## Ethanol fermentation with Ammonia pretreated Laminaria japonica

최원일, 오경근\*, 류현진 단국대학교 (kkoh@dankook.ac.kr\*)

Laminaria was pretreated using aqueous-ammonia solution at moderate temperatures to enable production of the maximum amount of fermentable sugars from enzymatic hydrolysis. The reaction conditions, which resulted in an enzymatic digestibility of 55.6%, were found to be  $165\,^{\circ}\mathrm{C}$ , 10 min and an ammonia concentration of 15% (w/w). Additionally, saccharification and fermentation was conducted with laminaria to assess the ethanol production yield and productivity.