

THE EFFECT OF SELECTIVE THINNING ON GROUND COVER, EPIPHYTIC MOSS AND LICHEN SPECIES, AND MICROHABITAT DIVERSITY IN *QUERCUS* *ROBUR*-DOMINATED STANDS

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In the Baltics, selective release of oak trees is a specific forestry method aimed to improve light conditions and preserve the necessary environment for rare and protected species in the forests. In 2003, selective thinning was applied in nine forest stands, dominated by *Quercus robur*. In each stand selective removal of trees was carried out around four oak trees and, accordingly, four additional oak trees were chosen as the control, around which no management was implemented. In order to evaluate and compare whether differences in floristic diversity could be observed between the managed and control parts of the stand 20 years after the management, repeated measurements were carried out in the stands in 2022 and 2023. To characterise the biotic community associated with oak trees, vascular, epiphytic, and epixylic moss and lichen species, as well as the microhabitat presence and frequency was analysed. The Shannon-Wiener index was used to evaluate the species' diversity, the principal drivers of vegetation and epiphytic species on the studied oak trees were assessed by detrended correspondence analysis. The selective thinning has provided a positive long-term effect on the evaluated indicators of biodiversity, making it an applicable method for forest stands, the purpose of which is to maintain biodiversity in combination with moderate economic activity. A slightly increased number of species and a higher diversity index were found in managed parts of sites; a statistically significant difference was found only in the case of diversity of vegetation species.

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