Abstract

Modern agriculture primarily utilizes monoculture fields of annual crops to meet human needs, which are associated with long-term soil degradation and many other negative environmental impacts. This bachelor's thesis thoroughly examines the reasons for cultivating annual crops and monocultures and the effects of this modern agriculture on the environment. At the same time, it compares this type of farming with its more sustainable forms, such as the cultivation of perennial crops and polycultures. The analysis shows that economic reasons, efficiency, and market demands are the main factors driving the cultivation of monocultures of annual crops. However, this type of farming brings significant negative environmental impacts, such as soil degradation, reduced biodiversity, increased soil erosion, and greater dependence on chemical fertilizers and pesticides. Sustainable farming practices, such as polycultures and the cultivation of perennial crops, offer efficient use of soil nutrients and moisture, support soil restoration, increase biodiversity, and improve ecological stability. This work thus emphasizes the necessity of finding a balance between economic goals and environmental needs through innovative and sustainable agricultural practices.