

## 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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