



# European Forest Genetic Resources Programme

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# EUFORGEN

- Promotes conservation and sustainable use of forest genetic resources in Europe
- Established in October 1994 to support implementation of resolutions made by the FOREST EUROPE process (Ministerial Conference on the Protection of Forests in Europe, MCPFE)
  - Resolution S2: Conservation of forest genetic resources, Strasbourg Conference, 1990
  - Resolution V4: Conserving and enhancing forest biological diversity in Europe, Vienna, 2003
  - Warsaw Declaration, 2007

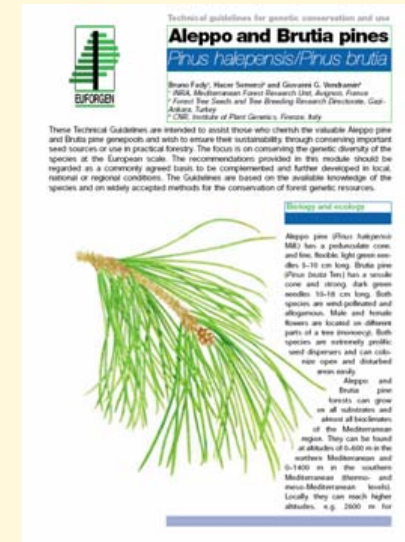
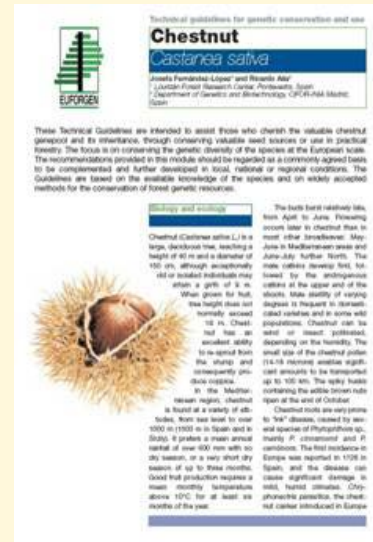


# EUFORGEN

- Member countries (26) (Oct 2010)
- National Coordinators → Steering Committee
- Secretariat (Bioversity International)
- Advisory Committee (Bioversity, FAO)
- Funded by the member countries
- EUFORGEN Networks until Dec 2009 (participated by 101 experts, scientists and managers)
  - Forest Management Network
  - Conifers Network
  - Scattered Broadleaves Network
  - Stand-forming Broadleaves Network

# Technical Guidelines

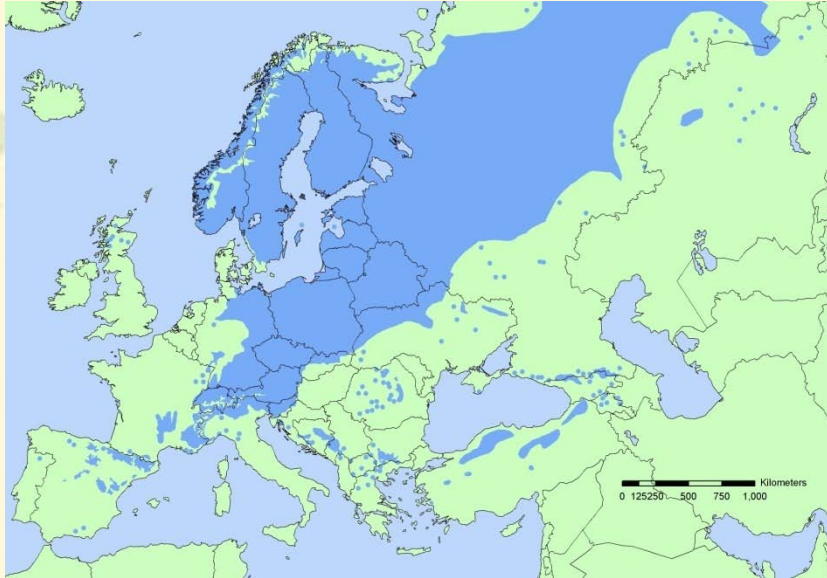
- Sycamore (*Acer pseudoplatanus*)
- Field map (*A. campestre*)
- Black alder (*Alnus glutinosa*)
- Chestnut (*Castanea sativa*)
- Common ash (*Fraxinus excelsior*)
- Oriental sweet gum (*Liquidambar orientalis*)
- Wild apple and pear (*Malus sylvestris*, *Pyrus pyraster*)
- Black poplar (*Populus nigra*)
- Wild cherry (*Prunus avium*)
- European white oaks (*Quercus petraea*, *Q. robur*)
- Service tree (*Sorbus domestica*)
- Wild service tree (*S. torminalis*)
- Lime (*Tilia cordata*)
- White elm (*Ulmus laevis*)
- Silver fir (*Abies alba*)
- Norway spruce (*Picea abies*)
- Swiss stone pine (*Pinus cembra*)
- Aleppo and Brutia pines (*Pinus halepensis* / *P. brutia*)
- Black pine (*P. nigra*)
- Maritime pine (*Pinus pinaster*)
- Italian stone pine (*Pinus pinea*)
- Scots pine (*P. sylvestris*)





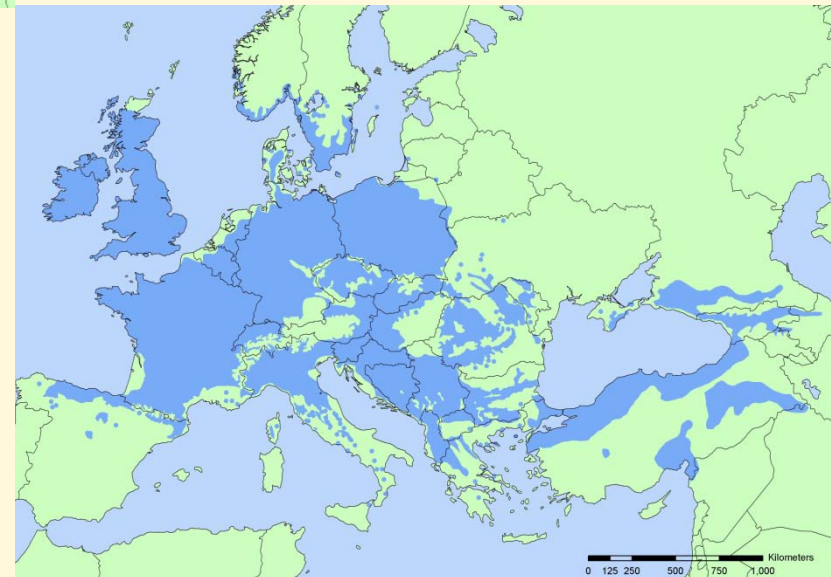
# Distribution maps

Scots pine (*Pinus sylvestris*)



[www.euforgen.org](http://www.euforgen.org)

Sessile oak (*Quercus petraea*)





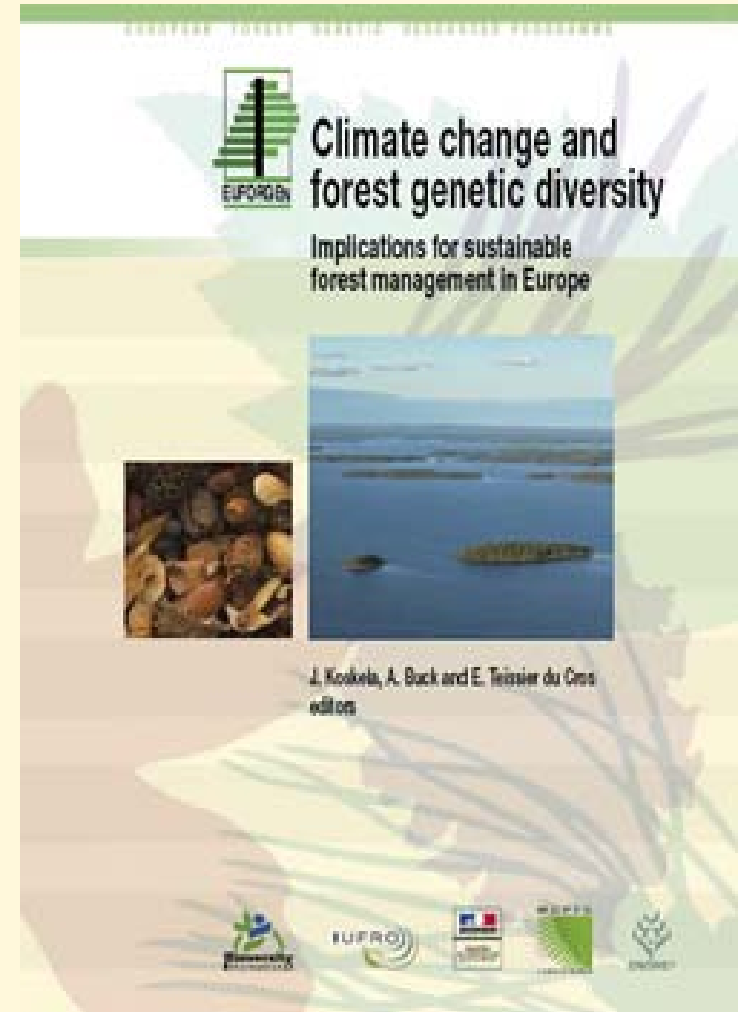
# EUFORGEN activities

- Development of gene conservation strategies for forest trees
  - Impacts of climate change on forest management and gene conservation
- Exchange of information (e.g. policies and practices related to gene conservation and forest management)
- Promotion of practical gene conservation at national level
- Identification of research needs
- Development of research projects and another collaborative actions
- Dissemination platform



# Climate change and FGR

- Bioversity-IUFRO workshop, Paris, France, 15-16 March 2006
- Part of the MCPFE Work Programme to implement Vienna Resolution 5 (Climate change and sustainable forest management in Europe)
- 78 participants from 25 countries





## Phase IV (2010-2014)

- New phase endorsed by the 6<sup>th</sup> meeting of the EUFORGEN Steering Committee, Thessaloniki, Greece, 9-12 June 2009
- Total budget: USD 2.02 million
- Objectives:
  1. Promote appropriate use of forest genetic resources as part of sustainable forest management to facilitate adaptation of forests and forest management to climate change
  2. Develop and promote pan-European gene conservation strategies and improve guidelines for management of gene conservation units and protected areas
  3. Collate, maintain and disseminate reliable information on forest genetic resources in Europe





# EUFORGEN Work Plan 2010-2012

- Three working groups (max 10 experts):
  - Assessment of gene conservation status of forest trees in Europe and development of pan-European gene conservation strategies;
  - Development of genetic monitoring methods for gene conservation units of forest trees
  - Development of guidelines for use and transfer of forest reproductive material (FRM) in the context of climate change
- Workshop on FGR conservation in Sep 2012
- 8<sup>th</sup> Steering Committee meeting in Nov 2012



# Collection of FGR data

- Inputs to the MCPFE process on Indicator 4.6 of the pan-European C&I for sustainable forest management:
  - area managed for conservation and utilisation of forest tree genetic resources (*in situ* and *ex situ* gene conservation)
  - area managed for seed production
- Inputs to the development of the FAO State of the World's Forest Genetic Resources (to be released in 2013)
- Maintenance and further development of the EUFGIS Portal



# Wrap-up of Phase III activities

- Cross-Network publication on FGR
  - Policies and practices related to gene conservation and forest management
  - Tools to promote the use of high quality forest reproductive material in Europe
  - Genetic consequences of seed harvesting in conifers
  - Use of genetic resources of scattered broadleaves in restoration projects in Europe
  - Genetic monitoring of gene conservation units
  - Case study on the use of provenances
  - Case study on genetic consequences of silvicultural practices on beech



# Wrap-up of Phase III activities

- Forest Management Network
  - Options and issues regarding the use of forest reproductive material and climate change (4-page leaflet)
  - Genetic aspects of forest management (regeneration methods, silvicultural methods): brief overview publication for policy-makers and managers
- Species-Networks
  - Technical Guidelines
  - Translation of the TGs (Italy, Slovenia, Spain)



## Other EUFORGEN activities

- Inputs to the Forest Europe process (MCPFE)
  - Preparations for the next Ministerial Conference (Oslo, June 2011)
    - Expert Level Meeting, Oslo, 23-24 March 2010
    - 3<sup>rd</sup> meeting of the new WG preparing options for a LBI, Rome, 31 Sep-1 Oct 2010
    - Preparatory meeting for the Oslo Conference, Rome, 4-5 Oct 2010
    - Expert Level Meeting, Geneva, 14-15 Dec 2010
  - Development of State of Europe's Forests 2011
    - 2<sup>nd</sup> meeting of the UNECE/FAO Team of Specialists, Ispra, Italy, 26-28 Jan 2010
    - 3<sup>rd</sup> meeting of the UNECE/FAO Team of Specialists, Geneva, Switzerland, 16-17 Dec 2010



## Other EUFORGEN activities

- Global issues and public awareness
  - Inputs to the NordGen seminar on ABS and BFW Forest Heritage event, Vienna, Sep 2010
  - Daily news stories and interviews, 13-15 Sep 2010
- Collaboration with the European Union
  - Round-table meeting on FGR, Brussels, 8 Feb 2010
  - AGRI GEN RES Committee meeting, 2 Dec 2010, EUFGIS results



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EUROPEAN FOREST GENETIC RESOURCES PROGRAMME

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**Useful EUFORGEN**

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*Genetic diversity is crucial for adaptation of forests to climate change*

**Forthcoming events**

**Who owns the genes of the forest trees?** (Dissemination event of a Horizon Forest project), Federal Research and Training Centre for Forests, Natural Hazards and Landscape (BFW), Maria Thurn, Vienna (10 September 2010) [Project website] [Programme]

**EUFORGEN final project meeting**, BFW, Maria Thurn, Vienna, Austria (12-18 September 2010) [Further details]

**10th EUFORGEN Steering Committee Meeting**, BFW, Maria Thurn, Vienna, Austria (16-17 September 2010) [Draft agenda] [Press releases]

**Related Information**

**Latest News**

**New tool to aid dynamic forest gene conservation** (14 Sep 2010) [more]

**Who owns the genes of the forest trees?** (10 Sep 2010) [more]

**Building a sound future for Europe's forest genetic resources** (3 Sep 2010) [more]

**Advances in forest ecosystem genomics** (27 Aug 2010) [more]

**Documents**

Report of the sixth Steering Committee meeting (2010)

**Contact**

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