

Lower jaw morphology of the last surviving tritylodontid *Fossiomanus sinensis* from the Early Cretaceous Jehol Biota, Liaoning Province, China

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Tritylodontids are close relatives of mammals with specialized teeth adapted for herbivory. Despite their diversification during the Jurassic, the fossil record of this clade suggests they declined significantly in the Cretaceous when they are mainly represented by fragmentary dental remains. The exception is the Early Cretaceous taxon *Fossiomanus sinensis* Mao et al., 2021. Here we describe a new mandible of this species from the same locality as the holotype specimen. The new specimen provides more complete information on mandible shape and tooth morphology, filling a knowledge gap for this iconic Cretaceous tritylodontid, given that cranial morphology in the holotype of *F. sinensis* remains insufficiently studied. Additionally, the fossil record of *F. sinensis* represents the youngest known tritylodontid (~119 Ma, Aptian) and the latest non-mammaliaform cynodont, shedding light on the evolutionary history of early mammalian relatives.

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