Minute Silurian oncocerid nautiloids with unusual colour patterns

Štěpán Manda and Vojtěch Turek


A minute Silurian oncocerid *Cyrtoceras pollux*, from the Prague Basin is assigned here to the genus *Pomerantsoceras*. The only so far known species of this genus comes from the Upper Ordovician (Hirnantian) of Estonia. *Pomerantsoceras* thus represents, except for un-revised poorly understood taxa, the single known oncocerid genus surviving the end–Ordovician extinction events. *Cyrtoceras pollux* is unusual among the Silurian nautiloids because of its small shell. Colour pattern characterised by a few longitudinal bands on the entire circumference of the shell is here reported in oncocerids. Longicone and only slightly curved small shells as in *Pomerantsoceras* are unusual among nautiloids and resemble straight shells of orthocerids and pseudorthocerids, in which the colour pattern consists of straight colour bands. Consequently the shell shape as well as the colour pattern should be regarded as adaptive convergence with orthocerids and pseudorthocerids. It supports the hypothesis that colour pattern functioned as camouflage and its evolution was under adaptive control. In addition, several types of the shell malformations including anomalous growth of septa, shell wall and pits on an internal mould are described.

**Key words:** Cephalopoda, Nautiloidea, taxonomy, colour pattern, shell size, shell malformation, Silurian.

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