

ACADEMIA NACIONAL DE CIENCIAS

## 9° CONGRESO ARGENTINO DE PALEONTOLOGÍA Y BIOESTRATIGRAFÍA

RESÚMENES

## The boring *Trypanites* from the Jandaíra Formation (Upper Cretaceous), Potiguar basin, Rio Grande do Norte, Brazil

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In spite of intense paleontologic research in the Jandaíra Formation, this study is one of the first in documenting ichnofossils. The aim of the present study is to report the presence of Trypanites Mägdefrau, 1932 in Cretaceous carbonate rocks of Brazil. The material was obtained in an active quarry in Areia Branca (Rio Grande do Norte) with approximately 8 m of vertical extension. The borings occur in several levels and a series of samples were collected. One sample studied has an area of approximately 160 cm2 containing 126 tubes bored in calcarenite. The borings have diameters between 1.0 and 4.0 mm with an average of 1.8 mm, lengths between 1.0 and 16.0 mm with an average of 5.0 mm and an inclination with respect to bedding of approximately 60°. The samples present different excavation types. X-ray analyses with variable emission potency between 48 and 62 kVA and intensity between 8 and 6.4 mA revealed that the tubes are straight to curved, in some cases showing overcrossing. They are cylindrical and unbranched, and display a single circular aperture and blind base with tapered to rounded end. Trypanites is distinguished from Gastrochaenolites and Palaeosabella by its lack of basal swelling (Tapanilla et al., 2004). Borings occur also in inoceramid molds. The ichnogenus Trypanites was probably produced by sipunculid or polychaete worms (Tapanilla and Copper, 2002). Trypanites is abundant in carbonate hard substrates such as shells, coral skeletons, bryozoan zoaria, and hardgrounds (Wilson and Palmer, 2001). According to Taylor and Wilson (2003), Trypanites has a long stratigraphic record, ranging from the Cambrian to Recent, being most common in the Ordovician. Knaust (1998) recorded Trypanites associated with Balanoglossites Mägdefrau, 1932 in Triassic limestones from Germany.

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