

## **Worldwide diversity of Cercozoa: summary of our current studies**

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We are currently using Cercozoa as model to unveil local and global patterns driving the protistan distribution in soils. Cercozoa, according to both observations under the microscope and molecular environmental sampling, is one of the major protistan groups in soil. This huge phylum comprises a vast array of morphologies - naked and testate amoebae as well as flagellates - and nutrition modes - bacterivores, algivores, fungivores, autotrophs, myxotrophs and parasites. This variety of forms and nutrition modes will be exploited to disentangle their role in the soil food-web and how they are differentially influenced by biotic and abiotic edaphic factors. We developed specific primers targeting the group and we are using them in several collaborative projects. We also classified the Cercozoa in functional groups according to morphology, nutrition modes and locomotion. I will summarize and discuss our latest findings on cercozoan worldwide distribution in varied environments, as revealed by high-throughput sequencing, such as drylands, temperate grasslands and forests, biological crusts and agricultural soils.