

Geographically and genetically distinct populations of scots pine (*Pinus sylvestris*) do not differ in resistance to damage the large pine weevil (*Hylobius abietis*), a common garden translocation study

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Abstract

Introduction

The large pine weevil (*Hylobius abietis* L. Coleoptera: Curculionidae) is a common pest of newly planted conifer plantations in Europe, generally causing damage to saplings up to five years old (?). Adult weevils emerge from tree stumps and feed on the bark and buds of coniferous saplings. Circular lesions on the bark and buds may cause a reduction in growth rate, stem deformation and an increased susceptibility to infection by airborne diseases of trees (?). A single adult weevil can damage several plants over the course of a season, with ~50% sapling mortality observed across plantation sites in the UK and Ireland (?). On commercial conifer plantations, *H. abietis* causes annual economic losses of €140 million *per annum* in Europe, of which €2.75 million occurs in the UK (?). *H. abietis* benefit from the env. created by the clearfelling of forest. The potential for climate change to enhance the damage caused by *H. abietis*, by reducing life cycle length and encouraging migration into previously weevil free areas, has prompted discussion of the effectiveness of current management practices and possible alternatives ().

Control management of *H. abietis* currently relies on a variety of chemical, biological and physical measures, with integrated pest management schemes yielding greater success (). MORE ON METHODS OF CONTROL

Scots pine is a pretty cool tree

Rather than the application of costly pesticides or biological control agents, breeding weevil resistant *P. sylvestris* varieties for commercial plantation forestry may

TEXT