

Abstract

The term „genal caeca“ refers to branching and anastomosing ridges developed with varying intensity on free and fixed cheeks and preglabellar field in many trilobites, including the trilobites from Barrandian area of the Czech Republic.

This diploma thesis presents the first detailed study of the morphology of genal caeca preserved on cephalons of Cambrian trilobite genera *Ptychoparia* Hawle & Corda, 1847, *Mikaparia* Kordule, 2006 and *Conocoryphe* Hawle & Corda, 1847 from Příbram-Jince and Skryje-Týřovice basins of the Barrandian area. Based on a detailed morphological description and measurements, separate fields of genal caeca occurrence were defined and frequency of their preservation on the studied specimens was compared.

The variability of the number of ridges in each field and the frequency of their preservation do not show any convincing connection with cranidial size of the specimens or the locality.

Keywords: trilobites, Barrandian area, genal caeca