

Supplementary Material

Title: Optimization of simultaneous production of volatile fatty acids and bio-hydrogen from food waste using response surface methodology

Nuo Liu^a, Jianguo Jiang^{a,b,*}, Feng Yan^a, Yiwen Xu^a, Meng Yang^a, Yuchen Gao^a, Aikelaimu Aihemaiti^a, Quan Zou^a

Table S1 The VFA production and VFA generate rate under various TS content at pH 7.0

Item	TS (g/L)		
	50	80	100
VFA (g/L)	17.86	21.65	26.17
VFA (g/g VS _{added})	0.416	0.315	0.305

Table S2 The Box-Behnken Design of independent variables for process optimization

Run	TS (g/L)	pH	Time (d)
	A	B	C
1	80	7	1
2	80	7	5
3	80	4	5
4	80	5	3
5	80	6	3
6	100	4	3
7	50	6	1
8	80	4	1
9	80	5	3
10	50	6	3
11	100	5	5
12	100	6	1
13	80	6	3
14	50	5	5
15	50	7	3

16	50	4	3
17	100	7	3

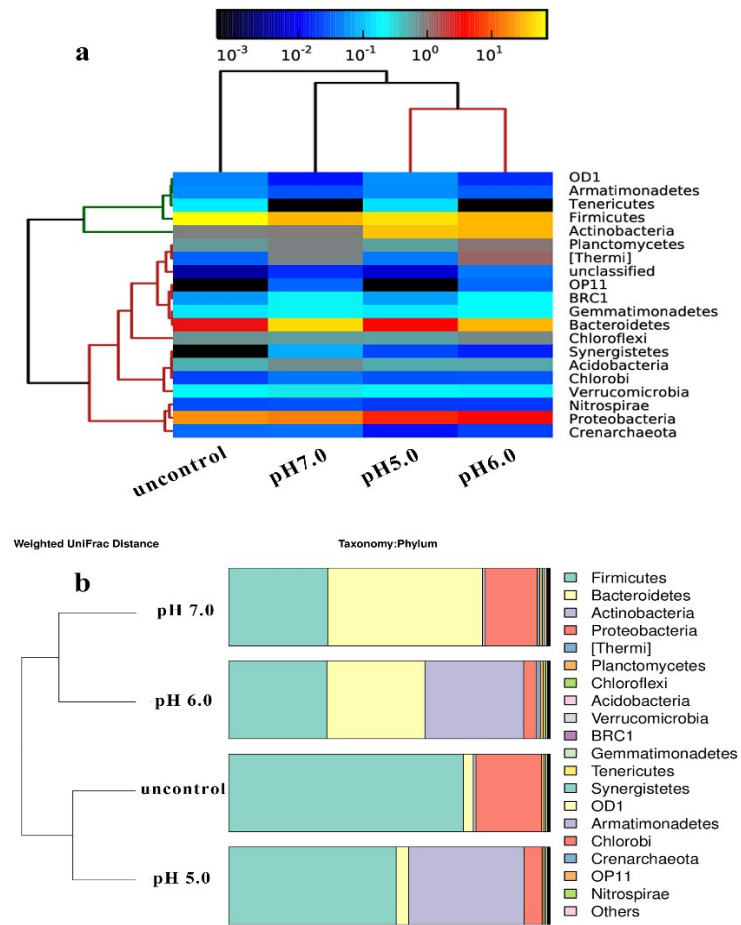


Fig. S1 Evolution of the bacterial community: (a) heat map at the gene level and (b) the abundance of different bacterial phyla.