

<http://dx.doi.org/10.11646/zootaxa.3795.5.7>
<http://zoobank.org/urn:lsid:zoobank.org:pub:E61A732A-0C12-4123-9BE8-5E35857484EB>

A new genus, *Neoschidium* (Hemiptera: Reduviidae: Emesinae), with a redescription of the type genus, *Neoschidium phasma* (Distant) [*Ghilianella phasma* Distant and *Schidium phasma* (Distant)], recorded for the first time from India

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Abstract

A new genus, *Neoschidium* was erected with the type genus, *Neoschidium phasma* (Distant). It was earlier described under *Ghilianella* Spinola 1850 as *G. phasma* Distant and later under *Schidium* Bergroth 1916 as *Schidium phasma* (Distant) by Bergroth (1916). Because it exhibits characters not only of *Ghilianella* and *Schidium* but also intermediate specific characters that are not found in both the genera, the type genus *Neoschidium phasma* (Distant) is redescribed with additional taxonomic details, morphometrics, and illustrations. It is also recorded for the first time from India.

Key words: Reduviidae, Emesinae, *Neoschidium phasma*, new genus

Introduction

The large and diverse genus *Ghilianella* Spinola in the subfamily Emesinae was erected by Spinola (1850) for the Neotropical species, *Ghilianella filiventris* Spinola. Distant (1904), in "The Fauna of British India," included this genus under the division Emesaria belonging to the subfamily Emesinae, with a description of a new species *viz.*, *G. phasma* from Myanmar and stating the distribution of this genus from Neotropical, Ethiopian, and Oriental regions. Bergroth (1916) stated that Indian *G. phasma* Distant cannot be included with American genus, *Ghilianella*, in which the head is armed with an apical spine. In *Ghilianella* the first rostral first segment is much shorter than the anteocular part of the head, scarcely passing the antenniferous tubercles, and shorter than the second segment, which does not reach the posterior margins of the eyes; and the third segment is longer than the first and second segments together. Hence, Bergroth (1904) shifted *G. phasma* to the genus, *Schidium*, erected by him (1916). But he overlooked three major characters of *G. phasma* *viz.*, head armed with a conspicuous spine apically, anteocular region shorter than the postocular region, and a granulated head and thorax that distinguishes it from *Schidium*. This misplacement is further corrected by Wygodzinsky (1966) in his monograph on Emesinae, that "the conspicuous body granulation of this insect makes its placement in *Schidium* highly doubtful; a re-examination of *Phasma* is imperative." However, Maldonado (1990) in his systematic catalogue of the Reduviidae of the world retained *G. phasma* in the genus *Schidium* as *S. phasma* (Distant).

Therefore, we studied *Schidium phasma* (Distant), for the first time from India (West Bengal; Darjeeling district) and redescribed it as *Neoschidium phasma* (Distant) under a new genus *viz.*, *Neoschidium*, and a key to distinguish *Ghilianella* Spinola, *Schidium* Bergroth, and *Neoschidium* gen. nov.

Legs: Forelegs relatively stout, raptorial, annulated with brownish ochraceous, fore-coxae long (3.707 mm); femur annulated and spinous up to middle, the first spine very long accompanied by alternative median and small spines, spinous region (3.915 mm) longer than unspined region (2.183 mm) (1:0.5) with long hairs in between; foretibiae longer than foretarsi with a small brownish ochraceous annulation at base, very long one at middle, tibiae with small ventral spines with alternate fine long hairs; foretarsi claw-like, one-segmented and shorter than tibiae, with ochraceous annulation at base and numerous ochraceous ventral longer hairs at base and smaller towards apex; middle leg long, femur (11.210 mm) little shorter than tibiae (14.461 mm) (0.8:1) and with five brownish ochraceous annulations; tibiae with four basal annulations and numerous small fine hairs; tarsi three-segmented, basal segment longer (0.219 mm) than third (0.175 mm) (1:0.8), second the shortest (0.148 mm), hind leg long, femur (14.301 mm) with five brownish ochraceous annulations and shorter than tibiae (19.936 mm) (0.7:1), tibiae longer than abdomen (11.301 mm) (1:0.6) with four basal annulations and numerous small fine hairs; three - segmented tarsi, covered with numerous fine hairs, basal segment longer (0.227 mm) than third (0.185 mm) (1:0.8), second the shortest (0.136 mm); claws single, slender, moderately curved.

Abdomen: Abdomen parallel-sided, slender, somewhat widened posteriorly with a very narrow longitudinal sulcation and ventrally carinate; connexivum spotted with ochraceous markings, abdominal surface slightly shining and wrinkled.

Genitalia as in figure3.

Measurements [in mm ♂ (n = 1)]. Body length 23.29; head length 1.52, width across eye 0.59; length of anteocular area 0.668, of postocular area 0.832; antennal length 22, lengths of antennal segments I: 10.69, II: 8.82, III: 0.37, and IV: 2.12; rostral length 1.53, lengths of visible rostral segments I: 0.59, II: 0.40 and III: 0.70, length of pronotum 7.72, width across humeri 0.72; length of anterior pronotal lobe 3.36, of posterior pronotal lobe 4.36, lengths of forecoxa: 3.70, trochanter: 0.65, femur: 5.40, tibia: 1.66, tarsus: 0.88, claw: 0.05; of midcoxa: 0.58, trochanter: 0.42, femur: 11.41, tibia: 14.46, tarsus: 0.54, claw: 0.08; of hind coxa: 0.87, trochanter: 0.42, femur: 14.30, tibia: 19.93, tarsus: 0.54, claw: 0.08, length of abdomen 11.30, width 1.24.

Material examined. 1♂, Loleyaon, Darjeeling District, West Bengal, India, 5.XII.12, Paramita Mukherjee (Lat.: 27.0209°, Long.: 88.5649°, Alt.: 1651 m).

Habitat : The specimen was collected from dry ferns.

Acknowledgements

Three of us (PM, GKS, & AB) are grateful to Dr. K. Venkataraman, Director, Dr.Kailash Chandra, Additional Director; Dr. K.A. Subramanian and Dr. M. E. Hassan, Scientists and Mr. B. Biswas, Assistant Zoologist, Zoological Survey of India for facilities, encouragement, and support, and to the Principal Conservator of Forest and Chief Wild life Warden, West Bengal Forest Department for giving permission to collect this specimen. One of us (DPA) acknowledges the Emeritus Scientist Fellowship from Council of Scientific and Industrial Research, India. All of us acknowledge the guidance of Prof. Carl W. Schaefer, University of Connecticut, U.S.A that enhanced the quality and enlarged the scope of the earlier version of this manuscript.

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