

Márialigeti, S., Németh, B., Tinya, F. & Ódor, P. (2009): The effects of stand structure on ground-floor bryophyte assemblages in temperate mixed forests. Biodivers Conserv 18: 2223-2241. DOI 10.1007/s10531-009-9586-6

Reference: Márialigeti, S., Németh, B., Tinya, F. & Ódor, P. (2009): The effects of stand structure on ground-floor bryophyte assemblages in temperate mixed forests. Biodivers Conserv 18: 2223-2241. DOI 10.1007/s10531-009-9586-6

Short reference: Márialigeti et al. (2009)

First author: Márialigeti, S.

Year: 2009

Abstract

The effects of stand structure on ground-floor bryophyte assemblages in temperate mixed forests

S. Márialigeti, B. Németh, F. Tinya, P. Ódor

The effect of tree species composition, stand structure characteristics and substrate availability on ground-floor bryophyte assemblages was studied in mixed deciduous forests of Western Hungary. Species composition, species richness and cover of bryophytes occurring on the soil and logs were analysed as dependent variables. The whole assemblage and functional groups defined on the basis of substrate preference were investigated separately. Substrate availability (open soil, logs) was the most prominent factor in determining species composition, cover and diversity positively, while the litter of deciduous trees had a negative effect on the occurrence of forest floor bryophytes. Besides, bryophyte species richness increased with tree species and stand structural diversity, and for specialist epiphytic and epixylic species log volume was essential. Sapling density and light heterogeneity were influential on bryophyte cover, especially for the dominant terricolous species. Many variables of the forest floor bryophyte community can be estimated efficiently by examining stand structure in the studied region. Selective cutting increasing tree species diversity, stand structural heterogeneity and dead wood volume can maintain higher bryophyte diversity in this region than the shelter-wood system producing evenaged, monodominant, structurally homogenous stands.

biodiversity: moss

forest structure: stand

Notes

Species composition, Species richness, Diversity, Functional groups, Forest structure

Címszavazva - VA

Publisher: Springer

Journal: Biodiversity Conservation

Location: ER Archívum (2009/P-001/1, 2009/P-001/2, 2009/P-001/3)

Type: scientific paper

Katalógusba vette: Gulyás Györgyi

Katalógusbavétel időpontja: Wed, 05/06/2009 - 12:00