

# *Hylaeus (Metylaeus) mahafaly* sp. n., a new Malagasy bee (Hymenoptera: Apidae)

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HENSEN, R. V., 1987. *HYLAEUS (METYLAEUS) MAHAFALY* SP. N., A NEW MALAGASY BEE (HYMENOPTERA: APIDAE) – *ENT. BER. AMST.* 47 (10): 152-154

*Abstract:* *Hylaeus (Metylaeus) mahafaly* sp. n. is described and compared with *H. (M.) spiniger* (Benoist), the only Malagasy species of *Metylaeus* described so far, and the Afrotropical species.

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## Introduction

During a collecting trip to Madagascar in 1984, Mr. A. Aptroot and I collected a species of *Hylaeus* subgenus *Metylaeus* in the south-west of Madagascar, near Tulear. The only known Malagasy species of this subgenus, *Hylaeus spiniger* (Benoist, 1945), was described from the semi-arid parts of southern Madagascar as well. I have examined the type of this species, which is preserved in the Muséum National d'Histoire Naturelle, Paris, France, and it proved to be quite different.

The classification of the Afrotropical (excluding Malagasy) Hylaeini, and the species of *Metylaeus* Bridwell and some other small groups within the Hylaeini were recently revised by Snelling (1985). He downgraded the genus *Metylaeus* Bridwell to a subgenus of *Hylaeus* Fabricius, which I have followed here. The morphological terminology used in this paper is largely following Snelling's publication.

***Hylaeus (Metylaeus) mahafaly* sp. n.**  
(figs. 1-8)

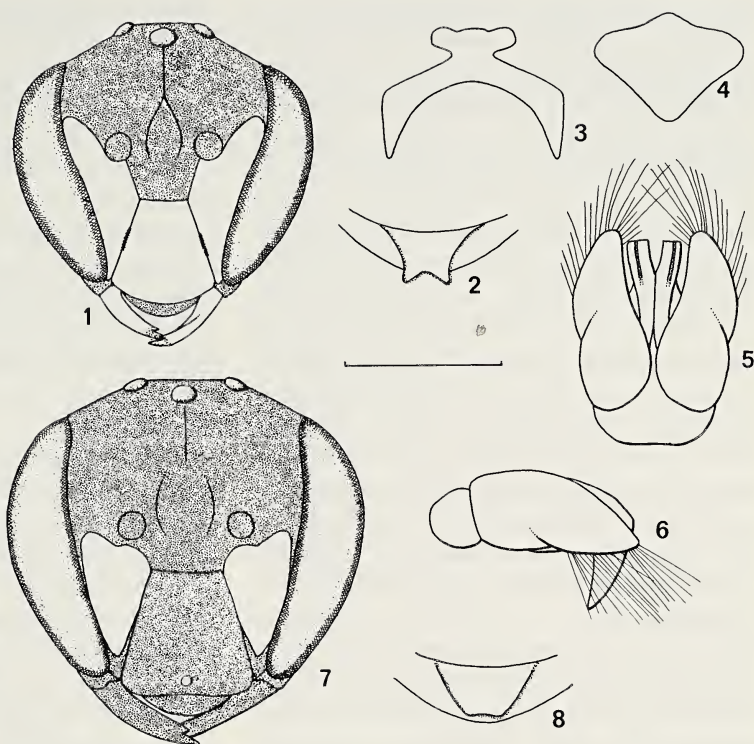
## Types

Holotype ♂, „MADAGASCAR; (Tulear); Ankilibe; 0 m; 43° 46 E, 23° 25 S; 22-IV-1984; leg. R. Hensen & A. Aptroot". Paratypes 4 ♂, 5 ♀, same data. Holotype and 1 ♀ paratype in Rijksmuseum van Natuurlijke Historie, Leiden. Paratypes, 1 ♂, 1 ♀ each, in Los Angeles County

Museum, California, USA; Snow Entomological Museum, Lawrence, Kansas, USA; British Museum (Natural History), London, England; and in my private collection.

## Diagnosis

*Hylaeus mahafaly* differs from all other known *Metylaeus* in having a pair of large yellow spots on scutellum, and weak transverse, oblique and lateral carinae on propodeum. The combination of the following characters is diagnostic as well: scutellum without posteriad directed spines, metanotum with spines in ♂ only; first and second metasomal segment coarsely densely punctate, interspaces shiny, very weakly shagreened; remaining tergites finely sculptured, dull; first tergite with well developed lateral pubescent fasciae apically; second without fascia. *H. mahafaly* is most similar to *H. scutispinus* (Alfken), from which it differs in the ♂ by the absence of spines on the scutellum, in the ♀ by the black clypeus with yellow spot (black, partly reddish in *H. scutispinus*) and the absence of a pubescent fascia on the second tergite. *H. mahafaly* is separated from the Malagasy *H. spiniger* (Benoist) in the ♂ by the finer punctuation of mesoscutum and mesopleuron, the absence of spines on the scutellum and the presence of conspicuous fasciae of white pubescence apicolate-



Figs. 1-8. *Hylaeus* (*Metylaeus*) *mahafaly* sp. n. 1-6, holotype, ♂. 1, head, frontal view; 2, metanotum; 3, seventh sternite; 4, eighth sternite; 5, genitalia, dorsal view; 6, genitalia, lateral view. 7-8, paratype, ♀. 7, head, frontal view; 8, metanotum. (1, 2, 7, 8: scale line 0.5 mm; 3-6: scale line 1 mm).

rally on the first tergite. The ♀ of *H. spiniger* is not known.

### Description

**Male.** Body length 4.3-4.6 mm; forewing length 2.8-2.9 mm; head length 1.1-1.2 mm (holotype resp. 4.3, 2.8, 1.1 mm); scape length 0.28 mm.

**Colour:** Black; antenna except scape ferruginous; mandibles and labrum ferruginous to yellow (labrum ferruginous, mandibles yellow with apex ferruginous in holotype; labrum black in one paratype); the following parts yellow: clypeus, sides of face along orbits, extending considerably above antennal insertions (fig. 1), scape apicoventrally, medially interrupted band on pronotal collar, pronotal lobes, spots on tegulae, pair of large spots on scutellum, tibiae except for a sub-apical black ring or spot, tarsi. Wings clear, stigma and veins light brown.

**Pilosity:** First tergite apicolaterally with conspicuous fasciae of dense white pubes-

cence; apical margins of second tergite and remaining tergites with very sparse pubescence.

**Head:** Broad, 0.9 times as wide as long; scape twice as long as wide; eyes strongly converging below, interocular width dorsally, across a line through midocellus, 1.7 times as long as shortest width across clypeus; clypeus as long as wide, sides evenly divergent from base; clypeal width at base 0.4 times as long as maximum clypeal width, 1.2 times as long as antennal socket diameter, 0.8 times as long as distance between antennal sockets, 0.9 times as long as distance between upper corner of clypeus and orbit along a horizontal line; supra-clypeal area between and above antennal insertions sharply keeled laterally, and with median carina; frons with median carina; punctation moderately coarse, subcontiguous; interspaces on face and vertex shiny, weakly shagreened, on genae less shiny, distinctly shagreened; punctures smooth, shiny within.



*Mesosoma*: Carina of pronotal collar strong, translucent, medially broadly interrupted; mesoscutum about 0.8 times as long as wide; scutellum 0.4 times as long as mesoscutum, apically depressed in the middle, and a little tuberculate on each side; metanotal disc laterally and posteriorly margined by a strong carina, posteriorly with a pair of flat, triangular teeth (fig. 2); mesoscutum with coarse, contiguous punctures, mesopleuron with moderately coarse, dense punctation; scutellum moderately coarsely, closely punctate; interspaces on these parts moderately shiny, tessellate. Propodeum with transverse, oblique and lateral carina only weakly indicated; propodeal triangle finely areolate, stigmal area rugulose; lateral and posterior face punctate, laterally finely and densely, posteriorly moderately coarsely and subcontiguously.

*Metasoma*: First tergite about as long as wide; first and second tergites moderately coarsely, subcontiguously punctate, punctures of second tergite a little finer, interspaces smooth, shiny; remaining tergites finely punctulate and shagreened, dull; sternites shiny, sparsely punctulate and tessellate; terminal sternites and genitalia see figs. 3-6.

*Female*. Body length 4.8-5.0 mm, forewing length 3.0-3.1 mm, head length 1.2-1.3 mm, scape length 0.35 mm.

*Colour*: Black; mandibles, labrum, flagellum and fore tibiae anteriorly ferruginous; clypeus with small yellow spot apically, sides of face with broad triangular yellow macula, not extending above antennal insertions (fig. 7); pronotal collar, except medially, pronotal lobes, spots on tegulae, large spots on scutellum, bases of tibiae and middle and hind basitarsi whitish yellow. Wings clear, stigma and veins brown.

*Pilosity*: As in ♂.

*Head*: Broad, 1.1 times as wide as long; scape 2.8 times as long as wide; eyes strongly converging below, interocular width dorsally, across a line through midocellus, 1.6 times as long as shortest width across clypeus; clypeus 1.05 times as long as wide, sides evenly divergent from base; clypeal width at base 0.5 times as long as maximum clypeal width, 2.8 times as long as antennal socket diameter, 0.9 times as long as distance between antennal sockets, 1.1 times as long as distance between upper corner of clypeus and orbit along a horizontal line; supra-clypeal area laterally not keeled; frons with weak median carina; facial fovea ending at about  $\frac{1}{4}$  distance between eye and ocellus. Punctation as in ♂.

*Mesosoma*: As in ♂, but scutellum not tuberculate, metanotal disc laterally and posteriorly carinate, but without teeth (fig. 8), propodeal triangle usually only basally areolate, remaining part minutely punctulate-reticulate.

*Metasoma*: As in ♂, but interspaces on second tergite finely shagreened.

### Etymology

Named after the Mahafaly, the colourful Malagasy tribe that inhabits the region around Tulear.

### Acknowledgement

I wish to thank Dr. R. R. Snelling, Natural History Museum Los Angeles County, for reviewing the manuscript.

### References

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Accepted 13.v.1987.