

Important notes on taxonomic structure of *Blaps nitens* Laporte de Castelnau, 1840 with the description of new subspecies *Blaps nitens medvedevi* subsp. n. (Coleoptera: Tenebrionidae: Blaptini)

Важные замечания по таксономической структуре *Blaps nitens* Laporte de Castelnau, 1840 с описанием нового подвида *Blaps nitens medvedevi* subsp. n. (Coleoptera: Tenebrionidae: Blaptini)

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Abstract. A new subspecies of *Blaps nitens* Laporte de Castelnau, 1840, however well-known but badly interpreted since more than one century, is described from Morocco: *Blaps nitens medvedevi* subsp. n. The origin of this confusion is explained in a chronological way. Consequently, a new synonymy is given: *Blaps nitens* subsp. *barbara* Solier, 1848 = *Blaps substriata* Solier, 1848 **syn. n.**

Резюме. В работе описан новый подвид вида *Blaps nitens* Laporte de Castelnau, 1840, вида хорошо известного, но плохо интерпретируемого в течении более чем одного столетия: *Blaps nitens medvedevi* subsp. n. Происхождение этого беспорядка объясняется в статье хронологически. Как следствие, устанавливается новая синонимия: *Blaps nitens* subsp. *barbara* Solier, 1848 = *Blaps substriata* Solier, 1848, **syn. n.**

Introduction

The revision of the genus *Blaps* Fabricius, 1775 of the Western Palaearctic region has led us to study methodically and eventually to rediscover the types of all the described species. During the process, we noticed a certain number of errors or some bad interpretations, among which the one we propose to rectify in the following lines.

The case that we will treat here relates to *Blaps barbara* Solier, 1848, a species that belongs to the 8th group of the I Division (Abteilung) in the classification proposed by Seidlitz [1893], the only one who has completely revised this genus following the example of Allard [1880, 1881, 1882]. As Seidlitz's monograph is, in the same time, the most precise, the most complete and the most «recent», it still prevailed more than one century after its publication. However, in spite of the remarkable general quality of this work, it is not free of errors.

Thus, the main origin of the erroneous interpretation of Solier's *Blaps barbara* can be attributed without doubt to Seidlitz [1893: 265], when he quotes exclusively in a wrong way this species from Morocco, undoubtedly starting from badly identified specimens of the Berlin museum and von Oertzen's private collection.

The German author's excellent work was then naturally

used as reference for the identification of *Blaps* by all the following generations of entomologists who were working at one time or another on this genus.

Thus, about twenty years later, Escalera [1914: 325] mentioned *Blaps barbara* Sol. from Morocco: Melilla (Arias), Tizin Tafilet, Marraquesh, Agadir, Mazagán, Mogador (Escalera).

Español [1943: 138] cited this species as common in the Occidental Morocco, especially in the surroundings of Ifni, spreading up to the Seguiat El Hamra. To identify this *Blaps*, the Spanish author explicitly refers to Seidlitz's revision, more particularly to the 8th group to which *barbara* belongs. Later, Español [1967] mentioned the same species under the name of *Blaps sulcata* ssp. *barbara* Sol. as an Atlantic race of *sulcata* that is common in SW Morocco, from Mazagan to Rio de Oro.

C. Koch, as a German-speaking entomologist, certainly referred to Seidlitz's monograph in his own interpretation of *barbara* Solier too. However, he wrote [Koch, 1945: 412]: «Ob die marokanische Form von der atlantischen Küste mit Recht den Namen *barbara* führt, wäre bei dieser Gelegenheit zu ermitteln». But nearly at the same time, he [Koch, 1944] gathered into the subspecies-complex of *Blaps sulcata* Laporte de Castelnau, 1840, *B. nitens* Laporte de Castelnau, 1840, *B. brachyura* Küster, 1848, *B. barbara* and *B. requieni* Solier, 1848.

Ardoin [1973] agreed with this opinion, but proposed the name of *nitens* Laporte de Castelnau for the nominal species, because *sulcata* Laporte is a junior homonym of *sulcata* Fabricius, 1775 (now junior synonym of *polychresta* Forskal, 1775). However, although the famous French entomologist had free access to the collections of the Natural History Museum of Paris, and thus to Solier's types, he still confused *barbara* Solier with *substriata* sensu Seidlitz. He also considered that *barbara* sensu Gridelli [1930] was different from *barbara* Solier, whereas the intuition of its Italian counterpart was perfectly right.

Kocher [1957: 67] wrote in his identification key to the *Blaps*-species of Morocco: «(2) Il ne paraît pas certain que cet insecte soit le véritable *barbara* dont Solier dit expressément: «prolongement caudal à peu près nul et

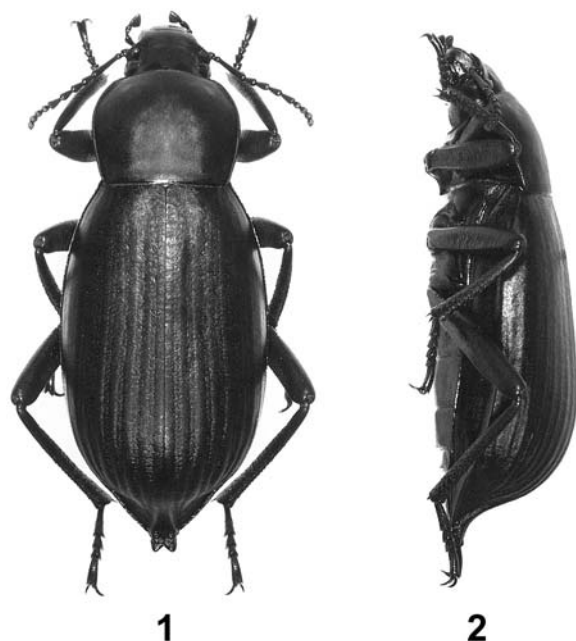


Fig. 1–2. *Blaps nitens medvedevi* subsp. n.
1 – dorsal view; 2 – lateral view
Рис. 1–2. *Blaps nitens medvedevi* subsp. n.
1 – вид сверху. 2 – вид сбоку.

comme tronqué chez le ♂». This ambiguous sentence, taken from the original description, resulted nearly every time in a doubtful interpretation of this species thereafter. As we will see later, the use of this morphological character is completely unfounded.

Kocher [1958: 125] is still not certain owing to the fact that the «*barbara*» of the South-Western Morocco is equivalent to the *barbara* sensu Solier.

However, the missinterpretation of *B. barbara* could have been avoided because Allard [1881: 174] already considered rightly *substriata* Sol. as a variety of *barbara* Sol. This author undoubtedly had the possibility to examine Solier's types, hence the accuracy of his opinion. Unfortunately, it will never be the case again with the next authors who were interested in *Blaps* thereafter, and this, for more than one century, except for Gridelli [1930: 288], whose opinion will not be followed. Actually, he wrote: «Obs. La specie manca del tutto nella Tripolitania dove viene sostituita da una forma nella quale credo di poter ravvisare con sicurezza la *barbara* (Sol.) All. (Ann. Soc. Ent. France 1881, p. 175)».

Since Koch [1944] and Ardoin [1973], it is admitted, at least temporarily and until proof of the opposite, that the taxa belonging to the Seidlitz's 8th group are all considered – with the exception of *Blaps sulcifera* Seidlitz, 1893 – as subspecies of *Blaps nitens* Cast. That's why they appear with this taxonomic rank in the present article.

Materials

Abbreviations used:

CBGP – Centre de Biologie pour la Gestion des Populations (Montpellier);
MNHUB – Museum für Naturkunde der Humboldt-Universität (Berlin);

MCG – Museo Civico di Storia naturale di Genova (Gênes);
MNHN – Museum national d'Histoire naturelle (Paris);
HNHM – Hungarian Natural History Museum (Budapest);
MHNL – Muséum d'Histoire naturelle de Lyon (MHNL);
CR – Collection J.–C. Ringenbach (Pau);
CS – Collection Soldati (Montpellier).

Blaps nitens subsp. *barbara* Solier, 1848

Blaps barbara Solier, 1848: 298; 343.

= *Blaps substriata* Solier, 1848: 298; 345, **syn. n.**

= *Blaps barbara* var. *substriata* Solier, 1848 sensu Allard [1881].

= *Blaps sulcata* subsp. *substriata* Solier, 1848 sensu Koch [1944].

= *Blaps nitens* subsp. *substriata* Solier, 1848 sensu Ardoin [1973].

Loc. cl.: «Barbarie, probablement Algérie».

Type material. *Blaps nitens barbara*. Holotype [MNHN]: ♂, «*Rhizoblaps barbara* Sol Alg. ♂ T leg?» (round blue label) / *barbara* (recto), Type Solier (verso) (turquoise rectangular label) / MUSEUM PARIS Coll. DE MARSEUL 1890 (turquoise rectangular label) / TYPE (red rectangular) / *B. barbara* Solier Type. Dissected.

Paratype of *Blaps nitens barbara* [MNHN]: ♀, *barbara* (recto), Type Solier (verso) (turquoise rectangular label) / «*Rhizoblaps barbara* Sol Alg. ♂ T leg?» (round blue label) / *B. barbara* Sol. Barbarie (beige rectangular label) / TYPE (red rectangular) / *Blaps barbara* Solier, C. Girard vid. 1975, Col. Marseul, Type de Solier, C. Girard vid. 1975 (double white rectangular label).

Blaps substriata Solier [1848: 298; 345]. Loc. cl.: «Tripoli». Holotype [MNHN]: ♂, *substriata* (recto), Type Solier (verso) (turquoise rectangular label) / «*Rhizoblaps substriata* Sol Tripoli ♂ T leg?» (round blue label) / TYPE (red rectangular label) / MUSEUM PARIS (turquoise rectangular label) / *B. substriata* Solier Type ! Col. de Marseul, C. Girard det. 19 (white rectangular label).

Other studied material. 6 ex. [MNHN], 3 ex. [MCG], 1 ex. [HNHM], 1 ex. [MHNL], 7 ex. [CR], 1 ex. [CS], 1 ex. [CT]. Libye : 20 km S Agedabya (Cyr.), Aziziyah (N 32°29.298' / E 12°58.731'), N of Bani Whalid, Leptis Magna, 60 km E Nalut, Tarhuna (Dj). Nefusah, Tripolitaine, Sabratha, Sidi Mesri, Tagiura, Tripoli, 20 km S from Tripoli.

According to Solier in the original description of *B. barbara* [1848: 243], the caudal extension of the elytra (mucron) should be «à peu près nul et comme tronqué chez le mâle». Actually, the type male has simply the elytral mucron broken! This was discovered after a good cleaning of the type-specimen.

Blaps nitens medvedevi subsp. n.

= *Blaps barbara* Solier, 1848 sensu Koch [1945].

= *Blaps sucata* subsp. *barbara* Solier, 1848 sensu Koch [1944].

= *Blaps nitens* subsp. *barbara* Solier, 1848 sensu Ardoin [1973].

Material. Holotype: ♂, Kasbah Oualidia, Cap Cantin, 1.11.1948, Maroc [MNHN]. Dissected.

Paratypes: Agadir, Maroc, 05.1975, Borys Malkin leg. 6 ex. (4♂, 2♀) [MHNL]; El Jadida, Maroc, 31.05.1985, H. Fongond leg. 2 ex. [CS]; Oued Draâ, poste abandonné sur rte P. 41, 19.05.1997, D. Morin leg. 1♀ [CS]; Aouinet Torkoz, Maroc, 11.1953, H. Fongond leg. 2 ex. [CS]; Maroc, Oued Massa, 7.05.1983, S. Doguet leg. 1♂ [CS].

Studied material. 38 ex. [MNHN], 8 ex. [MNHUB], 1 ex. [MHNL], 7 ex. [CS], 4 ex. [Coll. D. Morin].

Distribution. The new subspecies occurs in SW Morocco: Agadir, Boulaouane, Cap Cantin (Kasbah Oualidia), Casablanca,

Fedala, Goulimine, 81 km S Goulimine, Harazine Diabet (jardins du sultan, Mogador), Ifni (Gourizim), Marrakech, Mazagan, Mogador, Oued Draâ (poste abandonné sur rte P. 41), Serama, 28 km N Smimou (S Mogador), 27 km NE TanTan, Tiznit (Drâa).

Ethymology. The name was chosen in memory of the late G.S. Medvedev, the famous Russian specialist of the genus *Blaps*.

Description. 22–30 mm.

Head. Anterior margin of the clypeus obviously excavated with pointed lateral angles. Clypeo-frontal suture finely engraved and complete. Upper surface of head finely and sparsely punctured. Anterior margin of the mentum strongly angularly depressed and slightly emarginate in the middle. Labrum finely and sparsely punctate. From each puncture originates a very short hair directed frontwards. Gula microshagreened, so that it is clearly separated from the granulate underside of the cephalic capsule. Antennae glabrous, approximately reaching pronotum base when directed backwards.

Pronotum with the sides slightly and quite regularly rounded, generally widest before the middle. Pronotal punctation fine and sparse. Anterior and posterior ridges of pronotum interrupted in the middle, but complete and sharp laterally. On the underside, the anterior foramen of the pronotum is strongly rimmed in the middle and collar-shaped. Propleural punctation somewhat attenuated and rasp-like. Prosternal apophysis (in lateral view) subvertically bent just after the anterior coxae and prolonged in a concave curve which is more or less suddenly triangularly up-righted at the apex. Median apex of the prosternal apophysis strongly triangularly salient in top view.

Abdomen. Abdominal segments glabrous and wrinkled. Male abdominal hair tuft present between the 1st and the 2nd (visible) sternites. Anal sternite without apical hair tuft in both sexes, but with the external edge completely rimmed. Male abdominal callosity present in the middle of the first sternite and reduced to a small wrinkled swelling.

Elytra. Caudal extension (= mucron) present in both sexes at the apex of elytra, but short and straight in lateral view and transversely wrinkled on the underside. Sutural apical gap of mucron distinctly in right angle. Elytral surface overall with sparse rasp-like punctation. Elytra costate, showing 9 costae bound on each side by flat narrow secondary intervals. Apical declivity in lateral view steep, subvertical. Lateral margins of elytra (= superior margins of false epipleurae) entirely visible in dorsal view in both sexes. Epipleurae smooth and glabrous.

Legs. Male protibiae without a distinct longitudinal carina on the antero-external face. Protibiae dimorphic, slightly curved on the posterior face in male. Apex of the posterior faces of median tibiae (male) heel-shaped. Male posterior tibiae straight. Male median and posterior femorae not dimorphic and so, not denticulate on the upper-posterior face. The first three segments of posterior tarsi with a longer bristle fringe on the internal side. Underside lamella between the two claws of the onychium of tarsi triangular and smooth at the apex.

Aedeagus. Parameres closed and acuminate at least at the apex, straight in lateral view.

Diagnosis. This *Blaps* belongs to Seidlitz's 8th group of the I Division: the anterior margin of the mentum is angularly depressed and slightly emarginate in the middle, the caudal extension (mucron) of elytra is short with a sutural apical

gap distinctly in right angle, male abdominal callosity is in the middle of the first sternite and the apical declivity steep in lateral view. With the prosternal apophysis (in lateral view) vertically bent just after the anterior coxae, and male abdominal callosity present in the middle of the first sternite and reduced to a small wrinkled swelling, it is most closely related to *Blaps nitens* subsp. *laportei* Ardoin from eastern Libya and Egypt. But in the latter, the antennae are shorter (they are far to reach pronotal base when directed backwards), the elytral costation is stronger, especially on the disc (quite flattened here in *B. nitens medvedevi* subsp. n.) and the mucron is shorter. Furthermore, in *B. nitens laportei*, the general shape is shorter, with the pronotum usually broadest in the middle.

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