Hot compressed water treatment on herbaceous biomass

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

In the conversion of herbaceous biomass to valuable products, a pretreatment method is an important process. An efficient pretreatment that fractionate the major components, hemicellulose, cellulose and lignin, from herbaceous biomass has great potential to enhance the enzymatic activity for high sugar recovery with economically feasible. In this work, herbaceous biomass pretreatment using hot compressed water was performed to separate of cellulose, hemicellulose and lignin. The effect of variable parameters (reaction temperature and time) on the efficiency of the pretreatment was evaluated. The chemical compositions of untreated, pretreated liquid and residue solid were determined to investigate the yield of isolation after pretreatment.