

Correspondence

<http://urn:lsid:zoobank.org:pub:B0038986-9E32-4D3B-803E-0239B99D6F98>

Zhi-Lin Chen^{1,2)}, Fu-Ming Shi^{1,*)}, Shan-Yi Zhou^{2,3,*)}. FIRST RECORD OF THE MONOTYPIC GENUS *OPAMYRMA* (HYMENOPTERA: FORMICIDAE) FROM CHINA. – *Far Eastern Entomologist*. 2017. N 335: 7-11.

1) College of Life Sciences, Hebei University, Baoding, Hebei 071002, China. E-mail: chenzhilin35@163.com

2) Guangxi Key Laboratory of Rare and Endangered Animal Ecology, Guangxi Normal University, Guilin 541004, China. *Corresponding author, E-mail: shif_m@126.com

3) College of Life Sciences, Guangxi Normal University, Guilin, Guangxi 541004, China. *Corresponding author, E-mail: syzhou@mailbox.gxnu.edu.cn

Summary. The monotypic genus *Opamyрма* Yamane, Bui et Eguchi, 2008 is reported for the first time from China. The unknown female of *O. hungvuong* Yamane, Bui et Eguchi, 2008 is discovered and described.

Key words: Hymenoptera, Formicidae, Leptanillinae, *Opamyрма hungvuong*, fauna, new record, China.

Ж. Л. Чень, Ф. М. Ши, Ш. Ю. Чжоу. Первое указание рода *Opamyрма* (Hymenoptera: Formicidae) из Китая) // Дальневосточный энтомолог. 2017. N 335. С. 7-11.

Резюме. Впервые для Китая указывается монотипичный род *Opamyрма* Yamane, Bui et Eguchi, 2008. Найдена и описана ранее неизвестная самка *O. hungvuong* Yamane, Bui et Eguchi, 2008.

INTRODUCTION

The monotypic genus *Opamyрма* (Formicidae: Leptanillinae) is established by Yamane *et al.* (2008) with *Opamyрма hungvuong* as the type species basing on two workers from Central Vietnam. He pointed out that the genus *Opamyрма* possessing the features of Leptanillinae and Amblyoponinae which was tentatively placed in Amblyoponinae. Recently, Ward & Fisher (2016) investigated the classification system position of *Opamyрма* based on 11 nuclear gene fragments (total 7.4 kb). They pointed out that this genus is a member of the leptanilline clade and sister to all other extant Leptanillinae, but not in original subfamily Amblyoponinae. Here, we describe the *O. hungvuong* from the monsoon forest in Jianfeng Mt. area, Hainan Island, which is the first report of the genus and species from China. And the female of this genus is discovered and described below.

MATERIALS AND METHODS

This study is based on the specimens deposited in the Insect Collection of Guangxi Normal University, China. The examination of the specimens was carried out with Leica M205A stereoscope. High-quality multifocused montage images were captured using Leica DFC 450. All measurements are in millimeters. Standard measurements and indices are mostly defined by Bolton (1975), with addition of ED and MSL, and abbreviated in text as follow: **CI** – Cephalic Index = $HW \times 100 / HL$; **DPI** – Dorsal Petiole Index = $DPW \times 100 / PL$;

DPW – Dorsal Petiole Width: maximum width of petiole in dorsal view; **ED** – Eye Diameter: maximum diameter of eye; **HL** – Head Length: straight-line length of head in perfect full-face view, measured from the mid-point of the anterior clypeal margin to the midpoint of the posterior margin. In species where one or both of these margins are concave, the measurement is taken from the mid-point of a transverse line that spans the apices of the projecting portions; **HW** – Head Width: maximum width of head in full-face view, excluding the eyes; **LPI** – Lateral Petiole Index = $PH \times 100 / PL$; **MSL** – Mesosoma Length (= alitrunk length): diagonal length of the mesosoma in lateral view, measured from the point at which the pronotum meets the cervical shield to the posterior basal angle of the metapleuron; **PH** – Petiole Height: height of petiole measured in lateral view from the apex of the ventral (subpetiolar) process vertically to a line intersecting the dorsalmost point of the node; **PL** – Petiole Length: length of petiole measured in lateral view from the anterior process to the posteriormost point of the tergite, where it surrounds the gastral articulation; **PW** – Pronotal Width: maximum width of pronotum measured in dorsal view; **SI** – Scape Index = $SL \times 100 / HW$; **SL** – Scape Length: straight-line length of the antennal scape, excluding the basal constriction or neck; **TL** – Total Length: total outstretched length of the individual, from the mandibular apex to the gastral apex.

NEW RECORD

Family Formicidae

Subfamily Leptanillinae

Genus *Opamyra* Yamane, Bui et Eguchi, 2008

Opamyra Yamane *et al.* 2008: 56; Ward & Fisher, 2016: 690.

Type species: *Opamyra hungvuong* Yamane, Bui et Eguchi, 2008, by original designation.

DIAGNOSIS OF WORKER. Head nearly rectangular, occipital margin slightly concave, preoccipital carina complete, anterolateral corner with spine or denticle. Mandibles slender. Posteriorly margin of clypeus with distinctly continuous carina. Outer face of labrum with at least two rows of peg-like denticles. Eye and Ocelli absent. Frontal lobe absent, antennal sockets completely uncovered. Antennae short, 12-segmented, scapes far less surpass occipital corner. Mesosoma elongate, promesonotal suture distinct and notched, metanotal groove disappeared. Metapleural gland bulla large and round. Propodeal lobe small, low and round. Mid- and hind tibiae with a reduced barbate anterior spur and a well-developed pectinate posterior spur, Pretarsal claws simple, without teeth. Petiolar node elongate, narrowly attached to anterior face of the tergite of first gastral segment, without anterior peduncle, the sternite of petiole reduced to a small posteroventral sclerite. Gaster long, posterior portion laterally especially compressed. Sting long and strong.

DIAGNOSIS. This genus was originally described in the subfamily Amblyoponinae (Yamane *et al.* 2008) but later transferred to subfamily Leptanillinae (Ward & Fisher, 2016). *Opamyra* is easily distinguished from other genera of Leptanillinae by one-segmented nodiform waist. This genus is also easily separated from the genus *Apomyra* of Amblyoponinae by the helcium is attached at mid-height on the anterior face of the first gastral segment.

NOTES. Here the genus *Opamyra* is recorded from China for the first time.

***Opamyra hungvuong* Yamane, Bui et Eguchi, 2008**

Figs 1–6

Opamyra hungvuong Yamane, Bui & Eguchi, 2008: 57, figs. 1–12 (worker). Type locality: Vietnam.

MATERIAL. China: Hainan, Jianfengling Natural Reserve, 18°44.854'N, 108°55.761'E, 641 m, 9.IV 2016, 1 worker and 1 female, leg. Zhilin Chen (No. G160941).

DESCRIPTION. Worker (Figs 1–3). TL 4.19, HL 0.72, HW 0.59, CI 82, SL 0.41, SI 69, PW 0.44, MSL 1.13, PL 0.56, PH 0.34, DPW 0.25, LPI 61, DPI 45. (1 individual measured). In full-face view head rectangular, distinctly longer than broad, the middle of posterior margin slightly concave, posterior corner rounded, lateral margin slightly convex. Preoccipital carina distinct, almost encircling the posterior margin of the head. Mandible slender, masticatory margin with a bluntly apical tooth and a trapezoidal lobe; inner margin with three inconspicuous teeth. Anteriorly margin of clypeus weakly concave, posteriorly margin with distinctly continuous carina. In dorsal view, outer face of labrum with much more peg-like denticles. Frontal lobe absent. Antennal socket completely exposed. Antenna 12-jointed, scape stout, apices of scape reached to 2/3 of the distance from antennal socket to occipital corner. Eye and ocellus absent.

In lateral view mesosoma slender. Promesonotal suture impressed. Metanotal groove distinct. Dorsum of pronotum slightly convex; dorsum of mesonotum and propodeum almost straight and slightly lower than pronotum. Propodeal declivity weakly concave, posterodorsal corner rounded. Petiolar node oval shaped, much longer than high, anterior margin steep, posterior margin short, and unobvious, anterodorsal and posterodorsal corner rounded, dorsal margin weakly convex, anterior 2/3 of ventral margin much convex, posterior 1/3 of ventral margin converged. Subpetiolar process distinct, anteroventral corner broadly rounded, posteroventral corner bluntly toothed. Gaster very long, abdominal segment III longer than broad, Segment IV with differentiated presternite. Sting long and strong.

In dorsal view pronotum longer than broad, sides of pronotum slightly convex, remaining portion of mesosoma slightly narrower than pronotum and almost parallel-sided. Petiole much longer than broad, posterior slightly narrowed. Gaster long spindle-shaped, segment VI and VII laterally compressed.

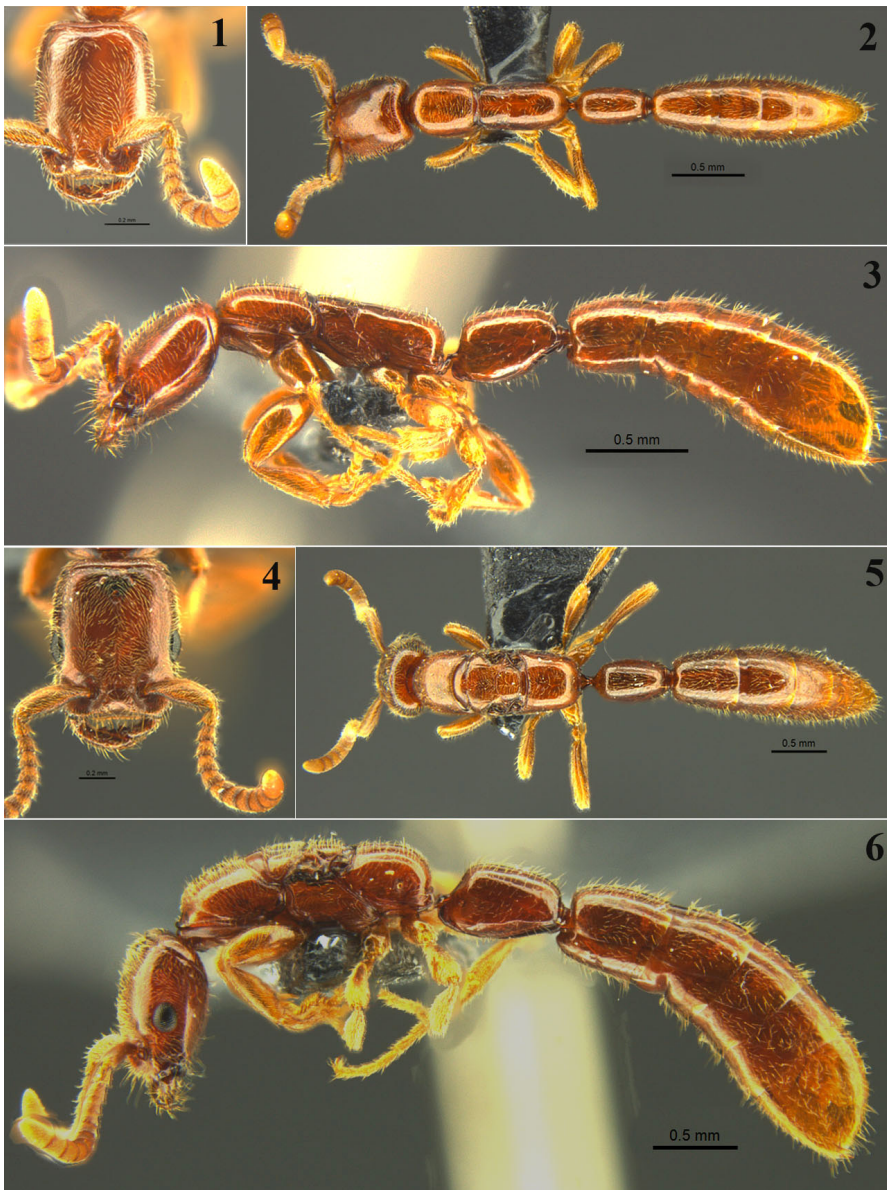
Whole body brown, antennae and legs light brown. Body surface moderately smooth and shining. Head with scattered superficially piligerous punctate; mandible with sparse large punctures; mesosoma sculptured more weakly than head; petiole and gaster almost smooth and shining. Head with densely erect or suberect short hairs; anterior margin of clypeus and outer margin of mandible with relatively long and sparse erect hairs; antennal scape with sparse erect hairs and denser pubescence; mesosoma, petiole and gaster with sparser standing hairs.

Female (Figs 4–6). TL 5.72, HL 0.91, HW 0.72, CI 79, SL 0.47, SI 65, ED 0.16, PW 0.59, MSL 1.19, PL 0.75, PH 0.31, DPW 0.41, LPI 41, DPI 55. (1 individual measured). Head with morphological characters similar to the worker, but female lateral margin almost parallel. Inner margin of Mandible teeth conspicuous. Eye large, situated slightly in front of midpoint of lateral margin. With 3 ocelli. In profile view, alitrunk stranger than the worker, dorsum moderately convex. In dorsal view, mesonotum fusiform, with a pair of parallelly shallow furrow on side portion. Mesoscutum oval. Metanotum crescent, narrow and transverse. Petiole and gaster similar to the worker, except for the subpetiolar process of female broadly rounded, without any tooth.

Sculptures, hairs and pubescences similar to the worker. Color also similar to the worker, but the head of female dark brown, the space between the 3 ocelli black.

DISTRIBUTION. Vietnam, China (new record).

NOTES. This species was only described on the base of two workers. Here we provide the description of female but so far the male of this species is unknown.



Figs 1–6. *Opamyra hungvuong* (No. G160941), worker (1–3) and female (4–6). 1, 4 – head in full-face view; 2, 5 – body, dorsal view; 3, 6 – body, lateral view.

ACKNOWLEDGMENTS

We are grateful to Zhenghui Xu (Southwest Forestry University, China) for translating the Latin name “*Opamyрма*” into Chinese. This study was supported by the National Natural Science Foundation of China (No. 31372248 & 31672343), the Ministry of Science and Technology of China (No. 2015FY210300) and Natural Science Foundation of Guangxi (No. 2016GXNSFBA380024).

REFERENCES

- Bolton, B. 1975. A revision of the ant genus *Leptogenys* Roger in the Ethiopian region with a review of the Malagasy species. *Bulletin of the British Museum (Natural History), Entomology*, 31: 235–305.
- Yamane, S., Bui, T.V. & Eguchi, K. 2008. *Opamyрма hungvuong*, a new genus and species of ant related to *Apomyрма*. *Zootaxa*, 1767: 55–63.
- Ward, P.S. & Fisher, B.L. 2016. Tales of dracula ants: the evolutionary history of the ant subfamily Amblyoponinae (Hymenoptera: Formicidae). *Systematic Entomology*, 41(3): 683–693.