

Date : avril 23, 2021

CERTIFICATE OF ANALYSIS – GC PROFILING

SAMPLE IDENTIFICATION

Internal code : 21D16-PTH04

Customer identification : Frank Carteri ORGANIC - Somalia, ethiopia - F00107211R

Type : Essential oil

Source : *Boswellia carteri*

Customer : Plant Therapy

ANALYSIS

Method: PC-MAT-014  - Analysis of the composition of an essential oil or other volatile liquid by FAST GC-FID (in French); identifications validated by GC-MS.

Analyst : Seydou Ka, M. Sc.

Analysis date : avril 22, 2021

Checked and approved by :

Alexis St-Gelais, M. Sc., chimiste 2013-174

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*P*HYSICO*C*HEMICAL *D*ATA

Physical aspect: Faintly yellow liquid

Refractive index: 1.4740 ± 0.0003 (20 °C; method PC-MAT-016)

*C*ONCLUSION

No adulterant, contaminant or diluent has been detected using this method.

ANALYSIS SUMMARY – CONSOLIDATED CONTENTS

New readers of similar reports are encouraged to read table footnotes at least once.

Identification	%	Class
2-Methyl-3-buten-2-ol	0.02	Aliphatic alcohol
(E)-2-Methyl-1,3-pentadiene	0.01	Alkene
Unknown	tr	Unknown
Toluene	0.06	Simple phenolic
Unknown	0.02	Alkene
Unknown	tr	Unknown
Unknown	0.01	Unknown
Hashishene	0.96	Monoterpene
Tricyclene	0.05	Monoterpene
α-Thujene	0.90	Monoterpene
α-Pinene	43.67	Monoterpene
Unknown	0.01	Monoterpene
α-Fenchene	0.02	Monoterpene
Camphene	0.59	Monoterpene
Thuja-2,4(10)-diene	0.45	Monoterpene
meta-Cymene	tr	Monoterpene
Sabinene	5.19	Monoterpene
β-Pinene	1.50	Monoterpene
Pseudolimonene isomer	0.03	Monoterpene
Dehydro-1,8-cineole	0.02	Monoterpenic ether
Myrcene	10.40	Monoterpene
6-Methyl-5-hepten-2-ol	0.02	Aliphatic alcohol
Pseudolimonene	0.03	Monoterpene
α-Phellandrene	1.88	Monoterpene
Δ3-Carene	0.16	Monoterpene
ortho-Methylanisole	0.09	Simple phenolic
α-Terpinene	0.13	Monoterpene
para-Cymene	2.66	Monoterpene
β-Phellandrene	0.89*	Monoterpene
1,8-Cineole	[0.89]*	Monoterpenic ether
Limonene	10.56	Monoterpene
Unknown	0.03	Unknown
Cymene analog	0.02	Monoterpene
(Z)-β-Ocimene	0.86	Monoterpene
Unknown	0.01	Unknown
(E)-β-Ocimene	0.23	Monoterpene
Unknown	0.01	Unknown
γ-Terpinene	0.24	Monoterpene
cis-Sabinene hydrate	0.02	Monoterpenic alcohol
Unknown	0.01	Oxygenated monoterpene
cis-Linalool oxide (fur.)	0.01	Monoterpenic alcohol
Octanol	0.01	Aliphatic alcohol
Unknown	0.06	Oxygenated monoterpene
Isoterpinolene	0.01	Monoterpene
γ-Campholenal	0.01	Aliphatic alcohol

Terpinolene	0.08	Monoterpene
para-Cymenene	0.03	Monoterpene
α -Pinene oxide	0.03	Monoterpenic ether
<i>trans</i> -Sabinene hydrate	0.05	Monoterpenic alcohol
Rosefuran	0.01	Monoterpenic ether
α -Thujone	0.04	Monoterpenic ketone
Linalool	0.20	Monoterpenic alcohol
Unknown	0.03	Monoterpenic alcohol
Verbenol analog?	0.03	Monoterpenic alcohol
β -Thujone	0.04	Monoterpenic ketone
<i>cis</i> -para-Menth-2-en-1-ol	0.06	Monoterpenic alcohol
Myrcenol	0.05	Monoterpenic alcohol
α -Campholenal	0.22	Monoterpenic aldehyde
<i>cis</i> -Limonene oxide	tr	Monoterpenic ether
allo-Ocimene	0.04	Monoterpene
<i>trans</i> -Limonene oxide	0.02	Monoterpenic ether
<i>trans</i> -Pinocarveol	0.32	Monoterpenic alcohol
<i>trans</i> -Sabinol	0.21	Monoterpenic alcohol
<i>trans</i> -Verbenol	0.69	Monoterpenic alcohol
meta-Mentha-4,6-dien-8-ol	0.13	Monoterpenic alcohol
Unknown	0.03	Oxygenated monoterpene
Unknown	0.01	Oxygenated monoterpene
Pinocamphone	0.05	Monoterpenic ketone
Pinocarvone	0.04	Monoterpenic ketone
Borneol	0.06	Monoterpenic alcohol
α -Phellandren-8-ol	0.23	Monoterpenic alcohol
<i>cis</i> -Sabinol	0.01	Monoterpenic alcohol
Umbellulone	0.03	Monoterpenic ketone
Terpinen-4-ol	0.35	Monoterpenic alcohol
Cryptone	0.10	Normonoterpenic ketone
Thuj-3-en-10-al	0.03	Monoterpenic aldehyde
para-Cymen-8-ol	0.01	Monoterpenic alcohol
α -Terpineol	0.22	Monoterpenic alcohol
Myrtenal	0.15	Monoterpenic aldehyde
Myrtenol	0.16	Monoterpenic alcohol
Methylchavicol	0.01	Phenylpropanoid
<i>cis</i> - α -Phellandrene epoxide (IPP vs Me)	0.08	Monoterpenic ether
Verbenone	0.31	Monoterpenic ketone
<i>trans</i> -Piperitol	0.03	Monoterpenic alcohol
Octyl acetate	0.01	Aliphatic ester
<i>trans</i> -Carveol	0.13	Monoterpenic alcohol
Unknown	0.01	Oxygenated monoterpene
<i>cis</i> -Carveol	0.04	Monoterpenic alcohol
Carvone	0.10	Monoterpenic ketone
Carvotanacetone	0.02	Monoterpenic ketone
Piperitone	0.05	Monoterpenic ketone
Linalyl acetate	0.01	Monoterpenic ester
3,5-Dimethoxytoluene	0.08	Simple phenolic
Unknown	0.04	Oxygenated monoterpene
Decanol	0.01	Aliphatic alcohol
Bornyl acetate	0.24	Monoterpenic ester
para-Cymen-7-ol	0.03	Monoterpenic alcohol

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<i>trans</i> -Pinocarvyl acetate	0.03	Monoterpenic ester
Carvacrol	0.03	Monoterpenic alcohol
Bicycloelemene	0.03	Sesquiterpene
α -Terpinyl acetate	0.04	Monoterpenic ester
α -Cubebene	0.14	Sesquiterpene
Cyclosativene II	0.05	Sesquiterpene
α -Ylangene	0.04	Sesquiterpene
α -Copaene	0.75	Sesquiterpene
1,5-diepi- β -Bourbonene	0.03	Sesquiterpene
β -Bourbonene	0.28	Sesquiterpene
Geranyl acetate	0.02	Monoterpenic ester
β -Cubebene	0.09	Sesquiterpene
β -Elemene	0.41	Sesquiterpene
Unknown	0.01	Unknown
α -Gurjunene	0.16	Sesquiterpene
β -Caryophyllene	3.18	Sesquiterpene
β -Copaene	0.06	Sesquiterpene
<i>trans</i> - α -Bergamotene	0.09	Sesquiterpene
6,9-Guaiadiene	0.10	Sesquiterpene
<i>trans</i> -Muurola-3,5-diene	0.04	Sesquiterpene
α -Humulene	0.67	Sesquiterpene
allo-Aromadendrene	0.14	Sesquiterpene
<i>cis</i> -Muurola-4(15),5-diene	0.02	Sesquiterpene
<i>trans</i> -Cadina-1(6),4-diene	0.04	Sesquiterpene
γ -Muurolene	0.25	Sesquiterpene
Germacrene D	0.46	Sesquiterpene
β -Selinene	0.17	Sesquiterpene
<i>trans</i> -Muurola-4(15),5-diene	0.01	Sesquiterpene
δ -Selinene	0.08	Sesquiterpene
Bicyclogermacrene	0.12	Sesquiterpene
epi-Cubebol	0.12	Sesquiterpenic alcohol
α -Selinene	0.09	Sesquiterpene
Germacrene A	0.01	Sesquiterpene
α -Muurolene	0.17	Sesquiterpene
Cubebol	0.28	Sesquiterpenic alcohol
γ -Cadinene	0.19	Sesquiterpene
<i>trans</i> -Calamenene	0.03	Sesquiterpene
δ -Cadinene	0.56	Sesquiterpene
<i>trans</i> -Cadina-1,4-diene	0.03	Sesquiterpene
α -Cadinene	0.02	Sesquiterpene
α -Calacorene	0.01	Sesquiterpene
Isocaryophyllene epoxide B	0.04	Sesquiterpenic ether
Germacrene B	0.04	Sesquiterpene
Elemicin	0.01	Phenylpropanoid
Palustrol	0.02	Sesquiterpenic alcohol
Unknown	0.02	Oxygenated sesquiterpene
Germacrene D-4-ol	0.06	Sesquiterpenic alcohol
Caryophyllene oxide isomer	0.05	Sesquiterpenic ether
Caryophyllene oxide	0.40	Sesquiterpenic ether
Viridiflorol	0.72	Sesquiterpenic alcohol
Copaborneol	0.10	Sesquiterpenic alcohol
Humulene epoxide II	0.07	Sesquiterpenic ether

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Junenol	0.01	Sesquiterpenic alcohol
10-epi-Cubenol	0.02	Sesquiterpenic alcohol
1-epi-Cubenol	0.04	Sesquiterpenic alcohol
τ-Cadinol	0.12	Sesquiterpenic alcohol
τ-Muurolol	0.02	Sesquiterpenic alcohol
α-Muurolol	0.05	Sesquiterpenic alcohol
α-Cadinol	0.01	Sesquiterpenic alcohol
(3Z)-Caryophylla-3,8(13)-dien-5β-ol	0.02	Sesquiterpenic alcohol
Shyobunol	0.02	Sesquiterpenic alcohol
α-Phellandrene dimer II	0.05	Diterpene
α-Phellandrene dimer III	0.01	Diterpene
α-Phellandrene dimer IV	0.01	Diterpene
Unknown	0.01	Unknown
meta-Camphorene	0.06	Diterpene
(3E)-Cembrene A	0.10	Diterpene
para-Camphorene	0.02	Diterpene
Cembrene C	0.02	Diterpene
Verticilla-4(20),7,11-triene	0.02	Diterpene
Cembrenol	0.04	Diterpenic alcohol
Serratol	0.38	Diterpenic alcohol
Incensole	0.05	Diterpenic alcohol
Consolidated total	98.47%	

*: Individual compounds concentration could not be found due to overlapping coelutions on columns considered

[xx]: Duplicate percentage due to coelutions, not taken into account in the consolidated total

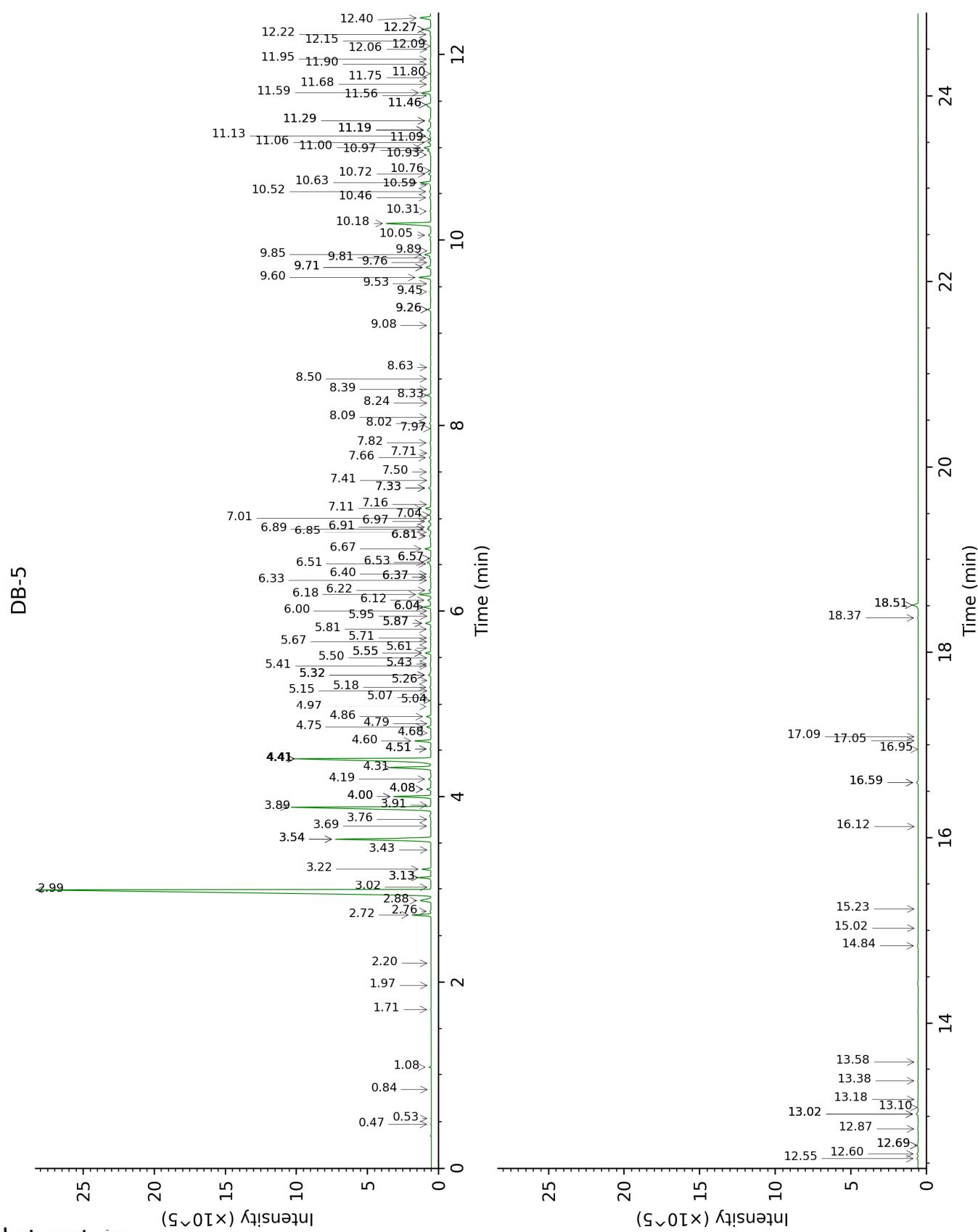
tr: The compound has been detected below 0.005% of total signal.

Note: no correction factor was applied

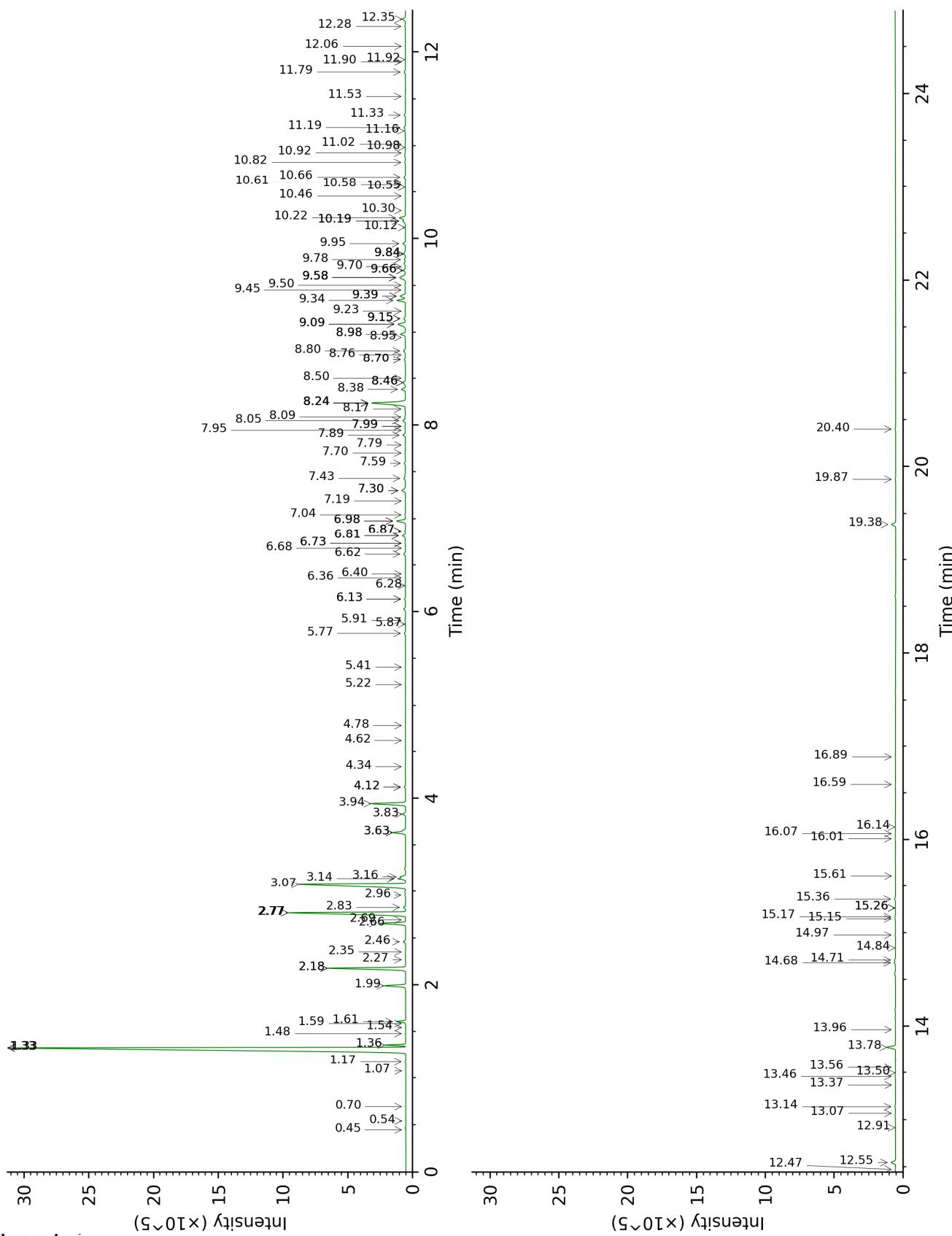
About "consolidated" data: The table above presents the breakdown of the sample volatile constituents after applying an algorithm to collapse data acquired from the multi-columns system of PhytoChemia into a single set of consolidated contents. In case of discrepancies between columns, the algorithm is set to prioritize data from the most standard DB-5 column, and smallest values so as to avoid overestimating individual content. This process is semi-automatic. Advanced users are invited to consult the "Full analysis data" table after the chromatograms in this report to access the full untreated data and perform their own calculations if needed.

Unknowns: Unknown compounds' mass spectral data is presented in the "Full analysis data" table. The occurrence of unknown compounds is to be expected in many samples, and does not denote particular problems unless noted otherwise in the conclusion.

This page was intentionally left blank. The following pages present the complete data of the analysis.



DB-WAX



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FULL ANALYSIS DATA

Identification	Column DB-5			Column DB-WAX		
	R.T	R.I	%	R.T	R.I	%
2-Methyl-3-buten-2-ol	0.47	600	0.02	1.48	1015	0.03
(E)-2-Methyl-1,3-pentadiene	0.53	627	0.01	0.45	767	0.01
Unknown [m/z 93, 91 (70), 77 (48), 108 (42)]	0.84	722	tr	0.54	824	tr
Toluene	1.08	758	0.06	1.33*	999	44.53
Unknown [m/z 109, 67 (32), 81 (14), 41 (12), 124 (10)]	1.71	833	0.02	0.70	882	0.02
Unknown [m/z 109, 43 (28), 124 (28), 41 (14), 55 (11), 79 (9), 81 (8)...]	1.97	855	tr	1.54	1021	0.02
Unknown [m/z 79, 78 (45), 91 (28), 77 (28), 41 (13), 80 (12), 107 (11)... 122 (1)]	2.20	876	0.01	1.08	956	0.01
Hashishene	2.72	917	0.96	1.33*	999	[44.53]
Tricyclene	2.76	920	0.05	1.17	973	0.05
α -Thujene	2.88	928	0.90	1.36	1002	0.99
α -Pinene	2.99	935	43.67	1.33*	999	[44.53]
Unknown [m/z 91, 92 (47), 65 (11)... 134 (1)]	3.02	937	0.01	2.27	1095	0.02
α -Fenchene	3.13*	945	0.62	1.59	1026	0.02
Camphene	3.13*	945	[0.62]	1.61	1028	0.59
Thuja-2,4(10)-diene	3.22	951	0.45	2.18*	1086	5.64
meta-Cymene	3.43	965	tr	2.77*	1136	10.31
Sabinene	3.54*	973	6.70	2.18*	1086	[5.64]
β -Pinene	3.54*	973	[6.70]	1.99	1066	1.50
Pseudolimonene isomer	3.69	982	0.03	2.35	1102	0.02
Dehydro-1,8-cineole	3.76	987	0.02	2.96	1151	0.06
Myrcene	3.89	996	10.40	2.77*	1136	[10.31]
6-Methyl-5-hepten-2-ol	3.91	997	0.02	6.73*	1430	0.05
Pseudolimonene	4.00*	1004	1.97	2.69	1130	0.03
α -Phellandrene	4.00*	1004	[1.97]	2.66	1127	1.88
Δ 3-Carene	4.08*	1009	0.24	2.46	1111	0.16
ortho-Methylanisole	4.08*	1009	[0.24]	5.77	1359	0.09

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α -Terpinene	4.19	1016	0.13	2.83	1140	0.13
para-Cymene	4.31	1023	2.66	3.94	1228	2.63
β -Phellandrene	4.41*	1029	11.45	3.16†	1167	[0.88]
1,8-Cineole	4.41*	1029	[11.45]	3.14†	1165	0.88
Limonene	4.41*	1029	[11.45]	3.07	1160	10.56
Unknown [m/z 67, 93 (70), 82 (70), 121 (42), 107 (39), 91 (33), 79 (28)...]	4.51*	1036	0.05			
Cymene analog	4.51*	1036	[0.05]	4.34	1257	0.02
(Z)- β -Ocimene	4.60	1042	0.86	3.63*	1205	1.11
Unknown [m/z 109, 43 (57), 91 (28), 67 (25), 93 (24), 95 (22), 77 (21), 137 (21), 41 (17), 79 (14)...]	4.68	1047	0.01			
(E)- β -Ocimene	4.75	1051	0.23	3.83	1219	0.23
Unknown [m/z 109, 45 (67), 41 (40), 67 (39), 81 (33), 79 (27), 95 (24), 91 (23), 82 (21), 55 (21), 93 (20)...]	4.79	1053	0.01	6.68	1426	0.01
γ -Terpinene	4.86	1058	0.24	3.63*	1205	[1.11]
cis-Sabinene hydrate	4.97	1065	0.02	6.73*	1430	[0.05]
Unknown [m/z 79, 93 (60), 43 (40), 94 (35), 137 (33), 77 (26), 91 (20), 152 (18)]	5.04	1069	0.01	4.62	1278	0.02
cis-Linalool oxide (fur.)	5.07	1072	0.01	6.36	1402	0.03
Octanol	5.15	1076	0.01	7.99*	1525	0.04
Unknown [m/z 43, 94 (63), 109 (61), 59 (55), 79 (51)...152 (2)]	5.18	1078	0.06	6.98*	1448	0.77
Isoterpinolene	5.26	1083	0.01	4.12*	1241	0.08
γ -Campholenal	5.32*	1087	0.15	4.78	1290	0.01
Terpinolene	5.32*	1087	[0.15]	4.12*	1241	[0.08]
para-Cymenene	5.32*	1087	[0.15]	6.14*	1386	0.07
α -Pinene oxide	5.41	1093	0.03	5.22	1319	0.03
trans-Sabinene hydrate	5.43	1094	0.05	7.79	1509	0.03
Rosefuran	5.50	1098	0.01	5.87	1366	0.01
α -Thujone	5.55*	1102	0.32	5.91	1369	0.04
Linalool	5.55*	1102	[0.32]	7.89	1518	0.20
Unknown [m/z 119, 109 (94), 43 (61), 95 (56), 91	5.60	1105	0.03	8.24*	1544	3.58

(48), 77 (32), 152 (32), 137 (31), 134 (24)]						
Verbenol analog?	5.67	1110	0.03	8.09	1533	0.05
β -Thujone	5.71	1112	0.04	6.14*	1386	[0.07]
cis-para-Menth-2-en-1-ol	5.81	1118	0.06	7.94	1522	0.03
Myrcenol	5.87*	1122	0.35	8.70*	1581	0.10
α -Campholenal	5.87*	1122	[0.35]	6.81*	1436	0.28
cis-Limonene oxide	5.95	1127	tr	6.28	1396	0.01
allo-Ocimene	6.00	1131	0.04	5.41	1333	0.02
trans-Limonene oxide	6.04*	1134	0.45	6.40	1405	0.02
trans-Pinocarveol	6.04*	1134	[0.45]	8.98*	1602	0.42
trans-Sabinol	6.12	1138	0.21	9.58*	1652	0.77
trans-Verbenol	6.18	1142	0.69	9.34	1632	0.71
meta-Mentha-4,6-dien-8-ol	6.22	1145	0.13	9.15*	1616	0.15
Unknown [m/z 109, 81 (39), 41 (38), 95 (24)... 152 (1)]	6.33	1152	0.03			
Unknown [m/z 97, 81 (96), 109 (80), 43 (53), 53 (40), 41 (36), 56 (29), 95 (25)... 152 (1)]	6.37*	1154	0.06	7.30*	1472	0.38
Pinocamphone	6.37*	1154	[0.06]	7.04	1453	0.05
Pinocarvone	6.40	1156	0.04	7.70	1503	0.04
Borneol	6.51	1163	0.06	9.58*	1652	[0.77]
α -Phellandren-8-ol	6.52	1164	0.23	9.95	1682	0.22
cis-Sabinol	6.57*	1167	0.06	10.60	1737	0.01
Umbellulone	6.57*	1167	[0.06]	8.76	1585	0.03
Terpinen-4-ol	6.67	1174	0.35	8.38	1556	0.34
Cryptone	6.81*	1183	0.13	8.98*	1602	[0.42]
Thuj-3-en-10-al	6.81*	1183	[0.13]	8.50	1565	0.03
para-Cymen-8-ol	6.85	1185	0.01	11.33	1798	0.10
α -Terpineol	6.89	1188	0.22	9.58*	1652	[0.77]
Myrtenal	6.91	1189	0.15	8.46*	1561	0.23
Myrtenol	6.97	1193	0.16	10.66	1742	0.13
Methylchavicol	7.01	1195	0.01	9.15*	1616	[0.15]
cis- α -Phellandrene epoxide (IPP vs Me)	7.04	1198	0.08	10.82	1755	0.07
Verbenone	7.11	1202	0.31	9.39*	1636	0.54
trans-Piperitol	7.16	1205	0.03	10.19*	1701	0.28
Octyl acetate	7.33*	1217	0.14	6.87*	1440	0.06
trans-Carveol	7.33*	1217	[0.14]	11.19	1787	0.13
Unknown [m/z 43, 111 (88), 126 (74), 125 (61)... 168? (2)]	7.41	1222	0.01	11.02	1772	0.03

<i>cis</i> -Carveol	7.50	1228	0.04	11.53	1816	0.04
Carvone	7.66	1239	0.10	9.84*	1673	0.19
Carvotanacetone	7.71	1242	0.02	9.23	1622	0.03
Piperitone	7.82	1249	0.05	9.70	1661	0.03
Linalyl acetate	7.97	1260	0.01	7.99*	1525	[0.04]
3,5-Dimethoxytoluene	8.02	1263	0.08	11.16	1784	0.08
Unknown [m/z 109, 41 (22), 81 (14), 43 (11)... 152 (4)]	8.09	1268	0.04			
Decanol	8.24	1278	0.01	10.55	1732	0.01
Bornyl acetate	8.33	1284	0.24	8.05	1530	0.24
para-Cymen-7-ol	8.39	1288	0.03	13.96	2041	0.02
<i>trans</i> -Pinocarvyl acetate	8.50	1296	0.03	8.94	1600	0.02
Carvacrol	8.63	1304	0.03	15.15	2158	0.04
Bicycloelemene	9.08	1336	0.03	6.87*	1440	[0.06]
α -Terpinyl acetate	9.26*	1348	0.20	9.50	1645	0.04
α -Cubebene	9.26*	1348	[0.20]	6.62	1421	0.14
Cyclosativene II	9.45	1362	0.05	6.81*	1436	[0.28]
α -Ylangene	9.53	1368	0.04	6.87*	1440	[0.06]
α -Copaene	9.60	1373	0.75	6.98*	1448	[0.77]
1,5-diepi- β -Bourbonene	9.71*	1380	0.31	7.19	1464	0.03
β -Bourbonene	9.71*	1380	[0.31]	7.30*	1472	[0.38]
Geranyl acetate	9.76	1384	0.02	10.30	1711	0.04
β -Cubebene	9.81	1388	0.09	7.59	1494	0.11
β -Elemene	9.85	1390	0.41	8.24*	1544	[3.58]
Unknown [m/z 71, 100 (92), 111 (79), 69 (46), 109 (45)...]	9.89	1393	0.01	16.89	2339	0.02
α -Gurjunene	10.05	1405	0.16	7.43	1482	0.16
β -Caryophyllene	10.18	1414	3.18	8.24*	1544	[3.58]
β -Copaene	10.31	1424	0.06	8.17	1539	0.05
<i>trans</i> - α -Bergamotene	10.46	1435	0.09	8.24*	1544	[3.58]
6,9-Guaiadiene	10.52	1440	0.10	8.46*	1561	[0.23]
<i>trans</i> -Muurola-3,5-diene	10.59	1445	0.04	8.70*	1581	[0.10]
α -Humulene	10.63	1447	0.67	9.09*	1611	0.86
allo-Aromadendrene	10.72	1454	0.14	8.80	1588	0.19
<i>cis</i> -Muurola-4(15),5-diene	10.76	1457	0.02	9.15*	1616	[0.15]
<i>trans</i> -Cadina-1(6),4-diene	10.92	1470	0.04	9.09*	1611	[0.86]
γ -Muurolene	10.97	1473	0.25	9.39*	1636	[0.54]
Germacrene D	11.00	1476	0.46	9.58*	1652	[0.77]
β -Selinene	11.06	1480	0.17	9.66*	1658	0.18
<i>trans</i> -Muurola-4(15),5-diene	11.09	1482	0.01	9.66*	1658	[0.18]

δ-Selinene	11.13	1485	0.08	9.45	1641	0.05
Bicyclogermacrene	11.19*	1490	0.33	9.84*	1673	[0.19]
epi-Cubebol	11.19*	1490	[0.33]	11.79	1840	0.12
α-Selinene	11.19*	1490	[0.33]	9.78	1668	0.09
Germacrene A	11.29*	1497	0.18	10.12	1696	0.01
α-Murolene	11.29*	1497	[0.18]	9.84*	1673	[0.19]
Cubebol	11.46*	1510	0.47	12.35	1890	0.28
γ-Cadinene	11.46*	1510	[0.47]	10.19*	1701	[0.28]
trans-Calamenene	11.56	1518	0.03	10.98	1769	0.02
δ-Cadinene	11.59	1520	0.56	10.22	1704	0.54
trans-Cadina-1,4-diene	11.68	1528	0.03	10.46	1724	0.03
α-Cadinene	11.75	1533	0.02	10.58	1734	0.02
α-Calacorene	11.80	1536	0.01	11.90	1849	0.01
Isocaryophyllene epoxide B	11.90	1544	0.04	11.92	1851	0.03
Germacrene B	11.95	1549	0.04	10.92	1764	0.02
Elemicin	12.06	1557	0.01	15.26*	2170	0.04
Palustrol	12.09	1560	0.02	12.06	1864	0.02
Unknown [m/z 152, 109 (61), 43 (21), 137 (16), 151 (16)... 222 (6)]	12.15	1564	0.02			
Germacrene D-4-ol	12.22	1570	0.06	13.46	1992	0.05
Caryophyllene oxide isomer	12.27*	1574	0.45	12.47	1900	0.05
Caryophyllene oxide	12.27*	1574	[0.45]	12.55	1907	0.40
Viridiflorol	12.40	1584	0.72	13.78	2023	0.73
Copaborneol	12.55	1596	0.10	14.71	2114	0.08
Humulene epoxide II	12.60	1600	0.07	13.14	1962	0.08
Junenol	12.69*	1607	0.08	13.37	1984	0.01
10-epi-Cubenol	12.69*	1607	[0.08]	13.50	1996	0.02
1-epi-Cubenol	12.87	1622	0.04	13.56	2001	0.03
τ-Cadinol	13.02*	1635	0.13	14.68	2110	0.12
τ-Muurolol	13.02*	1635	[0.13]	14.84	2126	0.02
α-Muurolol	13.10	1640	0.05	14.98	2140	0.05
α-Cadinol	13.18	1648	0.01	15.26*	2170	[0.04]
(3Z)-Caryophylla-3,8(13)-dien-5β-ol	13.38	1664	0.02	16.59	2307	0.03
Shyobunol	13.58	1680	0.02	16.07	2252	0.03
α-Phellandrene dimer II	14.84	1789	0.05	12.28	1883	0.06
α-Phellandrene dimer III	15.02	1805	0.01	12.92	1942	0.03
α-Phellandrene dimer IV	15.23	1824	0.01	13.07	1956	0.03
Unknown [m/z 43, 81 (45), 137 (39), 71 (39), 93 (33), 95 (32)...]	16.12	1905	0.01			

meta-Camphorene	16.60*	1950	0.11	15.17	2160	0.06
(3E)-Cembrene A	16.60*	1950	[0.11]	15.36	2179	0.10
para-Camphorene	16.95	1984	0.02	15.61	2205	0.01
Cembrene C	17.04	1993	0.02	16.01	2246	0.02
Verticilla-4(20),7,11-triene	17.09	1997	0.02	16.14	2260	0.02
Cembrenol	18.37	2125	0.04	19.87	2681	0.05
Serratol	18.51*	2140	0.43	19.38	2623	0.38
Incensole	18.51*	2140	[0.43]	20.40	2747	0.05
Total identified			98.59%			97.88%
Total reported			98.87%			98.04%

*: Two or more compounds are coeluting on this column

[xx]: Duplicate percentage due to coelutions, not taken into account in the consolidated total

†: Peaks apexes were resolved, but peaks overlapped and were summed for analysis

tr: The compound has been detected below 0.005% of total signal.

Note: no correction factor was applied

R.T.: Retention time (minutes)

R.I.: Retention index