



REDESCRIPTION OF *BARDESANES SIGNATUS* DISTANT (HEMIPTERA : REDUVIIDAE) FIRST RECORD FROM INDIA

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INTRODUCTION

Bardesanes signatus Distant (1909) belonging to subfamily Stenopodainae is characterized by elongate, dull-colored; with, often pentagonal or hexagonal, large cells formed on corium by cubital and post-cubital veins. Antenniferous tubercles sometimes strongly produced anteriorly; first antennal segment elongate, rather strongly developed, remaining segments more slender and in repose folded back against first; ocelli present; legs long, slender; hemelytral development variable, males macropterous, females often with more reduced forewings.

The subfamily Stenopodainae follows the Ectrichodiinae with 39 species under 14 genera. As observed for the Reduviinae and the Peiratinae, a single genus *Oncocephalus* holds the major constituent with 19 species. The genus *Canthesancus* has three species and the following five genera, viz., *Aulacogenia*, *Pygolampis*, *Sastrapada*, *Staccia* and *Thodelmus* have two species each. The remaining seven genera, viz., *Bardesanes*, *Caunus*, *Hemisastrapada*, *Kumaonocoris*, *Neoklugia*, *Neothodelmus* and *Streptophorocoris* are represented by one species each (Ambrose, 2006a). Livingstone & Ravichandran (1988b) erected new genus *Hemisastrapada*. Barber (1930) revised the new world fauna and Giacchi (1984)

has subsequently added considerably to our knowledge of diversity of the group in South America.

Earlier work on genus *Bardesanes* Distant, 1909 was done by Distant, 1910. He reported *Bardesanes signatus*, Distant 1909 from Myanmar. This species was also reported by Ambrose, 2006b & Biswas and Mitra, 2011.

MATERIALS AND METHODS

While studying the collection of Hemiptera from Central India, an interesting species identified as *Bardesanes signatus* Distant was collected from Chhindwara district in Madhya Pradesh, India. Photography and morphology of bug was studied by Leica microscope M 205-A. The species was identified with the help of 'Fauna of British India, vol. V, by Distant (1909) and deposited in National Zoological Collection of Zoological Survey of India, Kolkata.

RESULTS AND DISCUSSIONS

Bardesanes signatus Distant 1909

1909. *Bardesanes signatus* Distant, *The fauna of British India including Ceylon and Burma. Rhynchota*, V: 185-188.

Material examined: 1ex., Madhya Pradesh, Chhindwara, Pench Tiger Reserve, Totladoh, 11.ix.01, coll. S.K. Mishra & Party.

REDESCRIPTION

The species *Bardesanes signatus* was described by Distant (1909) without any illustrations, required for the accurate determination of species and hence the redescription of the species along with detailed measurements, illustrations and additional diagnostic features based on observations are provided.

Colour: Body fuscous in colour, apical area of abdomen beneath black, anterior tibia brown, corium longitudinally castaneous brown between the veins and with a pale creamy patch before the membrane.

MEASUREMENTS

BODY: Total length from head to abdomen 10.75 ± 0.05 mm, head to membrane 10.85 ± 0.06 mm (Fig. A); **EYES:** length 0.432 mm, width 0.270 mm, black in colour; **HEAD:** length 1.201 mm, length of anterior ocular region 0.846 mm; length of post ocular region 0.335 mm, width of anterior lobe of head 0.472 mm, width of posterior lobe of head 0.649 mm. Head sub oval, narrow in front of eyes than behind (Fig. B); **ANTENNAE:** First joint 6.614 mm, second joint 5.153 mm. 1st joint of antennae about as long as the intermediate femora and longer than second joint. **ROSTRUM:** Total length 0.802 ± 0.03 mm, First joint 0.425 mm, second joint 0.397 mm, third joint 0.380 mm. Rostrum with the first joint reaching middle of antecular portion of head, second joint sub equal to first, third slightly shorter than second (Fig. C). **LEGS- FORE LEG:** length (excluding tarsi) 6.869 ± 0.05 mm, length of Coxa 1.626 mm, length trochanter 0.398 mm, femur length 2.967 mm, tibia length 1.878 mm, tarsus length 1.007 mm, length of 1st, 2nd and 3rd tarsal joints are 0.172 mm, 0.156 mm and 0.071

mm respectively; Claw 0.071 mm in length; anterior femora moderately incrassated and finely spinous beneath, anterior tibia and tarsi united, about as long as femora, tarsi 3-jointed (Fig. F). **MID LEG:** Total length (excluding tarsi) 18.137 ± 0.05 mm, Length of Coxa 0.582 mm, Length of trochanter 0.475 mm, femur length 7.493 mm, tibia length 9.587 mm. Femora annulated with creamy white at apices. **HIND LEG:** Total length (excluding tarsi) 25.697 ± 0.05 mm, Length of Coxa 0.649 mm, Length of Trochanter 0.351 mm, Femur length 10.024 mm, Tibia length 14.673 mm, Length of 1st, 2nd and 3rd tarsal joints are 0.064 mm, 0.113 mm and 0.160 mm respectively. Posterior femora as long as entire body. Femora annulated with creamy white at apices. **PRONOTUM:** Length of anterior lobe of pronotum 1.332 mm, width of anterior lobe of pronotum 0.887 mm, length of posterior lobe of pronotum 1.334 mm, width of posterior lobe of pronotum 1.305 mm. Pronotum more than twice as long as head, the anterior lobe constricted, which is gibbous with a central longitudinal narrow ridge and with a nodule near each posterior angle, its basal margin sinuate, anterior margin black. **HEMELYTRON:** Length 7.102 mm, width 1.600 mm, Hemelytra passing abdominal apex, exterior cell of membrane longer than interior cell (Fig. D). **CORIUM:** Corium longitudinally castaneous brown between the veins and with a pale creamy patch before the membrane, the later with a central pale vein; corium transversely striate in each lateral area, membrane brown in colour. **ABDOMEN:** Length 5.427 mm, apical area of abdomen beneath black. **SCUTELLUM:** Length 0.298 mm, Width 0.282 mm, Scutellum black triangular (Fig. E). **CONNEXIVUM:** Length 6.806 mm, Width 1.830 mm.

	Genus <i>Bardesanes</i>	Genus <i>Caunus</i>
1.	Anterior femora spined.	Anterior femora unarmed.
2.	1st joint of rostrum little longer than second joint.	1 st joint of rostrum subequal to 2 nd joint.
3.	1 st and 2 nd joint of antennae subequal.	2 nd joint of antennae longer than 1 st .
4.	Apical spine of scutellum moderately curved upwards	Apical spine obliquely erect



A. Dorsal view of *Bardesanes signatus* Distant



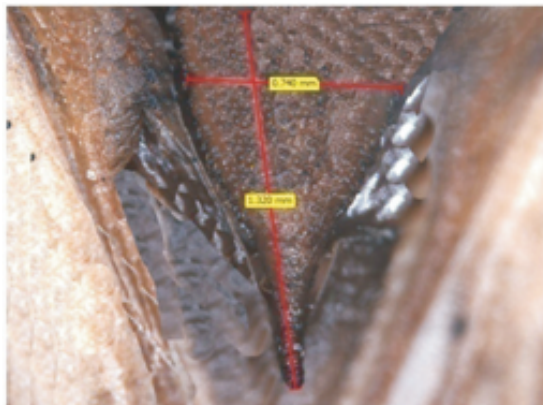
B. Head



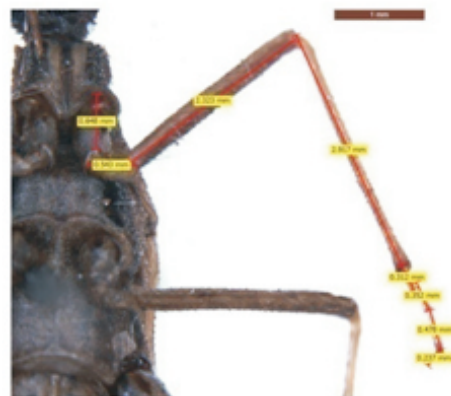
C. Rostrum



D. Hemelytra



E. Scutellum



F. Ventral view of left fore leg

The genus *Bardesanes* is alike to the genus *Caunus*, which may be differentiated with the following characters as mentioned in the table.

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