

Floristična sestava gozdnatih travnikov vzdolž osrednjega dela reke Drave (SV Slovenija) v odvisnosti od svetlobe in rabe
The species composition in relation to light and management in riparian wooded meadows along the middle Drava River (NE Slovenia).

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In the present study, we investigated the species richness and species composition in relation to light and management regime in remnants of wooded meadows within the riparian forests along the middle Drava River in Slovenia. 41 plots of still managed and, at different time periods (< 5 yrs, 5-15 yrs, > 15 yrs), abandoned riparian wooded meadows (RWM) were sampled. Next to vegetation relevés, light intensity (Photosynthetically Active Radiation (PAR)) was also measured in plots. Within RWM that were still managed two floristically distinct types were recognized by TWINSpan and DCA analysis: meadow-like and forest-like. Light intensity and mean number of species differed significantly between types. The CCA of active RWM showed significant relation between species composition and light conditions. The number of species per relevé on active RWM was negatively correlated with light intensity – in contrast to North European wooded grasslands. This could be explained by the influence of species-rich riparian hornbeam forests, which contribute a great number of understorey species, in contrast to naturally mesotrophic meadows. CCA of both active and abandoned RWM demonstrated that light was good predictor of RWM species composition and that abandonment caused profound changes in floristic composition. The species turnover during succession was more pronounced in less shaded meadow-like RWM where more light-requiring (grassland) species occurred. Species richness was the highest in active forest-like RWM. There were no significant differences in species richness between active meadow-like RWM and groups of abandoned RWM. The clear positive correlation between cover-abundance values of invasive neophyte *Solidago gigantea* and light intensity showed that abandoned RWM are very susceptible for colonization until there is enough light.