

Agronomic Characteristics and Textile Application of the Hemp Variety Chamaeleon

Marcel Toonen



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Chamaeleon

Kompolti sargaszaru X Ferimon 12



Chamaeleon



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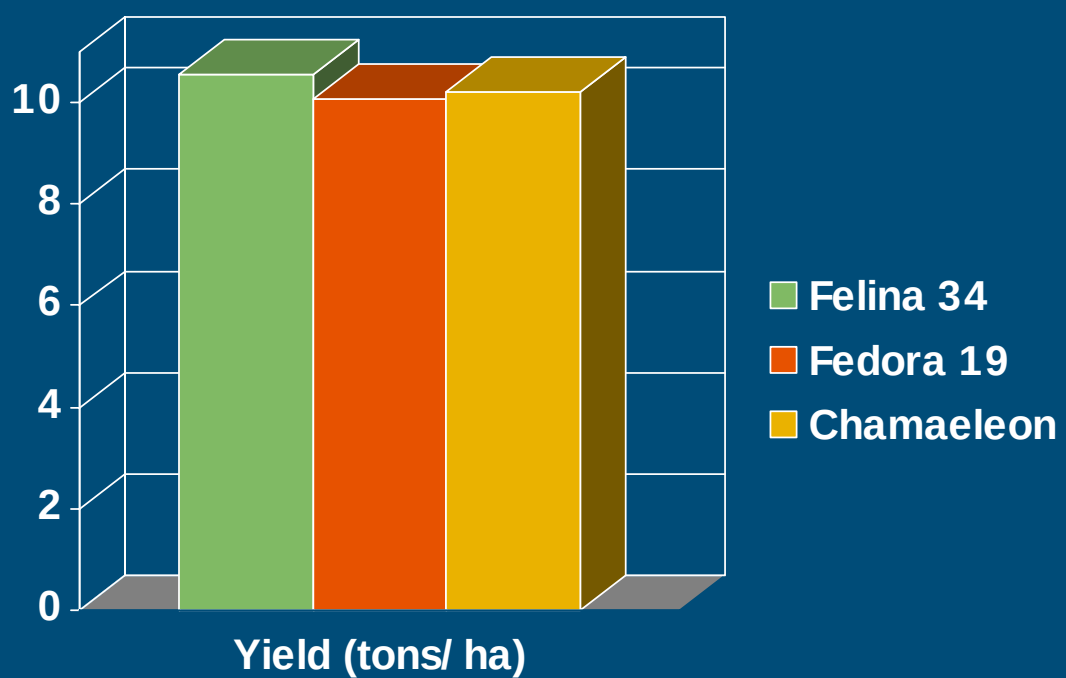
Chamaeleon

- fine fibre
- easy decortication
- bright colour
- 35% fibre
- $\text{THC} < 0.2\%$
- dioecious



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Dry matter yield per ha.



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Fibre yield

■ Bredemann method

- alkaline boiling



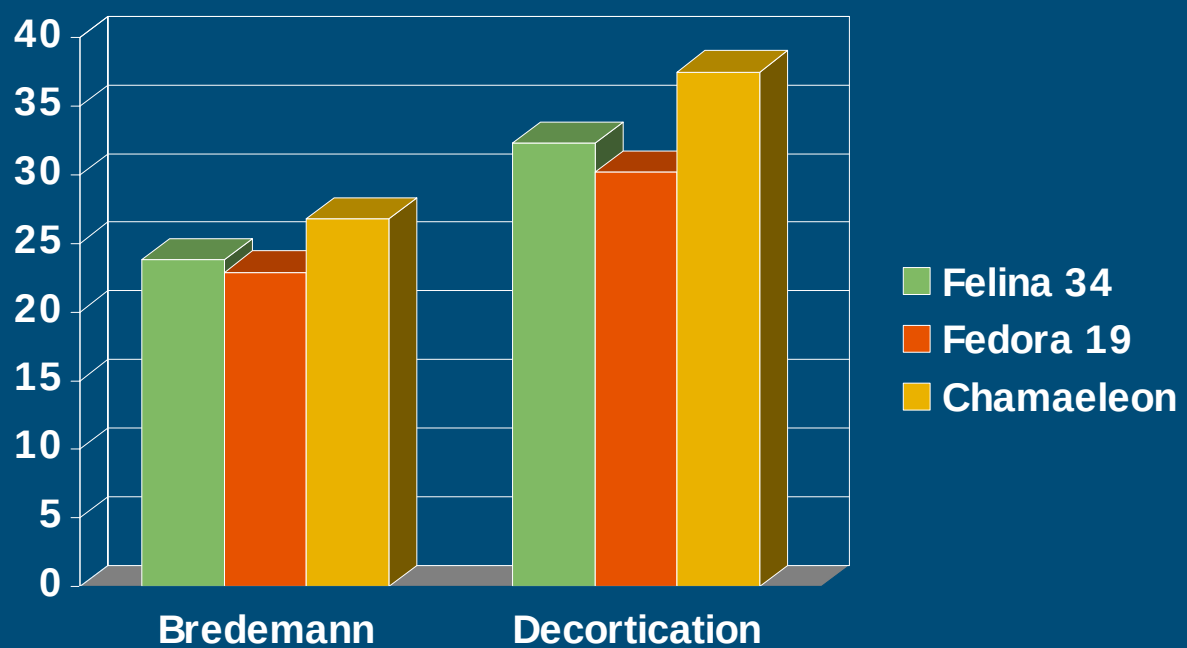
■ Decortication

- mechanical treatment



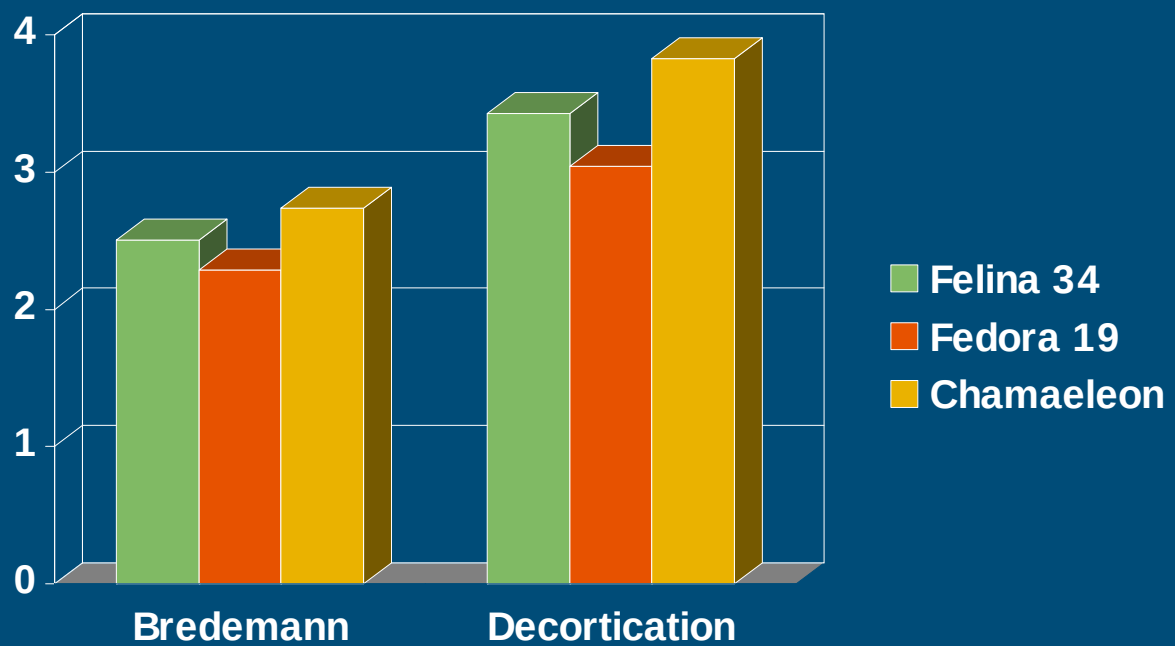
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Fibre yield (%)



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Fibre yield (ton/ha)



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Commercial cultivation

- limited seed supply
- good fibre yield
- ease of decortication
- blond fibre
- soft touch
- THC < 0.2%



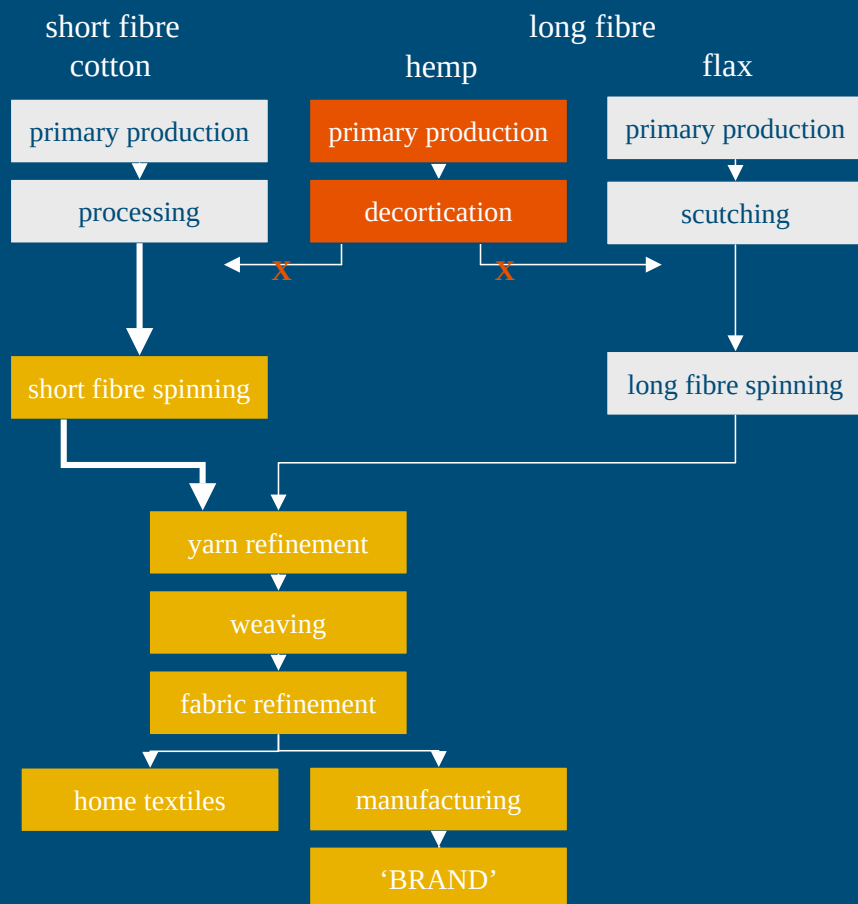
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Textile application of Chamaeleon

- European Agricultural policies
- Increasing demand for textile fibres
- Situation of cotton
- Farmers benefit
- Good characteristics of 'Chamaeleon'



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Refining of hemp

- Steam explosion
- (Bio-) chemical treatment (Isoris)
- Enzymatic treatment
- Others



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Short hemp fibre spinning



Chamaeleon
before STEX



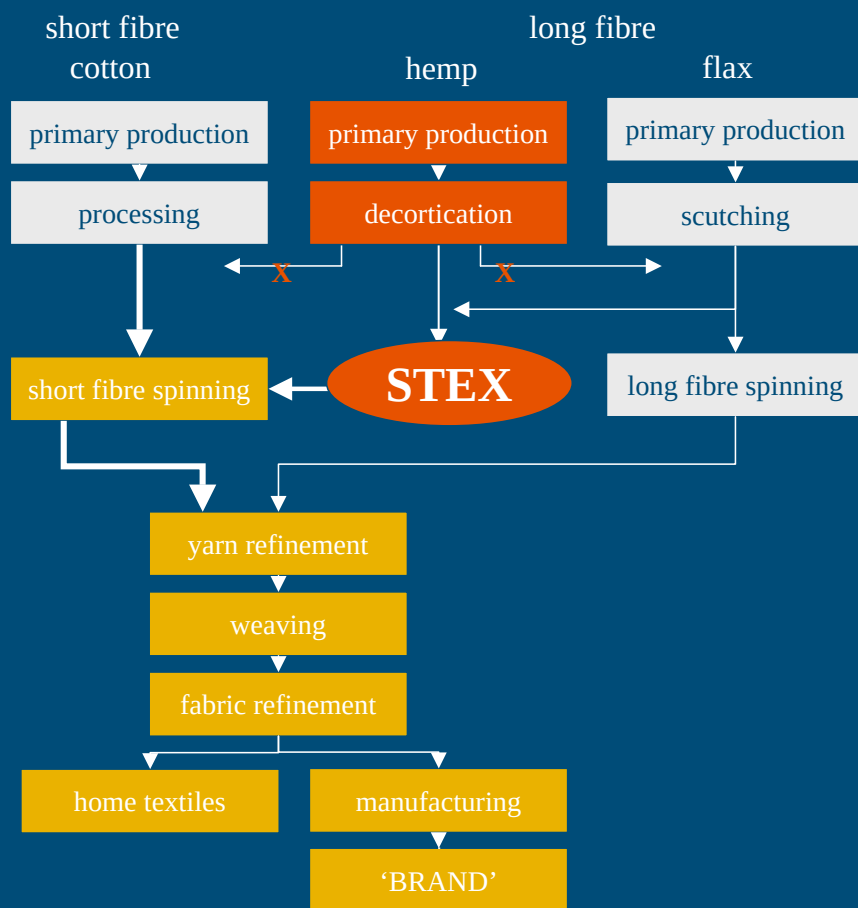
Chamaeleon
after STEX



cotton



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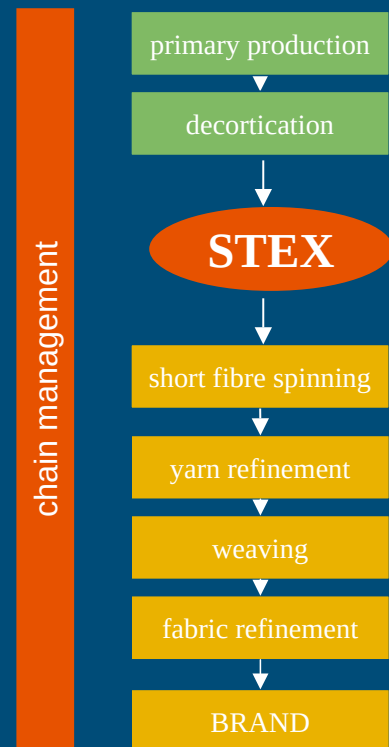
How
to develop a hemp
textile chain?



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Hemp textile chain

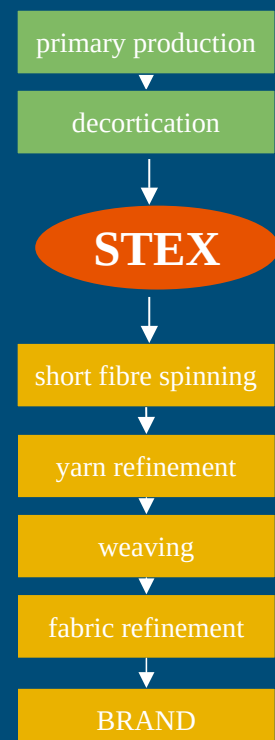
- Market pull
 - demand from textile industry
- Develop missing link
 - fibre refining
- Develop production chain
 - from breeding to textile industry
 - chain management



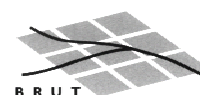
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Interreg project

- Regional development (Rhein-Waal)
- Develop cultivation
- Develop refining technology
- Produce fabrics
- Develop production chain
- Supported by:

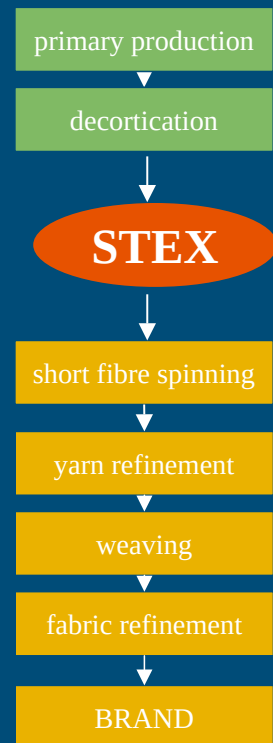


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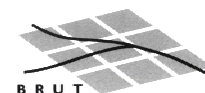


Interreg project

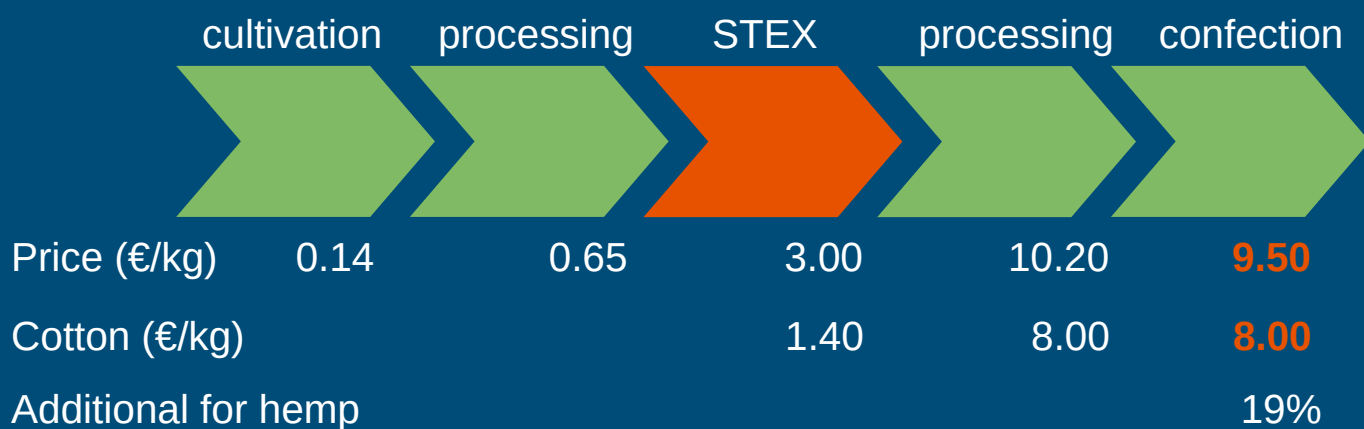
- Cultivation/processing
 - Biological Product Society Achterhoek
 - Agricultural Research Station NRW
 - Plant Research International
 - BaFa
 - IAF Reutlingen
- Textile
 - German Textile Centre Nord-West (DTNW)
 - Trützschler/Schlafhorst
 - Weaving companies
- Chain management
 - Vrisima
 - BRUT



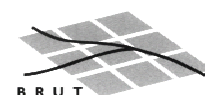
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Economics of hemp textiles



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Potential markets



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Thanks to

- Chamaeleon breeding
 - Henk van Dijke
 - Marlijn Hellendoorn
- Economics hemp textiles
 - Kai Nebel
 - Martin Tubach
- Interreg project
 - Roland Neswadba
 - Erwin Reingoudt



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