Abstract

Biodiversity in agricultural landscapes faces significant pressures from intensive farming practices. This bachelor's thesis focuses on evaluating organic farming in terms of its impacts on biological diversity using biodiversity indicators. Based on a review of scientific literature, various groups of indicator organisms are analyzed – birds, pollinators, pest predators, soil fauna, and vascular and non-vascular plants – and their responses to different farming methods. The work compares organic and conventional agricultural systems and evaluates their influence on species richness, abundance, and functional diversity of individual taxonomic groups. Organic farming shows a positive impact on biodiversity across taxonomic groups, with the greatest benefit occurring in intensively managed landscapes. Individual groups of bioindicators proved to be an effective tool for monitoring various aspects of agricultural systems. The highest biodiversity values are achieved through a combination of organic farming with ecological landscape management measures as a whole. Bioindicators in this context prove to be an effective tool for ecological assessment and planning of sustainable agriculture. Their use enables quantification of impacts from different forms of farming, identification of conservation priorities, and contribution to informed decision-making in agricultural and environmental policy.

Key words:

bioindicators, organic farming, biodiversity, agricultural landscape, monitoring, ecosystem services, landscape planning