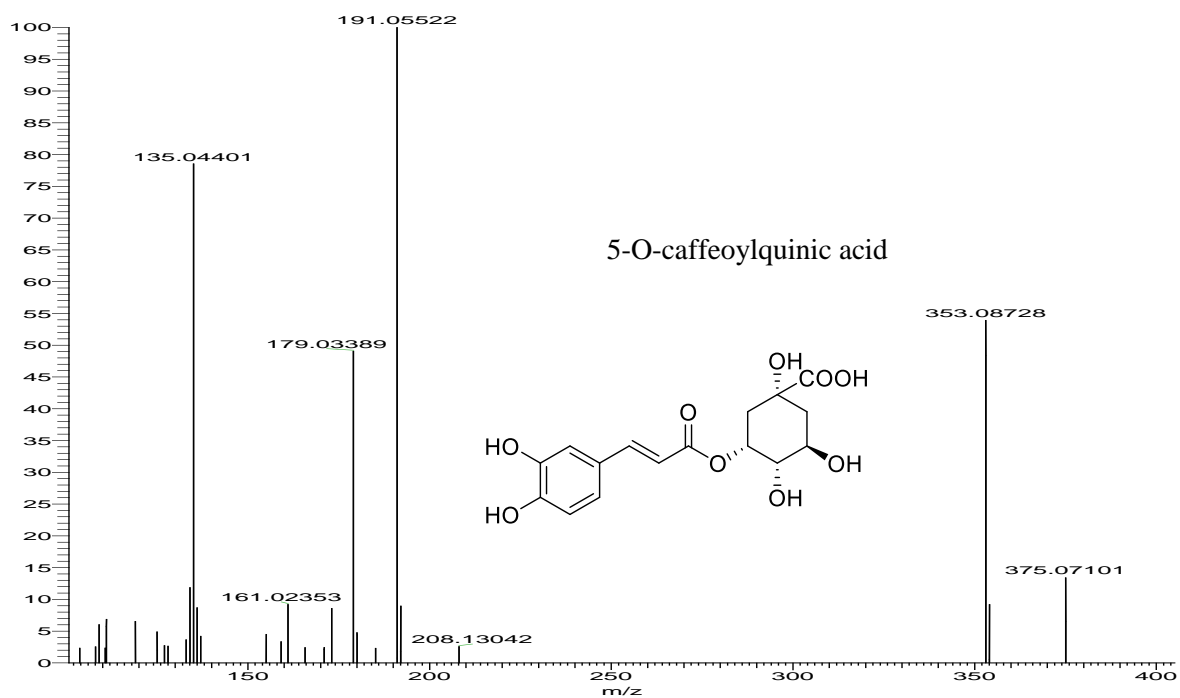
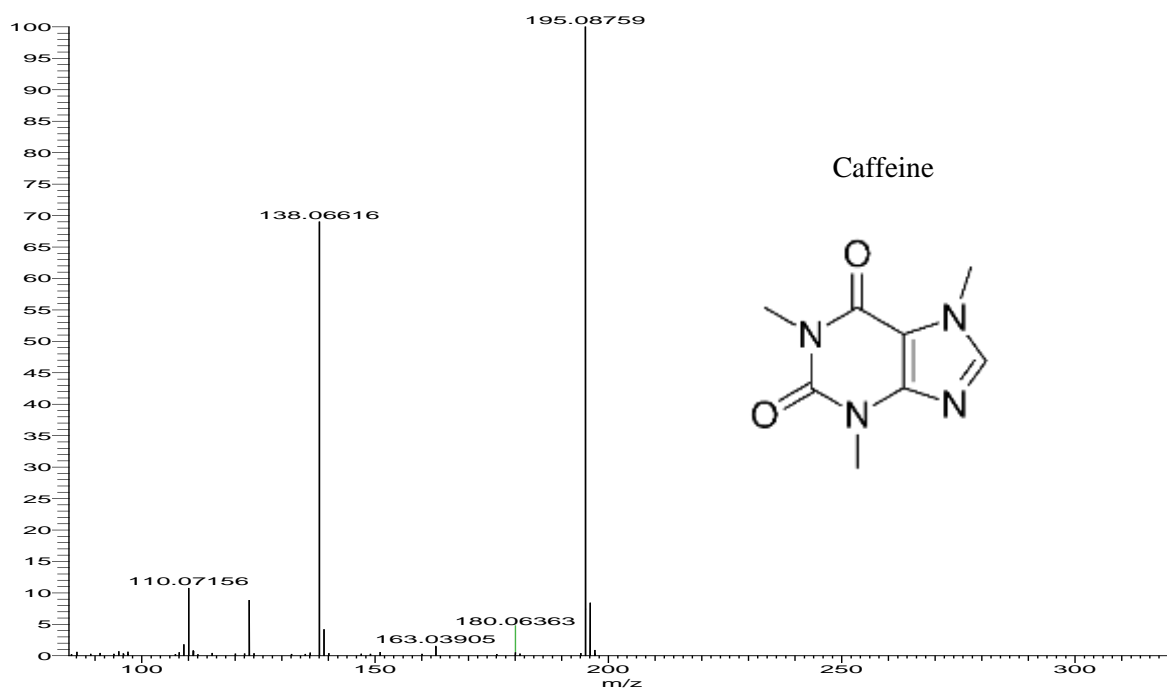
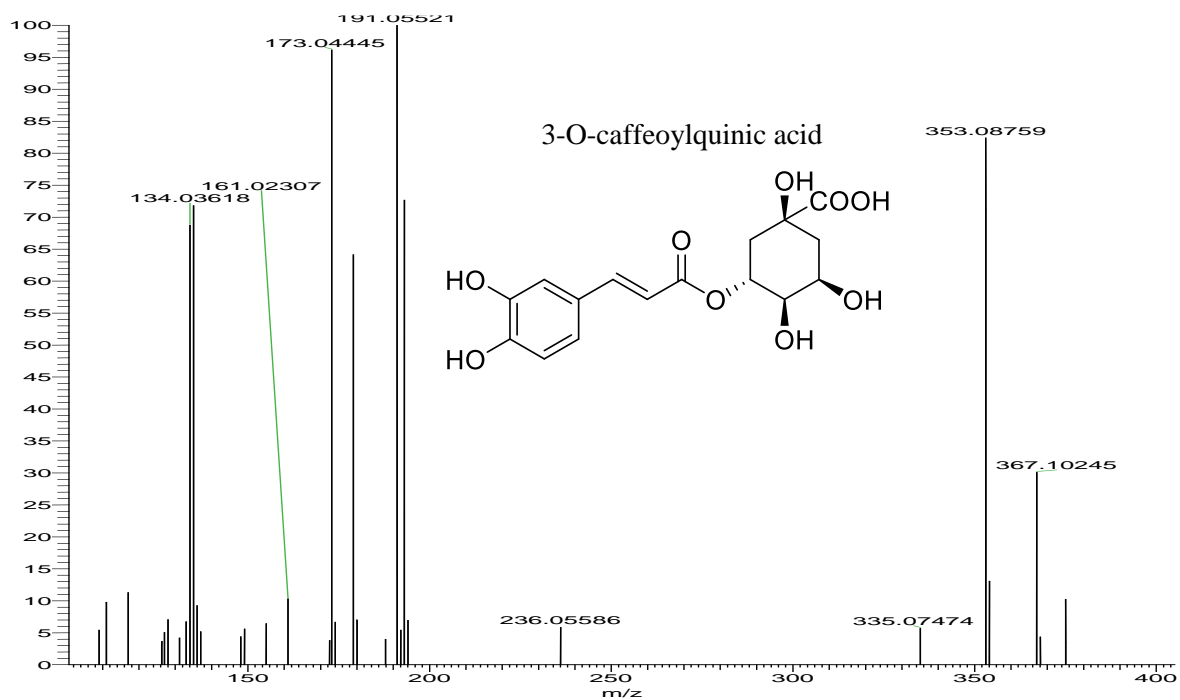
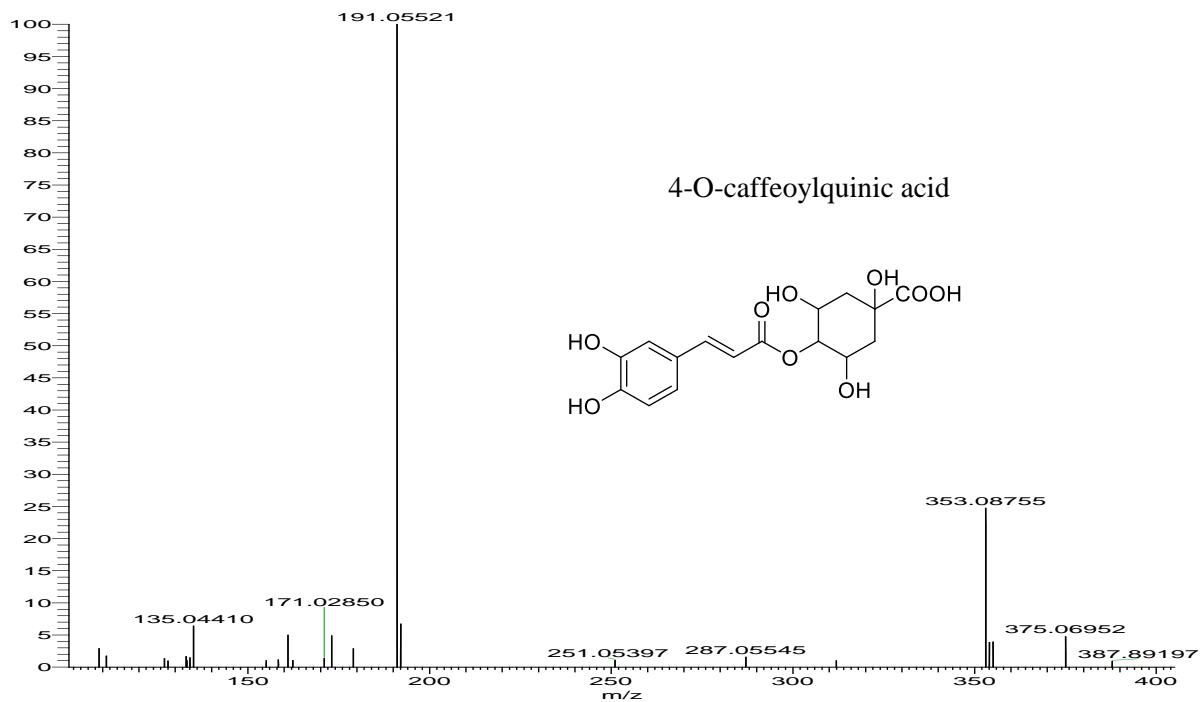
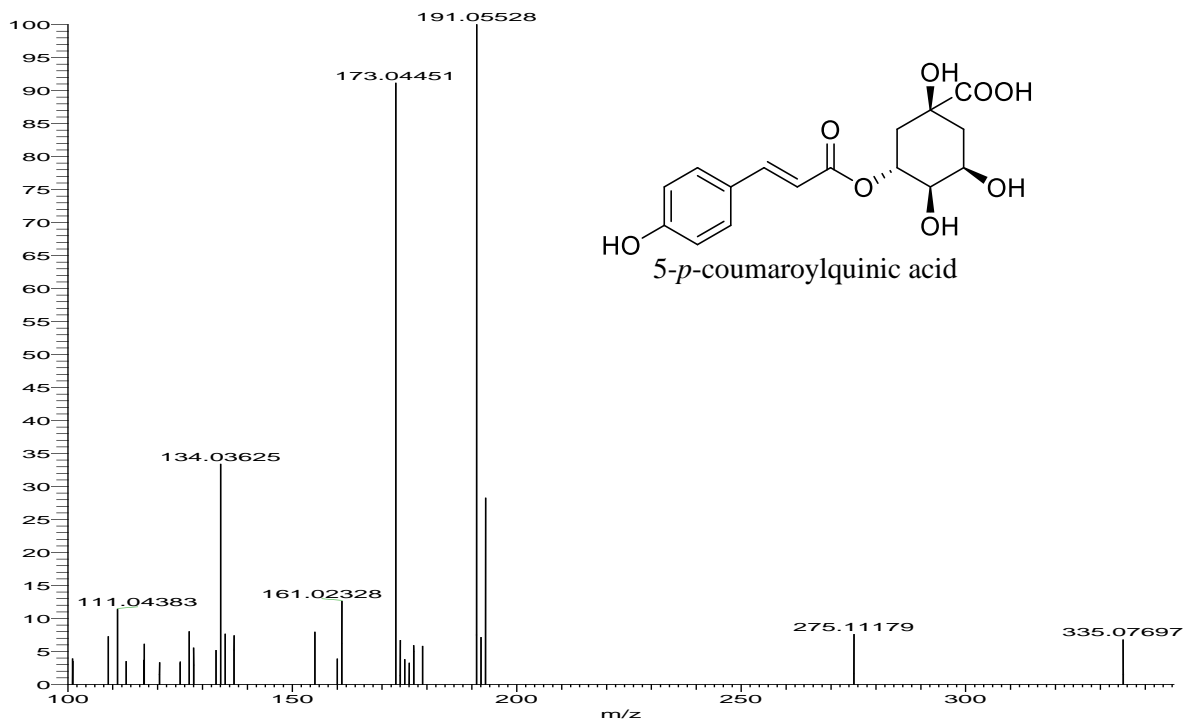
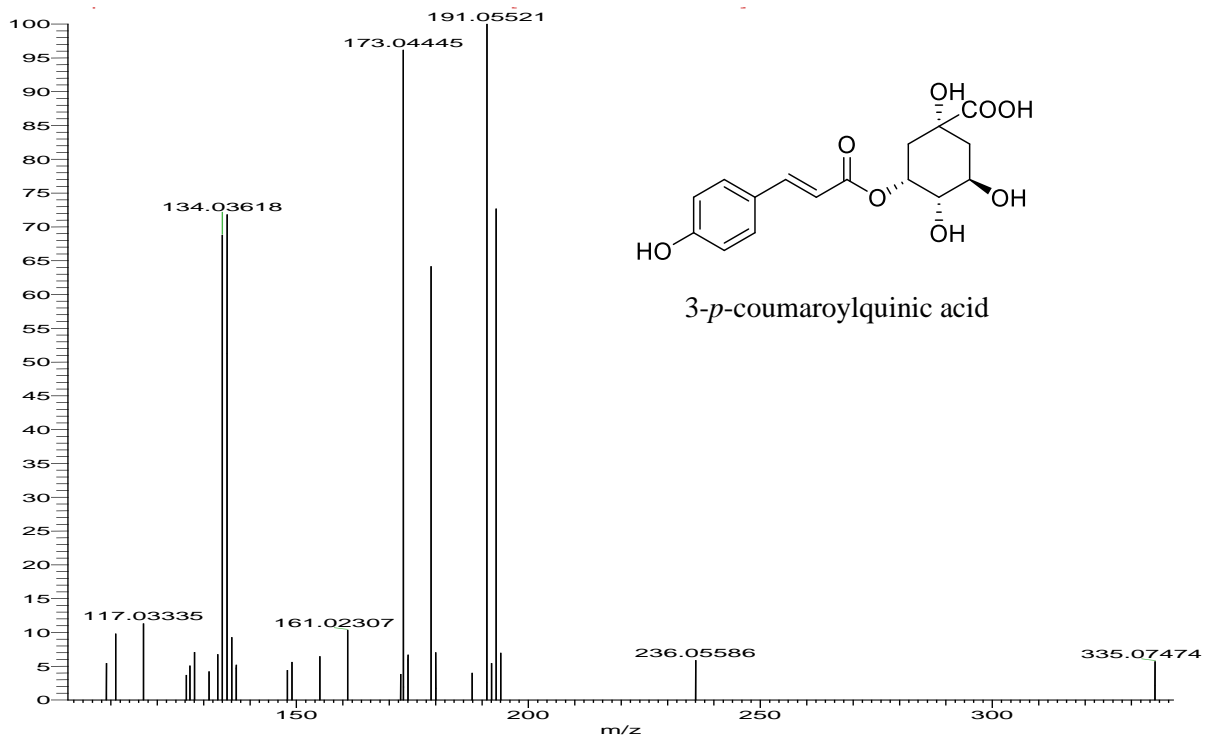
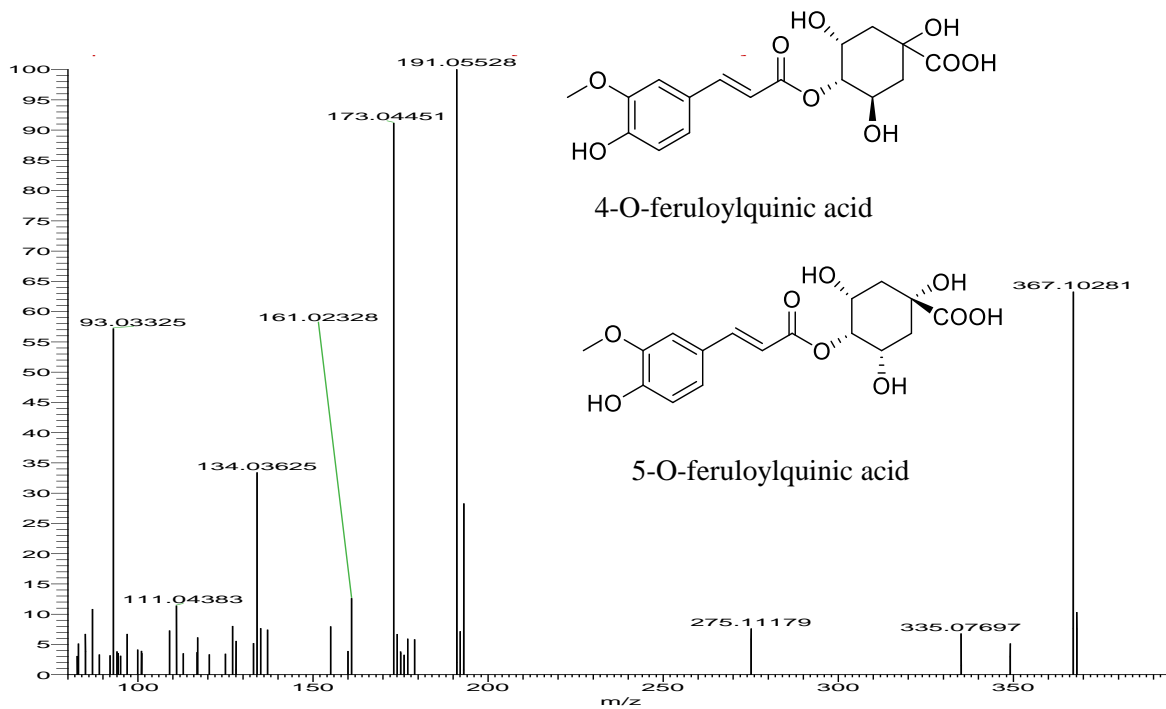
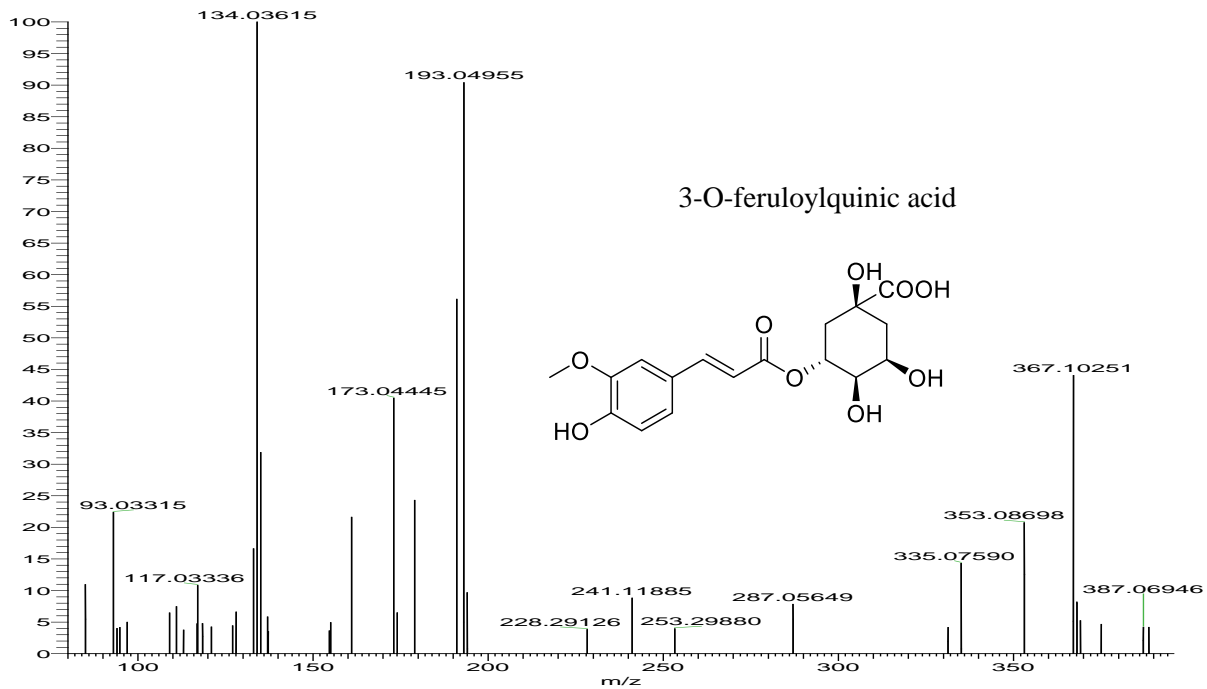


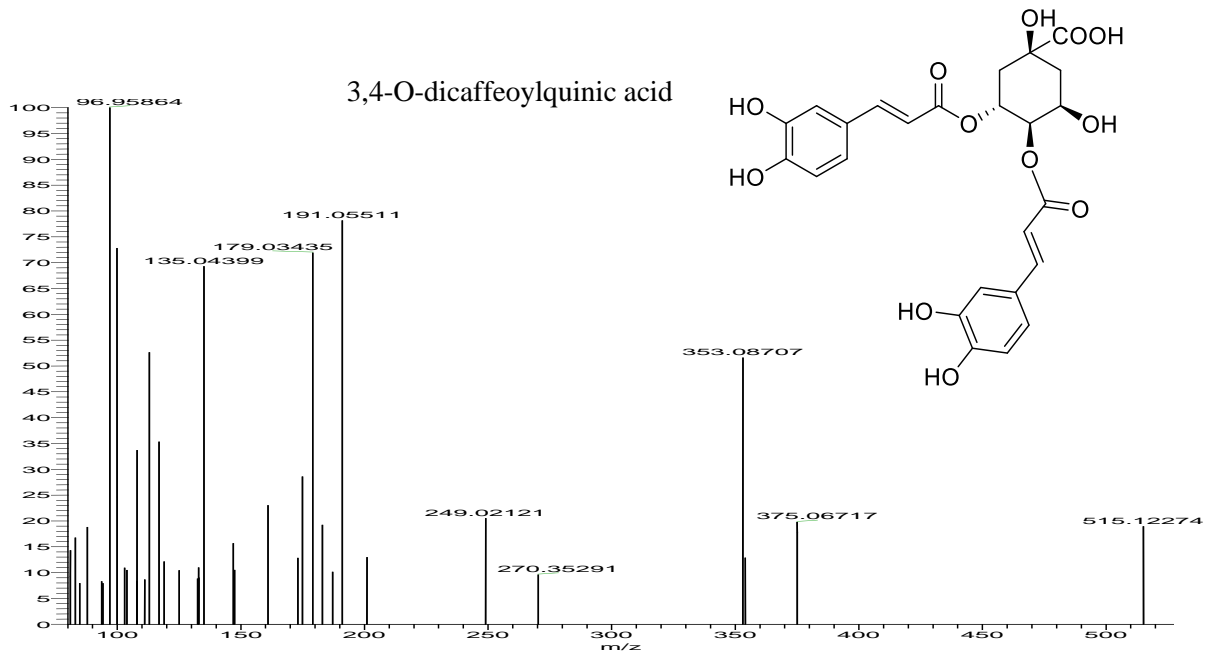
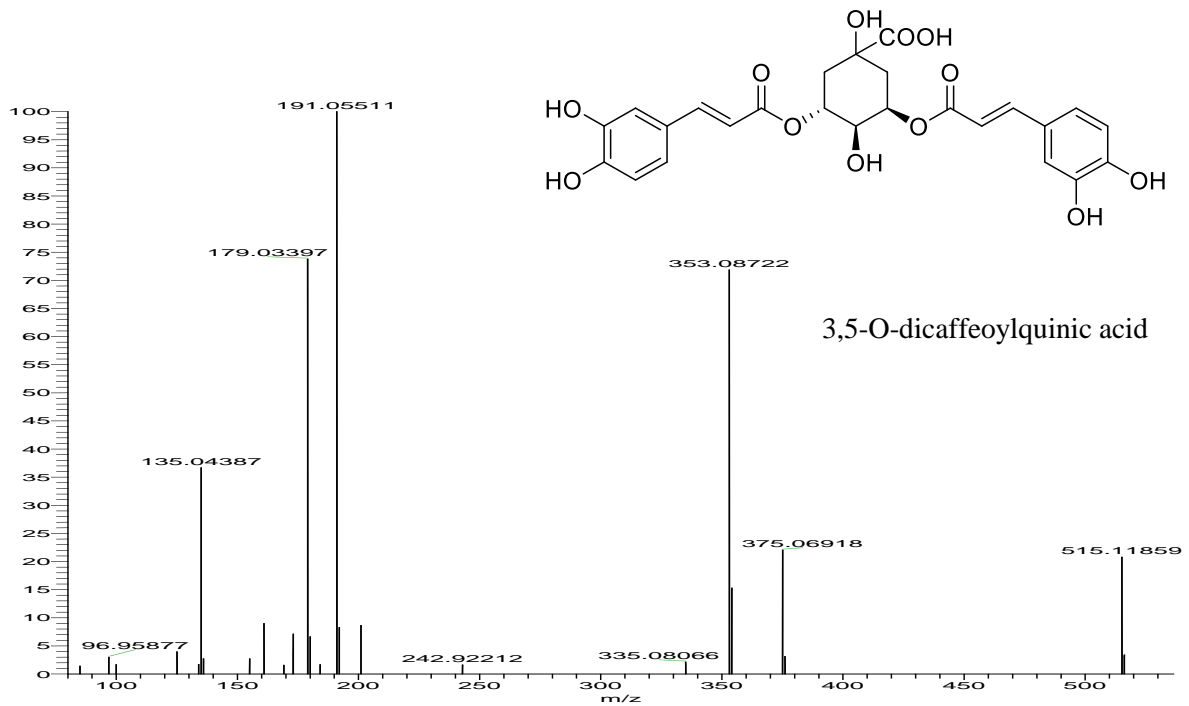
Supplementary materials:

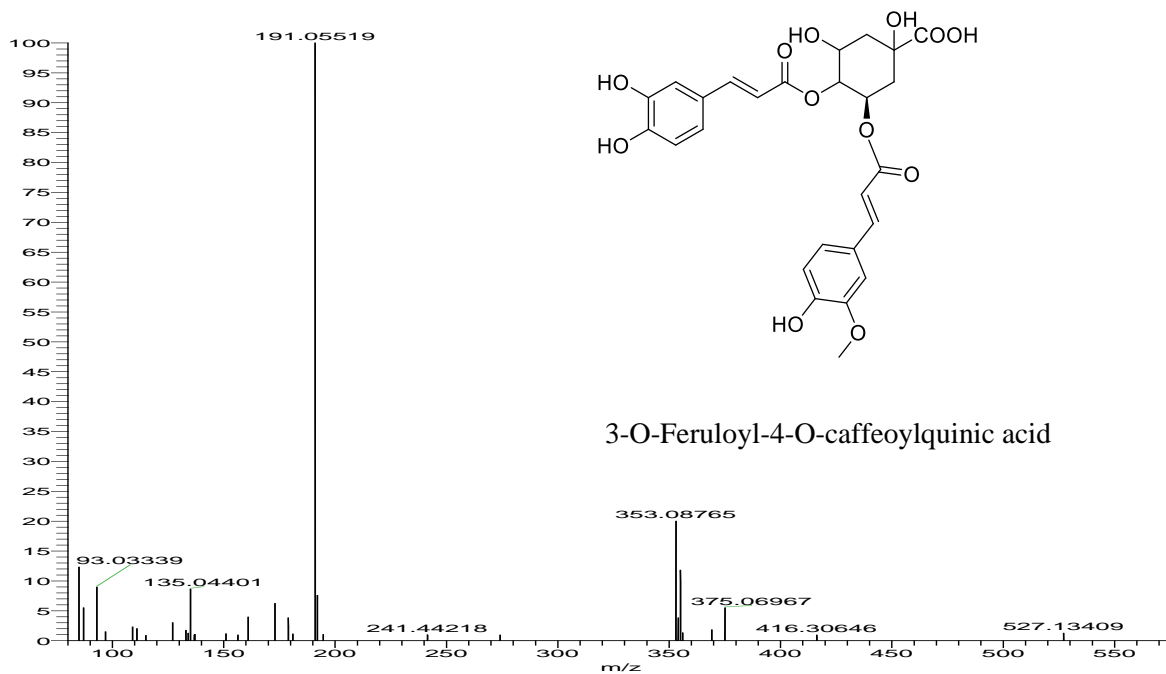
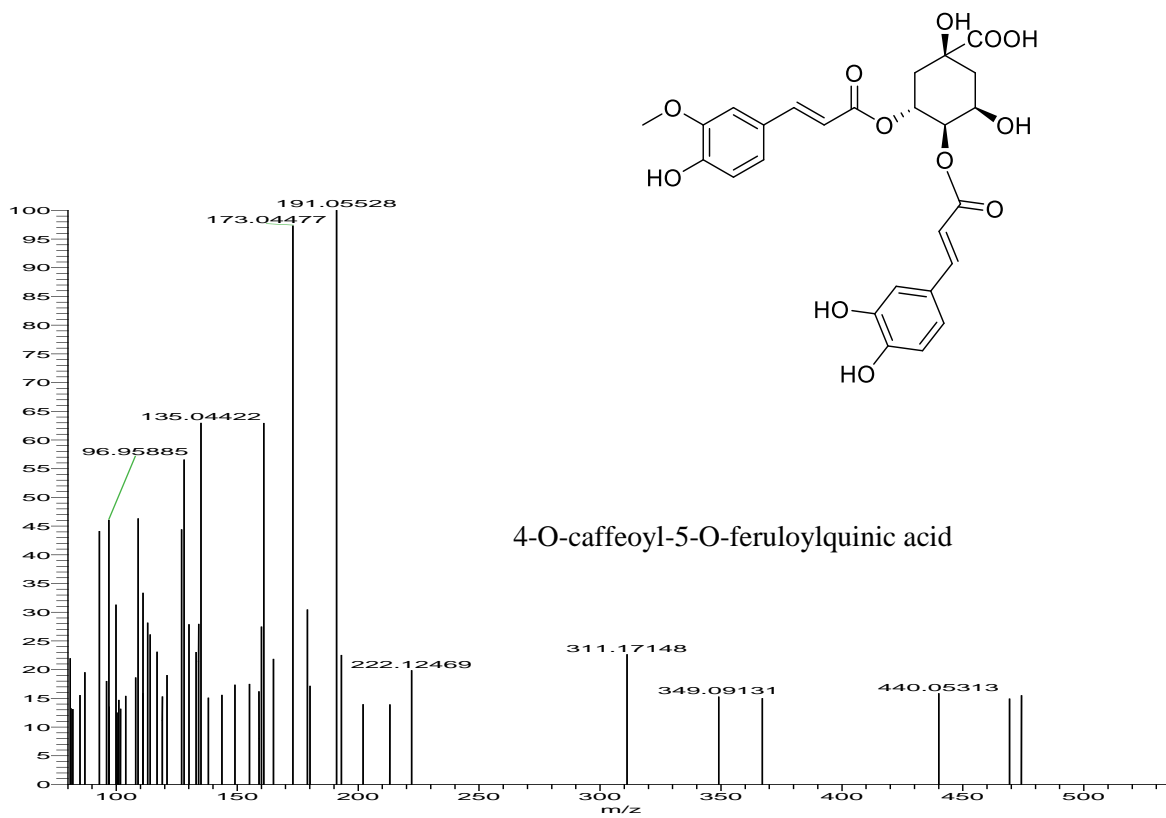












Supplementary Figure S1. MS/MS mass spectra of investigated compounds (n = 12) in assayed coffee brews.

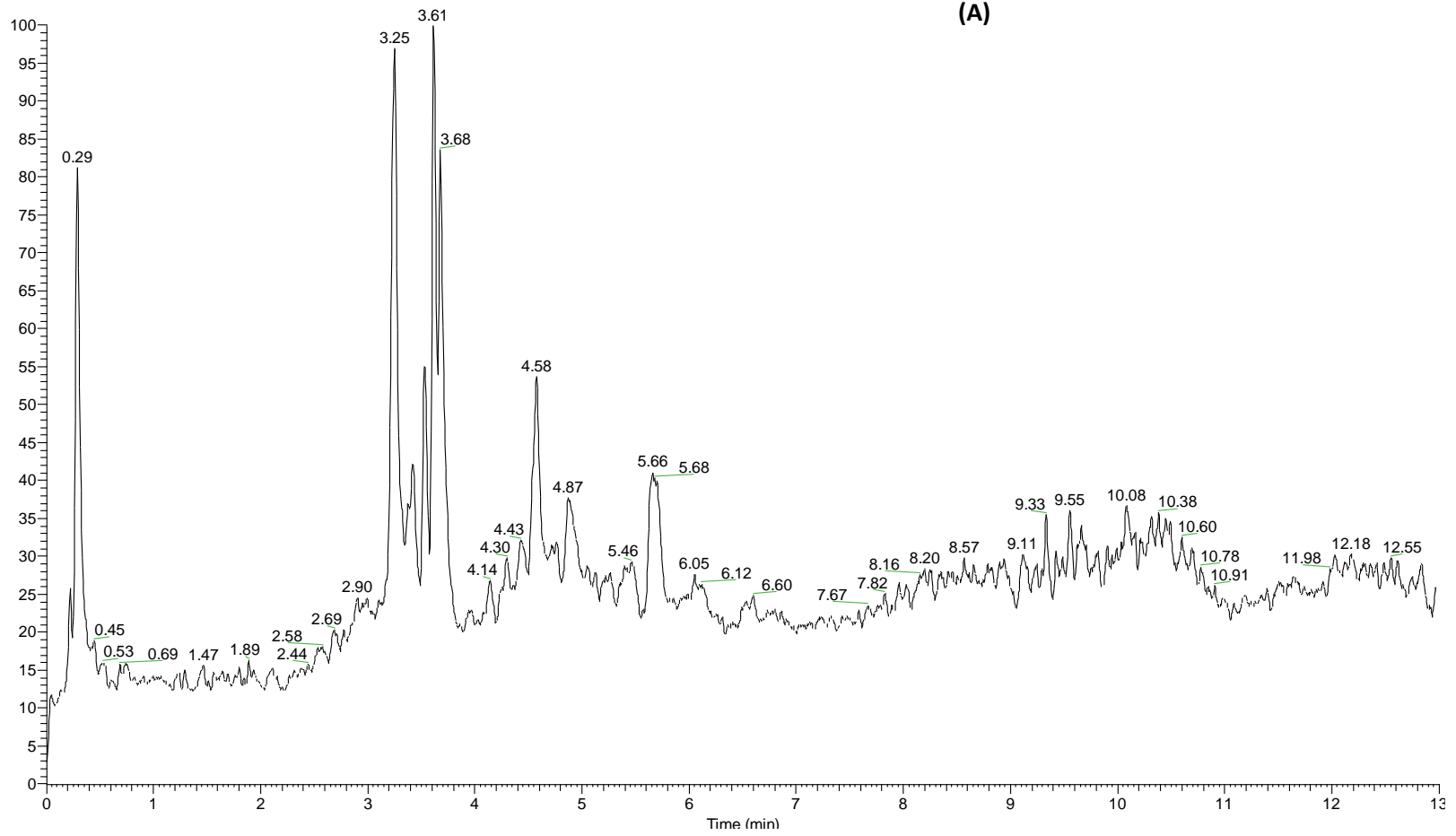
Table S1. Composition of stock solutions of simulated digestion fluid.

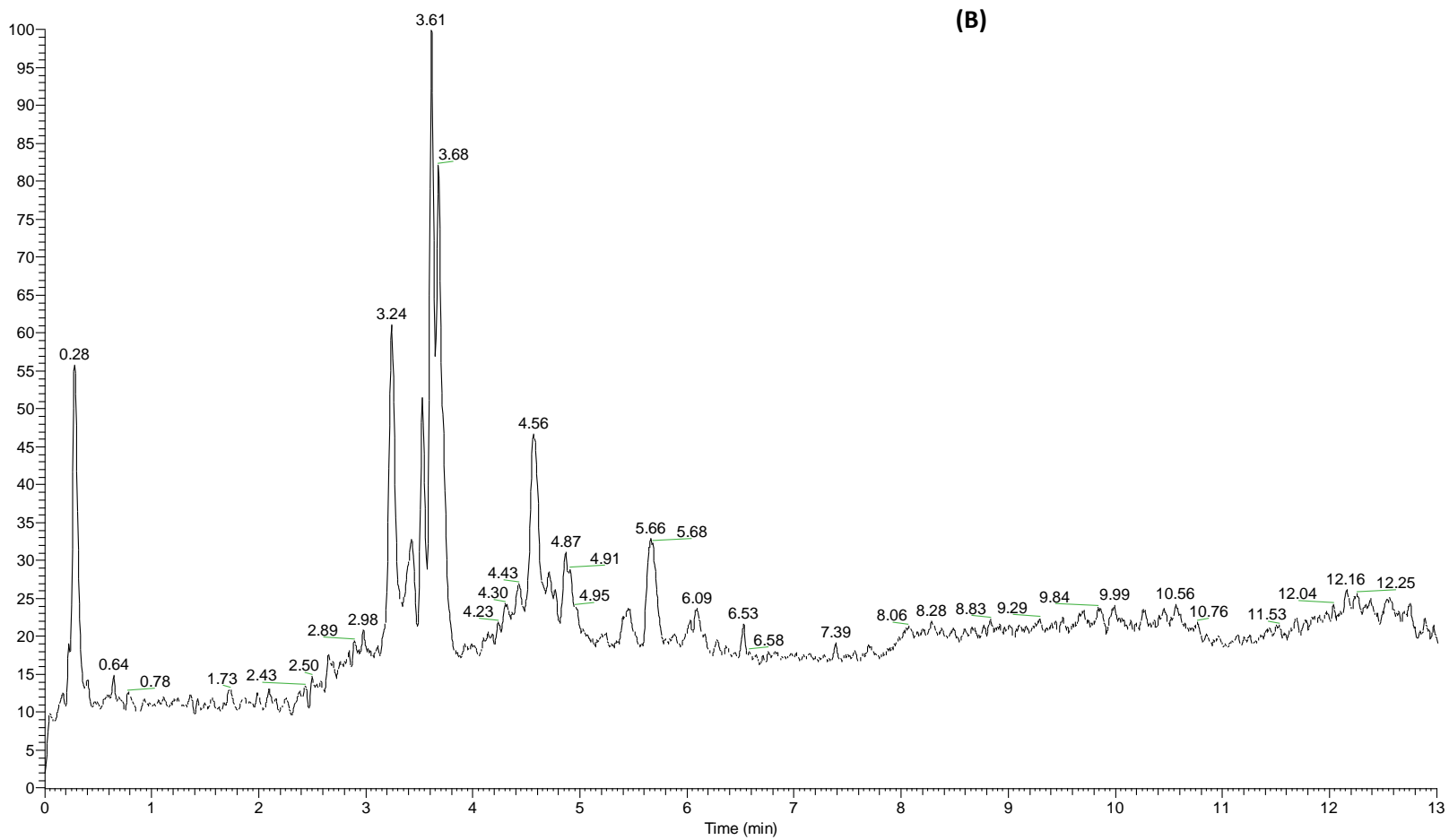
Salt solution	Stock concentration (mol/L)	SSF (pH 7)		SGF (pH 3)		SIF (pH 7)	
		mL of Stock added to prepare 0.4 L (mL)	Final salt concentration in sample (mmol/L)	mL of Stock added to prepare 0.4 L (mL)	Final salt conc. in sample (mmol/L)	mL of Stock added to prepare 0.4 L (mL)	Final salt conc. in sample (mmol/L)
KCl	0.5	15.1	15.1	6.9	6.9	6.8	6.8
KH ₂ PO ₄	0.5	3.7	1.35	0.9	0.9	0.8	0.8
NaHCO ₃	1	6.8	13.68	12.5	25	42.5	85
NaCl	2	-	-	11.8	47.2	9.6	38.4
MgCl ₂ (H ₂ O) ₆	0.15	0.5	0.15	0.4	0.12	1.1	0.33
NH ₄ (CO ₃) ₂	0.5	0.06	0.06	0.5	0.5	-	-
CaCl ₂ (H ₂ O) ₂	0.3	-	1.5	-	0.15	-	0.6

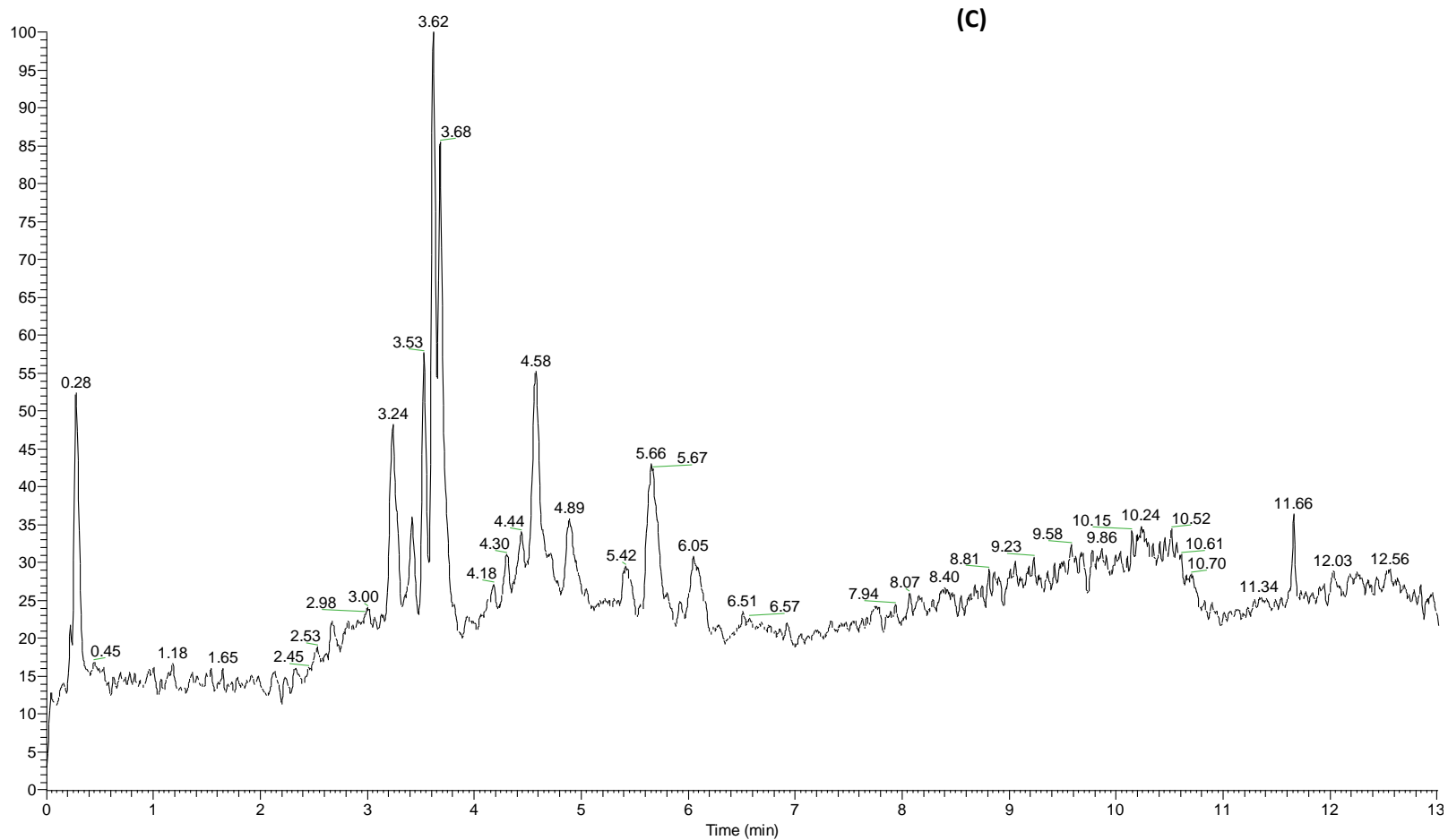
Table S2. HMWM content in the analyzed coffe brews.

Samples	Melanoidins
	(mg/mL) ± SD
Espresso	6.23 ± 0.41
Americano	0.71 ± 0.09
Instant coffee	5.78 ± 0.52

(A)







Supplementary Figure S2. Total Ion Chromatogram (TIC) of espresso (A), americano (B), and instant coffee brews (C) through UHPLC-Q-Orbitrap HRMS.