

New records of Late Triassic wood from Argentina and their biostratigraphic, paleoclimatic, and paleoecological implications

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We report gymnospermous wood found in sandstone and siltstone beds of the Upper Triassic Hilario Formation, Sorocayense Group at Hilario Creek located in San Juan province, Argentina. The identified xylotaphoflora comprises *Baieroxylon cicatricum* (Ginkgoales) and a new species of *Protophyllocladoxylon* (Coniferales), it constitutes the first reports of these taxa from the Triassic in Argentina. *Protophyllocladoxylon hilarioense* sp. nov. differs from the other species by the following combination of anatomical characters: radial pits araucarian, mixed and some with abietinian tendency, uni-biseriate; contiguous, separated; tangential pits uni-biseriate; cross-field pits are simple elliptic, oblique, one to two in number and low uni-biseriate rays. The growth rings in the reported woods show a gradual transition from earlywood to latewood, suggesting little change in the climatic conditions experienced during their growth. The type of growth rings observed is consistent with a humid but seasonally dry subtropical climate. These woods are representatives of the arboreal stratum of a mesophytic association.

Key words: Ginkgoales, Coniferales, Pinales, *Baieroxylon*, *Protophyllocladoxylon*, Triassic, Hilario Formation, Argentina, San Juan.

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