

***Leptura petramarketae* sp. nov. from Vietnam
(Coleoptera: Cerambycidae: Lepturinae: Lepturini)**

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Abstract. *Leptura petramarketae* sp. nov. from Vietnam (Lai Chau) is described, illustrated and compared.

INTRODUCTION

The genus *Leptura* is currently represented in Oriental Region by 11 species divided into three subgenera: *Bothrioleptura* Pesarini & Sabbadini 2015 with one known species, *Leptura* Linnaeus, 1758 with nine known species and *Noona* Sama, 2007 with one known species (Tavakilian & Chevillotte 2021). Three species of subgenus *Leptura* have recently been described from Vietnam, *Leptura* (L.) *kopai* Tichý, Viktora & N. Ohbayashi, 2019 and *L.* (L.) *kurinai* Hergovits, 2020 from Kon Tum Province, and *L.* (L.) *marceli* Hergovits, 2020 from Vinh Phuc Province. (Hergovits 2020a and 2020b, Tichý, Viktora & Ohbayashi 2019).

In the present paper, we describe a new species of the genus *Leptura* from the material recently collected in Lai Chau Province, Vietnam.

Leptura (L.) *petramarketae* sp. nov. from Vietnam (Lai Chau) is described and illustrated. The new species is compared to the congeners *L.* (L.) *aurosericans* Fairmaire, 1895, *L.* (L.) *kopai* Tichý, Viktora & N. Ohbayashi, 2019, *L.* (L.) *kurinai* Hergovits, 2020 and *L.* (L.) *nigroguttata* (Pic, 1927).

MATERIAL AND METHODS

Observation and photography. The habitus of holotype and paratype specimens was taken by the Canon EOS 350D digital camera with the Sigma 105 mm macro lens. Composite images were created using the software Image Stacking Software Combine ZP. The genitalia photographs were taken with a Canon MP-E 65mm/2.8 1–5× Macro lens on belows attached to a Canon EOS 550D camera. Each photograph was taken as several partially focused images and afterwards composed in the Helicon Focus 3.20.2 Pro software. The photographs were modified using Adobe Photoshop CC.

Type material is deposited in the following collections:

CPV collection of Petr Viktora, Kutná Hora, Czech Republic;

CRH collection of Roman Hergovits, Bratislava, Slovakia.

Slash (/) separates data in different lines on locality and determination labels.

TAXONOMY

Genus *Leptura* Linnaeus, 1758

Type species. *Leptura quadrifasciata* Linnaeus, 1758.

***Leptura (Leptura) petramarketae* sp. nov.**

(Figs. 1, 2a-d, 4a, d)

Type locality. Vietnam, Lai Chau Province.**Type material.** Holotype (♂): 'Vietnam' / 'Lai Chau' / '5/2020' / 'local collector leg.', (CPV); 9 Paratypes: (9 ♂♂, 6 ♀♀): same data as holotype, (CPV, CRH).The types are provided with a printed red label: '*Leptura petramarketae* sp. nov.' / 'HOLOTYPE [respective PARATYPE]' / 'P. Viktora et R. Hergovits det., 2021'.**Description.** Habitus of male holotype as in Figs. 2a, c. Body black, long and narrow, elongate, punctate, with pubescence (all male type specimens relatively similar and stable in shape and colour of pubescence with slight differences in the width of the spots). Body length from head to elytral apex 18.0 mm (male paratypes from 14.95 to 18.15 mm), widest in humeral part of elytra (4.65 mm), 3.87 times longer than wide.

Head black, large, widest through the eyes, 3.2 mm wide, slightly narrower than pronotum at base, strongly strangled near base, irregularly, coarsely and densely punctured, with distinct longitudinal furrow in middle, frons with small bald place in middle without punctation. Head covered by black, relatively sparse pubescence (between eyes with narrow longitudinal stripe of long goldenish pubescence), and long, dense, erect pale yellowish setation (setation densest and more distinct on frons, behind and under the eyes). Eyes large, convex, goldenish brown, very deeply emarginate on inner side. Clypeus blackish brown with narrowly pale ochre yellow anterior margin, semi-matt, punctured by large, coarse, irregular sparse punctation in posterior half, partly with long erect yellowish setae. Labrum pale ochre yellow (basal third largely blackish brown with a few large punctures), shiny, with yellowish setation on edges. Mandibles black, shiny, symmetrical, with long goldenish pubescence and yellowish setation on edges.

Maxillary palpus blackish brown (palpomeres with narrowly ochre yellow apex), with indistinct small-sized punctation and sparse yellowish setation, palpomeres widened apically. Last palpomere largest, cylindrical but irregular, with narrow, oval longitudinal depression on top edge (depression yellowish in middle), apical angles rounded.

Antennae with 11 antennomeres, narrow, elongate, antennomeres almost filiform, antennomeres 1-10 slightly widened apically, long, almost reaching elytral apex (as in Fig. 2a). Antennomeres black, antennomeres 1-4 coarsely punctured, glossy, covered by sparse, recumbent, black shiny pubescence and by tufts of yellowish setation in apex, antennomeres 5-11 matte, punctured by dense small-sized punctation, covered by very short black pubescence. Antennomere 11 long, distinctly narrowest apically in apical third. Antennomere 2 the shortest, and 5 the longest. Ratios of relative lengths of antennomeres 1-11 equal to: 0.65 : 0.16 : 1.00 : 0.96 : 1.15 : 0.87 : 0.85 : 0.75 : 0.72 : 0.67 : 0.96.

Pronotum black, bell shaped, slightly narrower than elytra at humeri, narrowest at anterior margin (1.64 times longer than wide at anterior margin), widest at base (1.13 times wider than long at base), lateral margins arcuate in middle, excised before posterior angles, strangled in apical part, with hump in anterior third (visible from dorsal view), pronotal disc with narrow longitudinal furrow in middle, punctured by dense punctation, covered by shorter and sparser blackish pubescence in dark places and long denser goldenish pubescence (densest at margins) as in Fig. 4a. Surface of pronotum with sparse, very long, erect, pale yellowish setation.

Scutellum black, triangular, very dense and small-sized punctured, almost completely covered by recumbent goldenish pubescence.

Elytra long and narrow, widest at humeri, regularly narrowing apically, apical part slightly

rounded, apex cut. Ultimate ventrite not covered by elytra in dorsal view. Elytra 12.23 mm long and 4.65 mm wide (2.63 times longer than wide); black with yellow spots (each elytron with four yellow spots visible from above and small longitudinal yellow spot at humeri near elytral epipleura - invisible from above, all spots are lined in black - not reaching elytral margins), completely punctured by dense small-sized punctuation, semi-gloss, covered by recumbent, black shiny pubescence in black places and recumbent, goldenish yellow pubescence in yellow places, elytral apex covered by ochre yellow pubescence (as in Fig. 2a).

Legs black, long and narrow, punctured by dense, relatively shallow punctuation, covered by sparse, pale yellowish and partly darker pubescence (pubescence denser on ventral side of pro- and mesofemora, densest and longest in protibiae), tibiae widened apically (metatibiae slightly curved, apical half widened and rounded). Tarsi black with pale brown claws, punctured by dense small-sized punctuation, covered by long dark pubescence. Pro- and mesotarsomeres 1-3 wider than metatarsomeres 1-3, metatarsomeres very long and narrow. Metatarsomere 1 1.1 times longer than metatarsomeres 2 and 3 together.

Ventral side of body as in Fig. 2c, black (ventrites narrowly pale reddish brown in basal and apical margins), punctured, almost completely covered by silvery pubescence and to a lesser extent by yellowish pubescence (for example spots on ventrites). Elytral epipleura black, glossy, covered by short, black shiny pubescence.

Genitalia as in Fig. 1.



Fig. 1. *Leptura petramarketae* sp. nov.: a- male genitalia (dorsal view), b- median lobe (lateral view); c- tegmen (lateral view); d- tegmen (sublateral view). Photo: Richard Sehnal.

Female. Habitus of female paratype as in Figs. 2b, d. Body length from head to elytral apex 18.83 mm (female paratypes from 17.56 to 19.2 mm), widest in humeral part of elytra (5.1 mm), 3.7 times longer than wide. Body shape, structure and pubescence similar to male. Female has distinctly shorter antennae, tarsi distinctly narrower and protarsi distinctly shorter than in male,

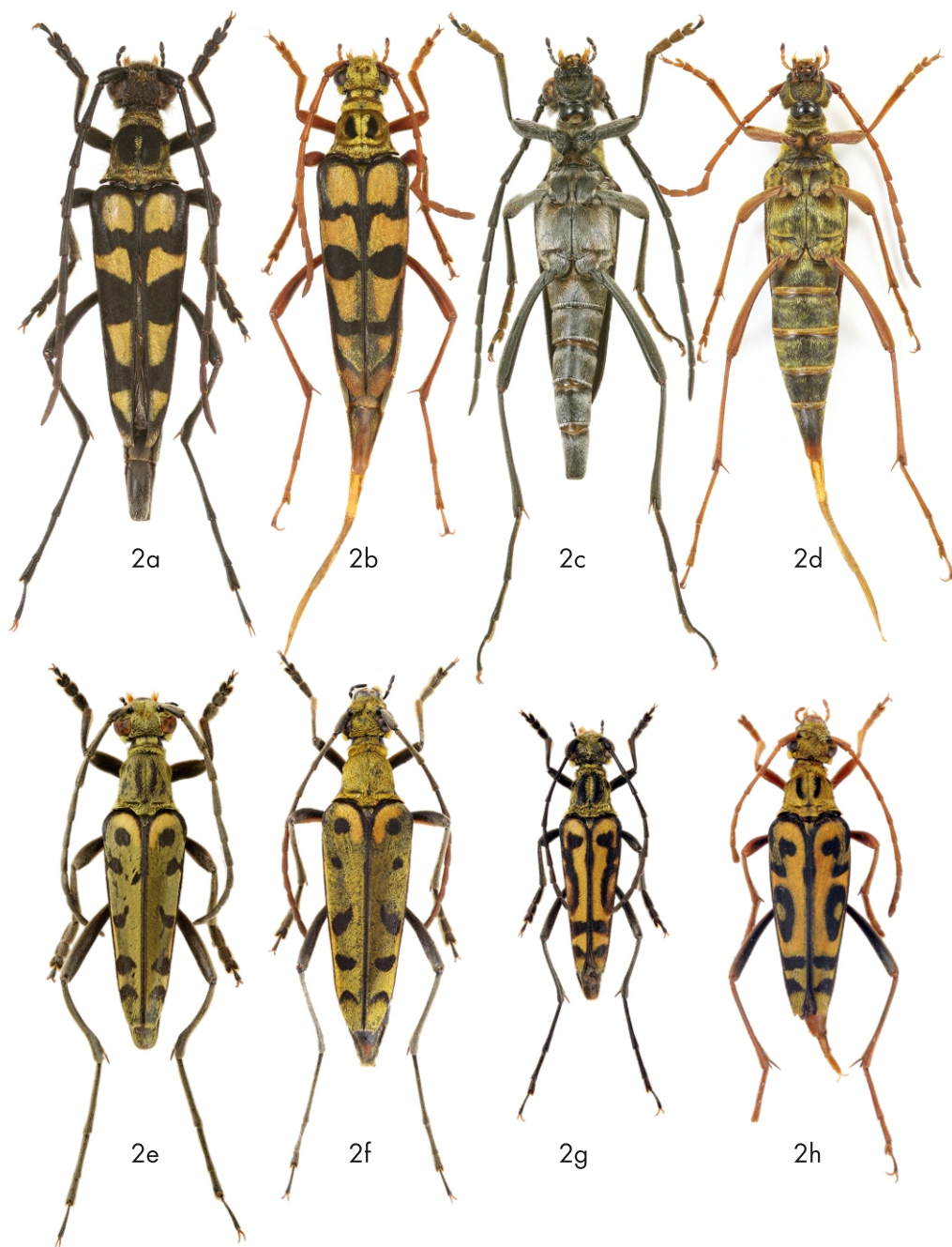


Fig. 2. *Leptura* spp., habitus, dorsal and ventral views: a, c- *L. (L.) petramarketae* sp. nov., male holotype; b, d- *L. (L.) petramarketae* sp. nov, female paratype; e- *L. (L.) nigroguttata* (Pic, 1927), male; f- *L. (L.) nigroguttata*, female; g- *L. (L.) kopai* Tichý, Viktora & N. Ohbayashi, 2019, male; h- *L. (L.) kopai*, female paratype.

Photo: a-d: Petr Viktora, e-h: Roman Hergovits.

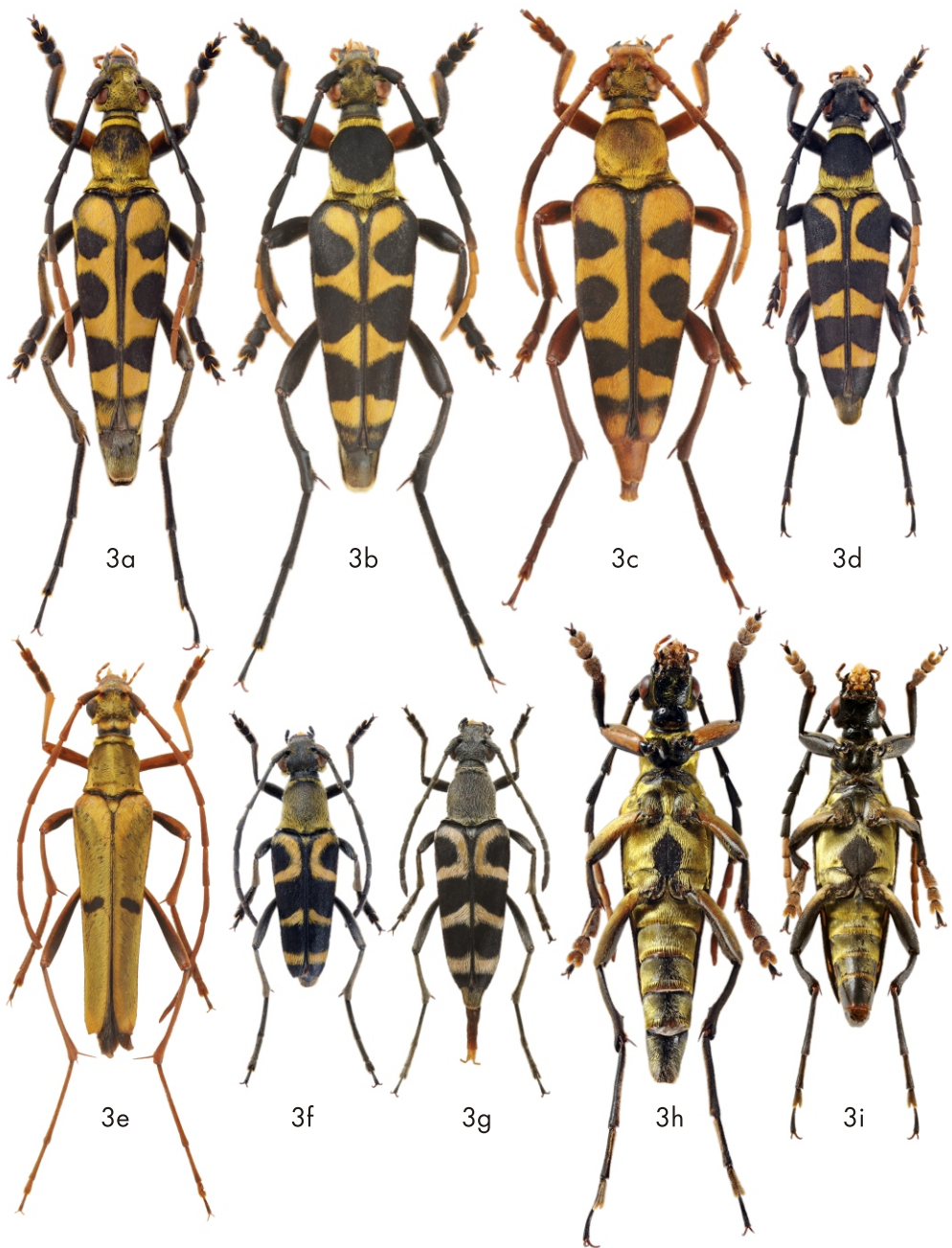


Fig. 3. *Leptura* spp., habitus, dorsal and ventral views: a, h- *L. (L.) aurosericans* Fairmaire, 1895, male from NE Laos (Houaphanh); b- *L. (L.) aurosericans*, male from N Vietnam (Vinh Phuc); c- *L. (L.) aurosericans*, female from N Vietnam (Vinh Phuc); d, i- *L. (L.) kurinai* Hergovits, 2020, male holotype; e- *L. (L.) aureolella* Holzschuh, 2009, male; f- *L. (L.) semiannulata* Pic, 1916, male; g- *L. (L.) semiannulata*, female.

Photo: Roman Hergovits.



Fig. 4. *Leptura* spp., habitus of pronotum (dorsal view): a- *L. (L.) petramarketae* sp. nov., male holotype; b- *L. (L.) nigroguttata* (Pic, 1927), male; c- *L. (L.) kopai* Tichý, Viktora & N. Ohbayashi, 2019, male; d- *L. (L.) petramarketae* sp. nov., female paratype; e- *L. (L.) nigroguttata*, female; f- *L. (L.) kopai*, female paratype; g- *L. (L.) aurosericans* Fairmaire, 1895, male from Laos (Houaphanh); h- *L. (L.) aurosericans*, male from Vietnam (Vinh Phuc); i- *L. (L.) aurosericans*, female from Vietnam (Vinh Phuc); j- *L. (L.) kurinai* Hergovits, 2020, male holotype; k- *L. (L.) aureolella* Holzschuh, 2009, male; l- *L. (L.) semiannulata* Pic, 1916, male.

Photo: a, d: Petr Viktora; b, c, e-l: Roman Hergovits.

legs, palpi and antennae pale reddish brown, head almost completely covered by very dense and long goldenish pubescence, ventral side of body covered by goldenish pubescence, each half of pronotal disc with two dark spots (larger oval spot in middle and small oval spot more anteriorly at lateral margin), yellow spots on elytra larger than in male (yellow spots combine in middle part and continue to edge of pale reddish brown elytral epipleura), elytral apex distinctly covered by ginger pubescence.

Differential diagnosis (applies to males). *Leptura* (L.) *petramarketae* sp. nov. is based on colour and shape of pubescence spots on elytra similar to *L. (L.) aurosericans* Fairmaire, 1895 and *L. (L.) kurinai* Hergovits, 2020. *L. (L.) petramarketae* distinctly differs from these species by unicoloured black antennae in full length (as in Fig. 2a) and by ventral side of body completely covered by silvery pubescence (as in Fig. 2c), while *L. (L.) aurosericans* and *L. (L.) kurinai* have bicolour, black and ochre yellow antennomeres (as in Figs. 3a, b, d) and metasternum with distinct bald place in middle (as in Figs. 3h, i). Other differences from some other *Leptura* species are evident from Fig. 3.

Leptura (L.) *petramarketae* sp. nov. is related to *L. (L.) nigroguttata* (Pic, 1927) and *L. (L.) kopai* Tichý, Viktora & N. Ohbayashi, 2019 with same characters in males: wide, strongly strangled head near base, pronotum with hump in anterior third (visible in dorsal view, as in Figs. 4a-c), pronotal disc with two (sometimes connected) dark oval spots, head almost as wide as pronotum. *L. (L.) petramarketae* distinctly differs from these species by longer antennae almost reaching elytral apex (antennae reaching approximately two thirds elytral length in *L. (L.) nigroguttata* and *L. (L.) kopai*), by pronotum approximately as long as wide in *L. (L.) petramarketae* (longer than wide in *L. (L.) nigroguttata* and *L. (L.) kopai*), and by pronotal disc with larger dark spots. Shape of spots on elytra is typical and differences in contrast with *L. (L.) nigroguttata* and *L. (L.) kopai* are clear from Fig. 2.

Etymology. The name is dedicated to first author's daughter Petra and wife Markéta.

Distribution. Vietnam (Lai Chau).

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