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New hadrosaurid dinosaurs from the uppermost Cretaceous of northeastern China

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Several hundred disarticulated dinosaur bones have been recovered from a large quarry at Wulaga (Heilongjiang Province, China), in the Upper Cretaceous (Maastrichtian) Yuliangze Formation. The Wulaga quarry can be regarded as a monodominant bonebed: more than 80% of the bones belong to a new lambeosaurine hadrosaurid, *Sahaliyania elunchunorum* gen. et sp. nov. This taxon is characterised by long and slender paroccipital processes, a prominent lateral depression on the dorsal surface of the frontal, a quadratojugal notch that is displaced ventrally on the quadrate, and a prepubic blade that is asymmetrically expanded, with an important emphasis to the dorsal side. Phylogenetic analysis shows that *Sahaliyania* is a derived lambeosaurine that forms a monophyletic group with the corythosaur and parasauroloph clades. Nevertheless, the exact position of *Sahaliyania* within this clade cannot be resolved on the basis of the available material. Besides *Sahaliyania*, other isolated bones display a typical hadrosaurine morphology and are referred to *Wulagasaurus dongi* gen. et sp. nov., a new taxon characterised by the maxilla pierced by a single foramen below the jugal process, a very slender dentary not pierced by foramina, and by the deltopectoral crest (on the humerus) oriented cranially. Phylogenetic analysis indicates that *Wulagasaurus* is the most basal hadrosaurine known to date. Phylogeographic data suggests that the hadrosaurines, and thus all hadrosaurids, are of Asian origin, which implies a relatively long ghost lineage of approximately 13 million years for basal hadrosaurines in Asia.

Key words: Dinosauria, Hadrosauridae, *Sahaliyania elunchunorum*, *Wulagasaurus dongi*, phylogeny, palaeogeography, Late Cretaceous, China.

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