

Cranial osteology and ontogeny of *Saurolophus angustirostris* from the Late Cretaceous of Mongolia with comments on *Saurolophus osborni* from Canada

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Reanalysis of the skull of the crested Asian hadrosaurine *Saurolophus angustirostris* confirms its status as a distinct species from its North American relative, *Saurolophus osborni*. In addition to its greater absolute size, *S. angustirostris* is differentiated from *Saurolophus osborni* by an upturned premaxillary body, a more strongly reflected oral margin of the premaxilla, the absence of an anterior notch in the prenasal fossa, a sigmoidal contour of the ventral half of the anterior process of the jugal, a shallow quadratojugal notch on the quadrate, and by a strongly bowed quadrate in lateral view. Phylogenetic analysis corroborates a sister taxon relationship between *S. angustirostris* and *S. osborni*. *Saurolophus* itself is characterised by a solid, rod-like crest composed of the nasals, frontals, and prefrontals; secondary elongation of the frontal and prefrontal resulting in the backwards extension of the frontal platform; a frontal platform that extends dorsal to the anterior portion of the supratemporal fenestra; a parietal that is excluded by the squamosals from the posterodorsal margin of the occiput; and the presence of two supraorbital elements. Although the palaeobiogeographic history of *Saurolophus* remains unresolved, at least two possible dispersal events took place across Beringia during the late Campanian leading to the evolution of the clade composed of *Kerberosaurus*, *Prosaurolophus*, and *Saurolophus*.

Key words: Dinosauria, Ornithischia, Hadrosauridae, Hadrosaurinae, *Saurolophus*, taxonomy, Cretaceous, Mongolia.

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