UPM Tilhill

Timber Quality Steering Group

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Use of Improved Sitka – a Practitioners View

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- Why should we use it
- Seed Orchard Success
- But we can do better
- The pitfalls
- The future
- Conclusion

Why use improved material

- We want to leave the best most flexible resource for future generations
- Lets get rid of the C…. that we have just now – we must be able to do better
- 1970's Sitka in the Borders – from an era when there were large scale planting programmes with tight deadlines and shortage of tested material

Seed Orchard Success

- A13 gave us genetic gain
  - 20% Diameter
  - 8% Form
  - -10% Density
- Rapid Establishment
  - 2m in 4 years – critical for separation
- Reduced Restock costs
- **Client and Forester confidence**

- **Gains achieved within first 5 years with lots more to come**

We Know We Can Do Even Better

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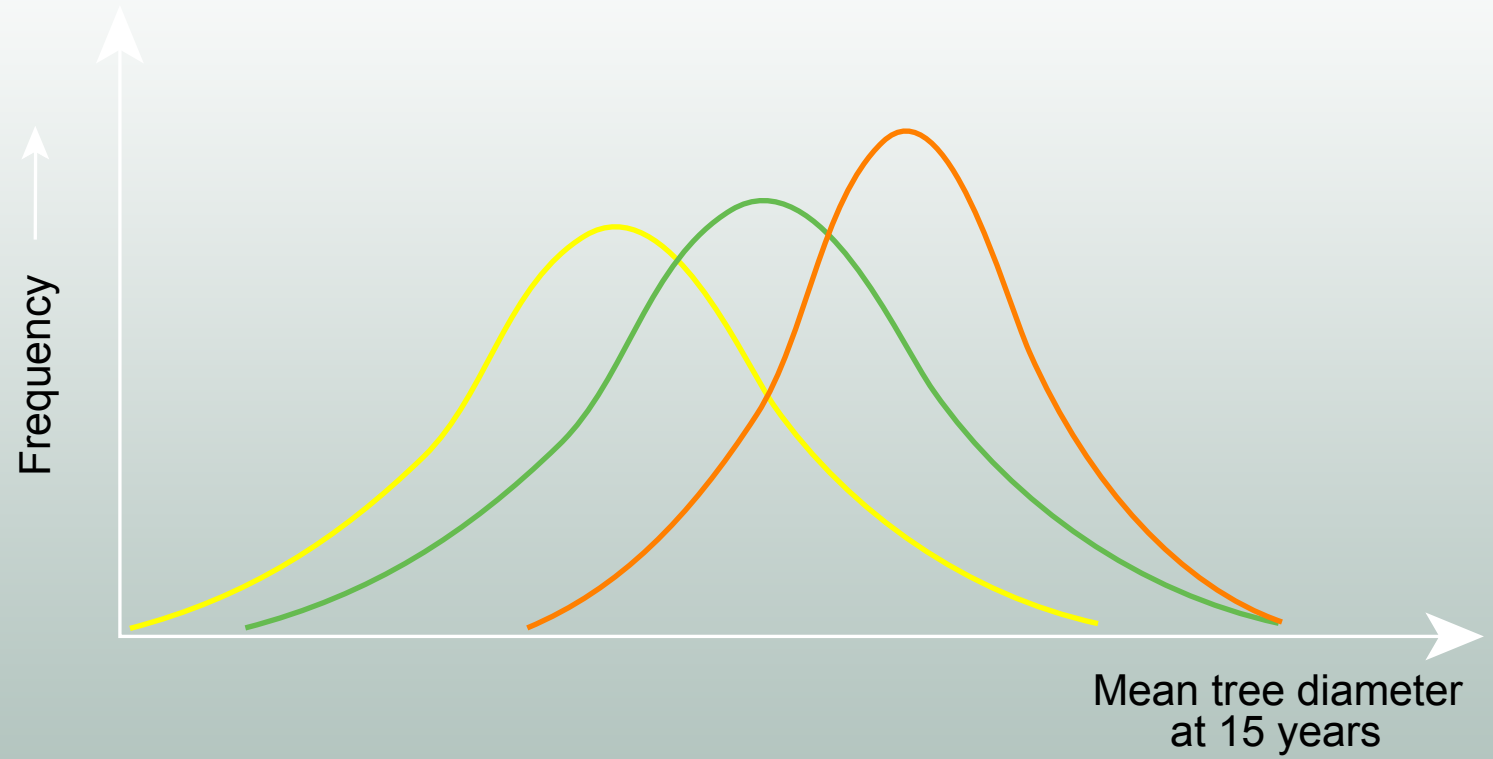
QCI v seed orchard v best full-sib families



But FC have not got sufficient Full Sib Seed at a realistic Cost!

We Know We Can Do Even Better

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- Full sibs will give us even better gains
  - 18 % Diameter
  - 0 % Density
  - 31 % Straightness
  - 14 % branching
- Greater uniformity
- Grant supplement for use at restock and New planting

The Pitfalls

- Ugly Ducklings do not inspire confidence
- Plants with long straggly roots do not get planted correctly leading to wind rock and socketing
- Longer establishment increases costs

The Pitfalls

- up to 30% of trees are of unacceptable quality in assessments done in up to 5 year old crops
- Longer establishment
- Poorer stocking reducing quality
- Some are straightening up but not enough

The Future

- FC to identify and to brash out early vp restocks to show they do straighten up!
- Raise quality of nursery material by improved husbandry
- Reduce palgiotropism
  - cells??
  - only tip cuttings??
  - be more site selective??
  - fertilise??
  - more fibrous roots

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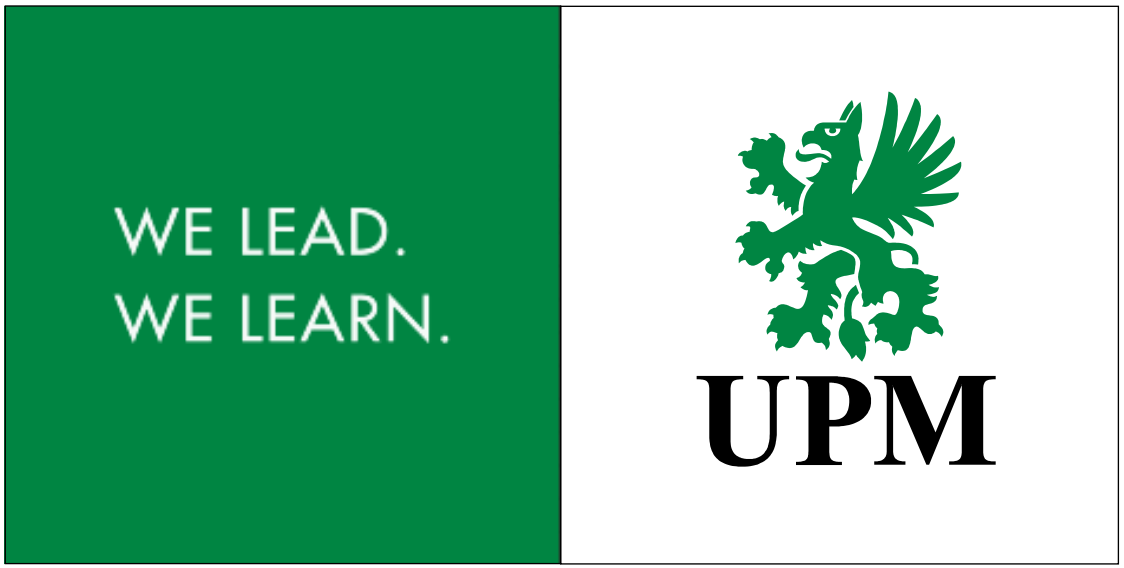
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