

Table S2. The linear equations for the flavonoids and phenolic compounds.

Metabolites	Retention time	limit of detection	limit of quantitation	Standard curves	RSD (%)
2,4-Dihydroxybenzoic acid	4.28	4.27	4.27	$y = 1.66737e5 x + 5.30965e5$ ($r = 0.99751$, $r^2 = 0.99503$)	1.76
2,6-Dihydroxybenzoic acid	4.28	0.14	0.14	$y = 8.86564e4 x + 6476.54125$ ($r = 0.99969$, $r^2 = 0.99939$)	3.32
3,4-Dihydroxybenzaldehyde	3.68	0.69	0.69	$y = 22116.62642 x + 1050.00105$ ($r = 0.99923$, $r^2 = 0.99846$)	7.62
4-Hydroxybenzoic acid	3.75	1.56	1.90	$y = 3.88878e4 x + -11616.14538$ ($r = 0.99960$, $r^2 = 0.99920$)	7.81
4-Hydroxycinnamic acid	4.59	0.12	0.77	$y = 9.73960e4 x + 3.26284e4$ ($r = 0.99940$, $r^2 = 0.99879$)	5.35
Apiin	4.93	0.04	0.04	$y = 27062.60184 x + 1005.19708$ ($r = 0.99730$, $r^2 = 0.99461$)	3.91
Aromadendrin	5.85	0.26	0.26	$y = 4.73204e4 x + -214.31868$ ($r = 0.99952$, $r^2 = 0.99903$)	4.59
Caffeic acid	3.96	1.30	2.10	$y = 26134.20850 x + -3.03375e4$ ($r = 0.99590$, $r^2 = 0.99181$)	15.71
Caftaric acid	3.24	0.38	0.97	$y = 7984.42499 x + -1080.86629$ ($r = 0.99809$, $r^2 = 0.99618$)	3.55
Catechin	3.63	1.21	0.32	$y = 4196.27171 x + -2962.01711$ ($r = 0.99873$, $r^2 = 0.99745$)	5.85
Chlorogenic acid	3.58	0.28	0.28	$y = 24371.86981 x + -3680.26502$ ($r = 0.99975$, $r^2 = 0.99950$)	3.09
Coniferaldehyde	5.75	0.20	0.71	$y = 3.57501e4 x + 6488.86865$ ($r = 0.99881$, $r^2 = 0.99761$)	2.85
Cosmosiin	5.20	0.12	0.27	$y = 22223.67911 x + 315.82508$ ($r = 0.99901$, $r^2 = 0.99803$)	6.24
Cyanidin 3-O-rutinoside chloride	3.44	0.23	0.90	$y = 14926.94965 x + 3174.56338$ ($r = 0.99990$, $r^2 = 0.99981$)	9.44
Epicatechin	3.97	4.41	4.41	$y = 1959.21571 x + 6949.77109$ ($r = 0.99695$, $r^2 = 0.99390$)	6.71
Eriodictyol	6.95	0.29	0.12	$y = 5.40788e4 x + 2823.21028$ ($r = 0.99952$, $r^2 = 0.99903$)	2.06
Ferulic acid	4.88	0.37	0.37	$y = 25482.04665 x + 2749.52295$ ($r = 0.99945$, $r^2 = 0.99891$)	2.44
Gallic acid	2.39	0.36	0.68	$y = 3.79671e4 x + 2229.43613$ ($r = 0.99911$, $r^2 = 0.99822$)	0.72
Gentisic acid	3.77	2.29	2.29	$y = 17580.23138 x + 25022.93985$ ($r = 0.99953$, $r^2 = 0.99906$)	2.17
Hesperidin	5.21	0.05	0.05	$y = 22005.34237 x + 1131.80631$ ($r = 0.99969$, $r^2 = 0.99939$)	4.29

Isoorientin	4.13	0.17	0.31	$y = 18849.93508x + 162.14385$ ($r = 0.99947, r^2 = 0.99895$)	13.67
Isorhamnetin	9.39	0.04	0.06	$y = 1.51689e5x - 855.62356$ ($r = 0.99987, r^2 = 0.99975$)	2.66
Isorhamnetin-3-O-glucoside	5.14	0.02	0.06	$y = 4.16905e4x + 633.48862$ ($r = 0.99963, r^2 = 0.99925$)	2.55
Methyl gallate	3.77	0.01	0.05	$y = 9.68578e4x + 797.63243$ ($r = 0.99903, r^2 = 0.99807$)	9.56
Morin	7.20	0.05	0.05	$y = 9.51372e4x - 225.47030$ ($r = 0.99994, r^2 = 0.99987$)	3.72
Myricetin 3-galactoside	4.19	0.09	0.30	$y = 4.30538e4x - 2095.68184$ ($r = 0.99857, r^2 = 0.99714$)	12.18
Narcissin	4.83	0.06	0.81	$y = 23437.80544x + 6991.94109$ ($r = 0.99607, r^2 = 0.99215$)	2.11
Naringenin	8.57	0.04	0.13	$y = 14751.12788x + 156.86294$ ($r = 0.99939, r^2 = 0.99878$)	2.91
Naringin	5.02	0.77	0.77	$y = 10536.68448x + 3429.94710$ ($r = 0.99924, r^2 = 0.99847$)	7.99
Nicotiflorin	4.74	0.06	0.13	$y = 26923.85137x - 297.35940$ ($r = 0.99926, r^2 = 0.99852$)	6.39
Orientin	4.13	0.17	0.12	$y = 17897.20754x - 198.05497$ ($r = 0.99836, r^2 = 0.99673$)	8.87
Pelargonidin-3-glucoside	3.63	0.34	1.95	$y = 5.01874e4x + 29657.21309$ ($r = 0.99962, r^2 = 0.99923$)	7.46
Phloretin	8.61	0.11	0.11	$y = 8.49143e4x + 1171.43150$ ($r = 0.99972, r^2 = 0.99944$)	2.42
Phlorizin	5.61	0.03	0.04	$y = 4.76082e4x + 48.26600$ ($r = 0.99993, r^2 = 0.99985$)	4.92
Procyanidin B3	3.50	0.48	1.99	$y = 2672.61615x - 882.49941$ ($r = 0.99814, r^2 = 0.99627$)	6.76
Protocatechuic acid	3.13	0.34	0.66	$y = 3.91198e4x + 8202.36981$ ($r = 0.99962, r^2 = 0.99923$)	1.60
Prunin	5.25	0.02	0.05	$y = 3.93228e4x + 785.47821$ ($r = 0.99969, r^2 = 0.99939$)	1.53
Quercetin 3-galactoside	4.55	0.19	0.34	$y = 19740.06507x - 2053.94721$ ($r = 0.99842, r^2 = 0.99684$)	4.50
Quercetin	4.55	0.19	0.04	$y = 8.82925e4x + 1234.95714$ ($r = 0.99969, r^2 = 0.99938$)	2.17
Rutin	4.41	0.20	0.90	$y = 16280.02981x + 403.51215$ ($r = 0.99540, r^2 = 0.99083$)	9.51
Salicylic acid	6.01	0.01	0.74	$y = 6.48909e4x + 21122.80594$ ($r = 0.99885, r^2 = 0.99769$)	2.71
Sinapic acid	4.86	0.04	0.04	$y = 17731.96607x + 180.36652$ ($r = 0.99911, r^2 = 0.99823$)	5.32

Syringaldehyde	4.86	0.79	0.79	$y = 19987.05676 x + 5280.46714$ ($r = 0.99845$, $r^2 = 0.99691$)	5.83
Syringic acid	4.11	1.57	1.86	$y = 7278.24918 x + -1701.88282$ ($r = 0.99568$, $r^2 = 0.99137$)	9.31
Taxifolin	4.94	0.18	0.28	$y = 20378.10557 x + 1358.56780$ ($r = 0.99952$, $r^2 = 0.99904$)	0.76
trans-3,3',4',5,5',7-H exahydroxyflavanone	4.18	0.12	0.12	$y = 25468.90594 x + 2161.50341$ ($r = 0.99914$, $r^2 = 0.99828$)	3.02
trans-Cinnamic acid	7.70	0.91	0.91	$y = 12408.26702 x + 6154.59698$ ($r = 0.99995$, $r^2 = 0.99990$)	2.89
trans-Piceid	4.55	0.28	0.28	$y = 22325.86508 x + 2290.94663$ ($r = 0.99607$, $r^2 = 0.99216$)	4.68
Trilobatin	6.16	0.02	0.02	$y = 4.10956e4 x + 398.33363$ ($r = 0.99980$, $r^2 = 0.99961$)	5.11
Vanillic acid	4.03	0.81	4.84	$y = 1714.08337 x + 3980.22011$ ($r = 0.99783$, $r^2 = 0.99566$)	4.86
Vitexin	4.50	0.02	0.05	$y = 6.32078e4 x + -136.09591$ ($r = 0.99910$, $r^2 = 0.99820$)	6.80