

Description of the larva of *Thopeutica clara* (SCHAUM, 1860) (Coleoptera, Cicindelidae)

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Abstract

For the first time the third instar of the larva of *Thopeutica clara* is described. A short morphological discussion in comparison with other known larvae of the some genera of Cicindelini is given.

Key words: *Thopeutica clara*, description, larva, Coleoptera, Cicindelidae, Asia.

Introduction

The genus of *Thopeutica* SCHAUM, 1861 comprises 34 species occurring in Indonesia and the Philippines. Until now the larva of this genus had not been described. The aim of the present paper is the description of the *Thopeutica* larva in detail. The description is based on a few larvae founded in collection of the German Entomological Institute (Eberswalde).

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Description of the larva

Material examined: Philippines, Mnt. Santo-Tomas, Mnt. Pavany, H-2000"-6500", 23. - 24. 05. 1932, Hadden leg., 6 L3.

Measurements (in mm): head width 3.04 - 3.15 (aver. 3.10); frontal width 1.63 - 1.67 (aver. 1.65); frontal length 1.56 - 1.67 (aver. 1.60); pronotum length 1.85 - 2.00 (aver. 1.83); pronotum width 3.15 - 3.23 (aver. 3.19).

Coloration: Head brown, near eyes dark-brown with red-cuprum luster; mandibles almost black apically; other appendages of head brown or light brown; disk of pronotum (especially elevations) dark brown with light luster; margins of pronotum light brown; setae of head and anterior margin of pronotum brown or dark brown; other setae light reddish.

Head. Vertex ridge indistinctly transverse and continues with caudal frontal ridge; frontal ridge wide, slightly u-shaped with 2 setae; frontal clypeal suture slightly curved near top; lateral frontal lobes half-rounded; nasale almost smoothed; stemma 1 slightly larger than stemma 2; coronal suture distinct, but shorter than one half of 4-th segment of antennomere; stemma 3 almost equal to stemma 4; first segment of galea longer than second segment; maxillary palpus no shorter than galea; stipes with 2 spines on inner side basally; second labio palpomere no shorter than first and with one seta slightly lower than middle; second segment of galea with 4 setae; palpfinger with 3 setae laterally and with 1 seta dorsally; antennomere 1 with 5 setae; antennomere 2 with 4-5 setae; most setae of head long and acute, but some near eyes flattened apically.

Pronotum (fig.1). Relief-structures of disk slightly distinct; anterior angles short, slightly rounded apically, directed forwards and no longer than anterior margin of pronotum; pronotum with 16 - 18 setae in each half; along median line with 6-7 setae; anterior ridge with 2-3 setae; lateral margin of pronotum with very slender edging; setae long and apically acute.

Abdomen. Abdominal areas are slightly sclerotized with a few setae; tergite 3-4 nearly oval with 12 -14 setae; hypopleuron consisting of one large and several small sclerites; epipleuron with 7-8 setae; sternites with 14-16 setae; fifth abdominal segment (fig. 2) with 2 pairs of hooks; median hooks very widened basally and curved apically outside; median hooks with 2 stout setae in the middle and directed nearly upwards; inner hooks less than 1.5 times shorter median hooks, apically acute

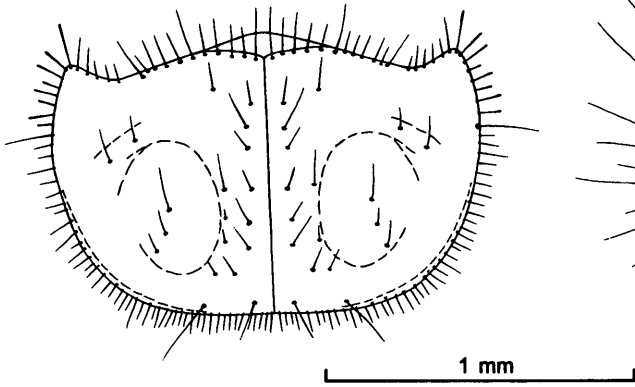


Fig. 1. Pronotum.

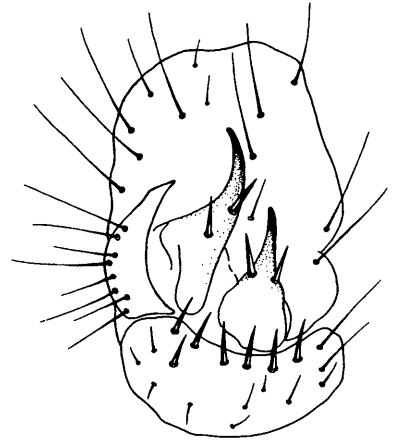


Fig. 2. 5th abdominal tergite (left side)

and with 2 nearly symmetrical stout setae in the middle; central spine of middle hooks long, massive and slightly curved upwards; tergites of the abdominal segment 5 nearly fused; apical part with 8-10 long setae; caudolateral part with 6-7 setae; caudal part with 8-12 stout setae, more spine-shaped on anterior margin; caudal margin of ninth sternite with 8 setae; caudal margin of ninth sternite with 8 setae; caudal margin of tergite 9 with 4 long lateral setae and 2 short in the middle; pygopod with 14-16 setae dorsally, most of them stout; ventral pygopod with a few small setae; top of pygopod with 14-15 setae, more stout dorsoventrally.

Discussion. Within the tribe the genus *Thopeutica* SCHAUM, 1861, belongs to the subtribe Cicindelina. But its larva are somewhat related only to certain species of the genus *Cephalota* DOKHTOUROFF, 1863, according to the shape of hooks, chaetotaxy of abdominal segment 5 and pygopod. However most of these and other larval characters are also similar to some species of *Odontocheila* CASTELNAU, 1834. This may confirm the relationship of Cicindelina and Prothymina subtribes and especially the independent position of *Thopeutica* as a genus. But final conclusions on the subtribal position of *Thopeutica* are possible after the study of the other larvae of the tribe Cicindelini. The following characters are separate *Thopeutica* from other genera: fused tergites of the abdominal segment 5, only few stout setae on caudal part of the tergite 5, indistinct transversal vertex ridge which continues with caudal frontal ridge, almost rounded elevations on the disk of the pronotum.

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