

Dipnoan from the Upper Triassic of East Greenland and remarks about palaeobiogeography of *Ptychoceratodus*

Wojciech Pawlak, Mateusz Tałanda, Tomasz Sulej, and Grzegorz Niedźwiedzki *Acta Palaeontologica Polonica* 65 (3), 2020: 561-574 doi:https://doi.org/10.4202/app.00679.2019

Here we present a description of the dipnoan remains collected from the middle to upper Norian (Upper Triassic) of Jameson Land, East Greenland. The specimens consist of isolated tooth plates and skull bones of *Ptychoceratodus*, the most complete Late Triassic dipnoan material from Greenland. This genus is reported for the first time from the Upper Triassic of Greenland. The studied material belongs to *Ptychoceratodus rectangulus* previously known from the middle–upper Norian of Germany. It fills the biogeographical gap between the records of the Germanic and the Jameson Land basins. A reconstruction of the skull roof is provided, based on isolated bones collected from the same bone-bed. Their good preservation enables recognition of the sensory line pits, arranged similarly as in the extant *Protopterus*, suggesting a comparable mode of life. This finding has implications for our understanding of the disparity in *Ptychoceratodus* dipnoans, as well as the morphology between closely related dipnoans of the Late Triassic ecosystems.

Key words: Dipnoi, Ptychoceratodus, Triassic, Norian, Greenland, Carlsberg Fjord Beds.

Wojciech Pawlak [wojciech.pawlak@student.uw.edu.pl] and Mateusz
Tałanda [m.talanda@biol.uw.edu.pl], Department of Palaeobiology and Evolution,
Faculty of Biology, Biological and Chemical Research Centre, University of
Warsaw, Żwirki i Wigury 101, 02-089 Warsaw, Poland. Tomasz Sulej [sulej@twarda.pan.pl
], Institute of Paleobiology, Polish Academy of Sciences, Twarda
51/55, 00-818 Warsaw, Poland. Grzegorz Niedźwiedzki [grzegorz.niedzwiedzki@ebc.uu.s], Department of Organismal Biology, Evolutionary Biology Center, Uppsala University, Norbyvägen 18A, 752 36
Uppsala, Sweden.

This is an open-access article distributed under the terms of the Creative Commons Attribution License (for details please see <u>creativecommons.org</u>), which permits unrestricted use,

distribution, and reproduction in any medium, provided the original author and source are credited.

Full text (1,032.2 kB)