

Supplementary data

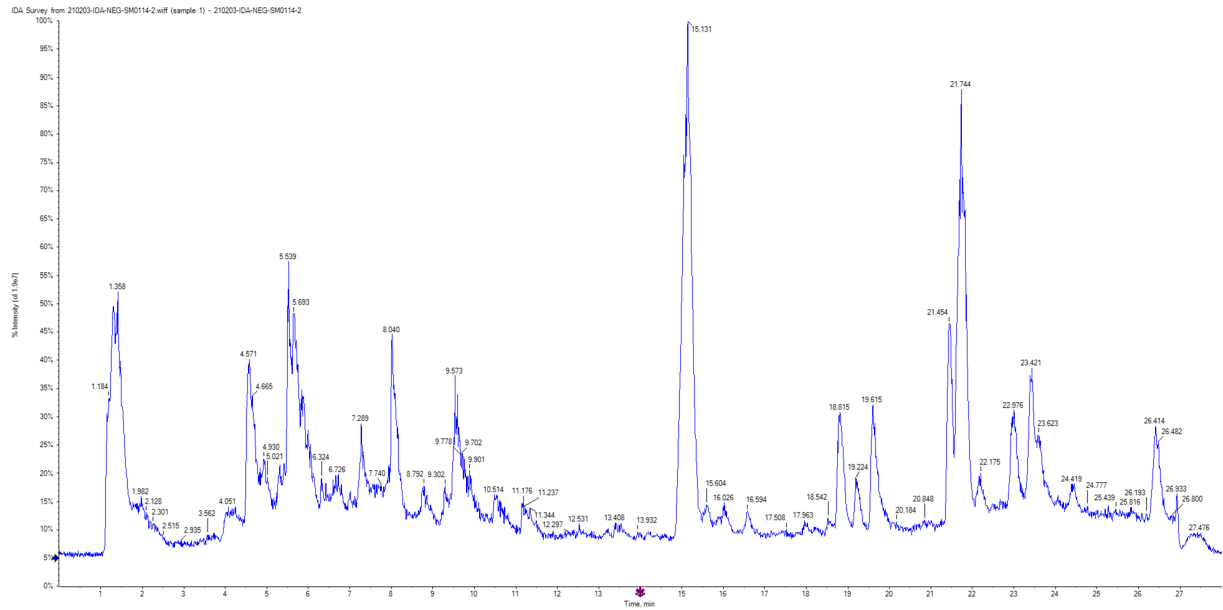
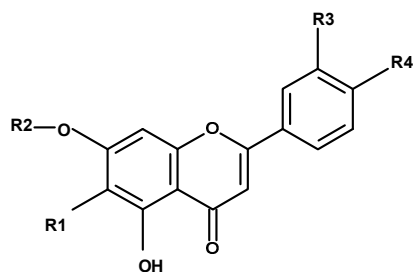


Figure S1. Total ion chromatogram (TIC) of methanol extract of *C. macrocarpa* leaves (negative mode)

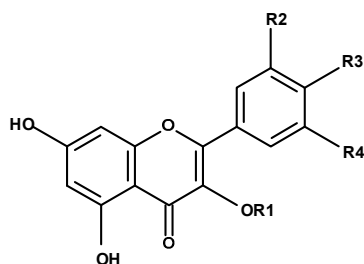
Table S1. The sequences of the utilized primers

Gene	Primer	Sequence
<i>norA</i>	Forward	5'-GACATTTACCAAGCCATCAA-3'
	Reverse	5'-TGCCATAAATCCACCAATCC-3'
<i>norB</i>	Forward	5'-GCTACACCATCAACAGATACAGCAA-3'
	Reverse	5'-ACTCAATGCGACGCCAAA-3'
<i>norC</i>	Forward	5'-TGGGTTGGAGATGGATTTTC-3'
	Reverse	5'-ACAATTAGCCCTGCAACGTC-3'
16srRNA	Forward	5'-CGTGGAGGGTCATTGGA-3'
	Reverse	5'-CGTTTACGGCGTGGACT-3'



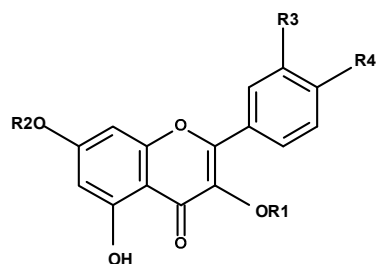
Compound	R1	R2	R3	R4
Luteolin	H	H	OH	OH
Luteolin-7-O-glucoside	H	Glu	OH	OH
Luteolin-3',7-diglucoside	H	Glu	O-Glu	OH
Apigenin-7-O-neoheperidoside	H	Neo	H	OH
Apegenin-7-O-glucoside	H	Glu	H	OH
Acacetin	H	H	H	OCH ₃
Baicalein-7-O-glucouronide	OH	Gluc	H	H

Figure S2a. Structures of flavones and flavones glycosides identified in *C. macrocarpa* leaves methanol extract of leaves (Glu= glucose, Neo= neoheperidoside, Gluc= glucuronicide)



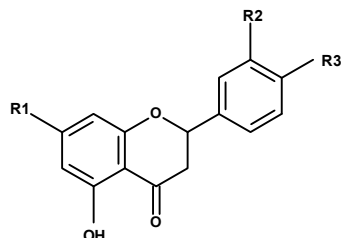
Compound	R1	R2	R3	R4
3, 5, 7-Trihydroxy-4'-methoxyflavone	H	H	OCH ₃	H
Myricetin	H	OH	OH	OH
Myricitrin	Rha	OH	OH	OH
Syringetin-3-O-glucoside	Glu	OCH ₃	OH	OCH ₃
Syringetin-3-O-galactoside	Gal	OCH ₃	OH	OCH ₃
Isorhamnetin-3-O-glucoside	Glu	OCH ₃	OH	H
Isorhamnetin-3-O-rutinoside	Rutinoside	OCH ₃	OH	H
4',5,7-Trihydroxy-3'-methoxy-flavonol	H	OCH ₃	OH	H

Figure S2b. Structures of 3',4',5'-trihydroxy, methoxylated, and glycosidic flavonols identified in *C. macrocarpa* leaves methanol extract (Rha= rhamnose, Glu= glucose, Gal= galactose)



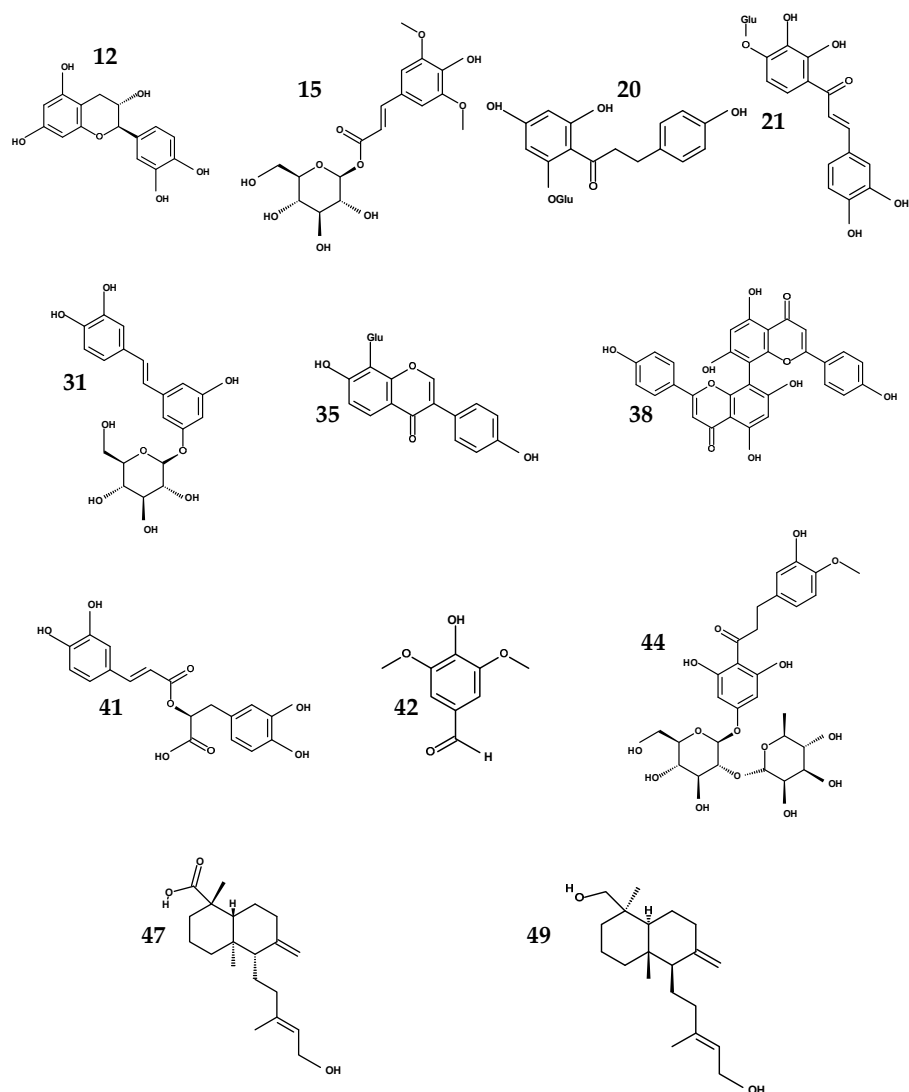
Compound	R1	R2	R3	R4
Quercetin	H	H	OH	OH
Quercitrin	Rha	H	OH	OH
Quercetin-7-O-rhamnoside	H	Rha	OH	OH
Quercetin-3-O-arabinoside	Ara	H	OH	OH
Quercetin-3,4'-O-di-glucoside	Glu	H	OH	O-Glu
Quercetin-3-O-xyloside	Xyl	H	OH	OH
Quercetin-4'-O-glucoside	H	H	OH	O-Glu
Kampferol-3-O-glucuronoid	Gluc	H	H	OH
Kaempferol-3-O-rhamnoside	Rha	H	H	OH
Kaempferol-3-O-arabinoside	Ara	H	H	OH

Figure S2c. Structures of flavonols and flavonols glycosides (Rha= rhamnose, Ara= arabinose, Xyl= xylose)



Compound	R1	R2	R3
Hesperetin	OH	OH	OCH ₃
Naringenin	OH	H	OH
Naringenin-7-O-glucoside	O-Glu	H	OH
Eriodictyol-7-O-glucoside	O-Glu	OH	OH

Figure S2d. Structures of flavanones and their glycosides



Compound No.	Compound name	Compound No.	Compound name
12	Catechin	38	Cupressuflavone
15	1- <i>O</i> - β -D-glucopyranosyl sinapate	41	Rosmarinic acid
20	Phlorizin	42	Syringaldehyde
21	Okanin-4'- <i>O</i> -glucoside	44	Neohesperidin dihydrochalcone
31	E-3,4,5'-Trihydroxy-3'-glucopyranosyl-stilbene	47	Isocupressic acid
35	Daidzein-8-C-glucoside	49	Agathadiol

Figure S3. Some compounds identified tentatively of *C. macrocarpa* leaves by LC-ESI-MS/MS (Glu=glucose)