

*Материалы из фонда
электронной библиотеки
Математического института
им. В.А. Стеклова РАН*

A. BORISSIAK (A. Borissiak). On the *Brachypotherium* from the Jilančik-beds of Turgai.
[A. А. БОРИСЯК. Об остатках *Brachypotherium* из джиланчикских слоев
Тургайской области. ГМ 18 I 1927].

(Présenté par P. Suškin, membre de l'Académie des Sciences, le 19 janvier 1927).

The continental series of Turgai contains besides the Upper-Oligocene Indricotherium-beds another life-zone rich in fossils — the so called Jilančik-beds, chiefly represented by remains of the rhinocerids and mastodons. This fauna includes at least three species of rhinocerids one of which is to be referred to the genus *Brachypotherium* being nearly identical to the *Br. aurelianense* Nouel from «sables de l'Orléanais» (Burdigalian). Thus the Jilančik-beds may be correlated with the Lower Miocene.

The form alluded to is represented by one complete though deformed skull, by the upper jaw of another skull (the mandible is wanting) and by a great number of bones of the skeleton; nearly all of them being represented excepting the backbone. The skull when restored is very near (the measurements also) to the skull of *Teleoceras (Brachypotherium) aurelianense* in the Muséum d'Histoire Naturelle (Jardin des Plantes, Paris), described by Mayet.¹ It is short and broad, with large zygomatic arches, a broad and flat occiput etc.; the nasal bones are not so heavy as in the Parisian form, showing a greater affinity with the other specimen of the skull relating to this species studied by me in the Geological Institute of the University of Strassburg, the rugosity for the nasal horn being equally smaller than in the former.

The cheek-teeth of our form are fully identical with the holotype teeth of the separate fragment of the upper jaw in the Muséum (Paris), their measurements being also about the same. At the same time the teeth of the above mentioned Strassburg skull, though yielded by the same beds are somewhat larger with antecrochets less developed, thus showing a higher specialization in the direction of *Brachypotherium brachypus* from the Middle Miocene.

As to the skeleton, the bones of the limbs of the Turgaian form exhibit characters similar to those of the Orleanaisian species, being but a bit smaller in size. The humerus is a broad bone with well developed tuberosities, its length being 340 mm. The radius is shortened (230 mm in length) with an articular surface (at the distal end) for the cuneiforme — a feature first appearing in *Br. aginense* from the Upper Oligocene (collections of the University of Marseille). The ulna is rather massive.

¹ Mayet. Études des mammifères miocènes des sables de l'Orléanais, Lyon, 1908.

The carpus is to be noted on behalf of its form broad and low, marking its intermediary position between those of *Br. aginense* (Upper Oligocene) and of *Br. brachypus* (Middle Miocene). In this respect the most characteristic of the carpalian bones is the magnum, then the unciforme and the scaphoideum; the trapezoideum and even the lunatum being much more indifferent. The metacarpals are very shortened, they are also of a shape intermediary between those of *Br. aginense* and of *Br. brachypus*, being but nearer to the former; there is a well developed V metacarpal closely allied to that of *Br. aginense*. The chief point of interest in the toe bones, very broad and short, is the semicircular form of the median hoof-bone, thus being more horse-like than rhinoceroid.

The characters of the hind limb are as follows: the femur measures 390 mm in length, the tibia — 243 mm; the astragalus is low with strongly developed trochlea, its articular surface more descending back than usually; the three articular surfaces for the calcaneum are separated, the internal one being flat. The calcaneum is short and thick. The other bones of the tarsus are nearly allied to those of *Br. aginense*. The metatarsals show a higher specialization than the metacarpals: metatarsale III is shorter than metacarpale III (in *Br. aginense* these bones are of equal size; in *Br. brachypus* the metatarsale III is relatively still shorter) its distal end being swollen (in *Br. brachypus* still more so). Like those of the fore foot the lateral digits are but moderately reduced. In the fore limb they possess the faculty of spreading, while in the hind one all three digits rest compactly pressed together.

The little differences in the structure of the nasal bones and the smaller dimensions of the skeleton in comparison with the type of *Brachypotherium aurelianense* apparently necessitate considering the Turgaian form as a distinct variety of this species.

As to the relationship between the shortlimbed rhinocerids from different continents, my studies of their remains in the European Museums have given some new results that shall be exposed in a further paper.

18 January 1927.

