Stakeholder survey on societal demand for improved Forest Reproductive Material

B4EST Project WP5 results

**MAIN AIM**

Development of bioeconomy, climate change and new threats question the breeders on stakeholder expectations.

This survey aims at:
- Identify priorities in term of productivity, resilience
- Identify divergences between countries
- Identify divergences between stakeholder groups

**MATERIAL AND METHOD**

Online survey with translations for 9 countries in 2018-2019

Target group mainly forest managers and owners

Dissemination by email, professional journals, websites, ...

**MAIN RESULTS**

Most of the 565 answers focused on Douglas fir, Norway spruce, scots pine and maritime pine cases.

<table>
<thead>
<tr>
<th>Biophysical criteria for selection</th>
<th>Biocriteria for selection</th>
<th>Biotic disturbances</th>
<th>Biotic disturbances</th>
<th>Biotic disturbances</th>
<th>Biotic disturbances</th>
<th>Survival rate</th>
<th>Abiotic disturbances</th>
<th>Non-timber products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Douglas fir</td>
<td>Norway spruce</td>
<td>Scots pine</td>
<td>Maritime pine</td>
<td>Poplar</td>
<td>Common ash</td>
<td>Eucalyptus</td>
<td>Stone pine</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Issues preventing the use of FRM</th>
<th>Forest management</th>
<th>Availability</th>
<th>Forest management</th>
<th>Limited choice</th>
<th>Concerns of managers</th>
<th>Availability</th>
<th>Concerns of managers</th>
<th>Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved vs. non-improved FRM</td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>7.0</td>
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<td>6.0</td>
<td>7.0</td>
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<tr>
<td>Climate conditions</td>
<td>Drought</td>
<td>Drought</td>
<td>Drought</td>
<td>Drought</td>
<td>Windstorm</td>
<td>Drought</td>
<td>Drought and frost</td>
<td>Drought</td>
</tr>
<tr>
<td>Needed improvement in plant traits</td>
<td>Seed quality</td>
<td>Seed quality</td>
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<tr>
<td>Cost-benefits ratio*</td>
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<td>5.0</td>
<td>4.0</td>
<td>5.0</td>
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<td>Outlook**</td>
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<td>6.0</td>
<td>5.0</td>
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</tr>
</tbody>
</table>

*Cost-Benefit relation of investment in improved FRM (1.0=net loss, 4.0=investment fully compensated, 7.0=net gain)

**Expected improved FRM developments in the next 20 years (1.0=will strongly decrease, 4.0=remain the same, 7=will strongly increase)

Use of appropriate FRM is considered as the second most effective measure to adapt forest to climate change

**CONCLUSION**

Positive perception of the breeding, with high expectation for climate change and resilience

Strong heterogeneity on knowledge, understanding and expectations between groups

Deliverables available,

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Papers in preparation