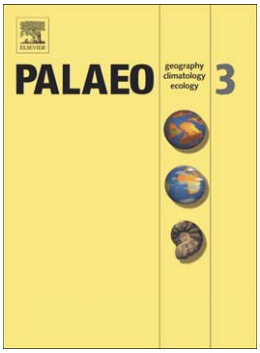

Strigoceras septicarinatum (Jurassic Ammonoidea) in the Precordillera of North Chile: Palaeobiogeographical and palaeoenvironmental implications

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PII: S0031-0182(14)00278-8
DOI: doi: 10.1016/j.palaeo.2014.05.022
Reference: PALAEO 6871

To appear in: *Palaeogeography, Palaeoclimatology, Palaeoecology*

Received date: 13 March 2014
Revised date: 19 May 2014
Accepted date: 23 May 2014

Please cite this article as: Fernandez-Lopez, Sixto R., Chong-Diaz, Guillermo B., *Strigoceras septicarinatum* (Jurassic Ammonoidea) in the Precordillera of North Chile: Palaeobiogeographical and palaeoenvironmental implications, *Palaeogeography, Palaeoclimatology, Palaeoecology* (2014), doi: 10.1016/j.palaeo.2014.05.022

Strigoceras septicarinatum (Jurassic Ammonoidea) in the Precordillera of North Chile: Palaeobiogeographical and palaeoenvironmental implications

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ABSTRACT

The first circum-Pacific record of the Bajocian dimorphic ammonite *Strigoceras septicarinatum*, from the Quebrada San Pedro area, Antofagasta, northern Chile, is described and illustrated. Morphological features of two specimens display macroconch and microconch characters of a single biospecies, usually assigned to separate morphospecies of the West Tethyan genera *Strigoceras* [macroconch] and *Cadomoceras* [microconch]. Preservational features of these two specimens, found *in situ* in the same stratigraphic level at the top of the Torcazas Formation, correspond to resedimented elements of the uppermost Bajocian *Dimorphinites* Biohorizon, contemporaneous with the sedimentary matrix. These specimens represent dimorphic shells produced by extremely scarce individuals inhabiting the Tarapaca Basin, without evidence of lasting biostratinomic modifications such as sorting by necroplanktic drift or biostratinomic encrusting. In the Tarapaca Basin, the distribution of ammonite shells was taphonomically and ecologically driven by regional changes of relative sea level. Taphonomic, palaeoecological and palaeobiogeographical observations in the areas of Quebrada San Pedro and Caracoles corroborate the development of an advanced-deepening