

# Notes on *Ecdamua nambui* (Hymenoptera: Torymidae), with a key to world *Ecdamua* species

A. Zavada

**Abstract.** The species *Ecdamua nambui* Kamijo, 1979, originally described from Japan, is in the present communication reported as found in Kiev, Ukraine. The Ukrainian specimen is provided with a description. A key to all five known species of *Ecdamua* is given.

**Samenvatting.** Gegevens over *Ecdamua nambui* (Hymenoptera: Torymidae), met een sleutel voor de *Ecdamua*-soorten van de wereldfauna  
*Ecdamua nambui* Kamijo, 1979, oorspronkelijk beschreven uit Japan, wordt hier meegeedeeld uit Kiev, Oekraïne. Het exemplaar uit Oekraïne wordt beschreven. Een determineertabel voor alle vijf bekende soorten uit het genus *Ecdamua* wordt gegeven.

**Résumé.** Données sur *Ecdamua nambui* (Hymenoptera: Torymidae), avec une clé pour les espèces mondiales d'*Ecdamua*  
*Ecdamua nambui* Kamijo, 1979, décrite du Japon, est rapporté ici de Kiev, Ukraine. L'exemplaire ukrainien est décrit. Une clé de détermination est donnée pour les 5 espèces d'*Ecdamua* connues dans le monde entier.

**Keywords:** *Ecdamua* – *Ecdamua nambui* – new record – key.

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## Introduction

In June, 2003 I learned of a "*Torymus*" species with exceptionally long ovipositor collected in Kiev, Ukraine. On a subsequent visit to the collecting locality, which is in the park surrounding the Sophia Cathedral in the downtown, another specimen, hereunder described, was taken in my presence. The specimen proved to be *Ecdamua nambui* Kamijo, 1979, previously only known from its type locality in Japan.

In describing sculpture and punctuation I adhered to the terminology proposed by Torre-Bueno (1962), while in all other respects following my earlier descriptions of *Torymus* species, and those of Graham & Gijswijt (1998).

The key was composed based on females of *Ecdamua* Walker deposited in the NHM (former BMNH). The distribution data and synonymies to all species listed below have been compiled from the online Chalcidoidea catalogue (Noyes 2003).

## Key to species of *Ecdamua* Walker

1. Propodeum with median row of foveae. Petiole at most twice as long as broad. Hind femur: length of tooth about half the breadth of femur at point of attachment; contour of lower margin non-continuous proximally and distally from tooth attachment. [Longitudinal sulcus on scutellum absent.] *nambui* Kamijo  
— Propodeum without row of foveae in the middle, smooth or with piliferous punctures. Petiole longer. Hind femur: tooth on hind femur as minute tubercle; curvature of lower margin smooth, unbroken at point of attachment of the tooth.....2
2. Propodeum glabrous. Prepectal fossa as a wide groove, with upper and lower margins parallel. ...3  
— Propodeum finely sculptured. Prepectal fossa triangular. ....4

3. Scutellum with an incomplete longitudinal sulcus. .... *cadenati* (Risbec)  
 — Scutellum without such longitudinal sulcus. .... *macrotelus* Walker
4. Petiole 1.5-1.6 times as long as hind tibia. Foveae in basal rows on propodeum smaller and more than four on each side. Width of frons equal to height of eye. [?Smaller species?] ..... *indica* Walker  
 — Petiole 1.9 times as long as hind tibia. Foveae in basal rows on propodeum large and few, at most four visible, on each side. Width of frons slightly less than height of eye. [?Larger species?] .....  
 ..... *longipilum* (Girault)<sup>1</sup>

### ***Ecdamua nambui* Kamijo, 1979**

*Ecdamua nambui* Kamijo, 1979.

Material studied: ♀, Ukraine, Kiev, 7.viii.2003 (Zavada) (BMNH).

DESCRIPTION: ♀: Head from above 39:18 times as broad as long; temples straight, 3.5:14.5 length of eye; parascrobal areas level with anterior margin of eyes; occipital aperture equal in breadth to distance between inner margins of eyes, its foremost point passes a little the tangent line drawn at their posterior margins; POL:OOL 4.5:10, OOL:OD 4.5:5; surface moderately shiny, on vertex slightly corrugated transversely, punctures of moderate size, rather sparse. Head in anterior view 41:30 times as broad as high; height of eye 22:30 height of head and 22:21 width of frons; toruli situated distinctly nearer to lower than to upper margin of face; length of scape proper 14:21 width of frons; scape hardly or just reaching lower ocellus; genae virtually straight, malar space 7:12 breadth of mouth; lower margin of face with a bordering groove along its entire length including clypeus; clypeus produced forward a little. Mandible with three robust teeth, which are equal in size. Lower face devoid of punctures, lightly alutaceous; parascrobal areas stronger sculptured, coriaceous, with isolated punctures appearing; head all over in long sparse brownish hairs; mandibles more densely pilose. Pedicellus longer than broad; anellus slightly shorter than broad or quadrate, subparallel, its breadth at base more than half apical breadth of pedicellus; F1 elongated conical, approximately twice as long as broad at apex and at base equal in breadth to pedicellus; F2-F7 gradually becoming shorter, F7 being 1.6-1.7 times as long as broad; all funicular segments clothed with short adpressed sensilla, arranged in up to 5 irregular rows; clava not broader than F7, approximately as long as F7 plus one-third F6.

Pronotum from above resembling the form seen in *Callimomus* species, with sides subparallel; its surface sculpture anteriorly foveolate-punctate with smooth interstices, posteriorly (along the partly effaced suture) becoming glabrous, devoid of punctures, postero-laterally shallow, confused-rugulose, showing as though meshes of very loose and irregular reticulation; sides of pronotum longitudinally strigulate in the main part, with an elevated smooth area distinctly bordering it at and around its upper posterior corner; below, sides of pronotum are extended down to overhang fore coxa as small and narrow, smooth testaceous flaps. Halves of prosternum with dividing longitudinal suture almost obliterated. Mesoscutum 85:52 as long as broad, in large and rather shallow

<sup>1</sup> I have seen only one Australian specimen in BMNH identified as *E. longipilum* (Girault). This specimen was rather close to *E. indica* Walker.

piliferous punctures, uniformly spaced at one their diameter, with smooth interstices; abscissae of scutoscutellar suture not continuously straight, thus forming an obtuse angle. Scutellum 51:27 times as long as broad, narrowly rounded apically, sculptured as mesoscutum but with punctures more apart; axillae with punctures even sparser and interstices lightly imbricate. Prepectal fossa very shallow but delimited clearly. The obliquely running ridge dividing antero-ventral and lateral surfaces of mesosternum is conspicuous and entire, reaching base of mid coxa; lateral surface weakly imbricate to smooth, furnished with a set of small foveae along its posterior margin in middle part. Frenal line distinct; posterior part of scutellum, occupying about two-fifth of its length, entirely and perfectly smooth; flange furnished with a few trabeculae. Metanotum clearly visible from above; lateral fossae with medial border somewhat smoothed. Propodeum visibly longer than scutellum, convex, glabrous and shining; with a row of four quite large, gradually diminishing laterad, foveae along base, on each side; partly separating the two innermost foveae lies another fovea, immediately posterior to which begin another pair of diverging rows of foveae, these being somewhat larger and more elongate than those in basal rows, that go to sides of propodeal foramen and divide the propodeum into three subequal areas; posterior margin of propodeum furnished with a groove; propodeal spiracle slit-like; callus only slightly stronger sculptured than rest of propodeum, with several obscure punctures and apparently bare. Propodeum inclined at 25–30°; propodeal foramen low. Mesepimeron large, rotund, somewhat (but not as strongly as in *Torymus austriacus* Graham) convex, as high as mid coxa. The lobe of mesepisternum that lies above mesepimeron forms at its anterior extremity a small detached sclerite, which is delimited by a sulcus. Hind coxa bare except for several long hairs near apex, about or slightly more than twice as long as broad; in profile, its anterior margin is very weakly angular; posterior margin not angulate basally and weakly and evenly curved in the rest of its length; dorsal ridge quite distinct only in proximal one-fourth; lateral surface reticulate, reticulation becoming obsolescent towards mid-line and turns alutaceous on anterior surface; medial surface imbricate, and neither surface has nitid areas such as in *T. armatus* Boheman and *T. kononovae* (Zerova & Seryogina). Hind femur 75:18 times as long as broad, bearing a strong, apically hooked tooth, distal to which the breadth of femur is conspicuously less than immediately proximally to it. Shorter spur of hind tibia 0.6-0.7 length of longer spur, the latter subequal to apical breadth of tibia. Hind basitarsus 28:76 length of tibia.

Fore wing with two hair-rows on under surface of costal cell, one running along its entire length and one terminating at about one-third from base; upper surface with single hair-row in distal half; basal and cubital veins traced with uninterrupted hair-rows; basal cell bare except for two or three hairs below SC; speculum small, closed, with disc piliation beginning immediately from cv. SC:M 81:45; ST distinct, oblique; PM gradually disappearing towards apex, at least 3.5 times as long as ST. Overall disc piliation not dense; disc entirely immaculate.

Gaster distinctly shorter than mesosoma, and conspicuously petiolate; petiole parallel-sided, somewhat compressed dorso-laterally and about twice as long as broad. Gastral tergites 2 to 4 narrowly and more or less strongly emarginate medially; tergite 5 broadly emarginate; all tergites alutaceous at base and glabrous, brightly shining in middle and at apex. Hypopygium unsclerotized except at extreme apex, pilose. Sides of gaster and apices of tergites 4 and 5 in sparse long greyish hairs. Ovipositor exceptionally long, measuring at least 3 body lengths.

Head, mesosoma from above, gaster except petiole, fore and mid coxae and femora metallic greenish-blue, strongly shining; sides of mesosoma and hind coxa and femur bluish-green, with golden tinge in places; posterior margins of gastral tergites violet; scape testaceous brown, fore tibiae at base, and mid tibiae entirely, brown, fuscous-testaceous, and so are maxillae; hind tibiae deep brown with weak metallic sheen; tarsi light-brown except distal segment, which is dark; antennae, tegulae, and petiole black.

Body length excluding ovipositor, 4 mm.

♂ unknown.

BIOLOGY. The specimen was taken on the trunk of an old chestnut tree when ovipositing into one of the numerous scolytid burrows, 2–3 mm in diameter, in a stretch of bare wood about 80 cm long for many seasons stripped of bark. Small wasps were seen entering and leaving these burrows.

DISTRIBUTION. Japan, Ukraine.

COMPARATIVE NOTES. This species stands apart from the other four species of *Ecdamua* for its pronounced hind-femoral tooth and the median row of foveae on the propodeum, downward diverging from the midpoint.

### ***Ecdamua cadenati* (Risbec, 1951)**

*Plesiostigma cadenati* Risbec, 1951.

*E. cadenati*; Grissell, 1995.

DISTRIBUTION. Niger, Senegal, Sierra Leone, Uganda.

### ***Ecdamua indica* Walker, 1871**

*E. indica* Walker, 1871.

*E. indica*; Narendran, 1984.

*E. indica*; Bouček, 1988.

*E. indica*; Grissell, 1995.

*E. mirabilis* Masi, 1926.

*Torymus mirabilis*; Farooqi, 1986.

*E. mirabilis*; Narendran & Sureshan, 1988.

*Amonodontomerus indicus* Ahmad, 1946.

*E. bangalorensis* Mani & Kurian, 1953.

DISTRIBUTION. China (Taiwan), India (Bihar, Karnataka, Kerala, Maharashtra, Uttar Pradesh).

### ***Ecdamua longipilum* (Girault, 1925)**

*Phegea* 33 (4) (I.XII.2005): 158

*Monodontomerella longipilum* Girault, 1925.  
*E. indica*; Bouček, 1988.  
DISTRIBUTION. Australia (Queensland).

### ***Ecdamua macrotelus* Walker, 1862**

*E. macrotelus* Walker, 1862.  
*E. macrotelus*; Bouček, 1988.  
*E. macrotelus*; Grissell, 1995.  
DISTRIBUTION. Kenya, Sierra Leone, Uganda.

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