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Article

First report of the lower dentition of *Siamotherium pondaungensis* (Cetartiodactyla, Hippopotamoidea) from the late middle Eocene Pondaung Formation, Myanmar

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With 4 figures

Abstract: The anthracothere *Siamotherium pondaungensis* from the late middle Eocene Pondaung Formation in Myanmar was known only from its upper dentition. Recent field work in the Pondaung deposits has led to the discovery of a juvenile fragmentary mandible preserving d3–d4, m1–m2 and erupting p3–p4. The morphology, structure and dimensions of these lower teeth (including simple and bunodont lower premolars with weakly developed talonids, lower molar trigonids and talonids of similar width, entoconid that lacks a postectoentocristid and slightly distal to the hypoconid) confirm their attribution to *S. pondaungensis* which is now documented by its almost complete dentition, and further demonstrate that this species clearly differs from all known dichobunoids, including *Pakkokuhyus lahirii*. *Siamotherium pondaungensis* is one of the Pondaung anthracotheres for which most complete cranial and dental material is known, and a phylogenetic analysis supports the basal-most position of *Siamotherium* within the hippopotamoids.

Key words: Myanmar, Pondaung, late middle Eocene, Anthracotheriidae, *Siamotherium pondaungensis*.

1. Introduction

The late middle Eocene Pondaung Formation in Myanmar is known for its numerous ungulate and primate fossil remains (Colbert 1938; Jaeger et al. 1999; Jaeger et al. 2019; Chaimanee et al. 2000; Chaimanee et al. 2012; Ducrocq et al. 2000; Ducrocq et al. 2016; Ducrocq et al. 2020; Takai et al. 2001; Takai et al. 2005; Beard et al. 2007; Beard et al. 2009; Soe 2008; Soe et al. 2017; Tsubamoto et al. 2011). Particularly, the primitive anthracothere assemblage is one of the most diversified in the Paleogene of Southeast Asia with five genera and seven species commonly recognized in the Pondaung fauna (Lihoreau & Ducrocq 2007; Soe 2008; Tsubamoto et al. 2011). The diversity of this group in Myanmar, as well as in Krabi (Thailand) where the second basal-most anthracothere *S. krabiense* is known, have led to suggest that the group originated in Southeast Asia and differentiated from other ungulates by the beginning of the middle Eocene (Pilgrim 1941; Beard 1998; Ducrocq 1999; Lihoreau & Ducrocq 2007). The small and primitive anthracothere *Siamotherium pondaungensis* was originally described from a fragmentary maxillary from the Kyadaw kyitchaung locality (Ducrocq et al. 2000), and later Soe et al. (2017) attributed an almost

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