

Growing Valuable Broadleaved Tree Species

A Silvicultural perspective

Rik Pakenham, Chiltern Forestry, Oxford, UK

Of the nine broadleaved species to be addressed by the COST programme, I have chosen to focus on three. Namely *Fraxinus excelsior* (Ash), *Acer pseudoplatanus* (Sycamore) and *Prunus avium* (Wild Cherry). These three being the most widespread of the nine in the UK.

I plan to examine the criteria which can create the 'ideal tree' and consequently the 'ideal log', which in monetary terms should be the most valuable.

I will concentrate purely on criteria which can produce high economic returns and will leave aside other values that trees and forests provide such as landscape, ecology, amenity, shelter, erosion control etc.

Many of these criteria will of course relate to all timber producing tree species, but specific requirements such as site, soils, light, climate, management regimes, rotation lengths, yield and diseases will all be specific.

Threats to growing high quality timber will be identified, some specific to the UK but future potential hazards for the rest of Europe.

Silvicultural systems to establish and grow these species will be compared both in an existing forest situation as well as creating new forests on agricultural land.

Tendering skills such as formative pruning and high pruning will be illustrated. Tree improvement programmes by scientific research to shorten rotation time and increase log value will be discussed.

Finally monetary costs and end values will be illustrated.