PhytoChemia

Date : 2026-11-06

Certificate of Analysis - GC Profiling

Sample Identification

Internal code : 26J28-PTH11
Customer Identification : Frankincense carterii - F30119
Type : Essential Oil
Source : *Boswellia carteri*
Customer : Plant Therapy

Checked and approved by:

Sylvain Mercier, M. Sc., Chimiste 2014-005

Notes: This report may not be published, including online, without the written consent from Laboratoire PhytoChemia. This report is digitally signed, it is only considered valid if the digital signature is intact. The results only describe the samples that were submitted to the assays. The compliance status of the sample is provided to facilitate the reading of the report. The client remains ultimately responsible for reviewing the results presented within this report and to establish compliance of the tested batch against relevant quality criteria.

Méthode certifiée ISO 17025:2017 Certified Method

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Gas Chromatographic Analysis

Method : PC-MAT-014 - Analysis of the composition of an essential oil or other volatile liquide by FAST GC-FID ISO
Results : See analysis summary (next page)
Analyst : Sylvain Mercier, M. Sc., Chimiste 2014-005
Date : 2026-11-04

Physicochemical data

Physical aspect : Faintly yellow liquid
Analyst : Cindy Caron B. Sc.
Date : 2026-10-28

Refractive index : 1.4716 ± 0.0003 (20 °C)
Method : PC-MAT-016 - Measure of the refractive index of a liquid.
Analyst : Cindy Caron B. Sc.
Date : 2026-10-28

Conclusion

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
Isobutyral	tr	Aliphatic aldehyde
2-Methyl-3-buten-2-ol	0.01	Aliphatic alcohol
(*E*)-2-Methyl-1,3-pentadiene	0.01	Alkene
3-Methyl-2-butanone	0.01	Aliphatic ketone
Unknown	tr	Unknown
Toluene	0.07	Simple phenolic
Prenal	0.01	Aliphatic aldehyde
Unknown	0.01	Alkene
Unknown BOCA XXII [m/z 99, 81 (73), 56 (54), 59 (47), 55 (45)...]	0.01	Unknown
Unknown	0.02	Unknown
Unknown	0.02	Unknown
Hashishene	0.55	Monoterpene
Tricyclene	0.06	Monoterpene
α-Thujene	8.89	Monoterpene
α-Pinene	37.08	Monoterpene
Unknown	0.34	Monoterpene
Camphene	0.66	Monoterpene
α-Fenchene	0.02	Monoterpene
Thuja-2,4(10)-diene	0.41	Monoterpene
3,7,7-Trimethylcyclohepta-1,3,5-triene	0.04	Monoterpene
Sabinene	5.16	Monoterpene
β-Pinene	1.24	Monoterpene
Pseudolimonene isomer	0.03	Monoterpene
6-Methyl-5-hepten-2-one	0.02	Aliphatic ketone
Dehydro-1,8-cineole	0.08	Monoterpenic ether
Myrcene	7.46	Monoterpene
6-Methyl-5-hepten-2-ol	0.03	Aliphatic alcohol
α-Phellandrene	2.06	Monoterpene
Octanal	0.02	Aliphatic aldehyde
Pseudolimonene	0.04	Monoterpene
Δ3-Carene	0.48	Monoterpene
ortho-Methylanisole	0.02	Simple phenolic
α-Terpinene	0.18	Monoterpene
Carvomenthene	0.02	Aliphatic alcohol
meta-Cymene	0.04	Monoterpene

para-Cymene	3.65	Monoterpene
Unknown	0.09	Unknown
1,8-Cineole	0.15	Monoterpenic ether
Limonene	12.71	Monoterpene
β-Phellandrene	0.63	Monoterpene
ortho-Cymene	0.05	Monoterpene
(*Z*)-β-Ocimene	0.29	Monoterpene
Unknown	0.07	Unknown
(*E*)-β-Ocimene	0.11	Monoterpene
γ-Terpinene	0.30	Monoterpene
cis-Sabinene hydrate	0.04	Monoterpenic alcohol
6,8-Epoxymenth-1-ene [Pinol]	0.02	Monoterpenic ether
cis-Linalool oxide (fur.)	tr	Monoterpenic alcohol
Octanol	0.05	Aliphatic alcohol
Unknown	0.02	Oxygenated monoterpene
Terpinolene	0.10	Monoterpene
para-Cymenene	0.10	Monoterpene
trans-Linalool oxide (fur.)	0.02	Monoterpenic alcohol
α-Pinene oxide	0.01	Monoterpenic ether
6,7-Epoxymyrcene	0.03	Monoterpenic ether
trans-Sabinene hydrate	0.04	Monoterpenic alcohol
Verbenol analog?	0.05	Monoterpenic alcohol
α-Thujone	tr	Monoterpenic ketone
Perillene	0.06	Monoterpenic ether
Linalool	0.14	Monoterpenic alcohol
Unknown	0.03	Monoterpenic alcohol
Unknown	0.05	Oxygenated monoterpene
β-Thujone	0.13	Monoterpenic ketone
Unknown	0.11	Oxygenated monoterpene
trans-*para*-Mentha-2,8-dien-1-ol	0.09	Monoterpenic alcohol
cis-*para*-Menth-2-en-1-ol	0.05	Monoterpenic alcohol
α-Campholenal	0.18	Monoterpenic aldehyde
Myrcenol	0.08	Monoterpenic alcohol
cis-Limonene oxide	0.02	Monoterpenic ether
allo-Ocimene	0.02	Monoterpene
trans-Pinocarveol	0.42	Monoterpenic alcohol
trans-Limonene oxide	0.04	Monoterpenic ether
cis-Verbenol	0.17	Monoterpenic alcohol
trans-Sabinol	0.09	Monoterpenic alcohol
trans-Verbenol	0.70	Monoterpenic alcohol
meta-Mentha-4,6-dien-8-ol	0.14	Monoterpenic alcohol

Sabinaketone	0.04	Normonoterpenic ketone
Pinocamphone	0.06	Monoterpenic ketone
Pinocarvone	0.08	Monoterpenic ketone
Borneol	0.05	Monoterpenic alcohol
α-Phellandren-8-ol	0.30	Monoterpenic alcohol
cis-Sabinol	0.11	Monoterpenic alcohol
Umbellulone	0.06	Monoterpenic ketone
Terpinen-4-ol	0.58	Monoterpenic alcohol
Thuj-3-en-10-al	0.02	Monoterpenic aldehyde
Cryptone	0.06	Normonoterpenic ketone
para-Cymen-8-ol	0.13	Monoterpenic alcohol
trans-Isocarveol	0.02	Monoterpenic alcohol
α-Terpineol	0.25	Monoterpenic alcohol
Myrtenal	0.14	Monoterpenic aldehyde
β-Phellandren-8-ol	0.01	Monoterpenic alcohol
Myrtenol	0.18	Monoterpenic alcohol
cis-α-Phellandrene epoxide (iPr vs Me)	0.13	Monoterpenic ether
Verbenone	0.37	Monoterpenic ketone
trans-Piperitol	0.03	Monoterpenic alcohol
trans-Carveol	0.14	Monoterpenic alcohol
Octyl acetate	0.04	Aliphatic ester
cis-Carveol	0.05	Monoterpenic alcohol
Cuminal	0.01	Monoterpenic aldehyde
Methyl decyl ether	0.02	Aliphatic ether
Carvone	0.13	Monoterpenic ketone
Carvotanacetone	0.02	Monoterpenic ketone
Unknown	0.02	Unknown
Piperitone	0.04	Monoterpenic ketone
trans-Sabinene hydrate acetate	0.04	Monoterpenic ester
Linalyl acetate	tr	Monoterpenic ester
Unknown	0.01	Unknown
3,5-Dimethoxytoluene	0.09	Simple phenolic
Unknown	0.04	Oxygenated monoterpene
Decanol	0.02	Aliphatic alcohol
Bornyl acetate	0.22	Monoterpenic ester
para-Cymen-7-ol	0.03	Monoterpenic alcohol
Thymol	0.02	Monoterpenic alcohol
Carvacrol	0.08	Monoterpenic alcohol
Unknown	0.03	Unknown
Bicycloelemene	0.03	Sesquiterpene
Unknown	0.03	Unknown

α-Cubebene	0.13	Sesquiterpene
α-Terpinyl acetate	0.05	Monoterpenic ester
Cyclosativene I	0.02	Sesquiterpene
Cyclosativene II	0.05	Sesquiterpene
α-Ylangene	0.02	Sesquiterpene
α-Copaene	0.49	Sesquiterpene
β-Bourbonene	0.28	Sesquiterpene
Geranyl acetate	0.02	Monoterpenic ester
β-Cubebene	0.09	Sesquiterpene
β-Elemene	0.46	Sesquiterpene
Isocaryophyllene	0.04	Sesquiterpene
α-Gurjunene	0.11	Sesquiterpene
β-Caryophyllene	2.22	Sesquiterpene
β-Copaene	0.06	Sesquiterpene
trans-α-Bergamotene	0.13	Sesquiterpene
6,9-Guaiadiene	0.05	Sesquiterpene
Unknown	0.02	Sesquiterpene
trans-Muurola-3,5-diene	0.03	Sesquiterpene
α-Humulene	0.44	Sesquiterpene
allo-Aromadendrene	0.12	Sesquiterpene
cis-Muurola-4(15),5-diene	0.04	Sesquiterpene
trans-Cadina-1(6),4-diene	0.03	Sesquiterpene
γ-Muurolene	0.27	Sesquiterpene
Germacrene D	0.46	Sesquiterpene
β-Selinene	0.20	Sesquiterpene
trans-Muurola-4(15),5-diene	0.02	Sesquiterpene
δ-Selinene	0.07	Sesquiterpene
epi-Cubebol	0.10	Sesquiterpenic alcohol
Bicyclogermacrene	0.05	Sesquiterpene
α-Selinene	0.16	Sesquiterpene
α-Muurolene	0.17	Sesquiterpene
Cubebol	0.24	Sesquiterpenic alcohol
γ-Cadinene	0.31	Sesquiterpene
trans-Calamenene	0.03	Sesquiterpene
δ-Cadinene	0.43	Sesquiterpene
trans-Cadina-1,4-diene	0.02	Sesquiterpene
α-Cadinene	0.03	Sesquiterpene
α-Elemol	0.02	Sesquiterpenic alcohol
Isocaryophyllene epoxide B	0.03	Sesquiterpenic ether
Germacrene B	0.03	Sesquiterpene
Elemicin	0.02	Phenylpropanoid

Palustrol	0.02	Sesquiterpenic alcohol
Unknown	0.04	Oxygenated sesquiterpene
Germacrene D-4-ol	0.04	Sesquiterpenic alcohol
Caryophyllene oxide isomer	0.04	Sesquiterpenic ether
Caryophyllene oxide	0.36	Sesquiterpenic ether
Viridiflorol	0.24	Sesquiterpenic alcohol
Copaborneol	0.08	Sesquiterpenic alcohol
Humulene epoxide II	0.06	Sesquiterpenic ether
1,10-diepi-Cubenol	0.08	Sesquiterpenic alcohol
1-epi-Cubenol	0.03	Sesquiterpenic alcohol
τ-Muurolol	0.03	Sesquiterpenic alcohol
τ-Cadinol	0.19	Sesquiterpenic alcohol
α-Muurolol	0.05	Sesquiterpenic alcohol
α-Cadinol	0.03	Sesquiterpenic alcohol
(3*Z*)-Caryophylla-3,8(13)-dien-5β-ol	0.03	Sesquiterpenic alcohol
Shyobunol	0.02	Sesquiterpenic alcohol
α-Phellandrene dimer II	0.04	Diterpene
(3*E*)-Cembrene A	0.07	Diterpene
Verticilla-4(20),7,11-triene	0.02	Diterpene
Cembrenol	0.03	Diterpenic alcohol
Serratol	0.21	Diterpenic alcohol
Incensole	0.04	Diterpenic alcohol
Consolidated total	**99.20**	

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

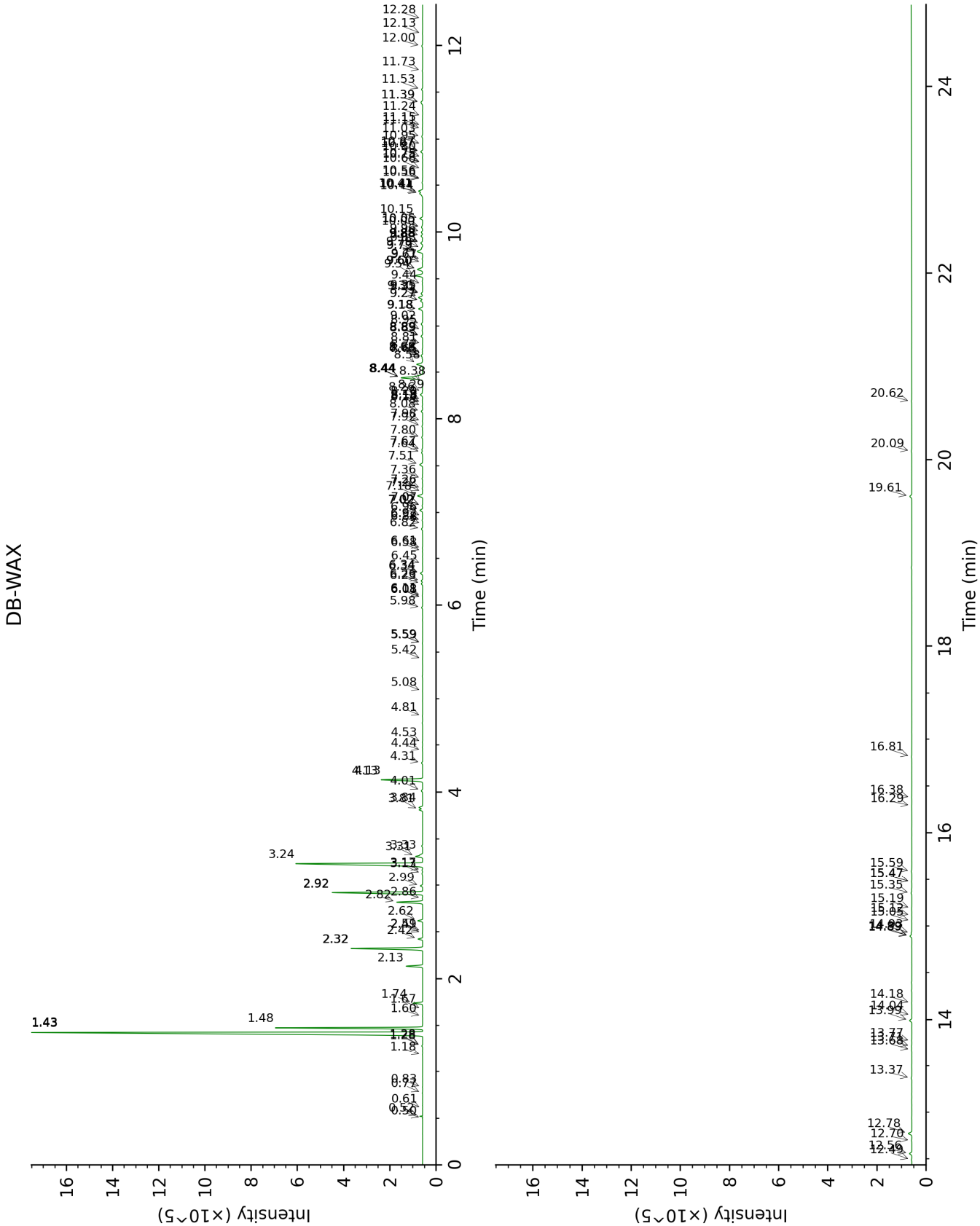
Note: no correction factor was applied

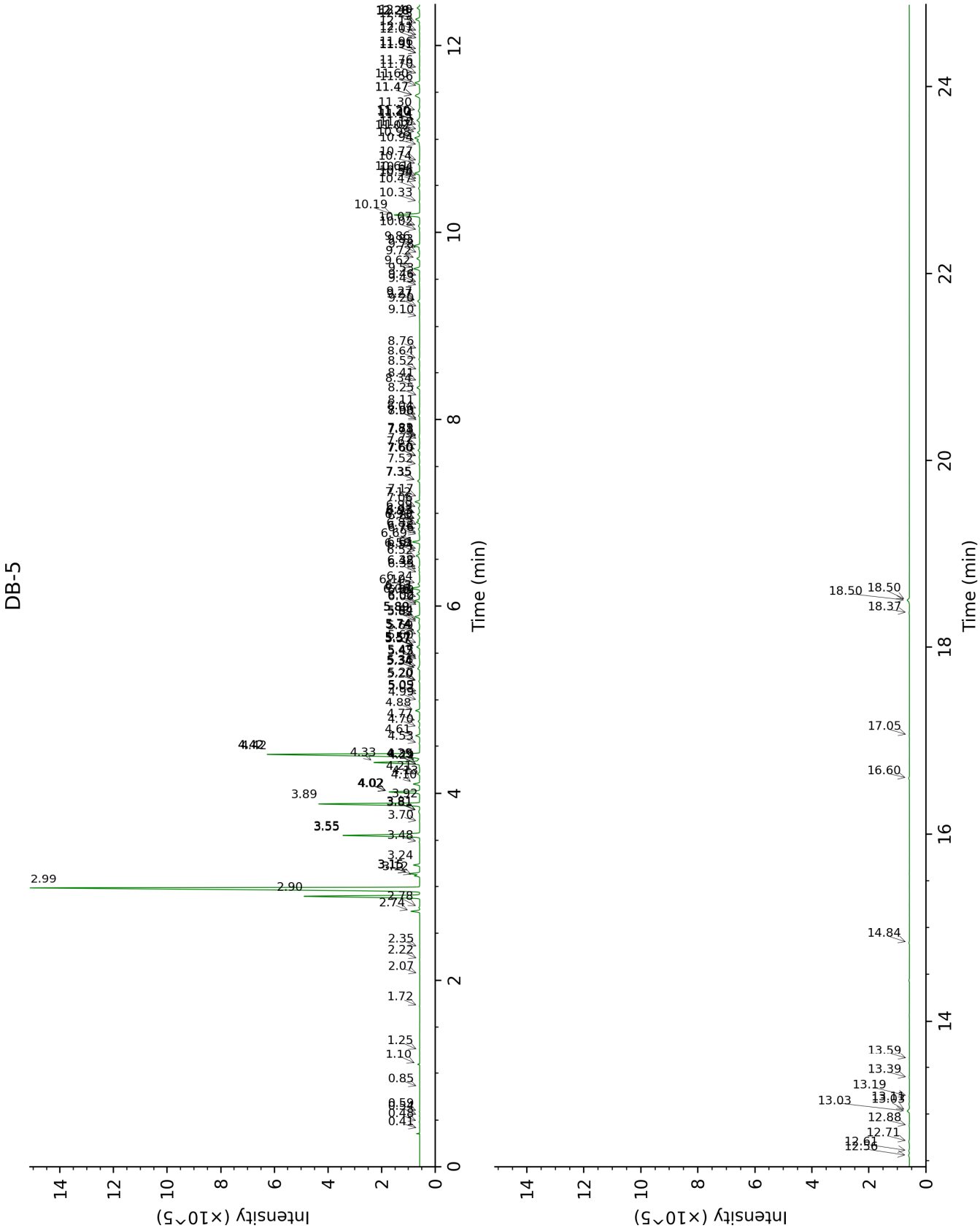
About "consolidated" data: The table above presents the breakdown of the sample volatile constituents after applying an algorithm to collapse data acquired from the multi-columns system of PhytoChemia into a single set of consolidated contents. In case of discrepancies between columns, the algorithm 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.

Bracketed value ([xx]): A bracketed percent value indicate that two or more compound percentage could not be solved due to coelution.

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DB-WAX
Time (min)
Intensity (×10^5)
12.28
12.13
12.00
11.73
11.53
11.39
11.24
10.15
9.44
9.18
8.44
8.38
7.80
7.51
7.36
6.82
6.45
5.98
5.59
5.42
5.08
4.81
4.53
4.44
4.31
4.13
4.01
3.24
3.11
2.99
2.92
2.86
2.82
2.62
2.42
2.32
2.13
1.74
1.67
1.60
1.48
1.43
1.28
1.18
0.83
0.77
0.61
20.62
20.09
19.61
16.81
16.38
16.29
15.59
15.47
15.35
15.19
14.89
14.18
14.04
13.77
13.68
13.37
12.78
12.70
12.56
12.49


DB-5
Time (min)
Intensity (×10^5)
2.99
2.90
2.74
3.89
3.55
4.42
4.33
4.02
18.50
18.37
17.05
16.60
14.84
13.59
13.39
13.19
13.03
12.88
12.71
12.67
12.56

Full analysis data

Isobutyral	Column DB-WAX			Column DB-5		
	0.52	778.2	0.07	0.41	536.9	tr
2-Methyl-3-buten-2-ol	1.60	1014.1	0.02	0.48	603.5	0.01
(*E*)-2-Methyl-1,3-pentadiene	0.50	761.3	0.01	0.54	628.8	0.01
3-Methyl-2-butanone	0.83	901.2	0.01	0.59	646.4	0.01
Unknown BODA I [m/z 93, 91 (70), 77 (48), 108 (42)]	0.61	821.4	tr	0.85	721.4	tr
Toluene	1.43*	995.5	[37.46]	1.10	758.1	0.07
Prenal	3.17	1154.6	0.06	1.25	781.5	0.01
Unknown BOCA I [m/z 109, 67 (32), 81 (14), 41 (12), 124 (10)]	0.77	879.5	0.01	1.72	831.8	0.01
Unknown BOCA XXII [m/z 99, 81 (73), 56 (54), 59 (47), 55 (45)...]				2.07	861.5	0.01
Unknown BOCA II [m/z 79, 78 (45), 91 (28), 77 (28), 41 (13), 80 (12), 107 (11)... 122 (1)]	1.18	955.9	0.02	2.22	874.9	0.02
Unknown BORI I [m/z 119, 91 (35), 79 (17), 77 (13), 120 (11), 117 (9)...134 (1)]	1.28*	972.4	[0.06]	2.35	886.1	0.02
Hashishene	1.43*	995.5	[37.46]	2.74	916.0	0.55
Tricyclene	1.28*	972.4	[0.06]	2.78	918.8	0.06
α-Thujene	1.48	1002.1	8.92	2.90	926.9	8.89
α-Pinene	1.43*	995.5	[37.46]	2.99	932.9	37.08
Unknown SAOF I [m/z 91, 92 (47), 65 (11)... 134 (1)]	2.42	1095.4	0.34	3.12	942.2	0.34
Camphene	1.74	1028.0	0.66	3.15*	943.8	[0.67]

α-Fenchene	1.67	1021.5	0.02	3.15*	943.8	[0.67]
Thuja-2,4(10)-diene	2.32*	1085.4	[5.50]	3.24	949.9	0.41
3,7,7-Trimethylcyclohepta-1,3,5-triene	2.92*	1135.4	[7.44]	3.48	966.3	0.04
Sabinene	2.32*	1085.4	[5.50]	3.55*	971.2	[6.39]
β-Pinene	2.14	1066.8	1.24	3.55*	971.2	[6.39]
Pseudolimonene isomer	2.49	1101.3	0.03	3.70	981.2	0.03
6-Methyl-5-hepten-2-one	5.08	1298.6	0.02	3.81*	988.6	[0.12]
Dehydro-1,8-cineole	3.13	1151.8	0.08	3.81*	988.6	[0.12]
Myrcene	2.92*	1135.4	[7.44]	3.89	993.9	7.46
6-Methyl-5-hepten-2-ol	6.96	1431.5	0.04	3.92	996.2	0.03
α-Phellandrene	2.82	1127.3	2.06	4.02*	1002.6	[2.18]
Octanal	4.44	1251.4	0.02	4.02*	1002.6	[2.18]
Pseudolimonene	2.86	1130.5	0.04	4.02*	1002.6	[2.18]
Δ3-Carene	2.62	1111.7	0.38	4.10	1008.1	0.48
ortho-Methylanisole	5.98	1359.5	0.10	4.14	1010.3	0.02
α-Terpinene	2.99	1141.0	0.18	4.21	1015.0	0.18
Carvomenthene	2.51	1103.0	0.02	4.29*	1020.3	[0.05]
meta-Cymene	4.13*	1228.6	[3.61]	4.29*	1020.3	[0.05]
para-Cymene	4.13*	1228.6	[3.61]	4.33	1022.6	3.65
Unknown BODA IV [m/z 109, 43 (58), 95 (26)... 137 (15)...]	6.26	1380.1	0.13	4.35	1024.0	0.09
1,8-Cineole	3.33	1167.4	0.15	4.42*	1028.1	[13.56]
Limonene	3.24	1160.2	12.71	4.42*	1028.1	[13.56]
β-Phellandrene	3.32	1166.3	0.63	4.42*	1028.1	[13.56]
ortho-Cymene	4.53	1257.8	0.03	4.53	1035.5	0.05
(*Z*)-β-Ocimene	3.84*†	1206.9	[0.31]	4.61	1040.8	0.29
Unknown BOFR III [m/z 109, 43 (57), 91 (28), 67 (25), 93 (24), 95 (22), 77 (21), 137 (21), 41 (17), 79 (14)...]	7.36	1461.8	0.06	4.70	1046.4	0.07
(*E*)-β-Ocimene	4.01	1219.9	0.12	4.77	1050.6	0.11
γ-Terpinene	3.81*†	1205.0	[0.29]	4.88	1057.8	0.30
cis-Sabinene hydrate	6.92*	1428.5	[0.05]	4.99	1064.8	0.04

6,8-Epoxymenth-1-ene [Pinol]	4.81	1278.3	0.03	5.05	1068.7	0.02
cis-Linalool oxide (fur.)	6.58	1403.1	0.03	5.09	1070.9	tr
Octanol	8.20†	1525.5	0.04	5.20*	1078.2	[0.07]
Unknown BODA VI [m/z 43, 94 (63), 109 (61), 59 (55), 79 (51)...152 (2)]	7.22	1451.0	0.02	5.20*	1078.2	[0.07]
Terpinolene	4.31	1241.6	0.10	5.34*†	1086.9	[0.17]
para-Cymenene	6.34*	1386.1	[0.23]	5.34*†	1086.9	[0.17]
trans-Linalool oxide (fur.)	6.88	1425.6	0.02	5.36†	1088.2	0.04
α-Pinene oxide	5.42	1319.6	0.02	5.43	1092.7	0.01
6,7-Epoxymyrcene	6.08*	1367.1	[0.04]	5.45	1094.2	0.03
trans-Sabinene hydrate	7.98	1508.1	0.03	5.47	1095.3	0.04
Verbenol analog?	8.29	1531.9	0.05	5.57*	1101.7	[0.24]
α-Thujone	6.08*	1367.1	[0.04]	5.57*	1101.7	[0.24]
Perillene	6.10	1368.8	0.06	5.57*	1101.7	[0.24]
Linalool	8.08	1516.1	0.14	5.57*	1101.7	[0.24]
Unknown ORMA I [m/z 119, 109 (94), 43 (61), 95 (56), 91 (48), 77 (32), 152 (32), 137 (31), 134 (24)]	8.44*	1544.0	[2.73]	5.60	1103.8	0.03
Unknown BOSE I [m/z 109, 81 (54), 91 (32), 79 (22)...]	6.23	1377.9	0.13	5.69	1109.5	0.05
β-Thujone	6.34*	1386.1	[0.23]	5.74*	1112.6	[0.23]
Unknown BOSE II [m/z 109, 91 (57), 93 (47), 81 (44), 77 (40)... 154 (1)]				5.74*	1112.6	[0.23]
trans-*para*-Mentha-2,8-dien-1-ol	8.95	1583.9	0.06	5.82	1118.3	0.09
cis-*para*-Menth-2-en-1-ol	8.14	1520.3	0.05	5.84	1119.6	0.05
α-Campholenal	7.02*	1436.4	[0.27]	5.89*	1122.6	[0.39]
Myrcenol	8.89*	1579.1	[0.17]	5.89*	1122.6	[0.39]

cis-Limonene oxide	6.44	1393.4	0.02	6.00	1130.0	0.02
allo-Ocimene	5.60*	1331.9	[0.03]	6.02	1131.3	0.02
trans-Pinocarveol	9.18*	1601.9	[0.43]	6.06	1133.7	0.42
trans-Limonene oxide	6.61	1405.6	0.03	6.09	1135.7	0.04
cis-Verbenol	9.27*	1608.8	[0.21]	6.13*	1138.5	[0.26]
trans-Sabinol	9.83	1654.2	0.09	6.13*	1138.5	[0.26]
trans-Verbenol	9.54	1630.8	0.72	6.19	1142.3	0.70
meta-Mentha-4,6-dien-8-ol	9.35*	1615.1	[0.16]	6.24	1145.4	0.14
Sabinaketone	8.72	1565.8	0.05	6.35	1152.5	0.04
Pinocamphone	7.26	1453.8	0.05	6.38	1154.7	0.06
Pinocarvone	7.92	1503.5	0.07	6.42	1156.9	0.08
Borneol	9.79*	1651.6	[0.74]	6.52	1163.5	0.05
α-Phellandren-8-ol	10.15	1680.2	0.29	6.54	1164.9	0.30
cis-Sabinol	10.87*	1740.6	[0.19]	6.58	1167.5	0.11
Umbellulone	8.89*	1579.1	[0.17]	6.61	1169.2	0.06
Terpinen-4-ol	8.58	1555.1	0.62	6.69	1174.5	0.58
Thuj-3-en-10-al	8.68*†	1562.4	[0.17]	6.76	1179.3	0.02
Cryptone	9.18*	1601.9	[0.43]	6.78	1180.3	0.06
para-Cymen-8-ol	11.53	1797.2	0.11	6.82	1183.3	0.13
trans-Isocarveol	10.95	1747.5	0.02	6.86	1186.0	0.02
α-Terpineol	9.79*	1651.6	[0.74]	6.90	1188.7	0.25
Myrtenal	8.68*†	1562.4	[0.17]	6.93*	1190.3	[0.16]
β-Phellandren-8-ol	10.75*	1730.6	[0.02]	6.93*	1190.3	[0.16]
Myrtenol	10.87*	1740.6	[0.19]	6.99	1194.2	0.18
cis-α-Phellandrene epoxide (iPr vs Me)	11.03	1754.3	0.10	7.06	1198.5	0.13
Verbenone	9.60*	1636.1	[0.61]	7.12	1202.9	0.37
trans-Piperitol	10.41*	1701.9	[0.40]	7.17	1206.1	0.03
trans-Carveol	11.39*	1785.4	[0.24]	7.35*	1217.9	[0.18]
Octyl acetate	7.07*	1440.0	[0.06]	7.35*	1217.9	[0.18]
cis-Carveol	11.73	1814.9	0.05	7.52	1229.8	0.05
Cuminal	10.56*	1714.9	[0.02]	7.60*	1235.3	[0.08]
Methyl decyl ether	5.60*	1331.9	[0.03]	7.60*	1235.3	[0.08]
Carvone	10.00	1668.2	0.14	7.67	1240.2	0.13
Carvotanacetone	9.44	1623.1	0.04	7.72	1243.6	0.02
Unknown CALU IV [m/z 43, 97 (69), 107 (46), 41 (28), 55 (21), 109 (20)...]	11.11	1761.4	0.05	7.78	1247.8	0.02

Piperitone	9.88*	1658.9	[0.21]	7.81	1249.9	0.04
trans-Sabinene hydrate acetate	7.67	1484.7	0.09	7.83	1250.7	0.04
Linalyl acetate	8.18*†	1523.5	[0.03]	7.98	1261.4	tr
Unknown BOCA VIII [m/z 43, 82 (94), 95 (55), 99 (52), 69 (47), 41 (46)...]				8.00	1262.9	0.01
3,5-Dimethoxytoluene	11.39*	1785.4	[0.24]	8.04	1265.4	0.09
Unknown BOSE VI [m/z 109, 41 (22), 81 (14), 43 (11)... 152 (4)]				8.11	1270.0	0.04
Decanol	10.75*	1730.6	[0.02]	8.25	1279.7	0.02
Bornyl acetate	8.26	1529.9	0.24	8.34	1285.9	0.22
para-Cymen-7-ol	14.18	2039.4	0.02	8.41	1290.5	0.03
Thymol	15.12	2131.3	0.02	8.52	1298.4	0.02
Carvacrol	15.35	2155.1	0.09	8.64	1306.6	0.08
Unknown CASA VI [m/z 69, 41 (75), 55 (58), 83 (33), 121 (33)...]	14.89*	2108.8	[0.19]	8.76	1311.5	0.03
Bicycloelemene	7.02*	1436.4	[0.27]	9.10	1336.1	0.03
Unknown CIAU VI [m/z 133, 105 (45), 91 (38), 119 (36)... 150 (3)]				9.20	1343.3	0.03
α-Cubebene	6.82	1420.9	0.13	9.27*	1348.1	[0.18]
α-Terpinyl acetate	9.71	1645.0	0.05	9.27*	1348.1	[0.18]
Cyclosativene I	6.92*	1428.5	[0.05]	9.43	1359.7	0.02
Cyclosativene II	7.02*	1436.4	[0.27]	9.46	1361.8	0.05
α-Ylangene	7.07*	1440.0	[0.06]	9.53	1366.8	0.02
α-Copaene	7.18	1447.9	0.52	9.62	1372.7	0.49
β-Bourbonene	7.51	1472.8	0.34	9.72	1380.4	0.28
Geranyl acetate	10.56*	1714.9	[0.02]	9.78	1384.2	0.02
β-Cubebene	7.80	1494.6	0.10	9.83	1387.8	0.09
β-Elemene	8.44*	1544.0	[2.73]	9.86	1390.2	0.46
Isocaryophyllene	8.18*†	1523.5	[0.03]	10.02	1401.8	0.04
α-Gurjunene	7.64	1482.4	0.13	10.07	1405.1	0.11
β-Caryophyllene	8.44*	1544.0	[2.73]	10.19	1414.0	2.22

β-Copaene	8.38	1539.4	0.08	10.33	1424.6	0.06
trans-α-Bergamotene	8.44*	1544.0	[2.73]	10.47	1435.2	0.13
6,9-Guaiadiene	8.65*†	1560.4	[0.05]	10.54	1440.2	0.05
Unknown BOCA IV [m/z 91, 161 (92), 105 (85), 119 (63), 133 (53), 79 (49), 204 (46)]	8.81	1572.7	0.02	10.56	1442.3	0.02
trans-Muurola-3,5-diene	8.89*	1579.1	[0.17]	10.61	1445.6	0.03
α-Humulene	9.30	1611.7	0.43	10.64	1448.0	0.44
allo-Aromadendrene	9.02	1589.2	0.17	10.74	1455.3	0.12
cis-Muurola-4(15),5-diene	9.35*	1615.1	[0.16]	10.77	1457.8	0.04
trans-Cadina-1(6),4-diene	9.27*	1608.8	[0.21]	10.94	1470.7	0.03
γ-Muurolene	9.60*	1636.1	[0.61]	10.98	1474.0	0.27
Germacrene D	9.79*	1651.6	[0.74]	11.02	1476.3	0.46
β-Selinene	9.88*	1658.9	[0.21]	11.07	1480.7	0.20
trans-Muurola-4(15),5-diene	9.88*	1658.9	[0.21]	11.10	1483.0	0.02
δ-Selinene	9.67	1641.8	0.03	11.14	1486.0	0.07
epi-Cubebol	12.00	1838.4	0.10	11.20*	1490.5	[0.31]
Bicyclogermacrene	10.05*	1672.6	[0.16]	11.20*	1490.5	[0.31]
α-Selinene	9.96	1665.0	0.16	11.20*	1490.5	[0.31]
α-Muurolene	10.05*	1672.6	[0.16]	11.30	1498.1	0.17
Cubebol	12.56	1888.3	0.24	11.47*	1510.5	[0.54]
γ-Cadinene	10.41*	1701.9	[0.40]	11.47*	1510.5	[0.54]
trans-Calamenene	11.24	1772.8	0.02	11.56	1518.2	0.03
δ-Cadinene	10.44	1704.1	0.42	11.60	1521.4	0.43
trans-Cadina-1,4-diene	10.68	1724.6	0.03	11.70	1528.7	0.02
α-Cadinene	10.80	1735.3	0.04	11.76	1534.0	0.03
α-Elemol	14.04	2026.6	0.02	11.91*	1545.8	[0.04]
Isocaryophyllene epoxide B	12.13	1849.9	0.03	11.91*	1545.8	[0.04]
Germacrene B	11.15	1764.6	0.03	11.96	1549.7	0.03
Elemicin	15.47*	2167.2	[0.04]	12.07	1558.4	0.02
Palustrol	12.28	1863.9	0.03	12.11	1561.2	0.02
Unknown BOCA V				12.15	1564.8	0.04

[m/z 152, 109 (61), 43 (21), 137 (16), 151 (16)... 222 (6)]						
Germacrene D-4-ol	13.68	1991.3	0.04	12.23	1570.9	0.04
Caryophyllene oxide isomer	12.70	1900.7	0.04	12.28*	1575.1	[0.40]
Caryophyllene oxide	12.78	1907.9	0.36	12.28*	1575.1	[0.40]
Viridiflorol	13.99	2021.5	0.24	12.40	1584.7	0.24
Copaborneol	14.92	2112.0	0.08	12.56	1597.0	0.08
Humulene epoxide II	13.37	1962.8	0.07	12.61	1601.1	0.06
1,10-diepi-Cubenol	13.72	1995.0	0.05	12.71	1609.1	0.08
1-epi-Cubenol	13.77	2000.4	0.03	12.88	1623.2	0.03
τ-Muurolol	15.05	2125.0	0.03	13.03*	1636.2	[0.21]
τ-Cadinol	14.89*	2108.8	[0.19]	13.03*	1636.2	[0.21]
α-Muurolol	15.19	2138.7	0.05	13.11	1642.3	0.05
α-Cadinol	15.47*	2167.2	[0.04]	13.19	1649.4	0.03
(3*Z*)-Caryophylla-3,8(13)-dien-5β-ol	16.81	2305.6	0.03	13.39	1665.8	0.03
Shyobunol	16.29	2251.2	0.02	13.59	1682.6	0.02
α-Phellandrene dimer II	12.49	1882.4	0.05	14.84	1790.2	0.04
(3*E*)-Cembrene A	15.59	2178.9	0.06	16.60	1952.2	0.07
Verticilla-4(20),7,11-triene	16.38	2260.1	0.03	17.05	1995.8	0.02
Cembrenol	20.09	2678.1	0.06	18.37	2127.0	0.03
Serratol	19.61	2620.3	0.21	18.50*	2140.9	[0.23]
Incensole	20.62	2743.3	0.04	18.50*	2140.9	[0.23]
Total reported		98.56%			99.49%	

*: Two or more compounds are coeluting on this column

[xx]: Duplicate percentage due to coelutions, only the first one is 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