (Phthiraptera, formerly Mallophaga) has ever been described from the wallcreeper. I collected 1 male and 1 female louse from a wallcreeper which had just fallen down in an accident at Pannonhalma, Hungary, on 15 November 1993. Two further wallcreepers, which had been found dead in the Mecsek Mountains, were studied at Janus Pannonius Museum, Pécs, Hungary. One of these birds, collected by László Wagner on 17 November 1992, harboured a 3rd instar larva of lice.

#### *Menacanthus tichodromae* sp. n.

A chewing louse species new to science, *Menacanthus tichodromae* sp. n. is described here (Fig. 1A).

Holotype: 1 female, Pannonhalma, 15. 11. 1993. No. 1627.

Paratypes: 1 male, Pannonhalma, 15. 11. 1993. No. 1627, 1 third instar larva, Pécs, Mecsek Mountains, 17. 11. 1992. No. 1664.

Host: *Tichodroma muraria* (L.) 1766, sex?

Designation of holotype: The holotype female is deposited in the Hungarian Natural History Museum, Budapest.

**Description of female:** Caput (Fig. 1B) – Arcus frontalis is bluntly rounded anteriorly, joins the temple region with a mild arch. The temple (tempus) has a slightly curved edge reaching out from the head. Choma has a slightly coloured ornament. Linea clypeus is double-lined, narrowing at the end and pointing into an apex. There is an oval pattern at the base of it. Clavus frontalis is well separated on the dorsal side of the clypeus, and bears a row of setae (ctenidium frontale). The two lateral setae are longer than those



enclosed by them. Two vertical edges (clavus) departing from clypeus dorsalis are semicircular. The head is slightly broader than its length (caput transversum). Gena dorsalis is well separated and somewhat less pigmented than the other parts of the head. Fossa clypealis is a longitudinal shallow ditch. The temple region bears four large, extending setae (chaeta) and several small setae among them. Sulcus temporalis is well visible. Dorso-clypeus is separated by a slight outline. There are two sickle-shaped, brown-pigmented ornamentations in the central region of the head with two oval patterns joining them laterally by a line. Two elongated setae and two shorter ones are visible on the preocular region. The occipital region is decorated by a horizontal pigmented band delineated by a fluctuating, convex and concave outline. There are 3 pairs of occipital setae (seta occipitalis) on it. The short, four-segmented, knobbed antennae (antenna subclavata) and the maxillary palps (palpus maxillaris) are visible from the ventral view, they do not exceed the outline of the head.

Thorax: Prothorax slightly separated, mesothorax and metathorax fused but separated by a pale suture. Prothorax and metathorax reverse trapezoid shaped. The shortest edge of this trapezoid dark-pigmented, joining to the oblique lateral edges by dark circular patches. Metathorax has the darkest pigmentation, somewhat 'trough-shaped', widest at the posterior edge. It is laterally edged by dark bars. The posterior edge of the metathorax bears a row of setae, the length of which is about the length of an abdomen segment. The number of these setae is variable.

Limbs: All the three pairs of limbs are light and ornamented by a narrow brown bar (stria) on the femur and tibia, which is more emphasised on the dorsal side. The following pattern of setae can be observed from a dorsal view. The femur of the forelimb (femur pedis anterioris) bears two long and some smaller setae (seta femoralis). There are small setae visible on the tibia. The second pair of limbs (pes medialis) bear a dense group of setae at the joining of the femur and tibia. There are two longer and two shorter setae on the tibia. The tibia of the hindlimb (pes posterior) bears four longer and two shorter setae. The longer setae are approximately as long as the shorter setae of the abdomen. The hindlimb is only slightly longer than the first and second pair of limbs.

Abdomen: The abdomen is longer and broader than the head. Segments 7 to 9 (segmentum abdominale septimum, octavum et nonum) are somewhat narrower than the head. Segments 1 to 5 are increasingly broader, the 5th segment (segmentum abdominale quintum) is the broadest one. The peripygium is rounded. There is a longitudinal edge along the lateral margin of each abdominal tergite. Tergites join to pleurites by their apexes, here the setae are situated more closely. There is one row of setae on the 1st abdominal tergite and two rows of setae on the other tergites. The setae on the posterior margin of tergites are approximately as long as the segments. There are shorter setae on the anterior part of the tergites, their number is variable, but higher than that of the long setae. There is a long lateral seta on each tergite, with dense smaller setae situated dorsally. The number of these small setae is decreasing on the 7th-9th abdominal tergites. The lateral setae on the 7th and 8th abdominal tergites are particularly long. The lateral setae are also long on the 9th tergite and enclose a dense row of short setae. On the ventral side of the abdomen (pars abdominalis ventralis) the sternites are laterally edged by a dark, pigmented band, this band is at least twice as broad as those on the edge of the tergites. The sternite of the tylus is extended laterally. It bears a ventral anal fringe with the longest setae situated laterally. The female genitalia are straight with a broader end posteriorly.

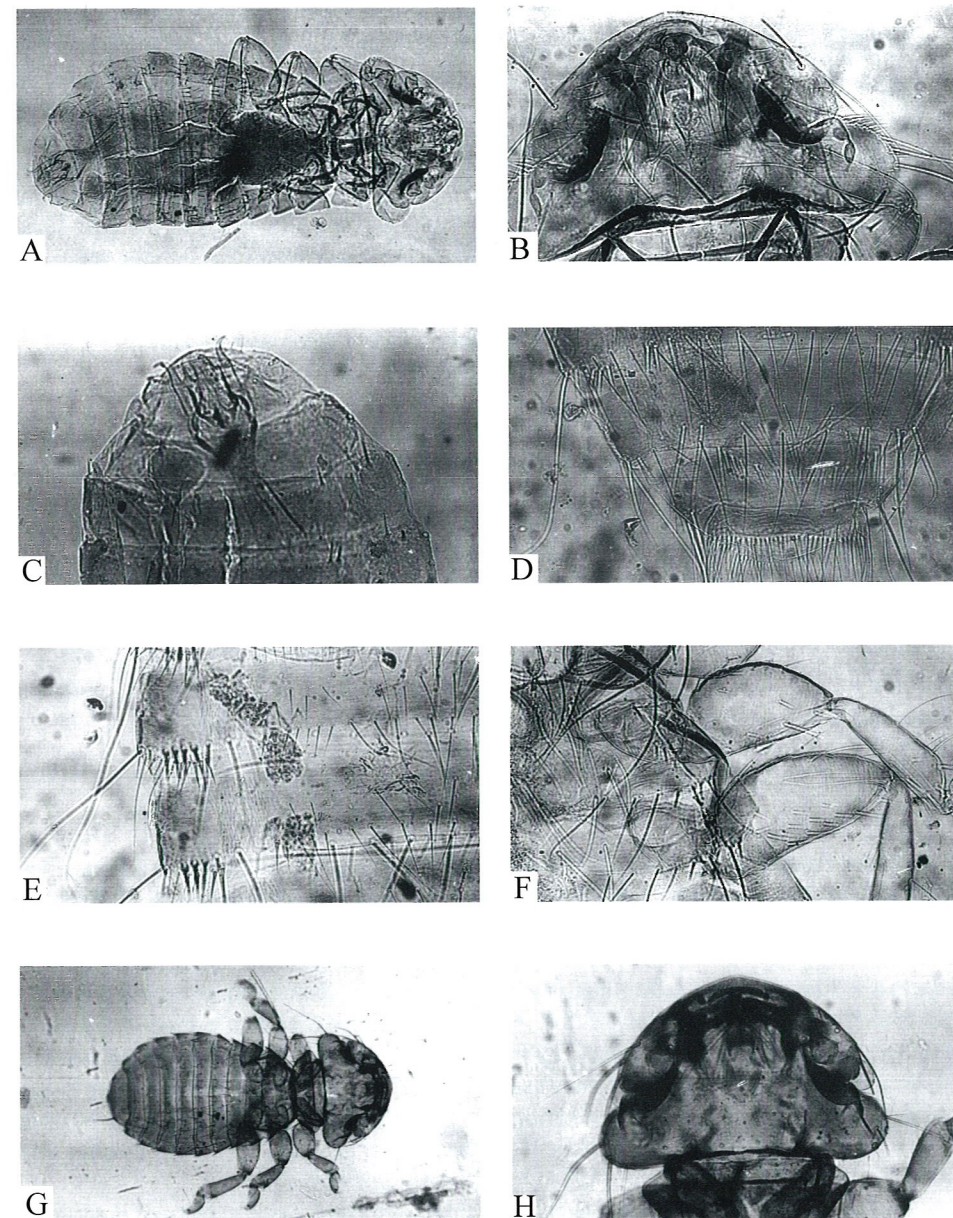


Fig. 1. *Menacanthos tichodromae* sp. n. A — adult male, B — caput of the female with subocular setae, C — male genitalia, D — terminalia (female), E — abdomen, lateral setae, F — limbs (pes medialis), G — larva, H — caput of the larva



Pigmentation: The female is less pigmented than the male, coloured pale yellowish-brown. Patterns are in dark brown. Gena dorsalis is remarkably light coloured.

**Remarks:** This species is closest to *Menacanthus sitta* (Giebel, 1866) of the nuthatch (*Sitta europaea* L., 1758). In his redescription of the *Menacanthus eurysternus* complex, Price (1975) synonymised this name as a junior synonymy of *Menacanthus eurysternus* (Burmeister, 1838). However, Fedorenko (1983) – while also considering the works of Price (1975, 1977) – accepted *Menacanthus sitta* (Giebel, 1866) of the nuthatch as a different species in her monography. She also modified the name of *Menacanthus eurysternus* to *M. eurysternum* and mentioned the magpie (*Pica pica*) as the type host. *Menacanthus eurysternum* and *M. sitta* are keyed and illustrated in her monography.

Table 1

Morphological characteristics of female, male and larval *Menacanthus tichodromae* sp. n. (Dimensions in millimetres)

	Female		Male		Larva	
	length	width	length	width	length	width
Caput:	0.27	0.54	0.25	0.46	0.21	0.36
Thorax:	0.31	–	0.31	–	0.22	–
Prothorax:	0.16	0.38	0.12	0.32	0.11	0.18
Mesothorax:	0.11	0.52	0.11	0.35	0.06	0.24
Metathorax:	–	0.53	–	0.40	–	0.28
Abdomen:	1.12	0.72	0.63	0.48	0.51	0.39
Total length:	1.70	–	1.19	–	0.94	–
Genitalia:	–	–	0.31	–	–	–

*Menacanthus tichodromae* sp. nova is recognised from *M. eurysternus* (Burmeister, 1838) and *M. sitta* (Giebel, 1866) by the following features. The clypeus is different in the pattern of its dark ornament, pale patch and its more concave edge. On the dorsal side of the clypeus, clavus frontalis has a different shape and a different pattern of setae. The abdomen is longer and broader than the head. The broad dark band of regio occipitalis ends in a hooked apex, which have a different shape. The two dark sickle-shaped ornament on the clypeus have a different shape. The setae of arcus frontalis are longer, their number is different from those of *M. eurysternus* and *M. sitta*. The pattern of abdominal chaetotaxy is also different. The second pair of limbs (pes medialis) bears a different series of setae at the join of the femur and tibia. Male body length and genitalia length are smaller, not within the ranges given by Price (1975) for *M. eurysternus* males.

**Description of male:** Smaller and darker than the female. Body shape and chaetotaxy are resembling those of the female. Head is nearly twice as broad as its length. The pigmented genitalia is somewhat darker than the sternits. Telomeron is paired and sclerotised, the end of parameres are flexed outwards at right angles. The paramere bears an elongated cover. The apodeme is pigmented.

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**Rékási, J.: *Menacanthus tichodromae* sp. n. a hajnalmadárról (*Tichodroma muraria* L. 1766)**

A szerző a tudományra nézve új tolltetű fajt *Menacanthus tichodromae* sp. n. néven írt le.

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