ACTA PALAEONTOLOGICA POLONICA

The Early Cretaceous lizard *Dalinghosaurus* from China

Susan E. Evans and Yuan Wang
Acta Palaeontologica Polonica 50 (4), 2005: 725-742

The Early Cretaceous lizard genus *Dalinghosaurus* from the Yixian Formation of Liaoning, China, was originally described on the basis of a partial postcranial skeleton characterised by extremely long slender hind feet and a long tail. The skull has remained unknown and the systematic position is undetermined. Here we describe the skeletal anatomy of this lizard in detail based on a series of new specimens in the collections of the Institute of Vertebrate Paleontology and Paleoanthropology, Beijing. The adult animal is small, with a well-ossified skull having a characteristic pattern of pustulate sculpture on the roofing bones and an expanded angular flange on the lower jaw. Skin impressions show a pattern of fine granular dorsal scales, rhomboidal ventral scales, and elongate tail scales arranged in annulae. In many features, the skull resembles that of the living *Xenosaurus* and *Shinisaurus*, as well as *Carusia* from the Late Cretaceous of Mongolia and China. Phylogenetic analysis using three different data sets provides some support for that interpretation. The postcranial skeleton is characterised by long hind limbs and short forelimbs, but the delicacy of the long pes and the slender claws suggest this animal may have been a climber rather than a facultative bipedal runner.

Key words: Lepidosauria, Squamata, lizard, Cretaceous, Jehol Biota, China.

Susan E. Evans [ucgasue@ucl.ac.uk], Department of Anatomy and Developmental Biology, University College London, Gower Street, London WC1E 6BT, England; Yuan Wang [wangyuan@ivpp.ac.cn], Institute of Vertebrate Paleontology and Paleoanthropology, Chinese Academy of Sciences, 142 Xi–Zhi–Men–Wai St, P.O.Box 643, Beijing 100044, China.


Full text (1,417.1 kB)