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# Ergebnisse der Bhutan-Expedition 1972 des Naturhistorischen Museums in Basel

# Coleoptera: Fam. Cucujidae Subfam. Laemophloeinae

#### By P. Mukhopadhyay and T. Sengupta

Abstract: Seven species are enumerated from Bhutan, Uttar Pradesh and Darjeeling district, two of which (Xylophloeus nainitalensis and X. darjeelingensis) are described as new to sciences.

The paper presents the results of the study of the material of Cucujidae: Laemophloeinae collected by the 1972 Bhutan expedition of the Naturhistorisches Museum in Basel, Switzerland, headed by Dr. W. Wittmer and materials of North West Himalaya (U.P. Survey, 1976, of Zoological Survey of India, Calcutta by Dr. T. Sengupta).

The Laemophloeinae (Cucujidae) fauna from Bhutan was hitherto unrecorded due to lack of collecting in that area and all the species except *Xylophloeus darjeelingensis* n. sp. are recorded for the first time from Bhutan.

### Cryptolestes pusillus (Schönherr)

Cucujus minutus OLIVIER, 1791, Encycl. Méth., 6: 243, nec FOURCROY, 1785. Cucujus pusillus SCHÖNHERR, 1817, Synonymia Insectorum, 1(3): 55. Cucujus testaceus STEPHENS, 1831, Ill. Brit. Ent. Mandib., 4: 224. Cucujus crassicornis WALTL, 1839, Isis, Jena 3: 225. Laemophloeus longicornis MANNERHEIM, 1843, Bull. Soc. Nat. Mosc., 16: 303. Laemophloes (Sic) brevis FAIRMAIRE, 1850, Rev. Mag. Zool., (2) 2: 56. Laemophloeus parallelus SMITH, 1851, List of Coleoptera in the British Museum, 1: 7. Laemophloeus pauper SHARP, 1899, Biol. C. Amer. Col., 2 (1): 530

Material examined: 2 specimens: 1 ♂, km 87 Phuntsholing-Thimphu, 22.5.1972, km. 87; 1 ♀, Phuntsholing, 200–400 m, 24.4.1972.

Remarks: This is a cosmopolitan species and now being recorded for the first time from Bhutan.

### Microlaemus picipennis (Grouvelle)

Laemophloeus picipennis GROUVELLE, 1908, Ann. Soc. ent. Fr., 77: 468, 473. Microlaemus picipennis (GROUVELLE): LEFKOVITCH, 1962, Bull. Brit. Mus. (Nat. Hist.) Ent., 12 (4): 165–245. Material examined: 1 specimen: 1 9, Tango, 27 km North Thimphu, 30.4.1972, altitude 1700 m, W. Wittmer.

Remarks: So far this species was recorded from Tamil Nadu: Nilgiri Hills and now being recorded for the first time from Bhutan.

#### Microlaemus interceptus (Grouvelle)

Laemophloeus interceptus GROUVELLE, 1903, Ann. Soc. ent. Fr., 72: 122.

Microlaemus interceptus (GROUVELLE): Lefkovitch, 1962, Bull. Brit. Mus. (Nat. Hist.) Ent., 12 (4): 167–245.

Material examined: 1 specimen: 1 9, Golakha, 29.4.1972, altitude 780 m, W. Wittmer.

Remarks: So far this species was recorded from West Bangal: Darjeeling and now being for the first time recorded from Bhutan.

### Placonotus testaceus (Fabricius)

Cucujus testaceus FABRICIUS, 1787, Mantissa Insectorum, 1: 166.

Laemophloeus suberis LUCAS, 1849, Expl. Sci. Algerie Crustacis. Arachnides, Myriapodes et Hexapodes, 2: 479.

Laemophloeus notatithorax OBENBERGER, 1917, Arch. Naturgesch., A(4) 82: 25.

Placonotus testaceus (FABRICIUS), Lefkovitch, 1959, Trans. R. Ent. Soc. London, 111 (5): 110–112.

Material examined: 1 specimen: 1 &, Samchi, 7.-11.5.1972, altitude 300 m, W.Wittmer.

Remarks: This is a cosmopolitan species and is being recorded for the first time from Bhutan.

Xylolestes ovalis (GROUVELLE) n. comb.

Laemophloeus ovalis GROUVELLE, 1883, Ann. Mus. Genova, 18: 281, t. 7, f. 7.

General appearance elongated, flattened, glabrous, shiny, dorsal surface yellowish brown.

Head transverse, apical margin of clypeus feebly trisinuated, median sinuosity at the same level of external sinuosity, frontoclypeal suture indistinct, median line on vertex extending two thirds of its length from base to apex, an oblique transverse line below the eye present, lateral line at the inner margin of eye finely grooved and apically joined with transverse groove lying below the apical margin, punturing on vertex finely and sparsely arranged. Eyes moderately large, black, moderately coarsely faceted. Antenna yellowish brown, its length extending slightly beyond the prothorax, scape moderately large, pedicel shorter than segment 3 which is narrowed at base and longer than segment 4, segments 4–8 subequal, segments 9–11 form a distinct club. Prothorax more than two times as wide as long, lateral margin rounded and smooth, lateral line broadly grooved at middle and narrowed both at base and apex, front angle broadly rounded, hind angle obtuse, puncturing on disc finely and moderately closely arranged. Scutellum triangular with rounded apex. Elytra 1.5 times longer than its combined width, humeral angle round and denticulated at apex, apical angle rounded, each elytra with incomplete sutural stria, impression of second cell at apex, third cell complete and narrowed at apex, an oblique striae passing exteriorly from base of discoidal striae, puncturing on elytra small, round and arranged in rows. Ventral surface yellowish brown and glabrous.

Measurements: Total length 1.6 mm; length of head 0.20 mm; width of head across middle 0.45 mm; length of antenna 0.60 mm; length and width of prothorax 0.37 mm; 0.54 mm; length and width of elytra 1.0 mm, 0.68 mm.

Material examined: 1 specimen: 1 ex., Samchi, 7.-11.5.1972, altitude 300 m, W.Wittmer.

Remarks: During the revision of African Laemophloeinae, LEF-KOVITCH (1962), errected the genus Xylolestes for the species Laemophloeus unicolor Grouvelle. GROUVELLE (1883) described the species ovalis from Borneo under the genus Laemophloeus. In the present study this species has been transferred to the genus Xylolestes for having tarsal formula 5-5-5 in both sexes, apical margin of clypeus trisinuated, lateral line on either side of pronotum broadly grooved, front coxal cavity narrowly open posteriorly, mesocoxal cavity narrowly open outwardly, median impressed line on metasternum extending two thirds of its length, maxillary lacinia with two teeth at apex and with few setae, intercoxal process of ventrite 1 broad and slightly rounded at apex. This species is recorded for the first time from Bhutan.

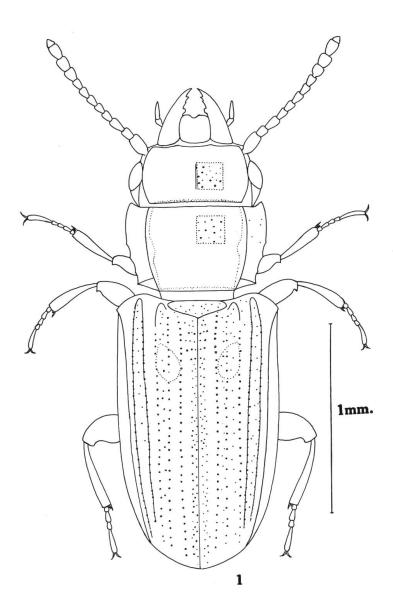
# Xylophloeus Lefkovitch

Type species: Laemophloeus patens Grouvelle.

GROUVELLE (1908) described the species Laemophloeus patens from Africa. During the revision of African Laemophloeinae, Lefkovitch (1962), errected the genus Xylophloeus for this species and described six new species under this genus. This genus hitherto remains unrecorded from Oriental region and is being for the first time recorded from India (Uttar Pradesh, West Bengal) and Bhutan. Indian and Bhutanese species of *Xylophloeus* unlike African species have apical margin of labrum slightly sinuate at middle and mesocoxal cavity narrowly open outwardly, whereas, in African species apical margin of labrum rounded and mesocoxal cavity moderately broadly open.

# Xylophloeus nainitalensis n. sp.

General appearance (Fig. 1) elongated, broadly flattened, shiny, glabrous; apical margin of clypeus; scape, pedicel and segments 3–8 of antenna and legs slightly reddish in colour, pygidium reddish brown, antenna finely pubescent, elytra black with faint yellowish spot along both the side of suture above the middle.



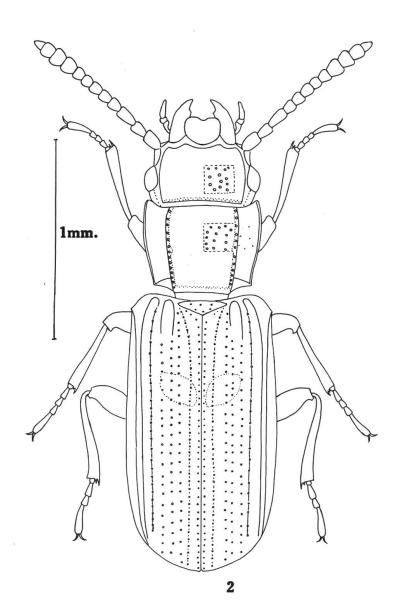
Head two times broader than long, apical margin of clypeus feebly trisinuated, frontoclypeal suture indistinct, median line on vertex short and indistinct, lateral line at the inner margin of eyes ridged with adjacent row of closely applied punctures in groove, joined anteriorly just behind the apical margin of clypeus by an almost straight ridge and posteriorly to grooved line at base, vertex with two types of punctures, large, round punctures moderately closely arranged and small and sparsely distributed punctures present in between large punctures, a short line below the eye present. Eye moderately large, flat and coarsely faceted. Antenna moniliform, scape moderately large, pedicel shorter than segment 3, segments 4-8 subequal, segments 9-11 form a distinct club, segments 9 and 10 subtransverse and segment 11 slightly longer than broad. Prothorax 1.4 times wider than long, slightly narrowed at base, lateral margin wavy, lateral line strongly ridged with internal broad groove at middle and narrowing towards base as well as apex, front angle rounded, hind angle obtuse, puncturing in between lateral line similar to that of head and comparatively fine and sparse in between lateral line and margin. Scutellum distinctly transverse with its apex subrounded and finely and closely punctured. Elytra 1.6 times longer than its combined width, humeral angle rounded and denticulated at apex, apical angle rounded, lateral margin folded, each elytron with dotted sutural line, second cell only distinguishable at base and third cell complete, puncturing on elytra fine and irregularly arranged and pubescence indistinct. Ventral surface brownish black with fine and sparsely distributed punctures.

Measurements: Total length of holotype 2.64 mm; width of head across eyes 0.61 mm; length of head 0.30 mm; length of antenna 0.91 mm; length and width of prothorax 0.57 mm, 0.80 mm; length and width of elytra 1.60 mm, 0.98 mm.

Holotype & (Regd. No. 8059/H<sub>4</sub>A) and Paratypes 2 & & and 4  $\Im$   $\Im$ (Regd. No. 8060–8065/H<sub>4</sub>A). INDIA: UTTAR PRADESH: Nainital, 16. 10. 1976, T. Sengupta, under bark of log. 1  $\Im$ , INDIA: West Bengal: Lopchu in Darjeeling District, 3.5. 1976, altitude 1500 m, W. Wittmer. 1  $\Im$ , BHUTAN: Thimphu, 31.5. 1972, W. Wittmer.

### Xylophloeus darjeelingensis n.sp.

General appearance (Fig. 2) elongated, broadly flattened, shiny and glabrous; apical margin of clypeus, antennae, lateral margin of pronotum, legs, humeral and apical angle of elytra reddish brown, rest of elytra black with two yellowish spots just above the middle. Head 1.7 times as wide as long, apical margin of clypeus trisinuated, frontoclypeal suture indistinct, median line on vertex absent, lateral line at the inner margin of eyes ridged with an internal dotted line and joined posteriorly with slightly grooved line at base, puncturing on vertex moderately large, round and dense, a dotted indistinct short line present below the eye. Eyes moderately large, whitish, well advanced from base and coarsely faceted. Antenna moniliform, scape moderately large, pedicel slightly shorter than segment 3, segments 4–8 thick, round and subequal, segments 9–11 forming a distinct club, segments 9 and 10 transverse, segment 11 slightly longer than broad. Prothorax 1.4 times



wider than long, slightly narrowed at base, lateral margin smooth and slightly sinuated below the middle, lateral line finely ridged with a small depression across two-thirds from apex, front angle projected with rounded apex, hind angle acute, punturing on disc similar to that of head, space between lateral margin and lateral line finely and sparsely punctured. Scutellum strongly transverse, rounded at apex, glabrous and finely and sparsely punctured. Elytra 1.9 times longer than its combined width, humeral angle rounded and denticulate at apex, apical angle rounded, lateral margin folded, each elytra with a distinct sutural line, first and second cell slightly distinguishable at base and third cell complete, punctuation on elytra arranged in rows.

Female: Unknown.

Measurements: Total length of holotype 2.04 mm; length of head 0.31 mm; width of head across eyes 0.54 mm; length of antenna 0.90 mm; length and width of prothorax 0.40 mm, 0.57 mm; length and width of elytra 1.31 mm, 0.75 mm.

Holotype  $\delta$ , INDIA: West Bengal: Tiger hill in Darjeeling District, 7.5.1975, altitude 2150 m, W.Wittmer.

# Key to the Indian species of the genus Xylophloeus Lefkovitch

1. Lateral margin on pronotum wavy, lateral line on pronotum strongly ridged with internal broad groove at middle and narrowing towards base and apex, median line on vertex of head present but indistinct, head two times as wide as long, elytra 1.6 times longer than its combined width and its puncturing irregularly arranged ...

X. nainitalensis n. sp. Lateral margin on pronotum smooth, lateral line on pronotum finely ridged with a small depression across two third from apex, median line on vertex of head absent, head 1.7 times as wide as long, elytra 1.9 times longer than its combined width and its puncturing arranged in rows ...

X. darjeelingensis n. sp.

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### References

GROUVELLE, A. (1903): Clavicornes de l'Inde septentrionale recoltés par M. Harmand (1) (Nitidulidae, Colydiidae, Cucujidae, Monotomidae, Dryopidae). Ann. Soc. ent. Fr. 72: 122.

GROUVELLE, A. (1908): Coléoptéres de la Région Indienne. Ann. Soc. ent. Fr. 77: 456-473.

LEFKOVITCH, L.P. (1959): A revision of the European Laemophloeinae (Coleoptera: Cucujidae). Trans. R. ent. Soc. Lond. 111: 95-118.

LEFKOVITCH, L.P. (1962): A revision of African Laemophloeinae (Coleoptera: Cucujidae). Bull. Brit. Mus. (Nat. Hist.) Ent. 12 (4): 165–245.

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