

Unusual median pores of *Alona* head shields recovered from recent and pre-industrial sediments of Alpine lakes

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ABSTRACT

*We report the finding of *Alona* (affinis-quadrangularis) - type headshields with atypical median pores, recovered from the sediments of high-mountain lakes. Subfossil Cladocera remains were analyzed in the framework of the European Project EMERGE (2000-2002, European Mountain lakes Ecosystem: Regionalisation, diagnostic & socioeconomic Evaluation), to evaluate changes in their assemblages consequent to industrial pollution. Observed response includes an increase in *A. affinis* with respect to *A. quadrangularis* after industrialization. According to the literature, the atypical head shields are most probably attributable to *A. affinis*. However, being detected in high mountain lakes, these remains may be interpreted as a result of mutations, as the intensity of UV radiation is high in these environments. In this sense, they might be interpreted as the abnormal *Daphnia*'s and *Chydorus*' ephippia, which were also detected in the sediments of these lakes.*

*Key words: subfossil cladocera, head pores, *Alona*, alpine lakes*
