

Abstract

Frustration from shape and size variability of oyster's species *Rhynchostreon suborbiculatum* (Lamarck) is long known phenomenon. In current state of his systematic it is not possible to consider it fully satisfying. As it is shown in study of genus *Gryphaea* by Jones and Gould (1999), that application of modern analytical methods, undoubtedly lightens long-darkened places of evolution process. Idea of Videt and Neraudeau (2003), that shape variability of *Rhynchostreon suborbiculatum* (Lamarck) probably also mirrors heterochronic processes, introduces inspirative and good foundation for future research in this field. Occurrence of this oyster is proved from huge range of sites in Bohemian Cretaceous Basin area. It is combination of rich occurrence, unique preservation and variability of lithological settings, which gives us unique starting point for next step to solve significant problem. Based on population analyses consisting of biometrical studies supported by oxygen isotope analyses, in future, it will be possible to reach sufficient conclusions of this issue, and progress in our knowledge.