

A New Weevil-Beetle (Insecta, Coleoptera, Nemonychidae) from the Lower Cretaceous of Spain

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Abstract—A new species, *Distenorrhinus (Parabrenthorhinus) xavieri*, is described from the Lower Cretaceous locality of Las Hoyas in Spain. A list of the curculionoid beetles known from the Cretaceous of Spain is given.

Key words: Weevil-beetle, Coleoptera, Nemonychidae, Lower Cretaceous, Spain.

INTRODUCTION

To date, the Mesozoic curculionoid beetles of Spain have been represented by seven genera and seven species, which are referred to three families, and have been limited to the Lower Cretaceous locality of Montsec (Whalley and Jarzembowski, 1985; Zherikhin and Gratshev, 1997; Gratshev and Zherikhin, 2000): *Distenorrhinoides simulator* Gratshev et Zherikhin, 2000; *Microbrenthorhinus martinezi* Gratshev et Zherikhin, 2000; *Brenthorhinoides lacasai* Gratshev et Zherikhin, 2000 (Nemonychidae); *Montsecbelus solutus* (Whalley et Jarzembowski, 1985) (Belidae); *Gobicar hispanicus* Gratshev et Zherikhin, 2000; *Cretonanophyes rugosithorax* Gratshev et Zherikhin, 2000; and *Jarzembowskia edmundi* Gratshev et Zherikhin, 1997 (Eccoptarthridae).

Due to the courtesy of Dr. X. Martínez-Delclòs (Geological Department, University of Barcelona), we had an opportunity to examine the remains of a beetle from the neighboring locality of Las Hoyas, which is Barremian (Melendez, 1995).

Thin and not geniculate antennae, a lower rostrum, and unwidened first tarsomeres allow a confident allocation of these remains to the family Nemonychidae. Slightly postmedial anterior coxae give a reason for considering it a member of the subfamily Brenthorhininae. A long rostrum, narrow mandibles lacking teeth, and relatively short antennae attached at the border of the apical third of the rostrum indicate that this species belongs to the genus *Distenorrhinus*. These remains are the only lateral impression attributable to the genus *Distenorrhinus*; therefore, comparison with other representatives of this genus, which are known in the form of dorsoventral impressions, is somewhat complicated; however, distinctly widened anterior tibiae provide sufficient evidence for allocating it to the subgenus

Parabrenthorhinus. Only one species from the Upper Jurassic of Kazakhstan, *D. (P.) sinuatipes* Gratshev et Zherikhin, 1995, has been known to belong to this subgenus; this species certainly differs from these remains.

MATERIAL

The examined specimen is temporarily deposited at the Section of Paleontology, University of Madrid, its permanent depository is the Museum of Cuenca, Spain.

SYSTEMATIC PALEONTOLOGY

Subfamily Brenthorhininae Arnoldi, 1977

Genus *Distenorrhinus* Arnoldi, 1977

Subgenus *Parabrenthorhinus* Gratshev et Zherikhin, 1995

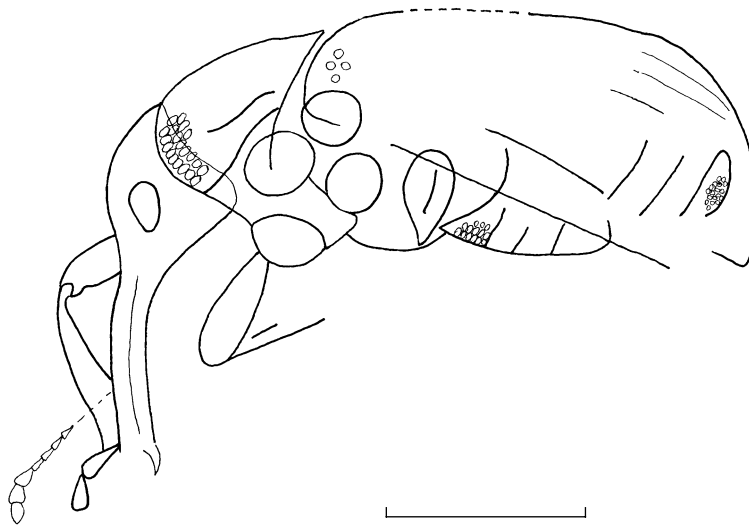
Distenorrhinus (P.) xavieri Gratshev et Zherikhin, sp. nov.

Etymology. In honor of X. Martínez-Delclòs, paleoentomologist.

Holotype. LH, no. 17330, part and counterpart of beetle impression; Spain, Cuenca Province, locality of Las Hoyas; Lower Cretaceous, Barremian.

Description (Figure). The body has a rather solid cuticle and is brown; the rostrum, antennae, and legs are notably paler. The rostrum is not arched too gently and is just a little narrower than the anterior femora, it is 7 times longer than wide, and 1.2–1.3 times as long as the pronotum. The mandibles are narrow and lack teeth. The antennae are attached at the border of the apical third of the rostrum, they are thin and short and extend approximately to the center of the eye. The antennal club is more or less loose and narrow, its segments are nearly uniform in length and width, the apical segment is acuminate. The club length is about equal to the four preceding antennomeres combined. The eyes are not large, the temples are approximately equal to the eye diameter. The frons is weakly convex. The

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Distenorrhinus (P.) xavieri sp. nov., holotype LH, no. 17330, general appearance. Scale bar, 1 mm.

pronotum is weakly and evenly convex and possesses a distinct lateral carina, and a dense, large-spotted pattern. The anterior margin of the pronotum bears smooth postocular lobes. The anterior coxae are large, notably prominent, and weakly postmedial. The elytron has a flattened disc and weak striae and is more or less steeply sloping, sparsely and finely punctate, and weakly and finely wrinkled apically. The elytron is 2.6 times as long as the pronotum. The anterior femora are thin, the anterior tibiae strongly rectilinearly widen from their bases toward their apices. The anterior tarsi are thin and long. The first tarsomere is at least 3 times as long as it is wide and 1.25 times longer than the second tarsomere, which is 3.2 times as long as it is wide. The first abdominal sternite is densely covered with small spots, the last abdominal sternite is finely punctate.

Measurements, mm: body length excluding rostrum, 3.1.

Comparison. Differences between the new and earlier described species are given below in the Key section.

Material. Holotype.

Key to identification of species of the genus *Distenorrhinus*, subgenus *Parabrenthorhinus*

1. Anterior femora moderately thickened; antennae attached slightly distad of rostrum midlength and not reaching pronotum

midlength; temples almost one half shorter than eye diameter; anterior tarsi short and fairly broad; body length, 4.0–4.4 mm.....
.....*D. (P.) sinuatipes*

—Anterior femora thin; antennae attached at border of apical third of rostrum and not reaching pronotum apex; temples not shorter than eye diameter; anterior tarsi thin and long; body length, 3.1 mm.....*D. (P.) xavieri* sp. nov.

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