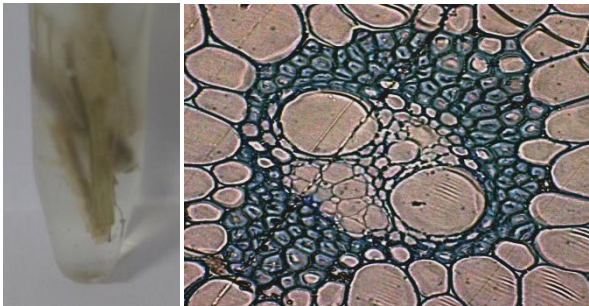
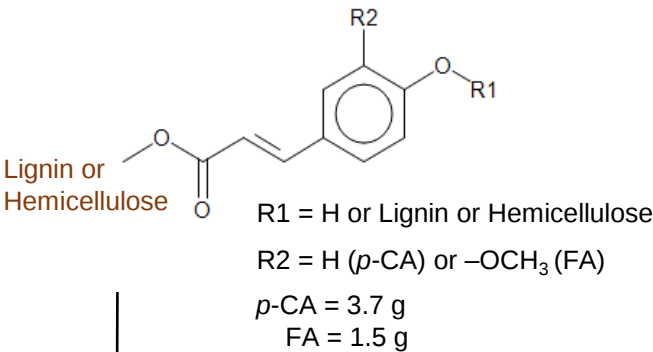


Untreated sugarcane bagasse (100 g)



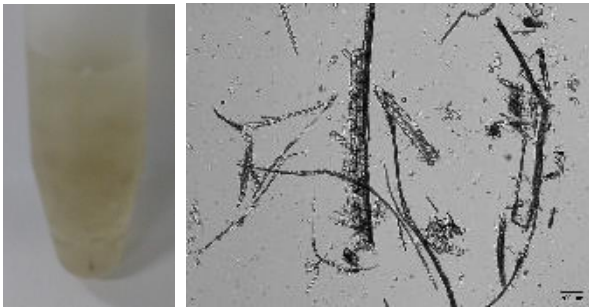
Complex ultrastructure of the cell walls hinders access to *p*-CA and FA



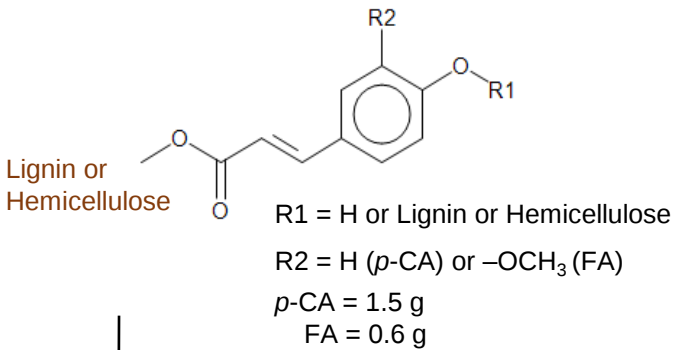
*Part of the lignin, hemicellulose and labile *p*-CA and FA were released to the pretreatment liquor*

Alkaline-sulfite CTM pretreatment

Pretreated sugarcane bagasse (81.8 g)



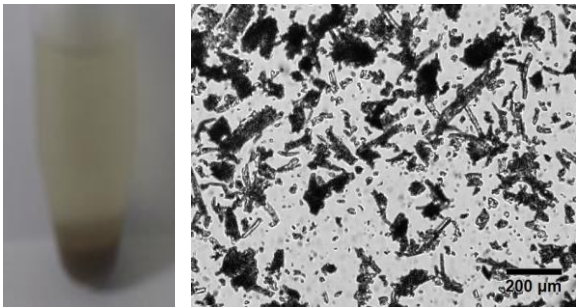
Disrupted fibers retaining cell wall ultrastructure



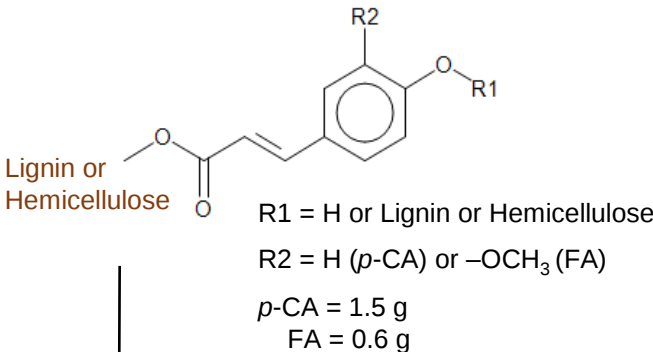
Residual lignin is depleted in β -O-4 linkages

Enzymatic hydrolysis of the polysaccharides

Residual solids (13.1 g)



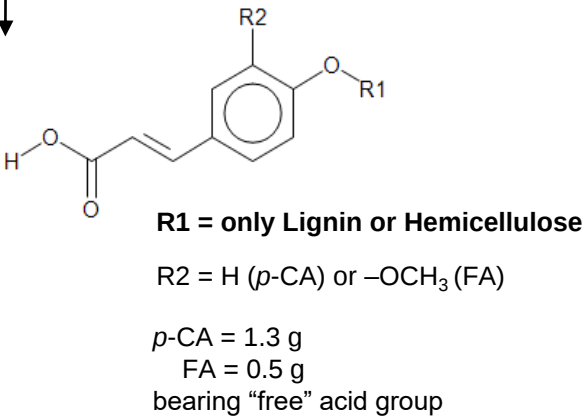
Cell wall ultrastructure collapsed after polysaccharide dissolution



*Residual lignin and/or non-digested hemicellulose retained part of *p*-CA and FA as original esters*

Analytical saponification

Solids after saponification



*Saponifiable *p*-CA and FA were released to the liquid fraction*

*Residual lignin and/or non-digested hemicellulose retained etherified *p*-CA and FA bearing "free" acid groups*

Figure S2. Processes diagram, main process steps and transformations, and mass balance for sugarcane bagasse and total *p*CA and FA along treatments and analytical procedures. The photomicrography from untreated sugarcane bagasse was obtained after toluidine blue staining.