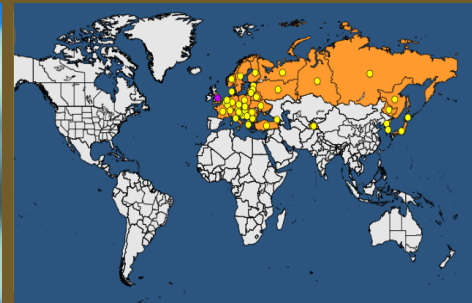


Range expansion of bark beetles in the genus *Ips* (ECLIPSE)



Funding

Non-competitive funding mechanism. Each funder only pays for the participation of their own national researchers. Total funding € 185 000

Research consortium

Defra (GB), DAFM (IE), ULB (BE), MU (IE), SLU (SE), AFBINI (GB), DAERA (GB)

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Goals

First evidence of breeding by *Ips typographus* in the United Kingdom and expansion of *Ips amitinus* in Scandinavia, *Ips duplicatus* in central Europe and *Ips cembrae* in Great Britain and western/northern Europe suggest that factors that previously limited or moderated range expansion may be changing. This project will assess the biotic, abiotic, climatic and anthropogenic factors that could be driving these changes in ecology and distribution of this important group of forest pests.

Objectives

The main objectives of the project are:

- To identify and analyse key factors determining the spread and breeding success of *Ips* bark beetles
- To investigate historic and ongoing changes in forest structure to assess beetle success in establishment and population expansion
- To investigate the potential role of climate change as a co-factor in enabling the beetles to gain a foothold in new locations that were previously considered to be climatically limiting
- To consolidate the range of factors into a risk matrix that is geographically linked to previous and new ranges of bark beetles in the genus *Ips* and, for comparison, the genus *Dendroctonus*

Key outputs and results

The knowledge developed in the project will allow to develop a risk matrix that could be used to provide surveillance and management options for the various species of *Ips*, both for general usage and for tailoring phytosanitary measures for those pests invading new areas.