

Review of the subgenus *Helopondrus* Reitter, 1922
of the genus *Nalassus* Mulsant, 1854
(Coleoptera: Tenebrionidae) of Turkey

Обзор подрода *Helopondrus* Reitter, 1922
рода *Nalassus* Mulsant, 1854 (Coleoptera: Tenebrionidae) Турции

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ABSTRACT. Three species of the subgenus *Helopondrus* of the genus *Nalassus* are known in the fauna of Turkey. *N. adzharicus* is new record for Turkey. The new combination *Nalassus (Helopondrus) planivittis*, **comb. n.** (from the genus *Cylindrinotus*) is established. *Nalassus (Helopondrus) clavicornis*, **sp. resurr.** is a good species raised from a junior synonym of *Nalassus (Helopocerodes) faldermanni*. A redescription of each species are given, and notes on distribution and taxonomic history. A key to the species of *Helopondrus* of Turkey is provided. The lectotypes of *N. planivittis* and *N. clavicornis* are designated.

РЕЗЮМЕ. В фауне Турции известно 3 вида подрода *Helopondrus* рода *Nalassus*. *N. adzharicus* — новый для фауны Турции вид. Устанавливается новая комбинация: *Nalassus (Helopondrus) planivittis* (Allard, 1876), **comb. n.** (из рода *Cylindrinotus*). *Nalassus (Helopondrus) clavicornis*, **sp. resurr.** — хороший вид, восстановленный из младшего синонима *Nalassus (Helopocerodes) faldermanni*. Приводятся переописание видов, данные о распространении и истории изучения каждого вида, а также определительная таблица представителей *Helopondrus* Турции. Обозначены лектотипы *N. planivittis* и *N. clavicornis*.

Introduction

Most species of the subgenus *Helopondrus* Reitter, 1922 of the genus *Nalassus* Mulsant are distributed in the Caucasus and Iran. One species inhabits Europe (France, Italy), and one inhabits southern Turkmenistan (Kopet-Dagh), one widespread species inhabits the south of the European part of Russia, Ukraine, Moldova and Western Kazakhstan.

Type species of the subgenus, *Nalassus sareptanus* (Allard, 1876), was designated by Nabozhenko [2001].

Helopondrus was described by Reitter [1922] in the genus *Cylindrinotus* Faldermann, 1837. Originally Reitter included in the subgenus 7 species. Later Medvedev

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[1999] described a further species from Kopet-Dagh. Later, *Helopondrus* was included in the genus *Nalassus* Mulsant, 1854, a number of species were synonymized, and a new species from the Caucasus [Nabozhenko & Dzhabazishvili, 2001; Nabozhenko, 2001] was described.

Before now, only two subgenera of *Nalassus* were known in the fauna of Turkey: the nominative subgenus and *Helopocerodes* Reitter, 1922. Representatives of *Helopondrus* were not known from Turkey. Study the types of Allard [1876] showed that the some taxa (including some previously synonymized with other taxa), described from Turkey, should be referred to the subgenus *Helopondrus*. One species, described from Georgia, is found in border areas of Turkey.

The following collection codens are used throughout the text: BMNH — The Natural History Museum, London, England; HNHM — Hungarian Natural History Museum, Budapest, Hungary; ZIN — Zoological Institute of Russian Academy of Sciences, St.-Petersburg, Russia; CF — Collection of Dr. Julio Ferrer, Haninge, Sweden.

Review of species

Nalassus (Helopondrus) adzharicus Nabozhenko et Dzhabazishvili, 2001

Nalassus (Helopondrus) adzharicus Nabozhenko et Dzhabazishvili, 2001: 92

Nalassus (Helopondrus) adzharicus: Nabozhenko, 2001: 655

MATERIAL (excluding types): Artvin, Bortka [Borçka], Karcal Dali, Otinga Yayla, 2100–2500 m h, 17.VII.1987, N. Staven leg. (CF).

Description, figures, type material and ecology cited in the papers of Nabozhenko & Dzhabazishvili [2001] and Nabozhenko [2001]. Holotype and main part of paratypes in ZIN, 1 paratype in Museum Histoire Naturelle (Paris), 1 paratype in HNHM, 1 paratype in BMNH, 5 paratypes in Institute of Zoology of Georgia (Tbilisi).

DISTRIBUTION. New record for Turkey. Until now the species was only known from the type locality (Georgia, Adzharia, Meskhetsky ridge, Taginauri).

VARIABILITY. The Turkish population differs from the Adzharian population in having lighter colour (dark-brown, instead of black), and also having margins of pronotum weakly rounded in the anterior part. The Adzharian population has straight or weakly emarginated margins of the pronotum in the anterior part (as a rule, in female).

Nalassus (Helopondrus) planivittis
(Allard, 1876), **comb. n.**

Figs 1–4.

Stenomax planivittis Allard, 1876: 39;
Stenomax planivittis: Allard, 1877: 15, 145;
Helops (Odocnemis) planivittis: Sedlitz, 1896: 726 (as synonym of *Helops (Odocnemis) nigropiceus* Küster, 1850);
Stenomax planivittis: Reitter, 1902: 220 (as resurrected species);
Cylindronotus (Omaleis) planivittis: Reitter, 1922: 138 nota.
TYPE MATERIAL. Lectotype (male) designated here: “Trebizonde”, “*Stenomax planivittis*” (yellow label), “*Stenomax planivittis* type All.”, “F. Bates Coll. 81–19.” (BMNH).

DESCRIPTION OF LECTOTYPE. Body dark-brown, moderately shiny; antennae, tibiae, tarsi and labrum light brown. Clypeus weakly bisinuated. Head widest at level of eyes. Eyes large, convex. Ratio of head width at eyes to distance between eyes 1.7. Genae weakly rounded only at base and not rounded further up to clypeus. Outer margin of head at the meeting-point of gena and clypeus without emargination at each side. Punctuation of head dense, moderately coarse. Punctures longitudinally elongated on frons and near eyes. Antennae moderately long, their three apical segments extending beyond base of pronotum.

Pronotum weakly transverse (1.26 times as wide as long), 1.48 times as wide as head, widest in the middle. Outer margins of pronotum weakly, widely evenly rounded, only obsoletely emarginated near base. Base weakly trisinuated, anterior margin weakly rounded and emarginated near anterior angles. Anterior angles visibly projected forward, deflexed, shortly rounded at apex. Posterior angles obtuse, shortly rounded at apex. All sides of pronotum margined. Disc of pronotum evenly convex. Punctuation of pronotum moderately coarse and moderately dense. In the middle and near margins punctuation less dense, punctures round. Punctuation more dense on the lateral side from center of disc, punctures here longitudinally elongated. Propleura not flattened, with narrow longitudinal rugae. Prosternal process weakly convex, with small projection of edging on the apex.

Elytra elongated (1.7 times as long as wide), 1.26 times as wide as pronotum. Outer margin of pronotum very weakly rounded. Punctures in striae on elytra merged into entire furrows. Intervals flattened, with fine distinct punctuation. Punctuation of metasternal episterna longitudinally elongated. Mesosternal sternite with usual punctuation, which is denser laterally and more sparse in the middle.

Abdominal sternites with fine, dense punctuation in the middle and more coarse and sparse laterally. 1st abdominal sternite with very dense hair spot of light setae. Anal sternite with hair spot on the apex, completely bordered on butt-end.

Trochantins of all legs with 2–3 long erect setae. Hind and middle femora with line of recumbent setae on inner side. Tibia straight, densely pubescent on inner side. Underside of tarsi densely covered with golden setae.

Body length — 8.2 mm, width — 3.5 mm.

DISTRIBUTION. The species is known only from holotype from Trabzon (Northeast Turkey). Possibly, it is associated with wood. Allard also records *N. planivittis* for Greece (possibly referring to another species).

TAXONOMIC NOTES. This species was cited, by Allard [1876, 1877], from “Trebizonde” (now Trabzon) and

“Grèce”. Possibly the lectotype of *Nalassus planivittis* Allard, 1876 remained unstudied since its original description; therefore the species has been included with an erroneous diagnosis in various genera and subgenera of Helopini. Allard [1876, 1877] included this species in the genus *Stenomax* Allard, 1876. Later Seidlitz [1896] synonymized it with *Odocnemis nigropiceus* (Küster, 1850). However Reitter [1902] resurrected *N. planivittis* in the genus *Stenomax* on the basis of the metallic shine of the elytra. Reitter compared this species with *Nalassus (Caucasonotus) glorificus* (Seidlitz, 1896) and to the uncertain species *Nalassus ponticus* (Seidlitz, 1896). However, later, Reitter [1922] included *N. planivittis* in the mixed subgenus *Omaleis* Allard, 1876 (now a junior synonym of the genus *Odocnemis* Allard, 1876), but cited it in a footnote as a species uncertain for him.

Study of the lectotype of this species has shown that it belongs to the subgenus *Helopondrus* of the genus *Nalassus*. The species has the following morphological characters characteristic for *Helopondrus*: antennae of male not thickened, pronotum with longitudinal elongated punctuation on each side from the disc center, parameres short, not strongly sclerotized, flattened dorso-ventrally. Other characters typical of the genus *Nalassus*: absence of grains or granules at elytral apex, absence of grains or teeth on tibia of a male, fore tarsi not expanded, 8th interval convex and merged with elytral margin at apex.

The last time this species was cited, by Reitter [1922], it was included in the genus *Cylindrinotus* Faldermann, 1837, subgenus *Omaleis* Allard, 1877. Thus, a new combination is established: *Nalassus (Helopondrus) planivittis* Allard, 1876, **comb. nov.**

Nalassus (Helopondrus) clavicornis
Allard, 1876, **spec. resurr.**

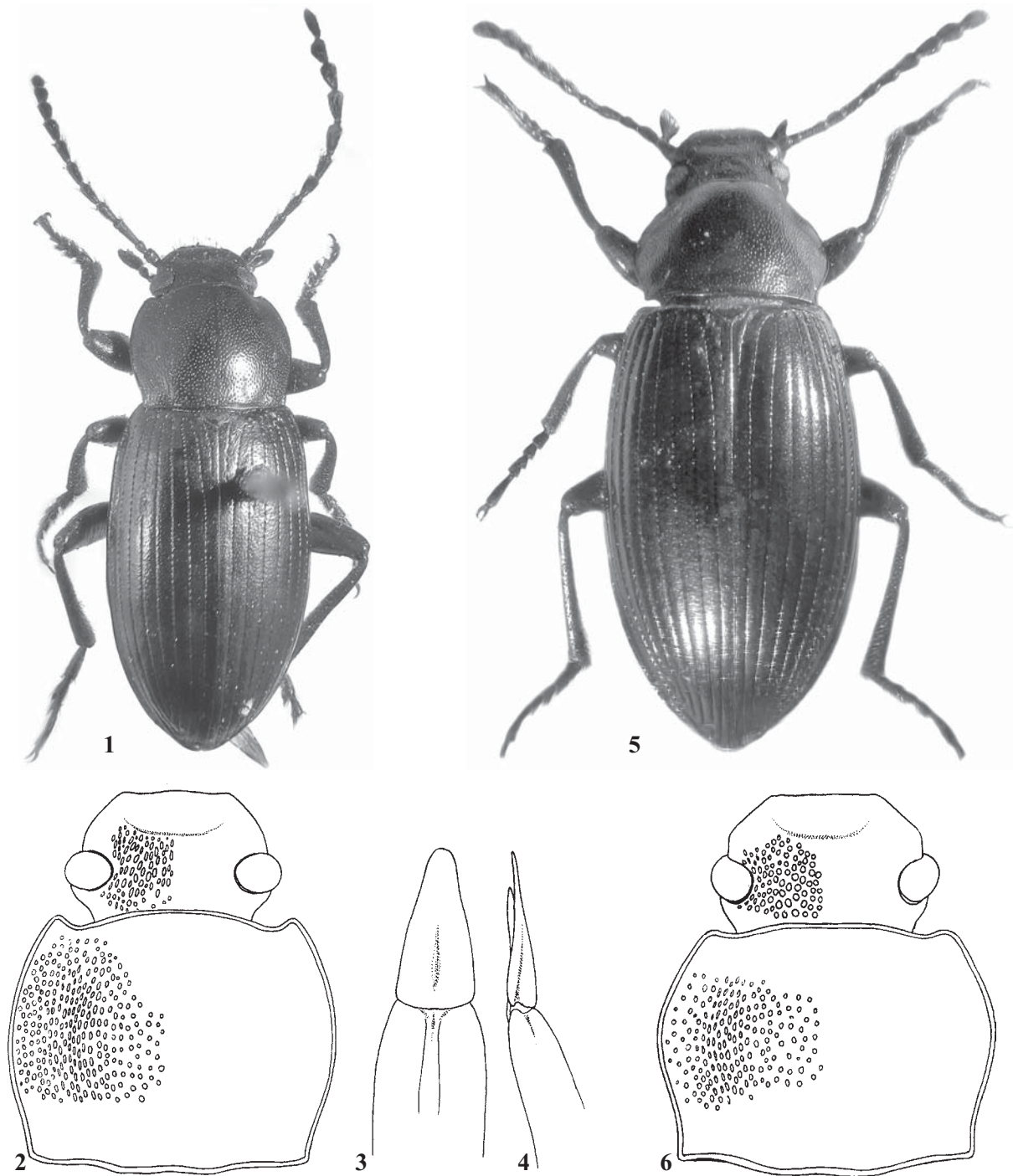
Figs 5–6.

Nalassus clavicornis Allard, 1876: 20;
Xanthomus clavicornis: Allard, 1877: 31, 118;
Helops (Xanthomus) clavicornis: Seidlitz, 1896: 740;
Cylindronotus (Helopocerodes) clavicornis: Reitter, 1922: 145;
Cylindronotus (Helopocerodes) clavicornis: Iablokoff-Khnozorian, 1964: 300, 301;
Nalassus (Helopocerodes) clavicornis: Nabozhenko, 2001: 633 (as synonym of *Nalassus (Helopocerodes) faldermanni* (Dejean in Faldermann, 1837)).

MATERIAL. Lectotype (female), designated here: “Kurdistan”, “*Nalassus clavicornis*” (yellow label), “*Nalassus clavicornis* type All.”, “F. Bates Coll. 81–19.” (BMNH).

DESCRIPTION OF LECTOTYPE. Body brown, moderately shining. Anterior margin of clypeus straight. Head widest at level of eyes. Eyes large, moderately convex. Ratio of head width at eyes to distance between eyes 1.57. Sides of genae parallel at base then slantingly converging to clypeus, here their outer margin straight. Outer margin of head at the meeting-point of gena and clypeus without emargination. Punctuation of head dense, moderately coarse (diameter of punctures 1.5–2 times the distance between them). Punctures round, near eyes longitudinally elongated. Antennae relatively long, their 3 apical segments extending beyond base of pronotum.

Pronotum weakly heart-shaped, transverse (1.35 times as wide as long), widest in the middle. Pronotum 1.57 times as wide as head at eyes. Outer margin of pronotum evenly rounded in the middle, weakly rounded in anterior part and widely emarginated near base. Anterior margin weakly rounded, weakly widely emarginated near anterior angles. Base weakly trisinuated. Anterior angles of pronotum weakly projecting, rectangular, rounded on the apex; posterior angles weakly obtuse, distinct on the apex, not rounded. All margins



Figs 1-6. *Nalassus* spp., lectotypes: 1-4 — *N. planivittis* (Alld.); 5-6 — *N. clavicornis* (Alld.); 1, 5 — total view; 2, 6 — head and pronotum; 3-4 — parameres; 1-3, 5-6 — dorsal view; 4 — lateral view.

Рис. 1-6. *Nalassus* spp., лектотипы: 1-4 — *N. planivittis* (Alld.); 5-6 — *N. clavicornis* (Alld.); 1, 5 — общий вид; 2, 6 — голова и переднеспинка; 3-4 — парамеры; 1-3, 5-6 — вид сверху; 4 — вид сбоку.

of pronotum narrowly edged. Punctuation of pronotum not even, moderately coarse, not dense in the middle of disc (diameter of punctures approximately equal to distance between them), punctures round; dense laterally (diameter of punctures greater than distance between them), punctures longitudinally elongated. Punctuation near outer margins as in the middle. Disc of pronotum visibly evenly convex, only

slightly depressed laterally and in the base near posterior angles. Propleura with narrow longitudinal rugae, their outer margin slightly separate from the surface. Prosternal process behind coxae weakly convex, without small projection of edging.

Elytra convex, elongated (1.6 times as long as wide), 1.3 times as wide as pronotum, widest in the middle, their outer

margin evenly rounded. Intervals weakly convex, very finely and sparsely punctate. Punctures in striae on elytra merged into entire furrows.

Abdominal sternites with fine and dense puncturation, anal sternite edged on the apex.

Femora almost naked, only with short recumbent hairs. Tibia straight, covered on inner side with golden hairs. Tarsi normal, with not very dense hair brushes on undersides.

Body length — 7.9 mm, width — 3.2 mm.

DISTRIBUTION. The species is known to me only from the lectotype from “Kurdistan”. The holotype of *Cylindrinotus batesi* Allard, 1876 which is also stored in collection of F. Bates has the same locality label written in the same handwriting. As *C. batesi* is endemic to Northeast Turkey, we have reason to believe that *Nalassus clavicornis* may have been collected by the same collector in Northeast Turkey.

TAXONOMIC NOTES. This species was cited, by Allard [1876], from “Russia méridionale” and “Tiflis”. Later Allard [1877] cited it from “Kurdistan” and “Tiflis”. Possibly nobody has studied the lectotype of *Nalassus clavicornis* Allard, 1876, since the original description, as the further redescrptions of Seidlitz [1896], Reitter [1922] and Iablokoff-Khnzorian [1957] absolutely do not conform to the lectotype of *Nalassus clavicornis*. Reitter [1922] and Iablokoff-Khnzorian [1964] included this species in the subgenus *Helopocerodes* Reitter, 1922. Reitter [1922] compared *Nalassus clavicornis* with *Nalassus (Helopocerodes) faldermanni* (Dejean in Faldermann, 1837) and *Nalassus eligius* (Reitter, 1922) (now a synonym of *N. faldermanni*) on habitus, form of pronotum and puncturation. Iablokoff-Khnzorian [1964] compared *N. clavicornis* with *N. faldermanni* and *N. (Helopocerodes) cyrensis* (Bogatshov, 1946) on the form of the pronotum and elytra.

On the basis of the not very clear original description and subsequent redescrptions, the species was synonymised with *Nalassus (Helopocerodes) faldermanni* (Dejean in Faldermann, 1837) [Nabozhenko, 2001]. Study of the lectotype showed that this taxon is a valid species of the subgenus *Helopondrus* Reitter, 1922. *N. clavicornis* has characters typical for *Nalassus* (see taxonomic notes on *N. planivittis*), and also characteristic for *Helopondrus*: pronotum weakly heart-shaped, with longitudinal elongated puncturation on each side of the disc center.

Thus *Nalassus (Helopondrus) clavicornis* Allard, 1876, **spec. resurr.** is a valid taxon.

KEY TO SPECIES OF THE SUBGENUS *HELOPONDUS* OF THE GENUS *NALASSUS* OF TURKEY

- 1(2). Anterior angles of pronotum strongly projecting, acute, pointed at apex. *N. adzhariensis*
 2(1). Anterior angles of pronotum not projecting or moderately projecting, straight or obtuse, rounded at the apex.

3(4). Anterior angles of pronotum moderately projecting, straight, narrowly rounded. Head at front with longitudinally elongated puncturation. Gena smoothly rounded, not parallel. *N. planivittis*

4(3). Anterior angles of pronotum not projecting, obtuse, widely rounded on apex. Head at front with usual puncturation of round punctures. Genae angled, parallel at the base. *N. clavicornis*

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References

- Allard E. 1876. Revision des Helopides vrais de Lacordaire // L'Abeille, Journal d'Entomologie. T.14. P.1–80.
 Allard E. 1877. Revision des Helopides vrais // Mitteilungen der Schweizerischen Entomologischen Gesellschaft. T.5. P.13–268.
 Iablokoff-Khnzorian S.M. 1964. Bemerkungen über einige Reiter'sche Typen aus dem Ungarischen Naturwissenschaftlichen Museum (Coleoptera) // Rovartani közlemények (Folia entomologica Hungarica). Vol.17. No.20. P.293–315.
 Medvedev G.S. 1999. A new species of tenebrionid beetle of the genus *Cylindronotus* from Turkmenistan (Coleoptera: Tenebrionidae) // Zoosystematica Rossica. T.7. No.1. P.138.
 Nabozhenko M.V. & Dzhabazishvili M.Ya. 2001. [New Species of *Nalassus* Muls. (Coleoptera, Tenebrionidae) from Georgia] // Entomologicheskoe Obozrenie. Vol.80. No.1. P.90–95 [in Russian, English translation in Entomological Review, 2001. Vol.81. No.3. P.284–288].
 Nabozhenko M.V. 2001. [On the classification of the tenebrionid tribe Helopini, with a review of genera *Nalassus* Mulsant and *Odocnemis* Allard (Coleoptera, Tenebrionidae) of the European part of the CIS and the Caucasus] // Entomologicheskoe Obozrenie. Vol.80. No.3. P.627–668 [in Russian, English translation in Entomological Review, 2001. Vol.81. No.8. P.909–942].
 Reitter E. 1902. Verschiedenes über die Coleopteren der Tenebrioniden-Abtheilung Helopina // Deutsche Entomologische Zeitschrift. Jahr.1901. S.209–224.
 Reitter E. 1922. Bestimmungs-Tabellen der europäischen Coleopteren. Heft 93. Tenebrionidae. 17. Teil: Unterfamilie Helopina, II // Wiener Entomologische Zeitung. Bd.39. S.113–171.
 Seidlitz G. von 1893–1898. Tenebrionidae. P.201–400 (1893), P.401–608 (1894), 609–800 (1896), 801–877 (1898) // Kiesenwetter H. von & Seidlitz G. von: Naturgeschichte der Insecten Deutschlands. Erste Abteilung Coleoptera. Bd.5. Hf.8. Berlin: Nicolaische Verlags-Buchhandlung. XXVIII+877s.