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**FIRST RECORD OF THE FAMILY LIOPTERIDAE (HYMENOPTERA:  
CYNIPOIDEA) FROM INDIA**

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**Summary.** Family Liopteridae (Hymenoptera: Cynipoidea), an archaic group of parasitoid wasp, is reported from India for the first time. *Paramblynotus annulicornis* Cameron, 1908 is found in the Great Nicobar Island. The specimen from India is re-described and illustrated.

**Key words:** parasitoid wasps, Liopteridae, fauna, new record, Great Nicobar Island, Oriental region.

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**Резюме.** Впервые для Индии приводится семейство Liopteridae – архаичная группа паразитических перепончатокрылых (Hymenoptera: Cynipoidea). На острове Большой Никобар найден *Paramblynotus annulicornis* Cameron, 1910. Приводится иллюстрированное описание экземпляра из Индии.

**INTRODUCTION**

Family Liopteridae is an archaic group of parasitic wasps (Buffington *et al.*, 2020). Together with Austrocynipidae and Ibalidae, they form the paraphyletic basal lineage of Cynipoidea (Ronquist, 1995a). Liopteridae is widespread in all zoogeographical regions, but most diverse in the tropics and subtropics (Liu *et al.*, 2007). There are about 200 species in four subfamilies: Liopterinae, Oberthuerellinae, Dallatorrellinae, and Mayrellinae (Dong *et al.*, 2018; van Noort, 2020). As a result of the studies on the diversity of parasitoid wasps of the Great Nicobar Island, a single specimen of the family Liopteridae was caught by authors and is hereby reported from India for the first time. This specimen is described and illustrated in the present paper.

**MATERIAL AND METHODS**

The specimen studied was collected in one of the yellow pan traps set in the forest at Campbell Bay, Great Nicobar Island. The specimen is dry and card mounted for taxonomic

studies. Photographs were taken with an Leica M205A and Leica DFC-500 digital camera. The final illustrations were post-processed for contrast and brightness using Adobe® Photoshop® software. Standard morphological terminology and abbreviations follow Liu *et al.* (2007). The specimen is deposited in the National Zoological Collections at Zoological Survey of India, Kolkata (Reg. no. 25626/H3).

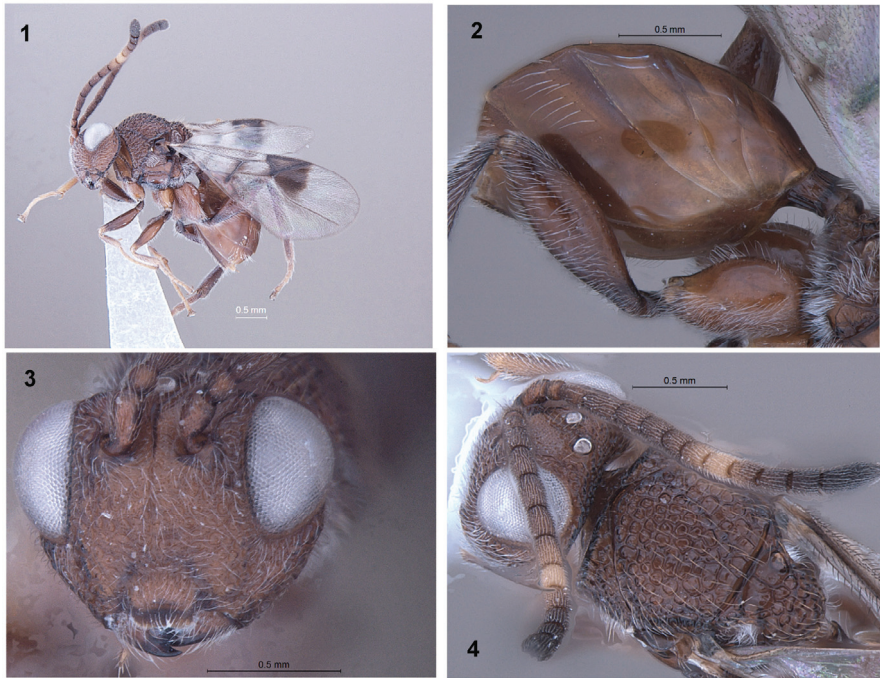
**NEW RECORD**  
**Family Liopteridae**  
**Subfamily Mayrellinae**  
**Genus *Paramblynotus* Cameron, 1908**

REMARKS. This genus consists of 109 species and subdivided into eight species groups (Cameron, 1908; Liu *et al.*, 2007; Dong *et al.*, 2018). The species of the genus are known in the Old World except Europe and Australia, but most diverse in Southeast Asia (Buffington *et al.*, 2020).

***Paramblynotus annulicornis* Cameron, 1910**

Figs 1–8

MATERIAL EXAMINED. **India:** Andaman Nicobar Islands, Great Nicobar Island, Campbell Bay National Park, 6.99933°N, 93.87975°E, forest, yellow-pan trap, 26.XI 2018, 1 ♀, leg. K. Rajmohana.



Figs 1–4. Female of *Paramblynotus annulicornis* from Great Nicobar Island: 1 – habitus; 2 – metasoma, lateral view; 3 – head, frontal view; 4 – mesosoma, dorsal view.

DESCRIPTION. Female. Length 3.8mm. Antenna 13-segmented. F1 < than F2. F11 wider and 2.2x as long as its penultimate segment. Body brown to blackish brown. Submedial pale ring on antenna from distal half of F6 extending to F7 and F8; segments basal to F6-F8, dark brown and those distal to F8 dark brown to black. Forewing with very prominent brownish-black macula, extending on marginal and submarginal cells and also on third cubital cell behind marginal cell. Body parts, except as specified below, with moderately dense silvery pubescence.

Vertex foveate-reticulate. Eyes prominent and distinctly extended laterally beyond outer margin of gena. Ocellar plate slightly raised, mostly glabrous, clearly defined laterally by distinct carina, glabrate anteriorly but foveate posterior to anterior ocellus. Median frontal carinae percurrent on lower face, but not reaching clypeus, indistinct beyond level of lower orbital margin, raised to prominent lamellate, triangular (in lateral view) process between antennal sockets. Upper face weakly foveate-reticulate than lower. Antennal scrobe distinctly depressed, glabrate, but with dense and fine punctures. Gena strongly foveate-reticulate with dense pubescence, as on face. Lower face and clypeus foveate-reticulate and irregularly punctate with pubescence; anterior tentorial pits small, yet distinct. Lateral occipital carina not reaching posterior part of vertex. Occiput glabrous.



Figs 5–8. Female of *Paramblynotus annulicornis* from Great Nicobar Island: 5 – metasoma, dorsal view; 6 – antenna; 7 – head and mesosoma, lateral view; 8 – propodeum and petiole, dorsal view.

Pronotal crest not raised. Lateral surface of pronotum foveate reticulate with pubescence. Anterior plate of pronotum with fine setigerous punctures dorsomedially mesoscutum strongly arched dorsally and heavily foveate-reticulate. Mesoscutellum also foveate-reticulate. Scutellar sulcus divided by a single median longitudinal carina. Laterodorsal process of mesoscutellum not prominent. Pubescence in axillar area conspicuous. Median mesopleural impression percurrent, with a few vertical carinae. Mesopleural triangle densely pubescent, well defined ventrally by a smoothly curved carina. Mesopleuron glabrous. Lower mesopleuron strongly depressed along ventral margin and densely pubescent ventrally. Metepisternum with irregular alveoli in dorsal part and conspicuously pubescent and densely punctate ventrally. Propodeum areolate-reticulate. Lateral propodeal carina percurrent and strongly curved medially. Median propodeal area areolate-reticulate. Median propodeal area glabrous. Median longitudinal carina distinct only anteriorly, ending on a transverse carina medially; and posterior part of median propodeal area with a submedian longitudinal carina. Tibiae and tarsi conspicuously pubescent. Metatibia apically with four long, apically pointed teeth. 1mt/2–5mt: 0.67.

Rs+M of forewing arising from near midpoint of basal vein. Marginal cell 2.1X as long as wide and almost subequal to submarginal cell. Bulla on Sc+R1 distinct.

Abdominal petiole with distinct longitudinal carinae, 1.25 times as long as wide in lateral view; T7 entirely covering T8, and not curved dorsoventrally; relative length of T3–7-4.8:3:3:4:2; T3–5 glabrous; T6 finely punctate with sparse pubescence towards its anterior; T7 densely and finely punctate, with a row of sparse pubescence anteriorly.

HOST. Unknown.

REMARKS. The specimen from India agrees to the description of *P. annulicornis* in the revisionary work (Liu *et al.*, 2007) except for a small variation in the pattern of areolate sculpture on the lower half of the median propodeum. Also, the median frontal carina on frons is weaker towards clypeus, though percurrent in the specimen studied.

DISTRIBUTION. India (new record), Indonesia (Sumatra), Malaysia (Borneo and Malay Peninsula).

## DISCUSSION

The island of Great Nicobar is located 180 km to the north of Sumatra. In the Late Oligocene, there were several cycles of sea level fluctuations, which drastically altered the land area configuration in Southeast Asia (Heaney, 1991). The low sea level facilitated the dispersal of plants and animals between the islands (Liu *et al.*, 2007). The present record of *Paramblynotus annulicornis* at Great Nicobar may be the outcome of such a dispersal event.

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