

Date : 2023-08-14

CERTIFICATE OF ANALYSIS - GC PROFILING

SAMPLE IDENTIFICATION

Internal code : 23H07-PTH03

Customer Identification : Spruce, Black - SA5109R

Type : Essential Oil

Source : *Picea mariana*

Customer : Plant Therapy

Checked and approved by:

Alexis St-Gelais, Ph. D., Chimiste 2013-174

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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 : Amélie Simard, Analyste

Date : 2023-08-13

PHYSICOCHEMICAL DATA

Refractive index : 1.4702 ± 0.0003 (20 °C)

Method : PC-MAT-016 - Measure of the refractive index of a liquid.

Analyst : Cindy Caron B. Sc.

Date : 2023-08-07

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
3-Methylfuran	tr	Furan
Isovaleral	tr	Aliphatic aldehyde
Toluene	0.01	Simple phenolic
Hexanal	0.01	Aliphatic aldehyde
Octane	tr	Alkane
Unknown	tr	Alkene
(3Z)-Hexenol	0.01	Aliphatic alcohol
Hexanol	0.01	Aliphatic alcohol
Santene	1.41	Normonoterpene
Styrene	0.01	Simple phenolic
Unknown	0.04	Normonoterpene
Unknown	0.02	Unknown
Tricyclene	1.67	Monoterpene
α -Thujene	0.14	Monoterpene
α -Pinene	20.22	Monoterpene
Unknown	0.04	Unknown
Camphene	11.98	Monoterpene
α -Fenchene	0.16	Monoterpene
Thuja-2,4(10)-diene	0.03	Monoterpene
3,7,7-Trimethylcyclohepta-1,3,5-triene	0.04	Monoterpene
Sabinene	0.05	Monoterpene
β -Pinene	10.68	Monoterpene
6-Methyl-5-hepten-2-one	0.01	Aliphatic ketone
Dehydro-1,8-cineole	0.01	Monoterpenic ether
Myrcene	1.81	Monoterpene
2-Carene	0.01	Monoterpene
α -Phellandrene	0.18	Monoterpene
Pseudolimonene	0.01	Monoterpene
Unknown	0.02	Oxygenated monoterpene
Δ^3 -Carene	9.65	Monoterpene
α -Terpinene	0.25	Monoterpene
<i>meta</i> -Cymene	0.02	Monoterpene
<i>para</i> -Cymene	0.22	Monoterpene
Limonene	6.30	Monoterpene
1,8-Cineole	0.18	Monoterpenic ether
β -Phellandrene	0.62	Monoterpene
(Z)- β -Ocimene	0.02	Monoterpene
(E)- β -Ocimene	0.01	Monoterpene
γ -Terpinene	0.16	Monoterpene
Unknown	0.04	Oxygenated monoterpene

Unknown	0.01	Unknown
<i>meta</i> -Cymenene	0.01	Monoterpene
Fenchone	0.03	Monoterpenic ketone
Terpinolene	1.02	Monoterpene
γ -Campholenal	0.03	Aliphatic alcohol
<i>para</i> -Cymenene	0.08	Monoterpene
α -Pinene oxide	0.05	Monoterpenic ether
Linalool	0.28	Monoterpenic alcohol
Nonanal	0.01	Aliphatic aldehyde
<i>para</i> -Mentha-1,3,8-triene	0.01	Monoterpene
endo-Fenchol	0.06	Monoterpenic alcohol
3-Methyl-3-butenyl isovalerate	0.01	Aliphatic ester
<i>cis-para</i> -Menth-2-en-1-ol	0.03	Monoterpenic alcohol
α -Campholenal	0.07	Monoterpenic aldehyde
Cosmene isomer I	0.01	Monoterpene
<i>trans</i> -Pinocarveol	0.09	Monoterpenic alcohol
Camphor	0.07	Monoterpenic ketone
Camphene hydrate	0.15	Monoterpenic alcohol
Isoborneol	0.08	Monoterpenic alcohol
Citronellal	0.03	Monoterpenic aldehyde
Pinocamphone	0.02	Monoterpenic ketone
Pinocarvone	0.04	Monoterpenic ketone
Borneol	0.94	Monoterpenic alcohol
Unknown	0.02	Unknown
Isopinocamphone	0.02	Monoterpenic ketone
Terpinen-4-ol	0.18	Monoterpenic alcohol
Cryptone	0.01	Normonoterpenic ketone
<i>meta</i> -Cymen-8-ol	0.02	Monoterpenic alcohol
<i>para</i> -Cymen-8-ol	0.02	Monoterpenic alcohol
<i>trans</i> -Isocarveol	0.02	Monoterpenic alcohol
Myrtenal	0.05	Monoterpenic aldehyde
α -Terpineol	0.75	Monoterpenic alcohol
Myrtenol	0.05	Monoterpenic alcohol
Methylchavicol	0.01	Phenylpropanoid
Verbenone	0.03	Monoterpenic ketone
Unknown	tr	Unknown
<i>trans</i> -Piperitol	0.06	Monoterpenic alcohol
endo-Fenchyl acetate	0.14	Monoterpenic ester
<i>trans</i> -Carveol	0.02	Monoterpenic alcohol
<i>cis</i> -Isocarveol	0.01	Monoterpenic alcohol
Citronellol	0.05	Monoterpenic alcohol
Unknown	0.01	Oxygenated monoterpene
Carvone	0.02	Monoterpenic ketone
Piperitone	0.01	Monoterpenic ketone
Geraniol	0.02	Monoterpenic alcohol

Geranial	0.02	Monoterpenic aldehyde
Unknown	0.02	Unknown
<i>cis</i> -Verbenyl acetate	0.03	Monoterpenic ester
Isobornyl acetate	0.49	Monoterpenic ester
Bornyl acetate	24.48	Monoterpenic ester
Unknown	0.06	Monoterpenic ester
<i>trans</i> -Pinocarvyl acetate	0.06	Monoterpenic ester
Car-3-en-5-one	0.01	Monoterpenic ketone
Myrtenyl acetate	0.02	Monoterpenic ester
Terpinyl acetate analog	0.04	Monoterpenic ester
<i>trans</i> -Carvyl acetate	0.02	Monoterpenic ester
<i>exo</i> -2-Hydroxycineole acetate	0.02	Monoterpenic ester
Unknown	0.02	Unknown
α -Cubebene	0.01	Sesquiterpene
α -Terpinyl acetate	0.04	Monoterpenic ester
Citronellyl acetate	0.05	Monoterpenic ester
Longicyclene	0.02	Sesquiterpene
Unknown	0.02	Oxygenated monoterpene
α -Copaene	0.03	Sesquiterpene
β -Bourbonene	0.01	Sesquiterpene
Geranyl acetate	0.23	Monoterpenic ester
β -Elemene	0.05	Sesquiterpene
Longifolene	0.08	Sesquiterpene
β -Caryophyllene	0.14	Sesquiterpene
β -Copaene	0.02	Sesquiterpene
<i>cis</i> -Muurolo-3,5-diene	0.02	Sesquiterpene
<i>trans</i> -Muurolo-3,5-diene	0.03	Sesquiterpene
α -Humulene	0.04	Sesquiterpene
(<i>E</i>)- β -Farnesene	0.06	Sesquiterpene
<i>trans</i> -Cadina-1(6),4-diene	0.06	Sesquiterpene
γ -Muurolole	0.08	Sesquiterpene
Germacrene D	0.05	Sesquiterpene
β -Selinene	0.04	Sesquiterpene
<i>trans</i> -Muurolo-4(15),5-diene	0.03	Sesquiterpene
α -Selinene	0.04	Sesquiterpene
α -Muurolole	0.17	Sesquiterpene
γ -Cadinene	0.22	Sesquiterpene
δ -Cadinene	0.74	Sesquiterpene
<i>trans</i> -Calamenene	0.04	Sesquiterpene
<i>trans</i> -Cadina-1,4-diene	0.03	Sesquiterpene
α -Cadinene	0.05	Sesquiterpene
α -Calacorene	0.02	Sesquiterpene
(<i>E</i>)- α -Bisabolene	0.10	Sesquiterpene
Unknown	0.02	Oxygenated sesquiterpene
Unknown	0.01	Oxygenated sesquiterpene

(E)-Nerolidol	0.01	Sesquiterpenic alcohol
Caryophyllene oxide	0.01	Sesquiterpenic ether
Globulol	0.01	Sesquiterpenic alcohol
Unknown	0.01	Unknown
10-epi-Cubenol	0.03	Sesquiterpenic alcohol
1-epi-Cubenol	0.03	Sesquiterpenic alcohol
τ -Cadinol	0.09	Sesquiterpenic alcohol
τ -Muurolol	0.09	Sesquiterpenic alcohol
α -Muurolol	0.03	Sesquiterpenic alcohol
α -Cadinol	0.15	Sesquiterpenic alcohol
cis-Calamenen-10-ol	0.01	Sesquiterpenic alcohol
trans-Calamenen-10-ol	0.02	Sesquiterpenic alcohol
Unknown	0.04	Oxygenated sesquiterpene
Unknown	0.02	Oxygenated sesquiterpene
Amorpha-4,9-dien-2-ol	0.02	Sesquiterpenic alcohol
(5Z)-Tetradecen-14-olide?	0.02	Aliphatic lactone
Unknown	0.02	Oxygenated sesquiterpene
(3E)-Cembrene A	0.01	Diterpene
Unknown	0.03	Oxygenated diterpene
13-epi-Manoyl oxide	0.01	Diterpenic ether
(E,E)-Geranyllinalool	0.01	Diterpenic alcohol
Manool	0.02	Diterpenic alcohol
7,13-Abietadiene	0.01	Diterpene
(Z)-Abienol	0.03	Diterpenic alcohol
Stearic acid	0.06	Aliphatic acid
Palustral	0.01	Diterpenic aldehyde
Abietal	0.01	Diterpenic aldehyde
Consolidated total	99.32	

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

Note: no correction factor was applied

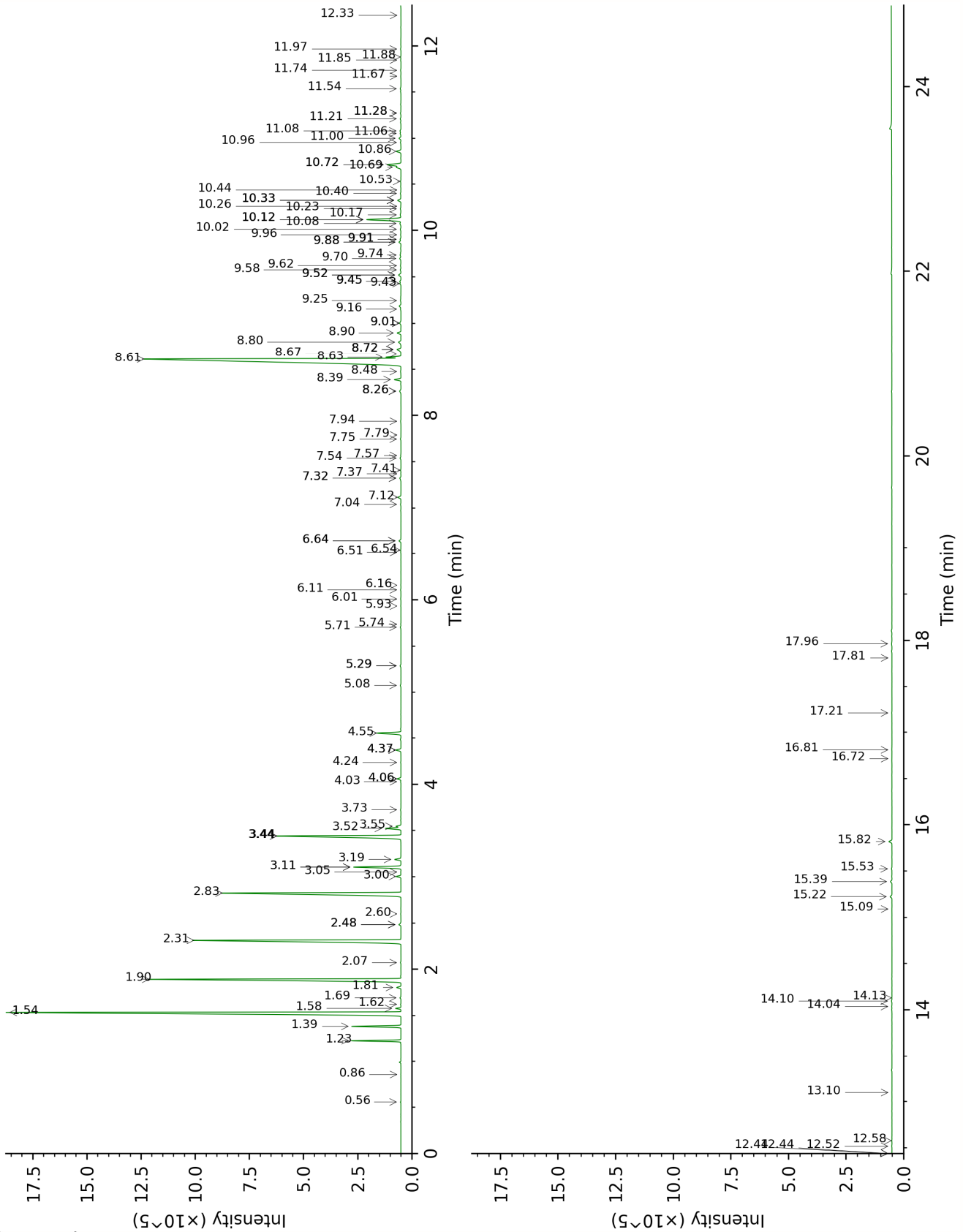
About "consolidated" data: The table above presents the breakdown of the sample volatile constituents after applying an algorithm to collapse data acquired from the multi-columns system of PhytoChemia into a single set of consolidated contents. In case of discrepancies between columns, the algorithm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

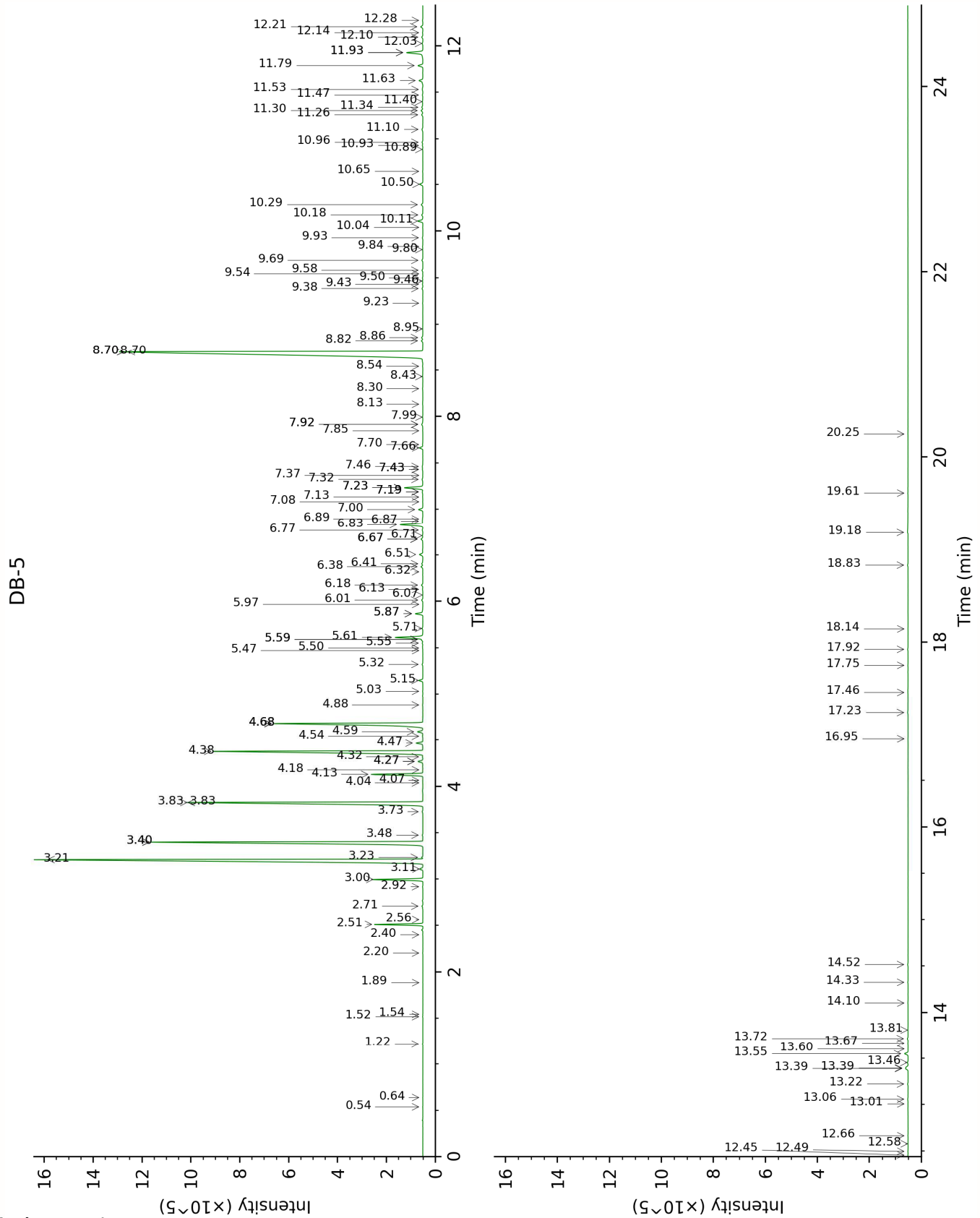
Unknowns: Unknown compounds' mass spectral data is presented in the "Full analysis data" table. The occurrence of unknown compounds is to be expected in many samples, and does not denote particular problems unless noted otherwise in the conclusion.

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





FULL ANALYSIS DATA

3-Methylfuran	Column DB-WAX			Column DB-5		
				0.54	605.3	tr
Isovaleral	0.86	885.1	tr	0.64	639.1	tr
Toluene	1.62	999.5	0.01	1.22	757.7	0.01
Hexanal	2.07	1042.3	0.02	1.52	798.4	0.01
Octane	0.56	778.1	0.01	1.54	802.0	tr
Unknown BOCA I [m/z 109, 67 (32), 81 (14), 41 (12), 124 (10)]				1.88	830.8	tr
(3Z)-Hexenol	6.11	1347.7	0.02	2.20	856.9	0.01
Hexanol	5.74	1321.1	0.01	2.40	873.1	0.01
Santene	1.23	945.0	1.44	2.51	882.2	1.41
Styrene	4.03	1202.2	0.01	2.56	886.5	0.01
Unknown ABBA I [m/z 79, 93 (66), 94 (52), 91 (39), 77 (37), 122 (31)]	1.69	1006.1	0.03	2.71	898.3	0.04
Unknown PIMA XXI [m/z 43, 59 (71), 44 (40), 85 (30), 41 (28), 45 (27)...]				2.92	913.2	0.02
Tricyclene	1.39	968.4	1.67	3.00	918.4	1.67
α -Thujene	1.58	995.3	0.16	3.11	925.7	0.14
α -Pinene	1.54	991.2	20.32	3.21	932.4	20.22
Unknown PIMA XX [m/z 43, 73 (38), 85 (29), 72 (28), 57 (26)...]				3.24	934.0	0.04
Camphene	1.90	1025.2	11.98	3.40*	944.8	[12.12]
α -Fenchene	1.81	1016.8	0.16	3.40*	944.8	[12.12]
Thuja-2,4(10)-diene	2.48*	1081.5	[0.10]	3.48	949.7	0.03
3,7,7- Trimethylcyclohepta- 1,3,5-triene	3.11*	1131.3	[1.85]	3.73	966.3	0.04
Sabinene	2.48*	1081.5	[0.10]	3.83*	972.8	[10.73]
β -Pinene	2.32	1065.3	10.68	3.83*	972.8	[10.73]
6-Methyl-5-hepten- 2-one	5.29*	1294.3	[0.04]	4.04	986.8	0.01
Dehydro-1,8-cineole	3.44*	1157.3	[6.31]	4.07	988.6	0.01
Myrcene	3.11*	1131.3	[1.85]	4.13	992.8	1.81
2-Carene	2.60	1092.4	0.01	4.18	996.0	0.01
α -Phellandrene	3.00	1123.5	0.18	4.27*	1001.9	[0.20]
Pseudolimonene	3.05	1127.2	0.01	4.27*	1001.9	[0.20]

Unknown PIMA 12 [m/z 109, 81 (35), 43 (34), 69 (33), 67 (29), 152 (29)]	3.73	1179.3	0.02	4.32	1005.1	0.02
Δ^3 -Carene	2.83	1109.7	9.68	4.38	1008.8	9.65
α -Terpinene	3.19	1137.7	0.24	4.47	1014.4	0.25
<i>meta</i> -Cymene	4.37*	1227.1	[0.22]	4.54	1018.9	0.02
<i>para</i> -Cymene	4.37*	1227.1	[0.22]	4.59	1021.9	0.22
Limonene	3.44*	1157.3	[6.31]	4.68*	1027.5	[7.07]
1,8-Cineole	3.55	1165.4	0.18	4.68*	1027.5	[7.07]
β -Phellandrene	3.52	1163.7	0.62	4.68*	1027.5	[7.07]
(<i>Z</i>)- β -Ocimene	4.06*	1204.4	[0.16]	4.88	1040.0	0.02
(<i>E</i>)- β -Ocimene	4.24	1217.3	0.01	5.03	1049.7	0.01
γ -Terpinene	4.06*	1204.4	[0.16]	5.15	1057.0	0.16
Unknown PIMA I [m/z 79, 93 (60), 43 (40), 94 (35), 137 (33), 77 (26), 91 (20), 152 (18)]	5.08	1278.7	0.03	5.32	1067.8	0.04
Unknown PIMA 2 [m/z 94, 79 (74), 67 (33), 41 (22), 95 (21)...]				5.47	1077.1	0.01
<i>meta</i> -Cymenene	6.54	1378.5	0.01	5.50	1078.8	0.01
Fenchone	6.01	1340.7	0.01	5.55	1082.1	0.03
Terpinolene	4.55	1240.5	1.02	5.59*†	1084.6	[0.05]
γ -Campholenal	5.29*	1294.3	[0.04]	5.59*†	1084.6	[0.05]
<i>para</i> -Cymenene	6.64*	1385.7	[0.09]	5.61*†	1085.9	[1.12]
α -Pinene oxide	5.71	1318.8	0.03	5.71	1091.9	0.05
Linalool	8.39	1516.2	0.28	5.87*	1101.9	[0.32]
Nonanal	6.16	1351.3	0.01	5.87*	1101.9	[0.32]
<i>para</i> -Mentha-1,3,8- triene	6.51	1376.8	0.01	5.97	1108.3	0.01
endo-Fenchol	8.72*	1541.7	[0.22]	6.02	1111.2	0.06
3-Methyl-3-butenyl isovalerate	5.93	1335.2	0.01	6.07	1114.7	0.01
<i>cis-para</i> -Menth-2-en- 1-ol	8.48	1522.8	0.03	6.13	1118.5	0.03
α -Campholenal	7.32*	1436.3	[0.07]	6.18	1121.5	0.07
Cosmene isomer I	6.64*	1385.7	[0.09]	6.32	1130.6	0.01
<i>trans</i> -Pinocarveol	9.52*	1604.0	[0.13]	6.38	1134.1	0.09
Camphor	7.54	1452.3	0.04	6.41	1136.1	0.07
Camphene hydrate	8.80	1547.8	0.14	6.51	1142.5	0.15
Isoborneol	9.70	1618.3	0.08	6.67*	1153.1	[0.10]
Citronellal	7.32*	1436.3	[0.07]	6.67*	1153.1	[0.10]

Pinocamphone	7.57	1454.4	0.02	6.71	1155.5	0.02
Pinocarvone	8.26*	1506.5	[0.08]	6.77	1159.3	0.04
Borneol	10.12*	1652.0	[1.72]	6.83	1163.1	0.94
Unknown PIMA 4 [m/z 109, 108 (48), 67 (41), 81 (40), 41 (28)...]	7.75	1467.5	0.03	6.87	1165.7	0.02
Isopinocamphone	7.94	1481.7	0.02	6.90	1167.2	0.02
Terpinen-4-ol	8.90	1555.4	0.18	7.00	1173.8	0.18
Cryptone	9.45*	1598.5	[0.06]	7.08	1179.1	0.01
<i>meta</i> -Cymen-8-ol	11.85	1795.6	0.02	7.13	1182.4	0.02
<i>para</i> -Cymen-8-ol	11.88	1798.6	0.02	7.19*	1186.0	[0.04]
<i>trans</i> -Isocarveol	11.28*	1747.3	[0.03]	7.19*	1186.0	[0.04]
Myrtenal	9.00*	1563.5	[0.08]	7.23*	1188.8	[0.80]
α -Terpineol	10.12*	1652.0	[1.72]	7.23*	1188.8	[0.80]
Myrtenol	11.22	1742.2	0.04	7.32	1194.5	0.05
Methylchavicol	9.62	1612.1	0.04	7.37	1197.3	0.01
Verbenone	9.96	1638.9	0.03	7.43*	1201.4	[0.03]
Unknown PIMA 7 [m/z 95, 93 (32), 121 (24), 79 (22), 91 (21), 105 (16)... 154 (2)]	11.28*	1747.3	[0.03]	7.43*	1201.4	[0.03]
<i>trans</i> -Piperitol	10.72*	1700.6	[0.72]	7.46	1203.4	0.06
endo-Fenchyl acetate	7.12	1421.0	0.14	7.66	1216.8	0.14
<i>trans</i> -Carveol	11.74	1786.0	0.02	7.70	1219.2	0.02
<i>cis</i> -Isocarveol	12.33	1837.8	0.01	7.85	1229.1	0.01
Citronellol	11.08	1731.2	0.05	7.92*	1233.7	[0.08]
Unknown CIAU II [m/z 137, 152 (28), 43 (25), 91 (24), 109 (23), 119 (19)]	11.67	1780.6	0.01	7.92*	1233.7	[0.08]
Carvone	10.33*	1668.6	[0.18]	7.99	1238.9	0.02
Piperitone	10.26	1663.5	0.02	8.13	1248.1	0.01
Geraniol	11.97	1806.0	0.02	8.30	1259.3	0.02
Geranial	10.44	1677.5	0.01	8.43	1268.1	0.02
Unknown PIMA 5 [m/z 43, 119 (72), 81 (66), 54 (48), 41 (47), 58 (44)...]				8.54	1275.4	0.02
<i>cis</i> -Verbenyl acetate	9.00*	1563.5	[0.08]	8.70*	1286.0	[25.00]
Isobornyl acetate	8.63	1534.9	0.49	8.70*	1286.0	[25.00]
Bornyl acetate	8.61	1533.3	24.48	8.70*	1286.0	[25.00]
Unknown PIMA 6 [m/z 107, 43 (76), 150]	9.43	1596.7	0.05	8.82	1294.3	0.06

(42), 91 (28), 108 (23)]						
<i>trans</i> -Pinocarvyl acetate	9.45*	1598.5	[0.06]	8.86	1296.5	0.06
Car-3-en-5-one	12.44*	1847.0	[0.02]	8.95	1302.8	0.01
Myrtenyl acetate	9.91*	1634.9	[0.04]	9.23	1322.1	0.02
Terpinyl acetate analog	9.91*	1634.9	[0.04]	9.38	1333.2	0.04
<i>trans</i> -Carvyl acetate	10.53	1685.0	0.03	9.43	1336.5	0.02
<i>exo</i> -2-Hydroxycineole acetate	10.40	1674.5	0.03	9.46	1338.9	0.02
Unknown CIAU VI [m/z 133, 105 (45), 91 (38), 119 (36)... 150 (3)]				9.50	1341.3	0.02
α -Cubebene	7.04	1415.3	0.02	9.54	1344.3	0.01
α -Terpinyl acetate	10.02	1643.6	0.04	9.58	1347.0	0.04
Citronellyl acetate	9.74	1621.3	0.05	9.69	1354.5	0.05
Longicyclene	7.37	1439.8	0.01	9.80	1362.6	0.02
Unknown PIMA 8 [m/z 93, 121 (68), 43 (67), 67 (44), 136 (36), 107 (34)... 180 (4)]	10.33*	1668.6	[0.18]	9.84	1365.0	0.02
α -Copaene	7.41	1442.7	0.02	9.93	1371.6	0.03
β -Bourbonene	7.79	1470.8	0.01	10.04	1379.4	0.01
Geranyl acetate	10.86	1712.7	0.23	10.11	1384.2	0.23
β -Elemene	8.72*	1541.7	[0.22]	10.18	1388.8	0.05
Longifolene	8.26*	1506.5	[0.08]	10.28	1396.6	0.08
β -Caryophyllene	8.72*	1541.7	[0.22]	10.50	1412.5	0.14
β -Copaene	8.67	1537.8	0.01	10.65	1423.3	0.02
<i>cis</i> -Muuroala-3,5-diene	9.25	1582.2	0.04	10.89	1440.9	0.02
<i>trans</i> -Muuroala-3,5-diene	9.16	1575.1	0.03	10.93	1444.1	0.03
α -Humulene	9.58	1608.5	0.04	10.96	1446.6	0.04
(<i>E</i>)- β -Farnesene	9.88*	1632.5	[0.11]	11.10	1457.0	0.06
<i>trans</i> -Cadina-1(6),4-diene	9.52*	1604.0	[0.13]	11.26	1468.6	0.06
γ -Muuroolene	9.88*	1632.5	[0.11]	11.30	1472.0	0.08
Germacrene D	10.08	1648.6	0.07	11.34	1474.7	0.05
β -Selinene	10.17	1656.1	0.06	11.40	1479.1	0.04
<i>trans</i> -Muuroala-4(15),5-diene	10.12*	1652.0	[1.72]	11.47	1484.4	0.03
α -Selinene	10.24	1661.3	0.04	11.53	1488.9	0.04

α -Muurolene	10.33*	1668.6	[0.18]	11.63	1496.0	0.17
γ -Cadinene	10.69	1698.4	0.22	11.79	1508.3	0.22
δ -Cadinene	10.72*	1700.6	[0.72]	11.93*	1519.3	[0.79]
<i>trans</i> -Calamenene	11.54	1769.4	0.04	11.93*	1519.3	[0.79]
<i>trans</i> -Cadina-1,4-diene	10.96	1720.8	0.03	12.03	1527.0	0.03
α -Cadinene	11.06	1728.9	0.05	12.10	1532.2	0.05
α -Calacorene	12.44*	1847.0	[0.02]	12.14	1536.0	0.02
(<i>E</i>)- α -Bisabolene	11.00	1724.5	0.10	12.21	1541.0	0.10
Unknown PIMA XV [m/z 95, 81 (70), 109 (68), 93 (59), 67 (53), 41 (49), 139 (40)... 220 (3)]	12.52	1854.1	0.02	12.28	1546.4	0.02
Unknown LESC I [m/z 93, 135 (99), 107 (72), 177 (72), 81 (57), 149 (53)... 220 (25)]	12.58	1859.4	0.01	12.45	1560.2	0.01
(<i>E</i>)-Nerolidol	14.13	1999.9	0.01	12.50	1563.5	0.01
Caryophyllene oxide	13.10	1905.7	0.01	12.58	1570.0	0.01
Globulol				12.66	1576.7	0.01
Unknown PIMA 10 [m/z 108, 43 (56), 109 (33), 93 (26), 119 (24)... 212 (2)]	15.09	2090.7	0.01	13.01	1603.7	0.01
10- <i>epi</i> -Cubenol	14.04	1991.1	0.02	13.06	1607.9	0.03
1- <i>epi</i> -Cubenol	14.10	1996.7	0.03	13.22	1621.4	0.03
τ -Cadinol	15.22	2103.9	0.09	13.39	1635.3	0.09
τ -Muurolol	15.39	2119.8	0.08	13.40	1635.6	0.09
α -Muurolol	15.52	2133.2	0.03	13.46	1640.5	0.03
α -Cadinol	15.82	2162.1	0.15	13.55	1648.4	0.15
<i>cis</i> -Calamenen-10-ol	16.81	2261.9	0.01	13.60	1652.8	0.01
<i>trans</i> -Calamenen-10-ol	17.21	2303.3	0.01	13.67	1658.2	0.02
Unknown LESC IV [m/z 159, 177 (59), 135 (57), 91 (47), 105 (47)... 220? (25)]				13.72	1662.2	0.04
Unknown PIMA XVI [m/z 177, 159 (98), 93 (94), 136 (84), 121 (68), 135 (65), 91 (57)... 220 (23)]				13.81	1669.9	0.02
Amorpha-4,9-dien-2-ol				14.10	1694.0	0.02

(5Z)-Tetradecen-14-olide?				14.33	1712.9	0.02
Unknown PIMA 11 [m/z 159, 132 (79), 135 (37), 91 (35), 177 (33)... 220 (16)]	17.96	2383.0	0.03	14.52	1729.5	0.02
(3E)-Cembrene A				16.95	1948.7	0.01
Unknown PISI V [m/z 105, 91 (100), 81 (89), 79 (86), 109 (86), 257 (83)... 275 (12)...]				17.23	1975.6	0.03
13-epi-Manoyl oxide	16.72	2252.3	0.01	17.46	1996.8	0.01
(E,E)-Geranylinalool				17.75	2025.6	0.01
Manool				17.92	2042.6	0.02
7,13-Abietadiene	17.81	2366.5	0.01	18.14	2064.4	0.01
(Z)-Abienol				18.83	2133.8	0.03
Stearic acid				19.18	2170.4	0.06
Palustral				19.61	2215.4	0.01
Abietal				20.25	2283.9	0.01
Total reported		98.76%			99.36%	

*: 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