

A new phylloblattid dictyopteran—first fossil insect from the Arroyo Totoral Formation (Cisuralian, Permian) of La Rioja Province, Argentina

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The first fossil insect from the Cisuralian (Lower Permian) Arroyo Totoral Formation, south of Sierra de los Llanos, Paganzo Basin, southeastern La Rioja Province, Argentina is reported. A new species of Phylloblattidae (Dictyoptera), *Anthracoblattina macucai* sp. nov., is described from an almost complete forewing and based on its general venation scheme (e.g., distinct narrowing of the strip-like costal field near wing base, widened areas between the main veins, Sc pectinated, R and M slightly sigmoidal, twigs provide fan-like covering of the wing apex, the first forks of both R and M located between the first third and the half of the wing length, CuA straight, ends at the transition of the wing tip into the posterior wing border, CuP fluently curved, broad interspace between CuP and AA, cross-venation anastomosing- striate to reticulate). Additionally, we discuss the taxonomic position of *A. macucai* sp. nov. in relation to other phylloblattid species described from Carboniferous–Permian South American outcrops. Finally, we analyze this new fossil “cockroachoids” within its paleofloristic context and depositional environment. *A. macucai* sp. nov. represents the first known Permian insect found for both the La Rioja Province and the Arroyo Totoral Formation, pointing the unit as promising for the search of fossil insects in Argentina.

Key words: Dictyoptera, Phylloblattidae, Arroyo Totoral Formation, Cisuralian, Permian, Argentina.

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