

# New, small, ancient crocodile-like reptile described in Brazil

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Middle-Late Triassic landscape of southern Brazil depicting a large *Prestosuchus chiniquensis* feeding on the carcass of a dicynodont while individuals of *Parvosuchus aurelioi* compete for scraps. Credit: Matheus Fernandes / *Nature*

The discovery of a new, ancient, predatory reptile dubbed *Parvosuchus aurelioi*—part of a group of crocodile-like reptiles called

pseudosuchians—in Brazil is [described in a paper](#) in *Scientific Reports*. The specimen, which dates to approximately 237 million years ago, during the Middle-Late Triassic, is the first small predatory reptile of its kind to be found in this country.

Prior to the dominance of the dinosaurs, pseudosuchians were a common form of ancient quadruped [reptile](#) during the Triassic Period (252—201 million years ago), with some species among the largest carnivores of the time. Smaller pseudosuchians known as gracilisuchids lived alongside these [apex predators](#) and have been found in areas such as China and Argentina.

Now, Rodrigo Müller reports the discovery of a new species of gracilisuchid based on a specimen found in the Santa Maria Formation in Brazil.

The partial skeleton dates to approximately 237 million years ago and consists of a complete skull including the [lower jaw](#), 11 dorsal vertebrae, a pelvis, and partially preserved limbs. The author names the new species *Parvosuchus aurelio*, which derives from 'parvus' (small) and 'suchus' (crocodile) and honors the amateur paleontologist Pedro Lucas Porcela Aurélio, who discovered the fossil materials.



Artistic reconstruction of two individuals of *Parvosuchus aurelio* in a Triassic landscape. Credit: Matheus Fernandes / *Nature*



Fossil of *Parvosuchus aurelioi*. Credit: Rodrigo Temp Müller / *Nature*





Fossil skull of *Parvosuchus aurelioi* under mechanical preparation. Credit: Janaína Brand Dillmann / *Nature*



Fossil of *Parvosuchus aurelioi*. Credit: Janaína Brand Dillmann / *Nature*

The skull measures 14.4 centimeters in length and features long slender jaws with pointed teeth that curve backwards, and several [skull](#) openings.

The skeleton is lightly built and estimated to be less than one meter long in total length. These features classify *P. aurelioi* as a gracilisuchid, which makes it the first species from this group to be confirmed in Brazil, according to the author. This finding highlights the diversity among pseudosuchians in the Triassic, he adds.

**More information:** Rodrigo T. Müller, A new small-sized predatory pseudosuchian archosaur from the Middle-Late Triassic of Southern Brazil, *Scientific Reports* (2024). [DOI: 10.1038/s41598-024-63313-3](https://doi.org/10.1038/s41598-024-63313-3). [www.nature.com/articles/s41598-024-63313-3](https://www.nature.com/articles/s41598-024-63313-3)

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