

Viscoelastic properties of *in situ* cell wall polymers from woody hemp core (chenevotte)

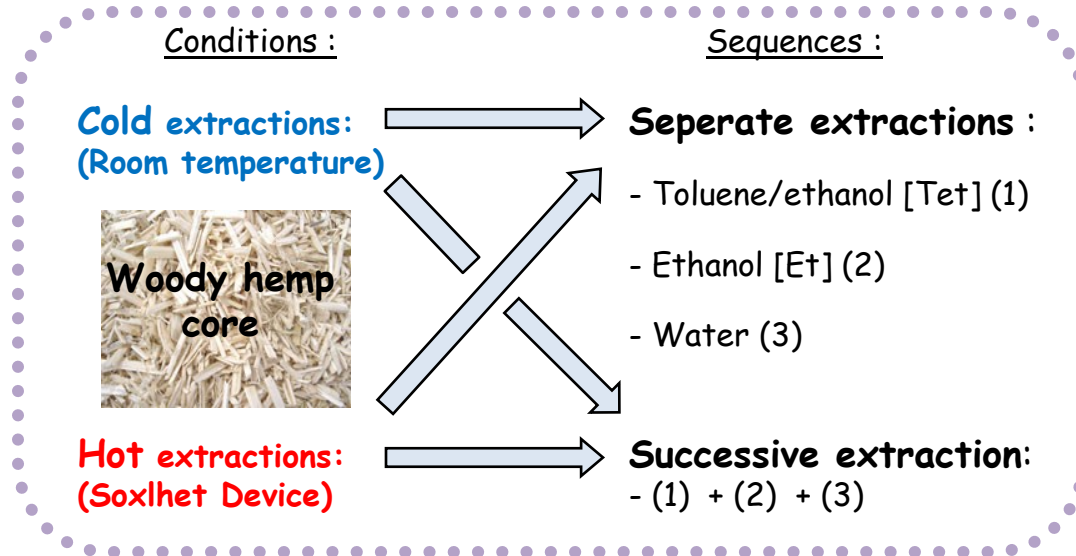


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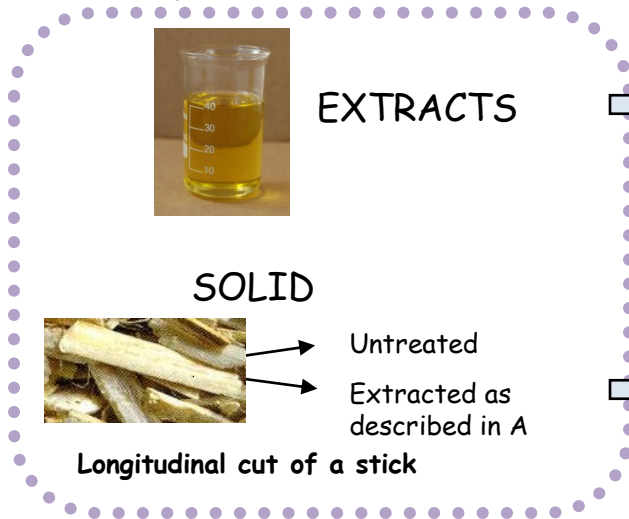
INRA, UMR-Fractionation of Agricultural Resources and Environment, Reims, France

Material and methods

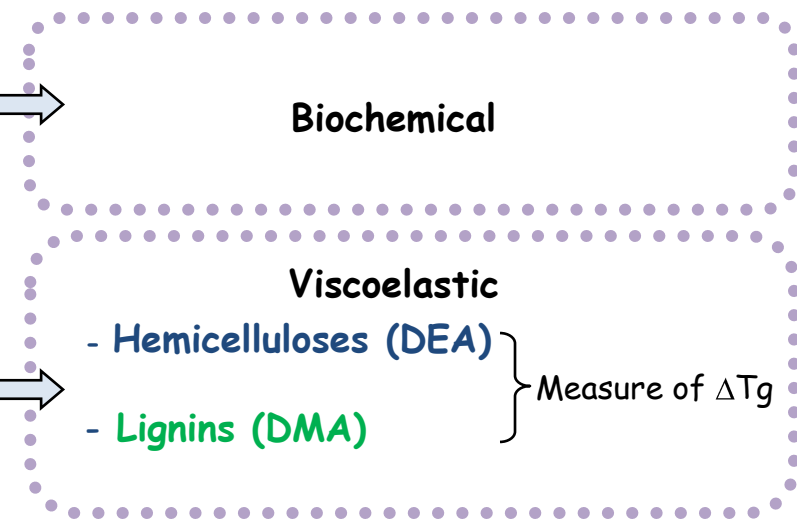
A - Extractions Overview



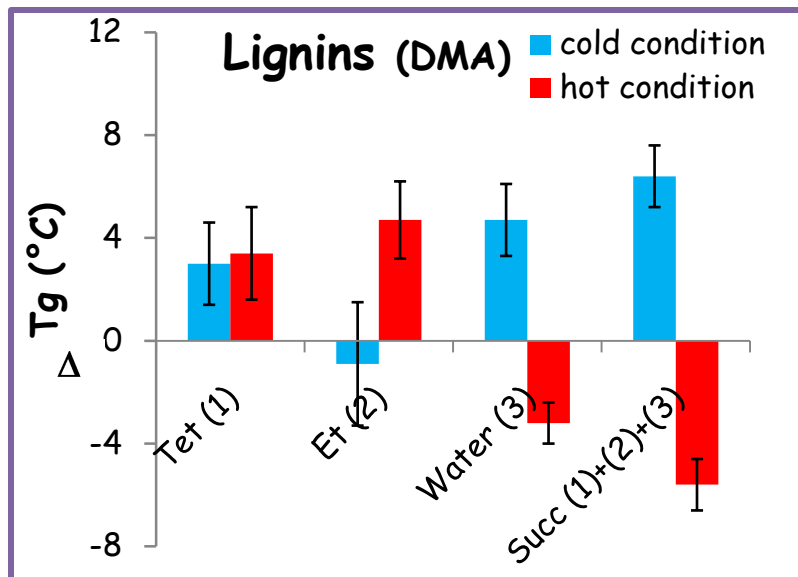
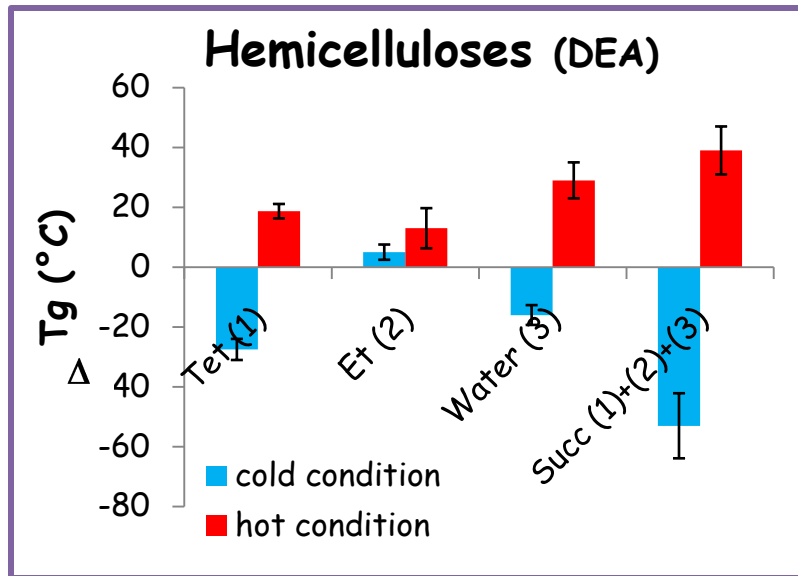
B - Samples after extractions



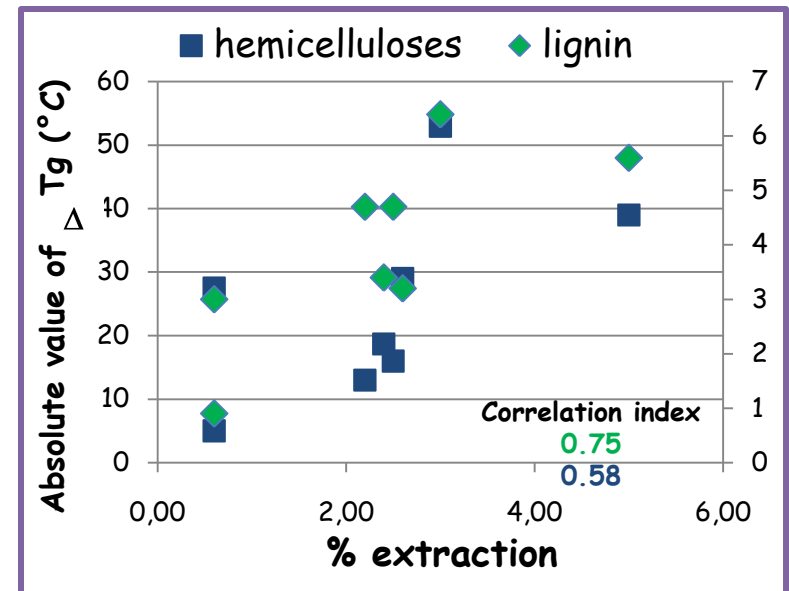
C - Characterization



Results



- Solvent extraction nature influences hemicelluloses and lignins relaxations
- ΔT_g seems to increase with solvent's polarity (up to 40 °C and 8°C for hemicelluloses and lignins respectively)
- Thermal treatment **mostly** leads to an opposite behaviour
 - Rigidification (+)
 - Plasticizing (-)



Correlations between modification of *in situ* polymers viscoelastic properties and global amount of cell wall extracted components