

Supplementary materials



Figure S1. Glass fermenter connected to a thermostat water bath, a reflux condenser and to an exit system containing NaOH solution. Note that in order to purify H₂ from H₂S, gas produced during fermentation process first passes through a flask containing NaOH solution (2M) and a second flask containing distilled water.

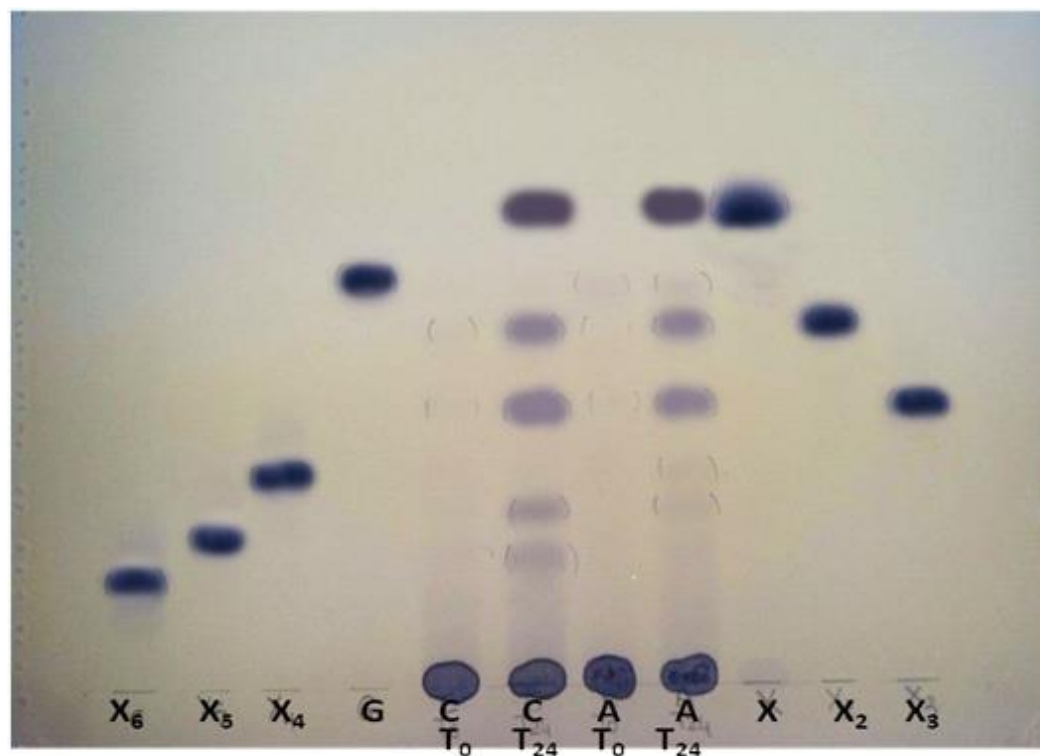


Figure S2. Thin layer chromatography analyses of hydrolysis products obtained by the enzymatic pool of the strain BUFF after 24 h of incubation at 60 °C on the hemicellulosic fractions recovered from *Cynara cardunculus* and *Arundo donax* biomass. X: xylose standard; X₂: xylobiose standard; X₃: xylotriose standard; X₄: xylotetraose standard; X₅: xylopentose standard; X₆: xylohexose standard; G: glucose standard; C T₀: reaction mixture containing the hemicellulosic fraction of *C. cardunculus* at zero incubation time; C T₂₄: reaction mixture containing the hemicellulosic fraction of *C. cardunculus* after 24 h of incubation; A T₀: reaction mixture containing the hemicellulosic fraction of *A. donax* at zero incubation time; A T₂₄: reaction mixture containing the hemicellulosic fraction of *A. donax* after 24 h of incubation. Symbols delimiting the bands are visible.