

The effect of hot compressed water pretreatment on enzymatic hydrolysis of herbaceous biomass

이현욱, 김대성, Aye Aye Myint, 윤준호, 이윤우*
서울대학교
(ywlee@snu.ac.kr*)

An efficient isolation of hemicellulose from herbaceous biomass has great potential to achieve high yield of fermentable sugars and prohibit the undesired degradation of products that are strong fermentation inhibitors. In this work, treated corn stover sample in hot compressed water(HCW) was used to produce fermentable sugar using enzymatic hydrolysis. The effect of parameters (the condition of treated sample and reaction time) on enzymatic hydrolysis were investigated. The chemical and physical features of untreated, treated hydrolysates and solid residue were characterized in order to assess the process efficiency and to understand the enzyme hydrolysis of corn stover.