

Abstract in English

In this thesis, I review how aquatic insects have adapted to fish predation in various habitats during all phases of their life cycles. Aquatic insects are a large group of heterogeneous species and this review introduces these orders and species, including the environments they inhabit. Fish are some of the most common and most impactful predators of aquatic insects and this thesis identifies a wide range of behavioural, morphological, chemical and life history defence mechanisms of various complexity and uniqueness aquatic insect orders have developed to counter fish predation. Most aquatic insects are subject to predation during their aquatic larval stage. A few orders also inhabit the water as adults, as is the case most notably for aquatic Coleoptera. More complex adaptations to fish predation are presented in this order. Oviposition is noted as a strategy used to negate fish predation even before individuals hatch. The use of fish predation as means to control mosquito larvae communities is presented and reviewed.

Keywords: aquatic insects, fish predation, defence mechanisms, adaptation to predation