



The Pterosaur Database

Raeticodactylus filisurensis

A small primitive pterosaur with a distinct nose crest discovered from the shallow marine sediments of the Upper Triassic from the lowest Kössen beds (late Norian/early Rhaetian boundary) in the central Austroalpine of Canton Grisons (Switzerland). The teeth in the anterior jaw are single cusped and fang like. In the posterior jaw region the teeth are multi cusped and similar to those of *Eudimorphodon*.



Stecher R., **2008**, A new Triassic pterosaur from Switzerland (Central Austroalpine, Grisons), *Raeticodactylus filisurensis* gen. et sp. nov., *Swiss Journal of Geosciences*, pp. 1-17.

Abstract

A new basal non-pterodactyloid pterosaur, *Raeticodactylus filisurensis* gen. et sp. nov., is reported. It has been discovered in shallow marine sediments from the Upper Triassic of the lowest Kössen beds (late Norian/early Rhaetian boundary) in the central Austroalpine of Canton Grisons (Switzerland). The disarticulated specimen is comprised of an almost complete skull and a partial postcranial skeleton. A high and thin bony, sagittal cranial crest characterizes the anterodorsal region of the skull. The large mandible, with an additional keel-like expansion at the front, partly matches the enlarged sagittal cranial crest. A direct and close relationship to *Austriadactylus cristatus*, the only known Triassic pterosaur with a bony cranial crest so far, cannot be established. The teeth of the premaxilla are monocuspid and exhibit very strongly bowed enamel wrinkles on the lingual side whereas the enamel is smooth on the labial side. These monocuspid teeth are large and fang-like. The numerous smaller teeth of the maxilla show three, four and five cusps. These are very similar to the teeth of the Triassic pterosaur *Eudimorphodon ranzii*. The humerus shows a thinner construction than that seen in other Triassic pterosaurs. The femur is quite unusual with a caput femoris perpendicular to the shaft. The bones of the extremities are almost twice as long as the ones from the largest Triassic specimen *E. ranzii* (MCSNB 2888). The newly described pterosaur is an adult, with a wingspan of approximately 135 cm. A morphofunctional analysis suggests that *R. filisurensis* was a highly specialized piscivore and possibly a skim-feeder.