

Sexual dimorphism in the Bathonian morphoceratid ammonite *Polysphinctites tenuiplicatus*

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Asphinctites tenuiplicatus [M] and Polysphinctites secundus [m] from the Asphinctites tenuiplicatus Zone (Early Bathonian), are usually considered as a sexual dimorphic pair, although authors describe them as separate species. We used statistical methods to test the sexual dimorphic correspondence between those morphospecies, based on a rather large sample of well-preserved macro- and microconchs derived from a single horizon of calcareous concretions in the Polish Jura. Our results indicate that both dimorphs or sexes have identical ontogeny up to a critical diameter, from which they diverge towards the characteristic morphology and sculpture of each dimorph. Thus, both dimorphs are described as a single species: Polysphinctites tenuiplicatus [M and m]. After review of the several nominal species usually assigned to the genera Asphinctites and Polysphinctites throughout their stratigraphic and biogeographic range in the Early Bathonian of the Tethys, it is concluded that they actually correspond to only two species of a single lineage. The corresponding name for the lineage should be Polysphinctites (= Asphinctites as a junior synonym).

Key words: Ammonoidea, Morphoceratidae, dimorphism, macroconch, microconch, Jurassic, Poland.

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