

## A NEW LANGURIID-BEETLE FROM BATU CAVES, MALAYA<sup>1</sup>

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*Abstract:* A new species of Languriidae (Coleoptera), *Thallisellodes limbooliati*, collected in Batu Caves, Malaya, is illustrated and described. It is remarkable in having a pseudo-closed acetabula, being intermediate in this respect between the Cladoxeninae of the Languriidae and the Cryptophilinae of the Erotylidae.

The present work was accomplished with many examples collected by Dr. H. Elliott McClure (U. S. Army Medical Research Unit, Institute for Medical Research, Kuala Lumpur, Malaya) at various points of the Batu Caves in Malaya from 1959-1960 (the detailed collection data on each species are recorded in the latter part) and sent to me from the Bishop Museum for identification.

The results of my study indicate that all of these examples belong to a single new species of the genus *Thallisellodes* Arrow of the subfamily Cladoxeninae of the family Languriidae. At the same time, I noticed that this species is very peculiar in the structure of its acetabula. At a glance the acetabula seems to be of a closed-type (never of a clear open-type as in the known-members of Languriidae); however, it is not of a complete closed-type commonly seen in the members of the true Erotylidae. It appears to be of a pseudo-closed-type often seen in some members of Galerucinae of the family Chrysomelidae, and this character suggests the relationship between the Cladoxeninae of the Languriidae and the Cryptophilinae of the Erotylidae despite the many other characters which distinctly separate these 2 groups.

This species is, for the present, being placed in the genus *Thallisellodes*, but further revisional work may be necessary to compare it with the known species of this genus. And, at the same time, revisional work on the relationship between the Languriidae and Erotylidae through the detailed comparative studies of the Cladoxeninae (especially with the present species) and Cryptophilinae may be considered as a most interesting and even important problem.

***Thallisellodes limbooliati* Chûjô, n. sp.**

Body elongate-oval, moderately convex on dorsum, finely pubescent on venter, antennae, legs, epipleura and apical area of elytra. Dorsum pitchy black, with discal areas of pronotum and elytra rather dark, lustrous; antennae and legs red-brown, with basal part of

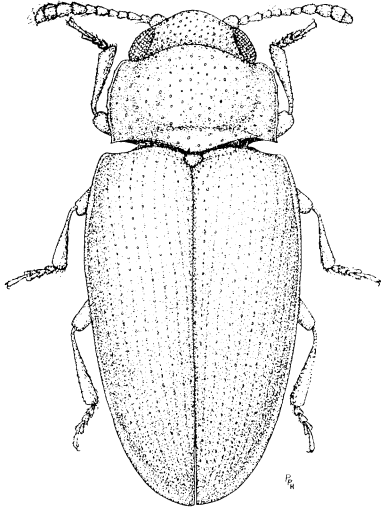
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1. Studies on the Languriid-Beetles (8).

femora more or less infuscated; venter dark red-brown, somewhat lustrous, with intercoxal area of pro- and mesosternum darker than other.

*Head* lightly convex, coarsely and rather closely punctured; clypeus limited from frons at each side by an oblique line, but not delimited at the median part, distinctly narrowed forwards, almost straight at front border; occiput with a pair of distinct stridulatory files.

*Mouth-parts*: lacinia strongly tapering terminally, ending into 3, longitudinally placed and very sharp projections; ultimate segment of maxillary palpus elongate-conical, with apex bluntly pointed; ultimate segment of labial palpus securiform; lateral parts of oral cavity raised into a triangular and blunt-headed lobe. Eyes distinctly convex, rather coarsely faceted. *Antennae* extending a little beyond middle of pronotum when turned back; segment 1 strongly thickened; 2 also somewhat thickened but distinctly smaller than 1; 3-6 each slenderer than 2; 3 somewhat longer than 2 and 4; 4-6 subequal; 7 and 8 each a little thicker than, but nearly equal in length to, 3; 9-11 respectively strongly and symmetrically dilated and forming a rather loosely articulated club as a whole; 9 nearly obtrapezoidal and slightly broader than long; 10 nearly semicircular; 11 subtruncate and a little broader than long. *Pronotum* strongly transverse, a little more than 2× as broad as long; front border gently arched forwards in dorsal aspect, emarginated, with the exception of its lateral



parts narrowly margined; front corners bluntly produced, lateral borders comparatively broadly margined, with some irregularly placed denticles or minute angulations at lateral edge, nearly parallel-sided, but distinctly convergent at apical part and slightly convergent at basal part; basal corners nearly rectangular, with extreme end of each sharply angulated and somewhat produced laterally; basal border distinctly margined at each lateral part, but emarginated at median part which is distinctly produced posteriorly with a gentle curvature; dorsum moderately convex from side to side, strongly and rather closely punctured, with medio-basal area distinctly and broadly depressed (more sparsely but strongly punctured in this depressed area and 1 puncture placed at each lateral extremity of this area often larger than inner ones) and latero-basal areas lightly depressed along borders. *Scutellum* transverse and obtusely angulated pentagonal, with surface flat and sparsely punctulated. *Elytra* elongate, a little broader at base than pronotum, dilating a little behind humeral areas and narrowing from there to extremities, which are separately or almost conjointly rounded; dorsum moderately convex, with 9 long files, a short scutellar file and a short latero-apical file of punctures on each elytron (punctures of long files very distinct at basal part, but rather indistinct at apical area); interstices of these files of punctures finely but not closely punctulate, outermost one very much broader than any of the others and rather closely and intricately clothed with larger and smaller punctures; basal ridge of each elytron narrowly but distinctly margined; elytral epipleura tapering posteriorly, but complete from base to apex and separated by sharp lateral carinae. *Ventral surfaces* rather closely clothed with larger but shallower punctures, but median part of metasternum

and abdomen more sparsely clothed with smaller punctures; intercoxal area of prosternum average in width, parallel-sided in general, but gently curved outwardly at a part, distinctly ridged at each side (these ridges produced a little beyond anterior borders of acetabula and forming a pair of procoxal lines which are more or less divergent forwardly), shallowly but distinctly grooved along lateral borders and also along posterior border which is truncated; acetabula pseudoclosed behind; intercoxal area of mesosternum somewhat medially; intercoxal part of the front border of metasternum strongly ridged and the ridge connected with a pair of mesocoxal lines, which are short (never reaching middle of metasternum) and strongly divergent posteriorly; metacoxal lines well-developed, extending a little beyond middle of sternite concerned and somewhat divergent posteriorly with a gentle curvature. *Legs* rather short and moderate in thickness; 3 basal segments of tarsi slightly widened terminally, segment 4 minute and forming a basal part of the corresponding claw-segment, claws simple. Length: 3.0 mm.

*Paratypes*: 3.0–3.5 mm.

Holotype ♂ (BISHOP 3207), Cavern A, from floor, Batu Caves, Malaya, 3.V.1960, H. E. McClure & Lim Boo-Liat. *Paratypes*: 20, Cavern A, 23.VI.1959; 10, Cavern C, Location 9, by light trap, 11.VIII.1959; 2, Cavern A, Location 2, at Bot. Room, 1.IX.1959; 5, Cavern A, 2.II.1960; 15, Cavern A, 16.II.1960; 8, Cavern A, Location 2, by light trap, 19.II.1960; 20, Cavern A, Earwing Peak, 22.II.1960; 5, Cavern A, 22.II.1960; 1, Cavern B, by light trap, 1.III.1960; 5, Cavern A, from floor, 8.III.1960; 7, Cavern A, Earwing Peak, 8.III.1960; 3, Cavern A, 8.III.1960; 5, Cavern B, by light trap, 8.III.1960; 10, Cavern A, 15.III.1960; 3, Cavern B, by light trap, 15.III.1960; 10, Cavern A, 19.III.1960; 10, Cavern A, from floor, 22.III.1960; 5, Cavern A, from floor, 26.III.1960; 5, Cavern A, Earwing Peak, 26.III.1960; 3, Cavern C, Black Cascade, by light trap, 29.III.1960; 10, Cavern A, from floor, 4.IV.1960; 3, Cavern A, Earwing Peak, 8–9.IV.1960; 9, Cavern A, from floor, 12.IV.1960; 1, Cavern B, by light trap, 12.IV.1960; 3, Cavern A, Earwing Peak, 12–16.IV.1960; 1, Cavern A, at light, 26.IV.1960; 10, Cavern A, 2nd floor, 26.IV.1960; 20, Cavern A, from floor, 3.V.1960; 8, Cavern A, from floor, 10.V.1960; 1, Cavern A, by light trap, 10.V.1960; 3, Cavern B, by light trap, 10.V.1960; 1, Cavern C, Black Cascade, by light trap, 10.V.1960; 20, Cavern A, Earwing Peak, 17.VI.1960; 20, Cavern A, from floor, 17.VI.1960; 7, Cavern A, from floor and walls, 19.VII.1960; 1, Cavern A, from floor, by light trap, 16.VIII.1960; 15, Cavern A, from debris on floor, 16.VIII.1960; 1, Cavern C, Onyx Man., by light trap, 16.VIII.1960; 1, Cavern A, by light trap, 16.IX.1960; 7, Cavern A, from floor, 16.IX.1960; 5, Cavern A, from floor, 18.X.1960; 3, Cavern A, from floor, 22.XI.1960; 2, Cavern A, from floor, 27.XII.1960; all Batu Caves, Malaya, collected by McClure and Lim Boo-Liat.

The holotype and many paratypes are preserved in the Bishop Museum, Honolulu, Hawaii and some paratypes are deposited in USNM and my collection.

The present new species may be most nearly related to *Thallisellodes transversus* Gorham from S. India among the known-species of this genus, but is distinctly separated from Gorham's species in the following points: Body smaller and somewhat differently colored; elytra not evenly rounded at each side; prosternal process not bifid behind; acetabula not distinctly open behind (by this peculiar character of acetabula the present species may very clearly be distinguished not only from the above-mentioned Gorham's species but from all other known-species of this genus); and mesocoxal lines shorter but metacoxal

lines far longer.

All examples worked in the present study were captured in the caverns as mentioned above, yet this species is not considered troglobic because of the normal, well-developed eyes and wings which are commonly seen in the other non-cavernicolous known-species belonging to the same family. It may be troglloxenous or, at most, a troglphilous species.

This new species is named after Mr. Lim Boo-Liat of the Institute for Medical Research, Kuala Lumpur, Malaya, who has done field work on the Batu Caves of Malaya.

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## RECENT LITERATURE ON PACIFIC INSECTS

### HEMIPTERA

(Continued from page 428)

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