ACTA PALAEONTOLOGICA POLONICA

Concentrations of juvenile and small adult cephalopods in the Hirnantian cherts (Late Ordovician) of Porkuni, Estonia

Björn Kröger
Acta Palaeontologica Polonica 52 (3), 2007: 591-608

The quarry in the north Estonian village of Porkuni provides a succession of shallow-water limestones and cherts spanning the Ashgillian *Normalograptus*? *extraordinarius* graptolite Biozone. This interval comprises the initial pulse of the end-Ordovician extinction. The succession of Porkuni contains abundant and extraordinarily well-preserved fossils. 71 cephalopod specimens were extracted from these strata at Porkuni. Many of these specimens are fragments of juvenile shells or small adults. The embryonic shells of the cephalopods are usually preserved and provide insight into their early ontogeny. The faunal composition is considered as autochthonous and reflects a 'palaeo-nursery' in a Hirnantian reef environment. The collected specimens represent twelve genera and four orders. Small oncoceridans and orthoceridans dominate the association. The rate of endemism is very high, since only two genera found in Porkuni, are known from outside Baltoscandia. The new genera *Parvihebetoceras, Pomerantsoceras, Porkunioceras,* and the new species *Parvihebetoceras wahli, Pomerantsoceras tibia, Porkunioceras tuba* , and *Strandoceras orvikui* are erected.

Key words: Cephalopoda, Nautiloidea, mode of life, end-Ordovician extinction, Ashgillian.

Björn Kröger bjoekroe@gmx.de, Institut für Paläontologie, Museum für Naturkunde, D-10115 Berlin, Invalidenstrasse 43, Germany.

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 (1,115.0 kB)