



Working Group 1

Basics of Growing Valuable Broadleaves

**European inventory
of
improved varieties
of valuable broadleaves**



COST E42

Inventory of Improved Varieties



“Improved varieties”

Type of Basic Material	Category of Forest Reproductive Material			
	Source identified	Selected	Qualified	Tested
Seed Source	X			
Stand	X	X		X
Seed Orchard			X	X
Parents of Family(ies)			X	X
Clone			X	X
Clonal Mixture			X	X

Additional information on

- average number of plants used for silvicultural purposes for each of the four categories of FRM (on a yearly basis)
- Number, area and harvest in selected non-tested seed stands



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History

□ First Meeting

- Brussels (BE), 2 - 4 November 2004
- Launching of the initiative for a pan-European inventory of IV's
- Compilers: Jean-Charles Bastien (INRA, FR)
Bart De Cuyper (INBO, BE)

□ Second Meeting

- Thessaloniki (GR), 18 – 21 May 2005
- Template of questionnaire to be drafted and distributed by J.-C. Bastien

□ Third Meeting

- Leuven (BE), 18 – 22 April 2006
- Consensus on final format of questionnaire
- Deadline for sending information: **July 1st, 2006**



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History

- ❑ **July 1st 2006**
 - **No response**
- ❑ **August 15th 2006**
 - Response from **two** member countries
 - New deadline set on September 15th 2006
- ❑ **September 15th 2006**
 - Response from **eight** more member countries
 - New deadline set on September 30th 2006
- ❑ **September 30th 2006**
 - Response from **four** more member countries



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State of the art

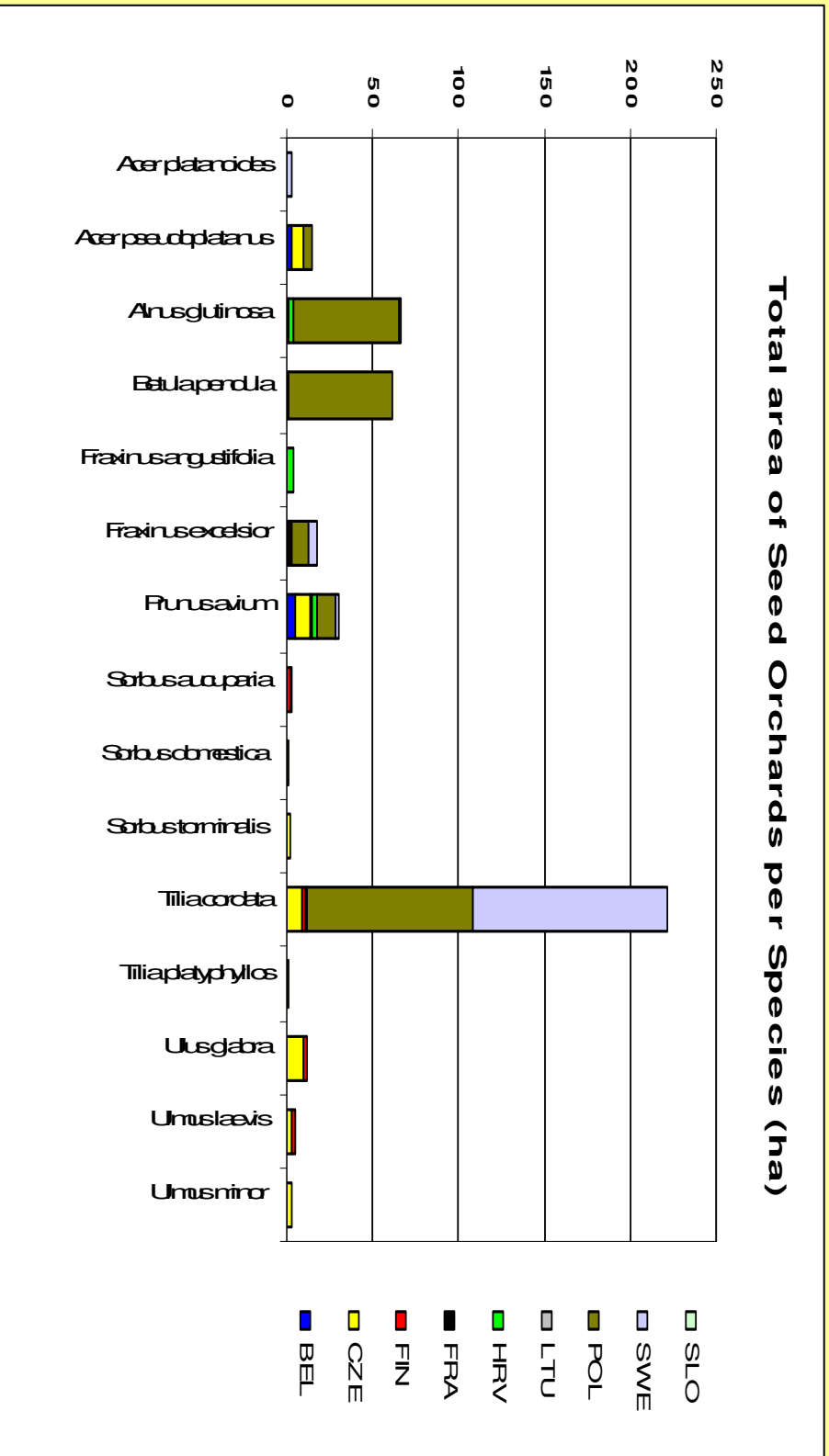
- ❑ COST E42 : 24 signatory countries
- ❑ After 6 months: useful information provided by 12 countries

Some preliminary results

- ❑ Tested seed stands: not available
- ❑ Seed Orchards (1/5)
 - 142 entries
 - “Tested”: none
 - “Qualified”: 94
 - **Not specified: 48**
 - Entries for **16** tree species
 - Total area: **350.00** ha (**area not specified for 9 seed orchards**)

Some preliminary results

□ Seed Orchards (2/5)





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Some preliminary results

□ Clones / Clonal Mixtures (1/3)

- **48** entries
 - Clones: 46
 - Clonal mixtures: 2 (LT: *Alnus glutinosa* & *Betula pendula*)
- Entries for **5** tree species
- Annual Production: **233,000** plants
- **Information from SK**
 - 9 species
 - 634 clones ??
 - “*registered plus trees represented in seed orchards*”



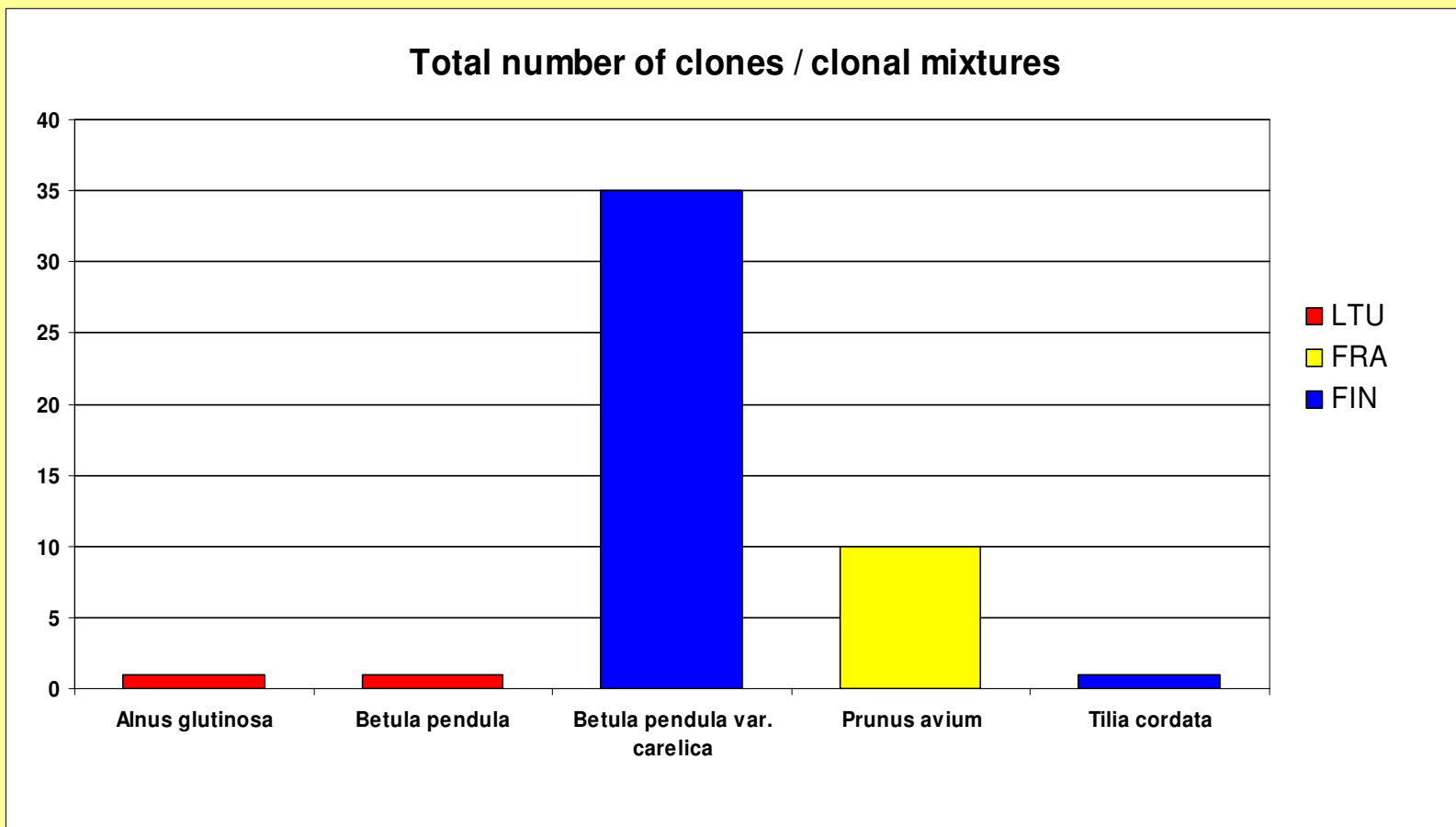
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Some preliminary results

☐ Clones / Clonal Mixtures (2/3)





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Some preliminary results

□ Clones / Clonal Mixtures (3/3)

- Annual Plant production
 - *Alnus glutinosa* – *Betula pendula* – *Tilia cordata* = 0
 - *Prunus avium* ~ 7000
 - *Betula pendula* var. *carelica* ~ 226,000



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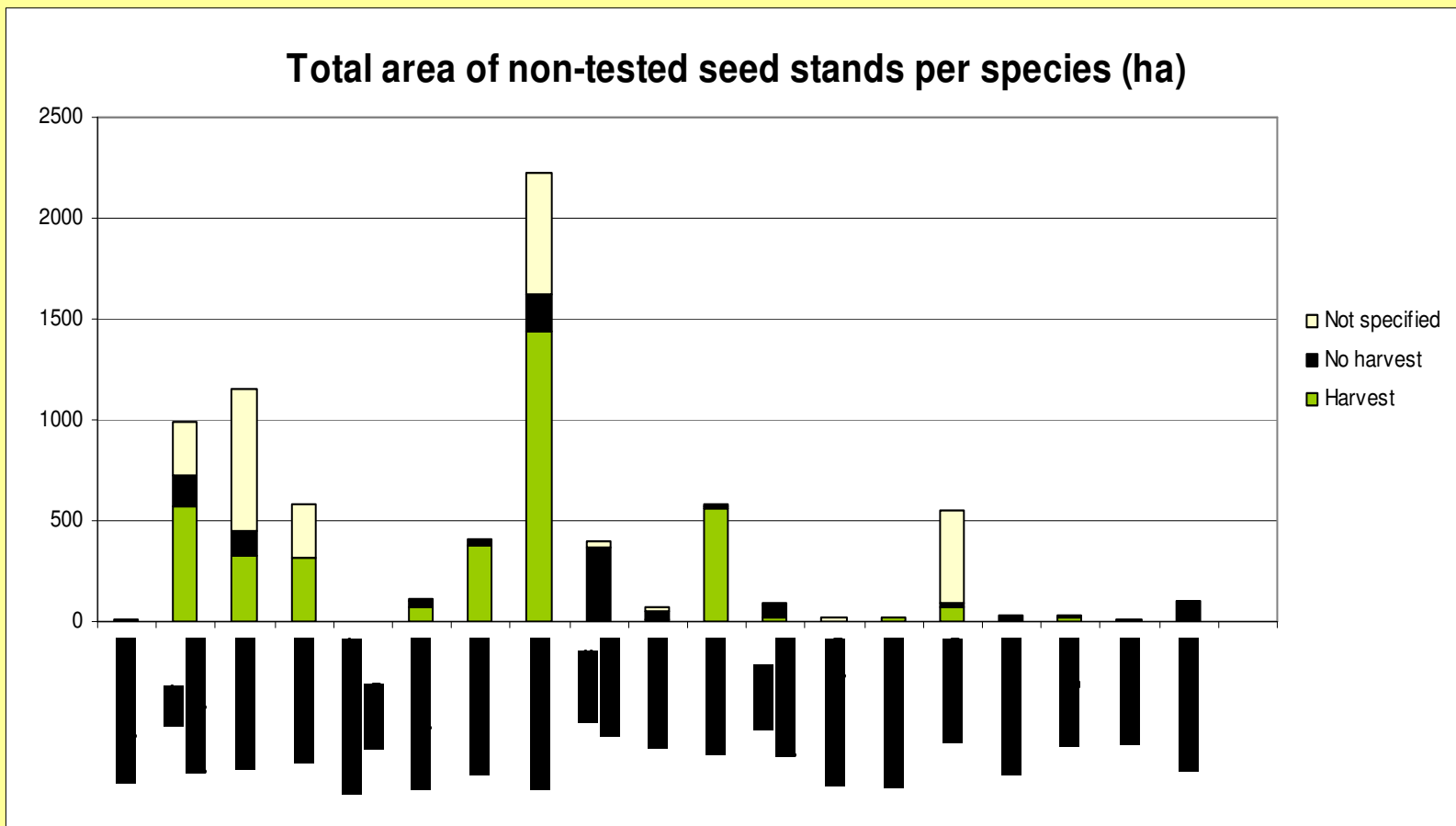
Additional information

Non-Tested Seed Stands (1/4)

- Entries from **11** countries
- Total number of seed stands = **1745**
- Total surface of seed stands = **7088 ha**
- Frequent harvest in only **3751 ha** (**not specified by 2 countries**)

Additional information

Non-Tested Seed Stands (2/4)





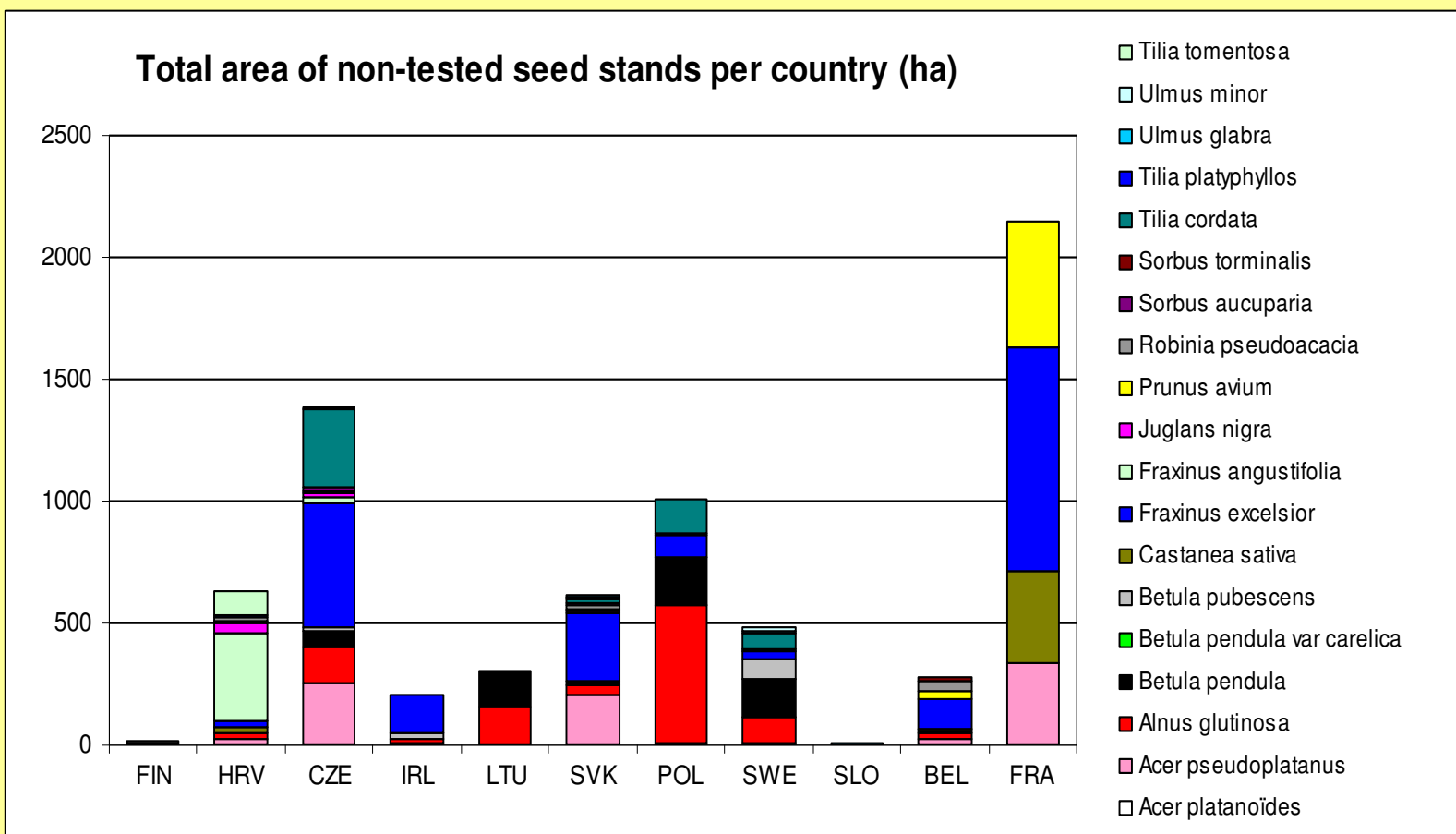
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Additional information

□ Non-Tested Seed Stands (4/4)





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Conclusions (preliminary)

□ Seed orchards

- Most important species
 - *Tilia cordata* (SWE & POL)
 - *Alnus glutinosa* (POL)
 - *Betula pendula* (POL)
- “Richest” countries: POL & CZE

□ Clones / Clonal Mixtures

- Non-productive or low production capacity (except for *B. pendula* var. *carelica*)



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Conclusions (preliminary)

❑ Non-Tested Seed Stands

- Most important species
 - Fraxinus excelsior (FRA & CZE & SVK)
 - Acer pseudoplatanus (FRA & CZE & SVK)
 - Alnus glutinosa (POL)
- “Richest” countries FRA & CZE & POL