



## A new *Ampedus* Dejean (Elateridae : Elaterinae) from Buxa Tiger Reserve, West Bengal, India

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### General Note



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### ABSTRACT

*Ampedus* Dejean of Buxa Tiger Reserve is monotypic, being represented by the only new species *A. furunculus*. Species is described and illustrated based on the basis of a single male specimen.

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Abbreviations: BTR= Buxa Tiger Reserve; LT= Light Trap; MSL= Mean Sea Level.

## 1. INTRODUCTION

Globally Elateridae includes 12,617 species under 725 genera (GBIF, 2013a) including 461 *Ampedus* Dejean species (GBIF, 2013b). While in Indian counterpart the genus is known by only 5 species (Vats, 1991). It appears that the Indian click beetles did not receive any serious attention till date. However we since 1994, were exploring the click beetles of Buxa Tiger Reserve, Jalpaiguri, West Bengal, India. In spite of our sincere effort, we could record *Ampedus furunculus* sp. nov. as the only representative of the genus. Beside describing and illustrating the species in question, we also provide diagnosis of the genus.

### 1.1. The biotope

Buxa Tiger Reserve (latitude 26°30' to 26°55' N and longitude 89° 20' to 89 °55' E ; MSL: 100 m to 1750 m; total area 760.94 sq. km , core area 385.02 sq. km.; temperature : 6° c to 30° c annual rainfall : 5000 mm) lies in the Alipurduar sub division of Jalpaiguri district of West Bengal. It is situated within 2 forest divisions, entire Buxa forest division of Alipurduar (Jalpaiguri) and part of Coochbehar forest division. The reserve includes 14 forest ranges. Buxa serves as an international corridor for elephant migration between India and Bhutan (for further detail see Sarkar *et al.*, 2012).

## 2. MATERIALS AND METHODS

Click beetles were mainly collected by visual search, hand picking and UV light trap. Collected samples were preserved following Chakraborty and Chakrabarti (2006). The recorded samples were studied under Stereo Zoom Binocular Microscopes Zeiss SV11 and Olympus SZX7. All measurements are in millimeters, made with an eye piece graticule. Materials are in the deposition of Department of Agricultural Biotechnology, Ramakrishna Mission Vivekananda University.

### 2.1. Diagnosis

**Genus: *Ampedus*** Dejean

Dejean PFMA. 1833, Catalogue des Coléoptères, Méquignon-Marvis, Paris, 1–176.

Body densely pubescent. Frons with anterior margin arcuate or straight. Mandible simple or bifid. Antennae reaching the posterior angle of prothorax or not, segments 4<sup>th</sup> to 10<sup>th</sup> similar. Pronotum with posterior angles unicarinate, carina short, posterior margin with lateral indents. Prosternopleural sutures open in front, prosternal spine not grooved between coxae, rounded. Scutellum pentagonal. Both mesepisternum and mesepimeron forming the part of margin of mesocoxal cavity. Metacoxal plates with posterior margin rounded. Claws simple, with setae at base.

### 2.2. Type Material

Holotype: 1♂, Rajabhatkhawa/LT, BTR, Jalpaiguri, West Bengal, India, coll. S. Sarkar, 05.iv.2010.

### 2.3. Type Deposition

Department of Agricultural Biotechnology, IRDM Faculty Centre, Ramakrishna Mission Vivekananda University, registration no. RKMVUE/elat./03/2015.

## 3. DESCRIPTION: Male (Holotype)

Body length: 11.86, width: 3.29.

Body black, marbled with yellow.

Head black, densely clothed with yellow spiculate hair, in patches leaving some areas free. Punctuation double. Frons broader than long, concave, anterior margin concave. Frontal carina incomplete, medially faint. Vertex raised at the middle. Eye black, round, moderately large with distinct facets. Labrum black, broader than long, medially concave, anterior margin concave. Mandible large, black, apically blunt. Antennae black, moderately long, extending beyond the middle of pronotum, basal segment robust, 2<sup>nd</sup> globular, smallest, 3<sup>rd</sup> smaller than 4<sup>th</sup>, 4<sup>th</sup> onward serrate and subequal. Apical segment blunt at apex.

Pronotum black, medially with two black oval eye spots. Thickly densely clothed with spiculate hairs, medial area free, posteromedially bluntly gibbous, sloped beyond, midlongitudinally sulcate almost throughout. Disc raised, longer than broad, punctuation double, larger ones scattered. Submarginal line present. Anterior margin concave, with anterior angle acute. Lateral margin entire, sinuate before hind angle, strongly carinate, serpentine. Hind angle long, divergent, acute.

Scutellum black, shield shaped, raised beyond, sloped further with spiculate pubescence. Hair little denser basomedially and on apical margin.

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Elytra raised, 2.1 times longer than pronotum, black, marbled with spiculate hairs in patches. Striae punctate, each strial puncture marked by spiculate hair. Interstriae convex, punctation double. Basally emarginate, angular, apically truncate. Apical end blunt, with sutural end dentate.

Prosternum convex, longer than broad. Puncture double, marginally with larger ones. Anteriorly with distinct chin piece. Prosternopleural suture straight. Prosternal spine long, emarginate, longitudinally sulcate between procoxae, anterior margin round.

Mesepisternum and mesepimeron forming part of the margin of mesocoxal cavity.

Metacoxal plate round.

Abdomen black, punctation double, Pubescence dense near lateral margins. Last sternite with two depressions.

Leg dark brown, thickly clothed with hairs similar to other regions. moderately long, tibia with 2 brown tibial spurs. Claw simple, setae present at base of claw.

**Genitalia:** Basal piece thin, 'U' like, arms round at apex, posterior margin convex, lateral margin feebly arcuate, outer margin strongly sclerotized, thin and line like, rest feebly sclerotized; median lobe longer than parameres, feebly sclerotized, arms long, straight, round at base, exceeding ventral posterior margin of parameres, long, dumbbell like, basally broad, apically knob like, furcae not reaching the anterior margin of parameres; parameres uniformly sclerotized throughout, outer lateral margin sinuate, basally broad, proximally concave, distal teeth small, pointed, strongly narrow from distal to apical, notched apically, pointed, with hairs plenty.

**Etymology:** The species name is derived from the knoblike tip of median lobe.

**Distribution:** India: West Bengal.

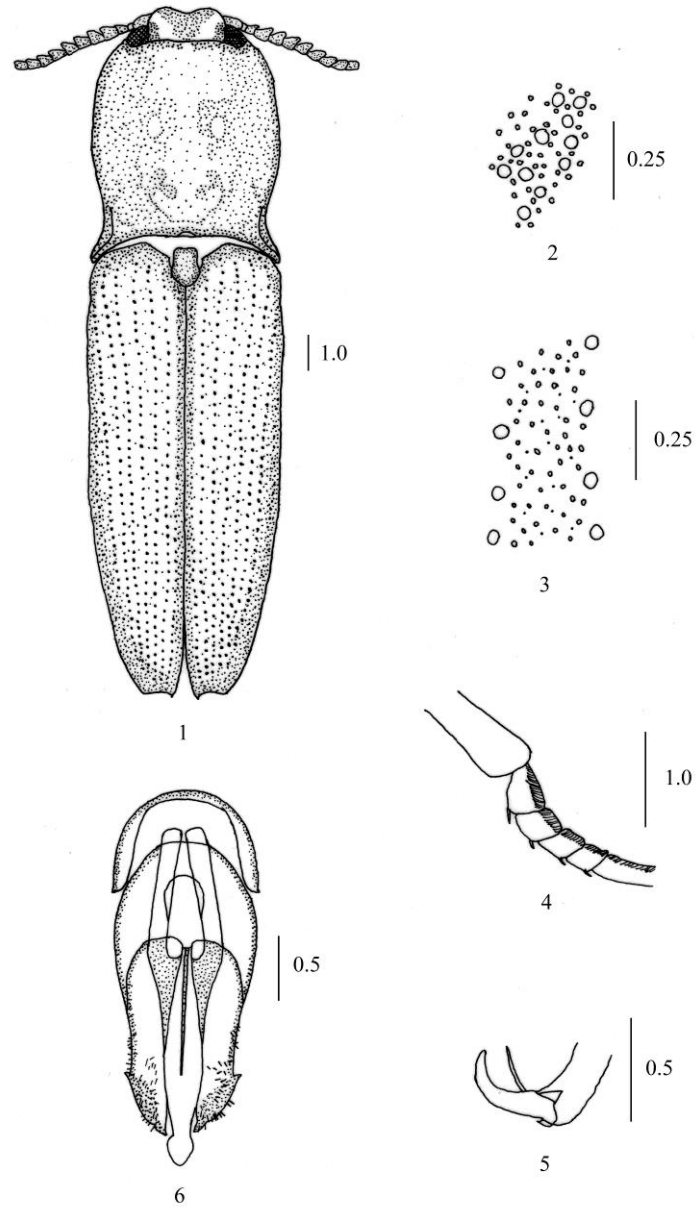
**Remarks:** None of the Indian congeners show any resemblance to the present species. Therefore the species under consideration is recognized as new to science.

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Figures 1-6

*Ampedus furunculus* sp. nov. Male (Holotype) : 1. Dorsal habitus; 2. Pronotal puncture; 3. Elytral puncture; 4. Part of leg; 5. Claw; 6. Genitalia.

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Figures 7-8

Images of *Ampedus furunculus* sp. nov. Male: 7. Dorsal habitus; 8. Genitalia.