

Table S1 Name and place of grafted of the grafted strain.

Samples	Place of grafted (Province)	Samples	Place of grafted (Province)
1 Zhengan No. 1 (ZA-1)	Guizhou	16 Changrubaiguo (CRBG)	Guizhou
2 Zhengan No. 2 (ZA-2)	Guizhou	17 Panxianchangbaiguo (PXCBBG)	Guizhou
3 Zhengan No. 3 (ZA-3)	Guizhou	18 Tancheng 202 (TC202)	Jiangsu
4 Zhengan No. 4 (ZA-4)	Guizhou	19 Tiema No. 2 (TM-2)	Jiangsu
5 Dalongyan (DLY)	Anhui	20 Tiema No. 3 (TM-3)	Jiangsu
6 Yuanling No. 13 (YL-13)	Shandong	21 Tiema No. 4 (TM-4)	Jiangsu
7 Xiaoyuanzi (XYZ)	Jiangsu	22 Damaling (DML)	Jiangsu
8 Xinchun No. 9 (XC-9)	Jiangsu	23 Guilin No. 2 (GL-2)	Guilin
9 Dafozhi (DFZ)	Jiangsu	24 Guilin No. 6 (GL-2)	Guilin
10 Taixing No. 1(TX-1)	Jiangsu	25 Guilin No. 9 (GL-2)	Guilin
11 Taixing No. 3(TX-3)	Jiangsu	26 Tanchengmalin g No. 1 (TCML-1)	Jiangsu
12 Taixing No. 4(TX-4)	Jiangsu	27 Tanchengmalin g No. 2 (TCML-1)	Jiangsu
13 Sunongfoshou(SNFS)	Jiangsu	28 Taxi No. 1 (Taxi-1)	Jiangsu
14 Tancheng 231(TC231)	Jiangsu	29 Taxi No. 2 (Taxi-2)	Jiangsu
15 Dongtingfoshou(DTFS)	Guilin	30 Yaziyinxing (YZYX)	Shandong

Table S2 The regression equation, linear range and LOD, LOQ of each metabolite

	Metabolite	Regression equation	R <sup>2</sup>	Linear range (ng/mL)	LOD (ng/mL)	LOQ (ng/mL)
1	EGC	$y = 6.3207 x - 0.0287$	0.9996	2.00-500.00	0.075	0.250
2	HA	$y = 4.235 x + 0.0319$	0.9981	16.00-500.00	5.000	16.000
3	Chlorogenic acid	$y = 34.7468 x - 0.2621$	1.0000	0.57-2840.00	0.003	0.010
4	Catechin	$y = 3.1658 x + 0.079$	0.9996	5.00-400.00	1.600	5.000
5	CA	$y = 3.7227 x + 0.0192$	0.9995	1.62-1620.00	0.002	0.008
6	Procyanidin B2	$y = 4.2448 x + 0.0045$	0.9993	1.94-5820.00	0.030	0.100
7	EpiCatechin	$y = 4.1748 x + 0.0243$	0.9982	3.00-1800.00	1.000	3.000
8	Dmyri	$y = 11.2477x - 0.01961$	0.9934	2.00-10000.00	0.050	0.250
9	p-coum	$y = 16.0888 x + 0.204$	0.9998	2.00-2000.00	0.020	0.060
10	Clitorin	$y = 16.8425 x + 0.0273$	0.9999	1.44-4320.00	0.002	0.008
11	Rutin	$y = 8.0259 x + 0.0643$	0.9999	1.54-6200.00	0.009	0.030
12	Dquer	$y = 19.4451 + 0.02602$	0.9932	2-10000.00	0.500	2.000
13	Quer-3-G	$y = 20.2226 x + 0.0452$	0.9998	1.96-880.00	0.016	0.050
14	QGR	$y = 13.5374 x - 0.0072$	0.9997	1.86-5580.00	0.043	0.143
15	Kaem-3-RU	$y = 13.7177 x + 0.0443$	0.9992	1.40-1400.00	0.001	0.002
16	Isor-3-RU	$y = 11.0941 x + 0.0299$	0.9998	1.80-5400.00	0.023	0.077
17	Quer-3-R	$y = 13.8554 x + 0.0799$	0.9980	1.98-1980.00	0.050	0.165
18	Isor-3-G	$y = 14.0290 x + 0.0688$	0.9981	1.24-1240.00	0.002	0.006
19	Kaem-7-G	$y = 17.2983 x + 0.0408$	0.9995	1.72.00-430.00	0.010	0.030
20	Apig-7-G	$y = 22.7991 x + 0.1241$	0.9990	1.68-1680.00	0.003	0.012
21	Dkaem	$y = 16.3512 + 0.01103$	0.9928	2.00-10000.00	0.020	0.080
22	Myri	$y = 16.871 x - 0.2203$	0.9984	1.90-1900.00	0.200	0.667
23	QRCG	$y = 11.1571 x + 0.1899$	0.9997	4.40-5280.00	0.004	0.012
24	KRCG	$y = 17.3968 x + 0.0474$	0.9997	1.74-435.00	0.008	0.025
25	Luteolin	$y = 11.4993 x + 0.0821$	0.9997	2.90-1160.00	0.002	0.008
26	Quer	$y = 15.7157 x - 0.02229$	0.9999	2.00-500.00	0.010	0.034
27	Apig	$y = 12.7079 x + 0.1799$	0.9998	1.62-1620.00	0.009	0.030
28	Nari	$y = 20.2863 + 0.13338$	0.9932	2.00-10000.00	0.100	0.200
29	Kaem	$y = 2.5753x + 0.0047$	0.9999	2.00-2000.00	0.003	0.010
30	Syri	$y = 30.5762 x + 0.3284$	0.9995	1.48-1480.00	0.005	0.018
31	Isor	$y = 20.7547 x + 0.1263$	0.9998	1.26-1260.00	0.001	0.003
32	Amentoflavone	$y = 53.0933 x + 0.0520$	0.9986	0.72-180.00	0.002	0.006
33	Bilobetin	$y = 2.4704 x + 0.0004$	0.9992	0.20-255.00	0.030	0.100
34	Isoginkgetin	$y = 29.3758 x + 0.0691$	0.9997	0.19-235.00	0.000	0.001
35	Ginkgetin	$y = 2.4415 x + 0.0086$	0.9999	0.17-210.00	0.003	0.009
36	Sciadopitysin	$y = 35.3566 x + 0.0998$	0.9996	0.22-275.00	0.005	0.017

Table S3 The method validation of each metabolite

Metabolite	Precision (RSD,%)					Repeatability (RSD,%, n=6)	Stability (RSD,%, n=6)	Original amount	Spiked amount	Recovery (%, n= 3)	RSD (%)	
	Intraday(n= 6)		Interday(n= 6)									
	C( $\mu\text{g/mL}$ )	RE	RSD	RE	RSD							
1	EGC	0.0560	6.45	5.20	-5.69	10.31	7.07	5.34	0.0055	0.0055	101.78	3.26
		0.1120	10.22	0.42	10.71	2.40						
		0.5600	-2.60	3.66	2.37	9.62						
2	HA	0.0400	1.36	10.30	3.12	7.21	5.60	7.55	0.0120	0.0120	97.30	4.71
		0.1600	2.22	10.31	6.64	8.13						
		0.8000	-5.08	2.74	-5.35	4.76						
3	Chlorogenic acid	0.0440	-12.28	0.54	-14.90	3.32	8.38	13.42	0.0022	0.0022	85.15	1.37
		0.0880	0.58	1.13	-5.54	5.99						
		0.8800	-7.58	1.93	-7.35	2.29						
4	Catechin	0.0720	1.26	2.86	-1.38	5.56	4.59	3.95	0.0249	0.0249	111.42	6.65
		0.1440	6.93	4.70	10.16	4.08						
		0.7200	1.73	4.24	2.89	3.75						
5	CA	0.0405	6.95	2.21	2.74	4.10	7.68	4.83	0.0036	0.0036	106.05	1.78
		0.1620	6.40	3.97	8.67	2.79						
		0.8100	-5.54	3.18	-3.15	5.68						
6	Procyanidin B2	0.0485	11.27	1.40	4.00	5.90	7.00	6.93	0.0028	0.0028	109.39	2.13
		0.0970	-0.57	3.12	-10.44	9.78						
		0.9700	-7.93	2.86	-7.31	2.04						
7	EpiCatechin	0.0450	-0.16	5.43	-1.81	3.73	4.35	2.80	0.0062	0.0062	104.72	2.80
		0.0900	11.57	3.45	12.12	2.84						
		0.9000	-4.06	1.35	-0.74	3.48						

(Continued)

	Compound	Precision (RSD,%)					Repeatability (RSD,%, n= 6)	Stability (RSD,%, n= 6)	Original amount	Spiked amount	Recovery (%, n= 3)	RSD (%)
		Intraday(n= 6)		Interday(n= 6)								
		C( µg/mL)	RE	RSD	RE	RSD						
8	Dmyri	0.0200	13.49	2.96	12.54	2.60	3.52	1.76	0.0005	0.0004	108.41	1.20
		0.2000	9.10	4.12	11.30	4.12				0.0005	114.04	2.23
		2.0000	0.63	1.53	3.92	8.06				0.0007	103.38	1.86
9	p-Coum	0.0360	13.47	1.86	-10.37	5.07	5.71	6.34	0.0099	0.0079	105.58	2.77
		0.1440	10.37	5.80	12.89	3.91				0.0099	93.90	1.80
		0.7200	1.24	1.07	2.53	3.30				0.0119	108.88	6.69
10	Clitorin	0.0360	0.19	4.36	-2.86	4.06	5.65	1.60	0.2110	0.1690	104.49	1.62
		0.1440	-4.85	6.73	-2.26	4.18				0.2110	103.99	3.41
		0.7200	2.67	0.97	-5.19	6.39				0.2530	108.4	2.90
11	Rutin	0.0770	3.03	2.30	-2.04	4.82	6.32	4.01	0.2710	0.2170	100.78	3.55
		0.1540	-4.90	7.67	-3.48	4.19				0.2710	103.16	4.26
		0.7700	-12.55	2.15	-12.08	2.53				0.3250	99.71	4.56
12	Dquer	0.0200	12.06	2.64	9.37	3.71	2.73	3.42	0.0032	0.0026	87.83	1.88
		0.2000	13.54	2.81	12.92	1.33				0.0033	94.59	3.82
		2.0000	1.57	0.95	3.97	5.40				0.0039	89.57	1.85
13	Quer-3-G	0.0490	-0.83	2.66	-3.44	-2.73	4.00	4.30	0.0374	0.0299	93.49	2.86
		0.1960	-2.12	7.13	0.21	4.12				0.0374	90.11	0.87
		0.9800	-10.84	2.51	-10.36	2.16				0.0449	102.64	2.06
14	QGR	0.0465	1.58	5.34	-2.68	4.81	5.51	8.12	0.0800	0.0640	105.23	2.95
		0.1860	-1.28	4.70	-3.51	3.89				0.0800	108.66	3.40
		0.9300	-11.16	3.01	-9.83	2.91				0.0960	102.80	1.62

(Continued)

	Metabolite	Precision (RSD,%)					Repeatability (RSD,%, n= 6)	Stability (RSD,%, n= 6)	Original amount	Spiked amount	Recovery (%, n= 3)	RSD (%)
		Intraday(n= 6)		Interday(n= 6)								
		C( µg/mL)	RE	RSD	RE	RSD						
15	Kaem-3-RU	0.0350	1.13	4.35	-3.42	5.40	3.89	4.49	0.3700	0.2960	106.35	1.26
		0.1400	2.65	1.99	2.20	1.81				0.3700	99.14	1.42
		0.7000	-7.20	1.86	-5.68	3.18				0.4440	110.14	1.55
16	Isor-3-RU	0.0450	1.15	3.86	-4.07	5.41	4.39	4.46	0.2140	0.1700	91.16	3.61
		0.1800	-0.52	1.92	-1.19	2.27				0.2140	104.29	4.05
		0.9000	-9.86	0.99	-8.57	3.02				0.2570	110.37	1.87
17	Quer-3-R	0.0495	-2.52	0.28	-5.54	3.05	5.52	9.26	0.0130	0.0104	96.54	3.83
		0.0990	8.83	2.25	6.97	3.2				0.0130	114.81	0.74
		0.9900	-9.84	2.38	-8.34	4.33				0.0156	97.74	3.23
18	Isor-3-G	0.0310	-10.16	2.54	-9.67	3.46	4.41	5.00	0.0136	0.0109	106.23	2.15
		0.0620	5.56	2.66	4.10	3.14				0.0136	100.85	4.86
		0.6200	-13.92	2.29	-13.22	1.92				0.0163	109.28	2.63
19	Kaem-3-G	0.0430	-5.16	2.99	-6.59	2.36	8.78	5.52	0.0054	0.0043	97.81	3.88
		0.0860	3.49	2.87	-0.25	4.50				0.0054	93.04	7.61
		0.1720	0.61	1.50	-4.91	5.14				0.0065	100.68	2.94
20	Apig-3-G	0.0420	2.81	1.56	1.71	4.74	3.97	7.92	0.0323	0.0260	113.52	1.69
		0.0840	13.16	1.35	11.03	3.58				0.0320	106.53	4.45
		0.8400	-12.56	2.82	-9.89	3.68				0.0380	93.14	2.17
21	Dkaem	0.0200	10.24	0.75	9.73	3.55	2.13	4.63	0.0168	0.0134	94.67	1.53
		0.2000	9.67	2.86	11.60	2.04				0.0168	106.22	2.77
		2.0000	-3.78	0.52	-4.16	2.96				0.0200	96.26	1.57

(Continued)

Compound	Precision (RSD,%)					Repeatability (RSD,%, n=6)	Stability (RSD,%, n=6)	Original amount	Spiked amount	Recovery (%, n=3)	RSD (%)	
	Intraday(n=6)		Interday(n=6)									
	C( µg/mL)	RE	RSD	RE	RSD							
22	Myri	0.0540	-12.94	2.57	-7.24	11.03			0.0030	100.64	2.98	
		0.1080	-4.22	2.36	5.20	8.42	6.73	9.22	0.0038	0.0038	105.26	1.06
		1.0800	-2.02	1.64	-6.94	4.55			0.0045	108.68	3.82	
23	QRCG	0.0880	-7.81	2.52	-10.62	3.72			0.1570	91.67	5.43	
		0.1760	6.50	1.29	-8.51	2.51	6.31	4.44	0.1960	0.1960	101.93	0.99
		0.8800	-11.61	1.87	-13.18	2.12			0.2350	100.26	1.42	
24	KRCG	0.0430	-5.34	2.86	-6.65	2.28			0.1080	91.16	3.61	
		0.0860	3.61	1.77	-0.21	4.38	6.53	2.41	0.1730	0.1730	95.77	2.97
		0.1720	-4.98	1.01	-6.78	3.07			0.2080	94.12	2.25	
25	Lute	0.0290	3.58	2.19	1.04	11.73			0.0017	97.32	0.44	
		0.0580	13.38	0.87	11.96	3.20	8.68	10.6	0.0022	0.0022	92.14	4.70
		0.5800	-10.07	2.94	-5.08	5.50			0.0026	108.91	1.48	
26	Quer	0.0335	-1.02	2.25	-7.41	11.27			0.0080	104.73	0.44	
		0.0670	11.65	1.35	8.94	5.14	7.46	7.77	0.0100	0.0100	113.49	3.79
		0.6700	-9.63	2.65	-8.53	4.28			0.0120	85.77	6.35	
27	Apig	0.0405	-6.22	2.85	-4.74	10.50			0.0052	97.44	1.10	
		0.0810	-10.57	1.32	7.79	6.91	4.50	8.27	0.0065	0.0065	111.10	4.43
		0.8100	-13.44	2.57	-11.16	3.68			0.0078	114.69	4.35	
28	Nari	0.0200	-0.35	5.91	-1.65	6.68			0.0025	103.59	0.52	
		0.2000	13.64	5.77	13.87	3.03	2.42	2.89	0.0032	0.0032	113.63	2.21
		2.0000	2.45	0.85	4.57	4.89			0.0038	102.08	0.58	

(Continued)

	Metabolite	Precision (RSD,%)					Repeatability (RSD,%, n=6)	Stability (RSD,%, n=6)	Original amount	Spiked amount	Recovery (%, n= 3)	RSD (%)
		Intraday(n= 6)		Interday(n= 6)								
		C( µg/mL)	RE	RSD	RE	RSD						
29	Kaem	0.0450	-3.48	4.58	-0.08	3.96	8.42	6.94	0.0075	0.0060	101.68	1.76
		0.0900	12.59	0.65	14.50	3.42				0.0075	109.97	5.79
		0.9000	-12.83	2.02	-6.77	5.16				0.0090	88.73	2.42
30	Syri	0.0370	-4.03	2.44	-6.38	3.13	7.06	8.00	0.0003	0.0002	102.28	3.79
		0.0740	13.57	0.34	7.01	8.69				0.0003	98.06	5.67
		0.7400	-14.01	1.90	-13.1	1.60				0.0003	110.42	5.19
31	Isor	0.0315	-1.85	1.74	-4.48	12.79	4.72	7.22	0.0057	0.0046	86.79	1.58
		0.0630	7.88	2.74	5.29	8.74				0.0057	98.86	5.13
		0.6300	-13.21	2.58	-12.67	1.77				0.0068	105.43	1.70
32	Amentoflavone	0.0180	-3.37	3.08	1.93	4.88	8.35	7.10	0.0054	0.0043	85.68	0.77
		0.0360	2.17	4.40	1.92	5.09				0.0054	88.89	2.77
		0.0720	-1.73	3.44	0.11	5.04				0.0065	110.26	5.88
33	Bilobetin	0.0255	-7.15	2.51	-9.98	8.23	8.48	7.31	0.1420	0.1140	90.04	5.47
		0.0510	-12.67	2.30	-14.23	2.53				0.1420	113.38	1.99
		0.1020	-9.67	2.51	-10.65	3.18				0.1700	110.42	3.12
34	Isoginkgetin	0.0235	-4.20	1.69	-0.78	3.47	8.43	6.32	0.3650	0.2920	97.57	1.30
		0.0470	-7.41	0.79	-6.47	1.88				0.3650	86.26	1.60
		0.0940	-13.70	4.56	-12.89	3.10				0.4380	86.65	3.34
35	Ginkgetin	0.0340	-7.66	1.84	-3.84	5.79	6.81	5.59	0.3040	0.2430	92.70	6.07
		0.0680	-9.34	3.64	2.45	10.71				0.3040	105.30	4.61
		0.1360	-13.97	4.97	-9.96	7.42				0.3650	100.88	3.76

(Continued)

Metabolite	Precision (RSD,%)					Repeatability (RSD,%, n=6)	Stability (RSD,%, n=6)	Original amount	Spiked amount	Recovery (%, n= 3)	RSD (%)
	Intraday(n= 6)		Interday(n= 6)								
	C( µg/mL)	RE	RSD	RE	RSD						
	0.0275	-9.92	2.67	-5.60	13.77				0.7500	107.02	1.50
36	0.0550	-9.10	4.42	-14.08	5.00	7.90	5.91	0.9480	0.9480	104.17	3.97
	0.1100	-2.28	2.36	-6.98	4.49				1.1380	94.43	4.67



Table S4 Concentrations of flavonoid metabolites in 30 *Ginkgo* cultivate varieties (ng/g).

	ZA-1	ZA-2	ZA-3	ZA-4	DLY	YL-13
EGC	26.49±0.74	19.16±0.17	36.69±0.56	26.82±0.85	19.53±0.37	8.17±0.09
HA	34.03±0.16	30.48±2.08	99.91±7.87	45.24±3.15	16.7±0.67	104.96±3.17
Chlorogenic acid	0.70±0.01	0.70±0.00	0.74±0.01	0.83±0.01	0.76±0.00	0.69±0.00
Catechin	150.58±3.86	194.6±1.24	349.86±5.57	308.73±3.24	187.26±3.29	118.36±2.6
CA	8.02±0.24	7.67±0.16	6.04±0.12	24.16±0.39	8.88±0.18	1.45±0.07
Procyanidin B2	15.37±0.50	14.95±0.42	7.57±0.29	8.14±0.41	10.45±0.50	3.60±0.03
EpiCatechin	62.93±2.24	72.11±0.86	28.20±0.57	37.68±1.26	50.86±1.95	24.84±0.48
Dmyri	5.76±0.16	3.78±0.06	3.88±0.17	16.56±0.52	0.87±0.01	0.81±0.03
p-coum	8.24±0.27	5.44±0.08	10.72±0.24	10.47±0.19	4.67±0.06	9.6±0.13
Clitorin	210.43±4.87	562.86±5.64	154.05±1.31	205.07±6.52	45.46±1.79	261.08±4.16
				1109.52±8.4	485.59±12.8	660.24±17.5
Rutin	316.61±7.71	744.25±7.20	915.02±6.82	3	4	9
Dquer	31.39±0.45	13.21±0.49	34.09±0.61	120.40±1.38	13.20±0.22	5.92±0.02
Quer-3-G	37.60±0.91	60.43±0.76	86.80±1.63	79.72±2.09	82.43±3.16	71.24±1.49
QGR	155.89±2.54	150.50±2.42	129.09±0.69	29.80±1.44	111.41±3.84	53.06±0.31
				449.49±16.9		763.07±20.7
Kaem-3-RU	230.41±9.40	599.89±19.28	270.02±4.27	3	218.39±6.84	9
Isor-3-RU	204.69±4.76	297.26±3.11	215.96±4.60	437.23±5.74	248.37±4.6	330.19±7.97
Quer-3-R	51.56±0.83	34.30±0.29	57.94±1.42	8.19±0.33	55.11±1.67	15.79±0.39
Isor-3-G	9.30±0.34	12.38±0.32	19.55±0.4	18.76±0.5	27.48±1.35	27.49±0.41
Kaem-7-G	13.39±0.23	19.22±0.12	7.41±0.15	5.09±0.09	4.55±0.08	5.58±0.10
Apig-7-G	68.75±1.46	129.11±1.55	73.32±0.69	78.38±2.14	54.63±1.25	53.73±1.06
Dkaem	154.47±0.54	77.50±3.02	89.96±2.17	478.61±6.03	34.99±0.45	44.26±0.32
Myri	3.96±0.09	1.87±0.01	4.58±0.11	13.18±0.30	2.05±0.01	1.52±0.02
QRCG	233.89±4.70	236.46±1.79	257.75±4.40	89.05±1.16	176.4±5.47	125.15±2.16
						271.37±12.0
KRCG	216.77±0.95	311.66±3.81	246.07±3.80	41.00±1.49	122.82±0.92	9
Luteolin	29.88±0.76	11.18±0.15	16.89±0.51	59.45±0.92	15.68±0.25	2.92±0.12
Quer	8.88±0.23	3.28±0.07	10.56±0.40	28.86±0.67	5.19±0.17	2.16±0.05
Apig	22.08±0.32	11.91±0.05	17.36±0.47	84.18±1.74	8.58±0.29	6.05±0.11
Nari	29.14±0.02	19.99±0.24	24.66±0.72	206.12±2.79	22.27±0.49	7.84±0.04
Kaem	6.35±0.17	2.52±0.10	3.22±0.03	11.85±0.27	1.83±0.07	1.63±0.05
Syri	0.39±0.00	0.06±0.00	0.25±0.01	0.74±0.03	0.39±0.03	-
Isor	4.33±0.11	1.42±0.02	4.70±0.15	16.61±0.23	5.25±0.24	1.65±0.04
Amentoflavone	10.45±0.46	18.65±1.08	19.55±0.92	13.59±0.37	22.62±0.67	12.97±0.48
Bilobetin	271.15±11.51	261.25±12.74	262.91±8.22	343.77±6.57	367.86±3.25	216.68±3.53
			385.44±10.9			
Isoginkgetin	747.13±5.32	731.11±14.37	7	465.08±1.77	304.54±3.98	547.77±5.47
Ginkgetin	681.61±17.99	617.93±18.38	688.17±11.7	590.48±8.24	939.45±18.0	487.33±12.9

			2		3	8
	1541.42±29.7	1222.28±44.8	992.74±26.3	1067.33±16.	783.29±21.8	
Sciadopitysin	5	1	7	9	9	917.12±8.24

(Continued)

	XYZ	XC-9	DFZ	TX-1	TX-3	TX-4
EGC	16.37±1.37	10.54±0.39	13.26±0.34	15.37±0.34	28.12±0.78	14.09±1.06
HA	98.02±4.19	34.56±0.96	12.07±0.72	48.79±1.56	231.57±22.91	16.51±1.19
Chlorogenic acid	0.69±0.00	0.71±0.01	0.74±0.01	0.72±0.00	0.76±0.01	0.70±0.01
Catechin	80.94±6.62	213.00±7.75	87.59±1.16	241.71±3.91	165.95±3.96	114.09±0.81
CA	3.79±0.14	5.41±0.33	1.65±0.04	17.92±0.24	37.32±1.12	2.79±0.03
Procyanidin B2	5.02±0.42	12.24±0.44	11.07±0.25	10.25±0.40	10.25±0.68	6.85±0.04
EpiCatechin	25.21±1.01	46.02±0.86	36.61±0.19	40.25±1.89	36.58±0.43	32.78±0.05
Dmyri	2.34±0.02	1.05±0.02	0.77±0.03	2.85±0.05	4.22±0.30	1.67±0.02
p-coum	8.20±0.66	6.35±0.31	4.48±0.16	10.58±0.28	48.92±1.28	3.95±0.21
Clitorin	222.94±5.13	357.67±4.6	142.7±1.66	138.35±2.82	678.73±28.26	158.21±2.83
	303.38±15.4	1002.15±8.7				
Rutin	1	5	233.68±5.24	816.89±19.77	639.6±27.36	222.92±5.43
Dquer	10.37±0.10	9.42±0.30	7.31±0.14	37.97±0.22	26.81±1.96	9.05±0.04
Quer-3-G	22.81±0.72	107.08±1.23	28.33±0.52	88.28±2.20	92.59±1.41	30.94±0.45
QGR	84.77±4.85	123.55±1.03	87.85±0.95	117.75±4.00	96.77±1.94	99.36±1.83
		694.01±23.8			1255.95±40.7	
Kaem-3-RU	320.75±7.31	7	198.87±4.80	545.35±10.04	3	269.58±6.17
		694.43±26.0				
Isor-3-RU	183.94±7.36	7	152.15±2.53	443.21±4.77	767.44±29.97	186.57±1.09
Quer-3-R	22.52±1.78	43.00±0.46	24.91±0.04	48.01±0.90	27.04±0.3	26.70±0.42
Isor-3-G	9.66±0.23	34.01±0.21	8.52±0.05	29.06±1.19	56.79±0.43	11.31±0.29
Kaem-7-G	6.16±0.12	3.72±0.06	9.78±0.25	6.04±0.34	7.76±0.10	6.37±0.05
Apig-7-G	35.98±2.34	48.55±0.56	71.34±0.64	76.97±1.57	61.19±0.78	44.28±0.27
Dkaem	55.02±0.14	35.7±1.91	25.71±0.41	189.33±1.73	282.27±5.74	42.63±0.33
Myri	1.54±0.03	2.13±0.05	1.45±0.01	9.8±0.29	10.1±0.04	1.64±0.01
QRCG	129.00±9.84	232.35±4.87	163.12±2.84	207.46±5.51	191.39±0.88	143.68±1.54
KRCG	186.76±7.37	243.97±4.20	145.98±2.27	273.61±3.33	436.51±15.59	171.06±3.33
Luteolin	6.99±0.55	3.43±0.25	2.12±0.06	38.75±1.44	63.1±0.53	6.97±0.23
Quer	1.62±0.11	4.94±0.31	1.02±0.01	24.03±0.22	27.3±0.10	2.79±0.11
Apig	7.52±0.46	9.80±0.28	4.93±0.08	54.62±1.40	54.06±0.26	5.92±0.31
Nari	9.05±0.04	8.89±0.50	10.14±0.17	43.21±0.26	50.95±0.51	12.15±0.08
Kaem	1.54±0.15	2.92±0.23	0.42±0.02	13.78±0.38	34.76±0.26	1.65±0.03
Syri	0.05±0.00	0.15±0.01	-	1.87±0.06	2.72±0.04	0.24±0.00

Isor	0.82±0.03	5.45±0.17	-	20.88±0.84	41.14±0.14	2.21±0.07
Amentoflavone	5.27±0.43	10.7±0.41	12.47±0.28	38.27±1.96	42.88±3.11	13.59±0.82
		226.77±14.7				280.78±15.8
Bilobetin	187.32±2.19	3	319.02±10.43	632.99±7.33	661.27±27.96	8
		530.81±13.7				
Isoginkgetin	499.8±3.33	8	610.09±16.19	600.11±19.58	909.15±28.46	652.09±3.70
		400.35±17.4		1005.62±44.0		611.46±20.5
Ginkgetin	400.00±8.91	4	556.90±14.3	2	835.45±41.87	6
	988.78±24.2	732.73±50.8	1161.90±19.5		1380.5±122.6	1166.5±60.3
Sciadopitysin	8	7	9	898.21±36.16	2	3

(Continued)

	SNFS	TC231	DTFS	CRBG	PXCBG	TC202
EGC	11.3±0.19	31.29±0.13	17.36±0.26	13.38±0.65	135.74±4.10	14.2±0.30
HA	25.55±2.47	31.55±0.75	32.07±0.87	15.85±0.67	81.36±6.10	42.19±1.83
Chlorogenic acid	0.72±0.01	0.74±0.01	0.70±0.00	0.71±0.01	0.73±0.01	0.73±0.00
Catechin	311.83±4.89	313.69±5.57	95.19±0.46	110.95±5.61	453.71±15.44	166.99±2.72
CA	6.86±0.24	14.70±0.39	10.46±0.12	8.89±0.43	14.00±0.46	7.82±0.13
Procyanidin B2	13.81±0.08	22.06±1.26	7.75±0.19	3.63±0.12	2.29±0.17	19.01±0.27
EpiCatechin	64.05±1.63	64.18±1.02	33.14±0.43	23.85±0.78	9.28±0.00	67.01±0.70
Dmyri	1.09±0.01	1.36±0.01	1.41±0.02	1.30±0.01	3.52±0.03	3.70±0.08
p-coum	4.58±0.03	6.78±0.26	5.44±0.09	0.58±0.05	15.71±0.29	6.21±0.13
Clitorin	130.85±0.58	217.41±3.36	182.61±1.80	195.13±2.91	288.01±1.29	108.75±0.48
		1795.34±26.5		603.59±28.8		
Rutin	5	1726.37±27.08	246.31±4.53	8	609.16±10.54	792.92±21.16
Dquer	19.46±0.19	6.82±0.04	8.98±0.09	18.96±0.12	18.78±0.19	13.38±0.06
Quer-3-G	171.5±0.88	148.64±1.22	28.5±0.55	103.11±2.81	79.04±0.51	47.62±0.24
QGR	85.37±1.51	166.44±1.18	93.86±1.54	134.39±0.64	177.03±3.02	130.59±0.40
				365.69±11.5		
Kaem-3-RU	5	836.59±11.78	195.58±3.84	1	331.72±11.60	341.49±10.42
Isor-3-RU	1178.49±7.17	1068.84±13.81	146.12±1.49	296.32±5.23	415.76±7.06	254.77±4.71
Quer-3-R	19.59±0.11	55.35±1.04	25.89±0.35	41.68±1.52	70.51±0.80	43.97±0.13
Isor-3-G	60.09±0.75	41.21±0.75	7.71±0.04	37.43±0.53	26.36±0.25	11.5±0.33
Kaem-7-G	11.97±0.03	4.15±0.08	9.47±0.42	6.27±0.21	6.54±0.21	8.55±0.14
Apig-7-G	306.55±8.80	89.36±1.60	59.39±0.34	54.23±1.33	49.42±0.94	70.92±0.20
Dkaem	99.99±0.23	21.97±0.04	36.31±0.27	77.32±0.50	80.06±0.67	117.49±0.30
Myri	3.65±0.04	3.54±0.01	1.62±0.02	3.84±0.11	6.79±0.13	5.09±0.03
QRCG	170.57±1.31	296.55±1.45	155.37±1.17	228.52±3.22	341.44±4.26	253.05±3.07

				224.85±18.8		
KRCG	256.6±2.00	349.08±6.79	163.14±3.60	2	233.60±5.00	226.08±2.45
Luteolin	13.26±0.08	5.47±0.07	5.86±0.00	15.17±0.30	14.31±0.24	24.41±0.33
Quer	11.14±0.11	12.57±0.14	2.05±0.01	7.48±0.15	15.22±0.20	11.88±0.28
Apig	25.31±0.22	10.38±0.10	7.85±0.19	14.12±0.48	29.74±0.12	28.48±0.42
Nari	27.33±0.18	13.64±0.05	13.99±0.25	14.77±0.05	18.19±0.15	32.1±0.13
Kaem	5.43±0.11	4.01±0.13	1.49±0.05	2.79±0.10	6.61±0.12	5.99±0.15
Syri	1.06±0.02	0.60±0.01	0.10±0.01	0.31±0.01	0.54±0.01	0.39±0.01
Isor	12.27±0.05	9.71±0.22	0.84±0.01	5.35±0.12	12.79±0.17	6.19±0.17
Amentoflavone	52.48±0.20	25.31±0.46	10.99±0.09	18.61±0.48	19.49±1.86	14.53±0.31
				410.54±26.3		
Bilobetin	807.97±10.39	579.39±12.13	218.24±2.87	6	468.23±21.07	302.83±3.39
			504.76±12.6	598.73±40.8		
Isoginkgetin	662.69±7.74	785.25±8.98	6	2	629.13±23.60	619.87±14.51
	1239.65±38.2			981.14±22.0		
Ginkgetin	9	742.96±28.66	422.05±6.87	1	848.2±15.90	535.37±13.03
		1261.85±103.8	807.36±69.2	1325.58±5.5	1062.03±30.5	1058.59±25.0
Sciadopitysin	845.49±55.01	2	9	5	0	7

(Continued)

	TM-2	TM-3	TM-4	DML	GL-2	GL-6
EGC	39.09±2.83	14.03±0.11	12.72±0.47	13.92±0.35	8.89±0.41	9.19±0.88
HA	71.14±1.06	39.82±2.16	37.47±2.33	40.6±0.87	56.34±3.36	54.1±5.35
Chlorogenic acid	3.49±0.04	0.73±0.01	0.71±0.02	0.72±0.02	0.71±0.00	0.70±0.01
Catechin	285.31±10.37	150.42±1.07	101.87±1.64	165.71±2.45	175.25±4.15	212.55±6.28
CA	13.88±0.99	13.79±0.08	19.28±0.44	12.04±0.16	7.55±0.38	8.34±0.42
Procyanidin B2	35.65±1.16	11.92±0.32	9.49±0.30	16.21±0.29	10.46±0.52	13.46±0.02
EpiCatechin	84.08±1.99	48.28±0.39	41.54±0.35	54.21±0.58	64.25±2.37	73.92±0.40
Dmyri	3.98±0.11	1.72±0.02	1.18±0.03	2.34±0.03	1.10±0.02	4.10±0.12
p-coum	10.19±0.98	5.33±0.04	6.55±0.60	5.28±0.08	5.99±0.22	12.54±0.16
Clitorin	233.95±4.96	130.89±0.73	221.36±5.33	148.21±0.62	299.2±7.77	314.58±2.85
	2278.79±120.3					
Rutin	1	964.6±21.91	661.69±38.61	654.94±11.37	613.00±7.33	595.54±16.22
Dquer	17.09±0.08	9.62±0.20	13.70±0.12	12.74±0.13	16.06±0.02	40.20±0.46
Quer-3-G	185.64±10.62	63.54±0.44	68.58±3.56	55.87±1.02	85.60±2.90	130.29±0.55
QGR	170.35±3.11	99.06±0.60	137.6±3.73	135.09±2.05	154.11±5.82	244.1±1.29
					313.32±10.0	
Kaem-3-RU	1282.74±41.91	621.32±19.01	471.49±21.2	432.72±9.28	5	417.72±4.57

Isor-3-RU	934.66±3.19	297.15±3.55	462.47±19.55	281.88±5.25	294.48±7.04	498.82±9.99
Quer-3-R	38.47±1.11	33.9±0.13	30.44±1.11	40.35±0.64	32.60±0.86	85.72±1.07
Isor-3-G	73.26±3.66	18.66±0.65	17.21±0.64	15.71±0.46	23.80±0.12	42.83±0.44
Kaem-7-G	18.75±0.23	6.19±0.14	5.99±0.22	5.63±0.41	10.58±0.23	13.02±0.23
Apig-7-G	218.02±9.19	87.33±0.84	89.67±2.01	64.33±0.18	69.93±1.26	169.56±4.89
Dkaem	173.79±2.42	84.33±0.86	56.27±0.67	90.38±0.44	65.52±0.56	195.1±1.03
Myri	10.68±0.27	3.51±0.05	3.24±0.10	3.89±0.02	2.89±0.09	7.47±0.14
QRCG	379.03±4.36	188.00±3.10	189.24±5.93	239.33±3.1	202.11±3.7	348.57±2.33
KRCG	210.6±3.14	251.57±2.97	369.06±8.66	199.64±5.77	201.70±2.33	275.36±3.57
Luteolin	26.12±1.27	15.94±0.18	14.84±0.54	19.51±0.25	12.70±0.33	61.86±0.58
Quer	22.93±1.07	10.21±0.21	7.10±0.27	15.89±0.11	5.06±0.13	27.80±0.26
Apig	70.71±3.26	22.74±0.26	13.86±0.49	16.94±0.31	16.09±0.35	71.06±1.05
Nari	42.93±0.60	26.09±0.35	19.73±0.14	26.99±0.32	18.48±0.17	55.28±0.65
Kaem	10.09±0.62	6.07±0.09	3.55±0.11	6.83±0.04	3.13±0.02	13.16±0.20
Syri	0.95±0.01	0.51±0.01	0.46±0.01	1.09±0.01	0.29±0.01	1.06±0.02
Isor	17.99±0.94	8.50±0.08	4.88±0.12	12.3±0.29	3.68±0.08	22.66±0.10
Amentoflavone	15.13±0.84	15.05±1.23	23.83±0.80	9.28±0.90	12.97±0.39	38.84±0.83
Bilobetin	427.87±10.04	360.79±13.00	531.09±16.55	310.29±26.11	277.84±7.71	451.09±9.79
Isoginkgetin	779.43±4.93	811.75±18.80	906.71±34.02	693.92±21.09	449.23±5.47	757.31±12.20 1020.85±18.3
Ginkgetin	653.06±25.91	725.82±6.82 1167.38±98.0	801.96±17.43 1650.18±47.0	690.49±45.35 1114.62±50.2	542.89±9.49 841.88±74.9	7 1869.38±15.5
Sciadopitysin	834.58±81.07	2	8	5	8	3

(Continued)

	GL-9	TCML-1	TCML-2	Taxi-1	Taxi-2	YZYX
EGC	37.25±1.06	18.7±0.34	33.59±0.94	35.73±2.10	10.07±0.05	26.08±1.08
HA	18.36±0.85	31.61±1.61	62.2±5.62	106.8±5.44	95.91±3.81	39.93±3.25
Chlorogenic acid	0.71±0.01	0.71±0.00	0.75±0.01	3.30±0.01	0.70±0.01	0.76±0.00
Catechin	337.09±8.09	123.53±0.71	181.51±2.63	297.59±2.01	123.52±2.18	360.22±7.19
CA	3.35±0.11	5.49±0.14	12.79±0.55	12.36±0.60	11.17±0.03	21.45±0.26
Procyanidin B2	53.55±2.23	11.16±0.11	8.78±0.22	30.73±0.63	10.59±0.05	35.89±1.61
EpiCatechin	135.72±3.25	42.96±0.88	37.03±1.08	92.83±0.26	38.22±0.39	118.49±9.45
Dmyri	4.33±0.05	0.69±0.03	0.45±0.00	2.56±0.02	3.12±0.15	4.28±0.04
p-coum	4.14±0.16	5.41±0.07	10.22±0.30	5.32±0.38	10.79±0.15	6.33±0.27
Clitorin	189.91±4.32	342.05±6.72	5.45±0.22	156.18±1.53	73.32±0.60	200.98±5.46
Rutin	1193.12±29.51	561.53±7.85	936.1±33.32	1105.06±30.28	845.62±6.42	1345.52±16.4
Dquer	13.65±0.18	7.80±0.24	13.93±0.26	13.23±0.15	14.82±0.16	17.48±0.26

Quer-3-G	87.07±2.32	78.01±1.32	64.36±1.84	98.18±3.28	42.32±0.53	98.40±2.66
QGR	218.82±8.12	123.3±1.37	87.81±3.22	188.95±1.23	96.62±3.48	225.07±7.06
Kaem-3-RU	555.82±9.40	459.88±5.38	975.32±5.28	620.88±22.64	521.92±15.34	803.74±21.94
Isor-3-RU	421.35±18.34	326.57±5.54	892.12±16.34	464.57±1.98	253.1±2.29	816.56±12.11
Quer-3-R	54.39±0.66	28.55±0.47	25.76±0.46	63.77±0.76	33.65±0.15	59.62±0.62
Isor-3-G	19.4±0.46	28.13±0.81	20.43±0.36	27.37±0.86	13.16±0.18	26.57±0.93
Kaem-7-G	11.78±0.46	4.44±0.07	4.35±0.25	12.83±0.83	3.22±0.11	16.08±0.46
Apig-7-G	131.12±1.28	46.55±0.34	47.61±1.30	184±6.48	49.47±0.34	241.95±5.33
Dkaem	114.55±0.32	30.93±0.56	57.68±0.89	101.62±0.39	139.94±1.34	158.07±1.43
Myri	2.75±0.02	2.08±0.05	5.04±0.16	11.56±0.23	6.61±0.04	5.19±0.09
QRCG	418.93±9.46	159.69±2.88	240.23±7.22	364.21±2.85	186.12±2.54	400.19±9.22
KRCG	306.84±10.95	182.84±3.93	223.07±2.66	267.76±3.56	258.23±4.90	245.11±3.12
Luteolin	11.10±0.22	10.41±0.22	49.98±1.12	21.41±1.70	28.01±0.13	38.71±0.73
Quer	6.52±0.16	3.26±0.09	12.31±0.38	24.03±0.29	21.88±0.25	18.79±0.08
Apig	11.85±0.35	8.85±0.12	26.50±0.91	39.53±0.69	42.04±0.33	51.28±0.13
Nari	26.91±0.41	12.39±0.35	20.18±0.28	32.42±0.10	39.63±0.32	41.47±0.29
Kaem	2.22±0.11	2.3±0.07	6.24±0.13	10.29±0.32	10.68±0.10	8.76±0.04
Syri	0.19±0.00	0.28±0.01	0.71±0.00	1.41±0.02	1.73±0.04	0.63±0.01
Isor	2.64±0.07	3.21±0.03	11.46±0.37	18.17±0.27	18.75±0.19	10.58±0.21
Amentoflavone	12.07±0.85	11.92±0.33	12.31±0.62	14.67±0.03	18.42±0.32	18.44±0.52
Bilobetin	365.43±10.73	257.35±3.31	402.91±5.97	347.88±8.10	459.27±8.76	491.18±1.37
Isoginkgetin	707.73±24.90	521.17±11.07	233.48±3.46	620.6±13.20	870.84±21.98	701.93±9.38
Ginkgetin	708.57±35.01	528.11±13.09	1462.71±57.18	567.84±5.62	805.09±30.53	813.06±26.15
Sciadopitysin	1017.69±55.07	964.67±68.50	745.36±36.34	671.52±9.80	1435.48±27.3	1698.12±19.39