

# Lower canopy invertebrate diversity in relation to Norway spruce (*Picea abies*) proportion

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Salingre, G. & Heliövaara, K. 2001. Lower canopy invertebrate diversity in relation to Norway spruce (*Picea abies*) proportion. *Norw. J. Entomol.* 48, 97-102.

Norway spruce branches were sampled from a series of mature managed stands in southern Finland. The proportion of spruce varied from 2% to 100% of the basal tree area. At each sampling area three mature spruces were chosen and from each tree the lowest branches and the vegetation (ground) below the trees were sampled at seven occasions during the growth period. Most of the collected material consisted of psocids (Psocoptera), spiders (Aranae), springtails (Collembola) and true flies (Diptera). No differences were recorded in the invertebrate numbers on the ground, but the number of species on spruce branches decreased by 20%, the number of invertebrates by 40%, and Hurlbert's index of diversity decreased by 10% as the proportion of spruce exceeded 40%.

Key words: biodiversity, forest management, vegetation, boreal forest.

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