

**NEW RECORD OF *GUISARDUS PULCHELLUS*  
(CARVALHO, 1959) (HEMIPTERA: MIRIDAE) FROM INDIA**

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**[Chandra, K. & Kushwaha, S. 2017. New record of *Guisardus pulchellus* (Carvalho, 1959) (Hemiptera: Miridae) from India. *Munis Entomology & Zoology*, 12 (2): 650-652]**

ABSTRACT: Present study revealed the identification of *Guisardus pellucidus* Carvalho, 1959 (Family Miridae), belonging to order Hemiptera reported from Andaman and Nicobar Islands are new additions to the Indian fauna.

KEY WORDS: *Guisardus pellucidus*, new record, Anthocoridae, Andaman and Nicobar Islands

The Andaman and Nicobar Archipelago form a chain of more than 500 islands and islets situated in the southeastern part of the Bay of Bengal in the Indian Ocean. The tropical rain forests of these islands are surprisingly very rich with a unique diversity of animal life and many areas are still unexplored. While undertaking the surveys of various parts of Andaman and Nicobar islands, for the inventurisation of insect fauna, interesting specimen of family Tingidae pertaining to suborder Heteroptera were collected by the first author.

Genus *Guisardus* Fieber, belongs to subfamily Mezirinae. From all over the world six species had been reported so far viz. *Guisardus bogorensis*, *G. chinensis*, *G. cristovalensis*, *G. fasciatus*, *G. pellucidus* and *G. strigicollis* (Carvalho, 1959). Previously *G. pellucidus* Carvalho, 1959 was reported by Distant, 1909 from Myanmar; letter on first time it had been described from this paper, it will add a new Miridae member in Indian fauna.

The family Miridae, often referred to as plant bugs, is the largest true bug family. Worldwide, more than 10,000 species of Miridae are known, but this number is expected to more than double once the tropical faunas are more thoroughly studied. Plant bugs belong to the superfamily Miroidea, Infraorder Cimicomorpha, and suborder Heteroptera, within the order Hemiptera. Also included in Miroidea are the families Joppeicidae, Microphysidae, Thaumastocoridae, and Tingidae. Their overlapping wings often create an "X" or "V" shape along the back. Some plant bugs are colorful combinations of red, yellow, or black, while others are dull brown. They have long slender antennae (Schuh and Slater 1995). Plant bugs insert their eggs in plant stems and suck plant juices. Many species are considered pests, but they also suck nectar from wildflowers. Some species are host-specific, while others feed on a wide variety of plants (Henry et al., 1988).

Present study revealed the identification of *Guisardus pulchellus* (Carvalho, 1959) (Family: Miridae), belonging to order Hemiptera reported from Andaman and Nicobar Islands are new additions to the Indian fauna. Morphology of bugs were studied by Leica microscope M205-A; identified with the help of available literature in Zoological Survey of India. The finding of such rare bugs species from these Islands show that this area is very rich and many more such species are expected, if further extensive and intensive surveys are undertaken.

## MATERIAL AND METHODS

While undertaking the surveys of various parts of Andaman and Nicobar islands, for the inventorisation of insect fauna, an interesting specimen of Miridae was also collected by the first author, which was later identified as *Guisardus pulchellus* (Carvalho, 1959) a new record to the Family Miridae fauna from these islands. Identified specimen was pinned and added to the National Zoological Collection of Hemiptera section in Zoological survey of India, Kolkata. Morphological study was done by a Leica Stereo zoom Microscope (Leica M205A).

## RESULTS

### Systematic account

Order: Hemiptera

Suborder: Heteropteroidea

Infraorder : Cimicomorpha

Superfamily: Miroidea

Family: Miridae

### Genus: *Guisardus* Distant, 1904

**Type species:** *Guisardus pellucidus* Distant, 1909

### *Guisardus pulchellus* (Carvalho, 1959)

1904. *Guisardus pellucidus* Distant, Fauna Brit. India, Heteroptera, II: 436-437.

1944. *Guisardus pulchellus* Hsiao, Proceedings of the United States National Museum, 95: 369-396.

1959. *Guisardus pulchellus* Carvalho, Arquivos do Museu Nacional, Rio de Janeiro, 48: 384 pp.

**Material examined:** Andaman and Nicobar Islands, Nicobar Group, Pulo-Milow, 30.III.1992, (1ex.), Coll. K. Chandra. Obtain from the bark of a tree.

**Original Description:** Head, pronotum, scutellum, body beneath and legs very pale ochraceous; antennae (excluding basal joint), eyes, lateral margins and posterior lateral angles of pronotum, and a central basal spot and apex to scutellum black; apical margin of corium, luargins of cuneus, and veins to membrane piceous; posterior area of pronotum tumid, transversely rugulose striate and centrally longitudinally incised on disk; clavus moderately infuscated.

**Diagnosis:** Body golden brown, Antenna light red in colour, pronotum light brown, lateral nodules of pronotum black; posterior lobe of pronotum with transverse lines, apical margin of scutellum black, membrane hyaline, head triangular in shape, eyes light red in colour, abdomen legs, sternum light brown. **BODY:** Total length from head to abdomen  $4.19 \pm 0.05$  mm, head to membrane  $10.85 \pm 0.06$  mm (Fig.); **EYES:** length 0.419 mm, width 0.389 mm, light red in colour (Fig.); **HEAD:** length .601.00 mm, **ANTENNAE:** First joint 0.864 mm, second joint 1.527 mm., 3<sup>rd</sup> joint 1.774 **PRONOTUM:** Length of anterior lobe of pronotum 0.878 mm, Width of anterior lobe of pronotum 0.151 mm.

**Distribution:** India (Andaman and Nicobar Islands) Elsewhere: Myanmar.

## DISCUSSION

This study about the *Guisardus pulchellus* (Carvalho, 1959) will add a new record to the Miridae fauna of India and will also enrich the information on fauna of Andaman and Nicobar Island. The finding of such rare bug species from these

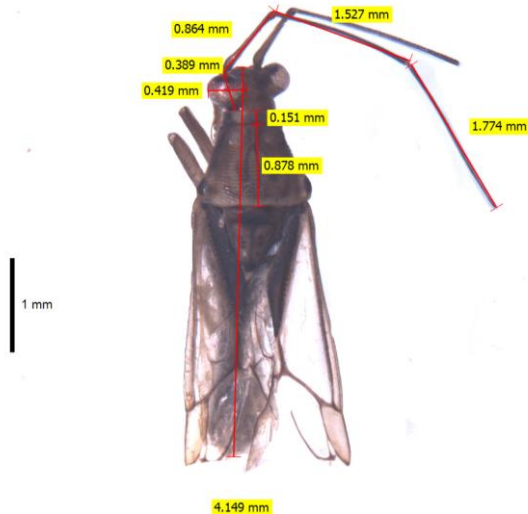
Islands show that this area is very rich and many more such species are expected, if further extensive and intensive surveys are undertaken.

### ACKNOWLEDGEMENT

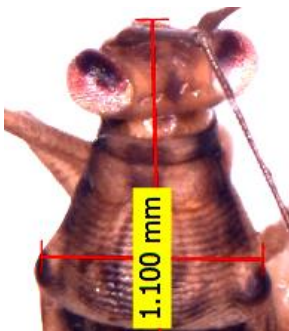
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*Guisardus pulchellus* (Carvalho, 1959)



Head and pronotum



Abdomen