Evolution of the anthracotheres (Mammalia, Artiodactyla) in the Neogene of Myanmar

Takehisa Tsubamoto¹, Thaung-Htike², Zin-Maung-Maung-Thein³, Naoko Egi⁴, Masanaru Takai⁴

¹Hayashibara Biochemical Lab., Inc., ²Shwebo Degree Collage, ³Mandalay Univ., ⁴Primate Res. Inst., Kyoto Univ.

We report new gnatho-dental specimens of the anthracotheres (Mammalia, Artiodactyla) discovered from four Neogene localities of central Myanmar. Based on these new specimens, we recognized four species of the anthracotheres in the Neogene of central Myanmar: Microbunodon silistrensis and aff. Sivameryx sp. from the middle Miocene; and Microbunodon milaensis and Merycopotamus dissimilis from the latest Miocene to Plio-Pleistocene. This discovery extends the distribution of Microbunodon and Sivameryx-like bothriodontine from the Indian Subcontinent to Southeast Asia, indicating their broader distribution in the Neogene. Furthermore, the discovery demonstrated that Microbunodon survived until the Plio-Pleistocene. It also indicates that both a highly selenodont hippo-like form (Merycopotamus) and a bunodont and relatively primitive form (Microbunodon) were the last surviving anthracotheres. These two anthracotheres co-existed until the late Pliocene/early Pleistocene in Myanmar. In the Neogene of Myanmar, the anthracotheriid fauna was changed around the late Miocene. This change was probably caused by the invasion of anthracotheres from the Indian Subcontinent likely related to the major faunal turnover events in the subcontinent. Then, the later fauna persisted until the late Pliocene/early Pleistocene, when the last anthracotheres became extinct.

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