

Sustainable second-generation bioethanol production from enzymatically hydrolyzed domestic food waste using *Pichia anomala* as biocatalyst

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Table 1. Chemical composition FORBI.

Characteristic	Value
Total Solids (%)	91.28 ± 0.75
Volatile Solids (% TS)	92.34 ± 0.73
Soluble Carbohydrates (% TS)	21.39 ± 2.25
Reducing sugars (%TS)	16.36 ± 1.09
Starch (%TS)	16.12 ± 1.59
Cellulose (%TS)	11.34 ± 1.47
Hemicellulose (%TS)	3.47 ± 0.42
Lignin (%TS)	5.12 ± 0.41
Proteins (%TS)	10.22 ± 1.08
Total Kjeldahl Nitrogen (%TS)	1.63 ± 0.17
Lipids (%TS)	9.26 ± 0.74

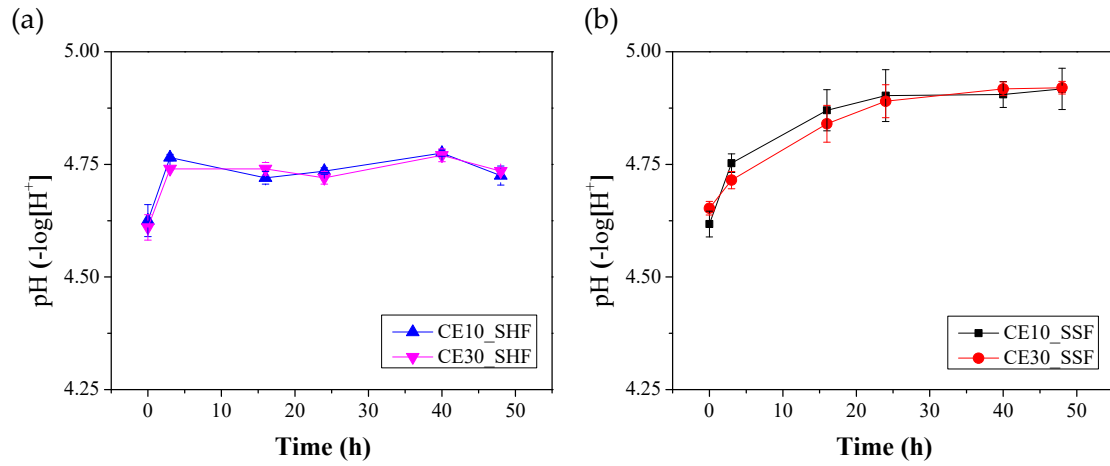


Figure 1. Variation of pH versus time during alcoholic fermentation of FORBI with *P. anomala* at separate hydrolysis and fermentation, SHF, (a) and simultaneous saccharification and fermentation, SSF, (b) via the cellulolytic blend (CE) at enzymatic loadings 10FPU/g TS FORBI and 30FPU/g TS FORBI.

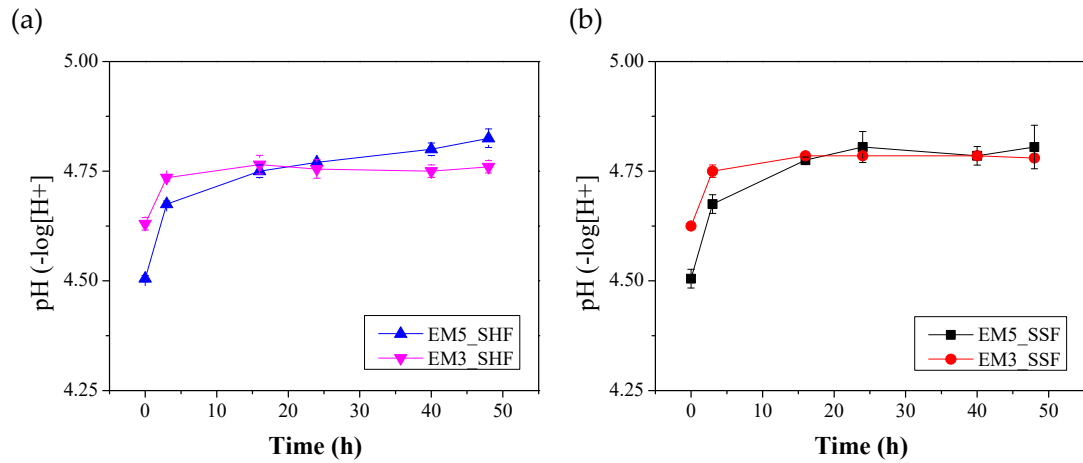


Figure 2. Variation of pH versus time during alcoholic fermentation of FORBI with *P. anomala* at separate hydrolysis and fermentation, SHF, (a) and simultaneous saccharification and fermentation, SSF, (b) via the enzymatic mixtures EM3 and EM5 containing cellulolytic and amylolytic enzymes.