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Gradualistic speciation of *Cyprideis* (Crustacea, Ostracoda) in Late Miocene Lake Pannon (Mataschen clay pit)

GITTER, F.[1, 2], GROSS, M.[1], PILLER, W.E.[2]

[1] Department for Geology & Paleontology, Universalmuseum Joanneum, Weinzöttlstraße 16, 8045 Graz, Austria
[2] University of Graz, Institute of Earth Sciences, NAWI Graz, Heinrichstraße 26, 8010 Graz, Austria
email: frank.gitter@museum-joanneum.at, martin.gross@museum-joanneum.at, werner.piller@uni-graz.at

Successive freshening and constantly changing environmental conditions in Lake Pannon led to a well documented radiation in mollusks and ostracods. Among ostracods (small crustaceans), *Cyprideis* is one of the most common genera in "Lake Pannon", as well as in several other ancient lakes, producing several species flocks. Here, we present high-resolution data from an early transgression of Lake Pannon in the Eastern Styrian Basin (SE Austria).

We drilled five cores in the Mataschen clay pit covering a ~2.3 m long section and completely sampled it in 5-mm thick intervals. This led to a resolution of just a few years per sample and enabled us to reconstruct minute changes within the ostracod fauna during the transgression of a brackish water body. The most dominant genus, *Cyprideis*, is represented through three species *C*. *mataschensis*, *C*. *kapfensteinensis* and *C*. ex gr. *pannonica*. Through morphometric analyses we highlight the variance of each taxon and suggest that there is no direct ecologic control on size or shape. Furthermore, we found a second, co-occurring morphotype of *C*. *kapfensteinensis* which is directly related to an elevation of salinities above 13 psu. The presence of two intermediate specimens between the two morphotypes in the sample directly below the first appearance of *C*. *kapfensteinensis* B leads us to the conclusion, that we are facing a speciation event leading to four sympatric species of *Cyprideis*.