



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



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□ 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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State of the art

- ❑ COST E42 : 25 signatory countries
- ❑ Initial deadline: July 1st 2006
- ❑ Changes since Oxford, October 2nd- 4th, 2006
 - data provided by SK and ES
 - National Registers provided by NL and GB → extraction of relevant data
- ❑ however... one year after the initial deadline... still 7 countries on the **blacklist**
- ❑ → search for their National Registers → additional data



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Some preliminary results

- ❑ Tested seed stands: 1 (*Alnus glutinosa* – NL)
- ❑ Seed Orchards
 - 158 entries
 - “Tested”: 4 (*Betula pendula* - SE)
 - “Qualified”: 123
 - **Not specified: 31**
 - Entries for 15 tree species
 - Total area: 530 ha

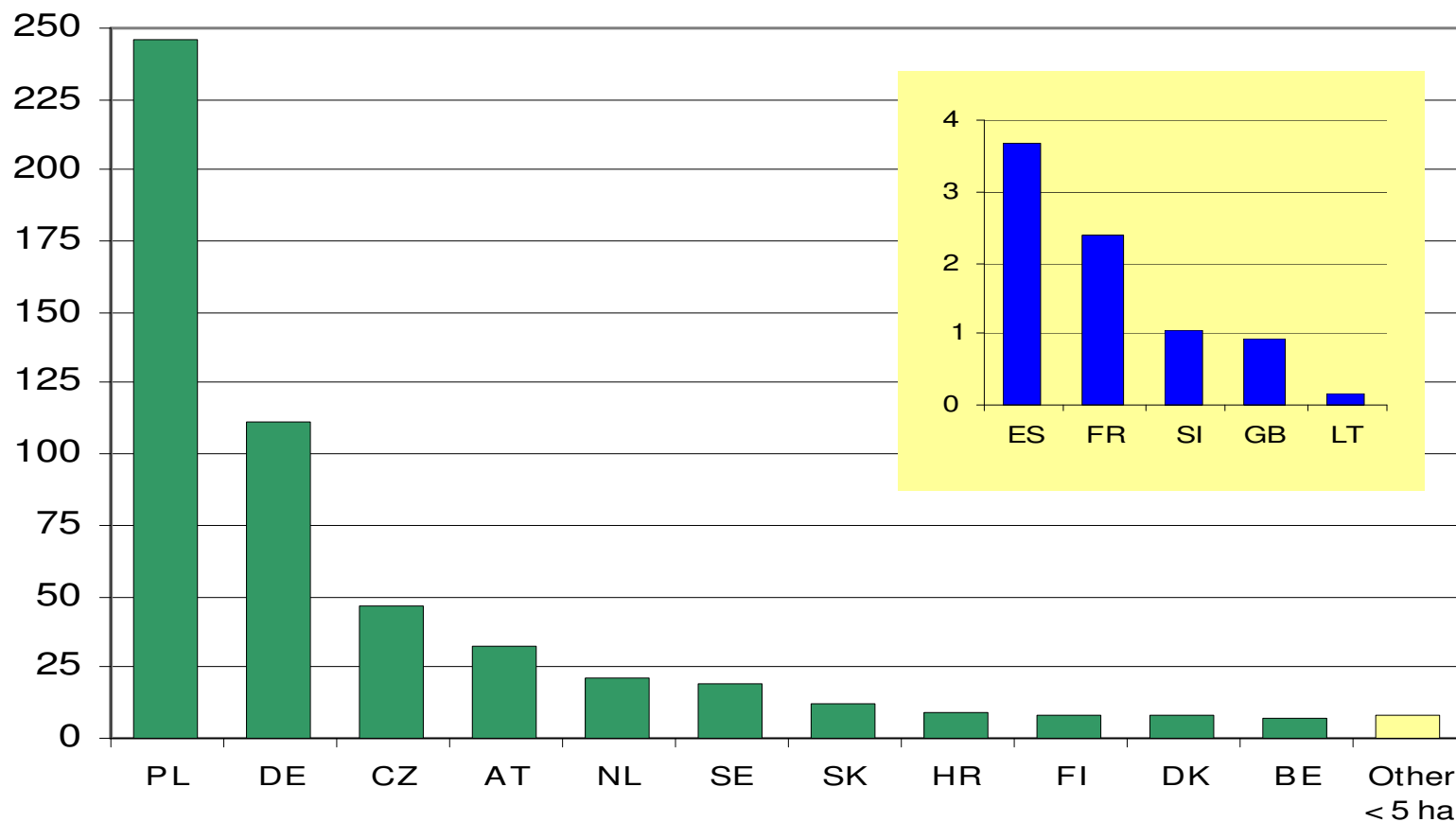


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Total area of seed orchards per country (ha)



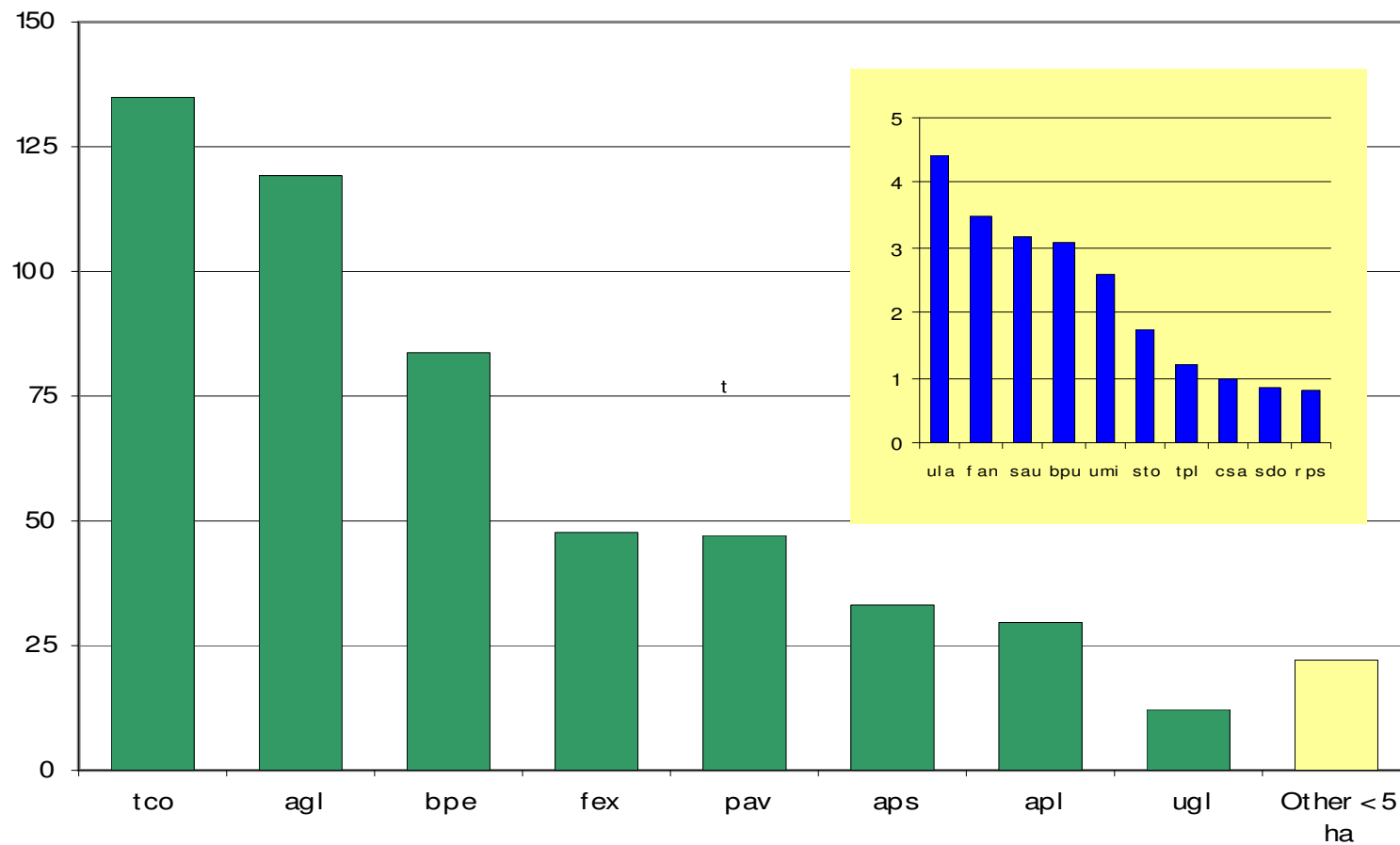


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Total area of seed orchards per species (ha)





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Some preliminary results

□ Clones / Clonal Mixtures

- 86 entries
 - Clones: 84
 - Clonal mixtures: 2 (LT: *Alnus glutinosa* & *Betula pendula*)
- Entries for 6 tree species

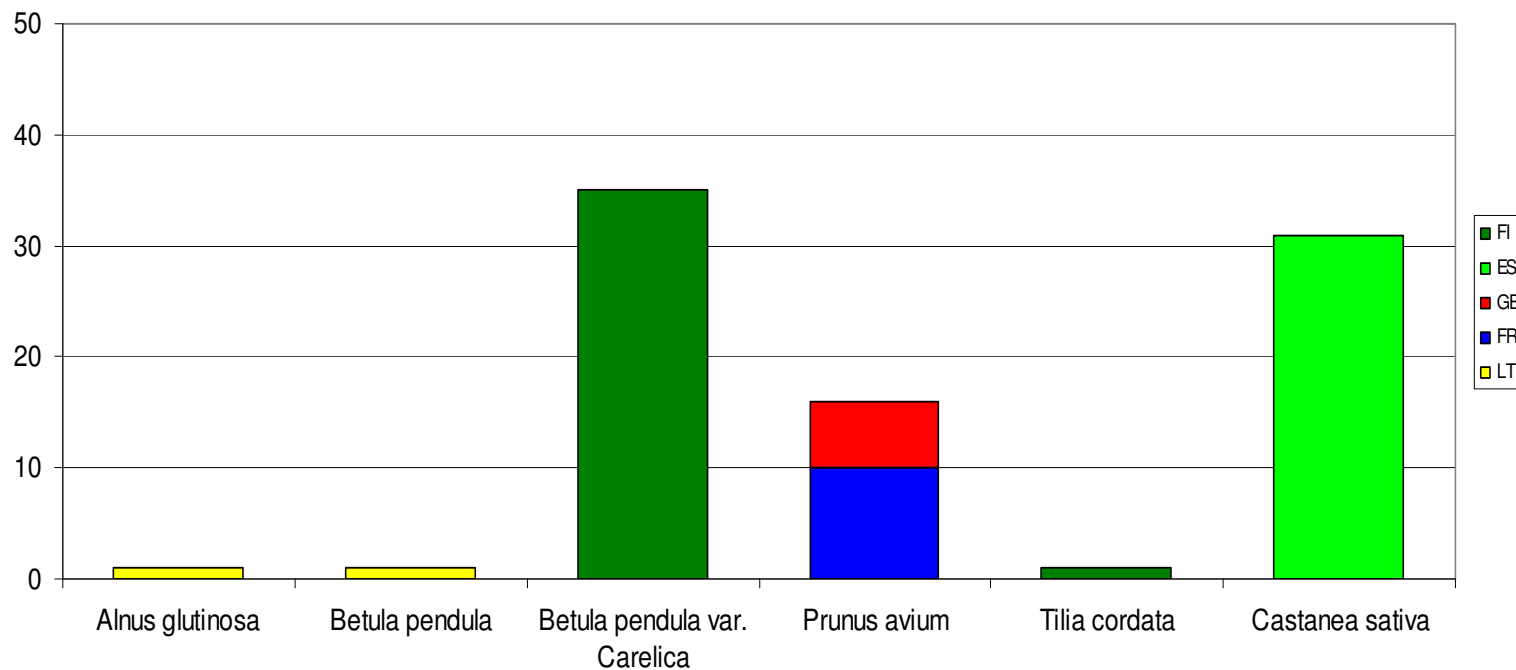


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Number of clones / clonal mixtures per species / per country





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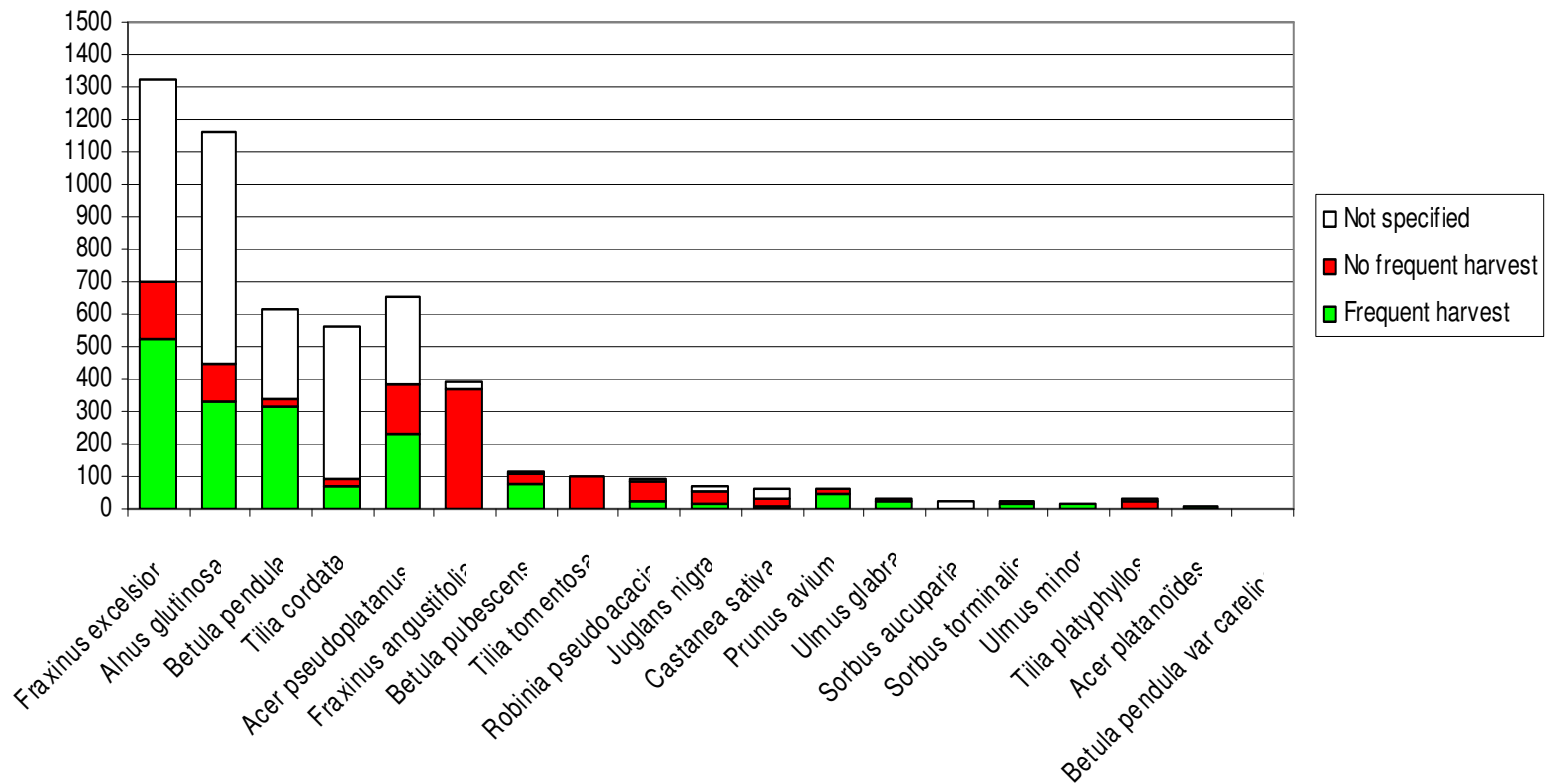
Inventory of Improved Varieties



Additional information

- Non-Tested Seed Stands (1/4)
 - Entries from **12** countries
 - Total area of seed stands = **5344 ha**
 - Frequent harvest in only **1688 ha** (32 %)

Total area of selected seed stands per species (ha)





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Conclusions

□ Seed orchards

- Most important species **with respect to area**
 - *Tilia cordata* (30.5 %)
 - *Alnus glutinosa* (19.0 %)
 - *Betula pendula* (17.1 %)
- Most important species **with respect to presence**
 - *Prunus avium* 10 countries
 - *Fraxinus excelsior* 8 countries
- “Richest” countries **with respect to total area**
 - PL (65.4 %) & CZ (12.4 %)
- “Richest” countries **with respect to number of species**
 - CZ (23) & SK (15) & PL (15)
- however... total number of DIFFERENT genotypes in the so's ??



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Conclusions

❑ Clones / Clonal Mixtures

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

❑ Non-Tested Seed Stands

- Most important species **with respect to total area and to presence**
 - *Fraxinus excelsior* (24.7 % - 10)
 - *Alnus glutinosa* (21.7 % - 11)
- “Richest” countries **with respect to total area**
 - CZ (25.8 %) & PL (18.9 %)
- “Richest” countries **with respect to number of species**
 - CZ (16) & SK (12)



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Time to finalize !

- No use in setting any further deadlines for non-responding countries**
- Try to get hold of data ourselves (i.e. J.-C. B. & B.D.C)**
- Write up a final report with compilation of available data in annex**
- Deadline: end of 2007**