

Table S1. The relative content of major flavonoid glycosides

Molecular weight (Da)	Formula	Compounds	Class II	Relative content
449.1	C ₂₁ H ₂₀ O ₁₁	Luteolin 7-O-glucoside (Cynaroside)	Flavonoid	23,420,000
593.16	C ₂₇ H ₃₀ O ₁₅	Kaempferol 3-O-rutinoside (Nicotiflorin)	Flavonols	21,362,000
449.11	C ₂₁ H ₂₀ O ₁₁	Quercetin-3-O- α -L-rhamnopyranoside	Flavonols	20,955,000
595.16	C ₂₇ H ₃₀ O ₁₅	Kaempferol-3-O-neohesperidoside	Flavonols	17,111,000
595.16	C ₂₇ H ₃₀ O ₁₅	Luteolin-7-O-rutinoside	Flavonoid	16,898,000
593.16	C ₂₇ H ₃₀ O ₁₅	Kaempferol 3-O-robinobioside (Biorobin)	Flavonols	16,529,000
595.16	C ₂₇ H ₃₀ O ₁₅	Kaempferol-3-O-glucoside-7-O-rhamnoside	Flavonols	13,746,000
595.17	C ₂₇ H ₃₀ O ₁₅	Tetrahydroxyflavone-C-rhamnosyl-glucoside	Flavonoid carbonoside	12,264,000
595.16	C ₂₇ H ₃₀ O ₁₅	Lonicerin	Flavonoid	12,034,000
435.08	C ₂₀ H ₁₈ O ₁₁	Avicularin	Flavonols	11,444,000
447.1	C ₂₁ H ₂₀ O ₁₁	Astragalin (Kaempferol 3-O-Glucoside)	Flavonols	10,000,000
449.11	C ₂₁ H ₂₀ O ₁₁	Kaempferol 3-O- β -D-glucopyranoside	Flavonols	9,056,100
597.15	C ₂₆ H ₂₈ O ₁₆	Quercetin-O-Hexoside-O-Pentoside	Flavonols	8,656,200
447.09	C ₂₁ H ₂₀ O ₁₁	Kaempferol 7-O-glucoside	Flavonols	5,930,100
463.12	C ₂₂ H ₂₂ O ₁₁	Diosmetin-7-O-galactoside	Flavonoid	4,211,900
611.16	C ₂₇ H ₃₀ O ₁₆	Kaempferol-3,7-di-O- β -D-glucopyranoside	Flavonols	4,203,900
627.2	C ₂₇ H ₃₀ O ₁₇	6-Hydroxykaempferol-7,6-O-Diglucoside	Flavonols	4,076,700
611.15	C ₂₇ H ₃₀ O ₁₆	Luteolin-7-O- β -D-gentiobioside	Flavonoid	3,829,600
465.1	C ₂₁ H ₂₀ O ₁₂	Isohyperoside	Flavonols	3,620,300
461.07	C ₂₁ H ₁₈ O ₁₂	Kaempferol-3-O- β -D-glucuronide	Flavonols	3,139,100
593.18	C ₂₈ H ₃₂ O ₁₄	Acacetin-7-O-rutinoside	Flavonoid	2,877,800
479.11	C ₂₂ H ₂₂ O ₁₂	Isorhamnetin-3-O- β -D-glucoside	Flavonols	2,872,500
461.08	C ₂₁ H ₁₈ O ₁₂	Tetrahydroxy-flavone-7-O- β -D-glucuronide	Flavonoid	2,824,300
435.13	C ₂₁ H ₂₄ O ₁₀	Phloretin 2'-O-glucoside	Isoflavones	2,358,300
609.18	C ₂₈ H ₃₂ O ₁₅	Diosmin	Flavonoid	2,224,900
533.1	C ₂₄ H ₂₂ O ₁₄	Kaempferol 3-O-(6''-O-malonyl)-galactoside	Flavonols	2,183,300
533.1	C ₂₄ H ₂₂ O ₁₄	Kaempferol 3-O-(6''-O-malonyl)-glucoside	Flavonols	2,047,800
611.1	C ₂₇ H ₃₀ O ₁₆	8-C-Hexosyl-luteolin O-hexoside	Flavonoid carbonoside	1,985,100
593.18	C ₂₈ H ₃₂ O ₁₄	Chrysoerio-C-rhamnoside-O-rhamnoside	Flavonoid	1,786,200
433.08	C ₂₀ H ₁₈ O ₁₁	Quercetin-3-O- α -L-arabinopyranoside(guajaverin)	Flavonols	1,563,400
627.1	C ₂₈ H ₃₄ O ₁₆	8-C-Hexosyl-hesperetin O-hexoside	Flavonoid carbonoside	1,548,500
463.09	C ₂₁ H ₁₈ O ₁₂	Luteolin 7-O-glucuronide	Flavonoid	1,439,600
463.09	C ₂₁ H ₂₀ O ₁₂	Quercetin-7-O-Glucoside	Flavonols	1,239,200
463.08	C ₂₁ H ₁₈ O ₁₂	Scutellarin	Flavonoid	1,209,900
609.18	C ₂₈ H ₃₂ O ₁₅	Neodiosmin (Diosmetin-7-O-Neohesperidoside)	Flavonoid	1,183,800
463	C ₂₁ H ₂₀ O ₁₂	Quercetin 3-O-glucoside (Isotrifoliin)	Flavonols	1,163,500

463.13	C ₂₂ H ₂₄ O ₁₁	Hesperetin 5-O-glucoside	Dihydroflavonol	1,103,600
611.16	C ₂₇ H ₃₀ O ₁₆	Quercetin glucoside-rhamnoside	Flavonols	1,071,700
609.18	C ₂₈ H ₃₂ O ₁₅	Diosmetin-7-O-rutin	Flavonoid	1,060,600
611.16	C ₃₀ H ₂₆ O ₁₄	Quercetin-O-feruloyl-Pentoside	Flavonols	1,006,200
579.16	C ₂₇ H ₃₀ O ₁₄	Apigenin 7-rutinoside (Isorhoifolin)	Flavonoid	975,380
581.15	C ₂₆ H ₂₈ O ₁₅	Kaempferol-O-Pentoside-O-hexoside	Flavonols	971,630
477.1	C ₂₂ H ₂₀ O ₁₂	Diosmetin-7-O-glucuronide	Flavonoid	962,680
627.15	C ₂₇ H ₃₀ O ₁₇	Quercetin 3,7-bis-O-β-D-glucoside	Flavonols	948,460
449.1	C ₂₁ H ₂₀ O ₁₁	Luteolin-3'-O-β-D-glucoside	Flavonoid	931,390
463	C ₂₁ H ₂₀ O ₁₂	Spiraeoside	Flavonols	916,940
449.1	C ₂₁ H ₂₀ O ₁₁	Luteolin-4'-O-β-D-glucoside	Flavonoid	829,220
475.1	C ₂₂ H ₂₀ O ₁₂	Chrysoeriol O-glucuronic acid	Flavonoid	691,500
465.1	C ₂₁ H ₂₀ O ₁₂	6-Hydroxykaempferol-7-O-glucoside	Flavonols	669,250
463.1	C ₂₁ H ₂₀ O ₁₂	Hyperin	Flavonols	508,030
609.1	C ₂₇ H ₃₀ O ₁₆	Bioquercetin	Flavonols	475,080
451	C ₂₁ H ₂₂ O ₁₁	Eriodictyol 7-O-glucoside	Dihydroflavone	409,500
533.1	C ₂₄ H ₂₂ O ₁₄	Isorhamnetin 3-O-β-(2"-O-acetyl-β-D-glucuronide)	Flavonols	407,450
609.1	C ₂₇ H ₃₀ O ₁₆	Rutin	Flavonols	320,810
773.21	C ₃₃ H ₄₀ O ₂₁	Quercetin glucoside-glucoside-rhamnoside	Flavonols	317,890
417.1	C ₂₀ H ₁₈ O ₁₀	Juglanin	Flavonols	317,680
493.1	C ₂₃ H ₂₄ O ₁₂	Tricin 7-O-hexoside	Flavonoid	308,670
607.1	C ₂₈ H ₃₂ O ₁₅	Chrysoeriol 7-O-rutinoside	Flavonoid	250,040
551.1	C ₂₄ H ₂₂ O ₁₅	Quercetin-7-O-(6'-O-malonyl)-β-D-glucoside	Flavonols	237,290
611.16	C ₂₇ H ₃₀ O ₁₆	Luteolin-7,3'-Di-O-β-D-Glucoside	Flavonoid	213,650
759.2	C ₃₂ H ₃₈ O ₂₁	Quercetin-O-Pentoside-O-Hexoside-O-Hexoside	Flavonols	174,330
625.18	C ₂₈ H ₃₂ O ₁₆	Isochrysoeriol C-hexosyl-O-hexoside	Flavonoid	161,910
475.12	C ₂₃ H ₂₂ O ₁₁	Apigenin-7-O-(6'-O-acetyl)-β-D-glucoside	Flavonoid	152,890
415.1	C ₂₂ H ₂₄ O ₈	Apigenin-3-O-α-L-rhamnoside	Flavonoid	149,300
449.1	C ₂₁ H ₂₀ O ₁₁	Quercitrin	Flavonols	135,080
565.2	C ₂₆ H ₂₈ O ₁₄	Isoschaftoside	Flavonoid carbonoside	117,330
609.19	C ₂₈ H ₃₄ O ₁₅	Hesperidin	Dihydroflavone	116,250
505.1	C ₂₃ H ₂₂ O ₁₃	Quercetin 3-O-(6"-O-acetyl)-galactoside	Flavonols	115,330
789.2	C ₃₃ H ₄₀ O ₂₂	6-Hydroxykaempferol-3,7,6-O-triglycoside	Flavonols	112,900

Table S2. The relative content of major flavonoid aglycones

Molecular weight (Da)	Formula	Compounds	Class II	Relative content
286.04	C ₁₅ H ₁₀ O ₆	Luteolin	Flavonoid	4,983,700
300.05	C ₁₆ H ₁₂ O ₆	Hispidulin	Flavonoid	3,514,700

300.05	C ₁₆ H ₁₂ O ₆	Diosmetin	Flavonoid	3,472,700
304.05	C ₁₅ H ₁₂ O ₇	Taxifolin	Dihydroflavonol	3,057,300
330.07	C ₁₇ H ₁₄ O ₇	Tricin	Flavonoid	1,137,200
286.05	C ₁₅ H ₁₀ O ₆	Isoscutellarein	Flavonoid	1,030,300
330.07	C ₁₇ H ₁₄ O ₇	Jaceosidin	Flavonoid	522,290
372.11	C ₂₀ H ₂₀ O ₇	Tangeretin	Flavonols	500,730
274.07	C ₁₅ H ₁₄ O ₅	Phloretin	Chalcones	498,600
448.08	C ₂₁ H ₂₀ O ₁₁	Isoorientin	Flavonoid carbonoside	436,490
320.04	C ₁₅ H ₁₂ O ₈	Dihydromyricetin(Ampelopsin)	Dihydroflavonol	386,080
272.06	C ₁₅ H ₁₂ O ₅	Naringenin	Dihydroflavone	270,750
402.11	C ₂₁ H ₂₂ O ₈	Nobiletin	Flavonoid	252,030
272.06	C ₁₅ H ₁₂ O ₅	Pinobanksin	Dihydroflavonol	220,840
316.05	C ₁₆ H ₁₂ O ₇	Isorhamnetin	Flavonols	146,200
316.06	C ₁₆ H ₁₂ O ₇	Tamarixetin	Flavonols	121,410