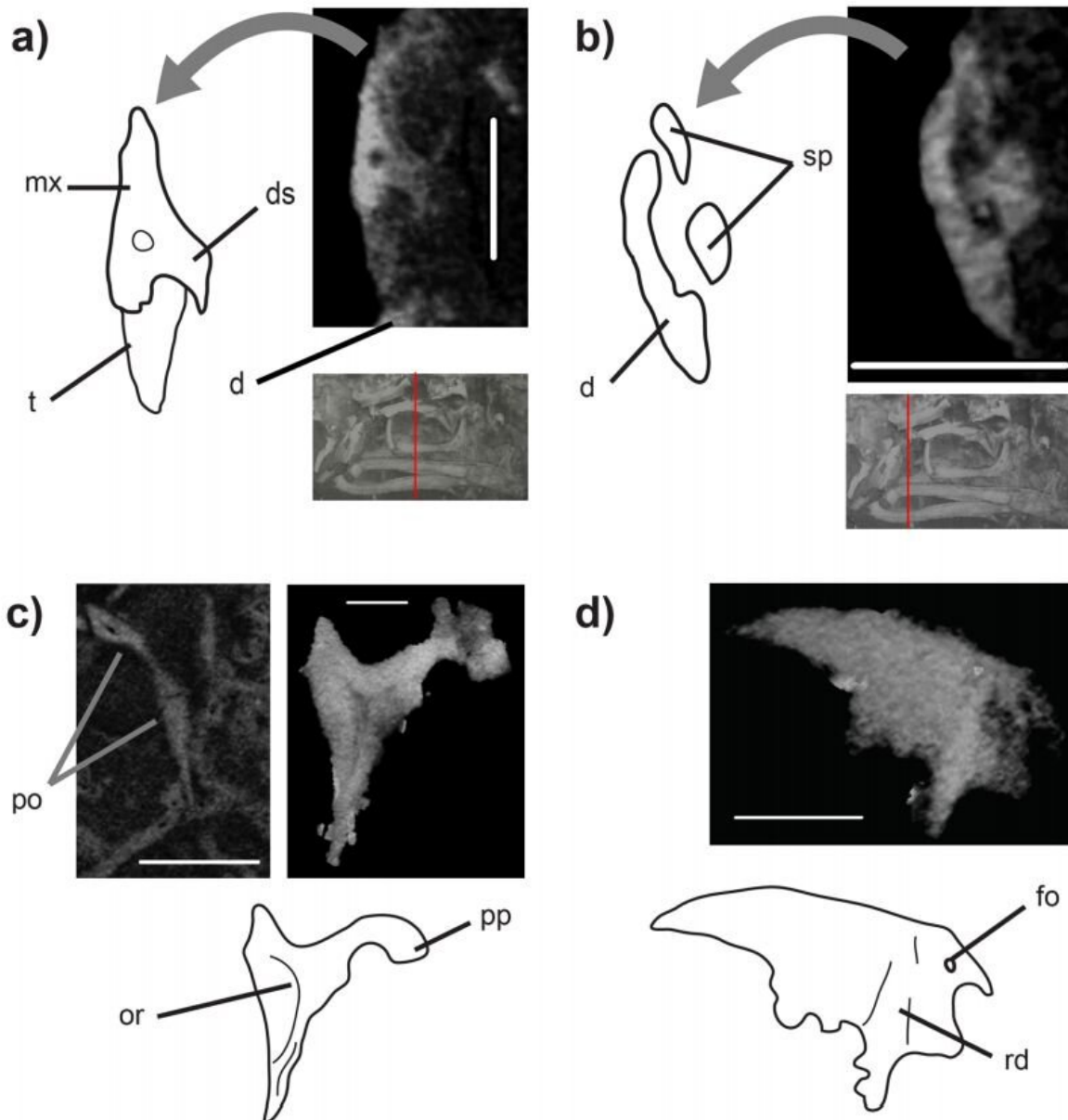


Tiny prehistoric lizard sheds light on reptile evolution

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CT images of Vellbergia. Credit: *Scientific Reports* (2020). DOI: 10.1038/s41598-020-58883-x

The discovery of a new species of prehistoric reptile from Germany is reported this week in *Scientific Reports*. The anatomical features of the species, named *Vellbergia bartholomaei*, add to our understanding of the early evolution of lepidosauromorphs.

Lepidosauromorphs are one of the largest and most diverse tetrapod lineages with over 10,500 [species](#). Ancestors to modern-day lizards, snakes and reptiles known as tuataras, lepidosauromorph specimens have only been found across a few Triassic sites and their [early evolution](#) remains largely unknown.

Gabriela Sobral and colleagues discovered the small fossil within the Middle Triassic (247 to 237 million-year-old) deposits of Vellberg, Germany. Analyses suggest that the specimen is a previously unknown species of early lepidosauromorph. One of the smallest found at the site, it could represent the first juvenile fossil collected at Vellberg. *V. bartholomaei* differs from other lepidosauromorph species owing to its distinct characteristics, including narrow, slender and short teeth relative to the [lower jaw](#), but shares a mosaic of features found in the predecessors of present-day lizards and tuataras. The findings, which suggest that Vellbergia may be a [common ancestor](#) of the two lineages, further our understanding of early reptile evolution.

The fossil adds to evidence implicating Vellberg as an important site for understanding early lepidosauromorph [evolution](#). Owing to the poor fossil record for the Early Triassic period, specimens from the Middle Triassic are of fundamental importance to understanding how vertebrates recovered after the Permian-Triassic mass extinction (around

252 million years ago), the Earth's most severe known extinction event, and how they diversified into modern species.

More information: A tiny new Middle Triassic stem-lepidosauromorph from Germany: implications for the early evolution of lepidosauromorphs and the Vellberg fauna, *Scientific Reports* (2020).
[DOI: 10.1038/s41598-020-58883-x](https://doi.org/10.1038/s41598-020-58883-x)

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