Zeitschrift:	Entomologica Basiliensia
Herausgeber:	Naturhistorisches Museum Basel, Entomologische Sammlungen
Band:	26 (2004)
Artikel:	Towards knowledge of the genus Xenoda Baly, 1877 (Chrysomelidae, Galerucinae)
Autor:	Medvedev, Lev N.
DOI:	https://doi.org/10.5169/seals-980836

Nutzungsbedingungen

Die ETH-Bibliothek ist die Anbieterin der digitalisierten Zeitschriften auf E-Periodica. Sie besitzt keine Urheberrechte an den Zeitschriften und ist nicht verantwortlich für deren Inhalte. Die Rechte liegen in der Regel bei den Herausgebern beziehungsweise den externen Rechteinhabern. Das Veröffentlichen von Bildern in Print- und Online-Publikationen sowie auf Social Media-Kanälen oder Webseiten ist nur mit vorheriger Genehmigung der Rechteinhaber erlaubt. <u>Mehr erfahren</u>

Conditions d'utilisation

L'ETH Library est le fournisseur des revues numérisées. Elle ne détient aucun droit d'auteur sur les revues et n'est pas responsable de leur contenu. En règle générale, les droits sont détenus par les éditeurs ou les détenteurs de droits externes. La reproduction d'images dans des publications imprimées ou en ligne ainsi que sur des canaux de médias sociaux ou des sites web n'est autorisée qu'avec l'accord préalable des détenteurs des droits. <u>En savoir plus</u>

Terms of use

The ETH Library is the provider of the digitised journals. It does not own any copyrights to the journals and is not responsible for their content. The rights usually lie with the publishers or the external rights holders. Publishing images in print and online publications, as well as on social media channels or websites, is only permitted with the prior consent of the rights holders. <u>Find out more</u>

Download PDF: 11.08.2025

ETH-Bibliothek Zürich, E-Periodica, https://www.e-periodica.ch

Entomologica Basiliensia 26 339–348 2004 ISSN 025

Towards knowledge of the genus *Xenoda* Baly, 1877 (Chrysomelidae, Galerucinae)

by Lev N. Medvedev

Abstract. Three new subgenera – Xenodina (type species: X. fulva sp.nov.), Xenodania (type species: X. vittata sp.nov.), Paraxenidea (type species: P. brancuccii sp.nov.) subgenn.nov. – and eight new species – X. vittata, X. cyanipennis, X. fulva (Malay Peninsula), X. impressa (Sumatra), X. tuberculata (Kalimantan), X. luzonica, X. bakeri (Luzon), X. brancuccii (Palawan) spp. nov. – are described. X. nigricollis Jacoby is found for the first time in the Malay Peninsula and Thailand. The genus is recorded for the first time from Thailand and the Philippines. A key to subgenera and species is given.

Key words. Coleoptera - Chrysomelidae - Galerucinae - new subgenera - new species

Introduction

The small oriental genus *Xenoda* Baly, 1877, including 2 subgenera and 16 species (WILCOX 1973, MOHAMEDSAID 2001), was previously known only from the islands of Indonesia and the Malay Peninsula.

In this article 3 subgenera are proposed and 8 species are described as new for science. Apart from the author's own collection, material from Basel Museum of Natural History was investigated. The genus is registered for Thailand and the Philippines for the first time.

Material

The following abbreviations are used for the places in which the material is deposited:

NHMB Naturhistorisches Museum, Basel LM author's collection, Institute for Problems of Ecology and Evolution, Moscow

Taxonomy

Genus Xenoda Baly, 1877

BALY (1877): Ent. Monthly Mag. 13: 225. Type of genus: Xenoda spinicornis Baly, 1877

Subgenus Xenoda (s.str.) Baly, 1877

Xenoda (s.str.) nigricollis Jacoby, 1896

Material examined. Thailand, Khao Sok (8.55N, 98.45E), 12.XI.1995, leg. M. Mostovski, 1 male (LM); – Malaysia, Benom Mts., 15 km E Kampong Dong (3.53N, 102.01E), 700 m, 1.IV.1998, leg. Dembický & Pacholátko, 1 male (NHMB), 1 female (LM).

Remarks. The species was known from Sumatra and found for the first time in Malacca and Thailand; the genus is registered for continental Asia for the first time. Aedeagus see Fig. 13.

Xenoda (s.str.) bakeri sp.nov.

Material examined. Holotype (male): Philippines, Luzon, Mt. Makiling, leg. Baker (LM).

Description and differential diagnosis. Morphologically almost the same as *X. pallida* Jacoby, 1896 from Sumatra, but the antennal bulb is a little more elongate -1.55 times as long as wide against 1.37 in *X. pallida* – the elytra are less densely pubescent and its size is smaller. These two species differ only in form of aedeagus: in *X. pallida* it is more broad, with truncate apex and widened base (Fig. 8), in *X. bakeri* sp.nov. aedeagus it is almost parallel-sided, feebly widened basally, with triangular apex prolonged in short protuberance (Fig. 15). Body entirely fulvous. Length of body 5.2 mm (in *X. pallida* 5.7–6.3 mm).

Xenoda (s.str.) luzonica sp.nov.

Material examined. Holotype (male): Philippines, Luzon, Butao, ex Staudinger (LM).

Description. Dark fulvous with frontal tubercles, prothorax and elytra more pale, apical antennal segments, elytral suture, tibiae, tarsi and metasternum darkened.

Head impunctate, frontal tubercles elongate triangular, sharp, delimited to the rear by arcuate impression. Antennae reach anterior third of elytra, covered with short and dense erect hairs, segment 1 long and slightly curved, 2 small, 3–8 forming elongate bulb (2.5 times as long as wide), 8 with long, curved spine, 9–11 thin and long (Fig. 7). Prothorax twice as wide as long, lateral margins straight and parallel-sided, surface transversely concave, impunctate. Elytra 1.6 times as long as wide, with dense erect hairs and lateral ridge from humerus to apical quarter dividing elytron into horizontal and vertical parts, surface uneven, finely and densely rugose, but without distinct punctures. Fore- and mid-tarsi with segment 1 slightly widened. Length of body 5.7 mm. **Differential diagnosis**. Near *X. pallida* Jacoby, 1896 from Sumatra, which has, however, much broader antennal bulb (about 1.3–1.4 times as long as wide) and much thicker antennal segments 9 and 10.

Subgenus Xenodina subgen.nov.

Type of subgenus: Xenoda fulva sp.nov.

Description. Antennae without bulb, nitidiform, segment 2 small and short, segments 3–10 moderately thickened, quadrangular, elongate or almost quadrate, apical segment more thin, spines absent, segment 10 often with groove or pore (Figs 1–4). Horizontal part of elytra roughly punctate or uneven, with impressions or tubercles.

Differential diagnosis. Differs from nominative subgenus in structure of antennae without bulb and curved spines. This subgenus is definitely the most primitive in the genus *Xenoda*.

Xenoda (Xenodina) fulva sp.nov.

Material examined. Holotype (male): Malaysia, Benon Mts., 15 km E Kampong Dong (3°53'E, 102°01'N), 700 m, 1.IV.1998, leg. Dembický & Pacholátko (NHMB).

Paratype: same locality, 1 male (LM).

Description. Fulvous, antennal segments 3–10, tibiae except bases and tarsi black.

Head impunctate, frontal tubercles elongate triangular, delimited to the rear by arcuate impression. Antennae reach anterior third of elytra, proportions of segments 15-4-13-10-2-8-9-9-9-19, segment 1 long, slightly arcuate, 2 very short, 3, 4 and 10 a little longer than broad, 5–9 nearly subquadrate, segment 10 with narrow membranous pore, 11 very narrow, 3 times as long as wide.

Prothorax 1.9 times as wide as long, lateral margins straight and parallel-sided, all angles with pore and bristle on tubercle; surface transversely concave, lustrous, impunctate. Elytra 1.55 times as long as wide, broadest before apex, surface with sharp ridge from humerus almost to apex, dividing elytron into horizontal and narrow vertical parts; horizontal part with dense erect pubescence, coarsely punctuate; vertical part almost impunctate. Epipleurae very narrow. All tarsi thin.

Aedeagus (Fig. 9) narrowed to apex, slightly curved in lateral view, with broad base.

Length of body 4–4.1 mm.

Differential diagnosis. It differs from other species of this subgenus in the entirely fulvous elytra lacking either impressions or tubercles.

Xenoda (Xenodina) cyanipennis sp.nov.

Material examined. Holotype (male): Malaysia, Benon Mts., 15 km E Kampong Dong (3°53'E, 102°01'N), 700 m, 1.IV.1998, leg. Dembický & Pacholátko (NHMB).

Paratypes: same locality, 2 males (NHMB, LM).

Description. Fulvous or dark fulvous, antennae black with segments 1 and 11 more or less fulvous, underside piceous, legs from fulvous with dark hind femora to piceous.

Head as in preceding species, antennae (Fig. 2) also almost the same, but segment 10 with large round pore and 11 thicker, 3 times as long as wide.

Prothorax and elytra as in preceding species, but vertical part of elytron with distinct punctures.

Aedeagus (Fig. 10) narrowed to apex, with broad base, with apical quarter curved downwards in lateral view.

Length of body 3–3.5 mm.

Differential diagnosis. It differs from *X. fulva* sp.nov. in its different colour and the apical part of aedeagus curved downwards.

Xenoda (Xenodina) impressa sp.nov.

Material examined. Holotype (male): Sumatra, Tandjong, leg. Morava (LM).

Description. Head piceous with fulvous mouthparts, antennae piceous with two apical segments fulvous, prothorax fulvous with poorly delimited piceous spot on each side, elytra fulvous with basal and preapical piceous spots, underside piceous, legs fulvous.

Head impunctate, frontal tubercles elongate triangular, convex and lustrous, delimited to the rear by arcuate impression. Antennae (Fig. 3) reach anterior third of elytra, proportions of segments 14-3-10-9-8-7-7-8-8-9-13, segments 3-10 widened, subquadrangular, 7 and 8 almost subquadrate, apical segment 3 times as long as wide.

Prothorax twice as wide as long, lateral margins slightly rounded, surface transversely concave, lustrous and impunctate. Elytra 1.5 times as long as wide, broadened towards the rear, not pubescent, with sharp curved ridge from humerus almost to apex, dividing elytron into horizontal and vertical parts. Horizontal part with feeble basal convexity and deep triangular impression in centre not reaching suture, roughly punctuate on impressed parts and much more finely on elevated areas. Vertical part broad in anterior part, distinctly narrowed beyond centre, finely punctuate.

Aedeagus feebly lanceolate, slightly curved in lateral view.

Length of body 3.3 mm.

Differential diagnosis. Spotted elytra with deep impression in centre differentiate this species from its congeners.

Xenoda (Xenodina) tuberculata sp.nov.

Material examined. Holotype (male): Malaysia, [Kalimantan], Prov. Sabah, Banjaram (LM).

Description. Fulvous, antennae black with piceous basal segments and pale flavous basal half of segment 11, on elytra postmedian tubercle near suture black.

Head very finely punctuate, microsculptured, frontal tubercles triangular, sharp, delimited to the rear by straight impression, vertex with central groove. Antennae almost reach middle of elytra, proportions of segments 20-5-15-15-15-15-15-15-14-10-30, segment 1 long, slightly curved, 2 short and subquadrate, 3 elongate, dull, about 2–2.5 times as long as wide, 7–9 lustrous, slightly widened, about twice as long as wide, 10 subquadrate, 11 with broad basal part and narrow apical third, segments 9 and 10 with impressions (Fig. 4).

Prothorax 2.1 times as wide as long, feebly narrowed to base, lateral margins almost straight, surface microsculptured, uneven, with triangular impression on each side and two transverse impressions, one before centre, the other beyond. Elytra 1.4 times as long as wide, coarsely and densely punctuate, including vertical part, with two tubercles before apical slope: one rather high near suture, the other feeble, near side margin. Epipleurae very narrow. All tarsi thin, segment 1 of hind tarsus as long as following segments together.

Aedeagus (Fig. 12) narrowed to apex, slightly curved in lateral view. Length of body 5.1 mm.

Differential diagnosis. It differs clearly in having two very distinct tubercles before the apical slope of the elytra.

Subgenus Xenodania subgen.nov.

Type of subgenus: Xenoda vittata sp.nov.

Description. Antennae without bulb, nitidiform, with segments 3 and 4 more than twice as long as wide, 5 and 6 about twice as long as wide, 7–9 slightly thickened, about 1.5 times as long as wide, segment 8 deeply concave, segment 10 with apical process on outside (Fig. 5). Horizontal part of elytra roughly sculptured.

Differential diagnosis. Differs in structure of male antennae, which have no bulb, but apical process on segment 10.

Xenoda (Xenodania) vittata sp.nov.

Material examined. Holotype (male): Malaysia, Benon Mts., 15 km E Kampong Dong (3°53'E, 102°01'N), 700 m, 1.IV.1998, leg. Dembický & Pacholátko (NHMB).

Paratype: same locality, 1 male (LM).

Description. Fulvous, antennae with segments 7–9 or 8–9 black or piceous, prothorax with poorly delimited piceous spot on each side, elytra with black lateral stripe widened to apex, metasternum black.

Head impunctate, frontal tubercles elongate triangular, delimited to the rear by arcuate impression. Antennae (Fig. 5) reach anterior third of elytra, nitidiform with preapical segments only slightly thickened, proportions of segments 15-5-9-10-10-10-10-10-8-8-7-20, segment 1 long and slightly curved, small, 3-11 elongate, 8 deeply concave, 10 with apical process, 11 almost as thick as 10.

Prothorax 1.9 times as wide as long, very feebly narrowed to base, lateral margins straight, all angles with pore and bristle, surface transversely concave, lustrous and impunctate. Elytra twice as long as wide, parallel-sided, with horizontal and vertical parts, divided by sharp ridge starting on humerus, surface with dense erect pubescence, coarsely punctuate, punctures more feeble on vertical part. Epipleurae very narrow. Tarsi narrow.

Aedeagus (Fig. 11) slightly narrowed to apex, with apical protuberance, curved in lateral view.

Length of body 3.5 mm.

Differential diagnosis. Species belongs to the monotypic subgenus.

Subgenus Paraxenidea subgen.nov.

Type of subgenus: Xenoda brancuccii sp.nov.

Description. Antennae without bulb, nitidiform, with segment 3 about 4 times as long as wide and segment 4 about 3 times as long as wide, segments 5–8 moderately

thickened, but each of them about twice as long as wide, 3 apical segments thin, 8 with long curved spine (Fig. 6). Horizontal part of elytra coarsely punctuate.

Differential diagnosis. This subgenus differs clearly in its combination of reduced bulb on the middle antennal segments and well developed curved spine on segment 8. It seems to be nearest to *Xenoda* s.str. but appears definitely more primitive.

Xenoda (Paraxenidea) brancuccii sp.nov.

Material examined. Holotype (male): Philippines, Palawan, Cleopatra Needle N.P., Tanabank river valley, 300 m, 20–22.XI.1990, leg. Bolm (NHMB).

Paratype: Philippines, N. Palawan, Bahile, 50 m, 22.XÏ.1992, leg. Bolm, 1 male (LM).

Description. Fulvous, antennal segments 4–10 and apices of hind femora piceous, tibiae more or less darkened.

Head impunctate, smooth, frontal tubercles elongate triangular, microsculptured, delimited to the rear by impression, vertex with longitudinal groove. Antennae (Fig. 6) reach beyond middle of elytra, nitidiform, proportions of segments 14–3–14–10–9–8–8–9–13–12–16, segments 3–11 elongate, 4–8 slightly thickened, 8 with apical curved spine, 9–11 very thin.

Prothorax 1.7 times as wide as long, slightly narrowed to base, side margins almost straight, all angles with pore and bristle, surface transversely concave, impunctate. Elytra 1.6 times as long as wide, with dense erect hairs and lateral ridge from humerus to elytral slope, dividing elytron into horizontal and vertical parts, horizontal part densely and rugosely granulate, vertical part almost smooth. Fore- and mid-tarsi with segment 1 not widened.

Length of body 3.4–3.5 mm.

Differential diagnosis. Species belongs to the monotypic subgenus.

A preliminary key to Xenoda (males)

- 1(12) Antennae more or less nitidiform, mostly with intermediate segments thickened, but without thick ovate bulb (Figs 1–6).
- 2(9) All antennal segments without curved spine (*Xenodina* subgen.nov.).
- 3(4) Elytra metallic blue. Antenna as Fig. 2, aedeagus as Fig. 10. Length 3–3.5 mm.

Malay Peninsula. X. cyanipennis sp.nov.

- 4(3) Elytra not metallic.
- 5(6) Elytra with impressions or tubercles, not entirely fulvous.

344

- 9(2) Antennal segments 8 or 10 with curved spine on apex.

- 12(1) Antennal segments 3–8 united in thick ovate bulb (Figs 7, 8).¹⁾
- 13(28) Antennal segment 8 with long curved spine (Xenoda s.str.).
- 14(19) Elytra metallic blue, greenish blue or bronze, strongly and densely punctuate.
- 15(18) Head and prothorax fulvous.
- 17(16) Legs entirely or mostly black. 2 apical antennal segments pale flavous. Length 5.5–6 mm.
 Sumatra, Mentawei.
 X. weyersi Duvivier, 1885
- 19(14) Upperside fulvous or reddish fulvous.
- 21(20) Prothorax impunctate or indistinctly punctate.
- 22(25) Species from Sumatra and maybe also Java.
- 23(24) Elytra densely punctate and pubescent, finely rugose. Entirely fulvous or tibiae and tarsi darkened. Antennal club thick, 1.3–1.4 times as long as

¹⁾ The species *X. carinata* Laboissiere, 1929 from Mentawei and *X. ovalis* Mohamedasid, 2001 from Sabah are not included in the key.

wide. Aedeagus as Fig. 14. Length 5.7-6.3 mm.

Sumatra, ?Java. X. pallida Jacoby, 1896

- 24(23) All characters of preceding species, but elytra not rugose. [Unclear species, possibly identical with *X. pallida*.] *X. hirtipennis* Jacoby, 1884
- 25(22) Species from the Philippines.
- 26(27) Body entirely fulvous Antennal bulb short ovate, 1.55 times as long as wide (Fig. 8). Aedeagus as Fig. 15. Length 5.2 mm.

Luzon. X. bakeri sp.nov.

- 28(13) Segment 8 of antennal bulb without long curved spine (subgenus *Xenodella* Weise, 1922). [Includes 8 poorly known species from Sumatra and Mentawei.]

Acknowledgements

I am grateful to Dr. M. Brancucci (NHMB) for the opportunity to study the interesting material in his care.

References

MOHAMEDSAID M. S. (2001): The genus Xenoda Baly from Malaysia (Coleoptera: Chrysomelidae: Galerucinae). Serangga 6(1): 17-36.

WILCOX J. A. (1973): Chrysomelidae: Galerucinae, Luperini. In: Coleopterorum Catalogus Supplementa Pars 78, fasc. 3. Uitgeverij Dr. W. Junk, Gravenhage, pp. 433–664.

Address of author:

Prof. Lev N. Medvedev Institute for Problems of Ecology and Evolution Russian Academy of Sciences Leninsky Prospect 33 Moscow 119071 RUSSIA E-mail: vladmed@online.ru



Figs 1–8. Antennae of males: 1, X. (Xenodina) fulva sp.nov.; 2, X. (Xenodina) cyanipennis sp.nov.; 3, X. (Xenodina) impressa sp.nov.; 4, X. (Xenodina) tuberculata sp.nov.; 5, X. (Xenodania) vittata sp.nov.; 6, X. (Paraxenidea) brancuccii sp.nov.; 7, X. (s.str.) luzonica sp.nov.; 8, X. (s.str.) bakeri sp.nov.



Figs 9–15. Aedeagi dorsally, (9–11 also laterally): 9, X. (Xenodina) fulva sp.nov.; 10, X. (Xenodina) cyanipenni sp.nov.; 11, X. (Xenodania) vittata sp.nov.; 12, X. (Xenodina) tuberculata sp.nov.; 13, X. (s.str.) nigricollis Jacoby ; 14, X. (s.str.) pallida Jacoby; 15, X. (s.str.) bakeri sp.nov.