# Two new genera of the subtribe Agrilina (Coleoptera: Buprestidae, Agrilinae)

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Abstract. Two new genera of Buprestidae are described and figured: Nelsonagrilus for three new species N. typicus, N. bambula from Laos, N. suzannae from Sumatra; and Dorochoviella for one new species D. kunashirensis from Kuril Islands.

Key Words. Coleoptera, Buprestidae, Agrilinae, new genus, new species.

## Introduction

A new concept of Agrilini Laporte, 1835 was recently published by Kubáň et al. (2000). Bellamy (2003) included fourteen genera in the subtribe Agrilina Laporte, 1835, of which only *Agrilus* Curtis, 1825 is distributed in the Palaearctic and Oriental Realms. The two new genera described herein are further representatives from these regions.

### METHODS AND MATERIAL

Locality data are presented verbatim, my remarks and addenda are in square brackets []. Abbreviations of the institutions where the type specimens are deposited are: collection Jendek, Institute of Zoology, Slovak Academy of Sciences, Bratislava, Slovakia (EJCB); Russian Academy of Sciences, Zoological Institute, St. Petersburg, Russia (ZIN).

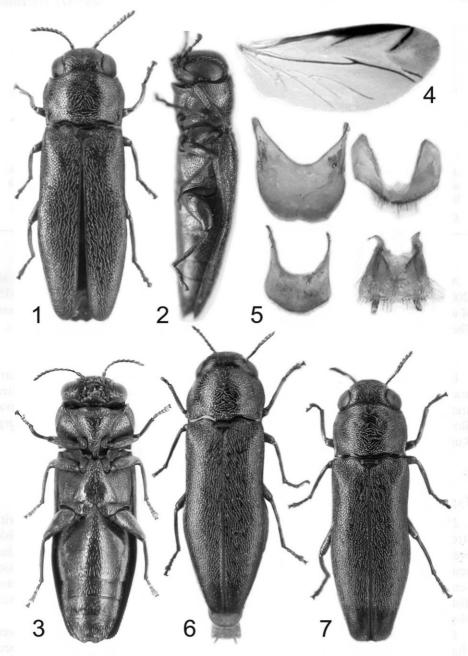
## Nelsonagrilus gen. nov.

(Figs. 1-7)

Type species: Nelsonagrilus typicus sp. nov. (present designation)

Diagnosis. Body small, head strongly convex; antennae short; pronotum with strongly lobed anterior margin and strongly developed gibbosity on disk; prehumeral, marginal and submarginal carinae present; scutellum subpentagular, acuminate posteriorly; epipleura very long, extending at least to middle of basal ventrite; prosternal lobe large and strongly arcuate; abdomen with 4 ventrites; tarsi distinctly shorter than tibiae; metafemora very stout; ovipositor uritiform with obvious styli.

Description. Body small, elongate, subcylindrical. Head large, strongly convex; clypeus and antennal cavities demarcated above by deep transverse sulcus; clypeus strongly transverse with sulcate lateral areas for reception of basal two antennomeres in repose. Eyes convex, with deep circumocular groove on inner margins; antennae short, not reaching middle of pronotum in repose; antennomeres 4–10 serrate. Pronotum with anterior margin strongly lobed medially; posterior margin bisinuate; sides arcuate, slightly emarginate at posterior angles. Disk with strongly developed anteromedial gibbosity; prehumeral carina long, subconfluent with lateral margin, obsolete and more distant from lateral margin in anterior one-third of pronotum. Marginal and submarginal carinae strongly convergent and confluent in posterior



Figures 1-7. Nelsonagrilus typicus Jendek, female holotype (3.9 mm): 1) dorsal habitus; 2) lateral habitus; 3) ventral habitus; 4) right wing; 5) terminal segments and ovipositor (from left to right) tergite 8, sternite 8, tergite 9, ovipositor. 6) N. bambula Jendek, female holotype (4.0 mm) dorsal habitus; 7) N. suzannae Jendek, female holotype (4.45 mm) dorsal habitus.

fifth of pronotal length. Scutellum subpentagonal, sharply acuminate posteriorly. Elytral apices conjointly or separately arcuate-subtruncate; humeri without carina; epipleura very long, extending at least to middle of basal ventrite. Prosternal lobe large, strongly arcuate; prosternal process acuminate apically. Abdomen with 4 ventrites; sternal groove on apex of last ventrite widely arcuately emarginate, distant from margin. Metacoxae widely transverse, medially attenuate; metafemora obviously stout; metatibiae with comb of whitish, erect setae on outer apical margin; tarsi distinctly shorter than tibiae; tarsi with pulvilli on first four tarsomeres; metatarsomere 1 subequal in length to 2–3 together or to 4 with pulvillus; pretarsus claviform, claws bifid with inner tooth shorter and broader. Ovipositor short with obvious styli on apical margin.

Etymology. A compound name, the first part of which is chosen to honor Dr. Gayle H. Nelson and the second referring to the closely related genus Agrilus. The

name is defined as masculine.

Remarks. Nelsonagrilus resembles the genera Meliboeus and Nalanda in the form of its pronotum, but the proximally open radial cell (Fig. 4) suggest it belongs to the tribe Agrilini (sensu Kubáň et al. 2000). The presence of marginal and submarginal pronotal carinae; form of prehumeral carinae; robust sternal lobe; posteriorly acuminate scutellum and long metatarsomere 1 indicate it is most closely related to the genus Agrilus, from which it differs by the much longer epipleura.

## Nelsonagrilus typicus sp. nov. (Figs. 1–5)

Description of Holotype. Small, length 3.9 mm, width 1.1 mm; body elongate, subcylindrical; cupreous with golden-red reflections on head and pronotum; dorsal surface with sparse, whitish, semirecumbent pubescence.

Head large, strongly convex; vertex coarsely punctate, with weak median sulcus; frons flat in lateral view, sparsely, faintly punctate and distinctly shagreened; clypeus strongly transverse, apically subtruncate. Eyes prominent, strongly projecting beyond outline of head; inner margins subparallel; antennomeres 1–2 fusiform, subequal in length, 3 conical, 4–10 serrate, 11 suboval.

Pronotum width to length ratio 1.46, slightly wider than elytra, widest at anterior one-third; anterior margin distinctly lobed medially; sides arcuate, slightly emarginate at obtuse posterior angles. Disk densely, superficially punctate, with distinct anteromedial gibbosity, narrowly impressed laterally, widely posteriorly; prehumeral carinae very fine, piliform, emerging from posterior angle, subconfluent with lateral margin, obsolete and more distant from lateral margin in anterior one-third of pronotum. Scutellum flat, transverse carina lacking.

Elytra subparallel in basal two-thirds, weakly converging in apical one-third; apices separately, broadly arcuate with denticulate margin; disk granular, entirely, sparsely pubescent with whitish, long, semierect hairs; humeri without carina; epipleura very long, extending to middle of basal ventrite (Fig. 2).

Prosternal lobe strongly arcuate with very faint emargination at apex; prosternal process flat, subparallel between coxae, sinuately acuminate apically. Last abdominal ventrite narrowly, arcuately emarginate at apex. Ovipositor membranous, short, subquadrate, with distinct styli on apical margin (Fig. 5).

Specimens Examined. Holotype  $^{\circ}$  (EJCB): "LAOS C., Bolikhamsai pr., BAN NAPE env. 7–16.V.2004, alt. 400  $\pm$  100 m, 18°20′ N, 105°08′ E, E. Jendek & O. Šauša leg.".

Etymology. The specific epithet reflects the status of this species as the type species of the genus Nelsonagrilus.

Remarks. Male unknown.

## Nelsonagrilus bambula sp. nov.

(Fig. 6)

Description of Holotype. Small, length 4.0 mm, width 1.15 mm; body subcuneiform, subcylindrical; black with strong silky tinge; dorsal surface with distinct whitish, semierect pubescence.

Head large, strongly convex in dorsal view, subopisthognathous in lateral view, superficially punctato-reticulate; vertex with very faint medial impression; frons flat. Eyes smaller, feebly convex, not projecting beyond outline of head, inner margins subparallel.

Pronotum width to length ratio 1.46, slightly wider than elytra, widest at middle; anterior lobe broad; posterior margin bisinuate; sides evenly arcuate; posterior angles subrectangular. Disk densely, superficially foveolate; with distinct anteromedial gibbosity, feeble lateral and deep posterior impressions; prehumeral carinae piliform near posterior angle, obsolete in anterior half, confluent with posterior two-thirds of lateral margin, more distant in anterior one-third. Marginal and submarginal carinae strongly convergent, confluent in posterior one-fifth of pronotal length. Scutellum with flat mesa on disk.

Elytral apices conjointly arcuate, subtruncate, with fine marginal denticulation; surface evenly covered with whitish pubescence that is caducous in lateroapical portions; humeri without carina; epipleura very long, extending to apical margin of basal ventrite. Prosternal lobe entire; prosternal process with sides convergent between procoxae, slightly impressed on disk; last ventrite broadly arcuate apically; sternal groove on apex of last ventrite widely arcuately emarginate, distant from margin. Ovipositor short, subquadrate with distinct styli.

Specimens Examined. Holotype  $\,^\circ$  (EJCB): "LAOS-CE., 1–18.v.2001, Boli Kham Xai prov.,  $18^\circ21'$  N,  $105^\circ04'$  E, BAN NAPE (8 km NE),  $\sim600$  m, Pacholátko leg."

Etymology. The specific epithet is a random combination of letters. Remarks. Male unknown.

## Nelsonagrilus suzannae sp. nov.

(Fig. 7)

Description of Holotype. Length 4.45 mm, width 1.25 mm; body elongate, subcylindrical; frons golden-purple, elytral apices dark purple-brown, remainder of body black-green with strong silky reflections; dorsal surface with dense, whitish, semierect pubescence.

Head strongly convex, battering ram-like in dorsal view, subopisthognathous in lateral view; frons with weak median carina, faintly, sparsely punctate; lower portion of vertex finely, transversely rugose and shagreneed. Eyes prominent, strongly convex, projecting beyond outline of head, inner margins subparallel.

Pronotum width to length ratio 1.38, about as wide as elytra at humeri, widest at middle; anterior margin distinctly lobed medially, lobe extending well beyond anterior angles; sides feebly arcuate, attenuate before subrectangular posterior angles. Disk strongly concave, faintly foveo-punctate, anteromedial gibbosity

moderately demarcated by laterobasal impressions; prehumeral carinae emerging from posterior margin near angles, rib-like, feebly arcuate, distant from and not confluent with lateral margin in apical one-third of pronotum. Scutellum flat, with obsolete transverse carina.

Elytra convex, widest at humeri; apices broadly, shallowly, separately arcuate, with finely serrate margin; surface granulate; humeri without carina; epipleura very long, extending to apical margin of basal ventrite.

Prosternal lobe entire; prosternal process flat with sides convergent between coxae, apex sharply attenuate; last ventrite broadly subtruncate apically, with weak emargination on tip; sternal groove on apex of last ventrite widely arcuately emarginate, distant from margin. Ovipositor short, subquadrate with distinct styli.

Specimens Examined. Holotype ♀ (EJCB): "E SUMATRA, RIAU prov., BUKIT TIGPULUH N.P., 0°50′ S, 102°26′ E, 18–25.i.2000".

Etymology. The specific epithet of this species is dedicated to Miss Zuzana Bohumelová (Bratislava).

Remarks. Male unknown.

### A KEY TO THE SPECIES OF NELSONAGRILUS

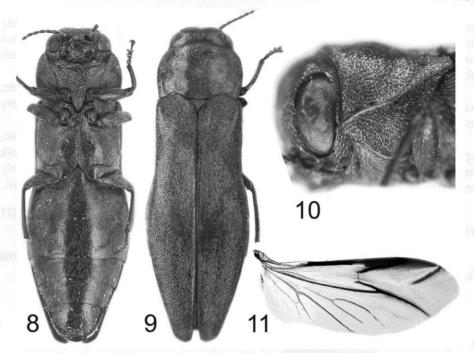
## Dorochoviella gen. nov.

(Figs. 8-11)

Type species: Dorochoviella kunashirensis sp. nov. (present designation)

*Diagnosis*. Medium-sized, clypeus deeply emarginate; eyes very small; submarginal pronotal carinae obsolete; prosternum distinctly sunken relative to proepisterna; proepisternal corners projecting.

Description. Body elongate, subcylindrical. Head distinctly narrower than pronotum; clypeus transverse, nearly completely divided by subtriangular emargination, separated from frons by transverse protuberance, lateral portions of clypeus with sulcus for reception of basal antennomere in repose. Eyes very small, with circumocular groove on inner margin; antennae serrate from antennomere 4. Pronotum with anterior margin lobed, posterior margin bisinuate; lateral margins evenly arcuate, posterior angles obtuse. Disk strongly convex; impressed laterally and posteriorly; prehumeral carinae present, not confluent with marginal carinae near apex. Submarginal carinae obsolete, only faintly angulately indicated. Scutellum subtriangular, sharply acuminate posteriorly, transverse carina lacking. Elytra widest at apical one-third; apices separately arcuate; epipleura very short. Prosternum distinctly declivous relative to proepisterna, proepisternal corners



Figures 8–11. Dorochoviella kunashirensis Jendek, female holotype (6.8 mm): 8) ventral habitus; 9) dorsal habitus; 10) lateral pronotal view; 11) right wing.

distinctly projecting; prosternal lobe narrow; prosternal process cuneiform. Abdomen with 4 ventrites; sternal groove on apex of last ventrite closed to margin, faintly incurved on tip. Metafemora not stout; metatibiae with long comb of setae on outer apical margin; tarsi shorter than tibiae on all legs; pretarsi subequal in length or longer than basitarsi; claws appendiculate; metatarsomere 1 longer than following 3 together.

Etymology. The name of this new genus is feminine and dedicated to Mr. Dorochov, the collector of the holotype.

Remarks. Dorochoviella is closely related to Agrilus by its proximally open radial cell (Fig. 11); presence of prehumeral carinae; short, subtriangular epipleura; posteriorly acuminate scutellum; form of the sternal lobe and long metatarsomere 1. It differs by the obsolete submarginal carina and distinctly sunken prosternum relative to the proepisterna.

## Dorochoviella kunashirensis sp. nov. (Figs. 8-11)

Description of Holotype. Medium sized, length 6.8 mm, width 2.2 mm; elongate, subcylindrical; head and pronotum golden-orange, elytra golden-green, ventral side blackish with silky reflections; head and pronotum glabrous, elytra with short, sparse, white pubescence that is caducous in epipleura and apical one-third of disk.

Head small, distinctly narrower than pronotum; vertex convex, densely rugosopunctate, with a fine median impression that becomes subtriangular in middle of frons; lower frons coarsely, transversely rugoso-punctate; clypeus strongly transverse, nearly completely divided by deep, median, subtriangular emargination, separated from epistoma above by transverse protuberance. Eyes very small relative to surface area of head in dorsal view, inner margins subparallel; antennomeres 1-2 fusiform, subequal in length, 3 conical, serrate from antennomere 4.

Pronotum width to length ratio 1.5, about as wide as elytra at humeri, widest at middle; anterior margin distinctly lobed medially; posterior margin bisinuate; sides evenly arcuate, posterior angles obtuse. Disk transversely rugoso-punctate, with wide basal impression and narrow, deep lateral impressions, strongly convex; prehumeral carinae piliform, straight, emerging from posterior margin near angles, obsolete in apical half of pronotum, not confluent with lateral margin. Submarginal carina obsolete, only faintly angulately indicated (Fig. 10). Scutellum subtriangular, sharply acuminate posteriorly, transverse carina lacking.

Elytra convex, widest in apical one-third; surface granulose; apices separately broadly arcuate, with fine, denticulate margin; humeri without carina; epipleura very

short, subtriangular, extending to basal margin of metacoxal plates.

Prosternum distinctly sunken relative to proepisterna, apical proepisternal corners distinctly projecting; prosternal lobe narrow, medially arcuately emarginate; prosternal process flat, cuneiform, sharply acuminate at apex. Last abdominal ventrite broadly subtruncate: sternal groove closely bordering apex of last ventrite, faintly incised at apex.

Specimens Examined. Holotype ? (ZIN): "[Russia, Kuril Archipelago] o. Kunashir Apëkhino Dorochovy [leg.?] 10.VIII.[19]66 [in Russian] \ Typ. Ag. 564-91 \cdot ".

Etymology. Named in reference to the type locality of Kunashir Island.

Remarks. Male unknown. The unique female holotype was originally labeled by Alexeev as "Dorochoviella kunashirense" but was never described. I have kept the original name of this remarkable species, though in corrected form. The holotype is partly damaged; terminal antennomeres of both antennae; right mesotibia and mesotarsus; right metatarsus and genitalia are missing. The sex of the holotype is inferred from the pubescence on the ventral surface (a presumed secondary sexual character) and from the inscription "?" on the label.

#### ACKNOWLEDGMENTS

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#### LITERATURE CITED

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