Marie-Curie-Fellowship for Csaba Vad

Csaba Vad, member of the WasserCluster team, was awarded one of the treasured Marie-Curie-Fellowships, which are funded by the Horizon 2020 Programme of the EU. In the focus of the two-year project is the research of chrysophytes, which are predicted to increase with climate warming, what implys serious consequences for trophic efficiency and fish production. Official start for CHRYSOWEB is in February 2016.

The chrysophyte „Uroglena" (under the microscope, picture at the right) is part of Csaba Vads research.
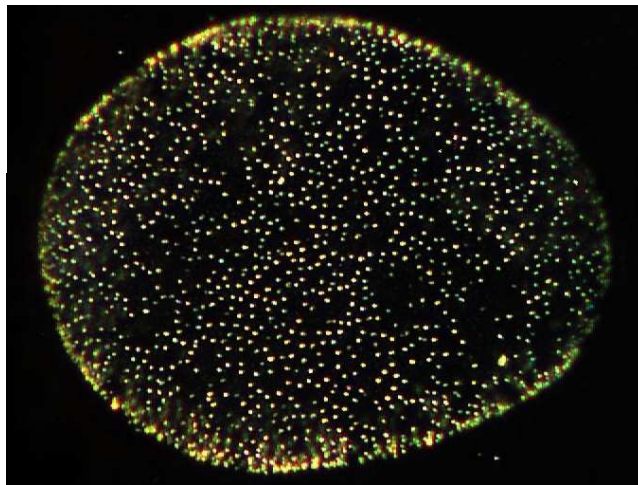
Plankton occupy a key position in aquatic trophic webs – and will be in the center of Csaba Vads research the next two years. Today a highly relevant topic lies ahead in assessing the global change-mediated shifts in aquatic trophic webs, with implications for the functioning of aquatic systems. Chrysophytes are a prevailing element of phytoplankton in lakes and their contribution is predicted to increase with climate warming. Current knowledge suggests that chrysophytes may impair zooplankton secondary production. However, our understanding on the nutritional quality and bottom-up effect of chrysophytes on zooplankton is insufficient.

With the realization of the Projekt CHRYSOWEB (The effect of mixotrophic chrysophytes on secondary productivity in pelagic food webs) it is now possible to enlarge on this topic. CHRYSOWEB aims to reveal the effects of chrysophytes on zooplankton secondary production and diversity. Laboratory feeding experiments will be combined with field observations, and the underlying mechanisms will be biochemically analysed in algae and consumers. Altogether CHRYSOWEB will significantly contribute to the understanding of carbon flow and nutrient cycling in alpine lakes and to the understanding of implications of global climate change.

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