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A new euselachian shark from the early Permian of the Middle Urals, Russia

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The isolated teeth of a new euselachian shark *Artiodus prominens* Ivanov and Duffin gen. et sp. nov. have been found in the Artinskian Stage (Early Permian) of Krasnoufimskie Klyuchiki quarry (Sverdlovsk Region, Middle Urals, Russia). The teeth of *Artiodus* possess a multicuspid orthodont crown with from four to nine triangular cusps; prominent labial projection terminating in a large round tubercle; distinct ornamentation from straight or recurved cristae; oval or semilunar, elongate, considerably vascularized base; dense vascular network formed of transverse horizontal, ascending, short secondary and semicircular canals. The teeth of the new taxon otherwise most closely resemble the teeth of some protacrodontid and sphenacanthid euselachians possessing a protacrodont-type crown, but differ from the teeth of all other known euselachians in the unique structure of the labial projection. The studied teeth vary in crown and base morphology, and three tooth morphotypes can be distinguished in the collection reflecting a moderate degree of linear gradient monognathic heterodonty. The range of morphologies otherwise displayed by the collection of teeth shows the greatest similarity to that described for the dentitions of relatively high-crowned hybodontids from the Mesozoic. The internal structure of the teeth, including their vascularization system is reconstructed using microtomography. The highest chondrichthyan taxonomic diversity is found in the Artinskian, especially from the localities of the Middle and South Urals.

Key words: Chondrichthyes, Elasmobranchii, teeth, Permian, Russia, Urals.

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