

Why names do count!

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Collectors are often complaining about changing names of fossil taxa and frequently claim that the Latin names seem to be rather subjective. From the scientist's point of view, these changes in taxonomy are results of scientific progress. Careful taxonomic revisions frequently question earlier identifications and are crucial to reveal evolutionary relationships, biogeographic patterns and biostratigraphic significance of certain species.

A perfect example is the Tertiary mollusc fauna of the Paratethys Sea. Most collectors are "used" to the names provided in the monograph of Moritz Hörnes (1851-1870). Hörnes was strongly influenced by monographs published by French and Italian scientists and therefore tried to compare and identify his taxa with these stratigraphically older French and younger Italian faunas. This led to numerous misidentifications and erroneous stratigraphic correlations. Consequently, recent revisions resulted in a nearly complete change of former taxonomic concepts. E.g., the emblematic "*Cardita jouanneti*" from Gainfarn turned out to be a completely different species for which a new name had to be found, and the highly sought after "*Protoma cathedralis*" from the Eggenburg region is neither *Protoma* nor *cathedralis*.

L'art pour l'art? No! These revisions resulted in a new view on the biogeographic relation of the Paratethys Sea and challenged the idea of an Indo-Pacific faunal immigration. Some gastropods turned out to be valuable biostratigraphic marker species and the distribution patterns of closely related species suggest a so far unrecognized paleogeographic separation of the Paratethys Sea.