

## The tarphyceratid cephalopod *Trocholites* in the Middle–Upper Ordovician of the Prague Basin —the Baltican element in peri-Gondwana

Martina Aubrechtová, Vojtěch Turek and Štěpán Manda


*Acta Palaeontologica Polonica* 68 (3), 2023: 529–538 doi:10.4202/app.01088.2023

The vast majority of cephalopods of the order Tarphyceratida are known from regions that were located at mid- or low palaeolatitudes during the Ordovician (mainly Baltica, Laurentia, and Chinese palaeoblocks). Only a handful of tarphyceratid specimens are known from high palaeolatitude regions of peri-Gondwana and Gondwana. Here, we describe the two best-preserved trocholitid cephalopods known to date from the Ordovician of the Prague Basin. The first is from the late Darriwilian/early Sandbian Dobrotivá Formation and is assigned to *Trocholites fugax*, a species previously recorded from roughly coeval strata of Iberia, France, and Bohemia. The specimen thus strengthens previous hypotheses regarding the interchange of non-benthic faunas between Baltica and different regions of peri-Gondwana during the Middle/ Late Ordovician boundary interval. The second specimen, assigned to a new species of *Trocholites chaloupkai* sp. nov., is from the late Sandbian–early Katian Zahořany Formation and thus represents one of the stratigraphically youngest *Trocholites* in the Ordovician of peri-Gondwana. Internal structures of the shell of the holotype of the new species were studied using micro-CT tomography. This revealed that *T. chaloupkai* sp. nov. closely resembles the stratigraphically older (Darriwilian) species *Trocholites depressus* from Estonia.

**Key words:** Tarphyceratida, *Trocholites*, micro CT, Darriwilian, Sandbian/Katian, Prague Basin, Baltica, peri-Gondwana, Bohemia.

Martina Aubrechtová [[aubrechm@gmail.com](mailto:aubrechm@gmail.com); ORCID: <https://orcid.org/0000-0002-9804-3249>], Institute of Geology, Czech Academy of Sciences, Rozvojová 269, 16500 Prague 6, Czech Republic; Institute of Geology and Palaeontology, Faculty of Science, Charles University in Prague, Albertov 6, 12843 Prague 2, Czech Republic. Vojtěch Turek [[vojtech\\_turek@nm.cz](mailto:vojtech_turek@nm.cz); ORCID: <https://orcid.org/0000-0001-7366-8229>], National Museum Prague, Václavské náměstí 68, 115 79 Prague 1, Czech Republic. Štěpán Manda [[stepan.manda@geology.cz](mailto:stepan.manda@geology.cz); ORCID: <https://orcid.org/0000-0002-4939-2063>], Czech Geological Survey, Klárov 3, 11821 Prague 1, Czech Republic.

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

 [Full text \(1,022.1 kB\)](#) |

 [Supplementary file \(84.6 kB\)](#)