ACTA PALAEONTOLOGICA POLONICA

A new basal eusauropod from the Middle Jurassic of Yunnan, China, and faunal compositions and transitions of Asian sauropodomorph dinosaurs

Lida Xing, Tetsuto Miyashita, Philip J. Currie, Hailu You, Jianping Zhang, and Zhiming Dong
Acta Palaeontologica Polonica 60 (1), 2015: 145-154 doi: http://dx.doi.org/10.4202/app.2012.0151

Many sauropod ghost lineages cross the Middle Jurassic, indicating a time interval that requires increased sampling. A wide taxonomic spectrum of sauropodomorphs is known from the Middle Jurassic of China, but the braincase of a new sauropod, named here *Nebulasaurus taito* gen. et sp. nov., is distinct. *Nebulasaurus* is sister taxon to *Spinophorosaurus* from the Middle Jurassic of Africa and represents a clade of basal eusauropods previously unknown from Asia. The revised faunal list indicates dramatic transitions in sauropodomorph faunas from the Jurassic to Cretaceous of Asia; these are consistent with geographic isolation of Asia through the Late Jurassic. Non-sauropod sauropodomorphs, non-mamenchisaurid eusauropods (including basal macronarians), and mamenchisaurids successively replaced previous grades through the Jurassic, and titanosauriforms excluded all other sauropod lineages across the Jurassic–Cretaceous boundary.

Key words: Dinosauria, Sauropoda, Eusauropoda, Jurassic, China.

Lida Xing [xinglida@gmail.com] and Jianping Zhang [zhjping@cugb.edu.cn], School of the Earth Sciences and Resources, China University of Geosciences, Beijing 100083, China; Tetsuto Miyashita [tetsuto@ualberta.ca] and Philip J. Currie [philip.currie@ualberta.ca], Department of Biological Sciences, University of Alberta, Edmonton, AB, T6G 2E9 Canada; Hailu You [youhailu@gmail.com] Institute of Geology, Chinese Academy of Geological Sciences, Beijing 100037, China; Zhiming Dong [dinodong@sina.com], Institute of Vertebrate Paleontology and Paleoanthropology, Chinese Academy of Sciences, Beijing 100044, China.

Full text (628.9 kB) |
Supplementary file (115.7 kB)