

Optimization of a Novel Method Based on Ultrasound-Assisted Extraction for the Quantification of Anthocyanins and Total Phenolic Compounds in Blueberry samples (*Vaccinium corymbosum* L.)

SUPPLEMENTARY MATERIAL

Table S1. Box-Behnken design matrix with the values of the six variables for each experiment and measured and predicted responses ($n = 2$).

	% MeOH	Temperature (°C)	Amplitude	Cycle	pH	Ratio	mg anthocyanins measured /g Blueberry	mg anthocyanins predicted /g Blueberry	Relative error of prediction (%)	mg total Phenolic Compounds measured /g Blueberry	mg total Phenolic Compounds predicted /g Blueberry	Relative error of prediction (%)
1	50	40	30	0.45	2	10	14.05	13.36	4.88	23.06	22.35	3.06
2	50	40	70	0.45	2	10	14.72	14.81	0.62	23.54	22.80	3.15
3	50	40	30	0.45	7	10	14.67	14.27	2.74	22.53	22.08	2.00
4	50	40	70	0.45	7	10	14.88	14.99	0.75	22.99	24.13	4.94
5	50	40	30	0.45	2	20	13.90	13.49	2.92	25.72	25.14	2.27
6	50	40	70	0.45	2	20	16.02	16.71	4.36	25.50	25.39	0.40
7	50	40	30	0.45	7	20	13.16	12.77	2.93	22.86	24.16	5.67

8	50	40	70	0.45	7	20	14.28	15.26	6.92	25.86	26.01	0.57
9	50	10	50	0.2	2	15	13.20	12.60	4.56	23.67	23.90	0.98
10	50	70	50	0.2	2	15	13.44	12.47	7.21	25.24	24.67	2.28
11	50	10	50	0.7	2	15	13.78	13.03	5.49	24.70	24.58	0.50
12	50	70	50	0.7	2	15	13.81	13.77	0.31	23.79	23.32	1.97
13	50	10	50	0.2	7	15	11.56	11.08	4.16	20.81	21.88	5.15
14	50	70	50	0.2	7	15	9.61	10.88	13.18	24.56	24.08	1.96
15	50	10	50	0.7	7	15	13.63	14.08	3.28	24.33	25.51	4.85
16	50	70	50	0.7	7	15	13.93	14.75	5.89	26.53	25.69	3.17
17	25	40	30	0.2	4.5	15	16.90	17.03	0.73	22.23	21.35	3.93
18	75	40	30	0.2	4.5	15	14.50	15.68	8.09	24.22	21.80	9.96
19	25	40	70	0.2	4.5	15	14.95	12.58	15.84	20.04	20.75	3.56
20	75	40	70	0.2	4.5	15	19.24	19.65	2.11	25.55	23.81	6.81
21	25	40	30	0.7	4.5	15	15.63	15.62	0.02	23.97	23.86	0.45
22	75	40	30	0.7	4.5	15	17.99	16.96	5.72	19.54	20.68	5.80
23	25	40	70	0.7	4.5	15	15.37	15.60	1.49	23.59	24.16	2.43
24	75	40	70	0.7	4.5	15	24.88	25.35	1.87	20.86	23.58	13.08
25	50	10	30	0.45	4.5	10	14.62	14.07	3.73	17.09	18.57	8.69
26	50	70	30	0.45	4.5	10	15.00	14.98	0.17	21.08	22.06	4.63
27	50	10	70	0.45	4.5	10	13.42	15.37	14.51	20.54	20.43	0.53
28	50	70	70	0.45	4.5	10	15.40	15.86	2.99	23.94	22.69	5.22
29	50	10	30	0.45	4.5	20	13.97	13.81	1.12	22.71	23.40	3.08
30	50	70	30	0.45	4.5	20	14.52	13.87	4.49	22.54	22.09	1.98
31	50	10	70	0.45	4.5	20	17.15	16.88	1.59	25.49	25.07	1.65
32	50	70	70	0.45	4.5	20	16.27	16.52	1.56	23.46	22.53	3.94
33	25	10	50	0.45	2	15	11.60	12.27	5.83	21.68	21.99	1.44

34	75	10	50	0.45	2	15	17.84	18.69	4.79	23.36	23.18	0.77
35	25	70	50	0.45	2	15	12.98	13.45	3.56	19.59	21.15	7.96
36	75	70	50	0.45	2	15	17.46	18.14	3.88	22.16	23.53	6.20
37	25	10	50	0.45	7	15	14.55	13.39	7.97	25.27	23.29	7.82
38	75	10	50	0.45	7	15	17.05	17.10	0.30	22.96	20.79	9.45
39	25	70	50	0.45	7	15	15.86	14.49	8.61	23.11	23.89	3.40
40	75	70	50	0.45	7	15	17.67	16.48	6.74	22.27	22.57	1.36
41	25	40	50	0.2	4.5	10	14.58	15.37	5.38	19.19	19.29	0.52
42	75	40	50	0.2	4.5	10	20.73	19.68	5.08	17.24	19.01	10.27
43	25	40	50	0.7	4.5	10	14.84	13.28	10.52	23.76	23.00	3.19
44	75	40	50	0.7	4.5	10	18.41	20.28	10.15	20.54	19.09	7.05
45	25	40	50	0.2	4.5	20	14.59	14.13	3.15	20.74	20.34	1.90
46	75	40	50	0.2	4.5	20	17.38	15.54	10.64	21.53	24.13	12.11
47	25	40	50	0.7	4.5	20	16.18	17.83	10.17	22.47	22.55	0.36
48	75	40	50	0.7	4.5	20	21.30	21.92	2.87	24.65	22.70	7.89
49	50	40	50	0.45	4.5	15	15.58	16.21	4.04	25.82	25.46	1.43
50	50	40	50	0.45	4.5	15	16.28	16.21	0.40	25.34	25.46	0.47
51	50	40	50	0.45	4.5	15	17.09	16.21	5.11	25.20	25.46	0.99
52	50	40	50	0.45	4.5	15	15.51	16.21	4.55	25.63	25.46	0.67
53	50	40	50	0.45	4.5	15	15.21	16.21	6.59	24.96	25.46	1.97
54	50	40	50	0.45	4.5	15	16.60	16.21	2.33	25.78	25.46	1.25
