

Two new subspecies of *Eodorcadion* Breuning, 1947 (Coleoptera, Cerambycidae) from Helan Mountains (Helanshan), Inner Mongolia

Два новых подвида *Eodorcadion* Breuning, 1947 (Coleoptera, Cerambycidae) с гор Хэлань (Хэланьшань) во Внутренней Монголии

M. Lin*, M.L. Danilevsky**
М. Лин*, М.Л. Данилевский**

* Key Laboratory of Zoological Systematics and Evolution, Institute of Zoology, Chinese Academy of Sciences, 1 # Beichen West Road, Chaoyang, Beijing 100101 China. E-mail: linmeiyang@ioz.ac.cn.

** A.N. Severtzov Institute of Ecology and Evolution, Russian Academy of Sciences, Leninsky prospect 33, Moscow 119071 Russia. E-mail: danilevskym@rambler.ru, danilevsky@cerambycidae.net.

** Институт проблем экологии и эволюции им. А.Н. Северцова РАН, Ленинский просп. 33, Москва 119071 Россия.

Key words: Cerambycidae, *Eodorcadion*, taxonomy, new subspecies, China, Alashan.

Ключевые слова: Cerambycidae, *Eodorcadion*, таксономия, новые подвиды, Китай, Алашань.

Abstract. *Eodorcadion* (*Ornatodorcadion*) *jakovlevi fangzhoui* Lin et Danilevsky, **ssp.n.** and *E. (O.) kaznakovi zhilini* Lin et Danilevsky, **ssp. n.** are described from Helanshan, Inner Mongolia, China. A morphological diagnosis of *E. (O.) kaznakovi kaznakovi* (Suvorov, 1912) is provided.

Резюме. *Eodorcadion* (*Ornatodorcadion*) *jakovlevi fangzhoui* Lin et Danilevsky, **ssp.n.** и *E. (O.) kaznakovi zhilini* Lin et Danilevsky, **ssp.n.** описаны с гор Хэлань провинции Внутренняя Монголия в Китае. Уточнена морфологическая характеристика *E. (O.) kaznakovi kaznakovi* (Suvorov, 1912).

The study of new Cerambycidae materials recently collected in Alashan Mountains of China allows to identify two new *Eodorcadion* taxa.

Several abbreviations of collections are used in the text: IZAS — Institute of Zoology, Chinese Academy of Sciences, Beijing; MD — collection of M.L. Danilevsky, Moscow, Russia; DEI — Deutsches Entomologisches Institut, Eberswalde, Germany; MHNL — Muséum d'Histoire Naturelle, Lyon, France; JV — collection of Jiří Vorišek, Jirkov, Czechia; SM — collection of S. V. Murzin, Moscow, Russia; ZIN — Zoological Institute of Saint-Petersburg, Russia; ZMM — Zoological Museum of Moscow State University, Russia.

Eodorcadion (*Ornatodorcadion*) *jakovlevi fangzhoui* Lin et Danilevsky, **ssp.n.**

Plate VIII: 1–2.

Type locality. China, Inner Mongolia, Helanshan, Hongyao-gou, 105.81687° E, 38.47523° N, 1880m.

Description. The new taxon does not look similar to the nominative subspecies because of much darker red-brown antennae and legs and strongly angulated humeri; reddish

head areas also much darker, nearly black; lateral prothoracic spines longer and sharper; pronotum coarsely rugose; elytra with roughly rugose humeral carinae; dorsal elytral surface roughly punctured, nearly mat, without strong luster; the distance between dorsal and humeral white stripe as wide as in the nominative subspecies, or a little narrower (as in holotype, Plate VIII: 1); no traces of internal dorsal stripe present, but in the nominative subspecies basal parts of internal dorsal elytral stripes often distinct; in female all white elytral stripes (Plate VIII: 2) are accompanied by narrow brownish stripes; length of males: 16.5–17.0 mm, width: 5.6–6.0mm; length of females: 18.5–21.0 mm, width: 7.0–7.5 mm.

Materials. *E. j. fangzhoui* ssp.n.: holotype, ♂ [IOZ(E) 1899805]; China, Inner Mongolia, Helanshan, Hongyao-gou, 105.81687° E, 38.47523° N, 1880 m, 12.VIII.2010, Fangzhou Ma leg. — IZAS; 4 paratypes from same locality with same date: 1♂ [IOZ(E)1899806] and 1♀ [IOZ(E)1899803], Fangzhou Ma leg. — IZAS; 1♂ [IOZ(E)1899804] and 1♀ [IOZ(E)1864919], Meiyang Lin leg. — MD.

E. j. jakovlevi (Suvorov, 1912) (see pages: 132, 186, figs 31, 1–3 by Danilevsky [2007]): 3♂♂, 2♀♀, syntypes of *Neodorcadion jakovlevi* Suvorov, [«Alashan mountains, Khoten-Gol defile, 5–10.6.1908, Kozlov's expedition»][in Russian] — ZIN; 2♂♂ syntypes of *Neodorcadion jakovlevi* Suvorov with same label — JV; 1♂ syntype of *Neodorcadion jakovlevi* Suvorov with same label — MHNL; 1♂, syntype of *Neodorcadion jakovlevi* Suvorov, with similar label, but the date is «5–10.6.1909» (lapsus calami?) — MD; 1♂, syntype of *Neodorcadion jakovlevi* Suvorov, «Gobi, Alashan, 12.6.1908 Kozlov» — DEI; 1♂, syntype of *Neodorcadion jakovlevi* Suvorov, «Mongolia, Alashan» — MHNL; 2♂♂, 2♀♀, China, Inner Mongolia, Helanshan, Shuimogou, 38.93726° N, 105.89746° E, 2025 m, 27.7.2010, Meiyang Lin leg. — MD; 3♂♂, 3♀♀, China, Inner Mongolia, Helanshan, Shatangzi, 33.86671° N, 105.91006° E, 2326 m, 29.7.2010, Meiyang Lin leg. — MD; 3♂♂, 1♀ with same label — SM.

Remark. The new series of *E. j. jakovlevi*, collected in 2010 includes males of about same size as known before, but certain females were considerably bigger up to 22 mm.

Etymology. The new taxon is named in honor of Mr. Fangzhou Ma, who collected the types.

Eodorcadion (Ornatodorcadion) kaznakovi
zhilini Lin et Danilevsky, **ssp.n.**

Plate VIII: 3–5.

Type locality. China, Inner Mongolia, Helanshan, Shuimogou, 105.84725° E, 38.96351° N, 1807 m.

Description. The males (females of the species remain unknown) of the new subspecies differs from the males of the nominative subspecies by often reddish legs and basal antennal joints (in two specimens of five known, Plate VIII: 4); besides, internal dorsal stripe always present, sometimes as short basal rudiments (as in holotype, Plate VIII: 3) or often nearly complete (Plate VIII: 4–5); the area between humeral and external dorsal stripe can be about as wide as humeral stripe (as in holotype), or much narrower, nearly indistinct (Plate VIII: 5); length of males: 14.0–15.5 mm, width: 5.1–5.2 mm.

A series of 6 males (Plate VIII: 6–9) of *E. k. kaznakovi* collected by S. Murzin in 2011 just at the type locality in the nearest environs of Bayn Hot allows to make more exact the morphological diagnosis of that very rare and poorly known species: internal dorsal elytral stripe usually totally absent, the area between humeral and external dorsal stripe is usually very narrow, pale elytral pubescence is always poorly developed, much less than in *E. k. zhilini* ssp.n.; the length of new specimens is 12.5–16.0mm

Materials. *E. k. zhilini* ssp.n.: holotype, ♂ [IOZ(E)1899802]; China, Inner Mongolia, Helanshan, Shuimogou, 105.84725° E, 38.96351° N, 1807 m, 13.8.2010, Zhilin Chen leg. — IZAS; 4 paratypes from same locality with same date: 1♂ [IOZ(E)1899800], Zhilin Chen leg. — IZAS; 2♂♂ [IOZ(E)1899801 & IOZ(E)1899799], Meiyong Lin leg. — IZAS; 1♂ [IOZ(E)1864920], Meiyong Lin leg. — MD.

E. k. kaznakovi (Suvorov, 1912) (see pages: 130, 186, figs 30, 1–4 by Danilevsky [2007]): 2♂♂, syntypes, each with two labels: (1) [«Alashan, Dyn-ian-in, 26.6.1908, Kozlov's exp.»] [in Russian], (2) «*Neodorcadion Kaznakovi*, Type m. G. Suvorov det.» — ZIN; 1♂ with two labels: (1) [«Alashan, Dyn-ian-in, 5–14.6.1908, Kozlov's exp.»] [in Russian] [the date absent in the

original description], (2) «*Neodorcadion Kaznakovi*, Type m. G. Suvorov det.» — MHNL; 1♂ (identified as *E. kaznakovi* Suv. by B. Namhaidorz), China, [«Alashan Desert, South Gobi, end of IX.1901, Kozlov» (near Dyn-ian-in = Baian Hot)] [in Russian] — ZIN; 1♂ with two labels: (1) [«Alashan, 9.1901, Kozlov's exp.»] [in Russian] [the date absent in the original description], (2) «*Neodorcadion Kaznakovi*, Type m. G. Suvorov det.» — JV; 1♂ (much bigger, than others), designated as «Type m.» of *Neodorcadion kaznakovi* Suv., but not published in the original description, China, [«South Alashan, stream canal of Dolonegol, 13.7.1908, Kozlov's expedition»] [in Russian] — ZMM; 1♂, China, Inner Nongolia, E Bayn Hot, 38.805° N, 105.748° E, 1820 m, 25.7.2011, S. Murzin leg. — SM; 1♂, China, Inner Nongolia, 5 km S Bayan Hot, 38.753° N, 105.676° E, 1560 m, 30.7.2011, S. Murzin leg. — SM; 4♂♂, China, Inner Nongolia, 5 km S Bayan Hot, 38.761° N, 105.684° E, 1600 m, 18–23.8.2011, S. Murzin leg. — SM.

Etymology. The new taxon is named in honor of Mr. Zhilin Chen who collected the specimens.

Acknowledgements

The authors are very grateful to Mr. Fangzhou Ma and Mr. Zhilin Chen for their collecting efforts and friendships. Our special thanks to all friends and colleagues for loan of the materials for study: Aleksej Gusakov and Andrej Ozerov (Zoological Museum of Moscow State University, Russia), Boris Korotyaev and Andrej Lobanov (Zoological Institute of Sankt-Petersburg, Russia), Virgile Marengo (Museum d'Histoire Naturelle, Lyon, France), Sergey Murzin (Moscow, Russia), Jiří Vorišek (Jirkov, Czech Republic) and Lotar Zerche (Deutsches Entomologisches Institut, Münchenberg, Germany).

References

- Danilevsky M.L. 2007. Revision of the genus *Eodorcadion* Breuning, 1947 (Coleoptera, Cerambycidae) // Collection systématique. Vol.16. Andrésy: Magellanes. P.1–227 + [3].
- Suvorov G.L. 1912. Vier neue *Neodorcadion*-Arten (Coleoptera, Cerambycidae) // Revue Russe d'Entomologie. Vol.12. P.70–75.

Поступила в редакцию 11.07.2011

Вклейка VII ❖ Plate VII

V.V. Dubatolov, V.V. Zolotuhin. P.367–379. Plate VII: 1–8. *Manulea* and similar genera, moths (1–7) and female genitalia (8). 1 — *Manulea pseudofumidisca* sp.n., holotype, SE Russia, Khabarovsk suburbs; 2 — *Brunia fumidisca*, female, holotype, «Burmah, Tenasserim Valley, E of Tovoу» (BMNH); 3 — *Manulea omelkoi* sp.n., holotype, SE Russia, South Primorye, Gornotaezhnoe; 4 — *M. kansuensis*, holotype, «Kina, S. Kansu» (Riksmuseet Stockholm); 5 — *M. minor*, Japan, Mt. Ariake (SZMN); 6 — *M. omelkoi* sp.n., paratype, SE Russia, South Primorye, Razdolnoe (MWM); 7 — *Prabbasa venosa*, China, Guangdong, Nanling, Shaoguan; 8 — *Brunia fumidisca*, female, holotype (BMNH).

В.В. Дубатов, В.В. Золотухин. С.367–379. Вклейка VII: 1–8. *Manulea* и близкие рода, бабочки (1–7) и гениталии самок (8). 1 — *Manulea pseudofumidisca* sp.n., голотип, ЮВ Россия, окрестности Хабаровска; 2 — *Brunia fumidisca*, самка, голотип, Бирма, долина Тенассерим, восточнее Товой (BMNH); 3 — *Manulea omelkoi* sp.n., голотип, ЮВ Россия, Южное Приморье, Горнотаежное; 4 — *M. kansuensis*, голотип, Китай, юг Ганьсу (Riksmuseet Stockholm); 5 — *M. minor*, Япония, гора Ариаке (SZMN); 6 — *M. omelkoi* sp.n., паратип, ЮВ Россия, Южное Приморье, Раздольное (MWM); 7 — *Prabbasa venosa*, Китай, Гуандун, Наньлинь, Шаогуан; 8 — *Brunia fumidisca*, самка, голотип (BMNH).

Н.В. Владимирова. С.361–367. Вклейка VII: 9. Местобитания Северо-Восточного Алтая, предпочитаемые разными видами высших поровых орибатид (2002, 2006 гг.).

N.V. Vladimirova. P.361–367. Plate VII: 9. Habitats of North-Eastern Altai, prefer different species of oribatid mites (2002, 2006).

Вклейка VIII ❖ Plate VIII

M. Lin, M.L. Danilevsky. P.381–382. Plate VIII: 1–9. — *Eodorcadion (Ornatodorcadion)* spp., habitus of beetles: 1–2 — *E. jakovlevi fangzhoui*, ssp. n.: ♂, holotype, IZAS (1); ♀, paratype, IZAS (2); 3–5 — *E. kaznakovi zbilini*, ssp. n., ♂♂: holotype, IZAS (3), paratypes, IZAS (4–5); 6–9 — *E. kaznakovi kaznakovi*, ♂♂, China, Inner Mongolia, S. Murzin leg., SM: E Bayn Hot, 25.7.2011 (6); 5 km S Bayan Hot, 30.7.2011 (7); 5 km S Bayan Hot, 18–23.08.2011 (8–9).

М. Лин, М.Л. Данилевский. С.381–382. Вклейка VIII: 1–9. *Eodorcadion (Ornatodorcadion)* spp., габитусы жуков: 1–2 — *E. jakovlevi fangzhoui*, ssp. n.: ♂, голотип, IZAS (1); ♀, паратип, IZAS (2); 3–5 — *E. kaznakovi zbilini*, ssp. n., ♂♂: голотип, IZAS (3), паратипы, IZAS (4–5); 6–9 — *E. kaznakovi kaznakovi*, ♂♂, China, Inner Mongolia, S. Murzin leg., SM: «E Bayn Hot, 25.7.2011» (6); «5 km S Bayan Hot, 30.7.2011» (7); «5 km S Bayan Hot, 18–23.08.2011» (8–9).

