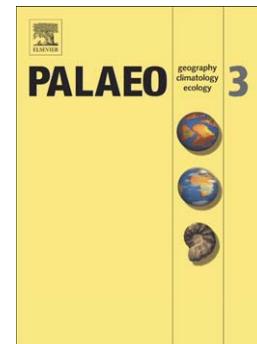


Accepted Manuscript

Early seed plants from western Gondwana: Palaeobiogeographical and ecological implications based on Tournaisian (Lower Carboniferous) records from Argentina

C. Prestianni, J.J. Rustán, D. Balseiro, E. Vaccari, A.F. Sterren, P. Steemans, C. Rubinstein, R.A. Astini



PII: S0031-0182(14)00555-0

DOI: doi: [10.1016/j.palaeo.2014.10.039](https://doi.org/10.1016/j.palaeo.2014.10.039)

Reference: PALAEO 7076

To appear in: *Palaeogeography, Palaeoclimatology, Palaeoecology*

Received date: 28 May 2014

Revised date: 21 October 2014

Accepted date: 29 October 2014

Please cite this article as: Prestianni, C., Rustán, J.J., Balseiro, D., Vaccari, E., Sterren, A.F., Steemans, P., Rubinstein, C., Astini, R.A., Early seed plants from western Gondwana: Palaeobiogeographical and ecological implications based on Tournaisian (Lower Carboniferous) records from Argentina, *Palaeogeography, Palaeoclimatology, Palaeoecology* (2014), doi: [10.1016/j.palaeo.2014.10.039](https://doi.org/10.1016/j.palaeo.2014.10.039)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Early seed plants from western Gondwana: palaeobiogeographical and ecological implications based on Tournaisian (Lower Carboniferous) records from Argentina.

Prestianni¹ C., Rustán²⁻⁴ J.J., Balseiro, D.²⁻³, Vaccari²⁻⁴ E., Sterren²⁻³, A.F, Steemans⁵ P.,
Rubinstein⁶ C. and Astini² R.A..

¹ Paleontology Department, Royal Belgian Institute of Natural Sciences, Rue Vautier 29, 1000 Brussels. cyrille.prestianni@naturalsciences.be; +32(0) 2 627 44 83. Corresponding author.

² Centro de Investigaciones en Ciencias de la Tierra (CICTERRA), CONICET-Universidad Nacional de Córdoba, Edificio CICTERRA, Av. Vélez Sarsfield 1611, X5016GCA, Ciudad Universitaria, Córdoba, Argentina.

³ Centro de Investigaciones Paleobiológicas (CIPAL), FCEFyN, Universidad Nacional de Córdoba, Av. Velez Sarsfield 299, 5000, Córdoba, Argentina

⁴ Universidad Nacional de La Rioja, Av. René Favaloro s/n 5300, La Rioja, Argentina

⁵ Unité de Paléobiogéologie, Paléopalynologie et Paléobotanique, Dpt. de Géologie, Université de Liège, B18/P40 Boulevard du Rectorat, 4000 Liege, Belgique.

⁶ Instituto Argentino de Nivología, Glaciología y Ciencias Ambientales (IANIGLA): CCT CONICET-Mendoza, Av. Ruiz Leal s/n, Parque General San Martín, M5502IRA, Mendoza, Argentina.

ABSTRACT

The oldest seed occurrences in western Gondwana have been recognized in a new stratigraphic section located in western Argentina (Precordillera Basin). Palynological evidence indicates an Early Mississippian (probably Tournaisian) age for this new succession. The two identified early seeds genera, *Pseudosporogonites* cf. *hallei* and *Warsteinia sancheziae* n. sp. were up to now considered as restricted to the Devonian of Laurussia. This finding suggests a dispersal of earliest spermatophytes between Laurussia and Gondwana during Devonian/Tournaisian times, thus accounting for the Rheic Ocean as a surmountable biogeographic barrier for continental

Download English Version:

<https://daneshyari.com/en/article/6349864>

Download Persian Version:

<https://daneshyari.com/article/6349864>

[Daneshyari.com](https://daneshyari.com)