

Date : 2025-05-28

CERTIFICATE OF ANALYSIS - GC PROFILING

SAMPLE IDENTIFICATION

Internal code : 25E14-PTH02

Customer Identification : Organic Helichrysum Italicum - Croatia - H90113R

Type : Essential Oil

Source : *Helichrysum italicum*

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

Date : 2025-05-27

PHYSICOCHEMICAL DATA

Refractive index : 1.4771 ± 0.0003 (20 °C)

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

Analyst : Cindy Caron B. Sc.

Date : 2025-05-14

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
Isovaleral	tr	Aliphatic aldehyde
2-Methylbutyral	0.01	Aliphatic aldehyde
3-Pentanone	0.03	Aliphatic ketone
2-Ethylfuran	0.01	Furan
2-Methylbutanol	0.01	Aliphatic alcohol
2-Methyl-3-pentanone	0.09	Aliphatic ketone
Unknown	0.01	Unknown
Unknown	0.03	Unknown
Hexanal	0.01	Aliphatic aldehyde
Octane	0.02	Alkane
2-Methyl-2-heptene	0.13	Alkene
4-Methyl-3-hexanone	0.20	Aliphatic ketone
(3Z)-Hexenol	0.02	Aliphatic alcohol
Furfuryl alcohol	0.01	Furan
(2E)-Hexenol	0.02	Aliphatic alcohol
Hexanol	0.04	Aliphatic alcohol
Isoamyl acetate	0.01	Aliphatic ester
Nonane	tr	Alkane
Bornylene	0.05	Monoterpene
Tricyclene	0.01	Monoterpene
α -Thujene	0.02	Monoterpene
α -Pinene	19.59	Monoterpene
Tiglic acid	0.01	Aliphatic acid
α -Fenchene	0.37	Monoterpene
Camphene	0.18	Monoterpene
Thuja-2,4(10)-diene	0.02	Monoterpene
β -Pinene	0.74	Monoterpene
Sabinene	0.01	Monoterpene
6-Methyl-5-hepten-2-one	0.03	Aliphatic ketone
2-Pentylfuran	0.01	Furan
Myrcene	0.05	Monoterpene
<i>trans</i> -Dehydroxylinalool oxide	0.01	Monoterpenic ether
6-Methyl-5-hepten-2-ol	0.02	Aliphatic alcohol
2-Carene	0.02	Monoterpene
Unknown	0.04	Monoterpene
α -Phellandrene	0.01	Monoterpene
Isobutyl 2-methylbutyrate	0.05	Aliphatic ester
Δ^3 -Carene	0.01	Monoterpene
(3Z)-Hexenyl acetate	0.03	Aliphatic ester
α -Terpinene	0.19	Monoterpene

<i>para</i> -Methylanisole	0.02	Simple phenolic
<i>meta</i> -Cymene	0.01	Monoterpene
<i>para</i> -Cymene	0.27	Monoterpene
1,8-Cineole	0.01	Monoterpenic ether
β -Phellandrene	0.76	Monoterpene
Limonene	3.36	Monoterpene
(Z)- β -Ocimene	0.02	Monoterpene
(E)- β -Ocimene	0.06	Monoterpene
Isobutyl angelate	0.27	Aliphatic ester
γ -Terpinene	0.41	Monoterpene
Octanol	0.01	Aliphatic alcohol
<i>para</i> -Cymenene	0.03	Monoterpene
<i>trans</i> -Linalool oxide (fur.)	0.01	Monoterpenic alcohol
Terpinolene	0.26	Monoterpene
2-Nonanone	0.08	Aliphatic ketone
2,4-Dimethylheptane-3,5-dione	0.07	β -Diketone
Linalool	1.01	Monoterpenic alcohol
Nonanal	0.07	Aliphatic aldehyde
2-Methylbutyl 2-methylbutyrate	0.11	Aliphatic ester
endo-Fenchol	0.07	Monoterpenic alcohol
α -Campholenal	0.01	Monoterpenic aldehyde
4-Hydroxy-4-methylcyclohex-2-enone	0.01	Aliphatic alcohol
<i>trans</i> -Pinocarveol	0.05	Monoterpenic alcohol
<i>trans</i> -Verbenol	0.06	Monoterpenic alcohol
<i>para</i> -Vinylanisole	0.02	Simple phenolic
Isoamyl angelate	0.02	Aliphatic ester
Nerol oxide	0.01	Aliphatic ether
Pinocavone	0.12	Monoterpenic ketone
2-Methylbutyl angelate	0.79	Aliphatic ester
Borneol	0.07	Monoterpenic alcohol
Unknown	0.01	Aliphatic ester
Nonanol	0.02	Aliphatic alcohol
Terpinen-4-ol	0.26	Monoterpenic alcohol
4,6-Dimethyloctane-3,5-dione epimer I	0.20	β -Diketone
4,6-Dimethyloctane-3,5-dione epimer II	0.12	β -Diketone
α -Terpineol	0.59	Monoterpenic alcohol
Myrtenol	0.02	Monoterpenic alcohol
2-Methylbutyl tiglate	0.02	Aliphatic ester
Unknown	0.02	Unknown
Decanal	0.04	Aliphatic aldehyde
Unknown	0.02	Unknown
Unknown	0.02	Unknown
Nerol	1.52	Monoterpenic alcohol
Hexyl 2-methylbutyrate	0.02	Aliphatic ester
(3Z)-Hexenyl 2-methylbutyrate	0.19	Aliphatic ester

Hexyl isovalerate	0.03	Aliphatic ester
3-Methylpentyl angelate	tr	Aliphatic ester
Unknown	0.04	Aliphatic ester
Linalyl acetate	0.08	Monoterpenic ester
(3Z)-Hexenyl angelate	0.01	Aliphatic ester
Hexyl angelate	0.07	Aliphatic ester
2-Undecanone	0.29	Aliphatic ketone
2-Acetyl- <i>para</i> -cresol?	0.02	Simple phenolic
Tridecane	0.04	Alkane
Hexyl tiglate	0.01	Aliphatic ester
α -Terpinyl acetate	0.01	Monoterpenic ester
Cyclosativene I	0.03	Sesquiterpene
Cyclosativene II	0.26	Sesquiterpene
α -Ylangene	tr	Sesquiterpene
Neryl acetate	10.27	Monoterpenic ester
α -Copaene	1.38	Sesquiterpene
7-Cubebene	0.01	Sesquiterpene
Italicene isomer	0.90	Sesquiterpene
Geranyl acetate	0.04	Monoterpenic ester
Sativene	0.04	Sesquiterpene
α -Funebrene	0.21	Sesquiterpene
Isoitalicene	0.15	Sesquiterpene
Italicene	3.29	Sesquiterpene
α -Gurjunene	0.02	Sesquiterpene
Tetradecane	0.03	Alkane
α -Cedrene	0.10	Sesquiterpene
<i>cis</i> - α -Bergamotene	0.93	Sesquiterpene
β -Caryophyllene	3.63	Sesquiterpene
β -Copaene	0.04	Sesquiterpene
<i>trans</i> - α -Bergamotene	0.85	Sesquiterpene
Italidione I (4,6,9-Trimethyldec-8-ene-3,5-dione)	2.02	β -Diketone
Cadina-4,11-diene	0.09	Sesquiterpene
Unknown	0.05	Sesquiterpene
α -Humulene	0.32	Sesquiterpene
α -Acoradiene	0.33	Sesquiterpene
Neryl propionate	1.62	Monoterpenic ester
(<i>E</i>)- β -Farnesene	0.84	Sesquiterpene
Unknown	0.10	Sesquiterpene
Selina-4,11-diene	1.54	Sesquiterpene
β -Selinene	4.56	Sesquiterpene
γ -Curcumene	11.45	Sesquiterpene
<i>ar</i> -Curcumene	2.57	Sesquiterpene
Italidione II isomer II (5,7,10-Trimethylundec-9-ene-4,6-dione)	1.83	β -Diketone

α -Selinene	3.00	Sesquiterpene
α -Muurolene	0.17	Sesquiterpene
Italidione II analog	0.30	β -Diketone
10-epi-Italicene ether	0.35	Sesquiterpenic ether
β -Bisabolene	0.19	Sesquiterpene
γ -Cadinene	0.07	Sesquiterpene
β -Curcumene	1.24	Sesquiterpene
7-epi- α -Selinene	0.34	Sesquiterpene
δ -Cadinene	0.60	Sesquiterpene
<i>trans</i> -Calamenene	0.25	Sesquiterpene
<i>trans</i> -Cadina-1,4-diene	0.02	Sesquiterpene
Italicene ether	0.11	Sesquiterpenic ether
(<i>E</i>)- γ -Bisabolene	0.09	Sesquiterpene
α -Cadinene	0.08	Sesquiterpene
Selina-3,7(11)-diene	0.04	Sesquiterpene
α -Calacorene	0.09	Sesquiterpene
(<i>E</i>)- α -Bisabolene	0.12	Sesquiterpene
Isocaryophyllene epoxide B	0.02	Sesquiterpenic ether
β -Calacorene	0.05	Sesquiterpene
Caryophyllenyl alcohol	0.01	Sesquiterpenic alcohol
(<i>E</i>)-Nerolidol	0.12	Sesquiterpenic alcohol
Italidione III isomer I	0.36	β -Diketone
Caryophyllene oxide	0.15	Sesquiterpenic ether
Italidione III isomer II	0.54	β -Diketone
Italidione III isomer III	0.40	β -Diketone
Guaiol	0.21	Sesquiterpenic alcohol
Copaborneol	0.22	Sesquiterpenic alcohol
Eudesm-5-en-11-ol	0.46	Sesquiterpenic alcohol
Unknown	0.13	Oxygenated sesquiterpene
Unknown	0.09	Oxygenated sesquiterpene
Unknown	0.05	Unknown
1-epi-Cubenol	0.03	Sesquiterpenic alcohol
Caryophylladienol I	0.07	Sesquiterpenic alcohol
γ -Eudesmol	0.09	Sesquiterpenic alcohol
Caryophylladienol II	tr	Sesquiterpenic alcohol
Eudesmol analog?	0.25	Sesquiterpenic alcohol
τ -Muurolol	0.03	Sesquiterpenic alcohol
τ -Cadinol	0.07	Sesquiterpenic alcohol
β -Eudesmol	0.12	Sesquiterpenic alcohol
α -Eudesmol	0.07	Sesquiterpenic alcohol
Selin-11-en-4 α -ol	0.15	Sesquiterpenic alcohol
α -Cadinol	0.02	Sesquiterpenic alcohol
Bulnesol	0.04	Sesquiterpenic alcohol
β -Bisabolol	0.10	Sesquiterpenic alcohol
epi- α -Bisabolol	0.02	Sesquiterpenic alcohol

α -Bisabolol	0.02	Sesquiterpenic alcohol
Neryl 4-methylvalerate?	0.01	Monoterpenic ester
Unknown	0.02	Unknown
Octyl angelate	0.06	Aliphatic ester
Geranyl 4-methylvalerate?	0.02	Monoterpenic ester
Unknown	0.12	Oxygenated sesquiterpene
Unknown	0.01	Oxygenated sesquiterpene
Unknown	0.05	Oxygenated sesquiterpene
Unknown	0.07	Oxygenated sesquiterpene
Unknown	0.10	Oxygenated sesquiterpene
Unknown	0.05	Oxygenated sesquiterpene
<i>trans</i> -Bisabola-1(6),10-diene-2,3-diol	0.23	Sesquiterpenic alcohol
Unknown	0.03	Unknown
Cryptomeridiol	0.06	Sesquiterpenic alcohol
Unknown	0.01	Unknown
Unknown	0.11	Unknown
Consolidated total	95.27	

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

Note: no correction factor was applied

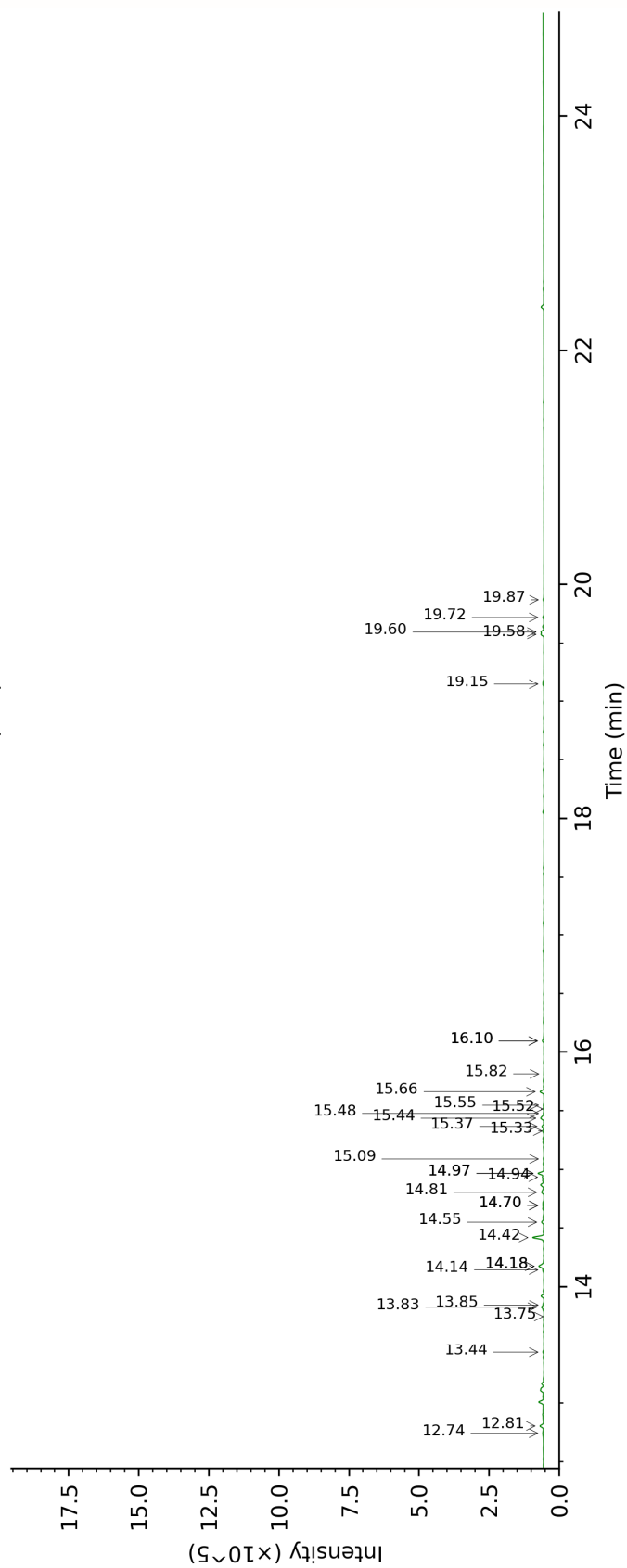
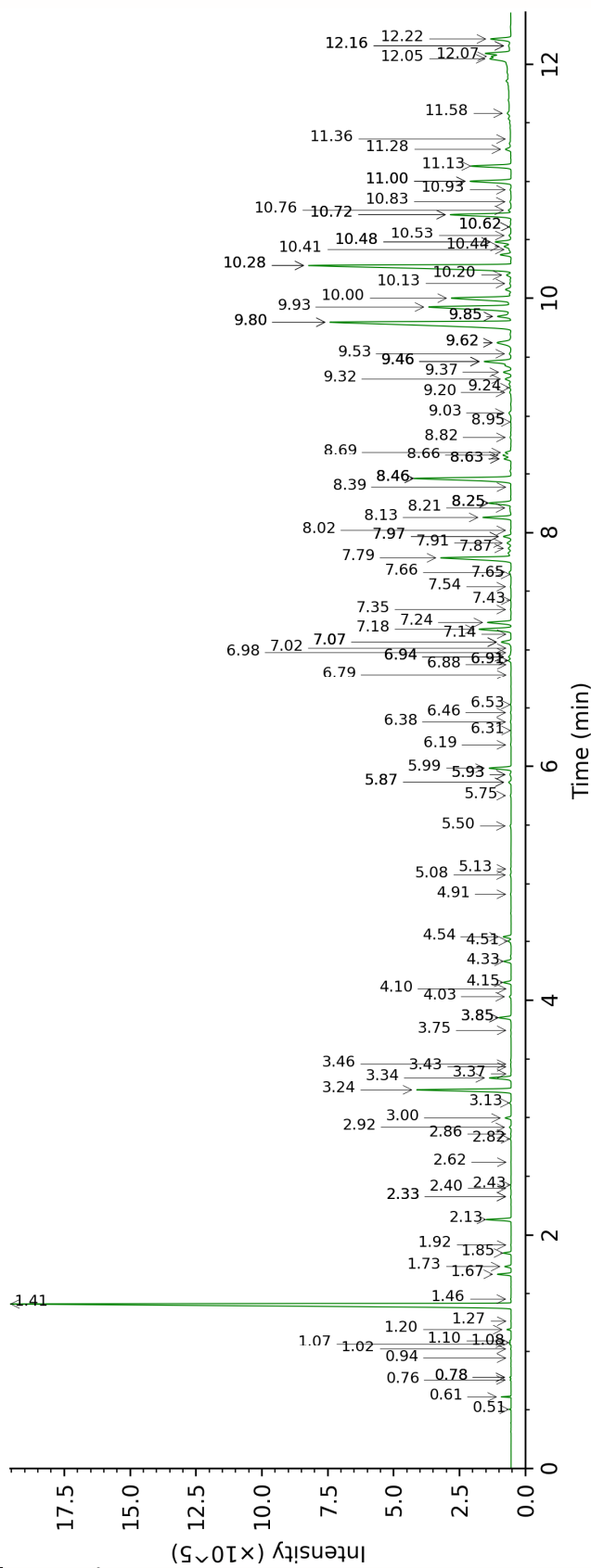
About "consolidated" data: The table above presents the breakdown of the sample volatile constituents after applying an algorithm to collapse data acquired from the multi-columns system of PhytoChemia into a single set of consolidated contents. In case of discrepancies between columns, the algorithm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

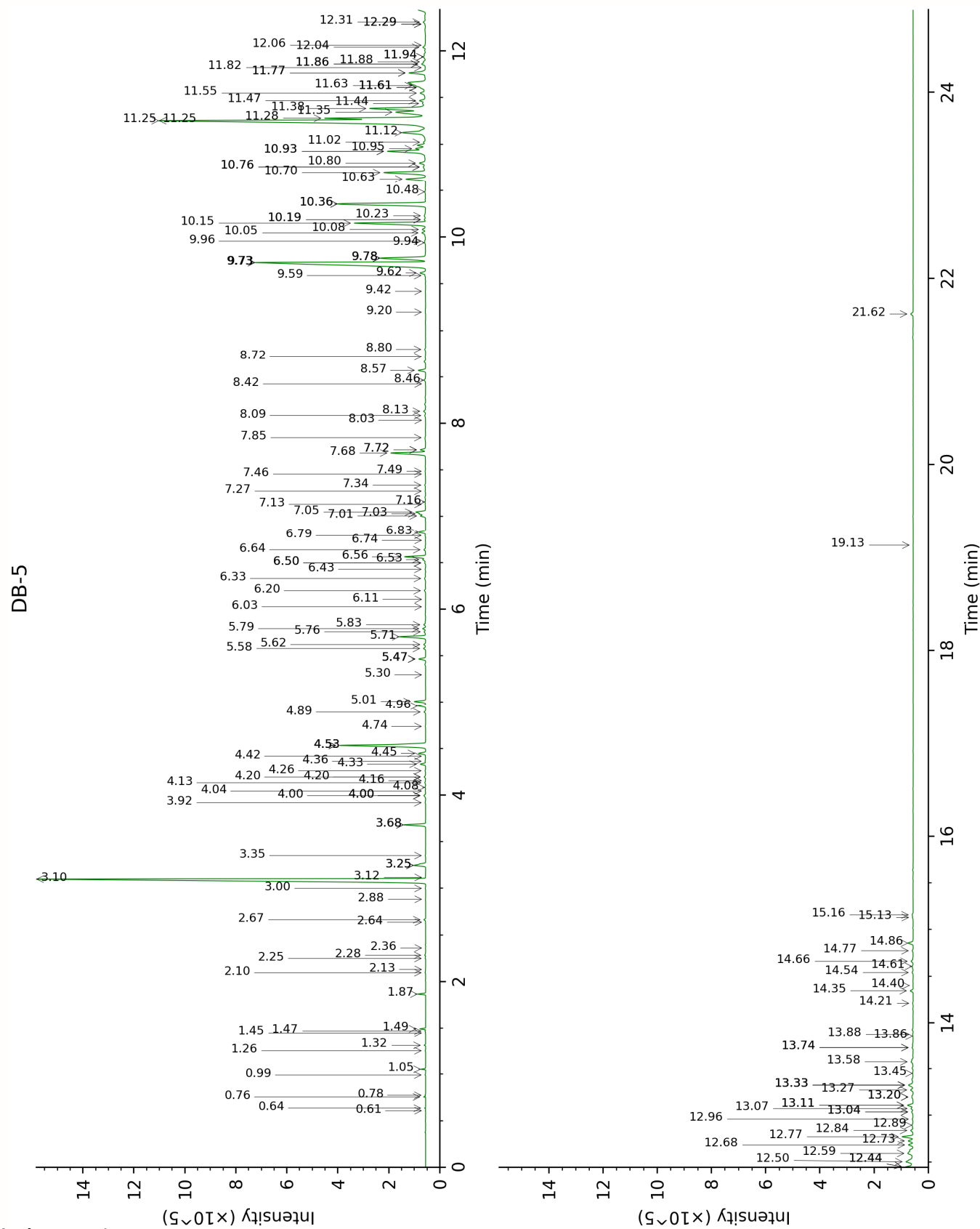
Unknowns: Unknown compounds' mass spectral data is presented in the "Full analysis data" table. The occurrence of unknown compounds is to be expected in many samples, and does not denote particular problems unless noted otherwise in the conclusion.

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

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

DB-WAX





FULL ANALYSIS DATA

Isovaleral	Column DB-WAX			Column DB-5		
	0.78*	888.0	[0.02]	0.61	642.2	tr
2-Methylbutyral	0.76	879.9	0.02	0.64	651.9	0.01
3-Pentanone	1.07	938.4	0.03	0.76	694.4	0.03
2-Ethylfuran	0.94	917.8	0.01	0.78	700.9	0.01
2-Methylbutanol	3.46	1175.3	0.01	0.99	734.2	0.01
2-Methyl-3-pentanone	1.20	958.5	0.09	1.05	743.0	0.09
Unknown HEIT III [m/z 73, 41 (54), 87 (50), 56 (47), 54 (29), 55 (25), 100 (23)... 115? (6)]	1.02	930.5	0.01	1.26	772.6	0.01
Unknown HEIT II [m/z 73, 87 (52), 41 (45), 56 (42), 100 (29)...]	1.08	940.5	0.03	1.32	781.0	0.03
Hexanal	1.92	1043.7	0.01	1.45	799.7	0.01
Octane	0.51	781.8	0.03	1.47	802.7	0.02
2-Methyl-2-heptene	0.61	827.6	0.13	1.49	805.1	0.13
4-Methyl-3-hexanone	1.85	1036.9	0.20	1.87	836.5	0.20
(3Z)-Hexenol	5.87*	1351.6	[0.10]	2.10	855.8	0.02
Furfuryl alcohol	9.03	1586.0	0.13	2.13	858.7	0.01
(2E)-Hexenol	6.19	1374.3	0.02	2.25	868.7	0.02
Hexanol	5.50	1325.3	0.05	2.28	871.5	0.04
Isoamyl acetate	2.40	1091.6	0.02	2.36	878.1	0.01
Nonane	0.78*	888.0	[0.02]	2.64	901.4	tr
Bornylene	1.10	943.0	0.03	2.66	903.6	0.05
Tricyclene	1.27	970.2	tr	2.88	918.3	0.01
α -Thujene	1.46	998.0	0.01	3.00	926.1	0.02
α -Pinene	1.41	993.9	19.75	3.10	932.7	19.59
Tiglic acid				3.12	933.9	0.01
α -Fenchene	1.67	1019.0	0.37	3.25*	942.6	[0.55]
Camphene	1.73	1025.5	0.18	3.25*	942.6	[0.55]
Thuja-2,4(10)-diene	2.33*	1084.6	[0.02]	3.35	949.6	0.02
β -Pinene	2.13	1065.2	0.74	3.68*	971.7	[0.75]
Sabinene	2.33*	1084.6	[0.02]	3.68*	971.7	[0.75]
6-Methyl-5-hepten-2-one	5.13	1299.3	0.02	3.92	987.6	0.03
2-Pentylfuran	3.74	1197.8	0.01	4.00*	992.7	[0.08]
Myrcene	2.92	1133.0	0.05	4.00*	992.7	[0.08]

<i>trans</i> -Dehydroxylinalool oxide	3.43	1173.5	0.01	4.00*	992.7	[0.08]
6-Methyl-5-hepten-2-ol	6.94*	1429.2	[0.13]	4.04	996.0	0.02
2-Carene	2.43	1094.4	0.01	4.08	998.6	0.02
Unknown HEIT I [m/z = 123, 43 (16), 152 (14), 124 (9), 137 (6)]	2.82	1125.2	0.04	4.13	1002.0	0.04
α -Phellandrene	2.86	1128.5	0.02	4.16	1003.5	0.01
Isobutyl 2-methylbutyrate	3.13	1149.3	0.05	4.20*	1006.0	[0.06]
Δ^3 -Carene	2.62	1109.6	0.01	4.20*	1006.0	[0.06]
(3Z)-Hexenyl acetate	4.91	1283.2	0.03	4.26	1010.2	0.03
α -Terpinene	3.00	1139.2	0.19	4.33	1014.7	0.19
<i>para</i> -Methylanisole	6.31	1383.0	tr	4.36	1016.6	0.02
<i>meta</i> -Cymene	4.10	1223.7	0.01	4.42	1020.1	0.01
<i>para</i> -Cymene	4.15	1227.6	0.26	4.45	1022.0	0.27
1,8-Cineole	3.37	1168.8	0.01	4.53*	1027.4	[4.09]
β -Phellandrene	3.34	1166.1	0.76	4.53*	1027.4	[4.09]
Limonene	3.24	1158.1	3.36	4.53*	1027.4	[4.09]
(Z)- β -Ocimene	3.85*	1205.7	[0.44]	4.74	1040.4	0.02
(E)- β -Ocimene	4.03	1218.7	0.06	4.89	1050.2	0.06
Isobutyl angelate	4.54	1256.1	0.27	4.96	1054.5	0.27
γ -Terpinene	3.85*	1205.7	[0.44]	5.01	1057.7	0.41
Octanol	8.25*	1526.7	[0.94]	5.30	1075.9	0.01
<i>para</i> -Cymenene	6.38	1388.1	0.03	5.47*	1086.7	[0.25]
<i>trans</i> -Linalool oxide (fur.)	6.98	1431.8	0.01	5.47*	1086.7	[0.25]
Terpinolene	4.33	1240.8	0.26	5.47*	1086.7	[0.25]
2-Nonanone	5.87*	1351.6	[0.10]	5.58	1093.9	0.08
2,4-Dimethylheptane-3,5-dione	7.66	1481.9	0.09	5.62	1096.6	0.07
Linalool	8.13	1517.3	1.02	5.71	1101.9	1.01
Nonanal	5.93*	1356.3	[0.06]	5.76	1105.3	0.07
2-Methylbutyl 2-methylbutyrate	4.51	1253.4	0.12	5.79	1107.5	0.11
endo-Fenchol	8.46*	1542.8	[4.55]	5.84	1110.2	0.07
α -Campholenal	7.02	1434.6	0.01	6.03	1122.7	0.01
4-Hydroxy-4-methylcyclohex-	14.14	2029.0	0.05	6.11	1127.8	0.01

2-enone						
<i>trans</i> -Pinocarveol	9.24	1602.9	0.06	6.20	1133.9	0.05
<i>trans</i> -Verbenol	9.62*	1633.6	[0.89]	6.33	1142.4	0.06
<i>para</i> -Vinylnisole	9.46*†	1620.8	[1.27]	6.43	1148.7	0.02
Isoamyl angelate	5.93*	1356.3	[0.06]	6.50*	1153.2	[0.03]
Nerol oxide	6.88	1424.2	0.01	6.50*	1153.2	[0.03]
Pinocavone	7.97*	1504.8	[0.31]	6.53	1155.5	0.12
2-Methylbutyl angelate	5.99	1360.2	0.79	6.56	1157.5	0.79
Borneol	9.85*	1651.5	[0.66]	6.64	1162.4	0.07
Unknown HEIT IV [m/z 83, 100 (34), 55 (33), 43 (21), 84 (21)...]	5.75	1343.6	0.03	6.74	1169.0	0.01
Nonanol	9.53	1626.1	0.09	6.79	1172.5	0.02
Terpinen-4-ol	8.63*†	1555.5	[0.27]	6.83	1174.7	0.26
4,6-Dimethyloctane- 3,5-dione epimer I	8.63*†	1555.5	[0.27]	7.01	1186.4	0.20
4,6-Dimethyloctane- 3,5-dione epimer II	8.69*†	1560.3	[0.22]	7.03*†	1188.0	[0.22]
α-Terpineol	9.85*	1651.5	[0.66]	7.05*†	1189.0	[0.38]
Myrtenol	10.93	1740.8	0.04	7.13	1194.5	0.02
2-Methylbutyl tiglate	6.91*	1426.9	[0.11]	7.16	1196.1	0.02
Unknown PIMA 7 [m/z 95, 93 (32), 121 (24), 79 (22), 91 (21), 105 (16)... 154 (2)]	11.00*	1746.9	[1.65]	7.27	1203.7	0.02
Decanal	7.35	1458.7	0.03	7.34	1208.0	0.04
Unknown HEIT XXII [m/z 81, 57 (91), 168 (73), 67 (52), 140 (45), 41 (36), 113 (27)...]				7.46	1216.1	0.02
Unknown HEIT XXI [m/z 81, 109 (85), 168 (72), 57 (69), 67 (58), 41 (49), 140 (45)...]				7.49	1218.1	0.02
Nerol	11.13	1757.8	1.56	7.68	1231.5	1.52
Hexyl 2-	6.53	1398.7	0.02	7.72*	1233.8	[0.21]

methylbutyrate						
(3Z)-Hexenyl 2-methylbutyrate	7.07*	1438.3	[0.45]	7.72*	1233.8	[0.21]
Hexyl isovalerate	6.79	1417.8	0.02	7.85	1242.7	0.03
3-Methylpentyl angelate	7.43	1464.6	0.03	8.03	1255.4	tr
Unknown HEIT VI [m/z 83, 55 (29), 57 (24), 100 (21), 104 (13)...]	6.91*	1426.9	[0.11]	8.08	1258.9	0.04
Linalyl acetate	8.21	1523.5	0.06	8.13	1262.0	0.08
(3Z)-Hexenyl angelate	8.25*	1526.7	[0.94]	8.42	1282.1	0.01
Hexyl angelate	7.97*	1504.8	[0.31]	8.46	1284.8	0.07
2-Undecanone	8.66*†	1558.0	[0.37]	8.57	1292.1	0.29
2-Acetyl- <i>para</i> -cresol?	12.16*†	1846.4	[0.21]	8.72	1302.2	0.02
Tridecane	5.08	1295.3	0.04	8.80	1304.0	0.04
Hexyl tiglate	8.95	1580.1	0.03	9.20	1332.4	0.01
α -Terpinyl acetate	9.80*	1647.5	[11.47]	9.42	1348.3	0.01
Cyclosativene I	6.94*	1429.2	[0.13]	9.59	1360.3	0.03
Cyclosativene II	7.07*	1438.3	[0.45]	9.62	1362.3	0.26
α -Ylangene	7.07*	1438.3	[0.45]	9.73*	1370.2	[11.57]
Neryl acetate	10.28*	1686.2	[11.51]	9.73*	1370.2	[11.57]
α -Copaene	7.18	1446.4	1.38	9.78*	1373.5	[2.28]
7-Cubebene	7.14	1443.3	0.01	9.78*	1373.5	[2.28]
Italicene isomer	7.24	1450.6	0.90	9.78*	1373.5	[2.28]
Geranyl acetate	10.62*	1714.2	[0.08]	9.94	1385.3	0.04
Sativene	7.54	1473.0	0.04	9.96	1386.4	0.04
α -Funebrene	7.91	1500.6	0.18	10.05	1392.8	0.21
Isoitalicene	7.87	1497.1	0.14	10.08	1395.3	0.15
Italicene	7.79	1491.0	3.32	10.15	1400.1	3.29
α -Gurjunene	7.65	1480.6	0.02	10.19*	1402.8	[0.05]
Tetradecane	6.46	1393.8	0.03	10.19*	1402.8	[0.05]
α -Cedrene	8.02	1508.9	0.04	10.23	1405.8	0.10
<i>cis</i> - α -Bergamotene	8.25*	1526.7	[0.94]	10.36*	1415.3	[4.55]
β -Caryophyllene	8.46*	1542.8	[4.55]	10.36*	1415.3	[4.55]
β -Copaene	8.39	1537.1	0.04	10.48	1425.0	0.04
<i>trans</i> - α -Bergamotene	8.46*	1542.8	[4.55]	10.63	1435.7	0.85
Italidione I (4,6,9-Trimethyldec-8-ene-3,5-dione)	12.05*†	1836.7	[1.41]	10.70	1441.0	2.02
Cadina-4,11-diene	9.20	1599.7	0.09	10.76*	1445.5	[0.18]

Unknown BOCA IV [m/z 91, 161 (92), 105 (85), 119 (63), 133 (53), 79 (49), 204 (46)]	8.82	1570.1	0.05	10.76*	1445.5	[0.18]
α -Humulene	9.32	1608.8	0.27	10.80	1448.6	0.32
α -Acoradiene	9.37	1613.5	0.33	10.92*†	1458.1	[1.97]
Neryl propionate	11.00*	1746.9	[1.65]	10.92*†	1458.1	[1.97]
(E)- β -Farnesene	9.62*	1633.6	[0.89]	10.95†	1460.2	0.43
Unknown CEDE VI [m/z 119, 91 (85), 93 (77), 105 (76), 79 (61), 134 (60), 94 (49), 204 (46)]	9.46*†	1620.8	[1.27]	11.02	1465.4	0.10
Selina-4,11-diene	9.46*†	1620.8	[1.27]	11.12	1473.1	1.54
β -Selinene	9.93	1657.9	4.56	11.25*†	1482.8	[16.61]
γ -Curcumene	9.80*	1647.5	[11.47]	11.25*†	1482.8	[16.61]
α -Curcumene	10.72*	1722.9	[2.59]	11.28†	1484.8	3.79
Italidione II isomer II (5,7,10- Trimethylundec- 9-ene-4,6-dione)	12.07*†	1838.5	[0.78]	11.34	1489.6	1.83
α -Selinene	10.00	1663.9	3.06	11.38	1492.6	3.00
α -Muurolene	10.13	1673.9	0.06	11.44	1496.6	0.17
Italidione II analog				11.47	1498.9	0.30
10-epi-Italicene ether	11.36*†	1777.2	[0.06]	11.55	1504.9	0.35
β -Bisabolene	10.20	1679.7	0.19	11.61*†	1509.7	[0.20]
γ -Cadinene	10.42	1697.4	0.07	11.61*†	1509.7	[0.20]
β -Curcumene	10.28*	1686.2	[11.51]	11.61*†	1509.7	[0.20]
7-epi- α -Selinene	10.44	1699.5	0.34	11.63*†	1511.3	[0.32]
δ -Cadinene	10.48*	1702.8	[0.66]	11.77*	1522.1	[0.85]
<i>trans</i> -Calamenene	11.28	1769.8	0.25	11.77*	1522.1	[0.85]
<i>trans</i> -Cadina-1,4- diene	10.72*	1722.9	[2.59]	11.82	1526.6	0.02
Italicene ether	11.58*†	1795.9	[0.37]	11.86*	1529.6	[0.20]
(E)- γ -Bisabolene	10.53	1707.4	0.09	11.86*	1529.6	[0.20]
α -Cadinene	10.83	1732.2	0.06	11.88	1531.5	0.08
Selina-3,7(11)- diene	10.62*	1714.2	[0.08]	11.94*	1535.6	[0.13]
α -Calacorene	12.16*†	1846.4	[0.21]	11.94*	1535.6	[0.13]
(E)- α -Bisabolene	10.76	1726.1	0.11	12.04	1543.8	0.12
Isocaryophyllene epoxide B	12.22	1851.6	0.84	12.06	1545.5	0.02

β-Calacorene	12.74	1898.5	0.05	12.29*	1563.4	[0.02]
Caryophyllenyl alcohol	13.75	1990.8	0.01	12.29*	1563.4	[0.02]
(E)-Nerolidol	13.83	1998.6	0.12	12.31	1565.2	0.12
Italidione III isomer I				12.44*	1575.7	[0.51]
Caryophyllene oxide	12.81	1904.2	0.15	12.44*	1575.7	[0.51]
Italidione III isomer II				12.50	1580.3	0.54
Italidione III isomer III				12.59	1587.4	0.40
Guaiol	14.18*	2032.0	[0.26]	12.68	1594.7	0.21
Copaborneol	14.97*	2108.9	[0.24]	12.73	1598.0	0.22
Eudesm-5-en-11-ol	14.42	2055.5	0.48	12.77	1601.5	0.46
Unknown MIAL II [m/z 43, 81 (97), 135 (71), 95 (62), 204 (61), 71 (59), 207 (56)... 222 (3)]	14.55	2068.1	0.11	12.84	1606.9	0.13
Unknown MECA V [m/z 179, 161 (66), 119 (44), 95 (38), 105 (35)... 204 (24), 222 (1)]	14.70*	2081.7	[0.08]	12.90	1611.6	0.09
Unknown HEIT VIII [m/z 182, 109 (58), 69 (50), 41 (42), 43 (40), 139 (31)... 235 (17), 250 (1)...]	14.18*	2032.0	[0.26]	12.96	1617.0	0.05
1-epi-Cubenol	13.85	2000.3	0.03	13.04*	1623.5	[0.10]
Caryophylladienol I	16.10*	2223.2	[0.07]	13.04*	1623.5	[0.10]
γ-Eudesmol	14.94	2105.6	0.05	13.07	1626.5	0.09
Caryophylladienol II	16.10*	2223.2	[0.07]	13.11*	1629.4	[0.25]
Eudesmol analog?				13.11*	1629.4	[0.25]
τ-Muurolol	15.09	2121.1	0.03	13.20*	1636.8	[0.10]
τ-Cadinol	14.97*	2108.9	[0.24]	13.20*	1636.8	[0.10]
β-Eudesmol	15.44	2155.9	0.16	13.27	1643.1	0.12
α-Eudesmol	15.37	2148.9	0.07	13.33*	1647.4	[0.27]
Selin-11-en-4α-ol	15.66	2178.4	0.15	13.33*	1647.4	[0.27]
α-Cadinol	15.55	2166.9	0.02	13.33*	1647.4	[0.27]
Bulnesol	15.33	2144.9	0.06	13.45	1657.9	0.04

β-Bisabolol	14.81	2092.8	0.13	13.58	1668.2	0.10
epi-α-Bisabolol	15.52	2163.7	0.02	13.74*	1681.5	[0.05]
α-Bisabolol	15.48	2159.9	0.02	13.74*	1681.5	[0.05]
Neryl 4-methylvalerate?	13.44	1962.1	0.04	13.86	1691.7	0.01
Unknown HEIT IX [m/z 196, 69 (62), 109 (58), 41 (54), 139 (41)... 249 (21)...]	14.70*	2081.7	[0.08]	13.88	1693.1	0.02
Octyl angelate	10.48*	1702.8	[0.66]			
Geranyl 4-methylvalerate?				14.21	1721.7	0.02
Unknown HEIT X [m/z 43, 69 (32), 198 (29), 41 (27), 93 (26)... 202 (20)...]				14.34	1733.4	0.12
Unknown HEIT XI [m/z 82, 125 (40), 41 (35), 69 (31), 67 (27)... 236? (t)]	15.82	2194.0	0.01	14.40	1738.3	0.01
Unknown HEIT XII [m/z 109, 127 (46), 138 (45), 81 (27), 123 (25)... 220? (2)]	19.15	2559.4	0.04	14.54	1750.4	0.05
Unknown HEIT XIII [m/z 136, 121 (74), 135 (55), 218 (36), 148 (33), 40 (42)... 236? (1)]				14.61	1756.2	0.07
Unknown HEIT XVI [m/z 109, 127 (46), 138 (45), 82 (34), 81 (31)... 236? (t)]	19.60	2613.0	0.11	14.66	1760.9	0.10
Unknown HEIT XVII [m/z 109, 138 (75), 123 (45), 127 (42), 81 (30)...]	19.72	2628.0	0.04	14.77	1770.8	0.05
trans-Bisabola- 1(6),10-diene-2,3- diol	19.58	2610.6	0.12	14.86	1777.9	0.23
Unknown HEIT				15.13	1801.8	0.03

XIX [m/z 43, 82 (69), 41 (66), 93 (62), 96 (55), 55 (49), 67 (45), 154 (44)...]						
Cryptomeridiol	19.87	2646.0	0.03	15.16	1804.3	0.06
Unknown HEIT XXXII [m/z 200, 145 (97), 160 (45), 185 (40), 43 (38), 157 (31)...]				19.13	2188.5	0.01
Unknown HEIT XXIX [m/z 81, 69 (80), 137 (48), 95 (35), 41 (35), 98 (33)...]				21.62	2463.7	0.11
Total reported		95.24%			97.80%	

*: 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