

A NEW SPECIMEN OF THE ENIGMATIC PERISSODACTYL-LIKE ARCHAIC
UNGULATE MAMMAL *OLBITHERIUM* FROM THE EARLY EOCENE OF WUTU
COAL MINE, SHANDONG PROVINCE, CHINA

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The famous early Eocene locality of Wutu has been revisited in the scope of a bilateral cooperation program between Belgium and China. At this occasion a skull associated with postcranial elements of a perissodactyl-like archaic ungulate has been discovered. The specimen comes from the middle coal-bearing Member of the Wutu Formation around the seventh coal layer about 250 meters deep. Based on the morphology of the teeth the specimen belongs to the enigmatic mammal *Olbitherium* that has been described from the same locality by Tong and Wang (2004). The new specimen is characterized by a moderate lophodonty, double rooted P1 and P2 and by the presence of an extra cusp near the metaconule on the P4. The upper molars are not much transverse giving a relatively square aspect to the teeth. A cladistic analysis based on dental, cranial and postcranial characters is performed in order to situate *Olbitherium* in the phylogeny of the primitive ungulates. This genus belongs to the order Perissodactyla and is close to basal isectolophids such as *Cardiolophus* and *Homogalax*. However, *Olbitherium* presents several autapomorphies suggesting that it is a member of new group of perissodactyls.