ACTA PALAEONTOLOGICA POLONICA

On the affinities of *Tetraceratops insignis*, an Early Permian synapsid

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Acta Palaeontologica Polonica 56 (2), 2011: 301-312 doi: http://dx.doi.org/10.4202/app.2010.0063

The affinities of the Early Permian synapsid *Tetraceratops insignis* have been reevaluated several times since the early 20th century, being considered as an eothyridid, a sphenacodontid, or a therapsid. This controversy continues into the 21st century, with recently raised doubts about the interpretation of *Tetraceratops* as the oldest known therapsid, a hypothesis supported by the only redescription of this fossil in the second half of the 20th century. Our study examines the arguments proposed to refute therapsid affinities, and concludes that *Tetraceratops* indeed is the sister−group of all other known therapsids. The most recently published phylogenetic data matrix that includes *Tetraceratops* fails to confirm its therapsid affinities. However, adding seven characters to that matrix leads to the conclusion that *Tetraceratops* is the basal−most and oldest therapsid. The recent suggestion of a Laurasian origin of therapsids appears poorly supported; too few data are available on the distribution of Permian synapsids to settle this question.

Key words: Therapsida, phylogeny, biogeography, center of origin, range extension, Paleozoic, Pangaea, North America.

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