

Sauropod diversity in the Upper Cretaceous Nemegt Formation of Mongolia—a possible new specimen of *Nemegtosaurus*

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Currently, there are two sauropod taxa known from the Upper Cretaceous (Maastrichtian) Nemegt Formation of Gobi Desert, Mongolia: Nemegtosaurus from the Nemegt locality and Opisthocoelicaudia from the Altan Uul IV locality. Both taxa are represented by not overlapping elements (skull and partial postcranial skeleton respectively), which arises question on their possible synonymy. Five articulated sauropod dorsal vertebrae (PIN 3837/P821, dorsals 6-10) were found in 1949 by the Mongolian Expedition of the Academy of Sciences of the USSR at the Nemegt locality. This specimen is similar to *Opisthocoelicaudia* in having a strong ventral ridge on dorsal centra, a low neural arch which is anteroposteriorly narrowest at the junction with the centrum and widens dorsally, and lack of hyposphene-hypantrum articulations. PIN 3837/P821 differs from *Opisthocoelicaudia* by having the less dorsoventrally flattened dorsal centra, a shallow ventral concavity of dorsal centra in lateral view, a vertical posterior centrodiapophyseal lamina (pcdl) in dorsals 8 and 9, a postzygodiapophyseal lamina (podl) that roofs the centrodiapophyseal fossa (pocdf), and strongly developed accessory laminae within the parapophyseal centrodiapophyseal fossa (pacdf). The sauropod femora from Nemegt Formation differ from the femur of Opisthocoelicaudia by the medial condyle extending more distally compared with the lateral condyle. Most likely these femora and PIN 3837/P821 belong to Nemegtosaurus, which would make this taxon distinct from Opisthocoelicaudia by discussed characters of dorsal vertebrae and femur.

Key words: Dinosauria, Sauropoda, Nemegtosaurus, Upper Cretaceous, Nemegt Formation, Mongolia.

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