Serangga 14(1-2): 93-98 ISSN 1394-1530 © 2009, Centre for Insect Systematics, Universiti Kebangsaan Malaysia & Department of Museums Malaysia

A NEW SPECIES OF *GORYPHUS* HOLMGREN FROM MALAYSIA (HYMENOPTERA: ICHNEUMONIDAE:CRYPTINAE)

Nur Azura, A.¹ & Idris, A.B.²

 ¹Dept. of Plant Protection, Faculty of Agriculture, Universiti Putra Malaysia, 43400 UPM Serdang, Selangor, Malaysia E-mail : nurazura_adam@hotmail.com
²Center for Insect Systematics, Universiti Kebangsaan Malaysia, 43600 UKM Bangi, Selangor, Malaysia E-mail : idrisgh@pkrisc.cc.ukm.my

ABSTRACT

One new species of *Goryphus pilosus* sp nov. from Malaysia is described and illustrated.

Key words: Ichneumonidae, *Goryphus*, new species, description, Malaysia.

ABSTRAK

Spesies baru *Goryphus pilosus* sp nov. daripada Malaysia telah diperihalkan dan diilustrasi.

Kata kunci: Ichneumonidae, *Goryphus*, spesies baru, perihalan, Malaysia.

Serangga

INTRODUCTION

The genus *Goryphus* is one of the commonest genera of Cryptinae. It is abundant in tropical and subtropical parts of the Old World (Jonathan & Gupta, 1973). It includes robust species that are parasitic upon various small or medium-sized cocoons and sometimes naked pupae host. *Goryphu* was firstly described and figured by Holmgren in the year 1868 and they were four species, *detritus* and *basilaris* from China, *ruficollis* from Java and *apicalis* from Philippines. In Malaysia, Gauld (1987) reported that *Goryphus bunoh* to be a biocontrol agent of Limacodidae of economic importance on palms in Malaysia. Another successful species is *Goryphus mesoxanthus mesoxanthus* which is a parasitoid of the planthopper in paddy field in Malaysia (Vreden & Abdul Latif 1986). Nine species were previously recorded in Malaysia (Yu & Horstmann, 1997; Jonathan & Gupta, 1973) and this paper added another four species which are new to science.

MATERIALS & METHODS

Materials examined in this study obtained from two repositories namely Centre for Insect Systematics, Universiti Kebangsaan Malaysia (CISUKM) and Nationaal Natuurhistorisch Museum, Leiden (LEIDEN). Species descriptions include the descriptions of head, thorax, abdomen and colouration. The measurements of body and apophyses length are also included. The information of the materials examined is arranged as follows: Country, Locality, Gender, Date, Collector and Repository Centre.

TAXONOMY

Goryphus pilosus Azura & Idris, sp.nov. (Fig. 1)

Remarks. The word ' pilosus' derives from the Latin which means hairy. The body and face are almost covered with moderate long, white hairs. The colouration is similar to *Goryphus elegans* but can still be distinguished by having a smooth pronotum surface.

94

DESCRIPTION

Male

Head. Face dull and rugose; clypeus polished with sparse, shallow and minute punctures with white hairs; frons polished with weak wrinkles; median carina weak; vertex polished and smooth; malar space 0.4 x the basal width of mandible;

Thorax. Pronotum polished and smooth except a few short striae along the middle of apical margin of pronotum, pronotal polished and smooth, epomia reaching the upper margin; mesoscutum polished, sparsely, shallowly and minutely punctuate, lateral lobes of notaulus without aciculation or striae; scutellum polished and smooth, lateral carina of scutellum confined to its base; metascutellum dull and smooth; mesopleurum broadly smooth, short striae along prepectal carina and just above speculum, area below sternaulus smooth, prepectal carina reaching subtegular; metapleurum broadly smooth, rugose with a few striae along juxtacoxal carina, juxtacoxal carina present; propodeum broadly strigose except above basal transversed carina, smooth; apophyses almost indistinct only crest-like, basal carina strongly present, weakly curved in the middle, apical carina strongly present, propodeal spiracle oval, median longitudinal carina incomplete, almost absent; areolet pentagonal, 0.7 x the height of vein above bulla, intercubiti diverge apically, second intercubitus hyaline.

Abdomen. First tergite polished and smooth, second and third tergites dull and moderately with deep and small punctures, the following tergite dull, with moderate, deep and small punctures.

Coloration

Black. The apical 0.3 of first tergite, second and seventh tergites apically, eighth tergite, front tibia broadly except a brown spot in the middle, front trochanter, subbasal of hind tibia, the basal 0.3 and apical 0.3 of middle tibia, whitish; middle and front coxa a spot below antennal socket, basal 0.3 of first tergite, whitish yellow; propodeum, metapleurum, sternaulus below, mesopleurum

Serangga

apically, orange; hind femur, hind tibia broadly and extreme base, outer side of front femur, brown; fore wing fuscous brown below stigma and apically.

Measurement

Length: Body 5.8 mm; Fore wing 4.4 mm.

Distribution. Malaysia.

Materials examined: 38 Males.

Holotype: MALAYSIA: NEGERI SEMBILAN: Pasoh Forest Reserve, 20.xii.2002 (50 ha plot), Ng. Y. F. & Ruslan, Male (CISUKM). Paratype: MALAYSIA: NEGERI SEMBILAN: Pasoh Forest Reserve, 20.xii.2002 (50 ha plot), Ng. Y. F. & Ruslan, 3 M (CISUKM); NEGERI SEMBILAN: Pasoh Forest Reserve, 20.i.2003, (50 ha plot), Ng. Y. F. & Ruslan, 2 M (CISUKM); NEGERI SEMBILAN: Pasoh Forest Reserve, 9.vi.2002 (50 ha plot), Ng. Y. F. & Ruslan, 1 M (CISUKM); NEGERI SEMBILAN: Pasoh Forest Reserve, 24.x.2002 (50 ha plot), Ng. Y. F. & Ruslan, 1 M (CISUKM); PERAK: Hutan Simpan Sungkai, 23-29.vii.2000, Soon (ufuk 1), 1 M (CISUKM); PAHANG: Hutan Kuala Lompat, 6.vii.1999, Rozienah, 3 M (CISUKM); Hutan Kuala Lompat, 7.ii.1998, Azura, 7 M (CISUKM); Hutan Kuala Lompat, 24.xi.1997, Azura, Zabidi, Faisal, 10 M (CISUKM); SABAH: south-east Sabah near Danum Valley Field C. c. 150 m, WON 0 Mal. Trap 5, 5.xii.1987-20.i.1988, C.v.Achterberg & T. Burghouts, 1 M (LEIDEN); south-east Sabah near Danum Valley Field C, Malaise trap 2 c175m, 14-26.iii.1987, C.v.Achterberg, 1 M (LEIDEN); south-east Sabah near Danum Valley Field C WON 1. Mal. Trap 5, c150m, 20.vi-12.vii.1987, C.v.Achterberg & D. Kennedy, 1 M (LEIDEN); southeast Sabah near Danum Valley Field C WON 1. Mal. Trap 5, c150m, 2-23.viii.1987, C.v.Achterberg & D. Kennedy, 1 M (LEIDEN); south-east Sabah near Danum Valley Field C, Malaise Trap 2, W5 c.150 m, 20-22.xi.1987, C.v.Achterberg, 1 M (LEIDEN); south-east Sabah near Danum Valley Field C WON 1. Mal. Trap south-west Sabah near Long Pa Sia, Payakalaba, c. 1010 m, Mal. Trap 15 (1 M) & 16 (2

96

M), 25.xi-1.xii.1987, 3 M C.v.Achterberg (LEIDEN); south-east Sabah near Danum Valley Field C, WO, Malaise trap 11, c 150 m, 20-26.iii.1987, C.v.Achterberg, 1 M (LEIDEN).

ACKNOWLEDGEMENT

We would like to express our gratitude and thanks to Nationaal Natuurhistorisch Museum, Leiden for lending specimens of *Goryphus* Holgrem. A special thank goes to Mr Ruslan Md Yusop for his assistance during the sampling of this project. The study on the *Goryphus* is funded by the Ministry of Science, Technology and the Environments, under the IRPA Programme, Project No. 09-02-02-0017-EA072.

REFERENCES

- Jonathan, J.K. & Gupta, V.K. 1973. Ichneumonologia Orientalis: Part III. The Goryphus-Complex (Hymenoptera: Ichneumonidae). Delhi: The Association for the Study of Oriental Insects C/O Dept. of Zoology, University of Delhi.
- Gauld, I.D. 1987. The ichneumonid parasitoids associated with Southeast Asian Limacodidae. In Cook, M.J.W. Godfrey, H.C.J. & Holloway, J.D. (pnyt.). Slug and netttle caterpillars: the biology, taxonomy and control of the Limacodidae of economic importance on palms in Southeast Asia, hlm. 123-138. UK: CAB International, Wallingford.
- Vreden, G.V. & Abdul Latif, A. 1986. Pests of rice and their natural enemies in Peninsular Malaysia. Wageningen: Centre of Agricultural Publishing and Documentation (Pudoc).
- Yu, D.S. & Horstmann, K. 1997. A catalogue of world Ichneumonidae (Hymenoptera) part 1: subfamilies Acaenitinae to Ophioninae. *Memoirs of the American Entomological Institute* 58: 49-252.

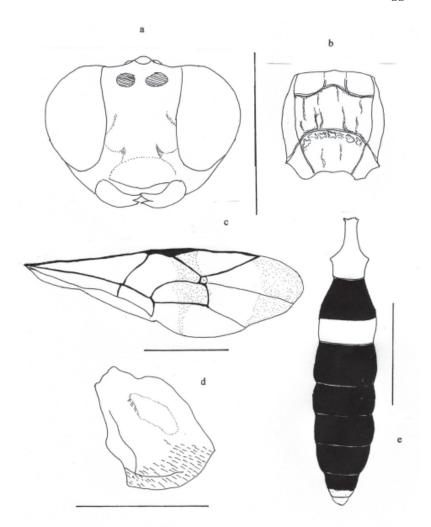


Fig. 1 *Goryphus pilosus* Azura & Idris, sp. nov. a, anterior view of head; b, propodeum; c, fore wing; d, mesopleurum; e, tergite (scale: 1mm)

98