

Green Extraction of Antioxidant Flavonoids from Pigeon Pea (*Cajanus cajan* (L.) Millsp) Seeds and Its Antioxidant Potentials using Ultrasound-Assisted Methodology

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Table S1. TFC and *in vitro* cell-free antioxidant activity values in the 41 BBD observations.

	TFC		ABTS		DPPH		CUPRAC		FRAP	
	(mg/g DM)		(μmol TEAC/mg DM)		(μmol TEAC/mg DM)		(μmol TEAC/mg DM)		(μmol TEAC/mg DM)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Obs1	23.94	1.35	169.83	3.13	160.04	1.25	30.69	0.95	31.83	1.90
Obs2	26.05	2.68	161.94	2.16	156.42	0.72	53.98	3.65	55.64	1.44
Obs3	30.46	1.71	176.47	1.44	216.54	3.74	70.38	1.44	90.59	1.44
Obs4	30.66	0.37	178.13	3.30	247.74	1.25	70.38	6.50	91.42	1.90
Obs5	25.60	1.62	119.59	4.99	152.35	4.37	48.79	2.59	51.07	1.25
Obs6	24.76	2.31	108.37	1.21	150.09	1.44	38.17	3.81	43.18	0.72
Obs7	29.56	0.03	173.98	1.90	188.06	0.72	67.68	1.25	68.93	1.90
Obs8	29.76	0.67	174.81	4.00	190.32	0.72	67.89	0.72	79.76	2.16
Obs9	34.24	0.12	200.14	1.90	294.75	2.16	95.99	1.65	116.82	0.72
Obs10	32.27	0.94	194.74	1.38	287.52	1.25	82.95	3.07	104.33	1.90
Obs11	36.04	0.50	203.46	5.62	303.34	0.72	110.76	0.72	121.65	4.72
Obs12	32.08	1.32	187.68	7.18	284.36	2.88	84.95	1.30	103.50	1.25
Obs13	33.33	0.25	195.99	1.44	288.42	3.30	89.16	3.75	105.16	0.72
Obs14	31.44	1.46	180.62	1.25	258.59	3.81	75.67	2.52	72.25	1.25
Obs15	31.70	0.36	181.04	1.44	262.20	4.00	73.91	1.54	102.67	7.30
Obs16	29.81	1.57	174.81	7.08	207.50	1.25	68.10	3.89	69.76	2.49
Obs17	24.39	2.42	82.22	8.98	106.77	2.88	33.39	2.36	35.35	0.42
Obs18	27.04	1.10	165.68	4.49	156.87	2.88	59.89	4.24	63.95	1.44
Obs19	25.69	2.24	144.08	1.50	152.80	3.81	50.24	2.00	54.39	2.59
Obs20	37.64	0.92	230.04	0.72	329.20	0.72	133.88	6.66	138.55	7.30
Obs21	29.46	3.63	172.74	4.00	173.15	0.72	66.64	3.81	63.51	0.60
Obs22	37.07	0.85	224.22	1.88	316.45	0.72	121.18	2.00	144.31	0.72
Obs23	26.59	1.87	164.02	4.72	156.42	3.30	54.39	2.19	60.62	1.44
Obs24	45.26	2.61	282.43	3.35	429.92	2.97	218.62	1.04	275.37	1.45
Obs25	31.20	2.70	178.96	2.59	252.26	1.90	72.67	2.16	97.83	3.60
Obs26	33.90	2.81	197.65	5.62	288.88	0.72	92.57	10.28	115.57	1.44
Obs27	27.07	0.48	165.68	3.30	158.68	1.90	63.74	3.81	65.61	1.44
Obs28	38.26	0.60	230.87	0.72	340.87	1.25	149.56	4.21	159.45	3.74
Obs29	30.11	2.53	175.64	2.49	216.09	1.25	69.55	2.81	85.17	1.44
Obs30	31.94	2.44	182.29	3.60	270.34	1.44	74.33	3.65	93.08	1.90
Obs31	27.75	1.70	166.92	3.30	165.91	1.25	65.40	7.58	67.68	1.90
Obs32	38.34	1.61	231.70	1.25	346.74	75.58	169.76	4.72	168.17	5.03
Obs33	27.70	1.68	166.51	1.44	164.56	0.72	64.15	0.95	77.68	1.90
Obs34	36.62	0.05	204.29	1.25	304.70	0.72	118.13	1.30	138.48	6.59
Obs35	27.90	1.53	167.34	1.90	172.24	0.72	68.23	1.65	65.10	1.90
Obs36	34.67	0.20	200.97	2.59	295.21	9.73	96.61	9.67	117.23	1.25
Obs37	45.01	5.53	264.37	5.19	423.60	2.66	213.85	2.29	260.77	2.81
Obs38	45.98	3.32	292.32	3.60	448.46	3.72	223.34	2.83	303.95	5.53
Obs39	43.75	3.28	234.19	1.25	412.75	2.74	201.87	1.45	226.58	2.34
Obs40	40.73	1.07	233.36	1.44	346.92	1.68	159.10	3.62	201.74	1.89
Obs41	41.80	1.15	233.36	1.90	351.72	7.88	178.20	1.62	226.30	3.79

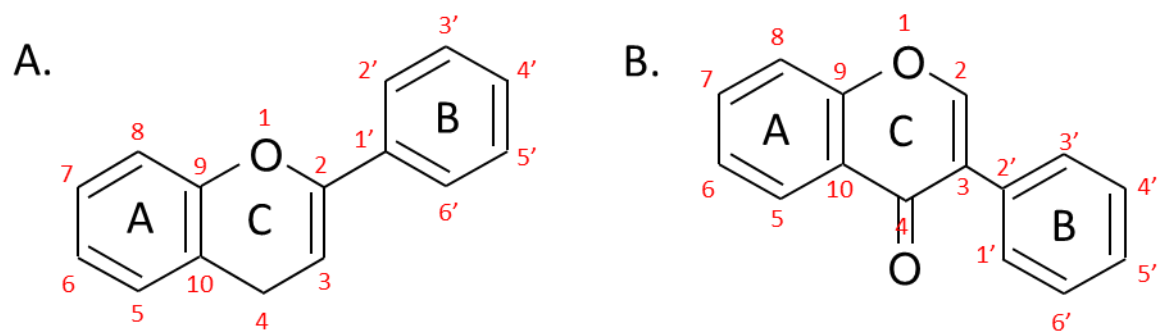


Figure S1. Basic structure of A. flavonoid and B. isoflavonoid.

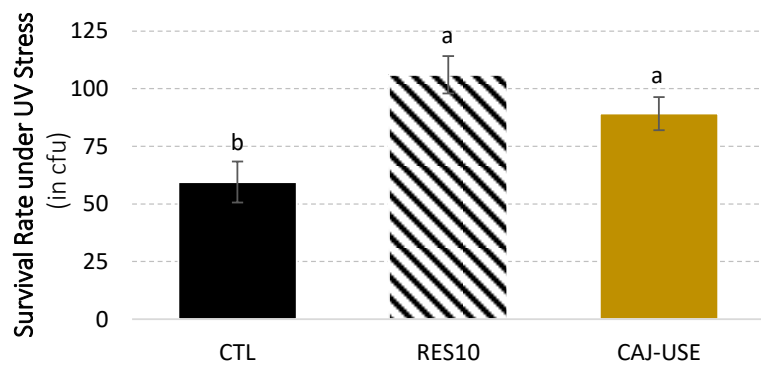


Figure S2. Yeast cells survival rate under UV stress.

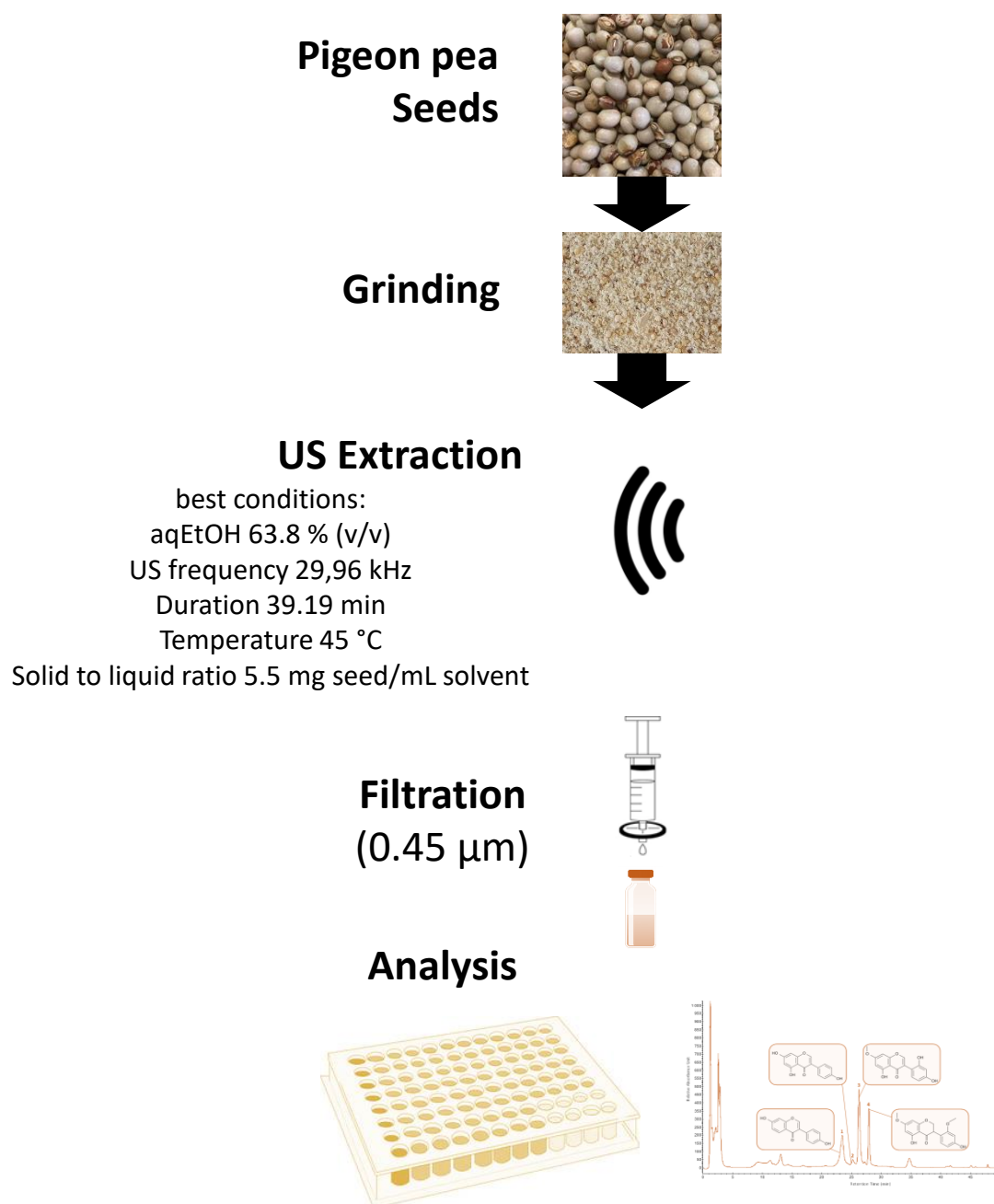


Figure S3. Workflow of the optimized USAE of (iso)flavonoids from pigeon pea seeds.