Supplementary Materials

Biohydrogen Production from Hydrolysates of Selected Tropical Biomass Wastes with *Clostridium Butyricum*

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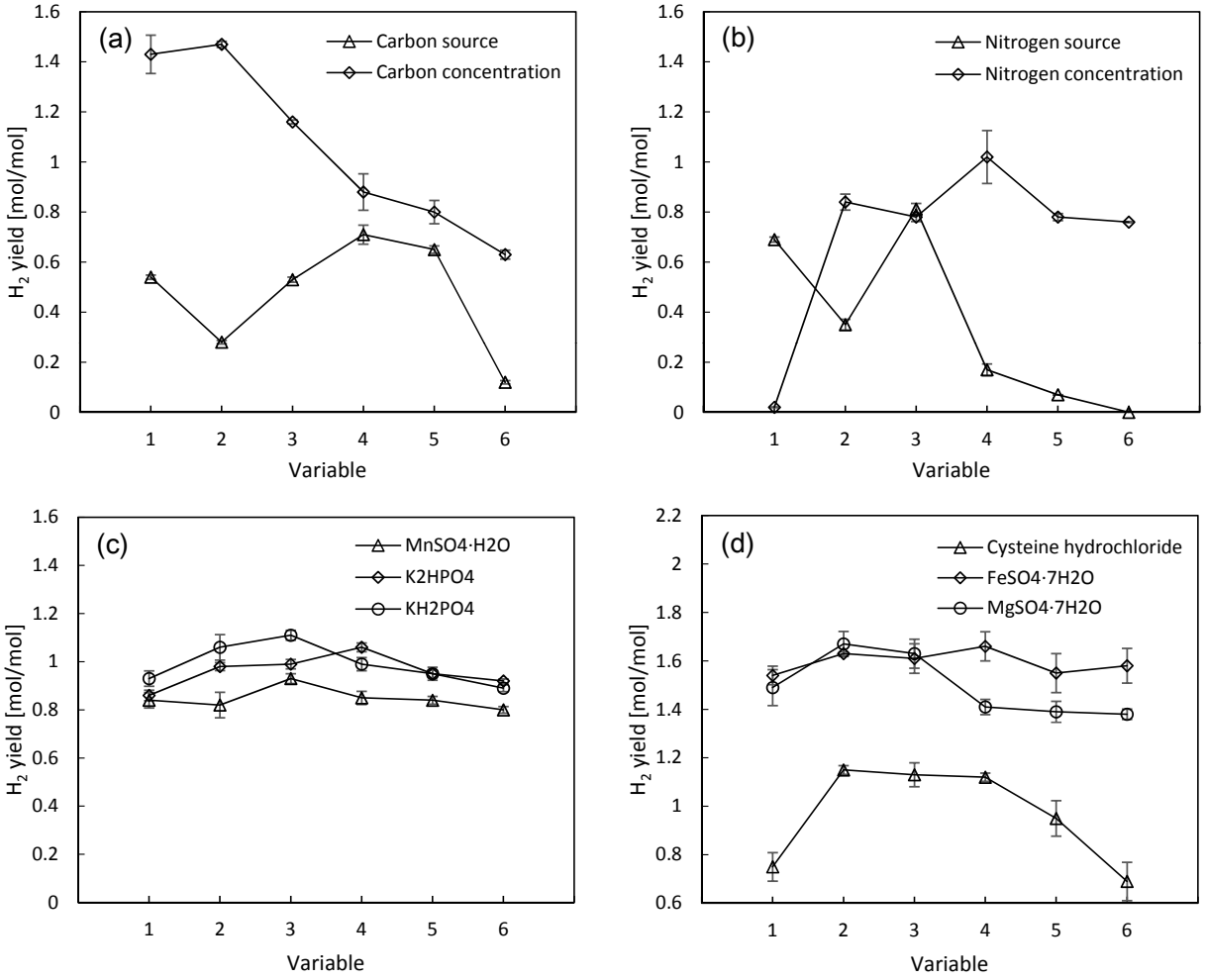

Figure S1. H_2 yield versus variable under the initial medium condition for 24 h bottle fermentation at 35 ^{o}C and 130 rpm shaking:
(a) carbon sources (No.1-6: Xylose, Galactose, Fructose, Glucose, Mannose, Glycerol; 20g/L), carbon concentrations (No.1-6: 10, 15, 20, 25, 30, 35 g/L); (b) nitrogen sources (No.1-6: tryptone, peptone, yeast extract, urea, $(NH_4)_2SO_4$, $NH_3{\cdot}H_2O$; 10 g/L), nitrogen concentrations (No.1-6: 0, 1, 3, 5, 7, 9 g/L); (c) concentrations of $MnSO_4{\cdot}7H_2O$ (No.1-6: 0, 0.05, 0.1, 0.15, 0.2, 0.25 g/L), concentrations of K_2HPO_4 and KH_2PO_4 (No.1-6: 0, 1, 3, 5, 7, 9 g/L); (d) concentrations of cysteine hydrochloride and $MgSO_4{\cdot}7H_2O$ (No.1-6: 0, 0.05, 0.1, 0.15, 0.2, 0.25 g/L), concentrations of $FeSO_4{\cdot}7H_2O$ (No.1-6: 0, 0.1, 0.2, 0.3, 0.4, 0.5 g/L).

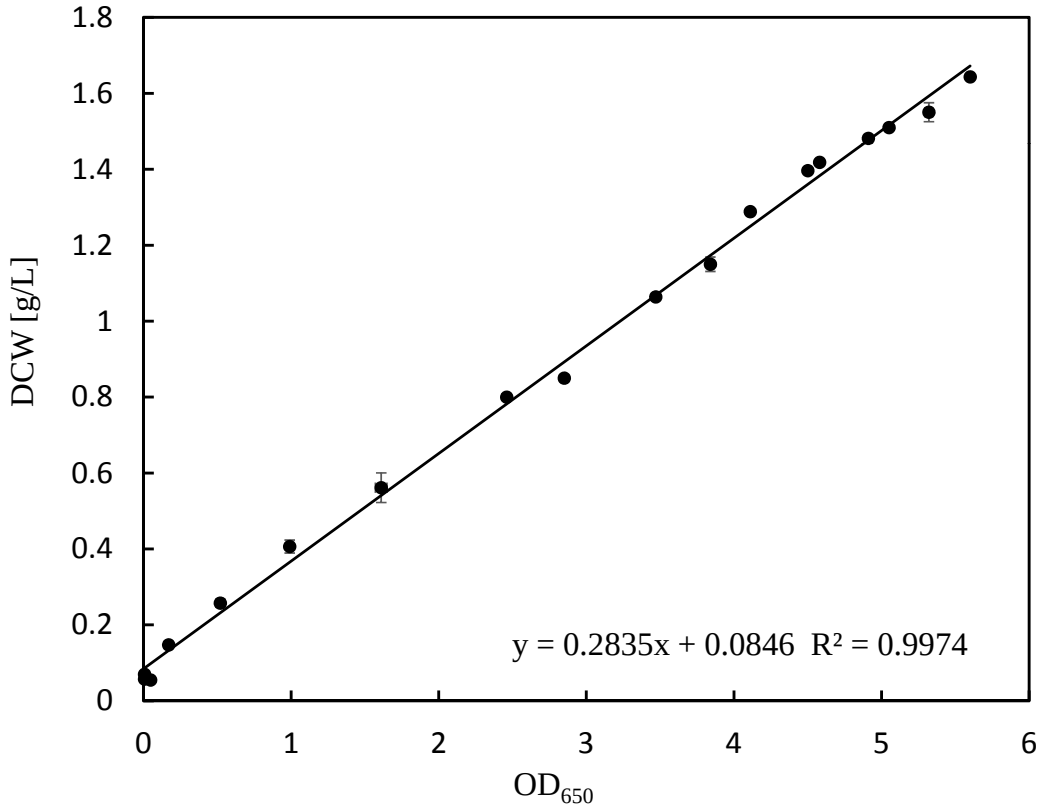

Figure S2. Regression curve between dry cell weight (DCW) and optical density (OD_{650}).

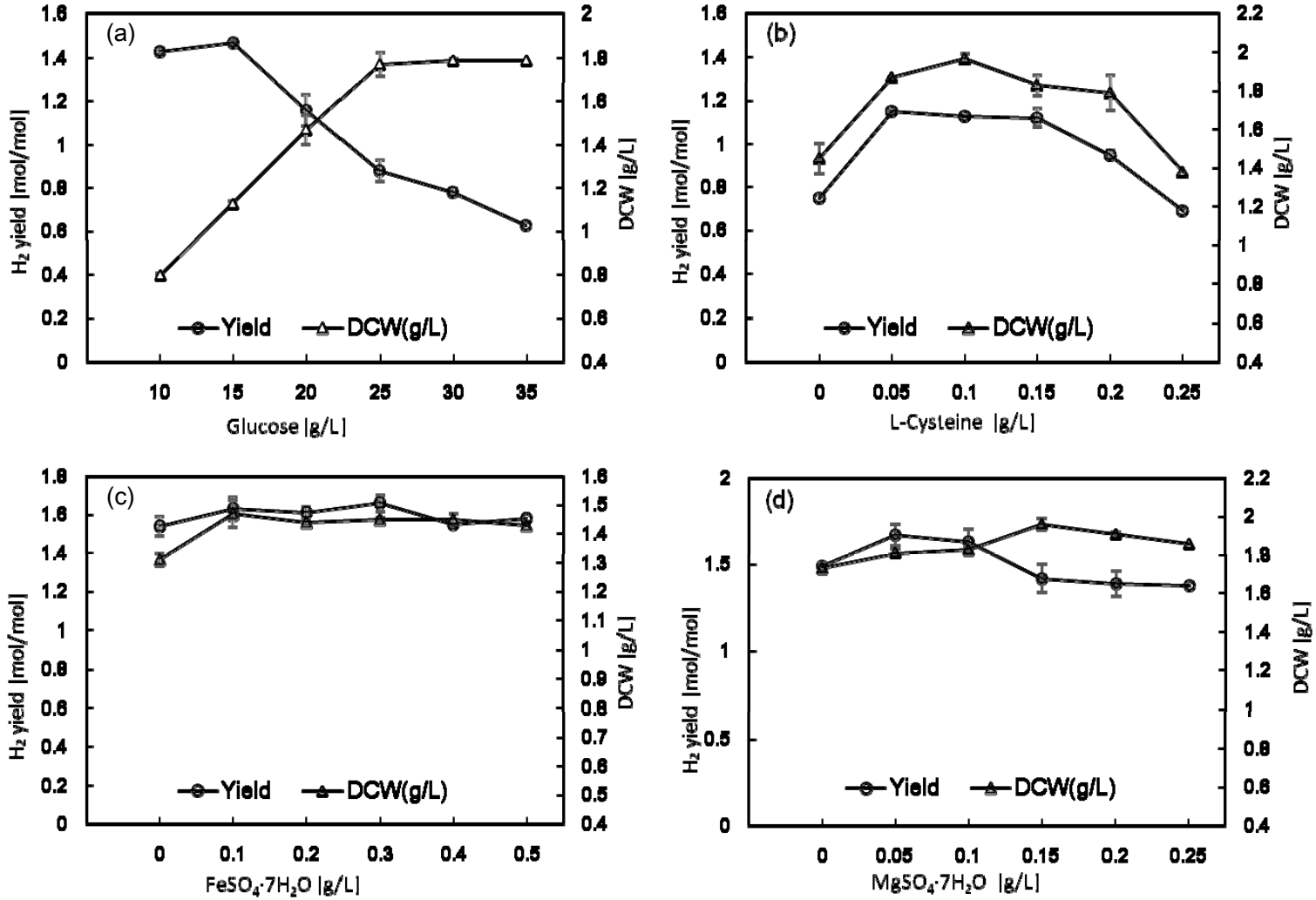

Figure S3. H_2 yield and dry cell weight (DCW) versus different concentration of (a) glucose, (b) L-cysteine, (c) $FeSO_4 \cdot 7H_2O$, and (d) $MgSO_4 \cdot 7H_2O$ (24 h bottle fermentation at 35 °C and 130 rpm shaking).