Tropical Natural History 23 (2023): 105-113

A New Species of the Ant Genus *Vombisidris* Bolton, 1991 (Hymenoptera: Formicidae: Myrmicinae) from Thailand

TADSANAI JEENTHONG[1], WEEYAWAT JAITRONG[1] AND WATTANACHAI TASEN[2*]

[1]*Office of Natural Science Research, National Science Museum, 39 Moo 3, Khlong 5, Khlong Luang, Pathum Thani, 12120, THAILAND*
[2]*Department of Forest Biology, Kasetsart University, Bangkok, 10900, THAILAND*
[*]Corresponding author. Wattanachai Tasen (fforwct@ku.ac.th)
Received: 26 January 2023; Accepted: 23 May 2023

ABSTRACT. – A new species of the ant genus *Vombisidris* Bolton, 1991 is described from southern Thailand under the name *Vombisidris satunensis* **sp. nov.** based on the worker and queen castes. The new species can be distinguished from the other congeners in having a yellow head and mesosoma, a dark gaster, and a short and straight propodeal spine. The type series was collected from dead twigs hanging on a shrub at the forest edge. A key to the known species of the genus *Vombisidris* is provided.

KEYWORDS: ant, distribution, new species, taxonomy, Thailand, *Vombisidris satunensis*

INTRODUCTION

Vombisidris Bolton, 1991 is a small genus of the subfamily Myrmicinae. The genus is distributed in India, China, various countries in Southeast Asia, New Guinea, and Queensland of Australia (Bolton, 1991; 2003; Huang and Zhou, 2006; Zettel and Sorger, 2010; Xu and Yu, 2012; General, 2020; AntWeb, 2023), with majority of species in Malaysia and Indonesia (Huang and Zhou, 2006; AntWeb, 2023; AntWiki, 2023; Table 1). Bolton (1991) described the genus, with *Vombisidris philax* Bolton, 1991 as the type species. In his work, twelve species were reported from the Oriental Region. After Bolton (1991) few taxonomic papers dealing with the genus were published: Zacharias and Rajan (2004) from India; Huang and Zhou (2006), Xu and Yu (2012) from China; Zettel and Sorger (2010); General (2020) from the Philippines. Currently, 18 valid species have been known of the genus. Among them, ten species were recorded from Southeast Asia. Kachonpisitsak et al. (2020) only reported the occurrence of the genus in Thailand without listing any named species. All species of the genus were described based on worker caste. Queens of two species, *Vombisidris bilongrudi* (Taylor, 1989) and *Vombisidris humboldticola* Zacharias & Rajan, 2004 have so far been known.

Recently, we collected an undescribed species of *Vombisidris* from Satun Province, southern Thailand; the specimens collected are small, have a yellow head and mesosoma, a darker gaster, and short and straight propodeal spines. After carefully examining these specimens under stereoscope and comparing them with the type material of closely related species, it was concluded that the species is new to science. In the present paper, we describe this species based on the worker and queen castes. An updated key to known species of *Vombisidris* of the world based on the worker caste is provided.

MATERIALS AND METHODS

The new species was collected from dead twigs hanging on shrub trees at the forest edge near Urai Thong Cave (7°10'40"N, 99°49'25"E), La-ngu District, Satun Province and a forest edge near Khlong Huai Ba (6°58'29"N, 99°46'22"E), La-ngu District, Satun Province, southern Thailand. The holotype and paratypes are pin-mounted dry specimens and deposited in the Natural History Museum Collection (THNHM). The type series was compared with the holotype and paratype images of the closely related species: *Vombisidris harpeza* Bolton, 1991 (ANTWEB CASENT0901989, holotype worker) from Borneo; *Vombisidris nahet* Bolton, 1991 (ANTWEB CASENT0901992, holotype worker) from Sulawesi; *Vombisidris renateae* (Taylor, 1989) (ANTWEB CASENT0901993, paratype worker) from Australia; *Vombisidris dryas* Bolton, 1991 (ANTWEB CASENT0901988, holotype worker) from Sarawak; and *Vombisidris xylochos* Bolton, 1991 (ANTWEB CASENT0901986, holotype worker) from Borneo, which are available on AntWeb (2023) and AntWiki (2023).

Most morphological observations were made with a ZEISS Stemi 305 stereoscope. Multi-focused montage images were produced using NIS element 3.7 from a series of source images taken by a Nikon MNB42100 digital camera attached to a Nikon ECLIPSE E600 microscope. Eleven workers, one dealate queen, and five alate queens were measured using a micrometer. All measurements are expressed in millimeters to hundredths place.

The abbreviations used for the measurements and indices are as follows (modified from Xu and Yu, 2012):

TABLE 1. List of the *Vombisidris* species and their distribution. Type localities are marked with " * ".

Species	Distribution
1. *Vombisidris acherdos* Bolton, 1991	New Guinea (Papua New Guinea*)
2. *Vombisidris australis* (Wheeler, W.M., 1934)	Australia (Queensland*)
3. *Vombisidris bilongrudi* (Taylor, 1989)	New Guinea (Papua New Guinea*)
4. *Vombisidris dryas* Bolton, 1991	Borneo (Sarawak*) and Indonesia
5. *Vombisidris freyae* General, 2020	Philippines*
6. *Vombisidris harpeza* Bolton, 1991	Borneo (Sarawak*), Indonesia, and Brunei Darussalam
7. *Vombisidris humboldticola* Zacharias & Rajan, 2004	India (Kerala* and Karnataka)
8. *Vombisidris jacobsoni* (Forel, 1915)	Indonesia (Sumatra*)
9. *Vombisidris lochme* Bolton, 1991	Indonesia (Sulawesi*)
10. *Vombisidris nahet* Bolton, 1991	Indonesia (Sulawesi*)
11. *Vombisidris occidua* Bolton, 1991	India*
12. *Vombisidris philax* Bolton, 1991	Indonesia (Sulawesi*)
13. *Vombisidris philippina* Zettel & Sorger, 2010	Philippines (Cebu*, Luzon, and Negros)
14. *Vombisidris regina* Bolton, 1991	Borneo (Sabah*) and Indonesia
15. *Vombisidris renateae* (Taylor, 1989)	Australia (Queensland*)
16. *Vombisidris satunensis* **sp. nov.**	Thailand (Satun Province*)
17. *Vombisidris tibeta* Xu, Z. & Yu, 2012	China (Tibet*)
18. *Vombisidris umbrabdomina* Huang & Zhou, 2006	China (Hunan*)
19. *Vombisidris xylochos* Bolton, 1991	Brunei Darussalam*, Malaysia, and Indonesia

TL Total Length. Roughly measured from anterior margin of head (including mandible) to tip of metasoma in stretched specimens, excluding sting.
HL Head Length. Length of head proper in full-face view, excluding mandibles, measured in straight line from anterior clypeal margin to mid-point of posterior margin.
HW Head Width. Maximum width of head capsule measured in full-face view, excluding compound eyes (hereafter simply eyes).
ED Eye Diameter. Maximum diameter of eye with head positioned in profile view such that anterior and posterior eye margins are in same plane of focus.
SL The maximum straight-line length of the antennal scape excluding the basal constriction or neck close to the condylar bulb.
ML Mesosomal Length. Diagonal length of mesosoma in profile, from the point at which pronotum meets cervical shield to posterior margin of metapleuron.
CI Cephalic Index. HW x 100/HL.
SI Scape Index. SL x 100/HW.

Taxonomy

Vombisidris satunensis Jeenthong, Jaitrong & Tasen, sp. nov.

(Figs. 1, 2, 4C, 4E)

Types. Holotype– worker (THNHM-I-00000246, deposited in THNHM), S Thailand, Satun Province, La-ngu District, Kamphaeng Subdistrict, Urai Thong Cave, 7°10'40"N, 99°49'25"E, 21 May 2022, W. Jaitrong leg., TH22-WJT-188. **Paratypes–** 13 workers (THNHM-I-00000247 to THNHM-I-00000259, THNHM), 1 dealate queen (THNHM-I-00000260), and 5 alate queens (THNHM-I-00000261 to THNHM-I-00000265), same data as holotype; 12 workers (THNHM-I-00000266 to THNHM-I-00000277, THNHM) and 5 alate queens (THNHM-I-00000278 to THNHM-I-00000279, THNHM-I-00000295 to THNHM-I-00000297, THNHM), S Thailand, Satun Province, La-ngu District, Khlong Huai Ba near Khao Kluai Mountain, 6°58'29"N, 99°46'22"E, 22 May 2022, W. Jaitrong leg., TH22-WJT-214.

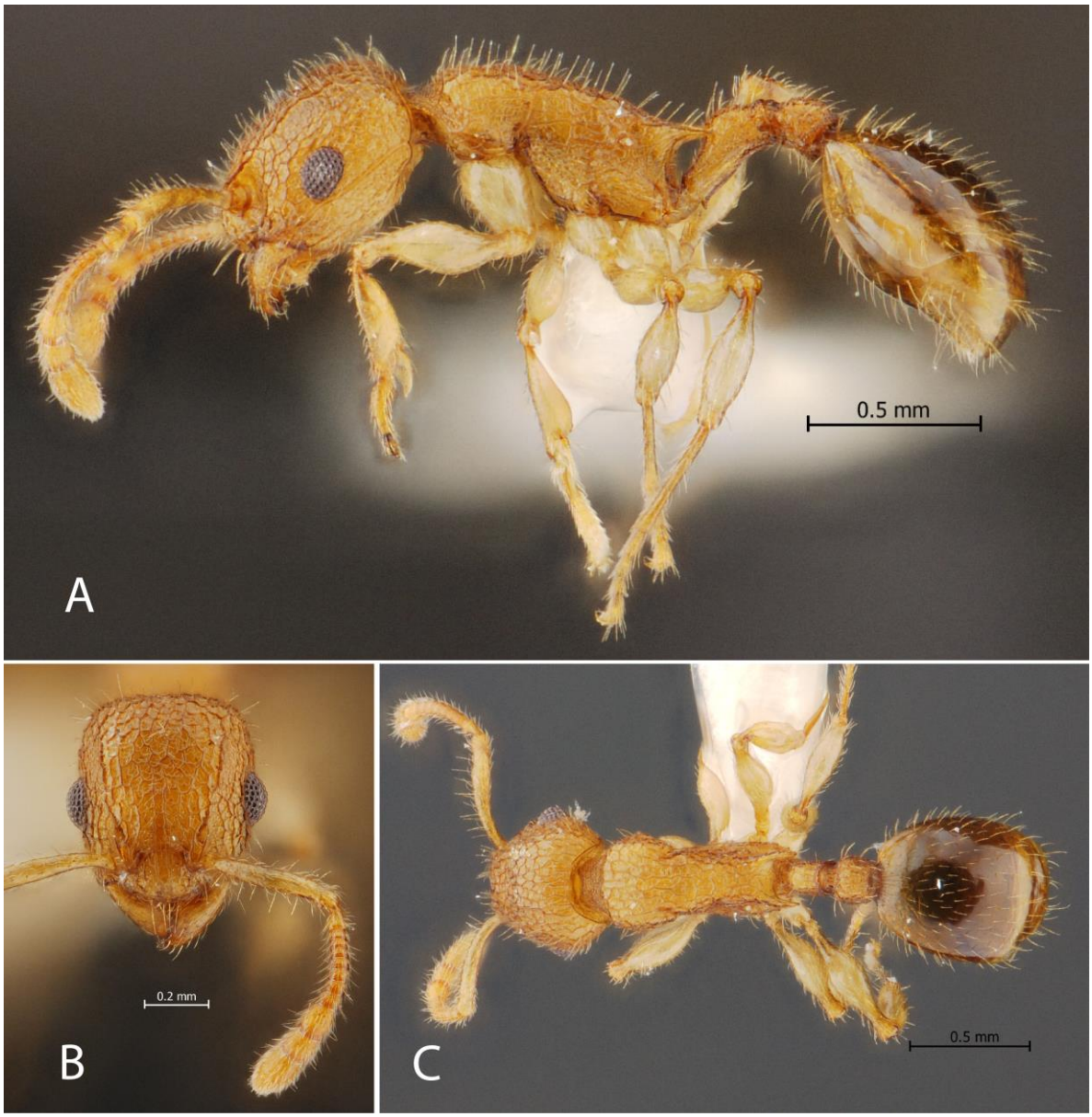

FIGURE 1. *Vombisidris satunensis* **sp. nov.** (holotype worker, THNHM-I-00000246). A, Head in frontal view; B, body in dorsal view; C, body in profile.

Worker description (Fig. 1)

Measurements (in mm). Holotype– TL 2.64, HL 0.66, HW 0.56, ED 0.17, SL 0.43, ML 0.79, CI 85, SI 76. **Paratypes–** (n = 11): TL 2.64–3.07, HL 0.66–0.76, HW 0.56–0.63, ED 0.17–0.20, SL 0.43–0.53, ML 0.79–0.86, CI 81–86, SI 76–88.

Head in full-face view subrectangular, distinctly longer than broad, almost parallel sided, with posterior margin broadly convex. Mandible subtriangular, masticatory margin with large apical tooth followed by 2 smaller teeth (second larger than third), long diastema, small prebasal tooth, and blunt basal tooth; basal margin of mandible straight, lacking denticles. Clypeus in full-face view subtrapezoidal, its anterior margin convex without denticles; in profile clypeus with distinctly convex median portion. Eye relatively large, convex, with 9–10 ommatidia in longest diameter, located laterally at middle length of head. Antenna 12-segmented; antennal scape slender, relatively long (0.81–0.86 times as long as head width), down-curved. Frontal lobes narrow, each lobe distinctly narrower than posterior portion of clypeus which is inserted between them. Torulus concealed by frontal lobe in full face view. Frontal carina present, extending beyond posterior margin of eye. Subocular groove complete, running from mandibular insertion to anteroventral margin of eye, then continuing along lateral face of head to posterolateral corner of head (partly touching anteroventral margin of eye).

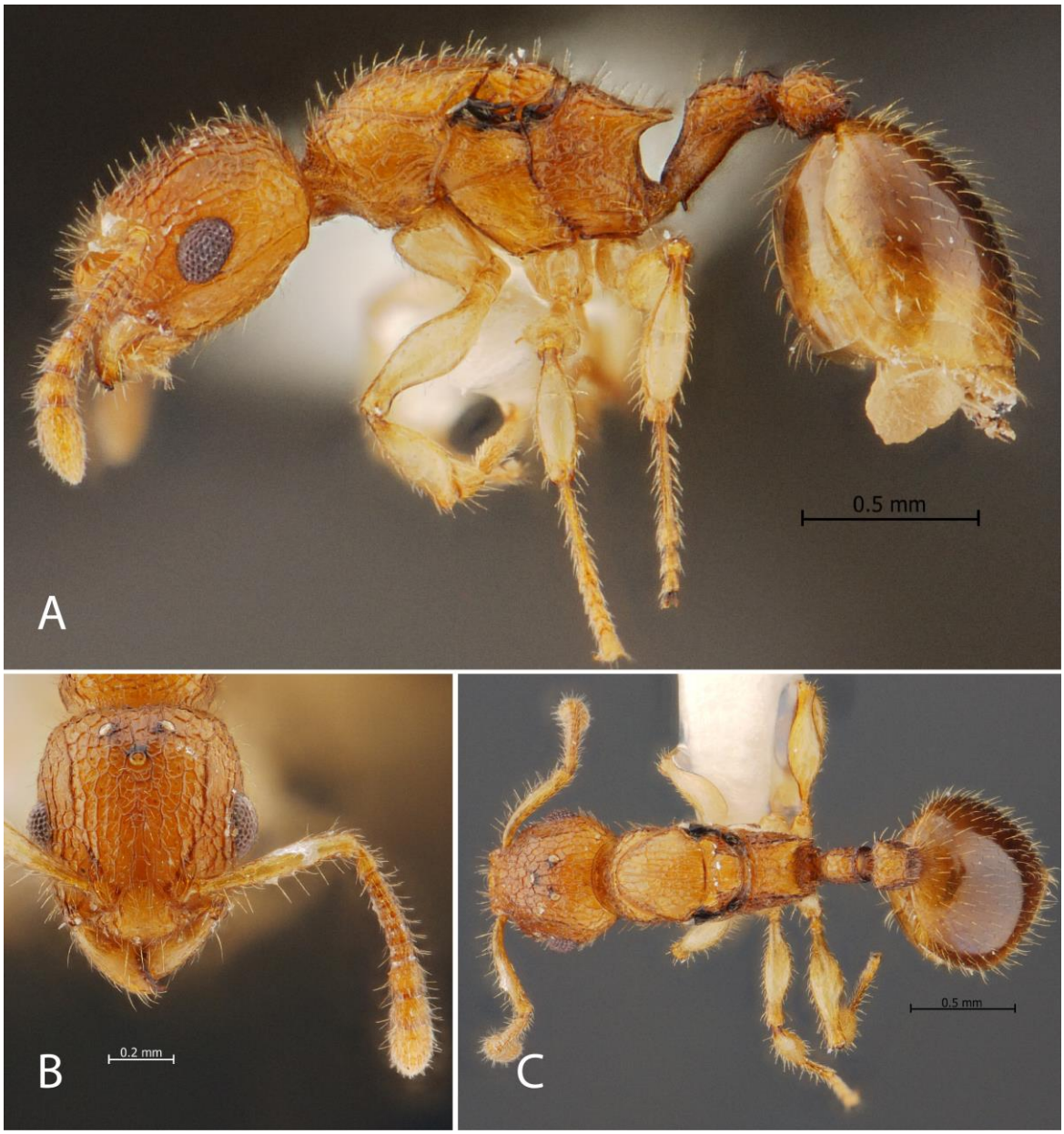

FIGURE 2. *Vombisidris satunensis* **sp. nov.** (paratype dealate queen, THNHM-I-00000260). A, head in frontal view; B, body in dorsal view; C. body in profile.

Mesosoma in profile slender with weakly convex dorsal outline; in dorsal view pronotum slightly shorter than broad and broader than mesonotum and propodeum; promesonotal suture absent; metanotal groove indistinct, a very shallow furrow; with mesosoma in profile mesopleuron broad and clearly demarcated from metapleuron by shallow suture; metapleuron not demarcated from lateral face of propodeum. Propodeal spine relatively short and straight, about 2 times as long as its width at base, sharp, pointed backward. Legs relatively long, femora and tibiae swollen medially.

Petiole in profile view pedunculate, clearly longer than high, petiolar node low with weakly convex dorsal outline. Postpetiole globular, about 0.5 times as long as petiole. Fist gastral tergite largest and extensively overlapping sternite.

Head, mesosoma, petiole and postpetiole reticulate, the reticulation on petiole and postpetiole finer than that on head; gaster smooth and shiny; mandible, antennal scape, legs smooth and shiny. Entire dorsum of body with dense erect hairs; scape covered with dense suberect hairs, sparsely with long erect hairs; flagellum of antenna with dense suberect hairs; anterior clypeal margin with 4–5 long erect hairs; mandible with sparse decumbent hairs; legs with sparser suberect hairs. Head, mesosoma, petiole, and postpetiole yellowish-brown; gaster darker than elsewhere; legs paler than mesosoma.

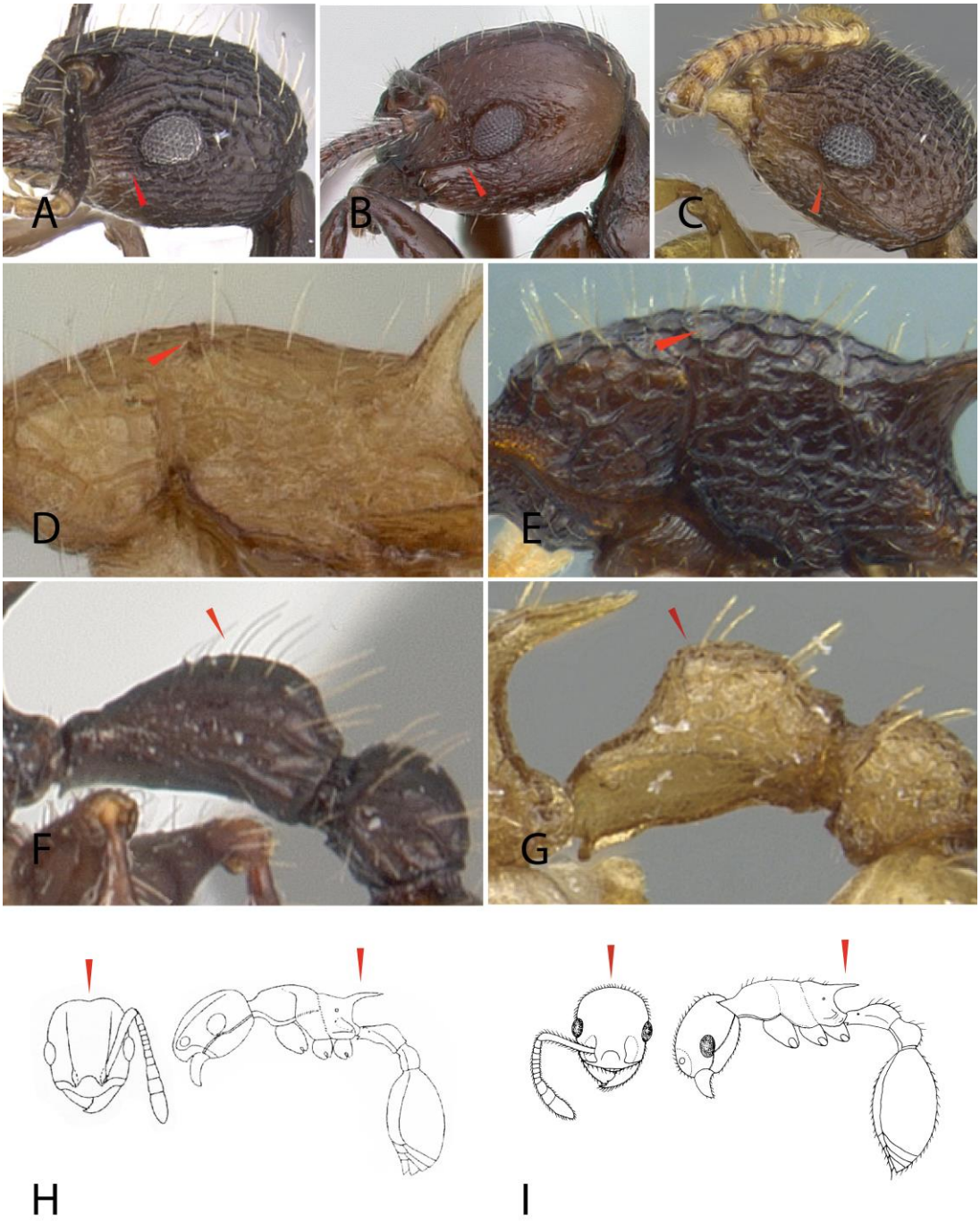

FIGURE 3. *Vombisidris* spp. A, *V. bilongrudi* (CASENT0901985, paratype worker); B, *V. acherdos* (CASENT0178734, paratype worker); C, *V. occidua* (CASENT0901990, holotype worker); D, *V. philax* (ASENT0178736, paratype worker); E, *V. philippina* (CASENT0919713, paratype worker); F, *V. regina* (CASENT0102595, paratype worker); G, *V. lochme* (CASENT0901987, holotype worker); H, *V. tibeta* (modified from Xu and Yu, 2012); I, *V. umbrabdomina* (modified from Xu and Yu, 2012).

Queen description (Fig. 2)

Measurements (in mm). **Paratypes–** (n = 1 dealate queen, 5 alate queens): TL 2.90–3.30, HL 0.69–0.79, HW 0.56–0.63, ED 0.17–0.20, SL 0.46–0.50, ML 0.92–0.99, CI 77–81, SI 79–83.

Similar to the worker in structure, sculpture and pilosity, with the following conditions that should be noted: body slightly larger; eye large, 0.17–0.20 mm, with 11–12 ommatidia in longest diameter; ocelli present (absent in worker), located on vertex, distance between median ocellus and lateral ocellus as long as distance between lateral ocelli; in dorsal view pronotum ‘narrow’, distinctly shorter than broad, its posterior margin strongly concave; mesoscutum almost as long as broad, anterior margin distinctly convex,

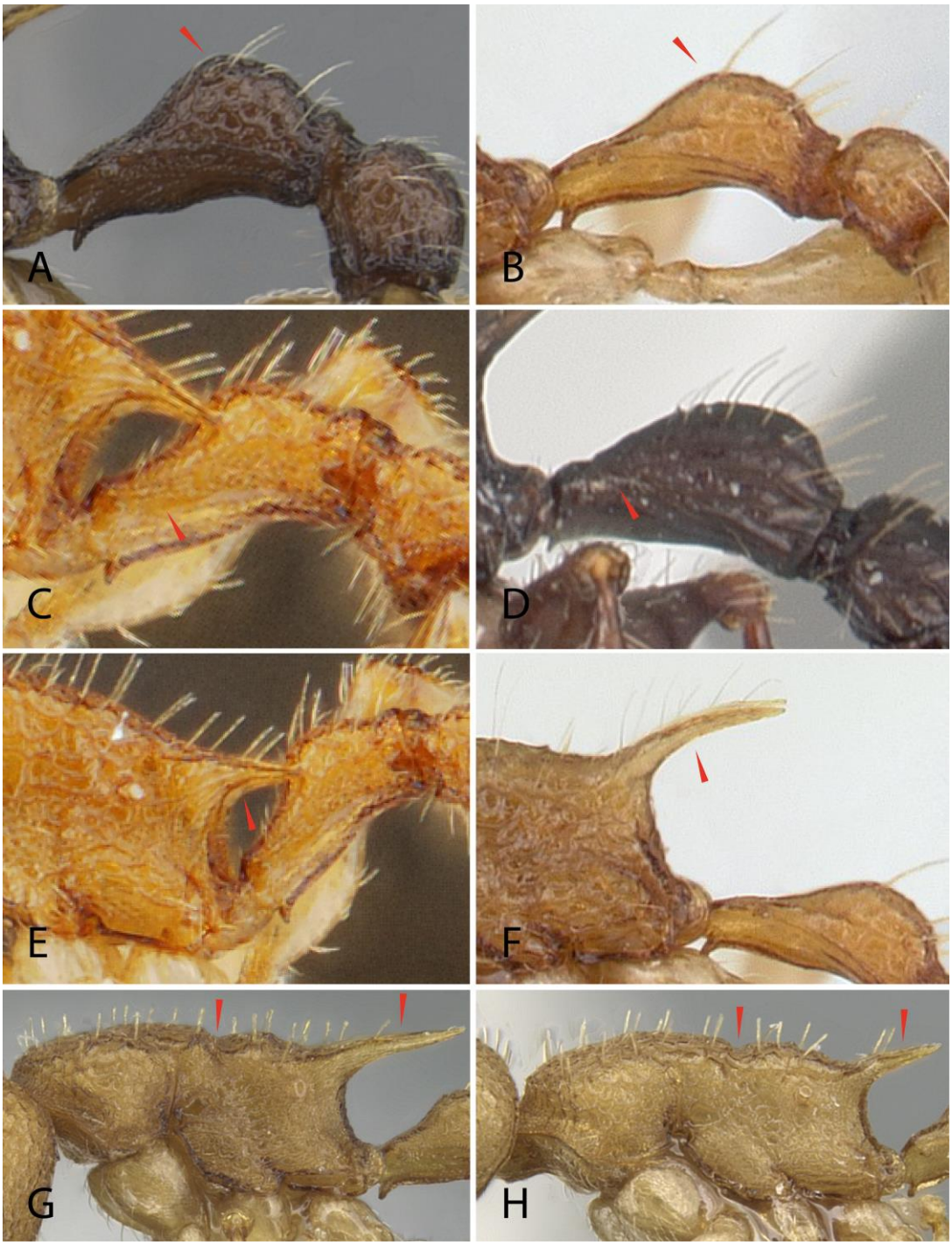

FIGURE 4. *Vombisidris* spp. A, *V. occidua*, (CASENT0901990, holotype worker); B, F, *V. nahet*, (CASENT0178735, paratype worker); C, E, *V. satunensis* (THNHM-I-00000246, holotype worker); D, *V. regina* (CASENT0102595, holotype worker); G, *V. xylochos* (CASENT0901986, holotype worker); H, *V. lochme* (CASENT0901987, holotype worker).

while posterior margin weakly convex; parapsidal lines invisible; scutellum shorter than broad; metanotum very short; metanotal-propodeal sulcus deeply impressed; in profile lateral face of pronotum large, much broader than dorsal median portion; mesopleuron broad, anepisternum small and clearly demarcated from katepisternum by distinct groove; metapleuron clearly demarcated from mesopleuron but not demarcated from lateral face of propodeum; propodeal dorsum longer than scutellar dorsum; propodeal spine relatively shorter than in worker.

Etymology.– The new species is named after Satun Province, where it was collected.

Distribution.– Thailand (Satun Province).

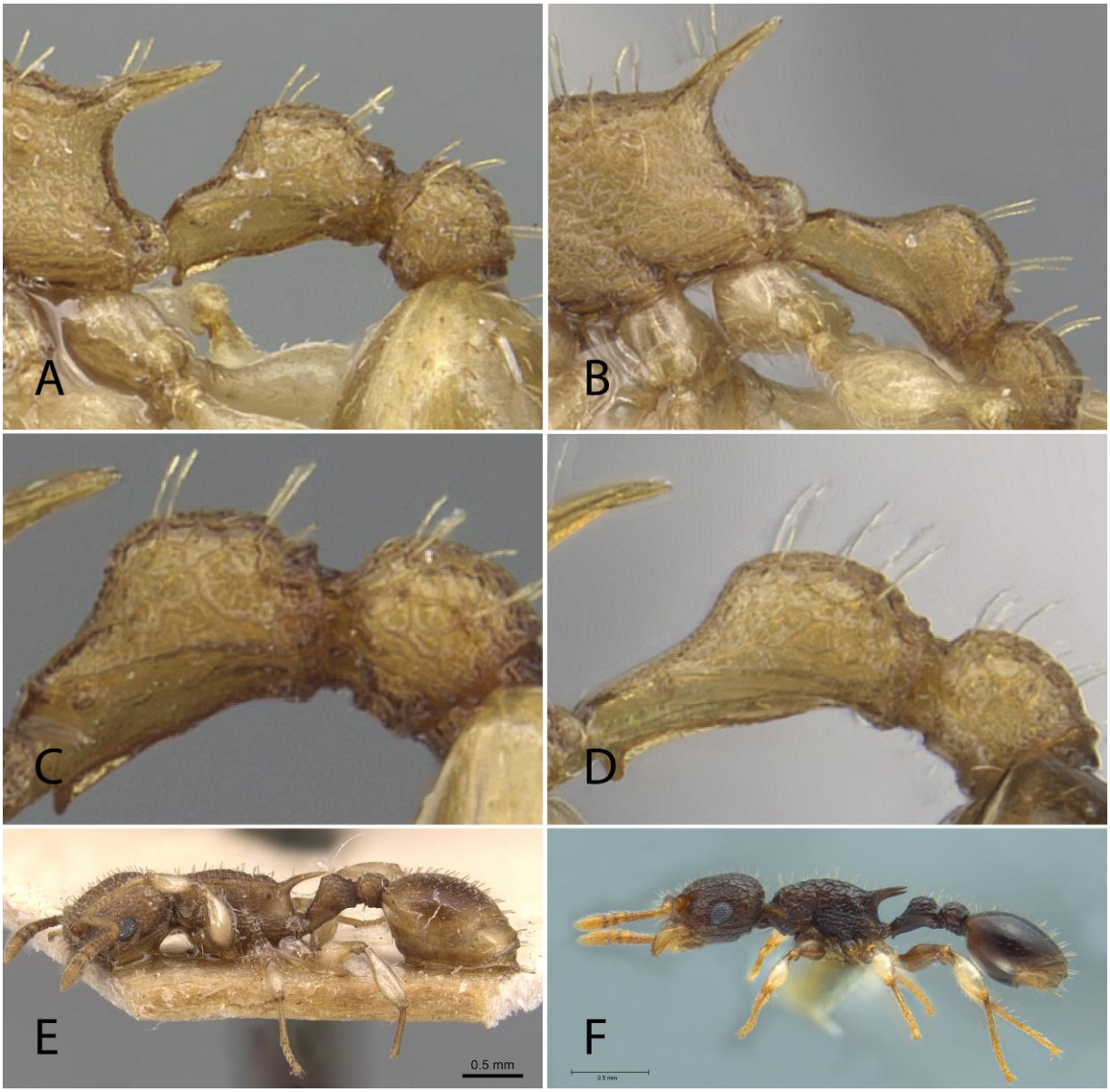

FIGURE 5. *Vombisidris* spp. A, *V. lochme* (CASENT0901987, holotype worker); B, *V. dryas* (CASENT0901988, holotype worker); C, *V. harpeza* (CASENT0901989, holotype worker); D, *V. renateae* (CASENT0901993, paratype worker); E, *V. jacobsoni* (CASENT0904730, paralectotype worker); F, *V. philippina*, (CASENT0919713, paratype worker).

Habitat.– This species nested in dead twigs hanging on shrub trees. Alate queens were found in two colonies (TH22-WJT-188 and TH22-WJT-214) collected in May 2022, thus mating season of the species might be in the dry season. Both colonies were found in lowland (ca. 100 m a.s.l.) at forest edge.

Comparative notes.– *Vombisidris satunensis* **sp. nov.** is most similar to *Vombisidris harpeza* Bolton, 1991 in having yellow body and weakly convex mesosomal outline but it can be separated from *V. harpeza* by 1) hairs on head relatively long, simple, sharp at tip (short and blunt at tip in *V. harpeza*); 2) frontal carina well-defined (indistinct in *V. harpeza*); 3) in dorsal view, metanotal groove indistinct (broad and shallow groove in *V. harpeza*); 4) propodeal spine short and straight (relatively long and downcurved in *V. harpeza*); 5) ratio of petiolar length and height greater (1.94 in *V. satunensis*; 1.5 in *V. harpeza*); 6) smaller species (TL 2.64–3.07, HW 0.56–0.63 in *V. satunensis*; TL 3.50, HW 0.75 in *V. harpeza*). The new species is quite similar to *Vombisidris nahet* Bolton, 1991 and *Vombisidris renateae* (Taylor, 1989) in having the long petiole and the yellow body but the new species is distinguished from the latter by short and straight propodeal spine (long and distinctly downcurved in the latter two) and clearly smaller body in average (TL 2.64–3.07 mm, HW 0.56–0.63 mm in the new species;

Key to known species of *Vombisidris* of the world based on the worker caste (updated from Xu and Yu, 2012)

1 Subocular groove entirely absent (Fig. 3A, Papua New Guinea). ……..…….. ***V. bilongrudi*** **(Taylor, 1989)**
- Subocular groove at least present from mandibular insertion to eye (Fig. 3B-C). ……..……..…… **2**

2 Subocular groove incomplete, running from mandibular insertion to anteroventral margin of eye, never beyond eye (Fig. 3B, Papua New Guinea). ……..…….. ***V. acherdos*** **Bolton, 1991**
- Subocular groove complete, running from mandibular insertion to anteroventral margin of eye, then passing through a shallow angle and continuing along the side to lateroccipital margin (Fig. 3C..... **3**

3 In profile view, dorsum of mesonotum with a pair of short vertical sharp teeth at each side (Fig. 3D); anterior 2/3 of first gastral tergite longitudinally rugulose (Indonesia) ..... ***V. philax*** **Bolton, 1991**
- In profile view, dorsum of mesonotum without a pair of vertical sharp teeth, at most with a pair of blunt prominence (Fig. 3E); first gastral tergite entirely smooth. …..... **4**

4 In profile view, petiolar node dome-like or roughly triangular, dorsum roundly convex, without distinctly differentiated dorsal face (Fig. 3F). .. **5**
- In profile view, petiolar node roughly trapezoidal, with distinctly differentiated dorsal face, anterodorsal and posterodorsal corners more or less distinct (Fig. 3G). ……..……. **12**

5 In profile view, metanotal groove shallow but obviously depressed. ……..…… **6**
- In profile view, metanotal groove entirely absent **7**

6 In full-face view, posterior margin of head weakly concave; anterior clypeal margin strongly convex; in profile view, propodeal spines weakly curved down, longer than propodeal dorsum; postpetiolar node evenly convex (Fig. 3H) (China: Tibet). .... ***V. tibeta*** **Xu & Yu, 2012**
- In full-face view, posterior margin of head weakly convex; anterior clypeal margin weakly convex; in profile view, propodeal spines straight, as long as propodeal dorsum; postpetiolar node strongly convex (Fig. 3I) (China: Hunan Province). ..... ***V. umbrabdomina*** **Huang & Zhou, 2006**

7 In profile view, petiolar node roughly triangular, dorsal corner distinct (Fig. 4A). ……..…… **8**
- In profile view, petiolar node dome-like, dorsal corner indistinct (Fig. 4B). ……..…….. **9**

8 In profile view, propodeal spines about as long as propodeal declivity; postpetiolar node evenly convex; in dorsal view, lateral sides of petiolar node convex; head and mesosoma blackish brown, gaster lighter brown (India) ……..…. ***V. occidua*** **Bolton, 1991**
- In profile view, propodeal spines distinctly longer than propodeal declivity; postpetiolar node strongly convex; in dorsal view, lateral sides of petiolar node almost straight; head and mesosoma yellowish brown, gaster blackish brown (India). ……..…. ***V. humboldticola*** **Zacharias & Rajan, 2004**

9 In profile view, petiole peduncle longer than petiolar node (Fig. 4C). ……..…….. **10**
- In profile view, petiole peduncle as long as or shorter than petiolar node (Fig. 4D). ……..…… **11**

10 In profile view, propodeal spine short and straight (Fig. 4E); smaller species (HW 0.56–0.63). …… ***V. satunensis*** **sp. nov.**
- In profile view, propodeal spine long and distinctly downcurved (Fig. 4F); larger species (HW 0.63–0.71 mm). ……..…. ***V. nahet*** **Bolton, 1991**

11 Entire body black to dark brown; larger species (HW 0.88–0.96 mm). ……..…….. ***V. regina*** **Bolton, 1991**
- Entire body yellow; smaller species (HW 0.56–0.63 mm). ……..… ***V. freyae*** **General, 2020**

12 In profile view, metanotal groove strongly depressed and trenchlike. ……..……..…… **13**
- In profile view, metanotal groove vestigial to absent, without a trench-like notch. .....……. **15**

13 In profile view, promesonotum nearly straight, anterodorsal corner angled; propodeal spine about two times as long as propodeal dorsum (Fig. 4G) (Brunei). ……..…….. . ***V. xylochos*** **Bolton, 1991**
- In profile view, promesonotum weakly convex, anterodorsal corner rounded; propodeal spine about as long as propodeal dorsum (Fig. 4H). …… **14**

14 In full-face view, lateral sides of head divergent behind eyes; in profile view, anterior peduncle shorter than dorsal face of petiolar node; first gastral tergite finely superficially reticulate (Fig. 5A) (Indonesia). ……..…….. ***V. lochme*** **Bolton, 1991**
- In full-face view, lateral sides of head nearly parallel behind eyes; in profile view, anterior peduncle about as long as the dorsal face of petiolar node; first gastral tergite almost completely smooth (Fig. 5B) (Malaysia). ……..……..… ***V. dryas*** **Bolton, 1991**

15 In profile view, petiole peduncle relatively short, shorter than dorsal face of petiolar node, the dorsal face nearly straight (Fig. 5C) (Malaysia). ……..…… ***V. harpeza*** **Bolton, 1991**
- In profile view, petiole peduncle relatively long, about as long as the dorsal face of petiolar node, the dorsal face weakly convex (Fig. 5D). …….. **16**

16 In profile view, anterodorsal corner of petiolar node bluntly angled, higher than posterodorsal corner, the latter rounded. …..……..….. **17**
- In profile view, both anterodorsal and posterodorsal corners of petiolar node bluntly prominent, at the same level. ……..…… **18**

17 In full-face view, posterior margin of head straight; in profile view, propodeal spines relatively short, shorter than or about as long as propodeal declivity; ventral face of petiole nearly straight; dorsal surface of mesosoma with short blunt hairs (Australia). ……..…… ***V. australis*** **(Wheeler, 1934)**
- In full-face view, posterior margin of head evenly convex; in profile view, propodeal spines relatively long, longer than propodeal declivity; ventral face of petiole concave; dorsal surface of mesosoma with moderate long tapered hairs (Australia). …….. ***V. renateae*** **(Taylor, 1989)**

18 In full-face view, posterior margin of head nearly straight; anterior clypeal margin weakly convex; dorsal surface of mesosoma with short blunt hairs; color yellow to lighter brown (Fig. 5E) (Indonesia). …..... ***V. jacobsoni*** **(Forel, 1915)**
- In full-face view, posterior margin of head weakly convex; anterior clypeal margin strongly convex; dorsal surface of mesosoma with moderate long tapered hairs; color blackish brown (Fig. 5F) (Philippines). ……..……..…… ***V. philippina*** **Zettel et Sorger, 2010**

TL 3.4–4.1 mm, HW 0.63–0.71 mm in the latter two). *Vombisidris satunensis* is also similar to *Vombisidris dryas* Bolton, 1991 in having slightly straight propodeal spines. However, *V. satunensis* is separated from *V. dryas* by the following characteristics: 1) metanotal groove indistinct (broad and shallow groove in *V. dryas*); 2) part of subocular groove touching anteroventral margin of eye (not touching in *V. dryas*); and 3) frontal carina long and well defined (short and indistinct in *V. dryas*). The new species is closely related to *Vombisidris xylochos* Bolton, 1991 in having the yellow body and the straight propodeal spine. The new species can be easily separated from *V. xylochos* by 1) in profile, petiolar node dome-like or roughly

triangular, dorsum roundly convex, without distinctly differentiated dorsal face (petiolar node roughly trapezoidal, with distinctly differentiated dorsal face in *V. xylochos*); 2) propodeal spine relatively short, about 2 times as long as its width at base (long, 4 times as long as its width at base in *V. xylochos*); metanotal grove absent (present in *V. xylochos*).

ACKNOWLEDGMENTS

This work was supported by Thailand Science Research and Innovation, Ministry of Higher Education, Science, Research and Innovation. We would like to thank Mr. Yudthana Samung (Mahidol University, Thailand), who kindly helped us in taking pictures of the new species. We also thank to Mr. Michael Cota (National Science Museum, Thailand), for his comments and reading the first draft of the manuscript.

LITERATURE CITED

AntWeb. 2023. Genus: *Vombisidris* Bolton, 1991. AntWeb. Version v8.91.2. California Academy of Science. https://www.antweb.org/images.do?subfamily=myrmicinae&genus=vombisidris&rank=genus&project=allantwebants (9 May 2023).

AntWiki. 2023. Genus: *Vombisidris* Bolton, 1991. Checklist of *Vombisidris* species. https://antwiki.org/wiki/Vombisidris (9 May 2023).

Bolton, B. 1991. New myrmicine genera from the Oriental Region (Hymenoptera: Formicidae). Systematic Entomology, 16: 1–13.

Bolton, B. 2003. Synopsis and classification of Formicidae. Memoirs of the American Entomological Institute, 71: 1–370.

General, D.E.M. 2020. *Vombisidris freyae*, a new nocturnal arboreal ant species from the Philippines (Hymenoptera: Formicidae). Halteres, 11: 32–35.

Huang J.-H. and Zhou, S.-Y. 2006. *Vombisidris* Bolton (Hymenoptera, Formicidae), a new record genus in China, with description of a new species. Acta Zootaxonomica Sinica, 31(1): 206–207.

Khachonpisitsak, S., Yamane, Sk., Sriwichai, P. and Jaitrong, W. 2020. An updated checklist of the ants of Thailand (Hymenoptera, Formicidae). Zookeys, 998: 1–182.

Xu, Z. and Yu, N. 2012. *Vombisidris tibeta*, a new myrmicine ant species from Tibet, China with a key to the known species of *Vombisidris* Bolton of the world. Sociobiology, 59(3): 1495–1507.

Zacharias, M. and Rajan, P.D. 2004. *Vombisidris humboldticola* (Hymenoptera: Formicidae): a new arboreal ant species from an Indian ant plant. Current Science (Bangalore), 87(10): 1337–1338.

Zettel, H. and Sorger, D.M. 2010. On the ants (Hymenoptera: Formicidae) of the Philippine Islands: IV. The genus *Vombisidris* Bolton 1992. Entomologica Austriaca, 17: 37–44.