

A new genus and species of Oriental termitophilous Amarygmini (Coleoptera, Tenebrionidae)

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Abstract

A new genus of Oriental termitophilous Amarygmini with a new species is described and illustrated: *Alienoplonyx* **gen. n.** and *Alienoplonyx alleni* **sp. n.** from Thailand (Coleoptera, Tenebrionidae, Amarygmini). An updated determination key of the Oriental genera of termitophilous Amarygmini is provided.

Introduction

The tribe Rhysopaussini WASMANN, 1896 of Tenebrionidae, as formerly defined and later-on by GEBIEN (1943) extended, was a conglomeration of several taxonomic entities. They have in common that the habitats of these Tenebrionidae should have some relation to termites and ants. ARDOIN (1962) transferred several of these genera to Amarygmini. Giving a new and more precise definition of the tribe Rhysopaussini (BREMER 2013) only the genera *Rhysopaussus* WASMANN, 1896, *Xenotermes* WASMANN, 1896 and *Mimoxenotermes* PIC, 1931 remained in that tribe. The genera *Azarelius* FAIRMAIRE, 1892, *Ziaelas* FAIRMAIRE, 1892, *Reichenspergeria* WASMANN, 1921 and *Singapura* GEBIEN, 1925 were transferred to Amarygmini (BREMER 2014); in addition, two more genera of termitophilous Amarygmini were created, *Insolitoplonyx* BREMER, 2014 and *Nepaloplonyx* BREMER, 2014.

The genus *Barlacus* FAIRMAIRE, 1900 (described from Borneo) had to be synonymized with *Asyleptus* PÉRINGUEY, 1896 (described from South Africa) (BREMER, 2013) because the type species of *Barlacus* FAIRMAIRE, 1900 (*Barlacus costulatus* FAIRMAIRE, 1900) is a synonym of *Asyleptus fumosus* PÉRINGUEY, 1896, the type species of *Asyleptus* PÉRINGUEY, 1896. *Asyleptus fumosus* has been collected in several provinces of the Republic of South Africa (SCHAWALLER & BREMER, 2013). Probably the unique type specimen of *Barlacus costulatus* FAIRMAIRE might be mislabeled and originates not from Borneo but from South Africa.

Generally termitophilous Amarygmini of the Oriental region show markedly upwardly raised genae which are fused in the middle, they form a vault over the middle part of the frons.

Specimens of the Oriental termitophilous Amarygmini are rare, and also in the larger collections of the mayor museums only a few specimens are deposited. Surprising discoveries of new species and even genera have to be expected if the main habitats of termites are more thoroughly examined. The author knows on further undescribed species and genera of Oriental termitophilous Amarygmini; they will be described by other authors.

In this paper a new species of a new genus of Oriental termitophilous Amarygmini is described and illustrated. Unfortunately, no information on the host termite is available.

Acronyms

USNM = US Museum of Natural History, Smithsonian Institution, Washington, DC, USA.

ZSM = Zoologische Staatssammlung, Munich, Germany.

Description of the genus *Alienoplonyx* **gen. n.**

Elongate; narrow; as in most Oriental termitophilous Amarygmini the genae are markedly raised upwards and fused in the middle, and in front of genae the head is obliquely and straightly descending; eyes are nearly meeting in the middle of frons; antennae short, with 11 short antennomeres; profemora with a sharp tooth on frontal margin; tarsi extremely narrow and short; pronotum bell-shaped with long, posteriorly



Alienoplonyx alleni sp. n.: Habitus and Underside (recognize the short, dense setae on the hind margin of elytra!).

protruding hind corners; elytra elongate, with straight sides, eight rows of large punctures, from them tiny, upraising setae originate; the apical elytral margin with a brush of short, dense, protruding setae; they originate from the eighth row of punctures and the adjacent interval.

Alienolonyx especially, by the form of head with its raised and in the middle fused genae, belongs to the termitophilous Amarygmini of the Oriental region. But it does not fit into any genus of the termitophilous Amarygmini currently known.

The Oriental genus *Singapura* GEBIEN, 1925, with *Singapura quadrihamata* GEBIEN as type species, has also protruding corners of pronotum (but the front corners are protruding ventrad and only the hind corners are protruding posteriorly); the front corners of *Alienoplonyx*, however, are not protruding ventrad, and only the hind corners are protruding posteriorly. In contrast to *Alienoplonyx*, *Singapura* has no spined profemora, and the antennae are much longer than in *Alienoplonyx* and have a quite different shape.

Spined profemora in Oriental genera of termitophilous Amarygmini are also found in species of *Azarelius* FAIRMAIRE, 1892 and in *Reichenspergeria aurocincta* WASMANN, 1921 (type species by monotypy). But species of both genera do not present protruding hind corners of pronotum.

Alienoplonyx alleni sp. n. has very thin and short tarsi. A similar form of tarsi is also found in *Insolitoplonyx seorsus* BREMER, 2014. However, this species has no spined profemora, and also the antennae, the pronotum and the femora are very different.

Markedly and pointedly protruding hind corners of pronotum are also found in the African termitophilous genus *Overlaetia* PIC, 1937. A species of this genus is illustrated by BREMER & LILLIG (2014, p.118). Species of *Overlaetia* also present spined profemora as *Alienoplonyx alleni* do. However, in contrast to *Alienoplonyx*, the species of *Overlaetia* have long, flattened antennomeres (the antennomeres of *Alienoplonyx* are short and transversely rounded); the anterior margin of pronotum of *Overlaetia* is puffed up, not so of *Alienoplonyx*; the areas of elytra which articulate with the protruding pronotal hind corners are smooth in *Overlaetia* (and contrasting to the rest of the elytral surface), while the surface of this antero-lateral area of elytra in *Alienoplonyx* does not differ from other parts of elytra.

Etymology: alienus (Lat.) *compar.* of alius = different; plonyx = frequently used suffix in genera of Amarygmini.



Alienoplonyx alleni sp. n.: Elytra.



Alienoplonyx alleni sp. n.: Head and pronotum, in view slightly from the front.



Alienoplonyx alleni sp. n.: Antenna.

Description of the new species

Alienoplonyx alleni sp. n.

Holotype, sex undetermined: Thailand, Chiang Mai, Chiang Dao Dist., 28. X. 2018, N 19.559209' E 99.077632', ALEXEY VISHNYKOV lg. (from the collection of ALBERT ALLEN, Star, Idaho, to USNM).

Paratype: Thailand, Chiang Mai, Chiang Dao Dist., 2. XI. 2018, N 19.559209' E 99.077632', ALEXEY VISHNYKOV lg. (from author to ZSM).

Measurements: Body length: 7.9+8.1 mm. Body width: 2.9+3.0 mm. Ratios. Pronotum: width/length 1.04+1.15. Elytra: length/width 1.76+1.79; length elytra/length pronotum 2.8+3.0.

Coloration: Upper side reddish brown, elytra slightly lighter brown than pronotum; underside, legs and antennae brown.

Head and antennae: Head separated into two parts by the markedly raised and medially fused genae: the posterior part behind genae is longitudinally horizontal and consists of the medially nearly contacting eyes and of the hind part of frons; the anterior part, however, is obliquely and straightly descending, and it consists of the anterior part of frons, clypeus and labrum. The hind part of frons is triangular, wide, hollow and nearly impunctate; the anterior part of frons is small, triangular and separated into two lateral parts by a narrow keel which medially originates from the genae. Lateral of this part of frons there are the hollow base of antennae. Clypeus large, longitudinally and transversely somewhat convex, lustrous, with some tiny punctures from which tiny hairs arise. The labrum is situated on a lower level than clypeus, it is wider than long, and with rounded sides, slightly dull, with some short to long, yellow setae. Antennae short, inserted on the frontal side of genae, but on upper side of head; antennomere 1 is long and widened apicad, antennomere 2 is short and smaller than antennomeres 1 or 3; antennomeres 3-10 are shorter than wide, antennomere 11 is somewhat longer than wide and apically pointed.

Maxillae apically with only one tip. Ultimate segment of maxillary palpes somewhat widened and triangular, not really securiform. Mentum wide and widened anteriorly, the anterior corner slightly protruding and pointed; lateral parts of mentum somewhat convex, medially limited by a weak line towards the flat median part. Submentum very short. Underside of neck slightly dull and impunctate.

Pronotum: Bell-shaped, with long, pointed, posteriorly protruding hind corners; front corners rounded; disc nearly flat, laterally deflexed to a blunt lateral margin; surface lustrous, in the hind part of pronotum with large punctures from which short, tender setae arise, towards frontal margin the punctures become smaller and more sparing.

Elytra: Scutellum triangular, with slightly bent sides. Elytra markedly longer than wide, with straight sides, apex rounded. Elytra convex across; disc longitudinally nearly flat, except apical region which is bent downwards. Surface with eight rows of large punctures which are nearly as wide as the width of the intervals, these are slightly vaulted; from the punctures of the rows short setae arise on disc, laterally the setae are markedly longer; on intervals small hairs; in the apical part of elytra a brush of relatively short, dense, posteriorly projecting setae arise from the eighth row of punctures and the adjacent interval.

Prosternum: Episterna with only a few small punctures. Prosternal process raised ventrad, slightly widened along procoxae, behind procoxae the process is descending and markedly narrowing, on the bottom level it becomes shortly widened. Procoxal cavities closed posteriorly.

Mesoventrite: Anterior part on a lower level than hind part. Anterior part with a relatively wide, brilliant, median part, lateral of it dull; with short, tender, recumbent hairs. Hind part of mesoventrite deeply emarginate on its frontal margin; upper side impunctate.

Metaventrite: Lustrous, impunctate, except the hind lateral parts along base.

Abdominal ventrites: In contrast to metaventrite dull, with small punctures and with minute, partially recumbent, partially slightly raised hairs.

Legs: Profemora with a large, pointed tooth near apex. Tibiae compressed; outer sides nearly straight with some minute teeth; one fifth from base the inner side slightly widened, and their ventral side slightly and widely indented; inner sides of meso- and metatibiae beyond basal fifth slightly widened, and narrowing again towards apex, inner sides of tibiae with some very short, stiff setae. Tarsi very tender and short. Tarsal formula 5-5-4.

Etymology: *alleni* = dedicated to ALBERT ALLEN, Star, Idaho, who kindly asked me to evaluate and describe this interesting species.

Updated determination key of genera of the Oriental termitophilous Amarymini

- 1 Profemora spined on frontal side 2
- Profemora not spined on frontal side 4

- 2 Lateral margins of pronotum and elytra either with long, dense, protruding hairs or with dense, short, brush-like setae only on the apical parts of elytra 3
- Hairs or setae do not protrude from the lateral margins of body; the spines on profemora are either distinct or very subtle, but always present; pronotum with distinct, longitudinal ridges
Azarelius FAIRMAIRE
(6 species, illustration of species and determination key of species in BREMER 2014, pp.164-170)

- 3 Pronotum on anterior and lateral margins and elytra on lateral margins with long, woolen and dense hairs. Upper side of pronotum smooth and without longitudinal ridges, pronotum additionally without posteriorly protruding, pointed hind corners *Reichenspergeria* WASMANN
(1 species: *Reichenspergeria aurocineta* WASMANN, 1921; illustration in BREMER 2014, p.173)
- Only the margin of the hind part of elytra with relatively short, dense, brush-like setae
Alienoplonyx gen. n.

- 4 Antennae long and antennomeres longer than wide, antennomeres 5-10 triangular, terminal antennomere prolonged and apically pointed; pronotum with protruding corners; the hook-like front corners are protruding ventrad, the hind corners are protruding posteriorly *Singapura* GEBIEN
(1 species: *Singapura quadrihamata* GEBIEN, 1925, illustrated in BREMER 2014, p.174)
- Antennae short, terminal antennomere apically not pointed. Pronotum without protruding front and hind corners 5

- 5 Pronotum with distinctly elevated longitudinal ridges *Nepaloplonyx* BREMER
(2 species of *Nepaloplonyx* BREMER, 2014, illustrations in BREMER 2014, pp.175-178)
- Pronotum with weak and inconspicuous elevations 6
- 6 Upper side and underside without tiny, very dense punctures; without any luster. Tarsi short, but not as tiny as in the species of the following genus. Tibiae on inner side broadened. Elytra cylindrical, with rows of large, dense punctures; external intervals keeled, intervals 1-3 partially not keeled. Most antennomeres pearl-like *Ziaelas* FAIRMAIRE
(2 species; redescrptions and illustrations in BREMER 2014: pp.170-173)
- Upper side and underside of body with tiny, very closely set punctures which induce a reduced luster. Tarsi as tiny as in *Alienoplonyx*. Tibiae near base compressed and widened over a short distance. Elytra with rows of punctures, separated by slightly convex intervals. Antennomeres not pearl-like
..... *Insolitoplonyx* BREMER
(1 species of *Insolitoplonyx* BREMER, 2014; illustration and description in BREMER 2014, pp.179-180)

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References

- ARDOIN, P. 1962: Essai de revision des Amarygmini africains (1). – Bulletin de l’Institut français d’Afrique Noire **24**: 955-1020, pls. 1-8.
- BREMER, H. J. 2013: Annotations on the tribe Rhysopaussini and on some genera assigned to this tribe (Coleoptera; Tenebrionidae, Rhysopaussini, Amarygmini). – Mitteilungen der Münchner Entomologischen Gesellschaft **103**: 71-79.
- BREMER, H. J. 2014: Revision of *Azarelius* FAIRMAIRE, *Ziaelas* FAIRMAIRE and related Oriental termitophilous genera, with descriptions of two new genera and remarks on tribal placement (Coleoptera: Tenebrionidae: Amarygmini). – Stuttgarter Beiträge zur Naturkunde A, Neue Serie **7**: 163-182.
- BREMER H. J. & M. LILLIG 2014: World Catalogue of Amarygmini, Rhysopaussini and Falsocossyphini (Coleoptera; Tenebrionidae). – Mitteilungen der Münchner Entomologischen Gesellschaft **104**, **Suppl.**: 3-176.
- FAIRMAIRE, L. 1892: Nouveau genre de Coléoptère hétéromère. – Bulletin de la Société entomologique de France **61**: VII-VIII.
- GEBIEN, H. 1925: Drei neue Rhysopaussinen. – Entomologische Mitteilungen **14**: 322-327.
- GEBIEN, H. 1943: Katalog der Tenebrioniden. – Mitteilungen der Münchner Entomologischen Gesellschaft **33**: 895-926.
- PIC, M. 1937: Hétéromères Rhysopaussides, principalement du Congo. – Revue de Zoologie et Botanic africaines **30**: 304-311.
- SCHAWALLER W. & H. J. BREMER 2013: The termitophilous genus *Asyleptus* PÉRINGUEY, 1896 (*Termitonebria* WASMANN, 1925 syn. nov., *Falsozialeus* PIC, 1951, syn. nov.) and its tribal placement (Coleoptera: Tenebrionidae: Amarygmini). – Annals of the Ditsong National Museum of National History (Pretoria) **3**: 81-83.
- WASMANN, E. 1921: Ueber einige indische Rhysopaussinen (Col., Tenebrionidae). Tijdschrift voor Entomologie **64**: 14-30.

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