

VPLYV ZMENENEJ DRUHOVEJ ŠTRUKTÚRY STROMOVEJ VRSTVY NA BYLINNÚ SYNÚZIU VYBRANÝCH LESNÝCH EKOSYSTÉMOV V ŠTIAVNICKÝCH VRCHOCH

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ABSTRACT

Wiezik M. **The influence of altered overstory composition on the herbaceous layer community in focal forest stands of Štiavnické vrchy Mts**

Herbaceous community under the influence of altered overstory composition was studied within a complex of 30 study plots situated at Štiavnické vrchy Mts. All plots were established in forest stands originally dominated by oak and belonging to one of two forest types. Three different management types of forest were distinguished, including reserved plots, native plantations and plantations with not indigenous tree species. Within these plots the herbaceous layer was investigated during the growing season of 2004. Altogether 78 species of vascular herbs were recorded. The reserved plots were dominated by mesotrophic mesophytes (76 %). The relative abundance of this ecological group was lowered within the native plantations (69 %) and non-native plantations (50,4 %), respectively. On the other hand, increased abundance of nitrophilous and non-evaluated species was recorded within both types of plantations. Also an influence of particular tree species was observed. The forest stands dominated by Black Locust were typical by increased affinity of species *Urtica dioica*, *Chelidonium maius* and *Galium aparine*. Stands with significant abundance of Norwegian Spruce were typical by affinity of *Impatiens parviflora* and *Luzula luzuloides*. The reserved plots and plots with pines and Common Larch were not distinctly different, typical by affinity of species *Poa nemoralis* and *Melica uniflora*. According to the standards of Ecological degradations, forest stands of Norwegian Spruce and Black Locust performed features indicating the decrease of ecological stability of the herbaceous community, originated from the overstory composition alternation.

Key words: forest management, foreign tree species, herbaceous community, overstory composition, ecological stability, Štiavnické vrchy Mts