

Abstract

The presented thesis deals with ichthyosaur fossils in the collections of the Chlupač Museum of the History of the Earth (hereafter CHMHZ). Specifically, these are five original specimens originating from the areas of Holzmaden, Germany (four specimens in total) and Hallein, Austria (one specimen).

The main goal of the work is a detailed description and identification of all five original specimens. At the same time, this work answers the question whether the original determination of the fossils corresponds to the current systematics of this group. The work also pays attention to the geology of the areas from which the fossils come, the paleobiology of these animals and the current form of their phylogeny and systematics.

This work finds that the original identification of the fossils in most cases does not correspond to the current systematics and proposes a new classification for three of the five specimens. All specimens from the Holzmaden site (4 in total) belong to the genus *Stenopterygius* and are represented by two species: *S. quadriscissus* (3 specimens) and *S. uniter* (1 specimen). The fossil from Hallein is in extremely poor condition, so its assignment is based on geographic and stratigraphic data. In this case, the specimen remains in the original genus classification: *Mixosaurus*.