

AN ELEPHANT UNDER THE CARPET? THE REBBACHISAURIDAE (SAUROPODA, DIPLODOCIMORPHA) FROM THE CRETACEOUS OF PATAGONIA. NEW EVIDENCES AT “LA BUITRERA” (CANDELEROS FORMATION), RÍO NEGRO PROVINCE[†]

Pablo A. GALLINA*, Sebastián APESTEGUÍA* and Fernando E. NOVAS*

‘La Buitrera’, a locality of the Candeleros Formation (Early Cenomanian) exposed in northern Río Negro Province, has provided an abundant tetrapod fauna. The sauropod remains include titanosauriform teeth and an incomplete rebbachisaurid specimen. The latter consists of a posterior cervical vertebra, two caudals, a femur, ilium, humerus, and several unprepared bones. The cervical neural arch shows two accessory lateral laminae; the first, previously considered autapomorphic for “*Rebbachisaurus*” *tessonei*, connects postzygodiapophysial and spinoprezygapophysial laminae; the other, absent in “*R.*” *tessonei*, connects the prezygodiapophysial lamina with the vertebral centrum. This suggests that the accessory lamina of the neuquenian taxon constitutes a synapomorphic trait of a wider group that could also include the taxon from the Bajo Barreal Formation. The Rebbachisauridae was an important component of the Cretaceous history of the Gondwanan Diplodocimorpha. They constitute a clade of plesiomorphic, mid-sized sauropods, with single neural spines along the whole back. They have been recorded in the Aptian of Neuquén (*Rayososaurus agrioensis*), the Aptian-Albian of Morocco (*Rebbachisaurus garasbae*), the Cenomanian of Egypt (*Nigersaurus taqueti*), Chubut, and Neuquén (“*Rebbachisaurus*” *tessonei*), and with possible reports up to the Coniacian of Chubut. Conflicting interpretations about *Antarctosaurus wichmannianus* could carry the diplodocimorph record in Patagonia up to the Santonian Anacleto Formation (Río Negro). The mid-sized rebbachisaurids, still almost unknown, largely cohabited with the faunas of large Senonian titanosaurids, and their last records are in agreement with the rising of the small-sized saltasaurine sauropods, which could have occupied a similar adaptive zone.

Project granted by the ANPCyT PICT 99 6678.

*Laboratorio de Anatomía Comparada y Evolución de los Vertebrados, Museo Argentino de Ciencias Naturales B. Rivadavia, Av. Ángel Gallardo 470, (1405) Buenos Aires.

[†] Original citation: Gallina, P. A., S. Apesteguía, and F. E. Novas. 2002. ¿Un elefante bajo la alfombra? Los Rebbachisauridae (Sauropoda, Diplodocimorpha) del Cretácico de Patagonia. Nuevas evidencias en “La Buitrera” (Fm. Candeleros), provincia de Río Negro. XVIII Jornadas Argentinas de Paleontología de Vertebrados, Bahía Blanca. *Ameghiniana* 39(4):10R. Translated by Sebastián Apesteguía, 2004.