

Optimized the Extraction of Sugars from Sewage Sludge using Ultrasound combined with Thermal-alkali

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Captions

Table S1 Crude sugar yield response surface design and results

Table S2 Results of ANOVA analysis of the regression model

Table S1. Crude sugar yield response surface design and results.

Number	Amount of NaOH addition (mL)	Digestion time (min)	Ultrasound time (min)	Crude sugar yield (%)
1	0	0	12.5	1.12
2	10	37.5	25	33.22
3	5	0	0	0.86
4	0	37.5	0	1.93
5	6	60	20	34.22
6	5	37.5	12.5	31.90
7	10	75	12.5	31.07
8	10	37.5	0	27.23
9	10	0	12.5	15.60
10	5	75	25	18.80
11	5	75	0	27.13
12	5	0	25	16.10
13	0	75	12.5	3.21
14	6	60	25	18.80
15	5	37.5	12.5	31.97
16	6	60	15	33.04
17	0	37.5	25	2.85

Table S2. Results of ANOVA analysis of the regression model. Parameters with p-value ≤ 0.05 are considered significant.

Source	Sum of Squares	df	Mean Square	F-value	p-value	
Model	2616.63	9	290.74	21.05	0.0003	significant
A	1196.93	1	1196.93	86.66	<0.0001	
B	270.95	1	270.95	19.62	0.0030	
C	14.07	1	14.07	1.02	0.3464	
AB	42.91	1	42.91	3.11	0.1213	
AC	4.71	1	4.71	0.3407	0.5777	
BC	179.23	1	179.23	12.98	0.0087	
A ²	314.63	1	314.63	22.78	0.0020	
B ²	327.98	1	327.98	23.75	0.0018	
C ²	195.00	1	195.00	14.12	0.0071	
Residual	966.68	7	13.81			
Lack of Fit	96.68	6	16.11	6576.71	0.0094	significant
Pure Error	0.0025	1	0.0025			
Cor. Total	2713.31	16				