

Table S1. Box-Behnken design (BBD) with experimental value for total yield of the three flavonoids^a.

RUN	X ₁ ^b	X ₂	X ₃	Y _{Leaves} ^c	Taxifolin	Diosmin×100	Quercetin	Y _{bark}	Taxifolin	Diosmin×100	Quercetin
	min	W	K	mg/g	mg/g	mg/g	mg/g	mg/g	mg/g	mg/g	mg/g
1	50	160	313.15	75.37	23.67	21.25	51.49	8.44	1.08	2.59	7.33
2	30	200	323.15	85.82	25.72	22.86	56.87	12.23	1.16	3.72	11.03
3	50	200	323.15	87.23	26.03	21.97	60.98	11.45	1.05	4.32	10.36
4	40	200	313.15	76.35	23.99	21.36	52.15	11.42	1.08	3.48	10.30
5	40	160	323.15	94.21	27.35	25.64	66.60	13.87	1.53	4.29	12.30
6	40	120	313.15	90.29	26.56	24.37	63.49	9.88	1.74	3.87	8.10
7	40	200	333.15	98.12	29.81	26.55	66.05	14.19	1.35	4.32	12.81
8	30	120	323.15	96.34	29.76	26.41	66.32	13.98	1.98	4.20	11.96
9	40	120	333.15	99.56	29.93	26.77	69.36	16.23	2.27	4.57	13.91
10	40	160	323.15	101.45	30.32	27.41	70.86	17.65	2.59	4.74	15.01
11	40	160	323.15	101.45	30.32	27.41	70.86	17.65	2.59	4.74	15.01
12	40	160	323.15	101.45	30.32	27.41	70.86	17.65	2.59	4.74	15.01
13	40	160	323.15	101.45	30.32	27.41	70.86	17.65	2.59	4.74	15.01
14	50	120	323.15	87.32	26.15	21.43	60.96	9.52	1.54	3.75	7.94
15	30	160	333.15	99.37	29.54	26.16	69.57	15.49	1.46	4.53	13.98
16	30	160	313.15	80.34	24.51	21.44	55.62	9.08	1.87	3.29	7.18
17	50	160	333.15	98.32	29.73	37.51	68.21	10.21	1.47	3.48	8.71

^a The results were obtained with Design Expert 8.0.6 software; ^b X₁ is the extraction time (min); X₂ is the ultrasonic irradiation power (W); X₃ is the temperature (K); ^c Y_{Leaves} is the total yield of 3 flavonoids from leaves of *A. nephrolepis*; Y_{bark} is the total yield of 3 flavonoids from bark of *A. nephrolepis*.