Nomenclatural Act

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Two new combinations and lectotype designations in the genus Leptophloeus Casey, 1916 (Coleoptera: Cucujoidea: Laemophloeidae)

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Abstract. Microlaemus piceicollis (Lea, 1909) and Lathropus strigiceps Lea, 1909 are hereby transferred to the genus Leptophloeus Casey, 1916 (Coleoptera: Cucujoidea: Laemophloeidae), rendering two new combinations. Additionally, the precise placement of these species within Leptophloeus is discussed, and lectotypes are designated for both.

Keywords: Flat beetles, Australasian region, Taxonomy, Nomenclature.

Leptophloeus Casey, 1916 was erected for Laemophloeus angustulus LeConte, 1866 (type species) and Laemophloeus perrisi Grouvelle, 1876. The genus is characterized by the slender, subparallel sided and subcylindrical body form, the antennae usually shorter than half of the body length in both sexes, the narrowly rounded intercoxal process of 1st abdominal ventrite and the tarsal formula usually 5-5-5 in both sexes (Casey 1916; Lefkovitch 1959; 1962). The genus was taxonomically revised by Lefkovitch (1959; 1962), Sasaji (1986), and Mukhopadhyay (2016) and currently includes 32 species with Holarctic, Asiatic, and Afrotropical distribution. Although Leptophloeus so far has not been recorded in the Australasian region, Thomas (1993) stated: "I also have seen specimens apparently referable to Leptophloeus from Australia and Southeast Asia".

Confusion has arisen regarding the placement of the Australian species Microlaemus piceicollis (Lea, 1909) and Lathropus strigiceps Lea, 1909. In their original descriptions, Lea (1909) placed them under the genus Lathropus Erichson, 1845 and provided comparisons of these species with Lathropus brightensis Blackburn, 1903 from Australia, which was later transferred to Microlaemus Lefkovitch, 1962 by Lefkovitch (1964). This probably influenced the thought of Thomas (1993), who stated that "Hetschko (1930) listed 12 species in this genus [Lathropus], but the three Australian species he included apparently belong to Microlaemus Lefkovitch". Although La. piceicollis was subsequently transferred to Microlaemus in Lawrence & Ślipiński (2013), the catalog by Thomas (2016) lists not only M. piceicollis but also La. strigiceps as members of Microlaemus. However, since the genus Lathropus was revised only by Thomas (2010) for the species from Florida and West Indies, La. strigiceps has never been formally removed from Lathropus. Herein, the examining of the types of Lathropus piceicollis from New South Wales and La. strigiceps from Tasmania, deposited at the South Australian Museum, Adelaide, Australia (SAMA; Ben Parslow), revealed that these species belong to the genus Leptophloeus and should be transferred accordingly. Hence, this paper proposes the following nomenclatural acts:

Leptophloeus piceicollis (Lea, 1909), comb. nov. Lathropus piceicollis Lea, 1909: 128; Hetschko (1930): 44; Bento (2023): 339.

Microlaemus piceicollis: Lawrence & Ślipiński, 2013: 323. (Fig. 1A, B)

Type material. Lectotype (here designated) deposited at SAMA, labeled: "piceicollis / Lea TYPE / Sydney" (white, handwritten) // "Lathropus / piceicollis Lea / N. S. Wales / 6681 / TYPE (white, handwritten) // "SAMA Database / No. 25-034795" (white, printed). Paralectotype, labeled: "piceicollis / Lea Sydney" (white, handwritten) // "Co-type" (white, printed) (1 specimen, SAMA).

Distribution. Australia: New South Wales (Sydney).

Remarks. In the original description, this species was differentiated from *Le. strigiceps* **comb. nov.** by means of coloration and smaller body size. It can also be easily diagnosed by the vertex simply punctured relative to the rugose vertex in *Le. strigiceps*.

Because both head and pronotum are simply punctate, *Le. piceicollis* **comb. nov.** matches with species placed in the *Le. alternans* group of Lefkovitch (1962). The validity of this species as a distinct species remains to be checked.

Although there is no size variation in the original description of this species, more than one specimen composes the type series. From the two labeled type specimens deposited at SAMA, the specimen labeled as "type" rather than "co-type" is designated as the lectotype (Fig. 1A, B). There is an additional pin with two unlabeled specimens whose type status is unverified.

Leptophloeus strigiceps (Lea, 1909), comb. nov. Lathropus strigiceps Lea, 1909: 128; Hetschko (1930): 45; Bento (2023): 339. (Fig. 1C, D)

Type material. Lectotype (here designated) deposited at SAMA, labeled: "strigiceps / Lea TYPE / Huon R" (white, handwritten) // "Lathropus / strigiceps Lea / Tasmania / TYPE / 6680" (white, handwritten) // "SAMA Database / No. 25-034794" (white, printed). Paralectotype, labeled: "strigiceps / Lea / New Norfolk" (white, handwritten) // "Co-type" (white, printed) (1 specimen, SAMA).

Distribution. Australia: Tasmania.

Remarks. This species is easily distinguished from *Le. piceicollis* **comb. nov.** by the body more elongated and the rugose sculpture on the vertex, which is provided with deep longitudinal impressions. *Leptophloeus strigiceps* **comb. nov.** belongs to the *Le. clematidis* group defined by Lefkovitch (1962), having "a tendency to rugose sculpturing on the head and prothorax", although some species included in this group have vertexal and pronotal surfaces without clear rugosity (e.g. *Le. janeti* and *Le. mobilis*). The validity of this species as a distinct







Figure 1. Leptophloeus piceicollis (Lea, 1909) comb. nov.: (A) dorsal view of the lectotype (here designated); (B) labels. Leptophloeus strigiceps (Lea, 1909) comb. nov.: (C) dorsal view of the lectotype (here designated); (D) labels. Scales: A = 0.5 mm; C = 1 mm. Pictures provided by Ben Parslow (SAMA).



species remains to be checked through the comparison with the other species belonging to this group.

Herein, from the two syntypes found at SAMA, the specimen labeled as "type" rather than "co-type" is designated as the lectotype of this species (Fig. 1C, D).

Taxonomic Authorities

Laemophloeus angustulus LeConte, 1866 in LeConte (1866). Laemophloeus perrisi Grouvelle, 1876 in Grouvelle (1876). Lathropus brightensis Blackburn, 1903 in Blackburn (1903). Lathropus Erichson, 1845 in Erichson (1845). Lathropus piceicollis Lea, 1909 in Lea (1909). Lathropus strigiceps Lea, 1909 in Lea (1909). Leptophloeus Casey, 1916 in Casey (1916). Microlaemus Lefkovitch, 1962 in Lefkovitch (1962).

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Authors' Contributions

MB: Conceptualization, Investigation, Writing – original draft. TY: Conceptualization, Investigation, Writing – review & editing. JAR: Supervision, Writing – review & editing.

Conflict of Interest Statement

The authors declare no potential conflicts of interest.

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