

## GENERAL BIOLOGY

## A New Stem Placental Mammal from the Early Cretaceous of Mongolia

Academician A. V. Lopatin<sup>a,b,\*</sup> and A. O. Averianov<sup>c,d</sup>

Received August 10, 2017

**Abstract**—A new taxon of stem placentals, *Hovurlestes noyon* gen. et sp. nov. from the Early Cretaceous of Mongolia (Höövör locality) is described. The new taxon differs from members of the genus *Prokennalestes* from Höövör in the single-rooted canine and the presence of cusp e, which is an enhancing interlocking between anterior molars (m1 and m2). *Hovurlestes noyon* gen. et sp. nov. is one of the rarest mammal taxa from Höövör, which expands morphological diversity of the earliest Eutheria.

DOI: 10.1134/S0012496618010027

Placentals are a flourishing mammal group which reached remarkable morphological diversity and adapted to all main adaptive zones. Wide adaptive radiation of placentals started after extinction of dinosaurs, at the beginning of the Cenozoic. Mesozoic history of this group remains insufficiently understood. In particular, the data on taxonomic and morphological diversity of the earliest eutherians first appearing in the fossil record in the Early Cretaceous are still rather poor. A unique source of information on Early Cretaceous mammals of Asia is the Höövör (or Khoboor) locality in Mongolia. It has yielded multituberculates, eutriconodonts, symmetrodonts, primitive pretribosphenic mammals, stem therian mammals, and some of the earliest stem placentals [1–7]. Regarding the number of specimens, the mammal fauna from Höövör is dominated by stem placentals of two species of the genus *Prokennalestes* (more than 500 specimens in the collections of the Borissiak Paleontological Institute of the Russian Academy of Sciences (PIN) in Moscow and the Institute of Paleontology and Geology of the Mongolian Academy of Sciences in Ulaanbaatar).

The present study describes a new, considerably rarer eutherian taxon from Höövör.

<sup>a</sup> Borissiak Paleontological Institute,  
Russian Academy of Sciences, Moscow, 117647 Russia

<sup>b</sup> Moscow State University, Moscow,  
119991 Russia

<sup>c</sup> Zoological Institute, Russian Academy of Sciences,  
St. Petersburg, 199034 Russia

<sup>d</sup> Kazan (Volga) Federal University, Kazan,  
420008 Tatarstan, Russia

\*e-mail: [alopat@paleo.ru](mailto:alopat@paleo.ru)

Class Mammalia Linnaeus, 1758

Superlegion Theria Parker et Haswell, 1897

Legion Eutheria Gill, 1872

**Genus *Hovurlestes* Lopatin et Averianov, gen. nov.**

Etymology. From the Höövör locality and the Greek ληστής (robber).

Type species. *H. noyon* sp. nov.

Diagnosis. Meckelian groove present. Dental formula I<sup>?</sup>/4, C<sup>?</sup>/1, P<sup>?</sup>/5, M<sup>?</sup>/3. Lower canine single-rooted. Trigonid more than twice as high as talonid. Protoconid significantly higher than other cusps of trigonid. Protocristid perpendicular to dental row axis. Cusp e and strong mesiolingual cingulid present. Precingulid well-developed. Distal metacristid present. Talonid narrow, with relatively small basin. Entoconid small. Hypoconulid equidistant from hypoconid and entoconid.

Specific composition. Type species.

Comparison. The presence of cusp e and strongly developed mesiolingual cingulid on the lower molars distinguish the new genus from *Prokennalestes* Kielan-Jaworowska et Dashzeveg, 1989 from the Aptian–Albian of Mongolia (Höövör) [7], *Eomaia* Ji et al., 2002 from the Barremian of China [8], *Murtoilestes* Averianov et Skutschas, 2001 from the Barremian–Aptian of Russia (Transbaikalia) [9], *Sasayamamylos* Kusuhashi et al., 2013 from the Albian of Japan [10], and *Bobolestes* Nesov, 1985 from the Cenomanian of Uzbekistan [11].

In addition, the new genus differs from *Prokennalestes* in the single-rooted lower canine; from *Eomaia* in the shorter Meckelian groove, the more inclined position of the lower canine, the smaller difference in height between the trigonid and talonid, and in the longer precingulid of lower molars; from *Murtoilestes* in the longer precingulid, the transverse protocristid,