



Supplementary material

Table S1. Extracted compositions identified peaks area by HPLC-QTOF-MS/MS.

Time (min)	Formula	Mass (<i>m/z</i>)	Compound Identification	MS/MS Fragment (<i>m/z</i>)	UAE	ME
					Peak Area	
18.36	C ₂₀ H ₂₂ O ₅	341	caffeyl glucopyranose	326; 319; 253; 225	0.110	0.097
21.47	C ₁₃ H ₁₄ O ₈	297	benzoyl glucuronide	179; 135; 297	0.223	0.103
22.33	C ₃₀ H ₂₆ O ₁₃	593	dimer propelargonidins	441; 467; 425	0.105	0.068
23.31	C ₂₁ H ₂₂ O ₁₂	465	taxifolin hexoside	285; 179; 301	0.059	0.039
24.72	C ₁₅ H ₁₄ O ₆	289	catechin	289; 181; 137; 125; 151	0.273	0.120
27.91	C ₃₀ H ₂₆ O ₁₂	577	dimer procyanidin	577; 449; 425; 289; 287	0.434	0.359
28.95	C ₃₀ H ₂₆ O ₁₂	577	dimer procyanidin isomer	577; 449; 425; 289; 287	1.154	0.953
30.39	C ₂₀ H ₁₈ O ₁₁	433	quercetin 3-O-xyloside	325; 300; 285; 151	0.062	-
31.54	C ₁₅ H ₁₄ O ₆	289	epicatechin	289; 181; 137; 125; 151	0.865	0.651
35.01	C ₄₅ H ₃₈ O ₁₈	865	trimer procyanidin	577; 451; 407; 289	0.956	0.874
37.24	C ₆₀ H ₅₀ O ₂₄	1153	tetramer procyanidin	865; 577; 451; 289	0.769	0.693
39.24	C ₆₀ H ₅₀ O ₂₄	1153	tetramer procyanidin isomer	865; 577; 451; 289	1.077	0.742
41.33	C ₂₇ H ₃₀ O ₁₆	610	rutin	301	0.377	0.327
45.56	C ₂₁ H ₂₀ O ₁₂	463	isoquercetin	301; 287; 151	0.781	0.459
51.51	C ₂₁ H ₂₀ O ₁₁	447	quercetin	301; 271; 243; 179	2.381	2.040
54.74	C ₁₅ H ₁₄ O ₅	273	afzelechin	273; 147; 138; 126	0.039	0.024
58.05	C ₂₀ H ₁₈ O ₁₁	433	quercetin-3-arabinoside	300; 179	0.161	0.122