

## SPECIES SELECTION

A number of factors, listed below, need to be considered when selecting species.

1. **Soil Type**
2. **Drainage**
3. **Exposure and Elevation**
4. **Landscape**
5. **Environmental Considerations**
6. **Production Potential**

When taking the above factors into account a species can be chosen based on the local conditions on the farm. In certain areas the **presence of deer, rabbits or squirrels may limit choice of species, and trees planted may require additional protection.**

### Species Information

The following are some brief notes on the most common species planted in Ireland. For illustrative purposes grant premium categories (GPCs) are listed beside each species and grouped together under the broad headings used for grant and premium payment.

#### **GPC 2            Non-Diverse Conifers                      Sitka spruce / Lodgepole pine**

##### **Sitka spruce:**

- Grows on a wide range of sites
- Produces the largest amounts of volume over a wide range of sites
- Avoid planting in frost pockets
- A good general purpose structural timber.
- Timber usually matures from 35 to 50 years

##### **Lodgepole pine:**

- One of the few species to grow on very poor soils
- Mainly planted in mixture with Sitka spruce
- Timber of variable quality.

#### **GPC 3            20 % Diverse Mix**

In order to create diversity a second species such as **Japanese larch** is often mixed with Sitka spruce to improve the visual appearance and variety within the forest. In certain sites alder may be planted instead of larch to achieve the same effect.

#### **GPC 4            Diverse Conifers**

Species other than Sitka spruce and Lodgepole pine are called diverse conifers for grant payment purposes. Some of their characteristics are described below.

**Douglas fir:**

- Enjoys well drained soils of moderate fertility
- Grows vigorously on good soils
- Generally limited to elevations below 200 m, and best grown in the east and south of the country.
- Susceptible to serious deer damage
- A good strong timber and suitable for joinery.
- Timber usually matures from 45 to 60 years

**Norway spruce:**

- Grows well on moist grassy sites
- More tolerant of frost than other species
- First thinning about 20 years of age
- Timber is used in joinery and flooring
- Timber usually matures from 50 years

**Scots pine:**

- Suited to a wide range of sites
- Thrives on light sandy soils
- Looks well in the landscape
- High quality timber, suitable for joinery, known in the trade as "Red deal"
- Timber usually matures from 65 years

**Hybrid larch:**

- Grows well on moist well-drained soils
- Deciduous conifer, providing good autumn colour
- Grows fast in the early years, first thinning about 16 years of age
- Timber usually matures from 45 years
- Excellent timber

Other species of Larch are also grown in Ireland. Japanese larch is planted in mixture with Sitka spruce while **European larch** is planted in mixture with oak and beech.

Other conifers, which have grown successfully on certain sites, include **Western red cedar** and **Hemlock**.

**GPC 5 Broadleaved Species**

A number of species such as oak, beech, **ash, sycamore, cherry and sweet chestnut** have been planted successfully in Ireland. Some of these species are described below.

**Ash:**

- Needs good fertile well-drained moist soil
- Avoid frosty hollows
- Sensitive to exposure
- Excellent timber for furniture and sports goods
- First thinning is generally when trees are between 10 to 13 meters in height.
- Plantation matures from 50 to 70 years

**Sycamore:**

- Grows best on fertile sites
- Tolerates exposure better than ash
- Timber used in the furniture trade
- First thinning at around 30 to 35 years of age or when trees are 12 to 14 meters in height
- Plantation matures from 60 to 80 years.

**GPC 6 Oak**

- Best growth achieved on well drained fertile soils
- **Sessile oak** will tolerate less fertile soils than **Pedunculate oak**
- Avoid thin shallow sandy soils, which can lead to timber defects i.e. "shake"
- Can be grown pure or mixed with Scots pine or European larch. The conifer can help the oak to grow better and straighter
- First thinning from 30 to 35 years of age or when trees are 13 to 15 meters in height
- Plantation matures from 120 to 160 years
- Good environmental benefits
- Timber used in the furniture and joinery trade

**GPC 7 Beech**

- Avoid exposed and windy sites
- Can be grown in mixture with European larch or Scots Pine.
- First thinning at around 35 years of age or when crop is around 12 to 15 meters in height.
- Plantations mature from 100 to 120 years
- Good timber used in the furniture and veneer trade.

**Forest Service Approved Species**

The Forest Service approves the following species for payment of grant aid. Other broadleaves not on the list can be planted in small groups in order to give colour and variety along road edges or where plantations are adjacent to dwelling houses.

<b>Conifers</b>		
Sitka spruce	Hybrid larch	Serbian spruce
Lodgepole pine	Japanese larch	Western hemlock
Norway spruce	Austrian pine	Western red cedar
Douglas fir	Corsican pine	
Lawson cypress	Monterey pine	
Leyland cypress	Scots pine	
European larch	Coast redwoods	

<b>Broadleaves</b>		
Ash	Beech	Southern beech
Sycamore	Alder	Spanish chestnut
Pendunculate oak	Cherry	
Sessile oak	Lime	

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