

INVESTIGATION OF THE SECONDARY SUCCESSION OF ABANDONED AREAS FROM DIFFERENT CULTIVATION IN THE NORTHEASTERN FOOTHILLS OF THE BÜKK MOUNTAINS

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Areas abandoned for various reasons are widespread in Europe, with a significant proportion in some regions of Hungary, such as the North Hungarian Mountains. Our knowledge of vegetation dynamics in abandoned lands is incomplete, in part because research comparing types abandoned from different cultivars is limited. This study compared the textural and structural changes of previously extensively treated vineyards, arables, and grasslands over a 30-year timescale in secondary succession studies. Based on the botanical surveys, it can be said that the total species number and diversity of abandoned vineyards and arable lands did not increase linearly in the four age groups studied. The way of secondary succession of former vineyards and arable lands showed many similarities. In these types, rapid regeneration of natural vegetation can be observed, the rate of which can only be reduced by the abundance of a few strong competitor species. However, the abandonment of extensively grazed and mowed grasslands has reduced species numbers and diversity, which may reduce the resilience of such grasslands to environmental factors. In abandoned lands, the mosaic landscape and previous extensive small-plot farming appear to have a positive effect on the rate of secondary succession and regeneration, as the species-rich vegetation patches provide a suitable propagule source for regeneration.