Supplementary Material

Manuscript Title: Improving reusability of biocatalysts by exploiting Cross-Linked Enzyme Aggregates (CLEAs) with commercial cellulolytic cocktails for hydrolysis of green coconut waste.

Figure S1 – CLEAs produced from cellulolytic cocktails using acetone as a precipitating agent. a) CLEAs-Celluclast without BSA; b) CLEAs-Celluclast with BSA; c) CLEAs-Cellic CTec2 without BSA; d) CLEAs-Cellic CTec2 with BSA.

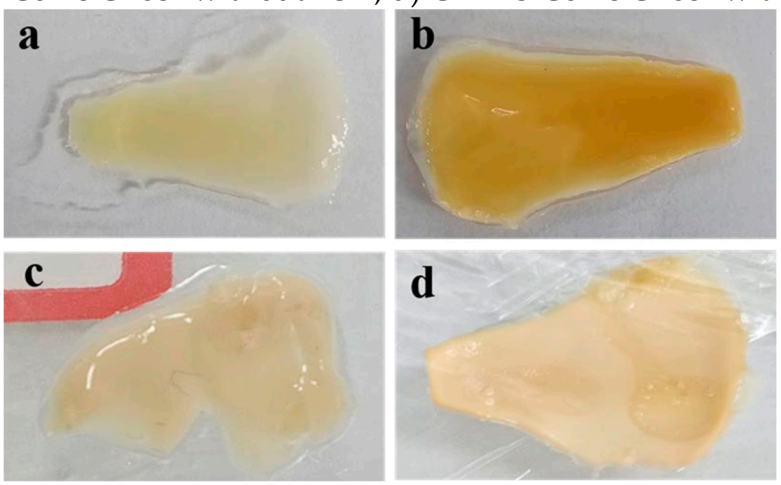


Figure S2 – CLEAs produced from cellulolytic cocktails using ethanol as a precipitating agent. a) CLEAs-Celluclast and CLEAs-Cellic CTec2 without BSA; b) CLEAs Celluclast with BSA; c) CLEAs-Cellic CTec2 with BSA.

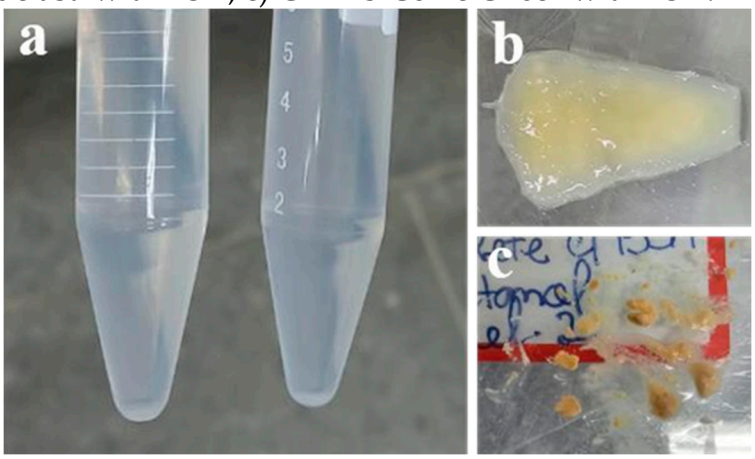


Figure S3 – Magnetic CLEAs produced with Celluclast (a) and Cellic CTec2 (b). The CLEAs were produced using acetone as a precipitating agent and with BSA. The crosslinking step was performed using 5% (v/v) glutaraldehyde.

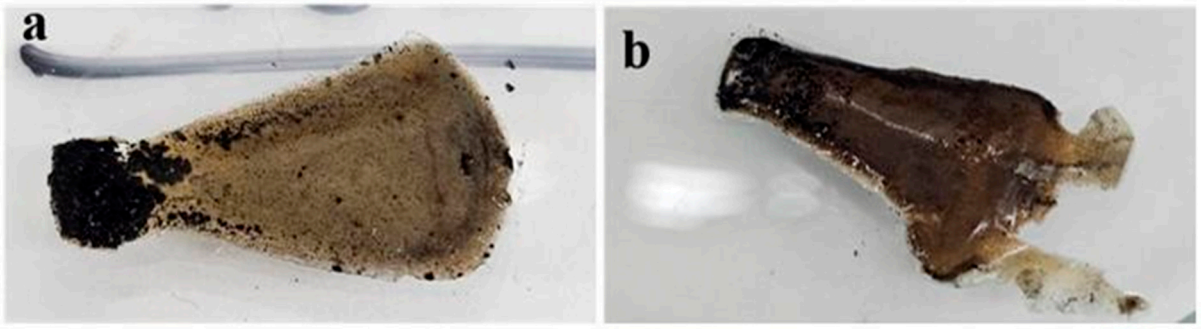


Table S1. Enzymatic hydrolysis activity of coconut fiber and cellulose by DNS assay occurred at 50°C and 125 rpm.

Time (h)	Glucose by Green coconut fiber (g/L)	Glucose by Cellulose(g/L)
4	1.04 ± 0.14	Zero
8	0.64 ± 0.12	1.67 ± 0.28
12	2.34 ±0.17	3.84 ± 0.33
24	2.88 ±0.20	4.79 ± 0.34
48	0.09 ± 0.03	0.46 ± 0.15