

New information on the cranial anatomy of the Middle Triassic rhynchosaurian reptile *Bentonyx sidensis*

Thitiwoot Sethapanichsakul, Robert A. Coram and Michael J. Benton


Acta Palaeontologica Polonica 68 (1) 2023: 53-62 doi:<https://doi.org/10.4202/app.01019.2022>

Rhynchosaurs were key herbivores over much of the world in the Middle and Late Triassic, often dominating their faunas ecologically. The anatomy of the Middle Triassic forms is debated in certain phylogenetically important details. Among several genera from the Anisian of England, *Bentonyx sidensis* is represented by a near-complete skull. New CT scanning of the holotype skull reveals previously concealed details of the palate and braincase in particular, and this allows comparison with other Middle Triassic rhynchosaurs and confirmation that *Bentonyx* is a distinct taxon from others of similar age including *Fodonyx*, *Rhynchosaurus*, *Langeronyx*, and *Stenaulorhynchus*. These are part of the first wave of rhynchosaur diversification in the Middle Triassic.

Key words: Reptilia, Rhynchosauria, *Bentonyx*, skull anatomy, Middle Triassic, Anisian, UK.

Thitiwoot Sethapanichsakul [sethaph@gmail.com; ORCID: <https://orcid.org/0000-0001-5739-4774>] and Michael J. Benton [mike.benton@bristol.ac.uk; ORCID: <https://orcid.org/0000-0002-4323-1824>], School of Earth Sciences, University of Bristol, Bristol, BS8 1RJ, UK. Robert Coram [rob@britishfossils.co.uk; ORCID: <https://orcid.org/0000-0003-3048-6665>], British Fossils, Unit 18-20 Bailie Gate Industrial Estate, Sturminster Marshall, Wimborne, Dorset BH21 4DB, UK; and School of Earth Sciences, University of Bristol, Bristol, BS8 1RJ, UK.

This is an open-access article distributed under the terms of the Creative Commons Attribution License (for details please see creativecommons.org), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

 [Full text \(1,534.1 kB\)](#)