

Growing valuable broadleaved tree species in a changing climate – risks and opportunities

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Valuable broadleaved tree species such as European ash (*Fraxinus excelsior*), black alder (*Alnus glutinosa*), birch (*Betula pendula*, *B. pubescens*), elms (*Ulmus glabra*, *U. laevis*, *U. minor*), limes (*Tilia cordata* and *T. platyphyllos*), sycamore maple (*Acer pseudoplatanus*), wild service tree (*Sorbus torminalis*), walnut (*Juglans regia*, *J. nigra* and hybrids) and wild cherry (*Prunus avium*) are important components of the European forestry resource. Many species have high economic, environmental and social values. Their scattered distributions may make them more vulnerable to anthropogenic influence and to climate change, for example by limiting their ability to reproduce or adapt to climate space shifts, than more widespread species. We review the general impacts of climate change on these valuable broadleaves and highlight specific risks and opportunities for each species or species group.

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