

Supporting Information

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Comprehensive phytochemical profiling and cell-free in vitro bioactivity assessment of the endemic *Campanula kirikkaleensis*

Dönmez & Güner

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Table S1: Chemical Composition of the Essential Oils from the Aerial Part and Root of *C. kirikkaleensis* Analyzed by GC-FID/MS

RI	Compound	Aerial Part (%)	Root (%)
1093	Hexanal	-	0.5
1225	(Z)-3-Hexenal	0.2	0.1
1244	Amyl furan	-	0.2
1282	Hexyl acetate	-	0.2
1360	Hexanol	0.1	0.4
1399	Nonanal	0.1	1.5
1405	(Z)-2-Hexen-1-ol	tr	-
1424	Hexyl butyrate	tr	-
1497	α -Copaene	-	tr
1507	(E,E)-2,4-Heptadienal	tr	tr
1516	2-Methoxy-3-sec-butylpyrazine [#]	-	0.1
1541	Benzaldehyde	tr	tr
1557	3,5,5-Trimethyl-3-butylcyclohexanone [#]	0.5	-
1598	2-Undecanone	-	0.1
1599	β -Elemene	0.1	-
1600	Hexadecane	0.1	0.1
1612	β -Caryophyllene	0.1	-
1638	Menthol	-	0.1
1655	(E)-2-Decenal	-	0.1
1659	Safranal	0.2	-
1664	Nonanol	-	0.1
1667	β -Barbatene	0.2	-
1682	(Z)-3-Nonen-1-ol	-	0.1
1700	Heptadecane	0.1	0.1
1723	3-Ethylbenzaldehyde [#]	0.4	2.9
1726	Germacrene D	1.0	tr
1730	α -Murolene	0.1	-
1734	Car-2-en-4-one [#]	0.1	-
1738	1-Azabicyclo[3.3.0]octan-2-one	-	0.1
1761	δ -Cadinene	0.5	-
1778	Tridecene ^{#Δ}	-	3.4
1800	Octadecane	0.1	-
1827	(E,E)-2,4-Decadienal	-	1.6
1845	Tridecene ^{#Δ}	-	0.5
1860	2-Propylphenol methyl ether [#]	-	0.2
1868	(E)-Geranyl acetone	0.7	0.7
1870	Tridecene ^{#Δ}	-	0.7
1878	2-Methyl-3-hydroxy-2,4,4-trimethylpentyl propanoate [#]	0.3	0.4
1889	2,2,4-Trimethyl-3-carboxyisopropyl-isobutyl pentanoate [#]	0.6	0.5
1893	2-Methyl-2,2-dimethyl-1-(2-hydroxymethyl) propyl pentanoate [#]	0.2	0.3
1900	Nonadecane	0.1	-
1933	Tetradecanal	e	-
1958	(E)- β -Ionone	0.9	0.1
1970	<i>trans</i> - β -Ionone-5,6-epoxide (<i>isomer-1</i>) ^{#Δ}	0.8	-
1973	Dodecanol	0.1	0.1
1996	<i>trans</i> - β -Ionone-5,6-epoxide	0.3	-
2001	4,7-Dimethyl-2-benzofuran-1(3H)-one [#]	-	0.2
2000	Eicosane	0.3	-
2037	3-Ethyl-3,4-dihydro-2(1H)-quinoxalinone [#]	2.5	20.6
2041	Pentadecanal	1.5	0.8
2077	Tridecanol	0.1	-

RI	Compound	Aerial Part (%)	Root (%)
2100	Heneicosane	1.1	2.1
2131	Hexahydrofarnesyl acetone	6.6	3.4
2178	3,4-Dimethyl-5-pentylidene-2(5H)-furanone	1.1	-
2180	Tetradecanol	0.2	-
2187	T-Cadinol	0.2	-
2195	3,4-Dimethyl-5-pentyl-5H-furan-2-one	0.9	-
2196	4-Vinyl guaiacol	0.5	0.2
2200	Docosane	0.8	-
2208	Megastigmatrienone [#]	0.3	-
2226	Methyl hexadecanoate (=Methyl palmitate)	0.2	-
2255	α -Cadinol	0.4	-
2294	Myristicin	3.8	5.5
2298	Pentadecanol	0.2	-
2300	Tricosane	7.5	0.6
2305	9-Hydroxy-thymol methyl ether	-	2.3
2330	Methyl heptadecanoate (=Methyl margarate)	0.8	-
2367	(Z)-9-Tricosene	0.5	-
2384	Farnesyl acetone	0.9	-
2390	6,9,12-Octadecatrienoic acid methyl ester [#]	2.4	0.4
2400	Tetracosane	3.8	0.7
2452	9-Tetracosene	0.9	-
2500	Pentacosane	12.8	1.6
2538	9-Pentacosene	1.5	-
2590	Phytol	14.2	4.9
2600	Hexacosane	3.0	-
2648	Nonadecanol	-	0.7
2700	Heptacosane	9.2	1.4
2734	Tetradecanoic acid (=Myristic acid)	-	1.4
2800	Octacosane	-	0.7
2815	1-Eicosanol	1.4	1.1
2900	Nonacosane	1.1	-
2931	Hexadecanoic acid (=Palmitic acid)	4.5	22.5
3000	Triacontane	3.4	8.0
3100	Hentriacontane	-	3.2
		96.5	97.5

Note: RRI: Relative Retention Index was calculated for the polar column with *n*-alkanes (C₇-C₄₀); %: Calculated from the FID chromatogram; tr: Trace (< 0.1%); #: Identified based on spectral similarity with the Wiley-NIST library; Δ: Correct isomer not identified.

Table S2: GC-FID/MS Analysis of the Volatile Compounds in *C. kirikkaleensis* Aerial Part and Root using the MSD-SPME Technique.

RRI	Compound	Aerial Part %	Root %
1093	Hexanal	-	4.3
1129	Thuja-2,4(10)-diene	-	0.1
1194	Heptanal	-	0.3
1225	(Z)-3-Hexenal	1.0	-
1232	(E)-2-Hexenal	-	1.2
1244	Amyl furan	-	0.3
1260	Pentanol	-	0.2
1282	Hexyl acetate	-	1.0

RRI	Compound	Aerial Part %	Root %
1296	Octanal	-	0.3
1304	1-Octen-3-one	-	0.1
1327	(Z)-3-Hexenyl acetate	-	0.1
1332	4-Nonanone	-	0.1
1335	(E)-2-Heptenal	-	0.6
1348	6-Methyl-5-hepten-2-one	-	0.2
1360	Hexanol	0.2	10.7
1391	(Z)-3-Hexen-1-ol	-	0.5
1399	Nonanal	0.9	3.5
1412	(E)-2-Hexen-1-ol	-	1.0
1416	3-Octen-2-one	-	1.0
1441	(E)-2-Octenal	0.1	2.5
1452	1-Octen-3-ol	-	0.9
1479	(E,Z)-2,4-Heptadienal	0.6	2.0
1481	3,4-Dihydro-2H-1,4-benzoxazine	0.2	-
1493	Tetramethyl pyrazine [#]	0.8	-
1496	3-Nonanol	0.2	-
1507	(E,E)-2,4-Heptadienal	0.7	1.9
1516	2-Methoxy-3-sec-butylpyrazine [#]	-	0.6
1523	(E,Z)-3,5-Octadien-2-one	-	4.7
1532	Camphor	1.2	-
1541	Benzaldehyde	0.3	0.6
1548	(E)-2-Nonenal	0.2	0.7
1553	Linalool	1.7	0.4
1562	Octanol	0.2	0.6
1573	(E,E)-3,5-Octadien-2-one	0.5	1.0
1600	Hexadecane	0.9	-
1604	2-Undecanone	0.4	-
1606	6-Methyl-3,5-heptadien-2-one	0.4	0.2
1617	Hexyl hexanoate	-	0.2
1638	β-Cyclocitral	0.9	-
1642	neiso-Menthol	0.6	0.4
1655	(E)-2-Decenal	0.6	0.7
1660	Benzeneacetaldehyde	1.8	-
1664	Nonanol	1.5	0.4
1671	Acetophenone	-	0.2
1681	2-Butyl-2-octenal	-	0.8
1696	trans-Chrysanthanol	-	0.9
1704	10-Methyl-2-undecanone	0.7	-
1706	α-Terpineol	0.2	-
1714	2-Dodecanone	0.2	-
1715	(E,E)-2,4-Nonadienal	-	0.5
1720	Dodecanal	1.0	-
1723	3-Ethylbenzaldehyde [#]	0.4	2.6
1730	Veratrole	-	0.1
1751	Carvone	0.5	-
1763	Naphthalene	-	0.5
1764	(E)-2-Undecenal	0.6	-
1766	Decanol	0.8	-
1778	Tridecene ^{#Δ}	1.3	-
1779	(E,Z)-2,4-Decadienal	-	7.1
1800	Octadecane	0.4	-
1815	2-Tridecanone	0.2	-
1827	(E,E)-2,4-Decadienal	1.5	10.1
1865	Hexanoic acid	-	0.7

RRI	Compound	Aerial Part %	Root %
1868	(<i>E</i>)-Geranyl acetone	4.8	1.6
1871	Undecanol	0.3	-
1878	2-Methyl-3-hydroxy-2,4,4-trimethylpentyl propanoate #	1.8	-
1889	2,2,4-Trimethyl-3-carboxyisopropyl-isobutyl pentanoate #	2.6	0.2
1893	2-Methyl-2,2-dimethyl-1-(2-hydroxy methyl) propyl pentanoate #	1.5	-
1933	Tetradecanal	0.6	-
1958	(<i>E</i>)- β -Ionone	5.5	-
1973	Dodecanol	1.8	0.4
1980	Benzothiazole#	-	0.2
1986	5,7-Dimethyl-2-benzofuran-1(3H)-one#	-	0.9
1996	<i>trans</i> - β -Ionone-5,6-epoxide	1.4	-
2025	1-(4- <i>tert</i> -Butylphenyl) propan-2-one #	0.6	-
2037	3-Ethyl-3,4-dihydro-2(1H)-quinoxalinone #	9.8	14.5
2053	Anisaldehyde	1.4	0.2
2084	Octanoic acid	-	0.2
2131	Hexahydrofarnesyl acetone	4.7	0.3
2192	Nonanoic acid	0.9	-
2178	3,4-Dimethyl-5-pentylidene-2(5H)-furanone	5.2	-
2196	4-Vinyl guaiacol	0.9	-
2239	Carvacrol	4.6	0.6
2264	Hexyl salicylate	0.7	-
2332	Methylpropyl salicylate # Δ	1.2	-
2343	2-Ethylhexyl salicylate	-	7.0
2371	Dihydroactinidiolide #	1.8	-
2382	2-Methoxy- α -5-dimethylbenzeneacetaldehyde#	-	0.7
2500	Pentacosane	1.5	-
2629	MW:276, BP:121	5.5	-
2670	Tetradecanoic acid	3.8	-
2935	Hexadecanoic acid (=Palmitic acid)	7.8	1.1
		94.4	94.7

Note: RRI: Relative Retention Index was calculated for the polar column with *n*-alkanes (C₇-C₄₀); %: Calculated from the FID chromatogram; #: Identified based on spectral similarity with the Wiley-NIST library; Δ : Correct isomer not identified; MW: Molecular weight; BP: Base peak

Table S3: GC-FID/MS Analysis of TMS Derivatives of *C. kirikkaleensis* Aerial Part Different Extracts

RRI	Compound*	HE %	CE %	ME %	HCE %	HCME %
1281	Glycerol - 3 TMS	-	-	0.7	-	-
1506	Malic acid - 3TMS	0.6	-	-	-	-
1582	1,4-Dideoxy-1,4-imino-D-arabinitol - 3TMS#	-	-	0.5	-	-
1622	3-Hydroxy-3-methylglutaric acid - 3TMS	-	-	0.8	-	-
1797	Tagatofuranose - 5TMS (<i>isomer-2</i>)	-	-	0.8	-	-
1843	Neophytadiene	0.7	1.2	2.8	2.2	-
1843	α -Fructofuranose - 5TMS	-	-	-	-	8.7
1849	D-Psicofuranose - 5TMS	-	-	-	-	1.2
1852	β -D-Fructofuranose, pentakis (trimethylsilyl) ether (<i>isomer 2</i>)	-	-	2.9	-	-
1855	Tetradecanoic acid (=Myristic acid) - TMS	0.6	-	2.5	1.2	-
1885	Heptadecanal	-	-	-	0.7	-
1898	Quinic acid - 5TMS	-	-	4.9	-	2.2
1907	Crotonic acid	-	-	-	0.9	-

RRI	Compound*	HE %	CE %	ME %	HCE %	HCME %
1929	α -Glucopyranose - 5TMS	-	-	2.6	-	2.6
1952	Pentadecanoic acid	-	-	-	0.7	-
1955	<i>MW: 612 BP:305</i>	-	-	2.6	-	-
2023	β -Glucopyranose - 5TMS	-	-	2.1	0.5	3.4
2049	Hexadecanoic acid (=Palmitic acid) - TMS	4.8	4.0	-	9.0	-
2076	Unidentified	-	-	-	-	3.5
2083	<i>MW: 612 Inositol derivative</i>	-	-	4.4	-	-
2127	myo-Inositol - 6TMS	-	-	3.0	-	11.7
2161	meso-Inositol - 6TMS [#]	-	-	-	-	2.8
2168	<i>MW: 612 Inositol derivative</i>	-	-	1.3	-	-
2179	Phytol - TMS	0.6	-	-	-	-
2182	<i>MW: 612 Inositol derivative</i>	-	-	0.8	-	-
2186	Phytol	-	-	-	1.4	-
2189	Unidentified	-	-	0.9	-	-
2217	4-Methylvaleric acid	-	-	-	2.3	-
2217	(Z,Z)-9,12-Octadecadienoic acid (=Linoleic acid) - TMS	4.0	2.4	-	-	-
2221	(Z)-9-Octadecenoic acid (=Oleic acid) - TMS	5.6	3.8	-	-	-
2225	α -Linolenic acid	-	-	-	4.3	-
2250	Octadecanoic acid (=Stearic acid) - TMS	0.5	-	-	1.0	-
2531	2-Methyl-6-nitroindolizine	-	-	-	2.6	-
2591	Sucrose derivative - 7TMS	-	-	-	-	0.8
2608	Monopalmitin - 2TMS	-	-	0.9	-	-
2646	Docosanoic acid - TMS	0.7	-	-	-	-
2687	Unidentified	-	-	-	-	1.6
2704	Sucrose derivative - 8TMS	-	-	-	-	5.0
2713	Sucrose - 8TMS	-	-	20.8	1.0	46.3
2761	Unidentified	-	-	-	-	2.1
2826	Unidentified	-	-	-	-	2.1
2844	Tetracosanoic acid - TMS	2.7	2.4	-	-	-
2893	Unidentified	-	-	1.2	-	-
2900	Nonacosane	0.5	-	-	-	-
2944	Pentacosanoic acid - TMS	0.6	-	-	-	-
2953	Hexacosanol - TMS	1.0	1.1	-	-	-
3011	Unidentified	0.8	-	-	-	-
3014	γ -Tocopherol - TMS	0.5	-	-	-	-
3023	<i>MW: 740</i>	0.6	-	1.1	-	-
3042	Benzene-1,2,4-triol	-	-	-	9.4	-
3042	Hexacosanoic acid - TMS	8.8	8.9	-	-	-
3071	<i>BP: 204</i>	-	-	0.7	-	-
3085	<i>MP: 361, 412</i>	-	-	2.0	-	-
3095	<i>BP: 203 MW:740</i>	-	-	2.9	-	-
3100	Hentriacontane	0.5	-	-	-	-
3104	<i>BP: 361</i>	-	-	0.7	-	-
3144	<i>MP: 361, 217, 382</i>	-	-	1.5	-	-
3144	Heptacosanoic acid - TMS	0.1	1.4	-	-	-
3149	1-Octacosanol - TMS	2.7	5.0	-	4.2	-
3159	α -Tocopherol (=Vitamin E) - TMS	1.8	1.6	-	-	-
3184	crypto-Chlorogenic acid - 6TMS	-	-	3.0	-	-
3214	Unidentified	-	-	-	-	1.0
3219	<i>BP: 575</i>	-	-	0.7	-	-
3224	<i>BP: 249</i>	-	-	1.2	-	-
3226	<i>BP: 204</i>	-	-	0.7	-	-
3239	<i>BP: 202 MP:289</i>	-	-	1.9	-	-
3244	Octacosanoic acid - TMS	16.8	20.0	-	18.0	-

RRI	Compound*	HE %	CE %	ME %	HCE %	HCME %
3264	5-Caffeoylquinic acid - 6TMS	-	-	0.5	-	-
3275	Campesterol - TMS	1.8	1.5	-	-	-
3305	Stigmasterol - TMS	2.2	2.1	-	-	-
3347	Triaccontanol - TMS	0.9	1.5	-	-	-
3368	β -Sitosterol - TMS	12.0	11.3	0.9	4.9	-
3378	5 α -Stigmasta-3 β -ol - TMS	1.7	2.4	-	-	-
3383	MW: 414	-	1.1	-	-	-
3426	MW: 486	-	3.1	-	-	-
3431	Cycloartenol - TMS	3.2	-	-	-	-
3442	Triaccontanoic acid - TMS	1.0	1.9	-	-	-
3444	Unidentified	0.6	-	-	-	-
3480	MW: 512	3.3	2.6	-	-	-
3491	Unidentified	1.0	-	-	-	-
3507	Unidentified	-	-	-	-	3.6
3507	Raffinose - 11TMS	-	-	4.2	-	-
3535	MW: 498	1.2	1.1	-	-	-
3563	Unidentified	1.0	1.4	-	-	-
3630	Unidentified	0.7	-	-	-	-
4093	Docosyl ferulate	-	-	-	8.2	-
4093	Unidentified	0.7	-	-	-	-
4218	MW: 408	-	3.1	-	-	-
4646	MW: 1050, BP: 217	-	-	3.2	-	-
5665	α -D-Mannopyranoside methyl-butyl derivative	-	-	-	26.3	-
Total		86.8	84.9	81.7	98.8	98.6

Note: RRI: Relative Retention Index was calculated for the polar column with *n*-alkanes (C₇-C₄₀); *: $\geq 0.5\%$; #: Identified based on spectral similarity with the Wiley-NIST library; HE: Hexane extract; CE: Chloroform extract; ME: Methanol extract; HCE: Hexane+Chloroform extract; Hexane+Chloroform+Methanol extract; MW: Molecular weight; BP: Base peak

Table S4: GC-FID/MS Analysis of TMS Derivatives of *C. kirikkaleensis* Different Root Extracts

RRI	Compound*	HE %	CE %	ME %	HCE %	HCME %
1281	Glycerol - 3TMS	-	-	0.1	-	-
1319	5-Hydroxymethyl furfural - TMS	-	-	-	-	9.7
1325	Unidentified	-	-	-	-	2.5
1506	Malic acid - 3TMS	-	-	0.5	-	-
1512	Unidentified	-	-	-	-	3.3
1518	Unidentified	-	-	-	-	5.5
1520	Trimethyl ((4-methylcyclohexyl) methoxy) silane [#]	-	-	-	-	7.9
1532	Pyroglutamic acid - 2TMS	-	-	0.1	-	-
1565	Unidentified	-	-	-	-	3.4
1582	1,4-Dideoxy-1,4-imino-D-arabinitol - 3TMS [#]	-	-	0.1	-	-
1585	Unidentified	-	-	-	-	11.0
1585	Threonic acid - 4TMS (<i>isomer-2</i>)	-	-	0.1	-	-
1602	Unidentified	-	-	-	-	4.7
1622	3-Hydroxy-3-methylglutaric acid - 3TMS	-	-	0.1	-	-
1628	Unidentified	-	-	-	-	1.3
1636	Unidentified	-	-	-	-	1.0
1738	Xylopyranose - 4TMS	-	-	0.1	-	-
1753	Xylitol - 5TMS	-	-	0.1	-	-
1767	Unidentified	-	-	-	-	1.5
1782	Unidentified	-	-	-	-	1.2

RRI	Compound*	HE %	CE %	ME %	HCE %	HCME %
1794	Unidentified	-	-	-	-	2.8
1797	Tagatofuranose (isomer-2) - 5TMS	-	-	0.1	-	-
1800	Ribonic acid - 5TMS	-	-	0.1	-	-
1803	Unidentified	-	-	-	-	1.8
1809	α -Methylfuranoside - 4TMS	-	-	0.1	-	-
1824	Unidentified	-	-	-	-	3.6
1843	Unidentified	-	-	-	-	2.3
1843	α -Fructofuranose - 5TMS	-	-	1.8	-	-
1852	β -Fructofuranose - 5TMS	-	-	2.0	-	-
1858	Fructopyranose - 5TMS	-	-	0.5	-	-
1858	Unidentified	-	-	-	-	2.6
1901	Quinic acid - 5TMS	-	-	2.7	-	-
1907	Lidocaine [#]	-	-	-	-	3.0
1917	Gluconolactone - 4TMS	-	-	0.2	-	-
1927	Sorbose - 5TMS [#]	-	-	1.1	-	-
1929	Unidentified	-	-	-	-	1.1
1929	α -Glucopyranose - 5TMS	-	-	0.9	-	-
1937	Unidentified	-	-	-	-	0.9
1958	MW:612, BP:305	-	-	1.4	-	-
1971	Mannitol - 6TMS	-	-	0.2	-	-
1980	Sorbitol - 6TMS	-	-	0.2	-	-
1987	Unidentified	-	-	-	-	0.5
2023	β -Glucopyranose - 5TMS	-	-	1.8	-	-
2046	Gluconic acid - 6TMS	-	-	0.1	-	-
2049	Hexadecanoic acid (=Palmitic acid) - TMS	1.8	-	0.1	2.1	0.6
2083	Unidentified	-	-	1.8	-	-
2127	myo-Inositol - 6TMS	-	-	3.1	-	-
2151	(E)-Caffeic acid - 6TMS	-	-	0.1	-	-
2151	Heptadecanoic acid - TMS	-	1.5	-	-	-
2165	Unidentified	-	-	0.5	-	-
2182	Unidentified	-	-	0.7	-	-
2207	Unidentified	-	-	0.3	-	-
2217	(Z,Z)-9,12-Octadecadienoic acid (=Linoleic acid) - TMS	3.4	1.5	0.1	0.6	-
2221	(Z)-9-Octadecenoic acid (=Oleic acid) -TMS	1.9	1.0	0.1	-	-
2250	Octadecanoic acid (=Stearic acid) - TMS	-	-	-	0.4	-
2364	2-O-Glycerol- α -D-galactopyranoside – 6TMS	-	-	0.1	-	-
2429	Unidentified	-	-	0.7	-	-
2519	Unidentified	-	-	-	-	2.3
2555	Unidentified	-	-	-	-	4.3
2555	Docosanol - TMS	-	-	-	0.4	-
2591	Unidentified	-	-	-	-	3.3
2646	Docosanoic acid (=Behenic acid)-TMS	1.0	1.2	-	1.6	-
2662	Unidentified	-	-	-	-	2.8
2692	Unidentified	-	-	0.2	-	5.0
2709	Unidentified	-	-	-	-	2.6
2713	Sucrose - 8TMS	-	-	52.9	-	-
2717	Unidentified	-	-	-	-	1.4
2730	Unidentified	-	-	-	-	2.6
2765	Unidentified	-	-	0.2	-	-
2769	Unidentified	-	-	-	-	2.9
2778	1-Monooleoylglycerol - 2TMS	-	-	0.1	-	-
2817	Trehalose - 8TMS	-	-	1.1	-	-
2844	Tetracosanoic acid (=Lignoceric acid) - TMS	-	-	-	2.9	-
2844	neo-Trehalose - 8TMS	-	-	0.1	-	-
2844	Tetracosanoic acid - TMS	1.8	2.9	-	-	-

RRI	Compound*	HE %	CE %	ME %	HCE %	HCME %
2853	Leucrose – 6TMS	-	-	0.1	-	-
2944	Pentacosanoic acid (=Pentadecylic acid) - TMS	-	-	-	0.5	-
2953	Hexacosan-1-ol (=Ceryl alcohol) - TMS	2.5	2.6	-	1.4	-
2976	Unidentified	-	-	0.1	-	-
2986	Unidentified	-	-	0.2	-	-
3042	Hexacosanoic acid (=Cerotic acid) - TMS	6.1	11.7	-	14.9	-
3080	Unidentified	-	-	0.1	-	-
3085	Unidentified	-	-	0.2	-	-
3090	Unidentified	-	-	0.1	-	-
3095	Unidentified	-	-	0.3	-	-
3104	Unidentified	-	-	0.2	-	-
3144	Unidentified	-	-	0.2	-	-
3144	Heptacosanoic acid (=Carboceric acid) - TMS	-	1.1	-	1.3	-
3149	Octacosan-1-ol (=Stearyl alcohol) - TMS	12.6	15.6	-	8.4	-
3159	α -Tocopherol (=Vitamin E) - TMS	1.5	-	-	-	-
3184	Chlorogenic acid - 6TMS	-	-	1.6	-	-
3224	Unidentified	-	-	0.4	-	-
3244	Octacosanoic acid (=Montanic acid) - TMS	6.9	18.9	-	16.6	-
3249	Unidentified	-	-	0.4	-	-
3275	Campesterol - TMS	2.9	1.5	-	-	-
3305	Stigmasterol - TMS	2.7	1.8	-	-	-
3347	1-Triacontanol (=Triacontoxy) - TMS	2.3	2.6	-	-	-
3347	1,1-Dimethylethyl-dimethyl-triacontyloxy silane [#]	-	-	-	2.0	-
3368	β -Sitosterol - TMS	10.5	6.8	0.1	2.1	-
3378	5 α -Stigmasta-3 β -ol (=Stigmastanol) -TMS	2.2	1.7	-	-	-
3383	MW:414	1.4	-	-	-	-
3389	MW:424	1.1	-	-	-	-
3431	Cycloartenol - TMS	2.6	1.9	-	-	-
3442	MW:524	2.7	1.6	-	-	-
3442	Unidentified	-	-	-	1.4	-
3480	MA:512	5.2	2.1	-	-	-
3513	1-Kestose - 11TMS	-	-	9.1	-	-
3591	Palatinose methyloxime - 7TMS [#]	-	-	0.1	-	-
3602	Oleanolic acid - 2TMS	-	-	0.1	-	-
3778	Unidentified	-	-	-	1.4	-
3935	Docosyl- <i>p</i> -coumarate - TMS	1.6	1.5	-	6.3	-
4170	Unidentified	-	-	-	4.1	-
4489	Unidentified	-	-	-	3.1	-
4675	MW:1050, BP:217	-	-	7.6	-	-
4939	Unidentified	-	-	-	4.9	-
4993	Unidentified	-	-	-	4.4	-
5070	Unidentified	-	-	-	2.9	-
5251	Unidentified	-	-	-	16.3	-
Total		74.7	79.5	97.5	100.0	99.4

Note: RRI: Relative Retention Index was calculated for the polar column with *n*-alkanes (C₇-C₄₀); *: $\geq 0.5\%$; #: Identified based on spectral similarity with the Wiley-NIST library; HE: Hexane extract; CE: Chloroform extract; ME: Methanol extract; HCE: Hexane+Chloroform extract; Hexane+Chloroform+Methanol extract; MW: Molecular weight; BP: Base peak

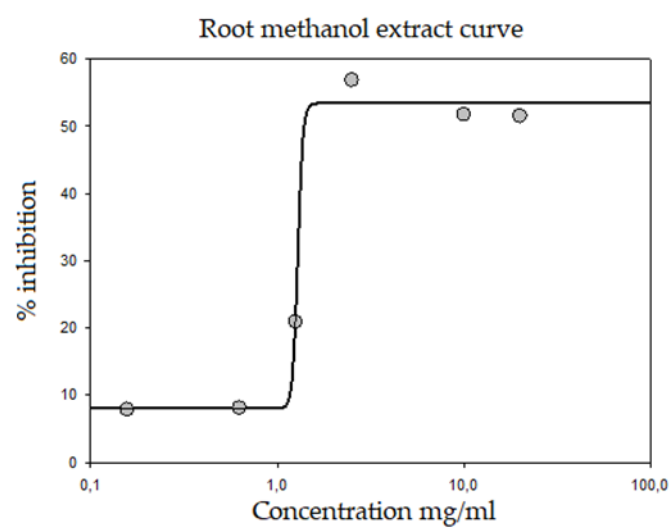


Figure S1: Root Methanol Extract Curve

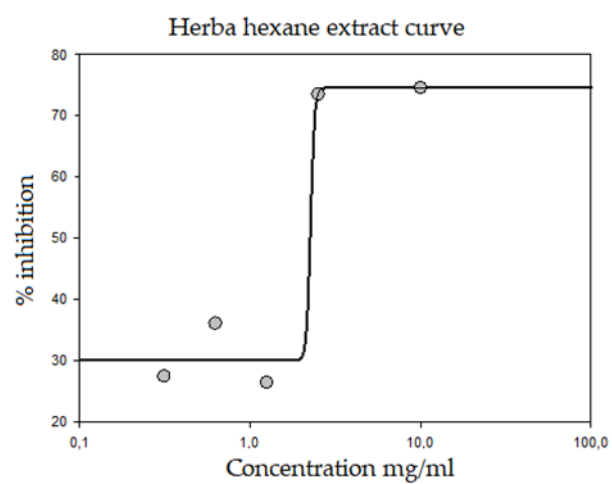


Figure S2: Herba Hexane Extract Curve

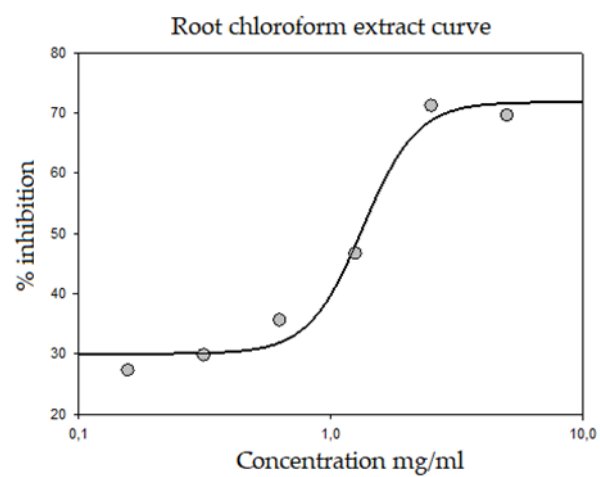


Figure S3: Root Chloroform Extract Curve

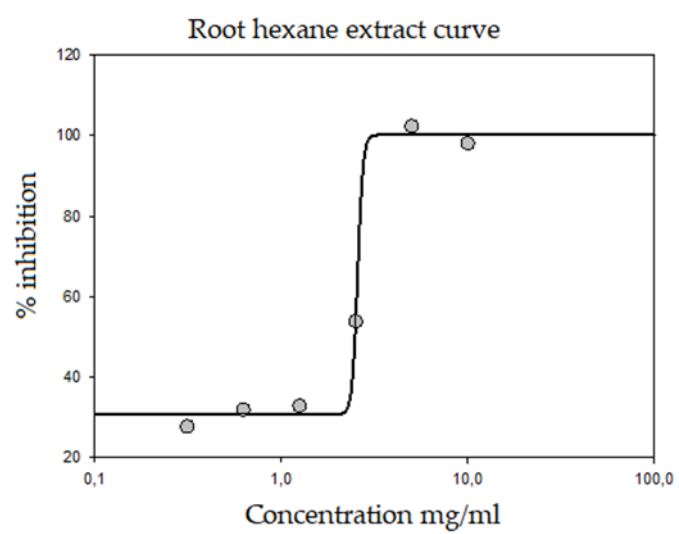


Figure S4: Root Hexane Extract Curve