XV Simposio Argentino de Paleobotánica y Palinología
II Simposio Argentino de Melisopalinología
10 al 13 de julio de 2012 – Corrientes, Argentina

Palynostratigraphy and correlation of the Cisuralian Vitiacua Formation in Southern Bolivia

M.M. DI PASQUO[1] y G. W. GRADER.[2]

New stratigraphic and palynologic study of the Vitiacua Formation was done at La Yesera and Canaletas, near to Tarija in southern Bolivia. Eight samples yielded 62 species (11 trilete and 6 monolete spores, 11 monosaccate and bisaccate non-striate and 31 striate and costate pollen grains, and 3 algae). The Yesera Centre assemblage (YCA, one sample) is composed of *Lueckisporites virkkiae* (Potonié and Klaus) Klaus and several species of *Vittatina*, *Mabuitasaccites*, *Striatoabieites*, *Corisaccites*, *Weylandites*, and *Botryococcus*. The Yesera West assemblage (YWA, three samples) is characterized by monolete (*Polypodiisporites mutabilis* Balme, *Reticuloidosporites warchianus* Balme, *Thymospora rugulosa* Mautino et al.) and trilete spores (*Lundbladispora*, *Convolutispora uruguaiensis* Mautino et al.) and subordinate algae and pollen grains (*Pteruchipollenites*, *Vitreisporites*). The Canaletas assemblage (CA) is poorly preserved represented by pollen grains (*Lueckisporites virkkiae*, *Striatoabieites multistriatus* (Balme and Hennelly) Hart, *Pteruchipollenites indarraensis* (Segroves) Foster) and *Botryococcus*. Predominantly varied pollen grains of gymnospermous affinities occur in the YCA and CA, whereas notable pteridophytes are dominant in the YWA, being characteristic of the terrestrial landscape of the *Glossopteris* Flora during the Early Cisuralian in Bolivia under a temperate climate. The YCA and CA are correlated to the palynoflora from the well dated lower member of the Copacabana Formation at Apillapampa (mid Asselian-early Sakmarian), and the YWA to the overlying Coal Member (early Sakmarian- Artinskian?), known from central Bolivia and correlated to Permian units of Peru. Overall they are correlated to the middle Artinskian-Wuachiapingian Brazilian *L. virkkiae* Zone, the Uruguayan *Striatoabieites anaverrucosus-Staurosaccites cordubensis* Zone, and the Argentinian *Lueckisporites–Weylandites* Zone.

[1] Laboratorio de Palinoestratigrafía y Paleobotánica, CICYTTP-CONICET, Dr. Matteri y España S/N, Diamante (E3105BWA), Entre Ríos, Argentina. *Repositorio del material palinológico*. E-mail: medipa@cicyttp.org.ar
[2] Department of Geological Sciences, University of Idaho, 825 W 7th Street, Moscow, Idaho 83844-3022. E-mail: georgewgrader@prisemgeoconsulting.com