The taxonomy and anatomy of rauisuchian archosaurs from the Late Triassic of Germany and Poland

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The German Late Triassic archosaur Teratosaurus suevicus is a historically important taxon, being the first described rauisuchian. Unfortunately the holotype is a single element, a maxilla, which is poorly preserved and incomplete. We redescribe this maxilla and identify a single potential autapomorphy. The fragmentary type specimen complicates attempts to refer additional material to this taxon, and other unassociated archosaur and rauisuchian specimens from the Mittlerer Stubensandstein of Germany cannot be referred to T. suevicus with any degree of confidence. The stratigraphically older T. silesiacus, from the upper Carnian of Poland, is represented by a much more complete and better preserved specimen. Comparison of the maxillae of T. suevicus and T. silesiacus reveals that the two are distinct taxa, contra recent suggestions, but also that they do not share any synapomorphies or a unique combination of characters relative to Postosuchus kirkpatricki and other rauisuchians. Thus, the Polish material must be transferred to a new genus, Polonosuchus gen. nov. Both Polonosuchus and Teratosaurus are very similar to Postosuchus kirkpatricki, and the three taxa are likely closely related.

Key words: Archosauria, Rauisuchia, taxonomy, Triassic, Germanic Basin.

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