## Possible death marks of coccomorphs (life position) on *Dicroidium* odontopteroides from the Passo das Tropas outcrop (Late Ladinian), Paraná Basin, Brazil

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## Abstract:

We analyzed a compression of a Triassic phytofossil specimen of Dicroidium odontopteroides presenting a probable coccoid fossil with the trace fossil representing the last activity of the tracemaker (Mortichnia). The phytofossil sample presents a high-quality preservation. That sample comes from an interval of 2.2 meters-thick of laminated mudstone of the Passo das Tropas outcrop, Santa Maria Formation, Paraná Basin. The trackway produced by the coccomorph is composed of two pared track rows with a total of 1.6 mm in length and 1.5 mm in width. The imprints have a scratch shape and are regularly spaced, forming an angle of 40° to the mid-line. The trace fossil has 14 imprints that can be attributed to the *Diplichnites* ichnogenera, produced before the compression of the coccomorph. The preserved insect presents 3.75 mm in length and 2.87 mm in width. The dorsal-posterior anal ring is exposed. The absence of dorsal wax plates ornamentation is probably due to a fine clay of sediment that overlays the dorsal view. Although dorsal comprehension is not visible, the interpretation of coccomorphs affinities is enhanced by the association with 29 coccomorph dorsal compressions bearing dorsal wax plates ornamentation in the same plant from that stratigraphic interval. Female specimen is suggested by compressions of elongated posterior wax plates. The association of life position of the coccomorph and its trackway on the Dicroidium odon-topteroides indicate an event of fast burial in the depositional site. The tracemaker evidence will be examined by techniques of Micro-CT for further interpretations [CNPq e CAPES].

Keywords: coccoid, Coccoideae, Ortheziidae, Dicroidium Flora, lagerstätten