

## Douglas Fir La Luzette

Tested Seed Orchard

### Summary

We source our Douglas Fir La Luzette seed from **Vilmorin**, the leading French seed house with a reputation for high quality seed. The information in this factsheet was taken from the original, which can be viewed at:

[http://www.vilmorin-tree-seeds.com/media/douglas\\_fir\\_la\\_luzette\\_\\_094344100\\_1641\\_21112011.pdf](http://www.vilmorin-tree-seeds.com/media/douglas_fir_la_luzette__094344100_1641_21112011.pdf)

La Luzette is the most widely used Douglas Fir seed orchard in France, combining the best US sources with those in France, producing quality seed suitable for planting in the UK. The large number of provenances and clones gives it a broad genetic base, **suited to a wide range of sites with 46% of clones coming from the North Washington Cascades**

### Criteria and Selection Process

The clones were selected after approximately 10 years, from 10 comparative provenance plantations located in France with further genetic thinning in 2006. Selection focused on:

- **Vigour - height growth after 11 years**
- **Lateness of bud burst - to avoid late spring frosts**
- **Quality of branching - slim branches, few in number**

#### La Luzette in Comparison with other Douglas Fir Seed

Yield (relative units)



### Characteristics of the Orchard

#### Orchard of Clones (cuttings)

- **Year of planting:** 1980/81
- **Place of planting:** Sousceyrac (Lot– France)
- **Altitude of planting:** 700 meters
- **Surface Area:** 34 hectares
- **Number of clones:** originally 343 clones; in 2006 this was genetically thinned out to 226 clones.
- **Origin of clones:** See Map: mostly USA, some France.
- **Number of effective clones:** originally 214. 136 after thinning.
- **Number of trees:** originally 5700. 2837 after thinning.
- **Start of production:** 1996
- **Method of pollination:** Free

### Evaluation

Recent results confirm that La Luzette produces a bud burst four days later compared to the Washington 403 control area, with good shape and a height gain of 12%. Based on these results, La Luzette has been placed definitively in the highest 'Tested' category for vigour (growth in height and circumference) and lateness of bud burst.

### Recommended Use

Based upon the information provided by Vilmorin combined with the recommendations in Bulletin 129, Choice of Douglas Fir Seed Origins for Use in British Forests, **we recommend La Luzette as the main choice of improved seed for most site types throughout the UK.** For frost-free sites in the South East UK, an alternative choice might be South Washington Cascades 412.

### Species

*Pseudotsuga menziesii* (Mirb.) Franco

### Orchard ID

PME\_VG\_002 La Luzette-VG

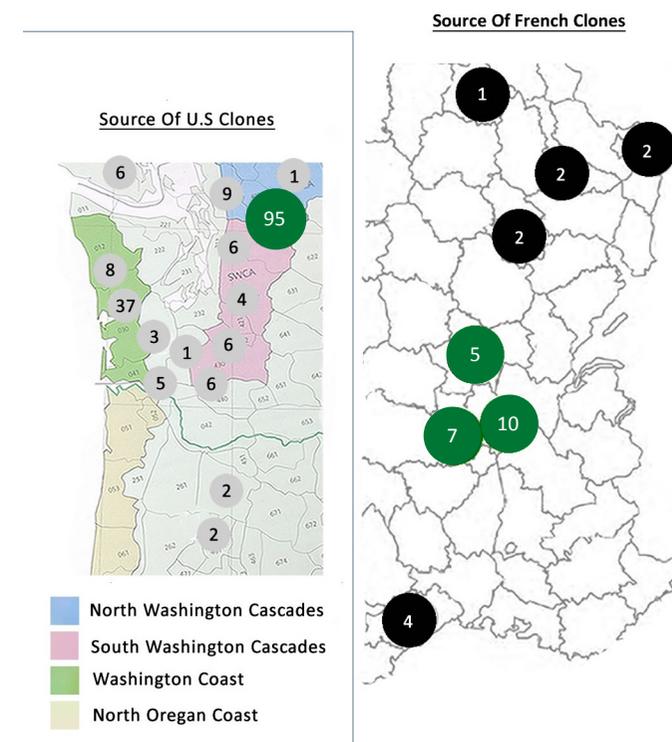
### Category

Tested

### Breeder

Institut National de la Recherche Agronomique (INRA) – Orleans, France

### Origin of La Luzette Seed Orchard Clones



Both maps are shown on the same scale