

Supplementary

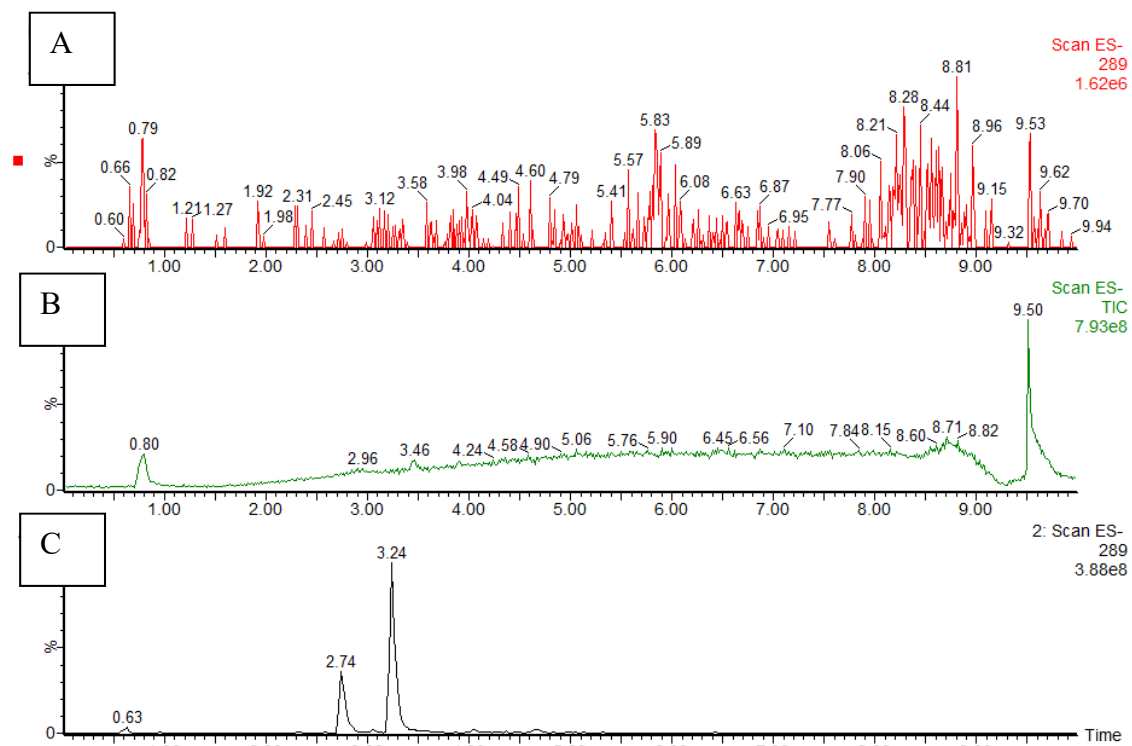


Figure S1. UHPLC-MS chromatograms acquired in A- SIM of the solvent, B- full scan of solvent and C- SIM of the standards.

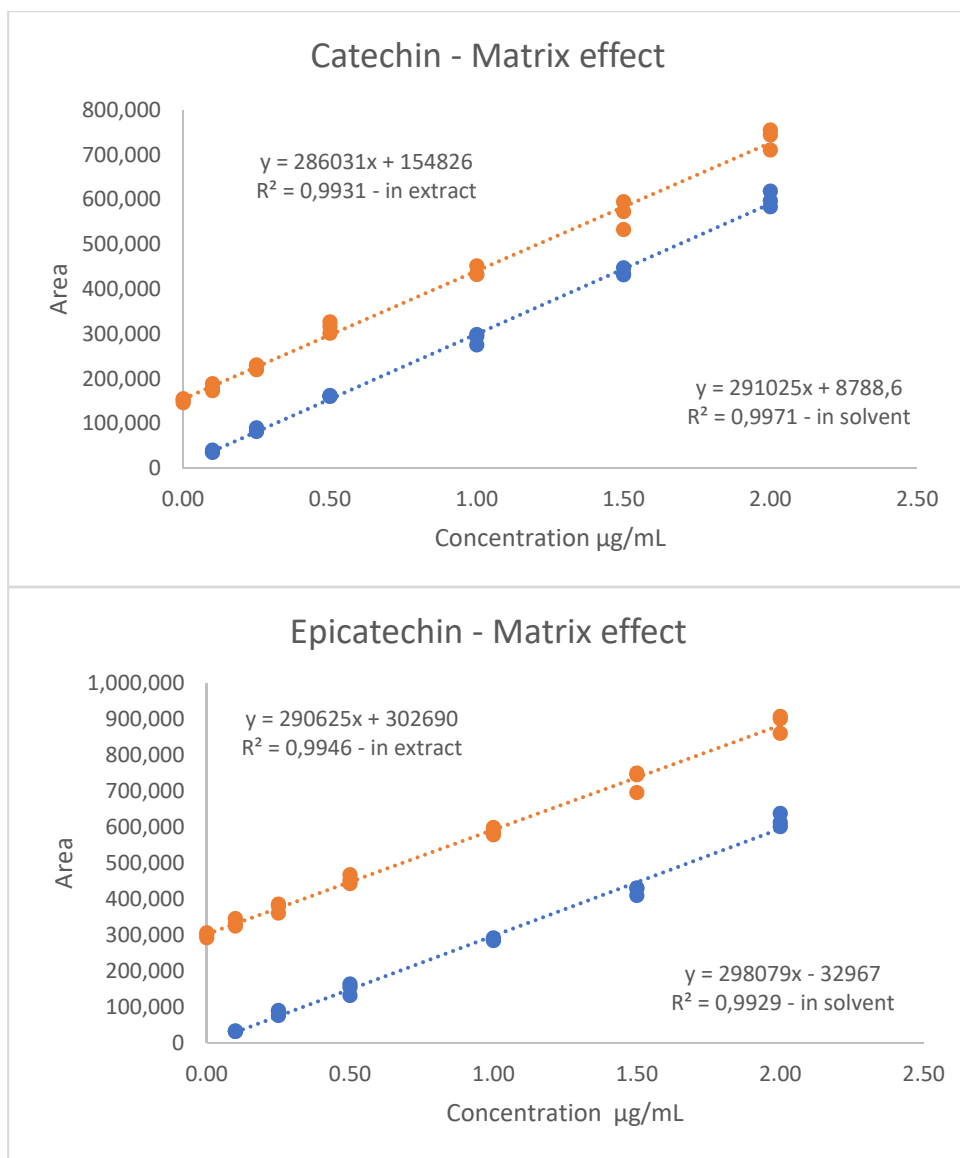


Figure S2. Compared analytical curves of catechin and epicatechin in extracts and solvent.

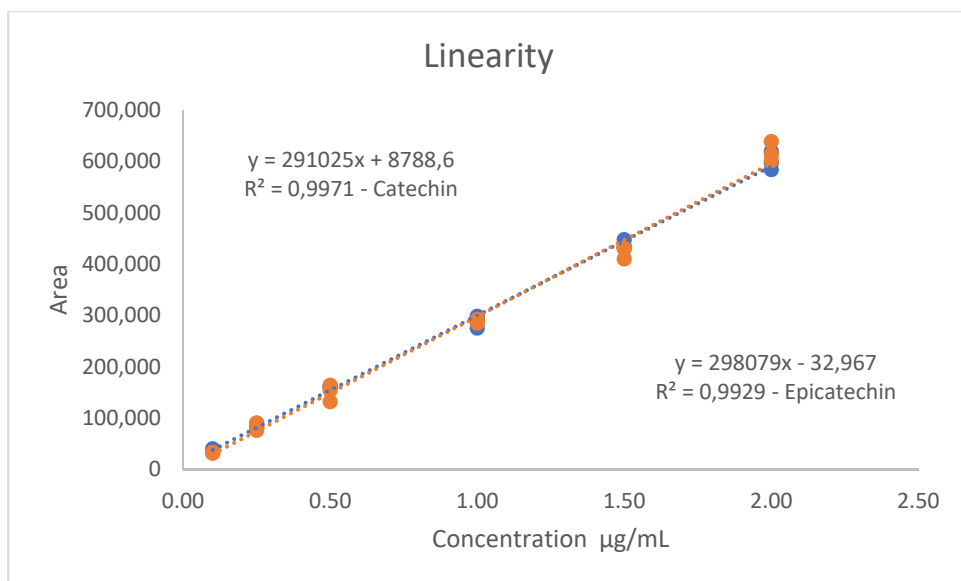


Figure S3. Analytical curves of catechin and epicatechin



Figure S4. Voucher of the authentic *Maytenus ilicifolia* sample (UEC 199156)



Figure S5. Voucher of the authentic *Maytenus aquifolium* sample (UEC 199157)



Figure S6. Voucher of the hybrid *Maytenus* sample (UEC 199158)

Table S1. Repeatability and intermediate precision of the method using calibration curves: catechin ($y = 289268x + 12722$) and epicatechin ($y = 294056x + 10672$).

REP	Catechin	Epicatechin	Catequina	Epicatequina
	[$\mu\text{g/mL}$]	[$\mu\text{g/mL}$]	[$\mu\text{g/mL}$]	[$\mu\text{g/mL}$]
	Repeatability		Intermediate precision	
1	4.22	8.94	4.31	9.05
2	4.62	8.38	4.96	9.83
3	4.30	8.67	4.10	8.75
4	4.36	9.33	4.31	9.64
5	3.78	9.25	4.65	8.84
6	4.31	8.90	4.31	8.66
Average	4.26	8.91	4.44	9.13
SD(σ)	0.28	0.36	0.31	0.49
RSD %	6.5	4.0	7.0	5.4

Table S2. Recovery of Catechin in three levels

Theoretical concentration ($\mu\text{g/mL}$)	Measured concentration ($\mu\text{g/mL}$)	RSD %	Recovery %
0.1	0.11	13.89	109.33
1.0	0.98	3.84	98.50
2.0	2.00	3.98	100.12

Table S3. Recovery of Epicatechin in three levels

Theoretical concentration ($\mu\text{g/mL}$)	Measured concentration ($\mu\text{g/mL}$)	RSD %	Recovery %
0.1	0.10	14.02	103.12
1.0	0.97	3.50	97.90
2.0	2.03	2.06	101.40

Table S4. Detection limit (DL) and quantification limit (QL) of Catechin and Epicatechin

	Linear equation	DL (µg/mL)	QL (µg/mL)
Catechin	Y=289428x + 4732.4	0.03	0.1
	Y=288962x + 3771.8		
	Y=283573x + 6011.1		
Epicatechin	Y=303439x + 3808.7	0.03	0.1
	Y=298011x – 1998.4		
	Y=297270x + 4165.5		

Table S5. Extraction and analytical conditions which were varied and recovery of Catechin and Epicatechin (%)

Condition	Catechin (%)	Epicatechin (%)
Centrifuged	100.0	100.0
PVDF 0.22 µm filter	97.8	103.4
Nominal/ validated	100.0	100.0
Flow 0.19 mL/min	97.8	95.7
Flow 0.21 mL/min	100.7	97.4
Temperature 25°C	100.9	97.1
Temperature 35°C	97.7	98.0
Solv. A 0.5% formic acid	95.5	95.1
Solv. A 1.5% formic acid	101.2	96.7
A different C18 column	99.9	96.9