

Date : February 05, 2019

CERTIFICATE OF ANALYSIS – GC PROFILING

SAMPLE IDENTIFICATION

Internal code : 19B05-PTH04-1-SCC

Customer identification : Frankincense Carteri - Somalia - F30106810R

Type : Essential oil

Source : *Boswellia carterii*

Customer : Plant Therapy

ANALYSIS

Method: PC-PA-014-17J19 - Analysis of the composition of an essential oil, or other volatile liquid, by FAST GC-FID (in French); identifications validated by GC-MS.

Analyst : Benoit Roger, Ph. D.

Analysis date : February 05, 2019

Checked and approved by :

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

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PYHSICOCHEMICAL DATA

Physical aspect: Faintly yellow liquid

Refractive index: 1.4730 ± 0.0003 (20 °C)

CONCLUSION

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

ANALYSIS SUMMARY

Identification	DB-5 (%)	DB-WAX (%)	Classe
2-Methyl-3-buten-2-ol	0.01	tr	Aliphatic alcohol
Toluene	0.04	1.60*	Simple phenolic
Unknown	0.01	0.01	Unknown
Hashishene	0.19	38.69*	Monoterpene
Tricyclene	0.04	0.05	Monoterpene
α -Thujene	1.52	[1.60]*	Monoterpene
α -Pinene	38.59	[38.69]*	Monoterpene
Unknown	0.83*	0.04	Monoterpene
Camphene	[0.83]*	0.78	Monoterpene
α -Fenchene	[0.83]*	0.01	Monoterpene
Thuja-2,4(10)-diene	0.33	3.62*	Monoterpene
meta-Cymene	0.07	4.85*	Monoterpene
β -Pinene	4.56*	1.22	Monoterpene
Sabinene	[4.56]*	[3.62]*	Monoterpene
Pseudolimonene isomer	0.01	0.02	Monoterpene
Dehydro-1,8-cineole	0.07*	0.04	Monoterpenic ether
6-Methyl-5-hepten-2-one	[0.07]*	0.01	Aliphatic ketone
Myrcene	4.78	[4.85]*	Monoterpene
6-Methyl-5-hepten-2-ol	0.02	0.02	Aliphatic alcohol
Octanal	1.88*	0.01	Aliphatic aldehyde
α -Phellandrene	[1.88]*	2.32	Monoterpene
Pseudolimonene	[1.88]*	[4.85]*	Monoterpene
Δ 3-Carene	0.92	0.84	Monoterpene
ortho-Methylanisole	0.01	0.03	Simple phenolic
α -Terpinene	0.09	0.10	Monoterpene
para-Cymene	2.95	2.97	Monoterpene
Limonene	11.03*	10.32	Monoterpene
β -Phellandrene	[11.03]*	0.68*	Monoterpene
1,8-Cineole	0.51	[0.68]*	Monoterpenic ether
Cymene analog	0.02	0.02	Monoterpene
(Z)- β -Ocimene	0.20	0.39*	Monoterpene
Unknown	0.02		Unknown
(E)- β -Ocimene	0.10	0.10	Monoterpene
γ -Terpinene	0.17	[0.39]*	Monoterpene
cis-Sabinene hydrate	0.04	0.04	Monoterpenic alcohol
Unknown	0.01	0.03	Oxygenated monoterpene
cis-Linalool oxide (fur.)	0.01	0.08	Monoterpenic alcohol
Octanol	0.02	0.01	Aliphatic alcohol
Unknown	0.09	1.06*	Oxygenated monoterpene
γ -Campholenal	0.18*	0.01	Aliphatic alcohol
Terpinolene	[0.18]*	0.07	Monoterpene
Isoterpinolene	[0.18]*	0.10	Monoterpene
para-Cymenene	[0.18]	0.03	Monoterpene
6,7-Epoxymyrcene	0.05*	0.02	Monoterpenic ether
α -Pinene oxide	[0.05]*	tr	Monoterpenic ether
trans-Sabinene hydrate	0.03	0.03	Monoterpenic alcohol
Perillene	0.26*	0.14	Monoterpenic ether
Linalool	[0.26]*	0.14	Monoterpenic alcohol

α-Thujone	[0.26]*	0.01	Monoterpenic ketone
Unknown	0.02	5.40*	Monoterpenic alcohol
β-Thujone	0.06	0.09	Monoterpenic ketone
cis-para-Menth-2-en-1-ol	0.09*	0.04	Monoterpenic alcohol
trans-para-Mentha-2,8-dien-1-ol	[0.09]*	0.09	Monoterpenic alcohol
α-Campholenal	0.33*	0.30*	Monoterpenic aldehyde
Myrcenol	[0.33]*	0.10	Monoterpenic alcohol
Methyl octanoate	0.13*	0.09*	Aliphatic ester
cis-Limonene oxide	[0.13]*	0.01	Monoterpenic ether
trans-Pinocarveol	0.60	0.58*	Monoterpenic alcohol
trans-Sabinol	0.27	0.43*	Monoterpenic alcohol
trans-Verbenol	0.95	1.06	Monoterpenic alcohol
meta-Mentha-4,6-dien-8-ol	0.16	0.25	Monoterpenic alcohol
Pinocamphone	0.06	[1.06]*	Monoterpenic ketone
Pinocarvone	0.07	0.07	Monoterpenic ketone
Borneol	0.08	[0.43]*	Monoterpenic alcohol
α-Phellandren-8-ol	0.37*	0.68	Monoterpenic alcohol
cis-Sabinol	[0.37]*	0.02	Monoterpenic alcohol
Umbellulone	0.07	0.08	Monoterpenic ketone
Terpinen-4-ol	0.41	0.41	Monoterpenic alcohol
Cryptone	0.03*	[0.58]*	Normonoterpenic ketone
Thuj-3-en-10-al	[0.03]*	0.06	Monoterpenic aldehyde
para-Cymen-8-ol	0.12	0.11	Monoterpenic alcohol
α-Terpineol	0.48*	[0.43]*	Monoterpenic alcohol
Myrtenal	[0.48]*	0.16*	Monoterpenic aldehyde
Myrtenol	0.25	0.23*	Monoterpenic alcohol
α-Phellandrene epoxide	0.15	0.14	Monoterpenic ether
Verbenone	0.36	0.35	Monoterpenic ketone
Octyl acetate	0.02	0.02	Aliphatic ester
trans-Carveol	0.22	0.27*	Monoterpenic alcohol
cis-Carveol	0.05	0.07	Monoterpenic alcohol
9-Decenyl methyl ether	2.33*	[0.09]*	Aliphatic ether
Methyl decyl ether	[2.33]*	2.37	Aliphatic ether
Cuminal	0.04*	0.01	Monoterpenic aldehyde
Hexyl 2-methylbutyrate	[0.04]*	0.02	Aliphatic ester
Carvone	0.14	0.19	Monoterpenic ketone
Carvotanacetone	0.02	0.02	Monoterpenic ketone
Piperitone	0.08	0.21	Monoterpenic ketone
3,5-Dimethoxytoluene	0.06	[0.27]*	Simple phenolic
Unknown	0.06		Oxygenated monoterpenes
Decanol	0.17	0.25*	Aliphatic alcohol
Bornyl acetate	0.33	0.43	Monoterpenic ester
Thymol	0.05	0.04	Monoterpenic alcohol
Carvacrol	0.02	0.07	Monoterpenic alcohol
Bicycloelemene	0.04	0.07	Sesquiterpene
α-Cubebene	0.31	0.24	Sesquiterpene
Cyclosativene I	0.03	[0.30]*	Sesquiterpene
Cyclosativene II	0.05	[0.30]*	Sesquiterpene
α-Copaene	0.99	[1.06]*	Sesquiterpene
β-Bourbonene	0.43	0.39	Sesquiterpene
1,5-diepi-β-Bourbonene	0.05	0.04	Sesquiterpene
β-Cubebene	0.13	0.14	Sesquiterpene

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β-Elemene	1.42	[5.40]*	Sesquiterpene
α-Gurjunene	0.10	0.11	Sesquiterpene
β-Caryophyllene	3.92	[5.40]*	Sesquiterpene
β-Copaene	0.09	0.06	Sesquiterpene
trans-α-Bergamotene	0.15	[5.40]*	Sesquiterpene
6,9-Guaiadiene	0.03	[0.16]*	Sesquiterpene
α-Humulene	1.03	1.04*	Sesquiterpene
allo-Aromadendrene	0.21	0.28	Sesquiterpene
cis-Muurola-4(15),5-diene	0.05	[1.04]*	Sesquiterpene
trans-Cadina-1(6),4-diene	0.09	0.23	Sesquiterpene
γ-Muurolene	0.39	0.40	Sesquiterpene
Germacrene D	0.48	0.47*	Sesquiterpene
β-Selinene	0.65	0.66	Sesquiterpene
trans-Muurola-4(15),5-diene	0.23*	[0.47]*	Sesquiterpene
δ-Selinene	[0.23]*	0.12	Sesquiterpene
α-Selinene	0.80*	0.51*	Sesquiterpene
epi-Cubebol	[0.80]*	0.24	Sesquiterpenic alcohol
α-Muurolene	0.26	[0.51]*	Sesquiterpene
Germacrene A	0.07	0.06	Sesquiterpene
γ-Cadinene	0.47	0.49	Sesquiterpene
Cubebol	0.61	0.77	Sesquiterpenic alcohol
trans-Calamenene	1.18*	0.03	Sesquiterpene
δ-Cadinene	[1.18]*	1.12	Sesquiterpene
Zonarene	[1.18]*	0.10	Sesquiterpene
trans-Cadina-1,4-diene	0.06	[0.25]*	Sesquiterpene
α-Cadinene	0.06	[0.23]*	Sesquiterpene
α-Calacorene	0.02	0.02	Sesquiterpene
Isocaryophyllene epoxide B	0.13*	0.05	Sesquiterpenic ether
α-Elemol	[0.13]*	0.11	Sesquiterpenic alcohol
Germacrene B	0.18	0.20	Sesquiterpene
Palustrol	0.03	0.02	Sesquiterpenic alcohol
Unknown	0.10		Oxygenated sesquiterpene
Spathulenol	0.14*	0.36	Sesquiterpenic alcohol
Germacrene D-4-ol	[0.14]*	0.04	Sesquiterpenic alcohol
Caryophyllene oxide	0.86*	0.79	Sesquiterpenic ether
Caryophyllene oxide isomer	[0.86]*	0.04	Sesquiterpenic ether
Viridiflorol	0.14*	0.12	Sesquiterpenic alcohol
Salvia-4(14)-en-1-one	[0.14]*	0.02	Aliphatic alcohol
Copaborneol	0.15	0.13	Sesquiterpenic alcohol
Humulene epoxide II	0.15	0.20	Sesquiterpenic ether
10-epi-Cubenol	0.44		Sesquiterpenic alcohol
1-epi-Cubenol	0.09	0.11	Sesquiterpenic alcohol
τ-Muurolol	0.42*	0.08	Sesquiterpenic alcohol
τ-Cadinol	[0.42]*	0.36	Sesquiterpenic alcohol
β-Eudesmol	0.19*	0.07	Sesquiterpenic alcohol
α-Muurolol	[0.19]*	0.04	Sesquiterpenic alcohol
α-Cadinol	0.04	0.04	Sesquiterpenic alcohol
(3Z)-Caryophylla-3,8(13)-dien-5β-ol	0.09	0.07	Sesquiterpenic alcohol
Shyobunol	0.03	0.03	Sesquiterpenic alcohol
α-Phellandrene dimer II	0.19		Diterpene
α-Phellandrene dimer III	0.04	0.03	Diterpene
α-Phellandrene dimer IV	0.03	0.01	Diterpene

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(3E)-Cembrene A	0.26	0.26	Diterpene
Cembrene C	0.09		Diterpene
Verticilla-4(20),7,11-triene	0.04	0.10	Diterpene
Cembrenol	0.12	0.12	Diterpenic alcohol
Serratol	1.13*	0.93	Diterpenic alcohol
Incensole	[1.13]*	0.21	Diterpenic alcohol
Total identified	97.48%	97.34%	

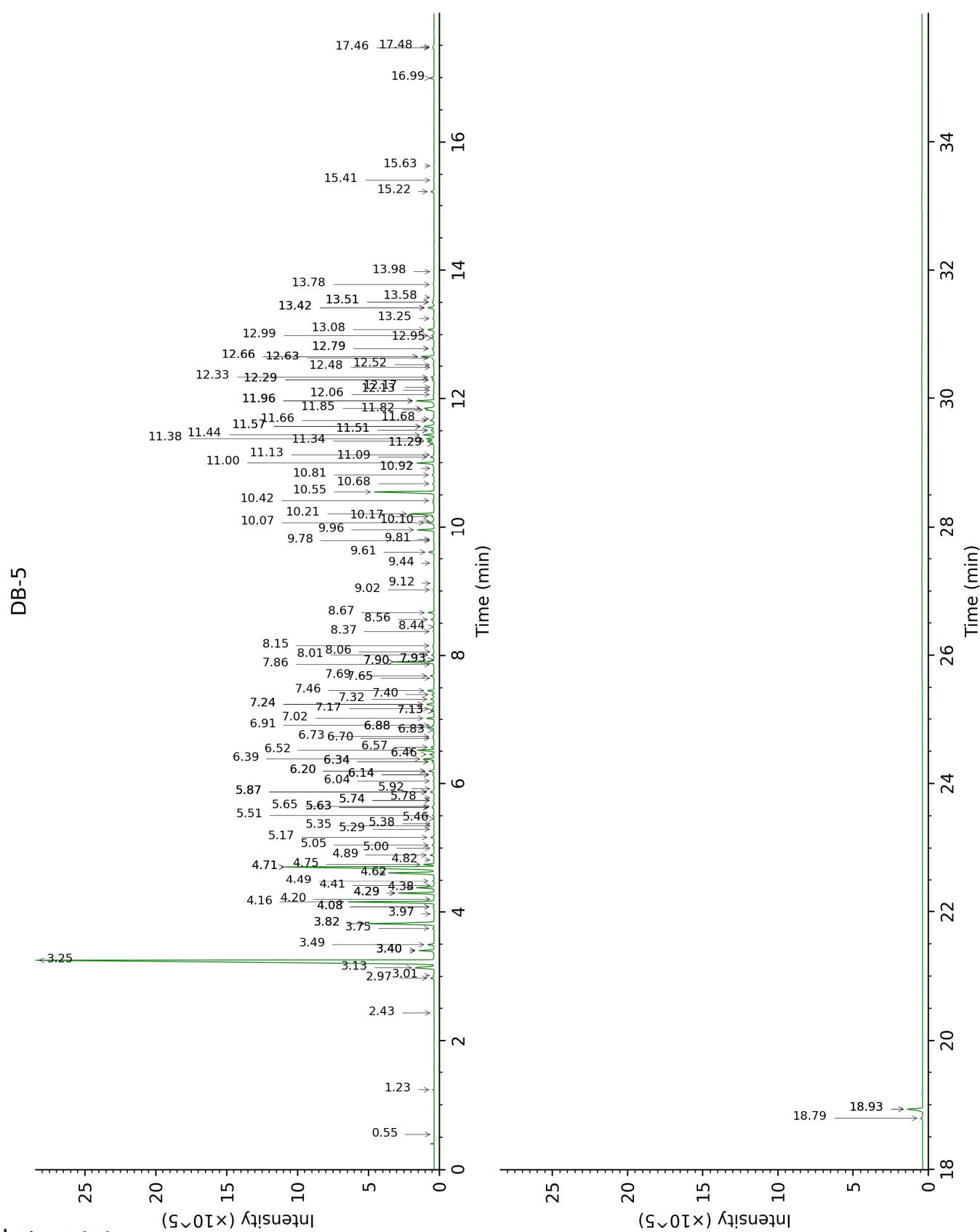
*: Two or more compounds are coeluting on this column

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

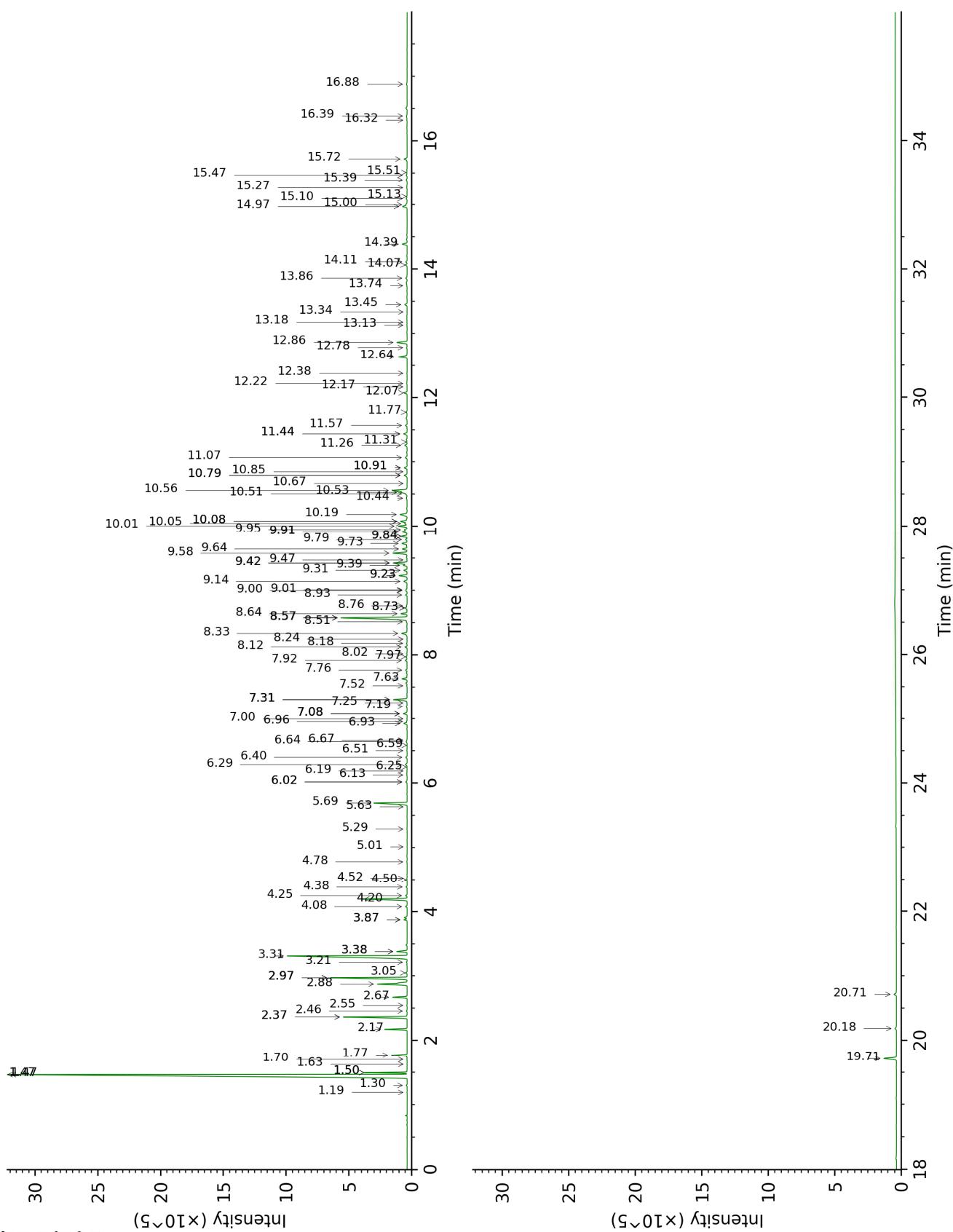
tr: The compound has been detected below 0.005% of total signal.

Note: no correction factor was applied

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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	0.54	605	0.01	1.63	1016	tr
Toluene	1.23	756	0.04	1.50*	1004	1.60
Unknown [m/z 79, 78 (45), 91 (28), 77 (28), 41 (13), 80 (12), 107 (11)... 122 (1)]	2.43	872	0.01	1.19	960	0.01
Hashishene	2.97	914	0.19	1.46*	1000	38.69
Tricyclene	3.01	916	0.04	1.30	976	0.05
α -Thujene	3.13	924	1.52	1.50*	1004	[1.60]
α -Pinene	3.25	932	38.59	1.46*	1000	[38.69]
Unknown [m/z 91, 92 (47), 65 (11)... 134 (1)]	3.40*	941	0.83	2.46	1095	0.04
Camphene	3.40*	941	[0.83]	1.77	1029	0.78
α -Fenchene	3.40*	941	[0.83]	1.70	1023	0.01
Thuja-2,4(10)-diene	3.49	947	0.33	2.37*	1086	3.62
meta-Cymene	3.74	964	0.07	2.97*	1136	4.85
β -Pinene	3.82*	969	4.56	2.18	1067	1.22
Sabinene	3.82*	969	[4.56]	2.37*	1086	[3.62]
Pseudolimonene isomer	3.97	978	0.01	2.55	1102	0.02
Dehydro-1,8-cineole	4.08*	986	0.07	3.22	1155	0.04
6-Methyl-5-hepten-2-one	4.08*	986	[0.07]	5.29	1301	0.01
Myrcene	4.16	991	4.78	2.97*	1136	[4.85]
6-Methyl-5-hepten-2-ol	4.20	994	0.02	7.00	1428	0.02
Octanal	4.29*	1000	1.88	4.50	1255	0.01
α -Phellandrene	4.29*	1000	[1.88]	2.88	1128	2.32
Pseudolimonene	4.29*	1000	[1.88]	2.97*	1136	[4.85]
Δ^3 -Carene	4.38	1005	0.92	2.67	1112	0.84
ortho-Methylanisole	4.41	1007	0.01	6.13	1362	0.03
α -Terpinene	4.49	1012	0.09	3.05	1142	0.10
para-Cymene	4.62	1020	2.95	4.20	1232	2.97
Limonene	4.71*	1026	11.03	3.31	1162	10.32
β -Phellandrene	4.71*	1026	[11.03]	3.38*	1168	0.68
1,8-Cineole	4.75	1028	0.51	3.38*	1168	[0.68]
Cymene analog	4.82	1033	0.02	4.52	1257	0.02
(Z)- β -Ocimene	4.89	1037	0.20	3.87*	1207	0.39
Unknown [m/z 109, 43 (57), 91 (28), 67 (25), 93 (24), 95 (22), 77]	5.00	1044	0.02			

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(21), 137 (21), 41 (17), 79 (14)...						
(E)- β -Ocimene	5.05	1047	0.10	4.08	1223	0.10
γ -Terpinene	5.17	1054	0.17	3.87*	1207	[0.39]
cis-Sabinene hydrate	5.29	1062	0.04	6.96	1424	0.04
Unknown [m/z 79, 93 (60), 43 (40), 94 (35), 137 (33), 77 (26), 91 (20), 152 (18)]	5.35	1066	0.01	4.78	1277	0.03
cis-Linalool oxide (fur.)	5.38	1068	0.01	6.64	1401	0.08
Octanol	5.46	1072	0.02	8.24	1523	0.01
Unknown [m/z 43, 94 (63), 109 (61), 59 (55), 79 (51)...152 (2)]	5.51	1076	0.09	7.31*	1451	1.06
γ -Campholenal	5.63*†	1083	0.18	5.01	1296	0.01
Terpinolene	5.63*†	1083	[0.18]	4.38	1246	0.07
Isoterpinolene	5.63*†	1083	[0.18]	4.25	1236	0.10
para-Cymenene	5.65†	1084	[0.18]	6.51	1390	0.03
6,7-Epoxy-myrcene	5.74*	1090	0.05	6.19	1367	0.02
α -Pinene oxide	5.74*	1090	[0.05]	5.64	1326	tr
trans-Sabinene hydrate	5.78	1093	0.03	8.02	1505	0.03
Perillene	5.87*	1098	0.26	6.29	1374	0.14
Linalool	5.87*	1098	[0.26]	8.12	1513	0.14
α -Thujone	5.87*	1098	[0.26]	6.25	1371	0.01
Unknown [m/z 119, 109 (94), 43 (61), 95 (56), 91 (48), 77 (32), 152 (32), 137 (31), 134 (24)]	5.92	1102	0.02	8.58*	1549	5.40
β -Thujone	6.04	1109	0.06	6.40	1382	0.09
cis-para-Menth-2-en-1-ol	6.14*	1116	0.09	8.18	1518	0.04
trans-para-Menth-2,8-dien-1-ol	6.14*	1116	[0.09]	9.01	1583	0.09
α -Campholenal	6.20*	1119	0.33	7.08*	1434	0.30
Myrcenol	6.20*	1119	[0.33]	8.93	1577	0.10
Methyl octanoate	6.34*	1128	0.13	6.02*	1354	0.09
cis-Limonene oxide	6.34*	1128	[0.13]	6.59	1396	0.01
trans-Pinocarveol	6.39	1131	0.60	9.23*	1601	0.58
trans-Sabinol	6.46	1136	0.27	9.84*	1651	0.43
trans-Verbenol	6.52	1140	0.95	9.58	1629	1.06
meta-Menth-4,6-dien-8-ol	6.57	1143	0.16	9.39	1614	0.25
Pinocamphone	6.70	1152	0.06	7.31*	1451	[1.06]

Pinocarvone	6.73	1154	0.07	7.97	1501	0.07
Borneol	6.83	1160	0.08	9.84*	1651	[0.43]
α -Phellandren-8-ol	6.88*	1163	0.37	10.19	1680	0.68
cis-Sabinol	6.88*	1163	[0.37]	10.85	1736	0.02
Umbellulone	6.91	1165	0.07	9.00	1582	0.08
Terpinen-4-ol	7.02	1172	0.41	8.64	1554	0.41
Cryptone	7.13*	1179	0.03	9.23*	1601	[0.58]
Thuj-3-en-10-al	7.13*	1179	[0.03]	8.76	1564	0.06
para-Cymen-8-ol	7.17	1181	0.12	11.57	1797	0.11
α -Terpineol	7.24*	1186	0.48	9.84*	1651	[0.43]
Myrtenal	7.24*	1186	[0.48]	8.73*	1561	0.16
Myrtenol	7.32	1191	0.25	10.91*	1741	0.23
α -Phellandrene epoxide	7.40	1196	0.15	11.07	1754	0.14
Verbenone	7.46	1200	0.36	9.64	1635	0.35
Octyl acetate	7.65	1213	0.02	7.26	1447	0.02
trans-Carveol	7.69	1216	0.22	11.44*	1786	0.27
cis-Carveol	7.86	1227	0.05	11.77	1815	0.07
9-Decenyl methyl ether	7.90*	1230	2.33	6.02*	1354	[0.09]
Methyl decyl ether	7.90*	1230	[2.33]	5.69	1330	2.37
Cuminal	7.93*	1232	0.04	10.67	1720	0.01
Hexyl 2-methylbutyrate	7.93*	1232	[0.04]	6.67	1402	0.02
Carvone	8.01	1237	0.14	10.05	1668	0.19
Carvotanacetone	8.06	1241	0.02	9.47	1621	0.02
Piperitone	8.15	1247	0.08	9.95	1660	0.21
3,5-Dimethoxytoluene	8.37	1262	0.06	11.44*	1786	[0.27]
Unknown [m/z 109, 41 (22), 81 (14), 43 (11)... 152 (4)]	8.44	1267	0.06			
Decanol	8.56	1275	0.17	10.79*	1731	0.25
Bornyl acetate	8.67	1282	0.33	8.33	1530	0.43
Thymol	9.02	1302	0.05	15.13	2130	0.04
Carvacrol	9.12	1310	0.02	15.39	2157	0.07
Bicycloelemene	9.44	1332	0.04	7.19	1442	0.07
α -Cubebene	9.61	1344	0.31	6.93	1422	0.24
Cyclosativene I	9.78	1356	0.03	7.08*	1434	[0.30]
Cyclosativene II	9.81	1358	0.05	7.08*	1434	[0.30]
α -Copaene	9.96	1369	0.99	7.31*	1451	[1.06]
β -Bourbonene	10.07	1376	0.43	7.63	1475	0.39
1,5-diepi- β -Bourbonene	10.10	1378	0.05	7.52	1467	0.04
β -Cubebene	10.17	1383	0.13	7.92	1497	0.14
β -Elemene	10.21	1386	1.42	8.58*	1549	[5.40]
α -Gurjunene	10.42	1401	0.10	7.76	1486	0.11
β -Caryophyllene	10.55	1411	3.92	8.58*	1549	[5.40]
β -Copaene	10.68	1420	0.09	8.51	1544	0.06
trans- α -Bergamotene	10.81	1430	0.15	8.58*	1549	[5.40]

6,9-Guaiadiene	10.92	1438	0.03	8.73*	1561	[0.16]
α-Humulene	11.00	1444	1.03	9.42*	1617	1.04
allo-Aromadendrene	11.09	1451	0.21	9.14	1594	0.28
cis-Muurola-4(15),5-diene	11.13	1454	0.05	9.42*	1617	[1.04]
trans-Cadina-1(6),4-diene	11.29	1466	0.09	9.31	1607	0.23
γ-Muurolene	11.34	1469	0.39	9.73	1642	0.40
Germacrene D	11.38	1472	0.48	9.91*	1657	0.47
β-Selinene	11.44	1477	0.65	10.01	1665	0.66
trans-Muurola-4(15),5-diene	11.51*	1482	0.23	9.91*	1657	[0.47]
δ-Selinene	11.51*	1482	[0.23]	9.79	1647	0.12
α-Selinene	11.57*	1486	0.80	10.08*	1671	0.51
epi-Cubebol	11.57*	1486	[0.80]	12.07	1842	0.24
α-Muurolene	11.66	1493	0.26	10.08*	1671	[0.51]
Germacrene A	11.68	1495	0.07	10.44	1700	0.06
γ-Cadinene	11.82	1506	0.47	10.53	1708	0.49
Cubebol	11.85	1508	0.61	12.64	1893	0.77
trans-Calamenene	11.96*	1517	1.18	11.31	1775	0.03
δ-Cadinene	11.96*	1517	[1.18]	10.56	1711	1.12
Zonarene	11.96*	1517	[1.18]	10.51	1706	0.10
trans-Cadina-1,4-diene	12.06	1524	0.06	10.79*	1731	[0.25]
α-Cadinene	12.13	1530	0.06	10.91*	1741	[0.23]
α-Calacorene	12.17	1533	0.02	12.17	1851	0.02
Isocaryophyllene epoxide B	12.29*	1542	0.13	12.22	1855	0.05
α-Elemol	12.29*	1542	[0.13]	14.11	2031	0.11
Germacrene B	12.33	1545	0.18	11.26	1771	0.20
Palustrol	12.48	1557	0.03	12.38	1869	0.02
Unknown [m/z 152, 109 (61), 43 (21), 137 (16), 151 (16)... 222 (6)]	12.52	1560	0.10			
Spathulenol	12.63*	1569	0.14	14.39	2058	0.36
Germacrene D-4-ol	12.63*	1569	[0.14]	13.74	1996	0.04
Caryophyllene oxide	12.66*	1571	0.86	12.86	1914	0.79
Caryophyllene oxide isomer	12.66*	1571	[0.86]	12.78	1906	0.04
Viridiflorol	12.79*	1581	0.14	14.07	2026	0.12
Salvia-4(14)-en-1-one	12.79*	1581	[0.14]	13.13	1938	0.02
Copaborneol	12.95	1594	0.15	15.00	2117	0.13
Humulene epoxide II	12.99	1597	0.15	13.45	1968	0.20
10-epi-Cubenol	13.08	1604	0.44			
1-epi-Cubenol	13.25	1619	0.09	13.86	2006	0.11
γ-Muurolol	13.42*	1632	0.42	15.10	2127	0.08

t-Cadinol	13.42*	1632	[0.42]	14.97	2114	0.36
β-Eudesmol	13.51 *	1640	0.19	15.47	2164	0.07
α-Muurolol	13.51 *	1640	[0.19]	15.26	2144	0.04
α-Cadinol	13.58	1646	0.04	15.51	2168	0.04
(3Z)-Caryophylla-3,8(13)-dien-5β-ol	13.78	1662	0.09	16.88	2310	0.07
Shyobunol	13.98	1678	0.03	16.32	2251	0.03
α-Phellandrene dimer II	15.22	1785	0.19			
α-Phellandrene dimer III	15.41	1801	0.04	13.18	1943	0.03
α-Phellandrene dimer IV	15.63	1822	0.03	13.34	1958	0.01
(3E)-Cembrene A	16.99	1947	0.26	15.72	2189	0.26
Cembrene C	17.46	1991	0.09			
Verticilla-4(20),7,11-triene	17.48	1993	0.04	16.39	2258	0.10
Cembrenol	18.79	2124	0.12	20.18	2683	0.12
Serratol	18.93*	2138	1.13	19.71	2627	0.93
Incensole	18.93*	2138	[1.13]	20.71	2747	0.21
Total identified			97.48%			97.34%
Total reported			97.79%			97.42%

*: Two or more compounds are coeluting on this column

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

t: 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