

Abstract

This thesis deals with the topic of eocrinoid echinoderms from the Barrandian area (Příbram-Jince Basin, mid-Cambrian, Drumian). The thesis is presented as a compilation of five published papers and an introduction. The introduction is an overview of current knowledge about eocrinoid echinoderms. It also includes links to new information from the five included papers, and serves as a unifying element for these professional publications.

The topic of the thesis is focused on a revision of selected specimens of eocrinoid echinoderms, and the study of their ontogeny, phylogeny, palaeoecology and systematic position. This thesis has also improved our understanding of early evolution of basal blastozoans.

This is the first study of Cambrian ontogenetic development on eocrinoid material from the Czech Republic. Complete ontogeny was described on the genus *Akadocrinus*, and it was possible to establish two basic phases in the development of this genus: pre-epispire-bearing phase and epispire-bearing phase. The new primitive blastozoan *Felbabkacystis* is described from the Jince Formation - its unique body plan highlights evolution of the body wall among blastozoans. Palaeoecology and phylogeny of the genus *Vyscystis* was studied, and phylogenetic analysis suggests a basal position of lepidocystoids among blastozoans. Revisions of morphological descriptions as well as clarifications of systematic positions were completed for the genera *Tige d'une Cystidée indéterminée* and *Lapillocystites*.