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A new relict stem salamander from the Early Cretaceous of Yakutia, Siberian Russia

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A new stem salamander, *Kulgeriherpeton ultimum* gen. et sp. nov., is described based on a nearly complete atlas (holotype) from the Lower Cretaceous (Berriasian–Barremian) Teete vertebrate locality in southwestern Yakutia (Eastern Siberia, Russia). The new taxon is diagnosed by the following unique combination of atlantal characters: the presence of a transversal ridge and a depression on the ventral surface of the posterior portion of the centrum; ossified portions of the intercotylar tubercle represented by dorsal and ventral lips; the absence of a deep depression on the ventral surface of the anterior portion of the centrum; the absence of pronounced ventrolateral ridges; the absence of spinal nerve foramina; the presence of a pitted texture on the ventral and lateral surfaces of the centrum and lateral surfaces neural arch pedicels; the presence of a short neural arch with its anterior border situated far behind the level of the anterior cotyles; moderately dorsoventrally compressed anterior cotyles; and the absence of a deep incisure on the distal-most end of the neural spine. The internal microanatomical organization of the atlas is characterized by the presence of a thick, moderately vascularized cortex and inner cancellous endochondral bone. The recognition of stem salamanders and other vertebrates with Jurassic affinities in the Early Cretaceous high-latitude (paleolatitude estimate N 63–70°) vertebrate assemblage of Teete suggests that: (i) the large territory of present day Siberia was a refugium for Jurassic relicts; (ii) there were no striking differences in the composition of high-latitude Yakutian and mid-latitude Western Siberian Early Cretaceous vertebrate assemblages; and (iii) there was a smooth transition from the Jurassic to Cretaceous biotas in North Asia.

Key words: Amphibia, Caudata, stem salamanders, Cretaceous, Russia, Siberia.

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