

**A new species of *Megalyra* Westwood
from the Philippines (Hym., Megalyridae).**

By

Børge Petersen

Zoological Museum, Copenhagen.

During its stay in the small Philippine island Tawi Tawi in the Sulu Sea the "Noona Dan Expedition" (Petersen, 1966) succeeded in collecting a specimen of *Megalyra*, the dominating genus in the odd hymenopterous family Megalyridae. This capture is of taxonomic interest because the specimen belongs to a new species, described below. However, the lucky finding may be of even more importance seen from a zoogeographical viewpoint, widening considerably the known range of distribution of *Megalyra*, previously recorded exclusively from the australian and papuan regions.

***Megalyra tawiensis* n. sp.**

Figs. 1—4.

Type material:

H o l o t y p e, 1 ♂, The Philippines. — TAWI TAWI: Tarawakan, 9 Nov. 1961, caught in a Malaise insect trap (Noona Dan Exped.); type deposited in the Zoological Museum of Copenhagen, Denmark.

D i a g n o s i s:

Female. Size moderate (6.5 mm). Square-built; mesoscutum twice as broad as long. Fore wing with broad, brownish band, no apical spot. Posterior ocelli closer to eyes than to each other. Head and thorax very coarsely mooncrater-like punctate. Gastral tergite 2 with finely punctate centre surrounded by shagreenation; tergite 3 punctate in anterior half. Ovipositor sheath less than three times longer than head and body united. Pubescence sparse, no dense hair patches. Colour black, limited

fuscous reddish-brown exceptions in appendages, hind femur black all over.

Description:

Size moderate in the genus. Length of head, thorax, and abdomen 6.5 mm, of ovipositor sheath 17 mm. Length of fore wing 5.2 mm.

Colour in general shining black; more or less fuscous, reddish-brown exceptions are antenna, mandible except tip, palps, legs except coxae and hind femur, tegula and other axillary sclerites, wing venation, narrow apical rim of tergites, pygostyles, tip of hypopygium, and ovipositor. Wings hyaline; fore wings with a broad, brownish band (Fig. 1), hind wings slightly brownish in radial cell. Hairs white.

Sculpture of head and thorax very coarse, consisting of modifications of sub-circular, shallow depressions (like moon-craters) dispersed more or less regularly over the surface. Distance between units generally shorter than their radius; in places they are almost touching, leaving but a narrow border, e.g. in dorsal surface of propodeum, where units tend to be hexagonal. Sculpture of head rather regular; size of units about 0.50 times the diameter of ocelli, their number 6-7 in 0.5 mm on top of vertex. Sculpture units of mesoscutum larger, up to 0.75 times the diameter of ocelli, their number on average 5 in 0.5 mm. Propodeum with four transverse depressions in mid-line of horizontal face; posterior vertical face sharply bordered by surrounding sculpture, smooth, only provided with a few low, rather irregular ridges.

The sculpture described above continues on sides of thorax and on hind coxae, but units are generally smaller, irregular, often joining in a mess of irregularities, or they disappear, e.g. in the grooves for receipt of femora; in propleuron the groove is provided with some arched keels; in mesopleuron a large smooth groove lies in front of 14-15 short keels perpendicular to posterior border.

Apart from hind coxae legs are smooth; in places sparsely finely punctate. Punctuation of hind femur and tibia irregular, units being of different size and shape, on outer surface of femur rather large and widespread, on tibia much closer, ventrally separated by distances approximately equal to their own diameter.

Abdomen smooth and polished, apart from a few very wide-spread punctures all over, and finely, densely punctate or shagreened areas on gastral tergites 2 to 7. Number of fine punctures about 20-25 in 0.5 mm on dorsal surface of tergites, their distance shorter than their diameter. Tergite 2 punctate only in centre of dorsal surface, the area being surrounded by a fine, scaly shagreenation, which is also feebly indicated on tergite 1, posteriorly. Tergite 3 punctate in anterior half, smooth or shagreened behind. In following tergites punctate area gradually increases, tergite 7 finally completely punctate apart from a narrow apical rim.

P u b e s c e n s e sparse, especially in dorsal surfaces; hairs erect or semi-erect, of uneven length, few are longer than hind tibia wide. No dense hair patches found, but in places e.g. head below, pro- and mesopleuron below, hind face of propodeum, and sides of tergites, the pubescence denser than elsewhere.

S t r u c t u r e. Head more than 1.50 times broader than long (Fig. 1) and also considerably broader than high (Fig. 2), measurements*) resp. 35, 21 and 28 (mandibles not measured); width of head: 25 at occipital carina; width of face: 15, less than 0.50 times width of head. Eyes large, 18×15 , slightly prominent; inner margins convex, strongly divergent above; outer margins straightened, downwards converging from occipital carina, distance at top only a little more than 0.50 times distance below, which is equal to shortest diameter of an eye. Ocelli large, about 2.0; distance between posterior ocelli (POL) 5.2, somewhat longer than distance to anterior ocellus, 4.3; shortest distance from eyes to posterior ocelli (OOL) about 3.5 and thus much shorter than POL. Distance from eyes to antennal scrobes equal to width of antennal segment 1. Malar space as long as antennal segments 1 and 2 united. An indistinct subocular line present.

Antennae about 1.40 times longer than head and thorax united. Segment 1 less than two times longer than wide (6.0×3.5), and more than two times wider than following segments. Segment 3 weakly curved and slightly flattened, as long as segment 6 (9.0), both a little shorter than the equal segments 4 and 5, (11.0). Terminal segment 14 half as long (4.5) as segment 3 or 6.

Thorax 1.40 times longer than broad and high (resp. 48, 35 and 34), and as broad as head. Mesoscutum short, two times broader

*) 20 units equal 1 mm.

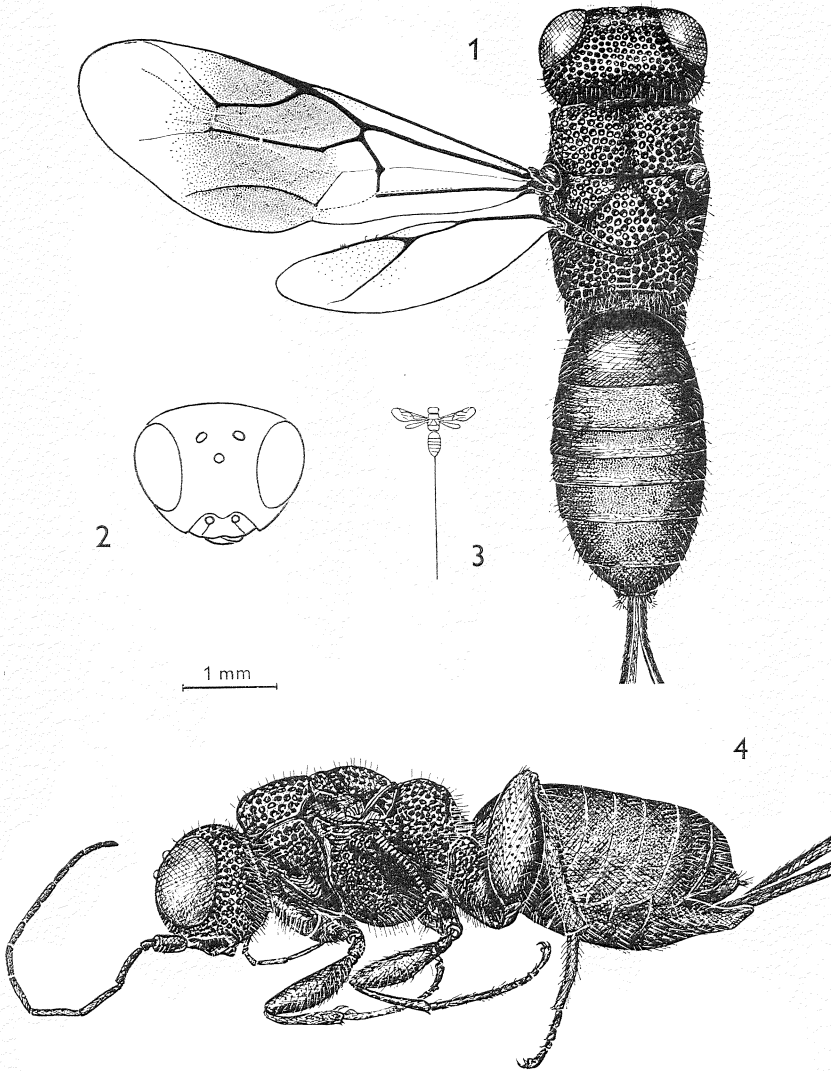
than long in mid-line (31×16), front margin straight along the head, oblique before the small antero-lateral points. Mesoscutellum about as long as mesoscutum, separated from the large triangular axillae by ill-defined, converging grooves, which meet before scutellum in two large sculpture units. Median part of metanotum narrow, lateral depressions triangular, with three transverse keels. Propodeum shortest in mid-line, dorsally about two thirds the length of mesoscutellum; lateral corners moderately prominent, rounded; front margin concave, laterally touched by anterior border of the narrow spiracles. Mesopleuron provided with a weak episternal scrobe. A deep pit present anteriorly in metapleuron.

Wings are as shown in Fig. 1 and a detailed description is omitted. Weak veins are shown by thin lines; concave folds are either shown by broken lines or as white lines in the shaded area. Five to six hamuli present, two or three proximally, well separated, and three in a group more distally.

Legs with comparatively much longer tarsi in the small fore and middle legs than in larger hind legs, where tarsus and tibia are almost equal. In hind legs tibia much longer, and coxae and femora much stouter than in the other legs; hind femur a little more than 2.5 times longer than high (29 : 11). Metatarsus in fore legs shorter than rest of tarsus, longer in middle and hind legs. Leg dimensions approximately as follows:

	Leg 1	Leg 2	Leg 3
Length of femur	21	22	29
- - tibia	17	20	34
- - tarsus	31	33	35
- - metatarsus	13	17	19

Gaster as long as head and thorax united, slightly narrower; it is nearly twice as long (58) as broad (31) and high (30) over segment 3, where largest. Tergites 1 + 2 + 3 half as long as gaster. Tergite 1 longest, in midline as long as tergites 2 + 3; tergites 3 and 4 almost equal, one third shorter than tergite 2. Tergites 5 to 7 increasing in length backwards. Hypopygium elongate, with an apical split reaching subapical swelling. Ovipositor sheath behind hypopygium 2.6 times longer than head and body united. Ovipositor tip weakly curved, dorsally with about 20 barbs, proximal ones only indicated.



Figs. 1-4. *Megalyra tawiensis* n. sp., holotype, Tawi Tawi, Philippines.
— 1. Dorsal view. — 2. Head, frontal view. — 3. Approximate natural size. — 4. Lateral view.

Relationships:

The placing of a new species among the known species of *Megalyra* can be done only with great inaccuracy until the genus is revised; almost all species are insufficiently described and good figures are missing. However, although considerably smaller (6.5 mm against 8 to 12 mm) *tawiensis* n.sp. may find its nearest relatives among the following three species: *szépligeti* Bradley, 1905, *caudata* Szépligeti, 1902, and *wagneri* Fahringer, 1926.

M. szépligeti is a totally black species and it also differs by the presence of an apical slightly dark spot in fore wings, sharp lateral angles of propodeum, posterior legs evenly covered with well separated punctures, and by more extensively punctate gastral tergites 2 to 7, only with a very narrow apical margin of tergites 2 and 3, smooth. *M. caudata* differs from *tawiensis* n.sp. by having compound eyes close together above, gastral tergites 2 smooth, fore wing provided with an oval spot apically, and some more red colourings. *M. wagneri* has much more red colour than *tawiensis* n.sp., and its sculpture of gastral tergites is sparser and of a different nature, viz. anterior part smooth and posterior part punctate.

The body form of the supposed related species has not been described, but presumably these are all more elongate than the square-set new species. Probably the transverse mesoscutum, twice as broad as long, is a good character distinguishing *tawiensis* n.sp. cogently from all previously described species.

Zoogeography:

So far known the indo-australian Megalyridae consists of only two not very closely related genera: *Megalyra* Westwood (Megalyrinae) with 22 species, and *Ettchellsia* Cameron (Dinapsinae) with only two species. The present record of a *Megalyra* from the Philippines is of particular zoogeographical interest because it is the first finding outside the australian and papuan regions, from where the genus is found mainly in Australia (Fahringer, 1926); twenty species are reported from this continent alone, whereas only a single species is known from each of the following localities: New Caledonia, New Guinea, and Ceram in the Moluccas. The genus is now known to occur further into the oriental region, viz. in one of the small islands bridging the malayan and philippine sub-regions between Borneo and Mindanao. However, this record is

not the first one of a megalyrid in the Philippines; a species of *Ettchellsia* was recorded from the island of Bohol by Baltazar in 1961. This genus is further known only from North Borneo (Cameron, 1909; Baltazar, 1961).

Summary.

A new species of *Megalyra* (Hymenoptera, Megalyridae, Megalyrinae) is described. Its transverse mesoscutum, twice as broad as long seems unique in the genus. Type locality is the island Tawi Tawi between Borneo and Mindanao. The finding in the transitorial zone between the philippine and malayan subregions of the oriental region is far outside the previously known range of distribution, viz. the australian and papuan regions.

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