

A new species of the genus *Anacaena* Thomson, 1859 from South Crimea and the Caucasus (Coleoptera: Hydrophilidae)

Новый вид рода *Anacaena* Thomson, 1859 из Южного Крыма и Кавказа (Coleoptera: Hydrophilidae)

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KEY WORDS: Coleoptera, Hydrophilidae, *Anacaena*, new species.

КЛЮЧЕВЫЕ СЛОВА: Coleoptera, Hydrophilidae, *Anacaena*, новый вид.

ABSTRACT: *Anacaena taurica* sp.n. (Hydrophilidae) from the Crimea and the Caucasus is described.

РЕЗЮМЕ: Описан новый вид *Anacaena taurica* sp.n. (Hydrophilidae) из Крыма и Кавказа.

Introduction

The genus *Anacaena* Thomson, 1859 comprising more than 40 species is distributed worldwide. The West Palaearctic species of *Anacaena*, namely *A. bipustulata* (Marsham, 1802), *A. globulus* (Paykull, 1798), *A. limbata* (Fabricius, 1792), *A. lutescens* (Stephens, 1829), *A. rufipes* (Guillebeau, 1896) have been revised by A. van Berge Henegouwen [1986]. *A. lohsei* van Berge Henegouwen & Hebauer, 1989 has been described from Italy and Switzerland [van Berge Henegouwen & Hebauer, 1989].

During our field work in the Crimea in 1999 and examining the collection of Zoological Institute of Russian Academy of Sciences (ZISP, St.-Petersburg, Russia), a new species of *Anacaena* was found. The description is given hereinafter.

Type materials of new species are deposited in the collections of ZISP, Zoological Museum of Moscow State University, Moscow, Russia (ZMUM), Zoological Museum of Belarus State University, Minsk, Belarus (ZMBU) as well as in the author's one (CSR).

Anacaena taurica Ryndevich sp.n.

Figs. 1–2, 4–5, 8–10, 14, 16.

= *Anacaena limbata* Zaitsev, 1952 (part) (non Fabricius, 1792) syn.n.

DESCRIPTION. Body oval, moderately convex. Dorsal side shining. Head and labrum black. Antenna yellowish brown, maxillary palpus brown or yellowish brown except black or dark brown ultimate segment. Pronotum black with

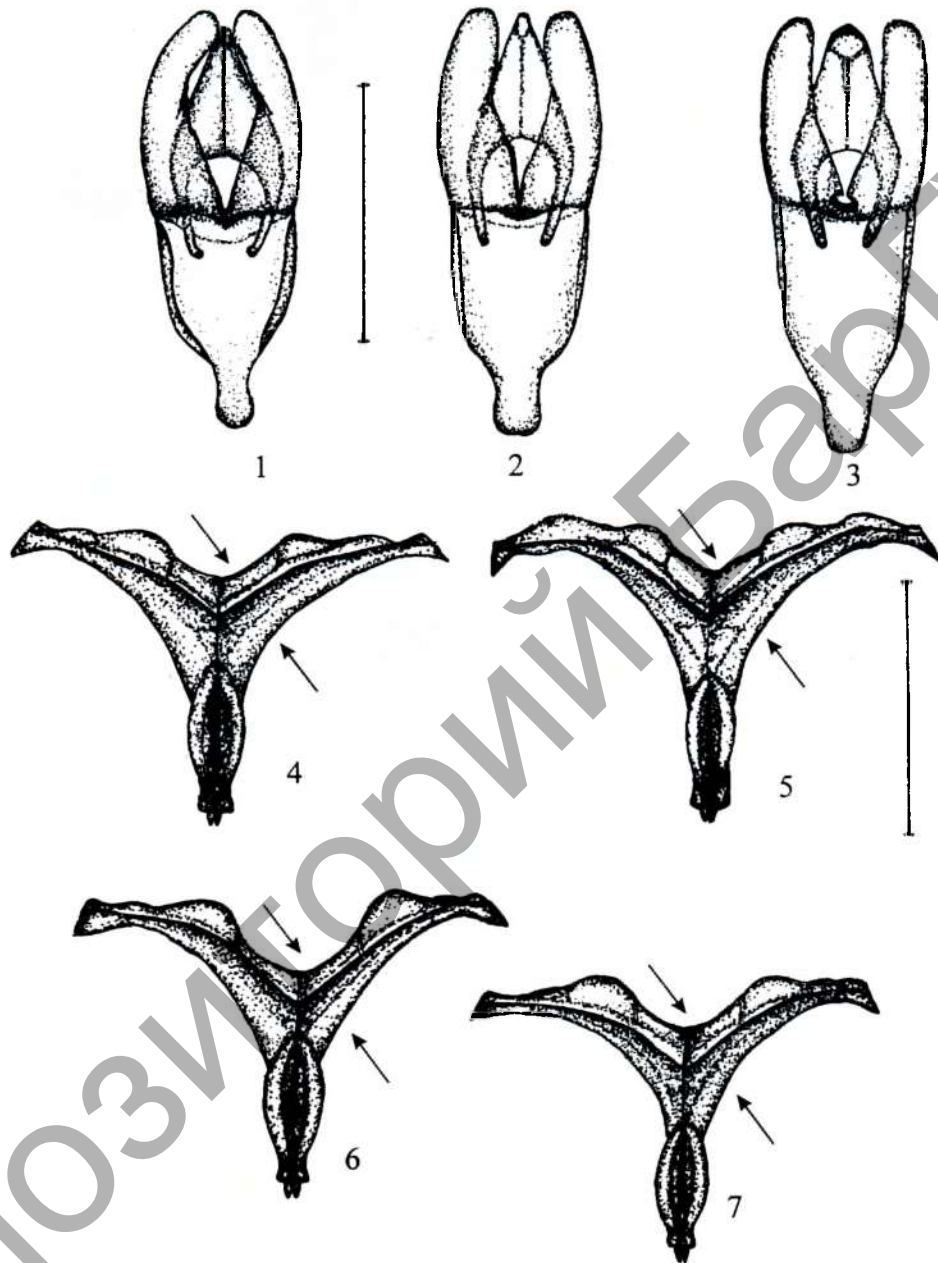
lateral sides broadly yellow. Scutellum brownish. Elytron brown or brownish yellow with regular dense punctation. Ventral side black. Mesosternum with distinct, acutely pointed transverse carina (Fig. 8–10). Legs reddish or brownish. In some specimens femora black or dark brown. Hind-femur hairline reaching hind margin (Fig. 14). Secondary sexual characters absent in male (Fig. 16). Genitalia of male as in Fig. 1–2. Metendosternit as in Fig. 4–5. Length 2.3–2.9 mm.

MATERIAL. Holotype (♂) Ukraine, Crimea, Gurzuf, pond Lapot, deep 0.4 m, 12.07.1999, leg. S.K. Ryndevich (ZISP).

Paratypes: some date as holotype, 9 ♂♂, 11 ♀♀ (ZMUM, ZISP, ZMBU, CRS); Ukraine, Crimea, Gurzuf, creek of mountain stream, 14.07.1999, leg. S.K. Ryndevich, 1 ♂ (CRS), Krim, Yaltinskiy u., Taushan-Bazar, 28.6.07, W. Pliginskiy [in Russian], *Anacaena limbata*, Reitter det., 1 ♀; Krim, Miskhor, VI.06, W. Pliginskiy [in Russian], 1 ♂; Krim, Angarskiy perev., Yaltinskiy u. Luzha u shosse, 22.06.07, W. Pliginskiy [in Russian], *Anacaena limbata* F., Zaitzev det., 3 ♂♂, 6 ♀♀; Krim, Angarskiy perev., Yaltinskiy u. Luzha u shosse, 25.6.07, W. Pliginskiy [in Russian], *Anacaena limbata*, IV.08, Zaitzev det., 9 ♂♂, 23 ♀♀; Krim, Angarskiy perev., Yaltinskiy u. Luzha u shosse, 27.06.07, W. Pliginskiy [in Russian], 3 ♀♀ (all in ZISP).

Caucasus: Caucasus, Reitter. Leder, *Creniphilus globulus* Payk. c. G. Sivers, 1 ♂, 1 ♀; Georgia: Bakuriani, prov. Gori, 29.IV.16, 2 ♀♀; Bakuriani, prov. Gori, *Anacaena limbata*, Zaitzev det., 24.VI.16, 3 ♂♂, 18 ♀♀; 29.VI.16, 1 ♂; 16.VII.16, 1 ♀; 18.VII.16, 2 ♀♀; 8.VIII.16, 1 ♀; Bakuriani distr., Gori, 6000, 2.V.12, Mus. Caucas., 65–12, V. Kozlovski, 1 ♀; Bakuriani distr., Gori, 5500, 1.VI.13, 4 ♀♀; Bakuriani distr., Gori, 5500, VII.14, 1 ♀; Bakuriani, prov. Achalk., VI–VII.16, 2 ♀♀; Armenia: Armenia, Mis-chana, 25.VIII.1930, A. Schelkovnikov, 3 ♀♀ (all in ZISP).

COMMENTS. New species is most closely related to *Anacaena lutescens*. Males of *A. taurica* are easily distinguishable by the genitalia and the absence of secondary sexual characters. The apex of penis of *A. taurica* is more sharpened. The ultimate fore-tarsal segment of *A. taurica* male is not inflated distally (Fig. 16). Habitus of *A. taurica* is the same as *A. lutescens*. Both these species have some minor distinctions in the structure of mesosternum carina. The carina of *A. taurica* always looks back being less prominent in the back part at the apex (Fig. 8–10). This character can be clearly traced in all specimens in the Crimea, but in some Caucasian ones it is variable. In *A. lutescens*, this property was found as being variable within the area of this widespread species (Fig.



Figs. 1-7. *Anacaena taurica* sp.n. (1-2, 4-5) and *A. lutescens* (Steph.) (3, 6-7): 1-3 — male genitalia, 4-7 — metendosternite, 1, 3-4 — specimens from South Crimea, 2, 5 — specimens from the Caucasus, 6 — specimen from Baranovichy (Belarus), 7 — specimen from Northern Vosges (France). The area of the crax shown with arrows in the figures. Scale: 0.25 mm (1-3), 0.5 mm (4-7).

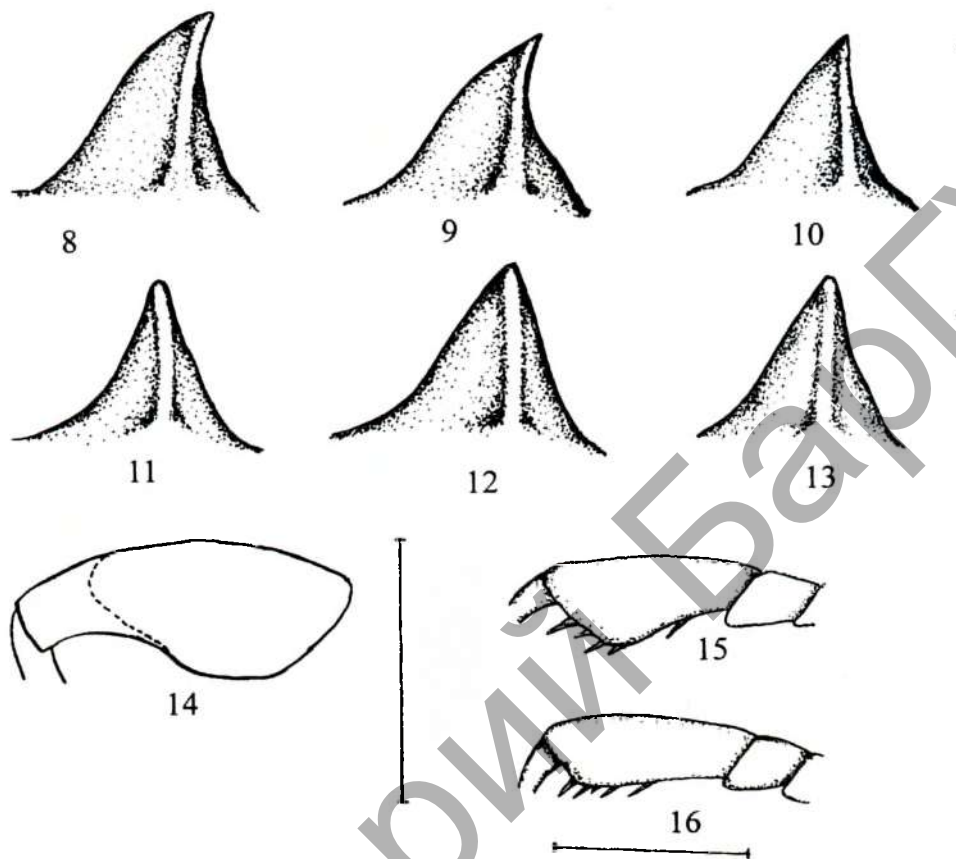
Рис. 1-7. *Anacaena taurica* sp.n. (1-2, 4-5) и *A. lutescens* (Steph.) (3, 6-7): 1-3 — гениталии самца, 4-7 — метэндостернит, 1, 3-4 — экземпляры из Южного Крыма, 2, 5 — экземпляры с Кавказа, 6 — экземпляр из Баранович (Беларусь), 7 — экземпляр из Северных Вогез (Франция). Область кракса на рисунках показана стрелками. Масштаб: 0,25 мм (1-3), 0,5 мм (4-7).

11-13). There are some minor distinctions between *A. taurica* and *A. lutescens* in the structure of metendosternite. *A. taurica* has wider and stronger area of metendosternite crax (Fig. 4-5) in comparison with *A. lutescens* (Fig. 6-7). I do not intend to trait the metendosternite peculiarities as an absolute character, but it seems to be useful together with other properties.

The validity of *A. taurica* being opposed to *A. lutescens* can be proved by the fact that I found two males of *A. lutescens* with ultimate fore-tarsal segment, which is inflated distally

(Fig. 15), having typical genitalia (Fig. 3) and typical metendosternite in the area of Gurzuf. The specimens of *A. lutescens* from the Crimea with typical characteristics were also found in the collection of ZISP.

Genitalia of *A. taurica* male look like in *A. bipustulata*, but hairline on the underside of the hind femur differs like other characters of habitus. *A. taurica* differs from *A. lohsei* in the structure of male genitalia, mesosternum and in colour. Unlike *A. limbata*, *A. taurica* has an absolutely black head



Figs. 8-16. *Anacaena taurica* sp.n. (8-10, 14, 16) and *A. lutescens* (Steph.) (11-13, 15): 8-13 — carina of mesosternum, right-lateral view, 14 — hairline of hind-femur, 15-16 — ultimate fore-tarsal segment of male, 8-9, 13-14 — specimens from South Crimea, 10, 16 — specimens from the Caucasus, 11 — specimen from Northern Vosges (France), 12 — specimen from Baranovichy (Belarus), 15 — specimen from Sicilia (Italy). Scale: 0.14 mm (8-13), 0.5 mm (14), 0.1 mm (15-16).

Рис. 8-16. *Anacaena taurica* sp.n. (8-10, 14, 16) и *A. lutescens* (Steph.) (11-13, 15): 8-13 — отросток среднегруди, боковой вид справа, 14 — волосная линия заднего бедра, 15-16 — последний членик передних лапок самца, 8-9, 13-14 — экземпляры из Южного Крыма, 10, 16 — экземпляры с Кавказа, 11 — экземпляр из Северных Вогез (Франция), 12 — экземпляр из Баранович (Беларусь), 15 — экземпляр из Сицилии (Италия). Масштаб: 0,14 мм (8-13), 0,5 мм (14), 0,1 мм (15-16).

and other characters of. hairline on the underside of the hind femur.

The investigation of species from Georgia (Bakuriani) identified by F.A. Zaitsev as *A. limbata* [Zaitsev, 1952] reveals that they are completely identical with *A. taurica*. I haven't succeeded in studying *A. limbata* material from Batumi and Bolnisi (Georgia), indicated in the above paper. Actually, F.A. Zaitsev mixed three species (*A. limbata*, *A. lutescens* and *A. taurica*), and therefore I cannot exclude the fact that all data for *A. limbata* from Georgia belong to *A. taurica*.

DISTRIBUTION. Mountains of South Crimea (Ukraine), the Caucasus (Georgia, Armenia).

HABITATS. Beetles inhabit mountain streams, pools and ponds.

ETYMOLOGY. The species' name is derived from "Tauria" — the old name of South Crimea, the locality of holotype of new species.

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