

Supplementary material

Bioassay-Guided Assessment of Antioxidative, Anti-Inflammatory and Antimicrobial Activities of Extracts from Medicinal Plants via High Performance Thin Layer Chromatography

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Table S1. Regression data for HPTLC assays.

Method	Standard	Regression equation	R ²	Linear range (µg)	LOD (µg)	LOQ (µg)
COX-1	Salicylic acid	y=53.269x + 33277	0.982	20-5000	519.0	1572.8
<i>S. aureus</i>	Streptomycin	y=8722.3x + 80905	0.987	2.5-50	6.5	19.7
<i>E. coli</i>	Streptomycin	y=10779x - 19261	0.989	2.5-45	5.2	15.9
DPPH	Gallic acid	y=11388x + 45743	0.988	0.5-6	0.9	2.6
FeCl ₃	Gallic acid	y=11854x + 26440	0.975	1-10	1.8	5.3
AlCl ₃	Rutin	y=8407.9x + 38043	0.974	1-7	1.3	3.8

Table S2. Method precision in terms of relative standard deviations (RSD) for repeated measurements (*n*=3).

TPC (Gallic acid)		Spectrophotometry				HPTLC											
		TFC (Rutin)		RSA (Trolox)		COX-1 (Salicylic acid)		<i>S. aureus</i> (Streptomycin)		<i>E. coli</i> (Streptomycin)		DPPH (Gallic acid)		FeCl ₃ (Gallic acid)		AlCl ₃ (Rutin)	
c (mg/mL)	RSD (%)	c (mg/mL)	RSD (%)	c (mg/mL)	RSD (%)	Applied (µg)	RSD (%)	Applied (µg)	RSD (%)	Applied (µg)	RSD (%)	Applied (µg)	RSD (%)	Applied (µg)	RSD (%)	Applied (µg)	RSD (%)
15.0	2.85	20.0	9.16	100.0	10.68	400.0	10.10	5.0	13.86	5.0	15.70	0.5	3.63	1.0	4.44	1.0	4.77
60.0	1.77	50.0	6.71	300.0	6.64	1000.0	6.69	25.0	11.54	25.0	10.24	3.0	4.47	5.0	1.23	6.0	3.03
125.0	1.41	100.0	4.71	500.0	6.65	2000.0	3.88	50.0	10.52	45.0	11.56	5.0	2.38	7.0	1.06	7.0	2.07
Average	2.01		6.86		7.99		6.89		11.97		12.50		3.49		2.24		3.29

Table S3. Regression data for colorimetric assays.

Method	Standard	Regression equation	R ²	Linear range (mg/L)	LOD (mg/L)	LOQ (mg/L)
TPC	Gallic acid	y=0.0085x + 0.0408	0.998	10-250	14.2	43.1
TFC	Rutin	y=0.00065x + 0.00327	0.985	10-100	12.1	36.8
RSA	Trolox	y=267.3x-0,5509	0.993	0.025-0.15	0.015	0.045