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A new gobiconodontid mammal from Upper Cretaceous of China and reassessment of dentition in *Gobiconodon*

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We provide a detailed description of the dental morphology of *Gobiconodon zofiae* based on the holotype and clarify its diagnostic features in comparison with other species in the genus. We also report a new species, *Gobiconodon gongzhulingensis* sp. nov., from the lower Upper Cretaceous Quantou Formation in Gongzhuling City, Jilin Province, based on a maxilla with five molariforms. The dental morphologies of both species allow us to reassess tooth assignments in *Gobiconodon* and support a dental formula of 2.1.3.4/2.1.3.5 for the genus. The molariforms of *Gobiconodon* exhibit a distinct type of tooth widening that is achieved primarily through cusp inflation, without pronounced cusp rotation or the addition of new cusps. In addition to the differences in occlusal pattern, embrasure shearing dominated by an orthal power stroke, accompanied by a labiolingually directed component of relative displacement of the lower teeth during mastication also distinguishes *Gobiconodon* from other eutriconodontans, particularly triconodontids, suggesting an insectivorous and/or omnivorous diet for *Gobiconodon*. The tooth shapes and wear patterns described here indicate diverse ecomorphological specializations and species diversification within eutriconodontans.

Key words: Mammalia, Gobiconodontidae, morphology, Quantou Formation, Upper Cretaceous, Jilin Province.

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