

SS14 - Oral

WHICH BIOLOGICAL TRAITS FAVOUR OR DISQUALIFY MACROINVERTEBRATES DURING A STREAM DROUGHT?

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Due to the ongoing climate change and a lack of summer precipitations, there is an increasing threat of stream intermittency in the temperate zone of Central Europe. In order to develop a retrospective method of indication of stream drought we focused our attention on the comparison of benthic macroinvertebrate assemblages living in permanent and intermittent streams.

We sampled macroinvertebrate assemblages in autumn and spring from a set of intermittent and permanent streams. Then we analyzed the taxonomic composition of the assemblages and calculated the proportional representation of 34 species traits related to species resistance and resilience to drought. The selection of these traits was based on an extensive literature review. Similarly, we used literature review to identify species with a potential to indicate permanency or intermittency of streams.

Finally, we compared the representation of indicator species and species traits between the assemblages of permanent and intermittent streams to identify (dis)advantageous traits that may prevent from or assist in coping with drought.

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