

**Assessment of Vojtěch Kolář master thesis entitled:
"The impact of predation risk and habitat complexity on trophic interactions in aquatic habitats"**

Little information exists about how multiple abiotic and biotic factors jointly influence the strengths of predator-prey interactions. In particular, the influence of vegetation and predation risk on predator-prey interactions in aquatic ecosystems remain little understood. To fill this gap, Vojtěch performed a laboratory experiment to investigate the effects of habitat complexity, prey density and predation risk by large dragonfly larvae (*Aeshna* sp.) on short-term interaction strengths (i.e., feeding rate) of the larvae of three odonate species. The results of his thesis suggests that it is important to take into account multiple factors to better understand and predict environmentally driven variations in trophic interaction strength and metabolic rates that underlie the energetic efficiency of individual consumers. These results have potential important implications in theoretical and applied ecology.

The present thesis includes a scientific manuscript written in English and a general introduction written in Czech. The experiments were conducted during summer 2014 and the obtained data were analyzed using advanced statistical methods. The Discussion provides possible explanations for the experimental results and enlarges the scope of the study by comparing the results obtained with those of previous studies. The cited literature is very relevant and well connected to the experimental results. The experiments are well planned and conducted. The amount of work to produce these interesting results is impressive. I consider that this work provide strong support for the influence of vegetation and predation risk on trophic interactions and consumer life history traits. The manuscript is well written and, after some improvements, will be submitted for publication to *Ecology* or other leading journals in ecology.

It was an everyday pleasure to supervise Vojtěch. He has an incredible motivation and is not afraid of working twelve hours per day and coming to the lab on weekends when necessary. Vojtěch demonstrated considerable autonomy, particularly in the experimental work, the maintenance of insect colonies and statistical analyses of experimental data. In my opinion, Vojtěch Kolář fulfilled all duties of a master student, and I recommend his thesis for defense at the Faculty of Science of the University of South Bohemia.

Toulouse, January 07, 2016

Arnaud SENTIS, Ph.D.
Supervisor

