Supporting information

**Single Step Production of Bioethanol from the Seaweed *Ulva rigida* using Sonication**

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Ulva lactuca to glucose – Recent results

The enzymatic hydrolysis of algae (Ulva lactuca) was carried out using two methods, namely, the conventional incubation (at 20 and 37 °C) and in a bath sonication (at 37 °C).

Typical hydrolysis process comprises of the following constitution:

Algae (0.84 g) was sonicated at 37 °C in the presence of DDW (20 mL), buffer (20 mL sodium acetate) and almyloglucose (50 μL) and α-amylase 10 µL and cellulase (0.05 g).

Fig. S1. $^1$H NMR spectrum of the aliquot of sample collected from the fermentation (SHF) broth under incubation at 120 min
Fig. S2. $^{13}$C NMR spectra of aliquots of samples from the fermentation broth at 180 min (a) under sonication and (b) under incubation at 37 °C [peaks at 63.4 and 72.8 indicate the formation of secondary metabolite, glycerol in addition to ethanol]