Supporting Information

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Determination of the effect of different drying methods on secondary metabolites of *Lavandula pedunculata* (Mill.) Cav. subsp. *cariensis* (Boiss.) Upson & S. Andrews by LC-HRMS

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Chemicals

Ascorbic acid (\geq 99 %, Sigma-Aldrich), (-)-Epigallocatechin gallate (\geq 97% TRC Canada), Fumaric acid (\geq 99 % Sigma-Aldrich), Chicoric acid (\geq 97% TRC Canada), Caffeic acid (\geq 98 % Sigma-Aldrich), (+)-trans taxifolin (\geq 97% TRC Canada), Luteolin-7-rutinoside (\geq 97% Carbosynth limited), Vanilic acid (\geq 97 % Sigma-Aldrich), Luteolin 7-glucoside (\geq 97% TRC Canada), Syringic acid (\geq 95 % Sigma-Aldrich), Rosmarinic acid (\geq 96 % Sigma-Aldrich), Apigenin 7-glucoside (\geq 97% EDQM CS), Ellagic acid (\geq 97% TRC Canada), Nepetin-7-glucoside (\geq 97% Phytolab), Quercetin (\geq 95% Sigma-Aldrich), Herniarin (\geq 98% Carl Roth GMBH), Naringenin (\geq 95 % Sigma-Aldrich), Luteolin (95% Sigma-Aldrich), Apigenin (\geq 97% TRC Canada),Hispidulin (\geq 97% TRC Canada), Isosakuranetin (\geq 97% Phytolab), CAPE (Caffeic Asit Phenethyl Ester) (\geq 97% european pharmacopoeia reference standard), Chrysin (\geq 96% Sigma-Aldrich), Acacetin (\geq 97% TRC Canada), Emodin (90% Sigma-Aldrich), (-)- caryophyllene oxide(\geq 99% chemika) were used.

Compounds	m/z	Ionisation mode	Linear range	Linear regression equation	LOD/ LOQ	R ²	Recovery (%)
Ascorbic acid	175.0248	Positive	0.5-10	y=0.00347x-0.00137	0.39/1.29	0.9988	96.2
(-)-Epigallocatechin	307.0812	Positive	0.3-5	y=0.00317x+0.000443	0.17/0.57	0.9947	102.22
Fumaric acid	115.0037	Positive	0.1-10	y=0.00061x-0.0000329	0.05/0.17	0.9991	97.13
Chicoric acid	473.0726	Positive	0.1-10	y=0.00237x-0.000218	0.03/0.1	0.9993	101.08
Caffeic acid	179.0350	Positive	0.3-10	y=0.0304x+0.00366	0.08/0.27	0.9993	94.51
(+)-trans taxifolin	303.0510	Positive	0.3-10	y=0.0289x+0.00537	0.01/0.03	0.9978	91.66
Luteolin-7-O-rutinoside	593.1512	Positive	0.1-10	y=0.00879x+0.000739	0.01/0.03	0.9988	93.05
Vanilic acid	167.0350	Positive	0.3-10	y=0.00133x+0.0003456	0.1/0.33	0.9997	98.66
Luteolin-7-O-glucoside	447.0933	Positive	0.1-7	y=0.0162x+0.00226	0.01/0.03	0.9961	96.31
Syringic acid	197.0456	Positive	0.5-10	y=0.0000831x+0.000024	0.1/0.3	0.9991	97.29
Rosmarinic acid	359.0772	Positive	0.05-10	y=0.00717x-0.0003067	0.01/0.03	0.9992	99.85
Apigenin-7-O-glucoside	431.0984	Positive	0.3-7	y=0.0246x+0.00306	0.01/0.03	0.9962	96.07
Ellagic acid	300.9990	Positive	0.05-10	y=0.0085x-0.000612	0.03/1	0.9994	101.49
Quercetin	301.0354	Positive	0.1-10	y=0.0509x+0.00467	0.01/0.03	0.9978	96.41
Herniarin	177.0546	Positive	0.1-7	y=0.309x+0.0266	0.01/0.03	0.9983	92.92
Naringenin	271.0612	Positive	0.1-10	y=0.0281x+0.00182	0.01/0.03	0.9995	86.65
Luteolin	285.0405	Positive	0.1-10	y=0.117x+0.00848	0.01/0.03	0.9981	96.98
Apigenin	269.0456	Positive	0.3-10	y=0.104x+0.0199	0.01/0.03	0.9998	81.55
Hispidulin	301.0707	Positive	0.05-10	y=0.02614x+0.0003114	0.01/0.03	0.9993	98.36
Isosakuranetin	285.0769	Positive	0.05-10	y=0.0235x+0.000561	0.01/0.03	0.9992	96.56
Caffeic asit phenethyl ester	283.0976	Positive	0.3-7	y=0.255x+0.0477	0.01/0.03	0.9964	94.42
Chrysin	253.0506	Positive	0.05-7	y=0.0964x-0.0002622	0.01/0.03	0.999	87.92
Acacetin	283.0612	Positive	0.05-7	y=0.046x+0.0001875	0.01/0.03	0.9995	87.52

Table S1: Validation parameters and LC-ESI-HRMS method developed for the secondary metabolites of the species



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Figure S1: The LC-HRMS Chromatogram of Quantified Compounds of the Methanol Extract of L1 © 2024 ACG Publications. All rights reserved.



Figure S1(Continued)

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Figure S2: The LC-HRMS Chromatogram of Quantified Compounds of the Methanol Extract of L2 © 2024 ACG Publications. All rights reserved.

Figure S2 (Continued)

Figure S3: The LC-HRMS Chromatogram of Quantified Compounds of the Methanol Extract of L3

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Figure S3 (Continued)

Figure S4: The LC-HRMS Chromatogram of Quantified Compounds of the Methanol Extract of L4 © 2024 ACG Publications. All rights reserved.

Figure S4 (Continued)

Figure S5: The LC-HRMS Chromatogram of Quantified Compounds of the Methanol Extract of L5

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Figure S5 (Continued)

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Figure S6: The LC-HRMS Chromatogram of Quantified Compounds of the Methanol Extract of L6 © 2024 ACG Publications. All rights reserved.

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Figure S6 (Continued)