

A lower jaw of *Pondaungia cotteri* from the Late Middle Eocene Pondaung Formation (Myanmar) confirms its anthropoid status

Abstract

Pondaungia cotteri is the largest primate known from the Late Middle Eocene Pondaung Formation, Myanmar. Its taxonomic status has been the subject of much debate because of the fragmentary nature of its remains. Initially described as an anthropoid, some authors recently have associated it with adapid primates. These debates have been fueled not only by the incompleteness of the fossils attributed to *Pondaungia* but also by the reticence of many authors to regard Asia as an important evolutionary theater for Eocene anthropoids. During the November 1998 Myanmar-French Pondaung Expedition, a right lower jaw was discovered that yields the most nearly complete dentition of *Pondaungia cotteri* ever found: it shows the complete horizontal ramus, alveoli for the second incisor and canine, three premolars, and three molars. The symphysis showed all characteristics of anthropoids but was unfused. The canine root is large, the first premolar is absent, and the second premolar is single-rooted, reduced, and oblique in the tooth row, as in anthropoids. The premolars show a reduced mesio-distal length compared with the tooth row, and their morphology is very similar to that of *Amphipithecus mogaungensis*. Therefore, the two Pondaung taxa appear to be closely related to each other, with *Siamopithecus* as their sister taxon