

PROGRAM AND ABSTRACTS

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088 - Oral

MORPHOMETRICAL TRAITS AND VARIABILITY OF CYPRIDEIS IN THE **NON-MARINE BASINS**

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Cyprideis is common genus in the non-marine continental basins since its appearance in the Oligocene/Early Miocene and it occurs in numerous endemic and morphologically highly variable populations. The female right valves in external lateral view were digitalized using the published images from the Amazonian Basin, Lake Tanganyika, Turkish and European Neogene basins, South and North Americas and the optic images from the Late Miocene Lake Pannon. Special attention is paid to Cyprideis torosa from different stratigraphical and geographical sites. For the reconstruction of valve outlines, the B-splines approach adapted to ostracods and known as Linhart's algorithm is used. Nonmetric Multidimensional Scaling (N-MDS), ANOSIM for 1-way layout, and PCA is used to ttest the morphometrical traits and variability of the species in the basins. Cyprideis of the Lake Pannon show low morphometrical variability in comparison to Cyprideis of other basins. Detailed examination of the hinge shows the changes in degree of dentition, thickening of the hinge elements and division of anteromedian tooth which accumulated through a time, but ecological evolution of that basin blocked an advanced morphological separation of the species. A morphometrical variability increases in the Americas and Turkish Neogene Cyprideis and it is comparable with morphometrical variability of Cyprideis torosa. Morphometrical variability within these groups can be explained by ecological and geographical barriers which separated the populations. The Amazonian and Tanganyikan species show the highest variability and advance morphological traits induced probably by long evolutionary period, and in a case of Tanganyikan species, the Cyprideis and their descendants obtained the characters homeomorphic with Paratethyan Hemicytherinae.

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