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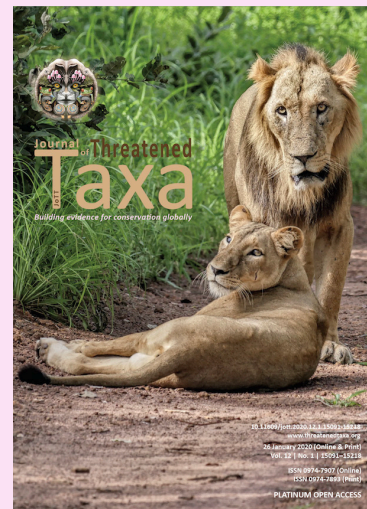
SHORT COMMUNICATION

DESCRIPTION OF A NEW SPECIES OF THE GENUS *LAMPROPSEPHUS* FLEUTIAUX, 1928 (COLEOPTERA: ELATERIDAE: ELATERINAE: DICREPIDIINI) FROM KONKAN, MAHARASHTRA, INDIA

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Description of a new species of the genus *Lampropsephus* Fleutiaux, 1928 (Coleoptera: Elateridae: Elaterinae: Dicrepidiini) from Konkan, Maharashtra, India

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Abstract: *Lampropsephus sulcatus* sp. nov. is described from the Konkan region of Maharashtra, India. A note to transfer *Propsephus assamensis* from *Propsephus* Candeze, 1859 to *Sephilus* Candeze, 1878 is included.

Keywords: Coastal lateritic outcrops, Elateridae, *Lampropsephus*, *Propsephus*, *Sephilus*, Western Ghats.

ZooBank: urn:lsid:zoobank.org:pub:54E5A22C-1657-44CF-935C-08D0B713A0C3

Candeze (1859) erected *Psephus* with *P. beniniensis* as a type species. Later on Hyslop (1921) erected a new genus *Propsephus* to put all known *Psephus* under it because *Psephus* was already preoccupied by *Psephus* Kirby, 1826 in Ochodaeidae (Scaraboidea). Fleutiaux (1935) proposed *P. eliminatus* Candeze, 1859 as type species. Casari (2008) retained Hyslop's assumption of *P. beniniensis* as type species. Fleutiaux (1928) erected monobasic *Lampropsephus* for *Propsephus cyaneus* Candeze (1878).

So far only one species *L. cyaneus* Candeze (1878) is before reported from India with a type locality as 'Himalaya'.

MATERIALS AND METHODS

The specimen was collected from a coastal lateritic outcrop near Bakale Village, Rajapur Taluk, Ratnagiri District in Maharashtra State. The holotype is a female and is deposited in the museum of The Bombay Natural History Society, Mumbai. The identification is based on Candeze (1859, 1878), Schwarz (1905), Fleutiaux (1928, 1935), and Casari (2008). The treatment given by Casari (2008) was the latest and most comprehensive. The morphological terminology was also consulted from Leschen et al. (2010).

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RESULTS

Lampropsephus (Fleutiaux, 1928)

Type species: *Psephus cyaneus* Candeze, 1878, by monotypy

Fleutiaux erected *Lampropsephus* for *Propsephus* based on brilliant colors (brilliant is *lampros* in Greek) and a combination of the following characters. Body oblong, convex with bristly pubescence. Frontal carina complete between eyes. Antennae not reaching the base of the pronotum. Second and third antennomeres small and globular and the others serrate. Elytra punctate-striate. Prosternum with indistinct chin piece. Notosternal sutures furrowed in the anterior. Elytral epipleurae wide and large, wider near anterior angles of elytra. Metacoxal plate narrow and posterior margin sinuate. Metatarsi slightly shorter than metatibia.

Lampropsephus sulcatus sp. nov.

(Images 1–6, 7D)

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Type examined: Holotype: BNHS 302, female, 10.vii.2012, Bakale, Ratnagiri District, Maharashtra, India 16.57°N & 73.34°E, on the flowers of *Antidesma acidum* Retz. leg. R. Khot (Image 1)

Diagnosis: The new species can be differentiated from *L. cyaneus* Candeze, 1878 by having a distinct groove in the posterior half of prothorax which is absent in the latter; prosternal margins distinctly concave in *L. cyaneus* Candeze, 1878 where as they are subparallel in the new species; prosternal projection stouter than the latter; body multi-coloured in the new species where as it is monochrome cyan in *L. cyaneus* Candeze, 1878.

DESCRIPTION

Habitus (Image 2)

Female: Total length 18.3mm from anterior margin of frontal carina to the tip of the elytra. Maximum breadth 5.57mm at the broadest part of elytra. Integument tricoloured; prothorax including hypomera rufous; head, antennae, proventrite, mesoventrite and metaventrite black; scutellar shield and elytra shining and deep blue. Punctures round, deep and dense. Pubescence yellow ochre.

Head (Image 3): Width (2.86mm) including eyes, slightly more than half of the prothorax width (5.32mm). Anterior margin broadly rounded. Frons broad, squarish, flat, inclined anteriorly, entirely carinate along its width (between eye to eye). Labrum bulging, anterior margin rounded. Mandibles with glabrous tip, bluntly truncate.



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Image 1. *Lampropsephus sulcatus* sp. nov. on the flowers of *Antidesma acidum* Retz.



Image 2. Dorsal habitus of *Lampropsephus sulcatus* sp. nov. (Holotype: female. Registration #BNHS 302).



Image 3. Head of *Lampropsephus sulcatus* sp. nov.



Image 4. Antenna of *Lampropsephus sulcatus* sp. nov.



Image 5. Ventral view of *Lampropsephus sulcatus* sp. nov.



Image 6. Abdominal ventrites of *Lampropsephus sulcatus* sp. nov.

Antenna (Image 4): Serrate, reaching beyond middle of the prothorax. Antennomere 4–11 with rami. First segment more than the double the length of second. Second and third antennomeres small and subequal. Fourth antennomere the broadest. Antennomere 5–10 distinctly serrate. Eleventh antennomere longer than the preceding, blunt, with broadly rounded apex, lateral sides constricted in the distal half.

Prothorax (length 4.82mm; breadth 5.32mm near the base of the posterior angles) with a distinct shallow groove in the posterior half. Anterior margin darker, slightly rounded in the middle with anterior angles which cover eyes partially. Lateral margin completely carinate from posterior to anterior, narrowing in the anterior

half. Posterior angles long with black borders and blunt apex; with distinct, black single carina from the tip to the base of the angle. Posterior margin black, glabrous. Sublateral incision along the posterior margin distinct, broad, squarish. Prescutal notch broad. Hypomerall margin along the pronotosternal sutures angulate.

Scutellum strongly declivous anteriorly with margins as follows: anterior margin carinate and broadly arcuate, lateral margins arcuate and in posterior two third and straight in the anterior third, posterior margin with broadly arcuate apex.

Elytra (length 11.6mm; breadth 5.57mm) with sides parallel tapering posteriorly to broadly rounded apex. Anterior angles indistinct. Striae with distinct and deep punctures which are separated by more than two diameters of punctures. Striae 2,3 and 4 slightly depressed on either side of the scutellum. Interstriae flat.

Prosternum (Image 5) with anterior margin slightly arcuate. Lateral margins slightly tapering

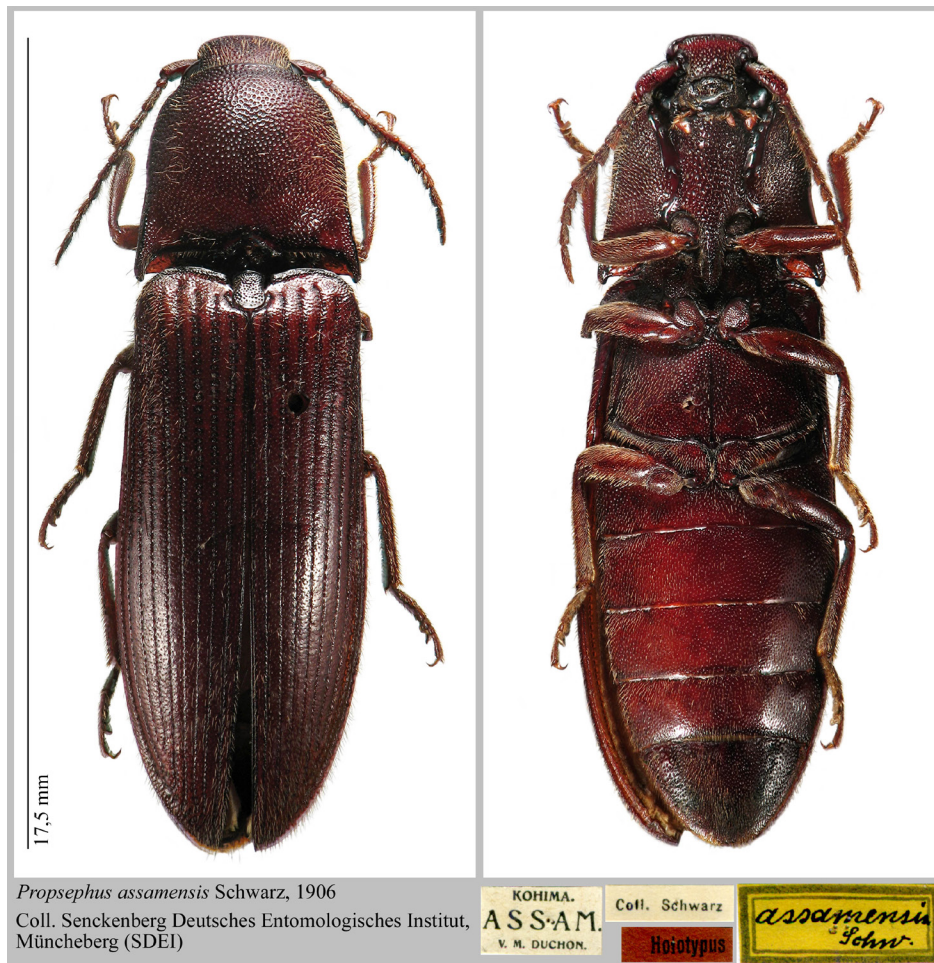


Image 7. *Sephilus assamensis* (Schwarz, 1905). syn. nov.

posteriorly. Notosternal sutures broad. Mesoventrite declivous anteriorly with an area on either sides of the mesoventral cavity depressed. Mesoventral cavity vertical in the middle with posterior end broadly rounded with thick margins, reaching beyond middle of mesocoxae. Metaventrite (Image 5) truncate between mesocoxae, distinctly separated from the mesosternum by deep suture. Metaventral discrimen distinct, entire. Metasternum slightly projecting between metacoxal plates.

Metacoxal plates (Image 5) broadly rounded along midline of body. Posterior margin sinuate as for the genus with posterior angle distinct and broad.

Legs: Mesocoxal margin formed by mesoventrite, metaventrite, mesepimeron, and mesanepisternum. Mesofemur the broadest. Posteriorly femora with a groove. Tibia long, thin, parallel sided, outer margin with a row of spinose hairs. Distal end of tibia with a row of spiniform hairs and short tibial spurs. Tarsomere 1–3 broad; 4–5 tarsomere thin and glabrous. First tarsomere with band of golden hairs near the apex appearing like

a lamella. Second and third tarsomere lamellate. Claw blade without basal seta arising from the outer surface of the blade.

Abdominal ventrites (Image 6) convex. Pygidium or abdominal process longer than the previous ventrites and with rounded apex.

Etymology

The species is named indicating the groove or sulcus present on prothorax. Masculine.

Note on transfer of *Propsephus assamensis* (Schwarz, 1905) (Image 7)

Sephilus assamensis (Schwarz, 1905) syn. nov.

Psephus assamensis Schwarz, 1905 (Deut. Entomo. Zeit. 260–261)

Propesphus assamensis: Hyslop, 1921 (Proc. of the Unit. St. Nat. Mus. 58: 621–680)

Type locality: Kohima, Nagaland (then Assam)

By examining high resolution photographs of the holotype of *Propsephus assamensis* and the description

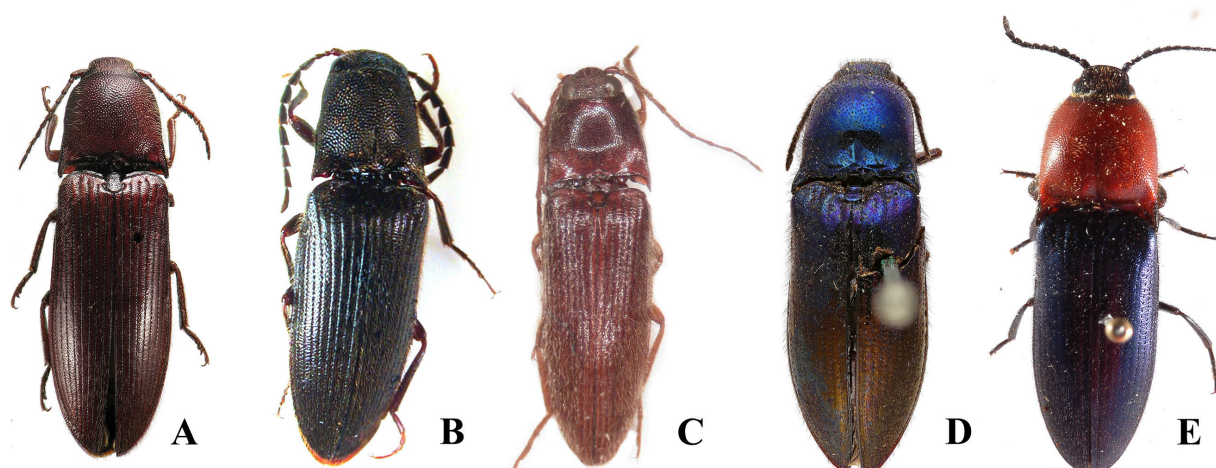


Image 8. Five species of psephid genera.

A—*Sepsilus assamensis* (Schwarz, 1905) syn. nov. | B—*Propsephus thanensis* (Patwardhan & Athalye, 2010) | C—*Neopsephus assamensis* (Schimmel, 2007) | D—*Lampropsephus cyaneus* (Candeze, 1878) | E—*Lampropsephus sulcatus* sp. nov.

by Schwarz (1905) the following characters are clearly seen. Antennae reaching beyond the base of prothorax. The terminal antennomere slender, long with pointed apex, as long as the previous two together. Head with complete carina on the frons. Prothorax wider than long, slightly narrowing anteriorly with margins entirely carinate. Notosternal sutures broad and deepened almost entire length. Prosternal process with narrowed apex. Metatarsi distinctly shorter than the metatibia. Based on these characters *Propsephus assamensis* Schwarz, (1905) can be transferred to *Sepsilus* Candeze, 1878 as *Sepsilus assamensis* (Schwarz) syn. nov.

DISCUSSION

Four psephid species (Image 8) have been described from India previously as follows – *Lampropsephus cyaneus* Candeze (1878), *Propsephus assamensis* Schwarz (1905), *Neopsephus assamensis* Schimmel (2007) and *Propsephus thanensis* Patwardhan & Athalye (2010). The first three species are from northeastern India and the last is from northern Western Ghats.

P. cyaneus described by Candeze (1878) with the type locality as ‘Himalaya’ of which Fleutiaux (1928) and Casari (2008) mention the type locality as ‘Tonkin’ which is outside Himalayan boundaries. *P. assamensis* was described by Schwarz (1905) from ‘Kohima, Assam’. Kohima is now the capital of Nagaland State. *Neopsephus*

assamensis Schimmel (2007) was reported from south of Shillong, Meghalaya. *P. thanensis* was described by Patwardhan & Athalye (2010) from Thane, Maharashtra.

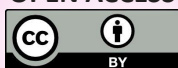
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