



# XVII Simposio Argentino de Paleobotánica y Palinología

*“Hacia nuevos desafíos”*

## INSTITUCIONES ORGANIZADORAS



Universidad Autónoma  
de Entre Ríos



C I C Y T T P

## AUTORIDADES

Aníbal Sattler (Rector - UADER)

Jorge Noriega (Decano FCyT – UADER)

Mercedes di Pasquo (Presidente ALPP 2009-2020)

Carlos Piña (Director CICYTTP-CONICET-ER-UADER)

## COMISIÓN ORGANIZADORA

### Presidente

Dra. Mercedes di Pasquo (CICYTTP-CONICET-ER-UADER)

### Vicepresidente

Dra. Guillermina Fagúndez (CICYTTP-CONICET-ER-UADER)

## CORRELATION OF THE *RETISPORA LEPIDOPHYTA* ASSEMBLAGE WITH CONODONTS NEAR THE DEVONIAN-CARBONIFEROUS BOUNDARY IN THE MIDDLE SAPPINGTON FORMATION, MONTANA, USA

**B.J. Rice<sup>1</sup>, M. di Pasquo<sup>2</sup>, P.T. Doughty<sup>3</sup>, G.W. Grader<sup>3</sup> and P. Isaacson<sup>1</sup>**

<sup>1</sup>Department of Geological Sciences, University of Idaho. 83844, Moscow, Idaho, United States of America. rice.bev.j@gmail.com

<sup>2</sup>Laboratorio de Palinoestratigrafía y Paleobotánica, Centro de Investigaciones Científicas y Transferencia de Tecnología (CONICET-Entre Ríos-UADER). Materi y España s/n, E3105BWA, Diamante, Diamante, Entre Ríos, Argentina. medipa@cicyttp.org.ar

<sup>3</sup>PRISEM Geoscience Consulting. 1011 West 27th Ave., Spokane, Washington 99203, United States of America.

Current research on the Sappington Formation of Montana is providing new information on the upper and lower range of *Retispora lepidophyta*. The Sappington Formation consists of 6 units: an upper (unit 6) and lower (unit 1) black shale, and a middle member (units 2–5) composed of a variety of near-shore marine strata including limestone, silty sandstone, and green shale. The *Retispora lepidophyta-Verrucosisporites nitidus* (LN) palynozone previously confirmed from the Unit 4 green shale within the Middle Sappington Formation at many localities in southwestern Montana has now been extended into the overlying Unit 5 lithologies at the Cottonwood-Mill Creek Divide and Yankee Pete localities. At Dry Hollow, palynomorphs of the LN Zone were recorded from Unit 4, and the index conodont *Siphonodella praesulcata* was recovered from the base of Unit 5. *Siphonodella praesulcata* has been recovered from Unit 5 strata at the Lick Creek and Snake Pit localities without associated palynomorphs. Uppermost Devonian conodonts have been recovered from other Unit 5 localities at Blue Ox, Bombing Range, Horseshoe Canyon West, and Vermont. Therefore, the upper range of *Retispora lepidophyta* is extended through Unit 5 along with the record of *S. praesulcata*. These microfossils are absent in the overlying Unit 6 and Lodgepole Formation. This confirms that Sappington units 4 and 5 represent the global Uppermost Famennian Hangenberg event in southwestern Montana.

\*Project supported by CONICET PIP 0812-2015; NGS (9808-15); PRISEM Geoscience Consulting; University of Idaho.

Publicado en Boletín ALPP, vol. 2018