

Far Eastern Entomologist

Дальневосточный энтомолог

Journal published by Far East Branch
of the Russian Entomological Society
and Laboratory of Entomology, Federal
Scientific Center of the East Asia
Terrestrial Biodiversity, Vladivostok

Number 470: 1-7

ISSN 1026-051X (print edition)
ISSN 2713-2196 (online edition)

February 2023

<https://doi.org/10.25221/fee.470.1>

<https://elibrary.ru/ddyjvr>

<https://zoobank.org/References/00912736-02B8-4065-AD94-A92D5C4184D7>

A NEW SPECIES OF THE GENUS *HYPERXIPHIA* MAA, 1949 (HYMENOPTERA: XIPHYDRIIDAE) FROM VIETNAM

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Summary. A new species, *Hyperxiphia punctata* Pham, **sp. n.** is described and illustrated from Ngoc Dong, Ha Quang, Cao Bang, Vietnam. An annotated list and a key to the three Vietnamese species of the genus *Hyperxiphia* is provided.

Key words: wood wasps, taxonomy, new species, key, Oriental region.

Ф. Х. Фам, А. Т. Т. Нгуен, Н. Т. Фам. Новый вид рода *Hyperxiphia* Маа, 1949 (Hymenoptera: Xiphydriidae) из Вьетнама // Дальневосточный энтомолог. 2023. N 470. С. 1-7.

Резюме. Из Вьетнама (Каобанг: Хакуанг, Нгок Донг) описан *Hyperxiphia punctata* Pham, **sp. n.** Приведены определительная таблица и список трех вьетнамских видов рода *Hyperxiphia*.

INTRODUCTION

Xiphydriidae occur in most major regions of the world, except sub-Saharan Africa. Xiphydriid wasps are characterized by distinctive, elongate, cylindrical body,

dome-shaped head, and long neck. The family consists of about 150 species in 29 genera and two subfamilies. Many xiphydriids are not commonly collected and are known from by only one or a few specimens. Those from southeastern Asia are poorly known (Smith, 2008, 2020; Taeger *et al.*, 2010).

Hyperxiphia Maa, 1949 is a small Asian genus of wood wasps occurring from Japan to Vietnam, Malaysia, Indonesia, and also Myanmar. The genus consists of 21 species, of which, 17 being recorded in the Oriental region, and the others being recorded in the eastern Palearctic region (Taeger *et al.*, 2010; Smith, 2019, 2020).

There have had two xiphydriids of the genus *Hyperxiphia* known from Vietnam, namely *H. melanaria* (Mocsáry, 1904) and *H. varia* (Mocsáry, 1904) (Mocsáry, 1904; Maa, 1949). Here, we describe and illustrate a new species of *Hyperxiphia* and provide a key to the Vietnamese congeners.

MATERIAL AND METHODS

The adult morphological and color characters were observed and described from pinned and dried specimens with the aid of a stereoscopic microscope. Morphological terms in general follow Smith (2008). Photographic images were taken using a Nikon SMZ800N microscope camera and a Canon SD3500 IS camera.

A key to all Vietnamese species of the genus *Hyperxiphia* was constructed based on a key to *Hyperxiphia* of Maa (1949) with only key characters of *H. melanaria* and *H. varia* and on the new species described here.

The holotype of the new species is deposited in the Institute of Ecology and Biological Resources (IEBR), Vietnam Academy of Science and Technology, Hanoi, Vietnam.

TAXONOMY

Genus *Hyperxiphia* Maa, 1949

Hyperxiphia Maa 1949: 23, 38, 165. Type species: *Hyperxiphia unguivaria* Maa, 1949, by original designation.

Palpixiphia Maa 1949: 23, 31, 165. Type species: *Xiphydria formosana* Enslin, 1911, by original designation. Synonymized by Smith, 2008: 54.

DIAGNOSIS. *Hyperxiphia* can be identified by the following characters: head rounded, without depression above ocelli; frons with longitudinal carinae; maxillary palpus 4-5-segmented, about half length of labial palpus; gena with distinct carina; medial length of pronotum short, much shorter than depth of excavation of pronotal collar in front; mesoscutellum rounded at apex, without tubercle; wing venation complete, with all veins and cells present, forewing costal cell narrow, not much wider than costa; all claws with inner tooth.

An annotated list of Vietnamese species with description of new species

Hyperxiphia melanaria (Mocsáry, 1904)

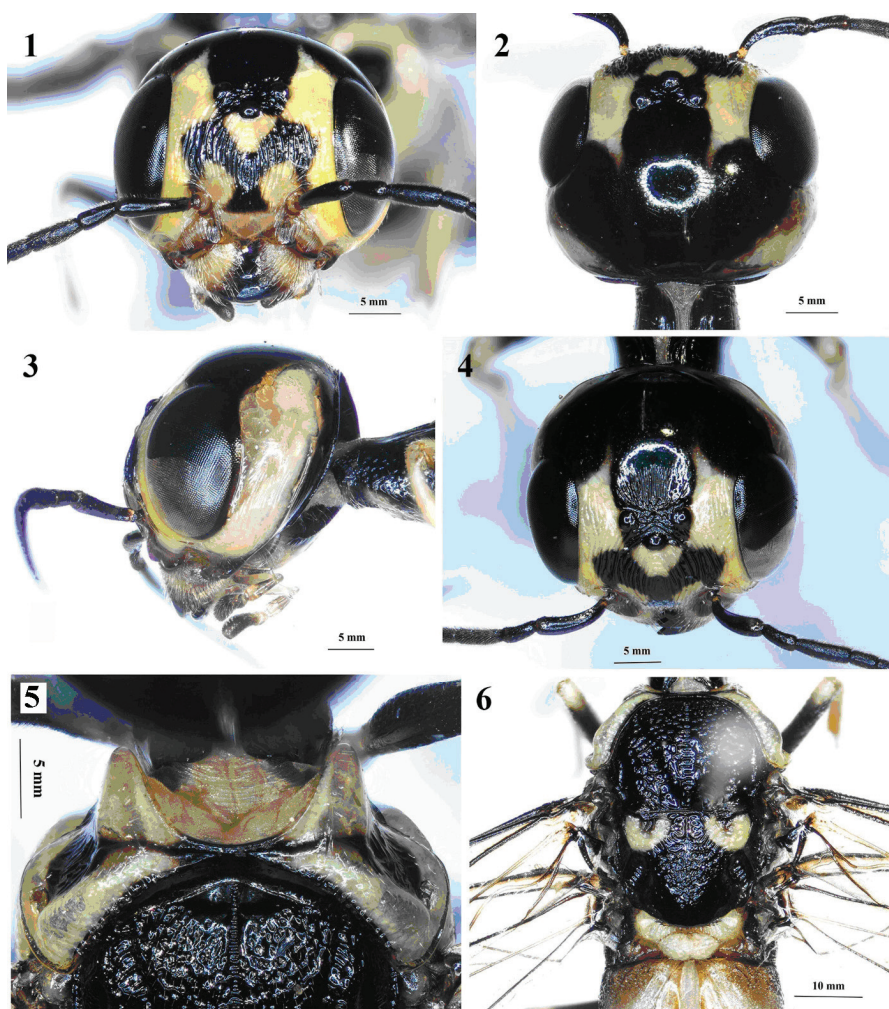
Xiphydria melanaria Mocsáry, 1904: 497.

DISTRIBUTION. Vietnam: Tonkin (currently Northern Vietnam) (Mocsáry, 1904; Maa, 1949).

***Hyperxiphia varia* (Mocsáry, 1904)**

Xiphydria varia Mocsáry, 1904: 497.

DISTRIBUTION. Vietnam: Tonkin (currently Northern Vietnam) (Mocsáry, 1904; Maa, 1949).



Figs 1–6. *Hyperxiphia punctata* Pham, sp. n., holotype ♀. 1 – head, frontal view; 2 – head, dorsal view; 3 – head, lateral view; 4 – vertex; 5 – pronotum, dorsal view; 6 – thorax, dorsal view.

***Hyperxiphia punctata* Pham, sp. n.**

<https://zoobank.org/NomenclaturalActs/9C516B82-9758-4510-9E13-EB02ECAA288F>

Figs 1–12

MATERIAL. Holotype: ♀, **Vietnam:** Cao Bang, Ha Quang, Ngoc Dong, 22°46'23" N, 105°58'29" E, 312 m, 23.V 2022, coll. Phong Huy Pham (IEBR).

DIAGNOSIS. Antenna black, 18-segmented; vertex with distinct, longitudinal carinae medially behind hind ocelli; eyes moderately diverging below; mesopleuron with dense, coarse, large punctures, interspace much smaller than puncture diameter; mesonotum rugoreticulate, black with axillae and metanotum yellowish white; wings hyaline, forewing darkly infuscated subapically; abdominal segments 1–5 reddish brown; abdominal tergites 1, 2, 5, 6, 8 with yellowish white spots laterally; sheath long, about $3.1 \times$ longer than broad, black except reddish brown at base.

DESCRIPTION. Female. Body length 16 mm (measured from the head to the apex of the last abdominal segment), forewing length 11 mm.

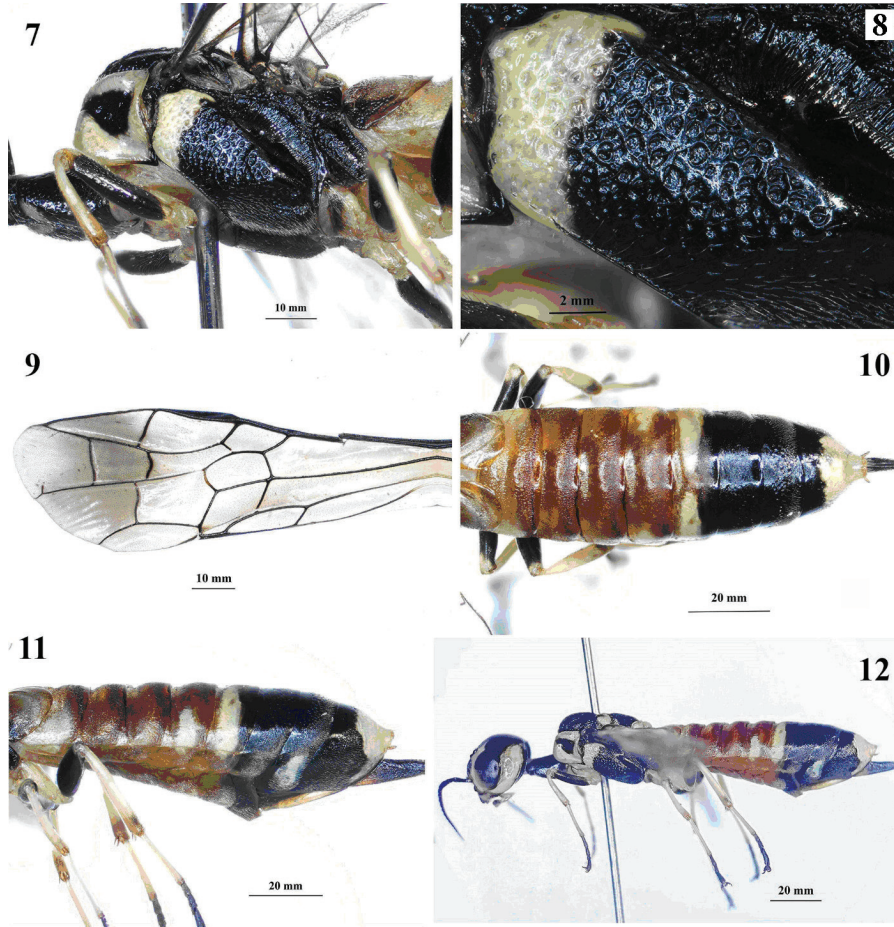
Colour. Antenna black (Figs 1–4). Head black except base of mandible, orbits (except upper area), area below antennae, antennal socket, and large band on gena extending to occipital carina near middle area, labial palpus and maxillary palpus (except apical palpomere brown) yellow (Figs 1–4). Thorax black with following yellowish white parts: pronotum except middle area and lateral spots; axillae, upper area of mesopleuron, tegula, metanotum (Figs 5–8), coxae, trochanters, tibiae, basitarsi (Figs 11, 12). Abdomen with segments 1–5 reddish brown, 6 reddish brown except black at apical area, 7 and 8 black, 9 black except yellowish white at apical area, 10 yellowish white; abdominal tergites 1, 2, 5, 6, 8 with yellowish white spots laterally, that on 6 extending to near middle area (Figs 10–12); sheath black with base reddish brown (Figs 11, 12). Wings hyaline, veins and stigma black, forewing darkly infuscated subapically (Fig. 9).

Head (Figs 1–4). Round in frontal view (Fig. 1); mandible with four teeth, apical tooth largest (Fig. 1); labial palpus with 4 palpomeres, first palpomere as long as remaining palpomeres combined; maxillary palpus with 4 palpomeres, its length about $2 \times$ that of labial palpus; antenna 18-segmented, first segment longest, with fine punctures; first and second segments shiny, with sparse, short setae; remaining segments covered with dense setae; relative lengths of antennal segments 1: 2: 3: 4 = 30: 16: 22: 12; frons with longitudinal carinae from level of hind ocelli through supraclypeal area (Figs 1, 4); eyes moderately diverging below, upper interocular distance equal to eye height (Fig. 1); vertex sparsely, finely punctate, with longitudinal median carinae behind hind ocelli (Figs 2, 4); gena with distinct carina (Fig. 3).

Thorax (Figs 5–9, 12). Propleuron shiny, with sparse punctures mostly laterally; pronotum shiny, medial length of pronotum much shorter than depth of excavation of pronotal collar in front (Fig. 5), with diagonal area of short carinae at center. Mesoscutum conspicuously rugoreticulate, with dense, coarse punctures except lateral sides, interspaces much smaller than puncture diameters (Fig. 6); mesoscutellum rugose, shiny, impunctate apically; mesopleuron shiny, with dense, coarse, large punctures, interspaces much smaller than puncture diameters (Figs 7, 8); mesosternum shiny,

without punctures; metanotum rugose (Fig. 6); metapleuron densely punctate (Fig. 7); fore basitarsus equal to remaining tarsomeres combined, hind basitarsus slightly shorter than remaining tarsomeres combined (Fig. 12); all tarsal claws with inner tooth (Fig. 12). Wings hyaline, veins black; forewing darkly infuscated subapically, with costal cell narrow, slightly wider than costa (Fig. 9).

Abdomen (Figs 10–12). Shiny; covered with sparse brownish setae; abdominal tergites 1–5 slightly rugose subapically, with dense, fine punctures; 7 impunctate; 8 with large punctures medially, interspaces equal to puncture diameters; 9 with a few punctures; 10 with long setae apically (Fig. 10); sheath stout and long, near straight in lateral view, about $3.1 \times$ longer than broad, about $0.9 \times$ length of basal plates (Figs 11–12).



Figs 7–12. *Hyperxiphia punctata* Pham, sp. n, holotype ♀. 7 – thorax, lateral view; 8 – mesopleuron; 9 – forewing; 10 – abdomen, dorsal view; 11 – abdomen, lateral view; 12 – habitus, lateral view.

Male. Unknown.

DISTRIBUTION. Vietnam: Cao Bang.

ETYMOLOGY. The name of species comes from punctured mesopleuron.

REMARKS. Maculae of the new species are rather similar to those of *H. semilutea* Smith, 2020 described from Laos (Smith, 2020), but they are different in the colour and shape. In *H. punctata*, yellow maculae on the vertex are angulate-shaped after the ocelli and triangle-shaped at the occipital carina (in *H. semilutea* they are truncated and L-shaped) and maculae on the thorax and the abdomen are yellowish white (in *H. semilutea* they are white). However, the new species is easily distinguished from the latter by characters as showed in Table 1.

Table 1. Different characters between *Hyperxiphia punctata* sp. n. and *H. semilutea* Smith, 2020

<i>H. punctata</i> sp. n.	<i>H. semilutea</i>
Vertex sparsely, finely punctate, with distinct, longitudinal carinae medially behind hind ocelli (Figs 2–4)	Vertex impunctate, rugulose medially behind hind ocelli
Mesopleuron with dense, coarse punctures, interspace much smaller than puncture diameter (Figs 7, 8)	Mesopleuron with sparse punctures, interspaces equal to or more than puncture diameters
Mesonotum conspicuously rugoreticulate, with dense, coarse punctures except lateral sides, interspaces much smaller than puncture diameters (Figs 5, 6)	Mesonotum rugulose
Forewing hyaline with infusate mark at sub-apex (Fig. 9)	Wings hyaline
Sheath long, about 3.1 times longer than broad (Figs 11, 12)	Sheath short, about 2 times longer than broad
Body length 16 mm (Fig. 12)	Body length 13.1 mm

Key to the Vietnamese species

1. All tibiae black except whitish at base of hind tibia. – Abdominal tergites 8 and 9 with whitish spots laterally, body length 12 mm *H. melanaria*
- All tibiae entirely brownish yellow or yellowish white 2
2. Legs brownish yellow, apico-tarsomeres brown; abdominal tergites 1, 2, 5, 8, and 9 with whitish spots; abdominal sternites 1–5 brownish yellow; antenna with 16 antennomeres, second antennomere less than 1/2 of 3rd and subequal to 4th; body length 9 mm *H. varia*
- Legs yellowish white except back at all femora and apico-tarsomeres; abdominal tergites 1, 2, 5, 6, and 8 with yellowish white spots laterally, 9 yellowish white apically; abdominal sternites 1–5 reddish brown; antenna with 18 antennomeres, second antennomere about 0.8 of 3rd, and about 1.8 of 4th; body length 16 mm *H. punctata* sp. n.

ACKNOWLEDGEMENTS

The authors are grateful to Dr. David R. Smith, Systematic Entomology Laboratory, Agricultural Research Service, U. S. Department of Agriculture c/o National Museum of Natural History, Smithsonian Institution, Washington, U.S.A., for discussing some aspects of the new species in this article and to Dr. Stephan M. Blank, Senckenberg Deutsches Entomologisches Institut, Eberswalder Str. 90, 15374 Müncheberg, Germany, for providing valuable literature. We thank anonymous reviewers for their valuable comments and suggestions on the manuscript. This research is funded by the Vietnam Academy of Sciences and Technology project number UQĐTCB.07/22–24 and by Research Grant Programme, Nagao Natural Environment Foundation (NEF), Tokyo, Japan to the first author.

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