



Swedish University of
Agricultural Sciences

SILVICULTURE OF TEMPERATE FORESTS 2023

Tree species profiles

Site requirements

Forest type and silvicultural systems

Growth

Management objective

Provenances

Regeneration

Initial spacing

Precommercial thinning

Thinning practices

Wood quality

Health and production risks

Biodiversity

Forest recreation

Economy

Conversion forestry

Conclusion

HARDWOODS

Field maple	<i>Acer campestre</i> L.
Norway maple	<i>Acer platanoides</i> L.
Sycamore	<i>Acer pseudoplatanus</i> L.
Italian alder	<i>Alnus cordata</i> (Loisel.) Loisel.
Black alder	<i>Alnus glutinosa</i> (L.) Gaertner
Grey alder	<i>Alnus incana</i> (L.) Moensch
Silver birch	<i>Betula pendula</i> Roth
Downy birch	<i>Betula pubescens</i> Ehrh.
Hornbeam	<i>Carpinus betulus</i> L.
Sweet chestnut	<i>Castanea sativa</i> Mill.
Turkish hazel	<i>Corylus colurna</i> L.
European beech	<i>Fagus sylvatica</i> L.
Narrow-leaved ash	<i>Fraxinus angustifolia</i> Vahl
European ash	<i>Fraxinus excelsior</i> L.
Manna ash	<i>Fraxinus ornus</i> L.
White walnut	<i>Juglans cinerea</i> L.
Manchurian walnut	<i>Juglans mandshurica</i> Maxim.
Black walnut	<i>Juglans nigra</i> L.
Persian walnut	<i>Juglans regia</i> L.
Hybrid walnut	<i>Juglans x intermedia</i> Carr.
Crab apple	<i>Malus sylvestris</i> Mill.
American plane	<i>Platanus occidentalis</i> L.
Oriental plane	<i>Platanus orientalis</i> L.
Hybrid plane, London plane	<i>Platanus x acerifolia</i> (Aiton) Willd.
White poplar	<i>Populus alba</i> L.
Black poplar	<i>Populus nigra</i> L.
European aspen	<i>Populus tremula</i> L.
Hybrid aspen	<i>Populus tremuloides x tremula</i>
Western balsam poplar	<i>Populus trichocarpa</i> Torr. & A.Gray ex Hook.
Grey poplar	<i>Populus x canescens</i> (Aiton) Sm.
Wild cherry	<i>Prunus avium</i> L.
Bird cherry	<i>Prunus padus</i> L.
Black cherry	<i>Prunus serotina</i> Ehrh.
Wild pear	<i>Pyrus pyraeaster</i> Burgsd.
Turkey oak	<i>Quercus cerris</i> L.
Sessile oak	<i>Quercus petraea</i> (Matt.) Liebl.
Downy oak	<i>Quercus pubescens</i> Willd.
Pedunculate oak	<i>Quercus robur</i> L.
Northern red oak	<i>Quercus rubra</i> L.
Black locust	<i>Robinia pseudoacacia</i> L.
Common whitebeam	<i>Sorbus aria</i> (L.) Crantz
Rowan, mountain ash	<i>Sorbus aucuparia</i> L.
True service tree	<i>Sorbus domestica</i> L.
Swedish whitebeam	<i>Sorbus intermedia</i> (Ehrh.) Pers.
Wild service tree	<i>Sorbus torminalis</i> (L.) Crantz
Small-leaved lime	<i>Tilia cordata</i> Mill.
Large-leaved lime	<i>Tilia platyphyllos</i> Scop.
Common lime	<i>Tilia x vulgaris</i> Hayne / <i>Tilia europaea</i> L.
Field elm	<i>Ulmus minor</i> Mill.
Wych elm	<i>Ulmus glabra</i> Huds.
European white elm	<i>Ulmus laevis</i> Pall.

CONIFERS

European silver fir	<i>Abies alba</i> Mill.
Grand fir	<i>Abies grandis</i> (D. Don) Lindl.
Caucasian silver fir	<i>Abies nordmanniana</i> (Steven) Spach
Noble fir	<i>Abies procera</i> Rehder
Atlas cedar	<i>Cedrus atlantica</i> (Endl.) Carrière
Lebanon cedar	<i>Cedrus libani</i> A. Rich
Port Orford cedar	<i>Chamaecyparis lawsoniana</i> (A. Murray bis) Parl.
Japanese cedar	<i>Cryptomeria japonica</i> (L.f.) D. Don
European larch	<i>Larix decidua</i> Mill.
Japanese larch	<i>Larix kaempferi</i> (Lamb.) Carrière sec. Franco
Hybrid larch	<i>Larix x eurolepis</i> A. Henry
Norway spruce	<i>Picea abies</i> (L.) Karst.
Serbian spruce	<i>Picea omorika</i> (Pančić) Purk.
Sitka spruce	<i>Picea sitchensis</i> (Bong.) Carrière
Swiss stone pine	<i>Pinus cembra</i> L.
Lodgepole pine	<i>Pinus contorta</i> Douglas ex Loudon
Multiple-stemmed mountain pine	<i>Pinus mugo</i> Turra
Black pine	<i>Pinus nigra</i> J.F. Arnold
Macedonian pine	<i>Pinus peuce</i> Griseb.
Scots pine	<i>Pinus silvestris</i> L.
Weymouth pine	<i>Pinus strobus</i> L.
Mountain pine	<i>Pinus uncinata</i> Mill. ex Mirb.
Douglas fir	<i>Pseudotsuga menziesii</i> (Mirb.) Franco
Coast redwood	<i>Sequoia sempervirens</i> (D. Don) Endl.
Giant sequoia	<i>Sequoiadendron giganteum</i> (Lindl.) Buchholz
European yew	<i>Taxus baccata</i> L.
Western red cedar	<i>Thuja plicata</i> D. Don
Western hemlock	<i>Tsuga heterophylla</i> (Raf.) Sarg.

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LEGEND (referring to exam requirements)

- Bold** Species for which the student is expected to demonstrate detailed knowledge of species ecology, common forest types and silvicultural practices in temperate forests in Europe. Silvicultural practices may be presented as examples from one or more countries or growth regions.
- Ordinary font Species for which the student should be familiar with their general role and importance in temperate forests in Europe.

Nomenclature The nomenclature in this list is according to the online version of *Flora Europaea* at <http://193.62.154.38/FE/fe.html> (to be updated later according to EuroPlusMed at <http://ww2.bgbm.org/EuroPlusMed/query.asp> and Kew's plant list at <http://www.theplantlist.org/>)