

## Late Cretaceous asioryctitherian eutherian mammals from Uzbekistan and phylogenetic analysis of Asioryctitheria

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Four small asioryctitheres at Dzharakuduk (Turonian), Uzbekistan are Daulestes kulbeckensis (= Kumlestes olzha), D. inobservabilis (= Kennalestes? uzbekistanensis), Uchkudukodon (gen. nov.) nessovi and Bulaklestes kezbe. Uchkudukodon nessovi is one of the smallest therians (molars about 1 mm long). Lower canine is two-rooted in Uchkudukodon gen. nov. and Bulaklestes (uncertain in *Daulestes*). All lower premolars in all four species are double-rooted. Teeth identified as dp1, p2 and dp2 in holotype of Uchkudukodon nessovi (McKenna et al. 2000) are here identified c, p1, and p2. A phylogenetic analysis weakly supported Asioryctitheria by four synapomorphies: conular basins become distinct, the number of roots reverts to two on the lower canine, the p5 becomes longer than p4, and the metaconid on p5 is reduced and lost. Other characters diagnostic of asioryctitheres are four upper and lower premolars (arguably five upper premolars in juvenile Kennalestes), P4 has a protocone swelling or protocone, some asymmetry of the stylar shelf on M1-2, the paraconule on M1-3 is distinctly closer to the protocone than is the metaconule, protocone is of moderate height on M1-3 (70-80% of paracone or metacone height), Meckel's groove is absent, and the mandibular foramen opens into a smaller depression on lingual side of mandibular ascending ramus. Asioryctes and Ukhaatherium are placed in Asioryctinae and along with Kennalestes are placed in Asioryctidae. Kennalestidae Kielan-Jaworowska, 1981 is a junior subjective synonym for Asioryctidae Kielan-Jaworowska, 1981. Because of uncertainties in the analysis, the positions of Daulestes, Uchkudukodon gen. nov., and Bulaklestes cannot be determined beyond referral to Asioryctitheria.

**Key words:** Mammalia, Eutheria, Asioryctitheria, *Daulestes*, *Bulaklestes*, *Uchkudukodon*, Cretaceous, Dharakuduk, Uzbekistan.

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