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A new subspecies of *Deronectes costipennis* BRANCUCCI (Coleoptera, Dytiscidae)

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The authors describe *Deronectes costipennis gignoux* n. ssp. from Spain (Prov. León). It differs from *D. costipennis costipennis* BRANCUCCI mainly by the consistent absence of distinct costae on the elytra.

INTRODUCTION

In an earlier paper (FERY & BRANCUCCI, 1987), we dealt with the known costate species of *Deronectes*. However, this way of grouping the species no longer seems to appear to be natural as the senior author has recently discovered specimens without striae which can only be considered as a subspecies of *D. costipennis* BRANCUCCI.

DESCRIPTION

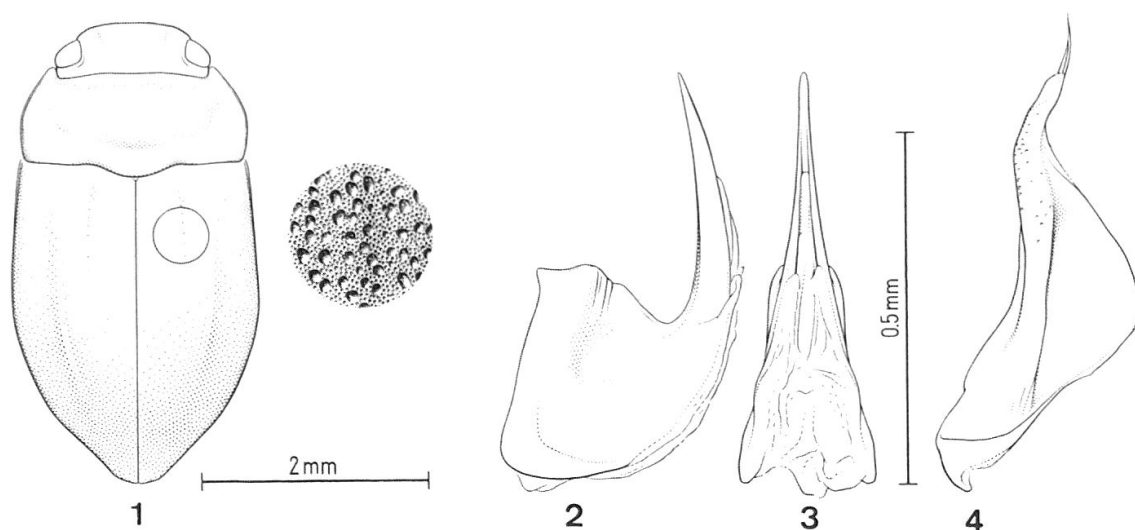
Deronectes costipennis gignoux n. ssp. Figs. 1–4.

Dark brown, matt. Body short, somewhat depressed, hardly rounded laterally (Fig. 1). The greatest width situated before middle of elytra, consequently just after the middle of the body. Elytra without distinct costae, but with very weakly developed longitudinal ribs. Elytra and sides of pronotum covered with short yellow setae.

Head dark brown. Anterior part and disc of the clypeus, as well as a narrow band alongside eyes, paler brown; evenly shagreened. Punctures of one size, not very dense, becoming denser anteriorly and on disc; on disc, the punctures separated from each other by their own diameter. Palpi and antennae light brown, not darkened.

Pronotum dark brown, matt, broad, evenly rounded laterally. The widest point situated at the middle of pronotal length. Base as broad as elytra. Lateral margins finely bordered, with a distinct longitudinal depression reaching from posterior to anterior margin. Surface sculpture with a fine shagreened lustre, with large, flattened and shining punctures; the latter denser along anterior and posterior margins, absent on both sides of the disc.

Elytra dark brown, matt, with two very weak longitudinal ribs; the inner one somewhat more distinct on anterior half, the outer one relatively strongly developed at middle. Punctures as on pronotum, the larger ones even larger, flattened posteriorly and more elongate. Lateral margin and suture without punctures.



Figs 1–4. *Deronectes costipennis gignouxii* n. ssp.: 1, Habitus. 2, Aedeagus, lateral view. 3, Aedeagus, dorsal view. 4, Paramere.

Underside brown, sternites 2–6, the middle part of the metasternum and metafemora darkened; posterior margin of the sternites somewhat paler. Entire surface densely puncturate, very slightly shining. Metacoxae distally with larger punctures. Sternites I and II with large obsolescent punctures towards middle. Prosternal process lance-shaped with a median carina, flattened laterally and with a row of long hairs (cf. *D. costipennis* BRANCUCCI). Metacoxal lines divergent. Legs reddish-brown. Pro- and mesotarsi not particularly broadened, protarsal claws somewhat prolonged, straight, the inner one slightly more strongly curved at apex.

Aedeagus broad at base, then evenly tapered, strongly pointed at apex (Fig. 2–3). Parameres (Fig. 4).

♀: Similar to ♂, the protarsi shorter; the larger punctures on 1st and 2nd sternites almost completely absent.

Length: 3.8–4.4 mm (4.15 ± 0.15 mm); width: 2.05–2.35 mm (2.21 ± 0.08 mm).

Holotype ♂ (coll. BRANCUCCI, in NHM-Basel) and 51 paratypes (2 ♂ and 3 ♀, coll. BRANCUCCI, in NHM-Basel; 1 ♂ and 1 ♀ in each of the following collections: Museum für Naturkunde, Berlin; WEWALKA, Wien; FRESNEDA, El Pont de Suert; BALKE, Berlin; HENDRICH, Berlin; 21 ♂ and 15 ♀, coll. FERY); locality: Spain, Prov. León, Picos de Europa, nr. Posada de Valdeón, mountain streamlet, 1200 m, 5.VIII.1988, H. FERY. 1 paratype (♂, coll. FERY); locality: idem, 20.III.1989, H. FERY.

Variation: This subspecies is known only from one locality. Within that population, only the density of the setae covering the body is somewhat variable.

Ecology: In a small mountain stream, with slow-flowing water. The specimens were caught in small water-holes, between decaying leaves. A single specimen of *Agabus bipustulatus* (L.) was found with the new subspecies.

Affinities: *Deronectes costipennis gignouxii* n. ssp. is very similar in appearance to *D. platynotus* (GERMAR) because of the lack of costae on the elytra. The

new subspecies can be distinguished from *D. platynotus* very easily by the aedeagus (Figs 2–4).

Derivatio nominis: This subspecies is dedicated to the GIGNOUX family (Toulon, Briançon).

Key for the identification of D. costipennis and D. platynotus

- 1 ♂. Aedeagus strongly pointed at apex (Figs 2–3). Paramers short but slender. Outer rib or costa distinctly visible 2
- ♂. Aedeagus short, narrowly rounded at apex. Parameres short and broad. Outer rib very weak, hardly visible
 *D. platynotus* (GERMAR)
- 2 Elytra with a distinct costa
 *D. costipennis costipennis* BRANCUCCI
- Elytra without distinct costa, just with a weak, though plainly visible longitudinal rib
 *D. costipennis gignouxii* n. ssp.

Deronectes platynotus (GERMAR)

GERMAR originally described this species as belonging to the genus *Hydroporus* CLAIRV. (GERMAR, 1834). In the Museum für Naturkunde of the Humboldt-University, Berlin, we were able to locate 8 specimens of *D. platynotus* (GERMAR) with a hand-written label: “*platynotus* Germ, German., Saxon. Märk”. One specimen was originally labelled with the number 10132; the other specimens have a more recent label bearing the same number. In an undated index this number refers to a record of 9 specimens. The ninth specimen has evidently disappeared since then. One specimen has a label reading “*murinus* STRM. Saxon”, one the number “60”. Four specimens are considered to be the type-series of *Hydroporus platynotus* GERMAR: one of them is here designated as lectotype and the others paralectotypes.

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ZUSAMMENFASSUNG

Die Autoren beschreiben *Deronectes costipennis gignouxii* n. ssp. aus Nordspanien (Prov. León). Die neue Unterart steht zwar dem *D. costipennis costipennis* BRANCUCCI insbesondere hinsichtlich der Genitale sehr nahe, zeigt aber wegen der nur schwach entwickelten Längsrippen auf den Flügeldecken deutliche Ähnlichkeiten mit *D. platynotus* (GERMAR). Ein Schlüssel zur Trennung der drei Taxa sowie einige ökologische Daten werden vorgelegt. Der Lectotypus von *Hydroporus platynotus* GERMAR wird designiert.

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