



evoltree

EUROPEAN PROJECT ON FOREST BIODIVERSITY

EVOLUTION OF TREES AS DRIVERS OF TERRESTRIAL BIODIVERSITY

IS A LARGE EU-FUNDED NETWORK OF EXCELLENCE LAUNCHED IN APRIL 2006 TO ANALYZE THE IMPACTS OF CLIMATE CHANGE ON FOREST ECOSYSTEMS FROM AN EVOLUTIONARY PERSPECTIVE.



A Better understanding of the evolutionary history of forest trees can help us to predict how they respond to climate change. Forests are complex ecosystems and subsequently forest research needs to apply different approaches to gain a better understanding of how they function. The European forest research community has carried out numerous important studies on forest biodiversity. However, many institutes maintain overlapping research infrastructure and often carry out similar studies without coordination.



The main objective of EVOLTREE is the reduction of the fragmentation of European research on forest genetics and genomics, creating the foundations for a new discipline, ecosystem genomics, which investigates linkages between genes and ecosystem functioning, looking at the genetic basis of ecosystem process, by linking various disciplines (ecology, evolutionary studies, genetics and genomics).

EVOLTREE's joint research activities focus initially on identifying genes of adaptive significance in the face of climate change in some model species from well studied tree genera (*Pinus*, *Quercus*, *Populus*), phytophagous insects (*Limantria*) and mycorrhizal fungi (*Laccaria* and *Glomus*). Research will be then expanded to include a series of target tree species, including *Picea abies*.

A total of seven Intensive Study Sites (ISS) in different forest ecosystem have been selected to host multidisciplinary research activities. Data from this network of sites will be exchanged and will allow comparing ecosystem processes in different environmental conditions.

LOCATION OF THE EVOLTREE INTENSIVE STUDY SITES IN DIFFERENT FOREST ECOSYSTEMS

- **Boreal:** Punkaharju (Finland)
- **Temperate:** Solling (Germany)
- **Untouched:** Blizyn (Poland)
- **Riparian:** Loire (France)
- **Alpine:** Valais (Switzerland)
- **Intensively managed:** Landes (France)
- **Mediterranean:** Ventoux (France)



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