

Abstract

The work is based on a revision of collection from several scientific institutions from the Czech Republic and the Federal Republic of Saxony (National Museum in Prague, Chlupáč Museum of Earth History, Senckenberg Natural History Collections Dresden, etc.). The collection is based on samples published by Oskar Lenz and George Bruder from the second half of the 19th century. Both authors also processed the findings of other researchers (e.g. Cotta, Weisse). The belemnite rostra were systematically divided into four families, five genera and seven identifiable genera. One rostrum has not exactly been determined. The age of the samples was established to be the Middle and Upper Jurassic (Bajocian-Kimmeridgian). The length of the expected sedimentation in this area has been prolonged to the past (deeper to the Middle Jurassic), mainly due to the finding of the species *Megateuthis gigantea* Schlotheim, 1820. Earlier research (especially in the 20th century) assumed the extent of preserved carbonate rocks only in the Oxfordian and Kimmeridgian age, with a not much fossiliferous Callovian Brtníky Formation. The studied sedimentary rocks show a significant influence of Milankovich cycles with repeated alternation of carbonate and non-carbonate layers in the sequence. Preliminary results of isotope analyzes indicate a very low geochemical potential. This is mainly due to the presence of the Lusatian fault and rift volcanism, which took place here in the Neogene period. Thanks to the analysis of the Jurassic organisms, micritic pelagic sedimentation in a bay or shallow sea with a limited input of clastic sediments from the mainland is assumed. The sea was well circulating, clean, well oxygenated and a small fluctuations of salinity is suggested (findings of echinoderms, chondrichthyes and brachiopods).

Key words: Jurassic of N Bohemia, belemnites, biostratigraphy, palaeobiogeography, isotope data