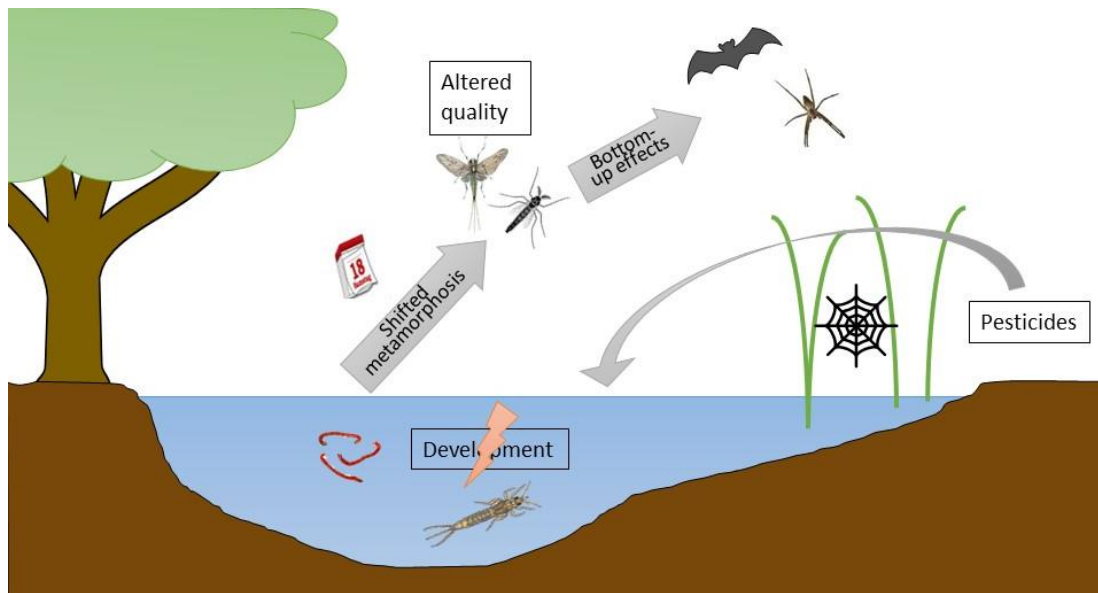


## Master thesis for students of ecotoxicology/environmental sciences

Going beyond method development: A method to determine multiple energy reserves in one sample as tool to investigate changes in subsidy quality

### Background:

Insects emerging from aquatic ecosystems are an important food source for terrestrial predators. Besides their biomass, their quality as food is proposed as driver for riparian food webs. One descriptor of this quality is the energy stored as proteins, glycogen, free sugars and lipids. Since it was found that their levels in aquatic insect larvae depends on the environmental conditions of the habitat the larvae are choosing, we strive for the assessment of named energy resources in larvae and adult life stages of the model species, the non-biting midge *Chironomus riparius*.



### Your project:

We have already generated a set of Chironomids from differently stressed laboratory systems. As the number of organisms is limited, we wish to establish in a first step a method that allows to quantify the named energy resources in one sample (Foray et al. 2012). With this method the stored organisms shall be analysed informing about the impact of food quality, copper, pesticides and Bti. We expect finding substantial differences among treatment groups over the duration of the experiment.

### Interested?

We have now hard criteria but assume the following characteristics are supportive of a positive experience of this collaboration. You enjoy working in the laboratory and have ideally some experiences with laboratory-based work. The ability to work independently and be reliable, thoughtful and consistent is certainly helpful, too. If you have questions or if you are interested, don't hesitate to contact us!

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Start: flexible but ideally during October/November 2020