

**NABIS TIBIALIS DISTANT (HEMIPTERA: NABIDAE),  
A FIRST RECORD FROM INDIA**

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ABSTRACT: The paper deals with the report of *Nabis tibialis* Distant, a rare species of family Nabidae for the first time from India.

KEY WORDS: Nabidae, *Nabis tibialis*, India.

*Nabis tibialis*, Distant (1902) belong to the family Nabidae, which are commonly known as damsel bugs. They are characterized by short length, yellowish or olive brown in color, labium curved reaching up to the mesothorax, with 4 distinct segments. The family Nabidae was earlier included in the family Reduviidae. The current classification of this family was given by Schuh and Stys in 1991, which included two subfamilies viz. Nabinae and Prostematinae. *Nabis tibialis* belong to subfamily Nabinae, characterized by para-stigmal pits on various abdominal segments, it is worldwide distributed but more diverse in northern hemisphere. Remane (1953, 1962 and 1964) described many new species of *Nabis* from western Palearctic region. The damsel bug's fauna in India is quite poor. Distant (1902) reported *Nabis capsiformis* Germar, 1837, *N. funebris* Distant, 1902, *N. indicus* (Stål, 1873) and *N. nigrescens* Distant, 1902 from India, however *N. tibialis* from Sri Lanka and *Nabis brevilineatus* Scott, 1874 from Myanmar and Japan. The report of *N. tibialis* Distant from Chhattisgarh is a new addition to the fauna of India.

### MATERIALS AND METHODS

While undertaking the survey of Kangervally National Park in Bastar district of Chhattisgarh state for making the faunal inventory, an interesting species identified as *Nabis tibialis*, Distant was collected. Photography and morphology of bug was studied by Leica microscope M 205-A. After identification specimen has been deposited in National Zoological Collection of Zoological Survey of India.

### OBSERVATION AND RESULTS

#### *Nabis* Latreille, 1802

**Type specimen** *Nabis apterus* Fabricius

**Distribution:** Cosmopolitan.

#### *Nabis tibialis*, Distant, 1902

1902. *Nabis tibialis*, Distant, *Fauna of Brit. India, Rhynchota*, II: 392-401.

Material examined: Bastar, Kangervally National Park, 14.i.2006, (1 ex) Coll. D. K. Harshey and Party.

**Description:** The species *Nabis tibialis*, Distant was described by Distant (1902) without any illustrations, required for the accurate determination of species and hence the description of the species along with detailed measurements, illustrations and additional diagnostic features based on observations are provided.

**Original Description** (Distant, 1902): Shining piceous brown; a lateral marginal fascia extending from anterior margin of eyes to base of head, two oblique discal fasciae and the posterior margin to pronotum, two medial marginal spots to scutellum, claval suture, veins, lateral margin and a sub apical spot to corium, lateral margins of abdomen, legs, rostrum, and antennae luteous; apex of second joint of antennae, extreme base of second joint of rostrum, spots to abdominal lateral margins and apices of femora and tibiae black; obscure shadings to anterior and intermediate femora, and numerous annotations to tibiae fuscous; membrane greyish, the venation pale fuscous; first joint of antennae about as long as head, almost equal in length to second joint; posterior lobe of pronotum obscurely granulate; lateral posterior angles of pronotum subnodulose.

**New Description:** Body olive yellow; rostrum four jointed; second joint largest; scutellum have a piceous spot; posterior lobe of pronotum highly punctate, one fasciae on the middle of the front lobe of pronotum; frontal lobe of head largest; legs olive brown, fore leg femora and tibia almost sub equal in length; tarsi 3 segmented, hind leg tibia larger than femora, mid leg femora larger than tibia, apical margin of femora with piceous annulation, abdomen piceous hairy, apical margin of corium with black spot (All figures are attached in Plate 1 & 2).

**Measurements:** BODY: Total length from head to membrane  $7.49 \pm 0.05$  mm; EYES: length 0.317 mm, width 0.287 mm, black in color; HEAD: length 1.352 mm, length of anterior ocular region 1.09.00 mm, length of post ocular region 0.262 mm, width of anterior lobe of head 0.536 mm, width of posterior lobe of head 0.675 mm; ROSTRUM: Total length  $2.412 \pm 0.03$  mm, First joint 0.301 mm, Second joint 0.927 mm, Third joint 0.640 mm and fourth joint 0.544 mm. Rostrum with the second joint reaching middle of ante-ocular portion of head, third joint reaching to the prothorax, fourth slightly shorter than third and reaching to the mesothorax; LEGS- FORE LEG: length (excluding tarsi)  $4.643 \pm 0.05$  mm, length of Coxa 0.641, length trochanter 0.501 mm, femur length 1.772 mm, tibia length 1.729 mm, length of 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> tarsal joints 0.052 mm, 0.160 mm and 0.278 mm respectively; Claw 0.143 mm in length; tarsi 3-jointed; MID LEG: Total length (excluding tarsi)  $4.359 \pm 0.05$  mm, Length of Coxa 0.486, femur length 2.077 mm, tibia length 1.796 mm. Femora annulated with piceous white at apices; HIND LEG: Total length (excluding tarsi)  $25.697 \pm 0.05$  mm, Length of Coxa 0.332, Length of Trochanter 0.327 mm, Femur length 2.552 mm, Tibia length 3.087 mm, Length of 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> Tarsal joints 0.155 mm, 0.281 mm and 0.363 mm respectively. Femora annulated with piceous at apices, Claw 0.101 mm; PRONOTUM: Length of anterior lobe of pronotum 0.492 mm, Width of anterior lobe of pronotum 1.101 mm, Length of posterior lobe of pronotum 0.720 mm, Width of posterior lobe of pronotum 1.583 mm; HEMELYTRON: Length 5.004 mm, width 1.385 mm, Hemelytra passing abdominal apex; ABDOMEN: Length 3.239 mm, apical area of abdomen beneath black and Width 1.329 mm; SCUTELLUM: Length 0.867 mm, Width 0.804 mm, Scutellum with black triangular spot.

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### Plate 1



*Nabis tibialis* Distant



Head and eyes



Pronotum



Rostrum

Plate 2



Fore leg



Mid leg



Tarsi of mid leg



Hind leg