### ZOFIA KIELAN-JAWOROWSKA & ANDREY V. SOCHAVA

# THE FIRST MULTITUBERCULATE FROM THE UPPERMOST CRETACEOUS OF THE GOBI DESERT (MONGOLIA)

Abstract. — Buginbaatar transaltaiensis n.gen., n.sp., assigned tentatively to the Cimolomyidae (Marsh), is described from an incomplete skull from the uppermost Cretaceous (?Maastrichtian) of Khaichin Ula, Bugin Cav Region, trans-Altaian Gobi, Mongolian People's Republic. The geological profile, in which the specimen was found, is characterized. The systematic position of Buginbaatar n.gen. within the suborder Taeniolabidoidea is discussed and it is shown that in some respects it is intermediate between the Cretaceous Cimolomyidae and Eucosmodontidae.

The only Cretaceous mammals known until now from the Gobi Desert came from the Djadokhta Formation in Bayn Dzak (Shabarakh Usu). They were discovered there by the Central Asiatic Expeditions of the American Museum of Natural History (Simpson, 1925, 1928; Gregory & Simpson, 1926); new material was collected later by the Polish-Mongolian Palaeontological Expeditions (Kielan-Jaworowska, 1968/69, and in print). On the basis of anatomical differentiation of the rich mammalian fauna found in Bayn Dzak, the first author came to the conclusion (*l.c.*) that the Bayn Dzak sandstone is of Coniacian-Santonian age. From the uppermost Cretaceous deposits, widely spread over the Gobi Desert, the mammalian fauna has not been so far reported.

In 1967 and 1968 the Soviet-Mongolian Geological Expedition, organized by the Academy of Sciences of USSR and Academy of Sciences of the Mongolian People's Republic, explored the Gobi Desert (Zaitsev, 1968). In 1968 they visited the Bugin Cav badlands in trans-Altaian Gobi, and the second author, a member of the expedition, found an incomplete skull of a multituberculate in the locality situated south of the hill of Khaichin Ula (Text-fig. 1).

Fossils were discovered in the Bugin Cav area by Mongolian shepherds, who in the summer of 1964 reported to the Academy of Sciences of the Mongolian People's Republic in Ulan Bator the finding of dinosaur bones in the sandy badlands of this region. In October of the same year the Academy of Sciences of the M.P.R. sent a palaeontological expedition to Bugin Cav (see Tschudinov, 1966). The expedition come across several skeletons of dinosaurs, three of which were excavated and brought to the Palaeontological Laboratory of the Geological Institute of the Aca-



Fig. 1. - Sketch-map of Nemegt Basin and Bugin Cav Region.

demy of Sciences in Ulan Bator. In 1968 the first author saw one of these skeletons mounted by Mr. Dashzeveg and a skull of another one in Ulan Bator and recognized them as belonging to *Tarbosaurus bataar* (Maleyev). The occurrence of *T. bataar* indicates that the gray-yellowish sandstone of Bugin Cav, yielding the dinosaur bones, is of the same age as the Upper Nemegt Beds in the Nemegt Basin (see Gradziński *et al.*, 1968/69) which were recognized tentatively as of the Campanian-Maastrichtian age. This agrees with the opinion of Tschudinov (1966) that the badlands in Bugin Cav and in the Nemegt Basin are contemporaneous.

The total thickness of the Upper Cretaceous deposits in Bugin Cav is about 50 m (Text-fig. 2). The stratigraphic section at Bugin Cav, examined by the second author, is (from the bottom) as follows:

1. Gray, aleuritic clay (known thickness 1.7 m).

2. Gray and pink cross-bedded sandstone, yielding dinosaur bones and turtles, designated as a lower dinosaur-bearing layer (4.3 m).

3. Gray and red aleuritic clay with an intercalation of a gray aleurite in the middle part. Fresh-water gastropods and ostracods (5.7 m).

4. Variegated (yellow, gray, red and orange) cross-bedded sandstone, yielding fresh-water gastropods and pelecypods and bones of dinosaurs and turtles, designated as an upper dinosaur-bearing layer (2.6 m).

5. Red clay with ostracods and phyllopods (2 m).

6. Gray and yellow, poorly cemented sandstone, with lenses of intraformational conglomerates, the latter prolific in shells of fresh-water pelecypods (6.5 m).



Fig. 2. — Geological profiles of Upper Cretaceous sediments in Bugin Cav and Khaichin Ula. D layers with dinosaur bones, B.t. Buginbaatar transaltaiensis. Explanations of numbers in text.

7. Brown-grayish clay with a layer of an intraformational conglomerate in the top part, the latter yielding shells of a pelecypod *Pseudohyria pseudoanodonta* (Martins), (4 m).

8. Poorly cemented, cross-bedded gray sandstone with gravel and white calcareous nodules. In the middle of the unit there is a layer with dinosaur egg-shells. A dinosaur egg, 7 cm long, was found in the rubble from this layer (25 m).

At the top of the above described section, on the eroded surface rests

a dark-gray conglomerate, presumably of Pleistocene age, about 3 m in thickness.

The gray sandstone (layer No. 8) forms the cliffs, which mount over the Bugin Cav. The locality of Khaichin Ula is situated about 20-25 km south-west from the badlands of Bugin Cav, in the lower part of the wide depression, which separates Bugin Cav from Altan Ula. From the upper hills of Bugin Cav, the white cliffs of Khaichin Ula badlands are easily visible. The deposits which crop out south of Khaichin Ula hill (about 20 m in thickness) are, according to the second author's observations, equivalent stratigraphically to the uppermost part (layer No. 8) of Bugin Cav section. The section, which yielded the multituberculate skull, is situated in the southern part of Khaichin Ula badlands. Its sequence (from the bottom) is as follows:

- 1. Gray sandstone (2 m).
- 2. Layer with calcareous nodules (0.1 m).
- 3. Light brown clay (1 m).
- 4. Alternating light-gray and red-brown sandstones (7 m).

5. Orange, poorly cemented sandstone, with rounded calcareous concentrations up to 0.5 m in diameter. In the middle of the layer are numerous fragments of dinosaur egg-shells, bones of dinosaurs and turtles (6 m).

6. Light-gray, fine-grained sandstone with calcareous nodules (5 m). The skull of *Buginbaatar transaltaiensis* n.gen., n.sp. was found in the lower part in a poorly cemented, gray-brownish sandstone.

At the top, on the layer No. 6, rests the Pleistocene dark-gray conglomerate. The skull of *B. transaltaiensis* n.sp. was found in Khaichin Ula section about 5 m above the layer with dinosaurs and egg-shells. It seems, therefore, most probable that it is of uppermost Cretaceous age, and it is referred tentatively in the present paper to the uppermost Cretaceous. However, it should be stressed that — as the dinosaur bones have not been found in the same layer as the skull, but some metres below a lowermost Paleocene age of *B. transaltaiensis* n.sp. cannot be excluded at present with full certainty.

The skull described in the present paper is housed in the Geological Museum of the Institute of Precambrian Geology and Geochronology, USSR Academy of Sciences in Leningrad, which is abbreviated as I.G.G.P.

# Acknowledgements

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# Suborder Taeniolabidoidea Sloan & Van Valen, 1965 Family ?Cimolomyidae (Marsh, 1899) Genus Buginbaatar nov.

Type species: Buginbaatar transaltaiensis n.sp.

Derivation of the name: Bugin — from Bugin Cav Region, in which the type specimen was found; Mong. baatar — a hero, alludes to the name of the capital of Mongolia, Ulan Baatar.

*Diagnosis.* — The genus is monotypic, the generic characters are those of the type species.

Stratigraphic and geographical range. — Known only from the ?Maastrichtian, locality of Khaichin Ula in Bugin Cav Region, trans-Altaian Gobi.

Discussion. — See p. 361.

Buginbaatar transaltaiensis n.sp. (Pls. I, II; Text-fig. 3)

Type specimen: Incomplete upper dentition, consisting of left P<sup>4</sup>, posterior part of M<sup>1</sup> and M<sup>2</sup>, right M<sup>1</sup> and M<sup>2</sup>, preserved in natural position, fragment of zygomatic arch removed from the natural position and unidentifiable bone fragments (I.G.G.P. No. 62-b-2f).

Type horizon and locality: ?Maastrichtian, Khaichin Ula, Bugin Cav Region, trans-Altaian Gobi.

Derivation of the name: transaltaiensis - found in trans-Altaian Gobi.

Diagnosis. — Upper tooth row straight in horizontal plane, concave in vertical plane. Length of P<sup>4</sup> equal to half that of M<sup>1</sup>. P<sup>4</sup> with low, straight profile in lateral view. M<sup>1</sup> strongly elongated, narrowing anteriorly. Internal row in M<sup>1</sup> well developed, terminating near the second cusp from the posterior of the medial row. Length of M<sup>2</sup> insignificantly greater than half of M<sup>1</sup>. Cusp formula: P<sup>4</sup> 3:6:1, M<sup>1</sup> 7:8:6, M<sup>2</sup> 2:3:2.

Measurements (in mm):

*Description.* — Upper tooth row is straight in a horizontal plane, and concave in a vertical plane. The two rows of teeth converge anteriorly.

 $P^4$  is a comparatively slender tooth, wider in its anterior part than posteriorly. The anterior outer row of cusps extends posteriorly for less than a half of the tooth length. It consists of 3 cusps which increase in size posteriorly. In the described specimen, the cusps of the outer row are sharply pointed, without traces of wear. To the rear of the ultimate cusp of the outer row, the outer margin of the tooth is strongly incurved. The middle row consists of 6 cusps which show strong traces of wear. They increase slightly in size towards the penultimate, which is the largest. The ultimate cusp is situated in the postero-labial corner of the tooth and the distance between it and the penultimate is somewhat longer than between the other cusps of the medial row. There is one, comparatively large cusp in the inner row. It is situated at the postero-lingual corner of the tooth, symmetrically with the ultimate cusp of the medial row and separated from it by a deep valley. The lateral profile of  $P^4$  is low and nearly straight.



Fig. 3. — Buginbaatar transaltaicnsis n.sp., sketch drawings of  $P^4$ ,  $M^1$  and  $M^2$  in occlusal and labial views.

 $M^1$  is characterized by a very low width/length ratio of 0.44. The cusps in outer row are subconical and increase in size towards the penultimate, which is larger than the ultimate. On the left  $M^1$  traces of strong wear are apparent along the lingual side of the outer row. The cusps in the middle row tend to be subcrescentic. The first is very small, the second much larger, the next increase in size towards the penultimate. The ultimate cusp is wider and shorter than the penultimate. The internal row is well developed and consists of conical cusps which increase in size posteriorly. The first cusp is situated to the rear of the second cusp of the medial row. In front of the anterior end of the internal row the tooth is very narrow.

 $M^2$  is a comparatively large tooth about as long as wide. There are two small sobconical cusps in the outer row, which extends for 0.6 of the tooth length. The middle row is very wide and consists of 3 cusps which tend to be subcrescentic. The first is very wide and short, the second longer than the first and the third very large, extending laterally opposite the half of the width of the outer row. The inner row consists of two large, subconical cusps and extends along the entire length of the tooth.

Zygomatic arch. There is a poorly preserved fragment of the right zygomatic arch in association with the dentition. It curves almost at right angles in its anterior and posterior parts. The longitudinal part of the arch strongly widens in the middle.

Discussion. — The structure of  $P^4$ , which is reduced in proportion to  $M^1$ , the form of the molar cusps and the straightness of the upper tooth row, when seen in a horizontal plane, suggest the relationship of Buginbaatar with Taeniolabidoidea. However, the family assignment of the new genus encounters difficulties. The oldest representative of the Taeniolabididae is a genus recently described by the first author (Kielan--Jaworowska, in print) from the Djadokhta Formation (Coniacian-Santonian) of Bayn Dzak in the Gobi Desert. In this genus, which is regarded as being close to the ancestral forms of both the Taeniolabididae and Cimolomyidae, there are 4 upper premolars, cusps 3:5:6 on P4, 5:5 ridge on  $M^1$  and 1:2:3 on  $M^2$ ; the length  $P^4/M^1$  ratio is 1.7:1.9. The absence of palatal vacuities and the square shape of the skull with its prominent zygomae, recalls the Taeniolabididae. Buginbaatar n.gen. is about 5 times larger than this taeniolabidid genus from the Djadokhta Formation, is provided with much greater number of cusps on the molars and has P4 reduced in proportion to  $M^1$ .

From the uppermost Cretaceous representative of the Taeniolabididae: Catopsalis joyneri Sloan & Van Valen, 1965, known from the Hell Creek Formation of Montana (Sloan & Van Valen, 1965), Buginbaatar differs in having a longer and quite differently shaped P<sup>4</sup>. In Catopsalis P<sup>4</sup> is strongly reduced, very high and spire-like in lateral view, while in Buginbaatar P<sup>4</sup> has a very low, nearly straight profile. Further differences in the structure of  $P^4$  are the presence of 3 antero--external cusps and a deep valley at the posterior end of the crown in Buginbaatar; these are lacking in Catopsalis.  $M^1$  in Buginbaatar is more elongated than in Catopsalis, has a greater number of cusps, and  $M^2$  is comparatively smaller. The sizes of B. transaltaiensis and Catopsalis joyneri are comparable. Buginbaatar hardly can be compared with Taeniolabis Cope, 1882 (Granger & Simpson, 1929; Simpson, 1937), which has a strongly reduced  $P^4$ , high and triangular in lateral view.  $M^1$  in Taeniolabis is provided with 3 complete rows of crescentic cusps.  $M^2$  is very large and quite different from that in Buginbaatar. However, the fragmentary zygomatic arch, preserved in association with the dentition of Buginbaatar, indicates a rectangular cranial outline, suggesting the relationship with Taeniolabis.

Of the Paleocene Taeniolabididae, the Mongolian species Prionessus lucifer Matthew & Granger, 1925 from the Paleocene (or ?Eocene) of the Khashaat (Gashato) of Mongolia, invites comparison (Matthew & Granger, 1925; Matthew et al., 1928; Granger & Simpson, 1929). Unfortunately, P<sup>4</sup> in Prionessus is not known. Prionessus lucifer is smaller than Buginbaatar transaltaiensis n.sp. and has M<sup>1</sup> both relatively and absolutely shorter than Buginbaatar, with a shorter inner row of cusps. The structure of P<sub>4</sub> in Prionessus, which is more reduced than in Catopsalis and the absence of palatal vacuities, suggest a close relationship with Taeniolabis.

The family Cimolomyidae Marsh, according to Sloan and Van Vallen (1965), includes two genera: Meniscoessus Cope, 1882 and Cimolomys Marsh, 1889, which were regarded by Clemens (1963) as Ptilodontidae incertae sedis. The Cimolomyidae differ from the Taeniolabididae in the structure of  $P_4$ , which in the Cimolomyidae is large and forms a high arch in lateral view, while in the Taeniolabididae  $P_4$  is strongly reduced and has a triangular profile. The form of  $P^4$  is different in the two genera: in *Meniscoessus*  $P^4$  is short and high as in the Taeniolabididae, while in Cimolomys P4 is long and low. In both genera the internal row of M<sup>1</sup> terminates near or at the second cusp from the anterior end of the medial row.  $M^1$  in Buginbaatar is very similar to those of the Cimolomyidae, but is relatively more elongated than in these cimolomyid genera. In structure of P4 Buginbaatar recalls Cimolomys Marsh, but  $P^4/M^1$  length ratio in B. transaltaiensis is 0.5, while in Cimolomys gracilis Marsh from the Lance Formation (basing on the teeth belonging to different individuals, figured by Clemens, 1963) it is about 0.77. In Cimolomus gracilis the medial cusps increase in height posteriorly and the last cusp is situated far in front from the posterior edge of the crown, while in Buginbaatar the medial cusps show only an insignificant increase in height towards the posterior, and extend to the postero-labial corner of the tooth. In Cimolomys clarki Sahni, recently described by Sahni (MS) from the Judith River Formation, the figured P<sup>4</sup> is longer than the figured  $M^1$  (the teeth belong probably to different individuals). The medial cusps in  $P^4$  of C. clarki increase in size towards the penultimate which is higher than in Buginbaatar and in lateral view  $P^4$  of C. clarki is subtriangular, while it is low in Buginbaatar.

Buginbaatar also shows some similarities to the uppermost Cretaceous Eucosmodontidae. The oldest representatives of this family have been recently described by the first author (Kielan-Jaworowska, *in print*) from the Djadokhta Formation of Bayn Dzak. The two Djadokhta eucosmodontid genera, provided with a very small number of cusps on the molars, a ridgelike inner row on  $M^1$ , and unreduced  $P^4$ , are too primitive to be compared with Buginbaatar. But the uppermost Cretaceous eucosmodontid Stygimys kuszmauli Sloan & Van Valen, 1965 from the Hell Creek Formation in Montana (Sloan & Van Valen, 1965) warrants a comparison. Stygimys is about half the size of Buginbaatar and has the inner row of cusps in  $M^1$  extending only for a half of the tooth length. It reaches the second cusp of the middle row in Buginbaatar. P<sup>4</sup> in Stygimys is much less reduced in proportion to  $M^1$  than in Buginbaatar, but the structure of P<sup>4</sup> in both genera is very similar. In both cases there are 3 cusps in outer row, the medial row of cusps is arranged obliquely across the rectangular crown, with cusps insignificantly increasing in height posteriorly and there is a deep valley (deeper in Buginbaatar) at the posterior end of the crown between the ultimate cusp of the middle row and the only cusp of the inner row. In both species the lateral profile of P<sup>4</sup> is relatively straight. However, in Stygimys kuszmauli the upper tooth row is straight in vertical plane, while it is strongly concave in Buginbaatar transaltaiensis n.sp.

The above discussion shows that Buginbaatar n.gen. shares the characters of both the Cimolomyidae and the Eucosmodontidae and therefore its assignment to the Cimolomyidae is tentative. Discovery of more material of the new genus, in particular of the lower  $P_4$ , could decide its family assignment with certainty.

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#### ZOFIA KIELAN-JAWOROWSKA & ANDRZEJ W. SOCZAWA

## PIERWSZY MULTITUBERKULAT Z NAJWYŻSZEJ KREDY PUSTYNI GOBI (MONGOLIA)

#### Streszczenie

Podczas Radziecko-Mongolskiej Wyprawy Geologicznej na pustynię Gobi, organizowanej przez Akademię Nauk Mongolskiej Republiki Ludowej i Akademię Nauk ZSRR, drugi autor znalazł w roku 1968 na obszarze Gobi Zaałtajskiej niekompletną czaszkę multituberkulata. Czaszka ta została znaleziona w odsłonięciach Chaiczin Uła, w rejonie Bugin Caw, w profilu piaskowców kredowych, 5 m ponad poziomem z dinozaurami. Obecność dinozaurów z rodzaju *Tarbosaurus bataar* (Malejew) w osadach Bugin Caw wskazuje, że występujące tam piaskowce są tego samego wieku, co górne warstwy z Nemegt w Kotlinie Nemegt i odpowiadają najprawdopodobniej kampanowi-mastrychtowi.

Dotychczas znane ssaki kredowe z pustyni Gobi pochodzą z Bajn Dzak, z Formacji Dżadochta, której wiek został określony przez pierwszego autora jako koniak--santon. Czaszka z Chaiczin Uła jest pierwszym multituberkulatem (i pierwszym ssakiem) znalezionym w osadach najwyższej kredy na pustyni Gobi. Czaszka ta została opisana w niniejszej pracy jako Buginbaatar transaltaiensis n.gen., n.sp.

#### Buginbaatar transaltaiensis n.gen., n.sp.

Okaz typowy: Niekompletne górne uzębienie, złożone z lewych: P<sup>4</sup>, uszkodzonego M<sup>1</sup>, M<sup>2</sup>, oraz z prawych: M<sup>1</sup> i M<sup>2</sup>. Wszystkie zęby zachowane w naturalnym położeniu. Fragment łuku jarzmowego w nienaturalnym położeniu i nieoznaczalne fragmenty kości.

Typowa miejscowość i poziom: Chaiczin Uła, region Bugin Caw, Zaałtajska Gobi, ?mastrycht.

Diagnoza rodzaju i gatunku. — Szereg górnych zębów prosty w plaszczyźnie poziomej, wklęsły w pionowej. P<sup>4</sup> równy połowie długości M<sup>1</sup>, w profilu bocznym niski i prosty. M<sup>1</sup> silnie wydłużony, zwężający się ku przodowi. Wewnętrzny rząd guzków na M<sup>1</sup> dobrze rozwinięty, kończący się przy drugim guzku rzędu środkowego. Długość M<sup>2</sup> nieco większa niż połowa długości M<sup>1</sup>. Wzór zębowy: P<sup>4</sup> 3:6:1, M<sup>1</sup> 7:8:6, M<sup>2</sup> 2:3:2.

Dyskusja. — Budowa P<sup>4</sup>, który jest zredukowany w stosunku do M<sup>1</sup>, kształt guzków zębowych oraz prosta linia szeregu zębowego przemawiają za zaliczeniem Buginbaatar do podrzędu Taeniolabidoidea. Zaliczenie nowego rodzaju do jednej z rodzin podrzędu napotyka na trudności, ponieważ Buginbaatar wykazuje cechy przejściowe między kredowymi przedstawicielami rodzin Cimolomyidae i Eucosmodontidae. Nowy rodzaj został z zastrzeżeniem zaliczony do rodziny Cimolomyidae, do przedstawicieli której (rodzaju Cimolomys Marsh, 1889 i Meniscoessus Cope, 1882) zbliża się budową M<sup>1</sup>. Meniscoessus i Cimolomys różnią się zasadniczo budową P<sup>4</sup>, który u Meniscoessus jest silnie zredukowany, wysoki i trójkątny, tak jak w rodzinie Taeniolabididae, zaś u Cimolomys — stosunkowo długi, trójkątny, lecz niski w widoku z boku. U nowego rodzaju P<sup>4</sup> jest nieco krótszy (w proporcji do M<sup>1</sup>), niż u Cimolomys, lecz niski i prosty w widoku z boku. Budowa P<sup>4</sup> zbliża nowy rodzaj do górno-kredowego przedstawiciela rodziny Eucosmodontidae, Stygimys kuszmauli Sloan & Van Valen, 1965, od którego różni się jednak znacznie budową zębów trzonowych.

#### зофия келян-яворовска & Андрей В. Сочава

ПЕРВЫЕ НАХОДКИ МУЛЬТИТУБЕРКУЛЯТА В КРОВЛЕ МЕЛА ПУСТЫНИ ГОБИ (МОНГОЛИЯ)

#### Резюме

Работая в составе Совместной Советско-Монгольской Геологической Экспедиции АН СССР и АН МНР, второй автор нашел в 1968 г. на территории Заалтайской Гоби неполный череп мультитуберкулята. Находка была сделана южнее горы Хайчин Ула в районе Бугин Цаба в толще меловых песчаников. В нижней части разреза Бугин Цаба присутствуют остатки динозавров *Tarbosaurus bataar* (Maleyev), указывающие на то. что содержащие их отложения одновозрастны верхним нэмэгэтинским слоям впадины Нэмэгэту и, вероятно, соответствуют кампану-маастрихту. Остатки мультитуберкулята были обнаружсны в верхней части мелового разреза данного района, представленной толщей серых песчаников и гравелитов в 5 м выше слоя, содержащего обломки костей и скорлупу яиц динозавров.

Меловые млекопитающие из пустыни Гоби, известные до настоящего времени, происходят из формации Джадохта в Баин Дзаке, возраст которой определяется первым автором как коньяк-сантон. Череп из района Хайчин Улы является первым мультитуберкулята (и первым млекопитающим) найденным в кровле меловых отложений пустыни Гоби. Череп описан в настоящей статье как

#### Buginbaatar transaltaiensis n. gen., n. sp.

Типовой экземпляр: Фрагмент черепа, состоящий из левого  $P^4$ , разрушенного левого  $M^1$  и  $M^2$  и правого  $M^1$  и  $M^2$ . Все зубы находятся в естественном положении. Вместе с зубами были найдены: фрагмент скуловой дуги, смещенной из естественного положения, и неопределимые обломки костей.

Горизонт и местонахождение: Южнее горы Хайчин Ула вблизи Бугин Цаба в Заалтайской Гоби, маастрихт(?).

Родовой и видовой диагноз. — Верхний зубной ряд прямой в горизонтальной плоскости и вогнутый в вертикальной. Р<sup>4</sup> низкий и прямой при взгляде сбоку, имеет длину, составляющую половину М<sup>1</sup>. М<sup>1</sup> сильно удлиненный, сужающийся к передней части. Внутренний ряд на М<sup>1</sup> хорошо развит, заканчивается вблизи второй вершины среднего ряда. Длина М<sup>2</sup> несколько больше половины М<sup>1</sup>. Формула вершин: Р<sup>4</sup> 3:6:1, М<sup>1</sup> 7:8:6, М<sup>2</sup> 2:3:2.

Обсуждение. — Строение Р<sup>4</sup>, имеющего меньшие размеры по сравнению с М<sup>1</sup>, форма зубных вершин и верхний зубной ряд прямой в горизонтальной плоскости дают основание отнести Buginbaatar n. gen. к Taeniolabidoidea. Отнесение этого нового рода к тому или иному семейству вызывает затруднения, поскольку Buginbaatar обладает признаками промежуточными между представителями меловых Cimolomyidae и Eucosmodontidae. Новый род предварительно отнесен к Cimolomyidae. Он напоминает представителей последнего семейства (рода Cimolomys Marsh, 1889 и Meniscoessus Cope, 1882) по строению M<sup>1</sup>. Menisсоеssus и Cimolomys отличаются друг от друга строением Р<sup>4</sup>, который у Menisсоеssus сильно редуцирован, высокий и треугольный, как у Taeniolabididae, в то время как у Cimolomys Р<sup>4</sup> сравнительно длинный, почти треугольный при взгляде сбоку. У нового рода Р<sup>4</sup> короче (по отношению к M<sup>1</sup>) чем у Cimolomys, но низкий и прямой при взгляде сбоку. По строению Р<sup>4</sup> новый род напоминает представителей семейства Eucosmodontidae самого конца мела (*Stygimys kusz-mauli* Sloan & Van Valen, 1965), от которых однако отличается строением верх-них коренных зубов.

# PLATES

## Plate I

Buginbaatar transaltaiensis n.gen., n.sp.

Incomplete upper dentition (right  $M^1$  and  $M^2$ , left  $P^4$  incomplete,  $M^1$  and  $M^2$ ) in occlusal view;  $\times$  5. ?Maastrichtian, Khaichin Ula, Bugin Cav Region, trans-Altaian Gobi, Mongolia (I.G.G.P. No. 62-b-2f).

(See also Plate II)

