

## TWO NEW CLICK-BEETLES FROM NORTHERN ITALY AND THE IBERIAN PENINSULA (COLEOPTERA ELATERIDAE)

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**Abstract:** Two new species of click-beetles belonging to the genera *Athous* (subgenus *Orthathous*) and *Dicronychus*, from northern Italy (Lombardy), Spain and Portugal are described.

**Key words:** Coleoptera, Elateridae, *Athous*, *Dicronychus*, new species, Italy, Spain, Portugal.

**Dos elatéridos nuevos del norte de Italia y de la Península Ibérica (Coleoptera, Elateridae)**

**Resumen:** Se describen dos especies nuevas de elatéridos pertenecientes a los géneros *Athous* (subgénero *Orthathous*) y *Dicronychus*, del norte de Italia (Lombardía), España y Portugal.

**Palabras clave:** Coleoptera, Elateridae, *Athous*, *Dicronychus*, especies nuevas, Italia, España, Portugal.

**Taxonomy / Taxonomía:** *Athous* (*Orthathous*) *pantinivallei* n. sp., *Dicronychus* *ibericus* n. sp.

### Introduction

The study of material of Coleoptera Elateridae received for determination from the civic Natural History Museum of Bergamo (Lombardy) and from the Spanish colleague J. I. López-Colón has revealed the presence of two new species described in this paper. One species, collected at Val Taleggio, in the Bergamo province (Lombardy, N. Italy) belongs to the genus *Athous*, subgenus *Orthathous* Reitter, for the small, very convex, scutellum narrower than the interelytral space and the fourth articles of tarsi much more smaller than third. The second new species belonging to the genus *Dicronychus* Brullé, is known for two specimens from Portugal and Central Spain. It resembles morphologically to *D. cinereus* (Herbst, 1784) (one of the specimens was previously determined and confused with this species) but the recent examination of a new specimen from Spain give me the opportunity to separate it particularly for the shape of the paramera of the male genitalia, truncate at their apicis.

### Material and methods

**Body measurements.** Body length is measured along the midline from the anterior margin of the frons to the apex of the elytra; the width is measured across the broadest part of the entire beetle.

**Pronotal measurements.** The pronotal length is measured along the midline; the width at the broadest part, which is most usually at the hind angles.

**Abbreviations.** The material studied is preserved in: CPG, Platia coll., Gatteo (Italy) and MCSNB (Civic Natural History Museum “E. Caffi” Bergamo (Italy).

The tribal placement of genera listed below follows Bouchard *et al.*, 2011.

### Taxonomy

#### Tribe Dendrometrini Gistel, 1848

#### *Athous* (*Orthathous*) *pantinivallei* n. sp.

Fig. 1, 1a, 3, 5, 7.

**MATERIAL EXAMINED.** Holotype ♂ - **Italy:** Lombardy, Val Taleggio, Torrente Enna (Bergamo), 470 m, 23.IV.1994, P. Pantini & M. Valle (MCSNB).

**DIAGNOSIS.** A species allied to *A. bicolor* (Goeze, 1777) it can be separated for the longer antennae with flattened articles, shape of pronotum as wide as head and eyes at the anterior margin, strongly sinuate before the posterior angles and particularly for the apicis of paramera of the male genitalia.

**DESCRIPTION.** Male. Not shining; entirely brown-ferruginous with undefined blackish shadings at the sides of pronotum, on scutellum and sides of elytra, covered with dense, yellowish, recumbent vestiture.

Head with eyes as wide as the anterior margin of pronotum, frons deeply and triangularly impressed, anterior margin moderately thickened at middle, directed downwards and just protruding above the clypeus, punctuation coarse, punctures umbilicate and contiguous.

Antennae exceeding by 3,5 articles the apicis of posterior angles of pronotum, second article subcylindrical, just longer than wide, third conical 2x longer than second; second and third, taken together, a little longer than fourth; fourth-tenth triangular, flattened, more twice longer than wide, last longer than penultimate, ellipsoidal.

Pronotum 1,15x longer than wide, widest at the apicis of posterior angles, strongly convex with two moderate and symmetrical depressions at the sides of the basal slope; sides arcuate, from middle regularly narrowing anterior, strongly sinuate before the posterior angles, the latter clearly diverging

with a very small spine directed outwards; punctuation coarse, very dense, punctures rather uniformly distributed, strongly umbilicate and contiguous at sides, less clearly umbilicate and nearly contiguous on the disk.

Scutellum smaller than the interelytral space, as long as wide, very convex, punctured.

Elytra 2.6x longer than pronotum and a little wider than it, convex; sides subparallel from base to middle then slightly dilated and narrowing at the posterior third; striae deeply impressed and punctured, interstriae moderately convex with rough surface.

Fourth tarsal article extremely smaller and narrower than third.

Aedeagus as in fig. 1, 1a (length 0.91 mm).

Female unknown.

Size. Length 8.7 mm; width 2.18 mm.

**ETYMOLOGY.** Dedicated to the collectors of the species, P. Pantini & M. Valle, curator and director of the Bergamo Museum of Natural History

### Tribe Cardiophorini Candèze, 1859

#### *Dicronychus ibericus* n. sp.

Fig. 2, 2a, 4, 6, 8, 9, 10, 11.

**MATERIAL EXAMINED.** Holotype ♂ - **Spain:** Sierra de Gredos, Navarrevisca (Avila), 1150 m, 16.VI.2012, J. I. López-Colón (CPG). 1 Paratype ♂ - **Portugal:** Douro, Minho, Lagoa-Trofa, 27.VI.2000, pheromons trap (CPG) (previously det. as *D. cinereus* Herbst).

**DIAGNOSIS.** A species very similar for the general shape and colour to *D. cinereus* (Herbst, 1784), it can be separated for the little shorter antennae, more dense punctuation of pronotum giving a less shining surface and above all for the truncate apicis of paramera in male genitalia.

**DESCRIPTION.** Male. Moderately shiny; entirely black-piceous with apicis of antennal articles, articulations of legs and tarsi ferruginous; covered with dense, short, recumbent, yellowish vestiture.

Head with eyes a little narrow than anterior margin of pronotum, frons moderately convex on vertex, feebly impressed at the anterior margin, the latter regularly arcuate, ridged, briefly protruding above the clypeus; punctuation dense, punctures fine, deep, simple, approximately of the same size, with shortest intervals.

Antennae reaching the apicis of posterior angles of pronotum slightly serrated from third article on; second article subconical, 1.6x longer than wide and 1.3x shorter than third; third-tenth subtriangular, gradually slenderer, on average 2x longer than wide; last a little longer than penultimate, subellipsoidal, moderately constricted at the apical extremity.

Pronotum 1.07x wider than long, widest behind the middle; convex with a shallow mid-longitudinal depression at the basal slope; sides arcuate, from behind the middle narrowing regularly anterior; sinuate before the posterior angles, the latter short, truncate, at apical extremity not divergent, shortly carinate; lateral suture-like obsolete after the middle; punctuation dense, punctures more or less regularly distributed, approximately of the same size, simple, with shortest intervals.

Scutellum heart-shaped, as long as wide, deeply impressed at middle, emarginate at middle of the base, finely punctured.

Elytra 2.6-2.7x longer than pronotum and a little wider than it, convex; sides subovaliform, striae regularly impressed and finely punctured, interstriae flat to gradually convex toward the apicis, very finely and densely punctured.

Claws clearly toothed from base to the middle.

Aedeagus as in fig. 2, 2a (length 1.31 mm).

Size. Length 8-8.3 mm; width 2.37-2.62 mm.

Female unknown.

**ETYMOLOGY.** The name is derived from the Iberian Peninsula where the species was collected.

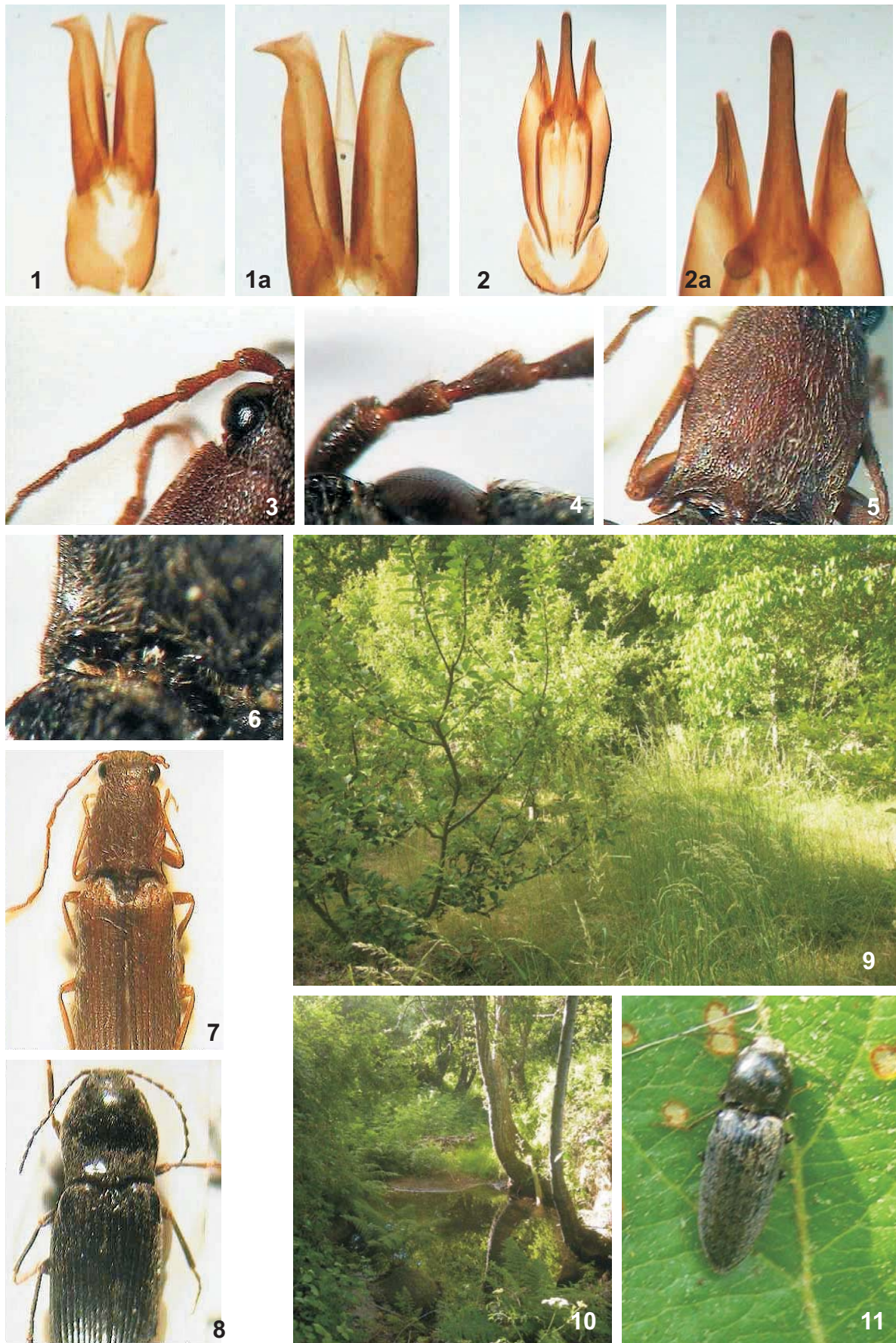
**ECOLOGICAL NOTES.** The holotype was collected on leaves of apple (*Malus domestica*) in a desert small vegetable garden with walnut-trees (*Juglans regia*) and other trees near a mountain stream with many alders (*Alnus glutinosa*) (Photos 9, 10, 11).

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**Fig. 1-2.** Male genitalia in dorsal view. **1. 1a.** *Athous (Orthathous) pantinivallei* n. sp.; **2. 2a.** *Dicronychus ibericus* n. sp. **Fig. 3-4.** First articles of antennae. **3.** *Athous (Orthathous) pantinivallei* n. sp.; **4.** *Dicronychus ibericus* n. sp. **Fig. 5-6.** Particular of posterior angles of pronotum. **5.** *Athous (Orthathous) pantinivallei* n. sp.; **6.** *Dicronychus ibericus* n. sp. **Fig. 7-8.** Habitus in partial view. **7.** *Athous (Orthathous) pantinivallei* n. sp.; **8.** *Dicronychus ibericus* n. sp. **Fig. 9-10.** Landscapes for *Dicronychus ibericus* n. sp. in the locality Navarrevisca (Ávila) (by J.I. López-Colón). **Fig. 11.** Adult of *Dicronychus ibericus* n. sp. on leaf of apple (*Malus domestica*) (by J.I. López-Colón).