Supplementary Material

Table S1. Retention time (RT), linear equations, squared correlation, limit of detection (LOD) and limit of quantification (LOQ) of standard compounds.

Compound	RT (min)	Regression equation	r^2	LOD (μg/mL)	LOQ (μg/mL)
Gallic acid	7.4	y = 22.285x+ 1.686	1.00	0.076	0.255
Chlorogenic acid	16.3	y = 9.020x – 1.550	0.999	0.513	1.712
Caffeic acid	17.1	y=23.495x+5.575	0.996	0.059	0.187
Syringic acid	17.7	y =41.61x-2.38	1.00	0.019	0.146
Ferulic acid	20.2	y = 20.505x- 8.728	1.00	0.079	0.318
trans-cinnamic acid	20.5	y = 49.68x- 24.601	1.00	0.011	0.139
Isorhamnetin	29.9	y = 39.958x- 37.26	0.998	0.025	0.246
Rutin	21.3	y = 4.262x+ 19.780	1.00	0.693	2.313
Isoquercetin	21.6	y = 9.262x-9.433	0.993	0.289	0.945
Kaempferol	22.4	y = 9.878x – 4.308	0.999	0.258	0.876
Quercetin	26.6	y = 9.580x-7.415	1.00	0.272	0.908

Table S2. Correlation coefficients between Total Phenolic Content (TPC)/Total Flavonoid Content (TFC) and the IC_{50} values, in antioxidant activities.

	DPPH·	NO·	ORAC	TBARS	FRAP
TPC	**-0.95****	-0.54	**-0.72****	0.35	**-0.88****
TFC	**-0.98****	-0.64**	**-0.81****	0.33	**-0.93****

Significant values at the level of significant alpha 0.005 are represented in blue.

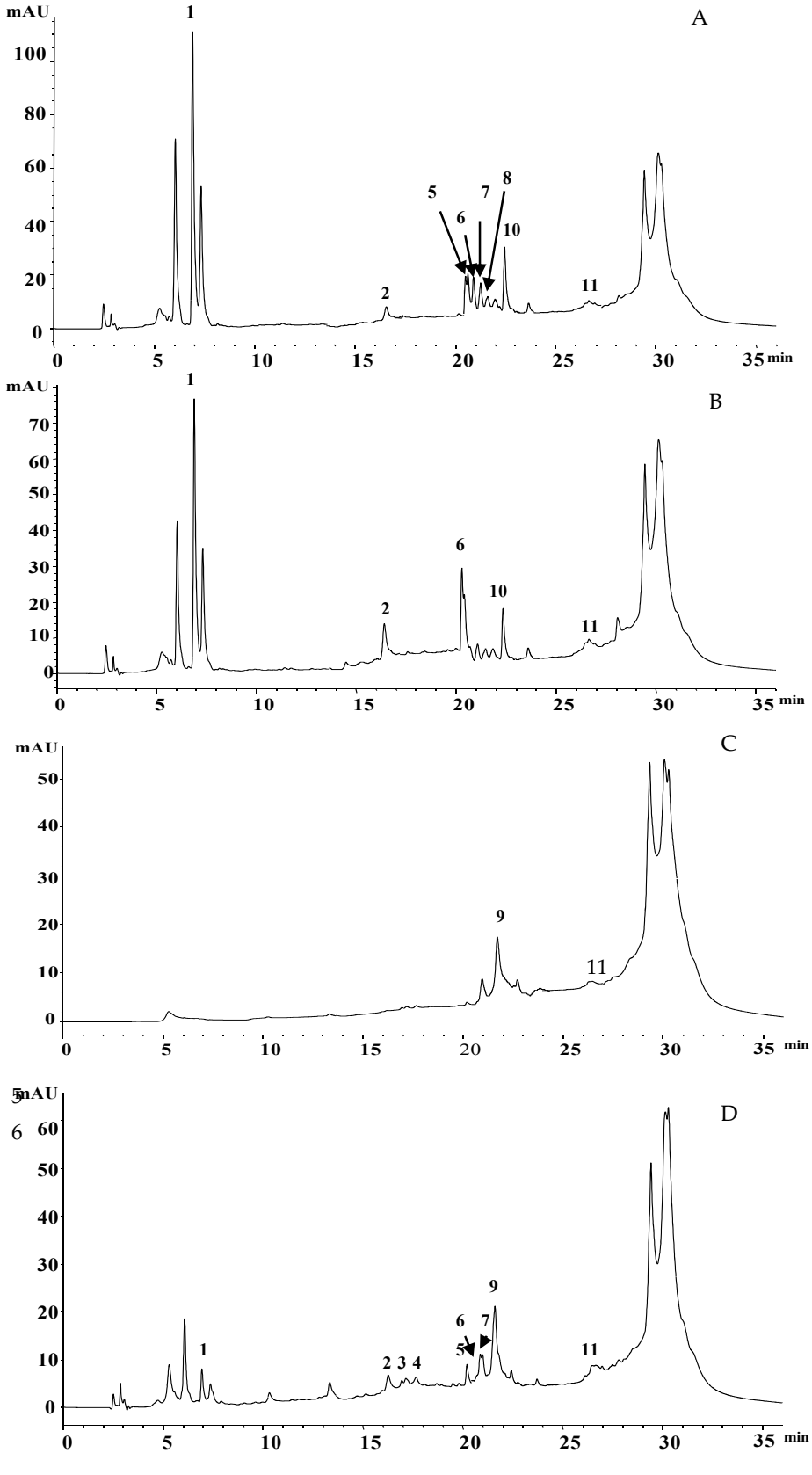


Figure S1. RP-HPLC chromatograms at 280 nm, from hydromethanolic extracts of leaves (A, B) and roots (C, D) of fennel plants grown under Fe sufficiency (A, C) or under Fe deficiency conditions (B, D). The peak numbers correspond to: 1, gallic acid, 2, chlorogenic acid, 3, caffeic acid, 4, syringic acid,; 5, ferulic acid, 6, *trans*-hydroxycinnamic acid, 7, isorhamnetin, 8, rutin, 9, isoquercetin, 10, kaempferol, 11, quercetin.