

New distributional record of *Xyphorachidia annamalaicus* Manickavasagam and Gowriprakash, 2018 from Jharkhand, India

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Abstract

Xyphorachidia annamalaicus Manickavasagam and Gowriprakash, 2018 recorded for the first time from Jharkhand, India.

Keywords: Chalcididae, Jharkhand, New Record, *Xyphorachidia*

Introduction

Chalcididae is one of the beneficial and major parasitic hymenopteran families under Chalcidoidea. The members play a pivotal role in bringing down the pest species in agricultural fields by attacking the larvae and pupae of Lepidoptera, Coleoptera and some Diptera. 253 species of Chalcididae under 34 genera are reported from India (Rameshkumar *et al.*, 2023;). *Xyphorachidia* Steffan, 1951 is a rare genus of Chalcididae under the subfamily Haltichellinae. The genus is represented by only two species: *Xyphorachidia dentata* Steffan, 1951 and *Xyphorachidia annamalaicus* Manickavasagam and Gowriprakash, 2018. *Xyphorachidia dentata* Steffan, 1951 was reported from Senegal and later extended its distribution to the different zones of the African continent which are Kenya, Benin and South Africa (Gowriprakash & Manickavasagam, 2018). The latest species *Xyphorachidia annamalaicus* Manickavasagam and Gowriprakash was discovered in 2018 from Tamil Nadu, India. Here the species *Xyphorachidia annamalaicus* is reported for the first time from Jharkhand.

Materials and Methods

Specimen sorted out from unidentified backlog collection of the National Zoological Collections, Zoological Survey of India, Kolkata. Studies were made using a Leica S8 APO stereo zoom microscope and images were taken using a Leica MC 120HD camera. All the images were stacked by the software Combine ZP. The voucher specimen

was registered and deposited to the National Zoological Collections of Zoological Survey of India, Kolkata (NZC).

Abbreviations

F=Female, EDAU=Entomology Department, Annamalai University, Parasitoid Taxonomy and Biocontrol Laboratory, Faculty of Agriculture, NZC= National Zoological Collections, Zoological Survey of India, Kolkata

Results

Systematic Account

Order: Hymenoptera

Superfamily: Chalcidoidea

Family: Chalcididae

Subfamily: Haltichellinae

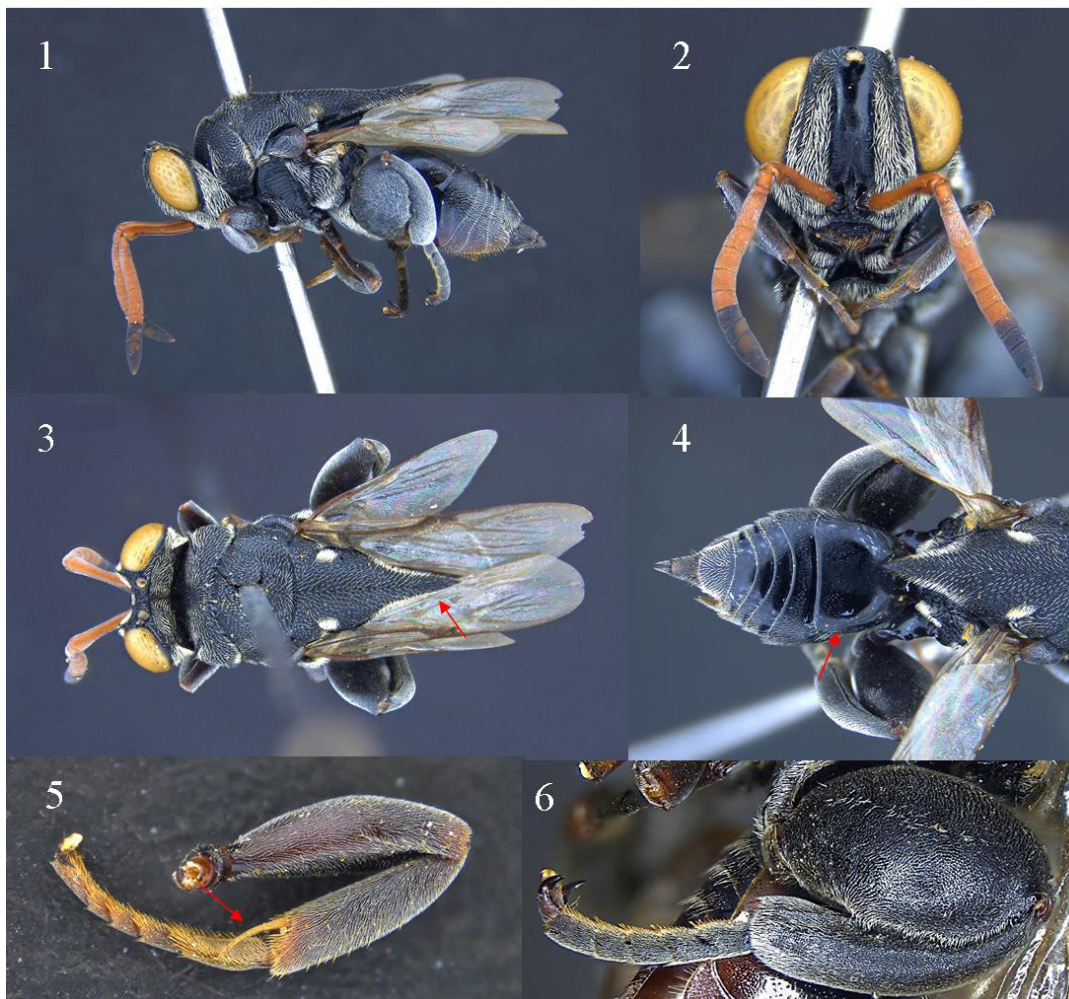
Genus: *Xyphorachidia* Steffan, 1951

Xyphorachidia annamalaicus Manickavasagam and Gowriprakash, 2018 (Figures 1-6)

2018. *Xyphorachidia annamalaicus* Manickavasagam and Gowriprakash, *Oriental Insects* 52(4):382-388, Holotype, F, EDAU, Tamil Nadu, India.

Material examined: Female: India: Jharkhand, Ranchi, Namkum, 06.viii.1958, coll: S.N. Gupta (Reg. No. 30944/H3).

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Figures (1-6). *Xyphorachidia annamalaicus* Manickavasagam and Gowriprakash. (1) Habitus, Lateral view; (2) Head frontal view; (3) Habitus, Dorsal View; (4) Scutellum and Gaster Dorsal view; (5) Fore tibia and (6) Hind femur with tibia.

Brief diagnosis: The species can be distinguished by the presence of pre-orbital carina forming an angle in front of the eyes, scutellum sharply pointed and extending nearly up to half of first gastral tergite (Figure 3), First and second tergites with distinct micro sculptures in the middle portion (Figure 4), fore tibia with a long spur (Figure 5) and second gastral tergite distinctly longer than third gastral tergite.

Distribution: India: Tamil Nadu (Gowriprakash and Manickavasagam, 2018), Jharkhand (New Record).

Discussion

Only two species of Chalcididae are known from Jharkhand so far viz. *Brachymeria tachardiae* (Cameron)

and *Brachymeria euploae* (Westwood) (Noyes, 2019). The species *Xyphorachidia annamalaicus* is first time recorded from Jharkhand. The present study has extended the distributional range of the aforesaid species along with the addition of a species to Jharkhand. This study also underlines the importance of old museum collections and the need for thorough documentation of natural enemies.

Acknowledgements

The authors are grateful to Dr. Dhriti Banerjee, Director, the Zoological Survey of India for providing all the necessary laboratory facilities to accomplish this work. The authors are also thankful to Ms. Paromita Mandal and Mr. Arnab Mandi, Central Entomology Laboratory for their help in various stages of this study.

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