Far Eastern Entomologist

Number 411: 21-24 ISSN 1026-051X (print edition) ISSN 2713-2196 (online edition) July 2020

https://doi.org/10.25221/fee.411.4
http://zoobank.org/References/F7E26C90-CFE4-4430-913C-5F976EE52C8C

A NEW RECORD OF THE GENUS *VERNEVANIA* (HYMENOPTERA: EVANIOIDEA: EVANIIDAE) FROM INDIA WITH DESCRIPTION OF A NEW SPECIES

S. I. Kazmi*, A. Rameshkumar, S. Sheela

Zoological Survey of India, M-Block, New Alipore, Kolkata-700053, India.
** Corresponding author, E-mail: kazmizsi@gmail.com*

Summary. *Vernevania indica* Kazmi et Rameshkumar, **sp. n.** is described from the south western region of India (Karnataka state). The genus *Vernevania* Huben et Deans, 2003 is reported for the first time from India.

Key words: Evaniidae, taxonomy, new species, Karnataka, India.

С. И. Казми, А. Рамешкумар, С. Шила. Первое указание рода *Vernevania* (Hymenoptera: Evanioidea: Evaniidae) из Индии с описанием нового вида // Дальневосточный энтомолог. 2020. N 411. С. 21-24.

Резюме. Из штата Карнатака на юго-западе Индии описывается *Vernevania indica* Kazmi et Rameshkumar, **sp. n.** Род *Vernevania* Huben et Deans, 2003 впервые указывается для Индии.

INTRODUCTION

This paper deals with evaniids collection present in Hymenoptera Section, Zoological Survey of India, Kolkata. Evanioidea are very rarely collected from India thus the Indian fauna are very poorly represented. In India, family Evaniidae represented only four genera, namely *Evania* Fabricius, 1775, *Parevania* Kieffer, 1907, *Prosevania* Kieffer, 1911, and *Vernevania* Huben et Deans, 2003.

Deans & Huben (2003) erected the genus *Vernevania* with type species *V. urbanusorum* Deans, 2003 from Sri Lanka. The species of *Vernevania* as other Evaniidae are parasites of ootheca of cockroaches. *Vernevania* is similar to the genus *Brachygaster* Leach, 1815, but can be distinguished mainly by having large head, short legs and coarse body sculpture. As compared to wing venation, *Vernevania* has full complement of wing venation, 7 cells and unique pattern of elongate 1st marginal and 1st discal cells. Nowadays *Vernevania* contains only the type species, though Huben & Deans, (2003) also indicated one undescribed species from India. In this paper, a new species of *Vernevaina* is described and illustrated.

MATERIAL AND METHODS

The present study was based on the unidentified specimens in the Hymenoptera Section, Zoological Survey of India, Kolkata. The material is collected from Karnataka, India through

net sweep method and killed in ethyl acetate and stored in 70% ethyl alcohol. Later specimen is dried and mounted on rectangular card using water soluble glue (Noyes, 1982). Specimen was studied using Leica M205A stereo zoom microscope and photographs and measurements were with same stereo zoom microscope. Identification was made by Deans & Huben (2003). Holotype is deposited at National Zoological Collection (NZC), Zoological Survey of India, Kolkata, India. The following abbreviations used in the text: POL – minimum distance between the two posterior ocelli; OAL – minimum distance between the posterior ocellus and anterior ocellus.

TAXONOMY

Family Evaniidae

***Vernevania indica* Kazmi et Rameshkumar, sp. n.**

http://zoobank.org/NomenclaturalActs/331690EC-452F-4D9E-9422-95D021FD5439

Figs 1–5

TYPE MATERIAL. Holotype – male (on card), **India**: Karnataka, Coorg district, Thalakkaveri Wildlife Sanctuary, 06.XI. 2013, col. P.M. Sureshan (Reg. no. NZC 23330/H3).

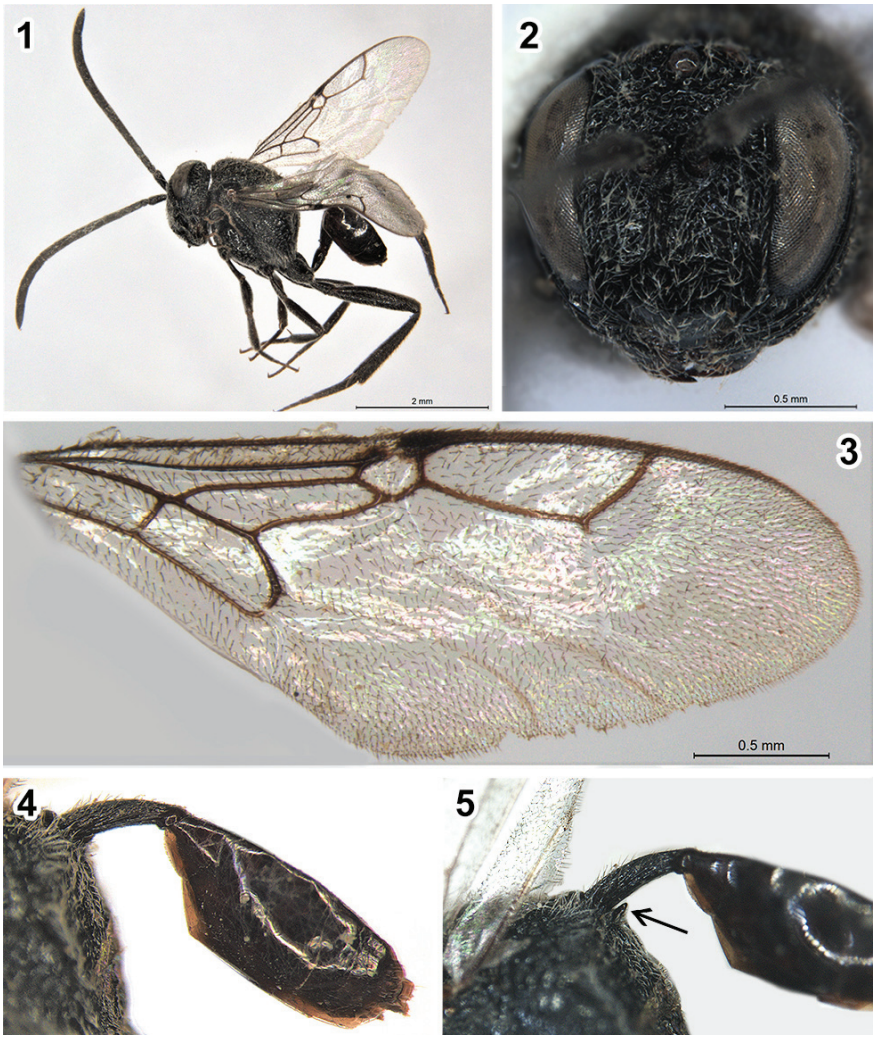
DESCRIPTION. MALE (Fig. 1). Holotype. Length 3.3 mm. Body dark brown with silvery white setae throughout body except metasoma; mandible brownish; eyes silvery grey; ocelli brownish yellow; scape brown; mesosoma dark brown; tegula pale brown; wings hyaline with brown venation; legs brown to dark brown; hind coxa nitid brown; tibial spur brown; petiole to dark brown.

Head (Fig. 2). Head almost as wide as high; frontovertex 0.58× of head width; ocelli nearly equal in size; POL 2.0× of OAL; Clypeus smooth and without sculpture. Antennae arising upper half of face; ridge present between antennal sockets; scape 2.4× as long as wide and 3.0× as long as pedicel; pedicle quadrate. Relative measurements (in mm) – head width (height), 1.28 (1.18); frontovertex width, 0.75; POL, 0.23; OAL, 0.11; scape length (width), 0.34 (0.14); pedicel length (width), 0.11(0.10).

Mesosoma. Pronotum, mesoscutum, scutellum and metanotum broadly foveoated with sparsely setose; mesoscutum 2.0× wider than long; metanotum 6.2× wider than long and 0.30× as long as scutellum; mesopleuron convex; propodeum areolate with uniformly silvery white hairs; a pair of keel-like structure on propodeum at origin of petiole (Fig. 5). Fore, mid and hind leg, 1.6×, 2.2× and 3.3× mesosoma height respectively; hind coxa with groove; hind femur as long as hind tibia; hind tibia as long a mesosoma height; interior spur of tibia 1.4× as long as exterior spur; tarsal claws 0.5× as long as 5th tarsomere. Relative measurements (in mm) – mesosoma height, 1.45; mesoscutum length (width),0.47 (0.94); scutellum length, 0.39; metanotum length (width), 0.12; (0.75); fore leg length, 2.28; mid leg length, 3.24; hind leg length, 4.86; hind femur length, 1.37; hind tibia length,1.41; hind tarsomeres 1–5 length, 1.31; interior tibial spur length, 0.21; exterior tibial spur length, 0.15; tibial claw length, 0.07; 5th tarsus length, 0.15.

Wings (Fig. 3). Fore wing veins 2M, 3M, r-m (except origin point) spectral; fore wing 2.8× as long as wide; hind wing 4.0× as long as wide; 1st submarginal cell pentagonal in shape; origin point of r-m distinctly marked in 1st marginal cell; marginal cell 2.8× as wide as high; hamuli with 4 hooks; jugal lobes present on both wings. Relative measurements (in mm) – fore wing length (width), 3.25 (1.16); marginal cell width (height), 0.56 (0.31); hind wing length (width), 1.69 (0.41).

Metasoma (Fig. 4). Petiole 3.6× as long as wide; metasoma ovoid in shape. Relative measurements (in mm) – petiole length (width), 0.52(0.15); metasoma length, 1.45.



Figs 1–5. *Vernevania indica* Kazmi et Rameshkumar, sp. n., male. 1 – lateral habitus; 2 – head in frontal view; 3 – fore wing; 4 – metasoma with petiole; 5 – propodeum showing a keel-like structure.

FEMALE. Unknown.

HOSTS. Unknown.

DIAGNOSIS. Male of *Vernevania indica* sp. n. is similar to *V. urbanusorum*. The differences between these two species are given in the Table 1.

DISTRIBUTION. India: Karnataka.

ETYMOLOGY. The species is named after the country where the type specimen was collected.

Table 1. Main morphological differences between species of the genus *Vernevania*

Vernevania indica	*Vernevania urbanusorum*
Scape 3.0× as long as pedicel	Scape 4.0× as long as pedicel
Pair of keel-like structure on propodeum at origin of petiole	Keel-like structure absent
Propodeum areolate, setose with silvery hairs uniformly spread without bald in middle area	Propodeum areolate, setose with silver hairs except bald in middle area
Origin point of r-m distinctly marked in 1st marginal cell	Origin point of r-m indistinct
1st submarginal cell pentagonal in shape	1st submarginal cell tetragonal in shape
Petiole 3.4× as long as wide	Petiole 3.0× as long as wide

ACKNOWLEDGEMENTS

The authors are thankful to Dr Kailash Chandra, Director of the Zoological Survey of India, Kolkata for providing necessary facilities to carry out this work. Authors are grateful to Dr P.M. Sureshan for collection of the specimen.

REFERENCES

Deans, A.R. & Huben, M. 2003. Annotated key to the Ensign wasp (Hymenoptera: Evaniidae) genera of the world, with descriptions of three new genera. *Proceedings of the Entomological Society of Washington*, 105(4): 859–875.

Noyes, J.S. 1982. Collecting and preserving chalcid wasp (Hymenoptera: Chalcidoidea). *Journal of Natural History*, 16: 315–334.

© **Far Eastern entomologist (Far East. entomol.)** Journal published since October 1994.

Editor-in-Chief: S.Yu. Storozhenko

Editorial Board: A.S. Lelej, S.A. Belokobylskij, M.G. Ponomarenko, E.A. Beljaev, V.A. Mutin, E.A. Makarchenko, A.V. Gorochov, T.M. Tiunova, M.Yu. Proshchalykin, S.A. Shabalin

Address: Federal Scientific Center of the East Asia Terrestrial Biodiversity (former Institute of Biology and Soil Science), Far East Branch of the Russian Academy of Sciences, 690022, Vladivostok-22, Russia.

E-mail: storozhenko@biosoil.ru web-site: http://www.biosoil.ru/fee