

A new species of *Pygommatius* Scarbrough & Hill, 2005 from Isle of Halmahera, Indonesia (Diptera: Asilidae: Ommatiinae)

G. TOMASOVIC¹ & A.G. SCARBROUGH²

¹ Research associate, Gembloux Agrio-Bio Technology, Department of Entomology, University of Liege, Belgium.

² Visiting Scholar, Entomological Museum, Department of Entomology, The University of Arizona, Tucson, AZ. 85721 USA.

Abstract

One new species of Asilidae, Ommatiinae is described: *Pygommatius halmaherensis* sp. nov., from Indonesia, Isle of Halmahera. Distribution maps of the genus as well as photos and illustrations of the species are given.

Résumé

Une nouvelle espèce d'Asilidae, Ommatiinae est décrite : *Pygommatius halmaherensis* sp. nov., d'Indonésie, île d'Halmahera. Des cartes de distribution du genre ainsi que des photos et illustrations de l'espèce sont fournies.

Introduction

This is a continuation of the study of the Asilidae collected in the Oriental region and deposited in the collection of the Royal Belgian Institute of Natural Sciences (RBINS, Brussels) (TOMASOVIC & GROOTAERT, 2003 ; TOMASOVIC & GROOTAERT, 2008 ; TOMASOVIC & SMET, 2007 ; TOMASOVIC, 2005a, 2005b, 2006a, 2006b, 2007, 2008 and SCARBROUGH & TOMASOVIC, 2010).

Taxonomy

Asilidae: Ommatiinae

Genus *Pygommatius* SCARBROUGH & HILL, 2005

The species of the subfamily Ommatiinae HARDY, 1927, are characterised by the plumose arista together with closed marginal cell. This subfamily presently includes eight genera in which the larger genus *Ommatius* WIEDEMANN, 1821, has more than 315 species widely distributed in the world. Whereas *Pygommatius*, a recently proposed genus, has far fewer species and a more restrictive distribution (SCARBROUGH & MARASCIA, 2003 ; SCARBROUGH & HILL, 2005). The species are distinguished by the uniformly thick, pencil-like bristles of the face, absence of a stout anepimeral bristle, multibranching epandrium, paired dorsal and ventral aedeagal apodemes, and stout erect bristles on one to four sternites.

Distribution (maps 1-4)

Currently the genus is reported from the Afrotropical and Oriental regions with 26 Afrotropical and 14 Oriental species, respectively. Of the latter, three are from India, nine from the Philippines, one from Sri Lanka and one, *P. calvus*, (MEIJERE, 1911) from Java in Indonesia (GELLER-GRIMM, 2010).

The distribution of *Pygommatius* in the Oriental region forms an arch from Southern India southward, across Indonesia, to the Philippines. Thus far no species are known from the Malaysian peninsula. The greatest number of species is from the island of Mindanao.

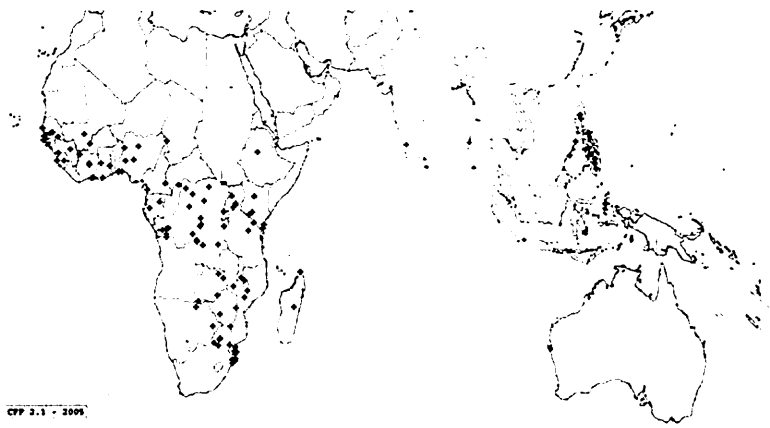
Distribution pattern is incomplete and may merely reflect the areas where most collecting has been done. There are probably few places in the Oriental region where species of *Pygommatius* are unlikely to occur. A great deal of additional collecting is necessary before a more adequate analysis of distribution will be possible.

Materiel examined

Pygommatius halmaherensis n.sp. (Figs 1-5)

Holotype male: Indonesia, Halmahera, Near Payahe, trap 2, 18.II.1995. c. 125 m. Leg. VAN ACHTERBERG & DE VRIES (on pin, Naturalis, Leiden).

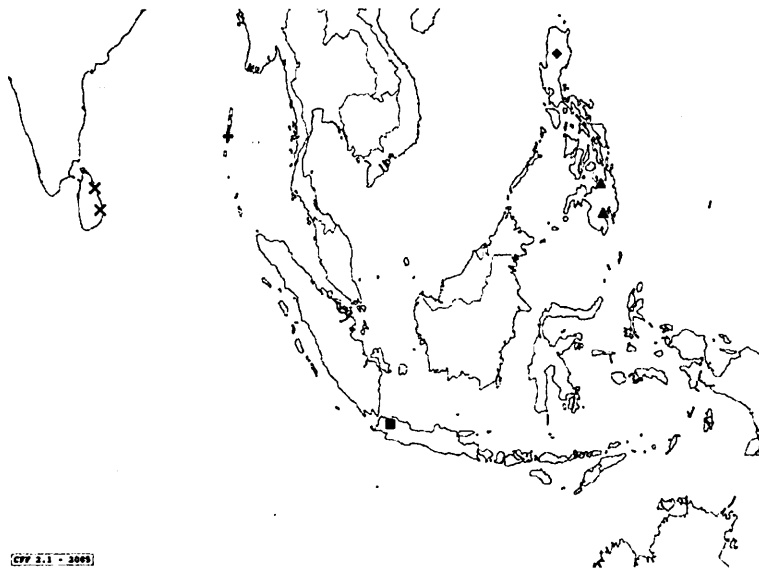
Paratypes 3 males : Same provenance as holotype



CPP 2.1 - 2009

Distribution of the genera *Pygommatius* in the World
Pygommatius 267 specimens

Map 1. Distribution map of genus *Pygommatius* in the world.



CPP 2.1 - 2009

- + *Pygommatius andamanensis* 2 specimens
- X *Pygommatius anisoramus* 4 specimens
- ▲ *Pygommatius apoticus* 9 specimens
- *Pygommatius calvus* 2 specimens
- ◆ *Pygommatius daknistus* 1 specimens

Map 2. Distribution of the species of *Pygommatius* in Oriental region.

(RBINS); 1 male, Indonesia: Halmahera, Isl. Kao Dist., Kao River Basin, Air Kanan, Kampung Tuguis ~ 1-14 Mar. 1981, AC MESSER & PM TAYLOR (USNM).

Description

A relatively small, slender species with distinctive L-bristle below fore femur and unique terminalia.

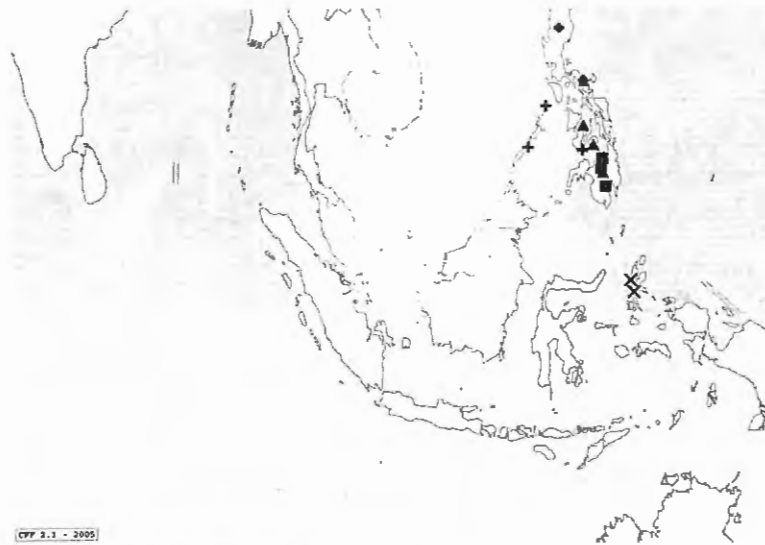
Length 11 mm.

General colour. Black with yellowish legs and slightly infuscated wings.

Head: Face golden, 1/11 as wide as head at antennae, mystax with six yellow stout setae and sparse yellowish setae. Antennae: scape and postpedicel yellow, pedicel brown, these last three

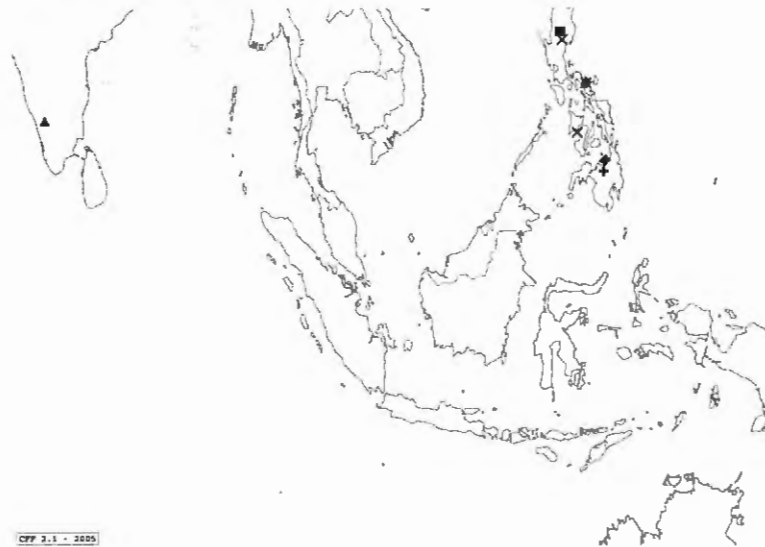
segments shorts, style long, black and plumose. Occiput with greyish tomentum, postocular bristles short and black, occipital bristles fine and white, lower occipital bristles bushy and white. Palpus brown with long and fine and yellowish setae.

Thorax: pronotum with greyish tomentum and fine white setae. Scutum, blackish, postalar callus brownish-yellow dorsally, yellow laterally; tomentum brown; two long, black notopleurals. Scutellum with two long, yellow scutellar bristles. Wings iridescent, slightly brownish with microtrichia at the tip. Pleura entirely dark, black anteriorly, brownish posteriorly including metacoxa; tomentum greyish with yellowish setae. Katatergal and metepisternal bristles long, fines and yellowish.



CVF 2.1 - 2005

- + *Pygommatus epicalus* 3 specimens
- X *Pygommatus halmherensis* 5 specimens
- ▲ *Pygommatus hocus* 5 specimens
- *Pygommatus hypnus* 3 specimens
- ◆ *Pygommatus iriga* 3 specimens



CVF 2.1 - 2005

- + *Pygommatus misamis* 5 specimens
- X *Pygommatus montanus* 4 specimens
- ▲ *Pygommatus nilgiriensis* 1 specimen
- *Pygommatus scinius* 1 specimen

Maps 3-4. Distribution of the species of *Pygommatus* in Oriental region.



Fig. 1. *Pygommatus halmaherensis* n.sp.



Fig. 2. *Pygommatus halmaherensis* n.sp., full face.



Fig. 3. *Pygommatius halmaherensis* n.sp., ventral view of genitalia.



Fig. 4. *Pygommatius halmaherensis* n.sp., lateral view of genitalia.

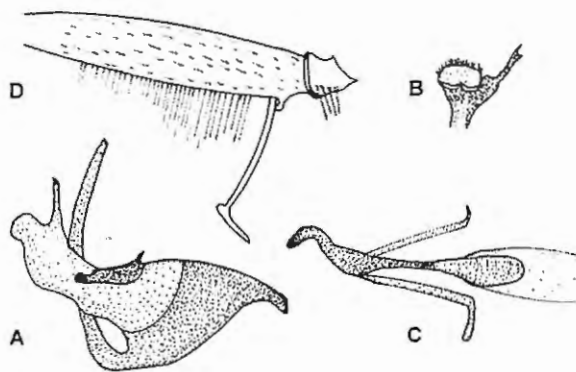


Fig. 5. *Pygommatius halmaherensis* n.sp. A: internal view of epiandrium ; B: dististylus ; C: aedeagus ; D: fore leg.

Legs: coxa with greyish tomentum and yellowish setae; fore coxa yellow, middle and hind coxae brown. Fore and middle trochanters and femora yellow, hind coxa black with yellow setae. Fore and middle femora yellow, with a stripe of abundant whitish setae ventrally; fore femur with an unusually long yellow **L-shaped bristle** basally; middle femur with short black setae anteriorly. Hind femora with basal half yellow, black anteriorly with some stout black setae anteriorly and anteroventrally, 4-5 longer bristles posteroventrally. Fore and middle tibiae yellow with very short black and long fine yellow setae; lateral bristles third to half as long as tibiae. Hind tibiae yellow with black apically, setae short, yellow or black; apex with flat dagger-like spur; hind tibiae slightly bent on apical third, interior margin appears emarginated in posterior view. Fore and middle metatarsus yellow with black and yellow setae, tarsomeres otherwise black with black setae.

Abdomen: shining black, tergites with short black setae on the middle and long, yellow setae

laterally. Sternites 3-5 with several erect stout bristles.

Male genitalia: shining black with pale brown apex. Epiandrium with three branches, the dorsal branch short with apex concealed below pygidium; second branch much longer and slender, stylate; third branch flat and wide, shorter than stylate branch, with hair-like process apically. Gonostylus reduced. Endoaegeal process slender, distiphallus short and curved, aedeagal apodeme long, and the dorsal and ventral apodemes of aedeagal sheath long and flat tape. Hypandrium with a wide transverse cluster of numerous brown and long bristles.

Derivatio nominis: the name refers to the region where the species has been collected.

Remarks. *Pygommatius halmaherensis* is distinguished by the stout L-shaped bristle below the fore femur, stripe of abundant pale setae below the middle femur, a slightly bent hind tibiae with a flat apical spur, erect bristles on sternites 3-5, and combined characters of the male terminalia. These characters readily separate it from *P. calvus*.

References

- GELLER-GRIMM F., 2010. - Database of Asilidae. www.geller-grimm.de/asilidae.htm
- SCARBROUGH A.G., & HILL H., 2005. - *Pygommatius* Scarbrough & Marascia, a valid Ommatiinae genus (Diptera: Asilidae) with new combinations and new species from the Philippines. *Zootaxa*, 1055: 1-22.
- SCARBROUGH A.G., & MARASCIA C.G., 2003. - Revision of *Ommatius* Wiedemann (Diptera: Asilidae). IV. *Pygommatius* subgen. nov. with twenty-five Afrotropical species. *Zootaxa*, 228: 1-4.
- SCARBROUGH A.G., & TOMASOVIC G., 2010. - *Ommatomyia*, a new Ommatiinae genus and species

- from Vietnam (Diptera: Asilidae). *Zootaxa*, 2366: 46-54.
- TOMASOVIC G., 2005a. - New Asilidae (Diptera) from Thailand : Contribution 2. *Bulletin de la Société royale belge d'Entomologie*, 141 : 163-167.
- TOMASOVIC G., 2005b. Genus *Nusa* Walker, 1851: three new species from Cambodia and notes on the genus (Diptera: Asilidae: Laphriinae). *Bulletin de la Société royale belge d'Entomologie*, 141 : 168-173.
- TOMASOVIC G., 2006a. - Etude sur les genres d'Asilidae (Diptères) recensés de 2003 à 2005 sur le site d'Angkor (Cambodge). *Belgian Journal of Entomology*, 8(1) : 11-15.
- TOMASOVIC G., 2006b. Une nouvelle espèce d'*Hoplophomerus* Becker, 1925 de Chine est décrite. La présence d'espèces d'*Emphysomera* Schiner, 1866 est citée pour la première fois au Cambodge (Diptera Asilidae) *Bulletin de la Société royale belge d'Entomologie* 142 : 68-71.
- TOMASOVIC G., 2007. - Description of a new species and review of the oriental species in the subfamily Trigonomiminae Enderlein, 1914 (Diptera: Asilidae). *Notes fauniques de Gembloux*, 60(3): 129-132.
- TOMASOVIC G., 2008. - A new species of *Aphistina* Oldroyd 1972 from Thailand (Diptera: Asilidae: Laphriinae). *Entomologie faunistique*, 68(3): 125-128.
- TOMASOVIC G. & GROOTAERT P., 2003. - New Asilidae (Diptera) from Thailand : contribution 1. *Bulletin de la Société royale belge d'Entomologie*, 139 : 252-258.
- TOMASOVIC G. & GROOTAERT P., 2008. - Four new species of robber-flies (Diptera : Asilidae) from the Oriental Region. *Bulletin de la Société royale belge d'Entomologie*, 144 : 71-78.
- TOMASOVIC G. & K. SMETS 2007. - Description of three new species and a first record of Asilidae (Diptera) from Cambodia. *Bulletin de la Société royale belge d'Entomologie* 143 : 41-47.
-