

*This contribution is published
to honor Prof. Vladimir Chikatunov,
a scientist, a colleague and a friend,
on the occasion of his 80th birthday.*

A new species of the jewel beetle genus *Endelus* Deyrolle (Coleoptera: Buprestidae: Agrilinae: Aphanisticini) from Laos

MARK YU. KALASHIAN

*Scientific Center of Zoology and Hydroecology, National Academy
of Sciences of Armenia, P. Sevak Str. 7, Yerevan 0014, Armenia.
E-mail: mkalashian1@gmail.com*

ABSTRACT

A new species of jewel beetles, *Endelus (Endelus) chikatunovi* n. sp. (Coleoptera: Buprestidae), from North Laos (Luang Namtha Province) is described, illustrated and compared with closely related species.

KEYWORDS: Biodiversity, Coleoptera, Buprestidae, Aphanisticini, new species, Indochina, Oriental Region, Southeast Asia, Laos, taxonomy.

ԱՄՓՈՓՈՒՄ

Լաոսի Լուանգ Նամթա նահանգից նկարագրվում և համեմատվում է մոտ տեսակների հետ *Endelus (Endelus) chikatunovi* n. sp. սկզբնական (Coleoptera: Buprestidae) նոր տեսակ:

ՀԻՄՆԱԲԱՈՒՆԵՐ. Կենսաբազմազանություն, Coleoptera, Buprestidae, Aphanisticini, սկզբնական, նոր տեսակ, Հնդկասիին, Հնդ-Մալայան տարածաշրջան, Հարավարևելյան Ասիա, Լաոս, տարսնոմնիա:

INTRODUCTION

The jewel-beetle genus *Endelus* Deyrolle, 1864 is a rather diverse group in the Old World buprestid fauna. Charles L. Bellamy listed 124 valid species of *Endelus* in his *World Catalogue of Jewel Beetles* (Bellamy 2008); recently 10 more species have been described by the author of this study (Kalashian 2011, 2013, 2017, 2019). The genus is distributed in the Eastern Palearctic, Oriental and Australian regions, and is recorded from Nepal, Sikkim, continental China and Taiwan, Japan, Southeast Asia, Sunda and Philippine Islands, through New Guinea and Australia to Fiji. As far as it is known, the species of *Endelus* are associated with ferns (e.g. Bellamy 2007). Among the numerous and diverse materials of the tribe Aphanisticini from the Oriental and Eastern Palearctic regions available to me from various collectors, several undescribed species of *Endelus* have been revealed. One of them originated from Laos is described below, being the tenth species of the genus known from this country.

MATERIALS AND METHODS

The morphology of beetles was studied using Micromed MC-2 Zoom and MBS-10 stereomicroscopes. Measurements were taken using an ocular micrometer. Photographs of the habitus were taken using a Canon EOS 550D digital camera, equipped with a Canon MP-E65 mm f/2.8 1–5× macro lens; Helicon Focus Pro software was used for stacking photos.

Label data are cited verbatim; a slash (/) is used to separate lines on the same label and a double slash (//), to separate data from different labels. The following abbreviations are used in the text: p – printed data, PC – personal computer print, [red] – refers to label color.

The following institutional codens are used throughout the text:

- EJCB – Eduard Jendek collection, Bratislava, Slovakia;
- NMPC – National Museum, Prague, Czech Republic;
- ZIN – Zoological Institute of the Russian Academy of Sciences, St. Petersburg, Russia.

TAXONOMY

Genus *Endelus* Deyrolle, 1864

Endelus (Endelus) chikatunovi n. sp.

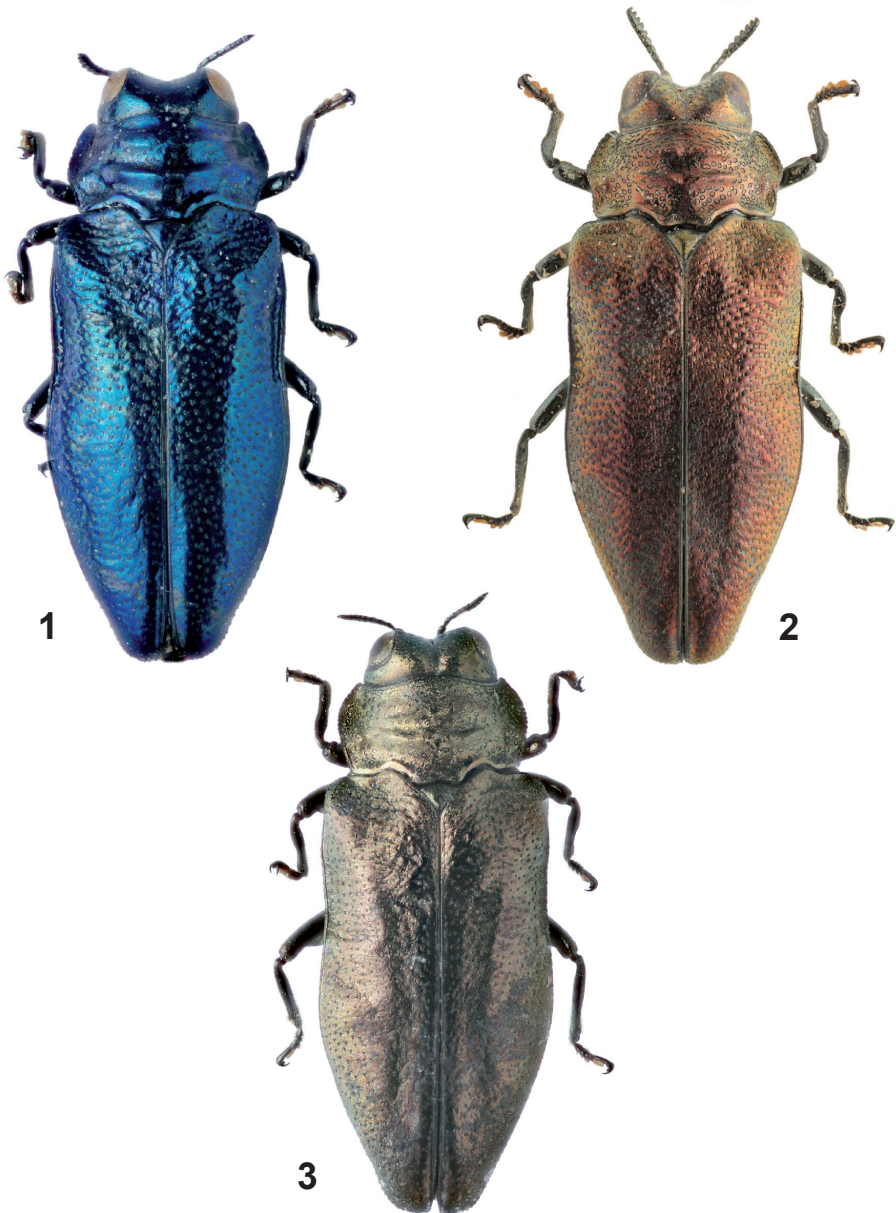
(Fig. 1)

LSID: urn:lsid:zoobank.org:act:052D7AA3-CE74-47D5-9FC2-9A295283BC2B.

Etymology: The new species is dedicated to Prof. Vladimir I. Chikatunov of the Steinhardt Museum of Natural History (Tel Aviv, Israel) on the occasion of his 80th anniversary.

Diagnosis: Body (Fig. 1) of medium size, moderately elongate, approximately 2.50× as long as wide, moderately convex, rather metallic dark-blue, legs and antennae black with bluish tint. Dorsal surface and prosternum with fine but distinct microreticulate shagreenity, with silky shine, rest of thorax and abdominal ventrites with strongly obliterate shagreenity and shinier. Body length 4.9 mm, width 1.95 mm.

Description: Female. Head large, distinctly narrower than anterior margin of pronotum, slightly narrowed anteriorly; eyes large, reniform with wide upper and narrow lower portion (in lateral view), clearly visible in dorsal view, moderately convex, not protruding beyond head contour; temples rather long, very finely projecting behind eyes. Oculofrontal margins obtuse, rounded. Clypeus continues surface of frons, strongly transversely triangular, with very shallow, nearly indistinct triangular emargination. Frons very slightly widened posteriorly, slightly triangularly depressed with sides nearly straight (in dorsal view), with deep slit-like furrow behind clypeus and antennal cavities; this furrow upcurved laterally along lower half of lateral margins of eye (in frontal view), nearly reaching them; similar slit-like longitudinal furrow starting from the middle of former one, extending posteriorly, reaching approximately level of upper 1/3 of eyes (in frontal view), and slightly widened there to form



Figs 1–3: *Endelus* (*Endelus*) spp., habitus, dorsal view: (1) *E. chikatunovi* n. sp., holotype, female (photo: M. Kalashian); (2) *E. kabakovi* Kalashian, paratype, female, Vietnam (from Kalashian, 2019, © Pleiades Publishing, Inc., 2019); (3) *E. pyrrhosiae* Kurosawa, topotype, male, Japan (from Kalashian, 2019, © Pleiades Publishing, Inc., 2019). Not to scale.

a very narrow drop-shaped pit; these furrows together forming an anchor-shaped structure. Frons anteriorly with nearly indistinct singular small punctures slightly deepened backwards and more distinct on vertex. Antennae $1.55\times$ as long as vertical diameter of eye, serrate beginning from approximately equilaterally triangular 5th antennomere; following antennomeres strongly transverse; antennomeres 1 and 2 longitudinal, big and swollen, 3rd and 4th antennomeres longitudinal, small, slightly widened distally.

Pronotum $1.88\times$ as wide as long, widest slightly behind middle, narrowed anteriorly almost rectilinearly and then shortly arcuately just behind anterior angles, and slightly concavely narrowed posteriorly toward obtuse-angled basal angles. Sides finely irregularly serrate, with fine edging continuing along the entire bisinuate anterior margin, posterior margin bisinuate with wide median lobe slightly concavely truncate opposite scutellum. Pronotum rather widely and slightly irregularly flattened along margins. Disc slightly elevated along anterior margin and rather strongly along posterior one, and with two rather short, transverse bolster-shaped carinae both becoming lower along midline of pronotum, anterior carina is distinctly shorter and lower and with more obtuse edge than posterior one. Surface with irregular, rather sparse medium-sized flat punctures, on elevations smoothed and nearly indistinct.

Scutellum slightly transverse, triangular, moderately convex.

Elytra $1.9\times$ as long as wide, distinctly wider than pronotum, weakly and almost rectilinearly widened immediately behind humeri, then weakly and somewhat concavely widened approximately to level of posterior $\frac{2}{5}$ reaching their maximum width, then first slightly arcuately and then (in distal part) finely concavely narrowed toward rather widely and slightly separately, irregularly rounded apices. Margins of elytra finely serrate (slightly more distinctly at apex), with fine edging wedging out approximately at level of apical $\frac{1}{3}$ of elytra. Sides of elytra behind humeri with narrow flat area wedging out approximately in apical $\frac{2}{5}$. Disc convex, narrowly elevated along base, distinctly depressed medially of humeral tubercles, this depression continued towards scutellum and along suture toward elytral apex narrowing backward. Surface rather densely covered with medium-sized punctures and with irregular undulate transverse wrinkles, coarse anteriorly and strongly smoothed posteriorly but distinct nearly as far as elytral apex.

Prosternal process with several rather coarse, transversely oval punctures; hypomera with traces of small pinned punctures nearly invisible on microreticulated background; rest of ventral side of body with reticulation of fine undulate wrinkles bearing in places very fine pinned punctures; sculpture smoothed but distinct as far as apex of abdomen.

Anal ventrite widely, slightly irregularly rounded at apex.

Male. Unknown.

Differential diagnosis: By the anchor-shaped structure of the frontal furrows, the microreticulated dorsal surface and the structure of pronotum, the new species

belongs to the recently established *Endelus* (*Endelus*) *pyrrhosiae* Kurosawa, 1985 species group (Kalashian, 2019). From two other species of the group, *E. kabakovi* Kalashian, 2019 (Fig. 2) and *E. pyrrhosiae* Kurosawa, 1985 (with two subspecies *E. p. pyrrhosiae* (Fig. 3) and *E. p. aokii* Kurosawa, 1985, known to me from its description), *E. chikatunovi* n. sp. can be easily distinguished by its coloration (in *E. kabakovi*, the body dorsally is copper-red and ventrally black with weak greenish tint, both subspecies of *E. pyrrhosiae* are dark bronze with a more or less distinct reddish or greenish tint, the frons is dark olive-green, the pronotum with the more distinct olive tint anteriorly). Additionally, *E. kabakovi* differs in having a larger body (5.2–6.1 mm), a deeper frontal depression, coarser and denser punctuation of the head and pronotum, and the elytral surface densely covered with small short stroke-shaped punctures. In *E. pyrrhosiae*, the pronotum is widest before its middle, its punctuation is intermediate between those in *E. kabakovi* and *E. chikatunovi*, the carinae of the pronotum are shorter and less distinct, and the elytra are covered with more delicate and sparser pinned punctures.

Holotype: ♀ LAOS north [Luang Namtha Prov.], 13-24.V.1997 / 15 km NW Louang Namtha / N 21°07.5 E 101°21.0 / alt. 750±100m / E. Jendek & O. Šauša leg. (p, PC) (EJCB) // Holotype / *Endelus* (*Endelus*) / *chikatunovi* sp. n. / M. Kalashian det. 2020 (red, p, PC).

Distribution: Indochina: Laos (Luang Namtha Prov.).

Ecological information: A single specimen was collected from a fern in disturbed mountain rainforest (Fig. 4).



Fig. 4: Type locality of *Endelus chikatunovi* n. sp.: disturbed rainforest near Luang Namtha (Laos) (photo: E. Jendek).

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