

Abstract

In the context of the necessity to research the global decline of insects, the scientific community has increasingly focused on the quantitative monitoring of insect populations, specifically their biomass and abundance. These metrics provide a different type of information on population trends compared to monitoring diversity or geographical distribution. However, interpreting population trends based on these metrics is accompanied by a number of challenges. This thesis highlights these issues and underscores the necessity of quantitative monitoring and its benefits for understanding insect population dynamics. Additionally, it provides an overview of the most commonly used methods for insect quantitative monitoring, ranging from traditional approaches to modern techniques. Lastly, it also presents studies that address the monitoring of insect biomass and abundance.

Keywords: insect, biomass, abundance, population trends, insect decline, monitoring methods