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The osteology and systematic position of *Dongusuchus efremovi* Sennikov, 1988 from the Anisian (Middle Triassic) of Russia

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Abstract

© 2016, © 2014 Taylor & Francis. European Russia has yielded several fragmentary but potentially important archosauriform specimens from the Middle Triassic, but these have been only briefly described in the literature. One of these puzzling taxa is *Dongusuchus efremovi* Sennikov, 1988, described from the Donguz Svita. We present a redescription of *Dongusuchus efremovi*, which includes the first photographic atlas and thorough anatomical description of the holotype and referred specimens. This taxon is shown to be a gracile, probably fast-running species with elongate and slender limbs. A phylogenetic analysis recovers *Dongusuchus efremovi* as an early-diverging, non-archosaurian archosauriform. Previous work had suggested that this taxon was a 'rauisuchid'. The gracile proportions of the femur and somewhat wedge-shaped head, however, are unusual for basal archosauriforms and are similar to the plesiomorphic state in crocodile and avian-line crown archosaurs. Several Early-Middle Triassic basal archosauriforms and early members of the crocodile and avian lineages were gracile with elongate, slender limbs. This suggests that the limb morphology of *Dongusuchus efremovi* may be plesiomorphic for Archosauria and proximal clades.

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Keywords

Archosauria, Archosauriformes, Archosauromorpha, Donguz, Middle Triassic, Russia