

Date : 2024-07-30

CERTIFICATE OF ANALYSIS - GC PROFILING

SAMPLE IDENTIFICATION

Internal code : 24G16-PTH01

Customer Identification : Organic Roman Chamomile - Bulgaria - CC3107R

Type : Essential Oil

Source : *Anthemis nobilis* [syn. *Chamaemelum nobile*]

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 : 2024-07-23

PHYSICOCHEMICAL DATA

Refractive index : 1.4419 ± 0.0003 (20 °C)

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

Analyst : Cindy Caron B. Sc.

Date : 2024-07-17

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
Ethanol	tr	Aliphatic alcohol
Isobutyral	0.01	Aliphatic aldehyde
Methacrolein	tr	Aliphatic aldehyde
2-Methyl-3-buten-2-ol	tr	Aliphatic alcohol
Isobutanol	0.03	Aliphatic alcohol
Isovaleral	0.01	Aliphatic aldehyde
3-Methyl-2-butanone	0.01	Aliphatic ketone
2-Methylbutyral	0.01	Aliphatic aldehyde
3-Methyl-3-buten-2-one	0.01	Aliphatic ketone
2-Ethylfuran	0.01	Furan
Isoamyl alcohol	0.02	Aliphatic alcohol
2-Methylbutanol	0.08	Aliphatic alcohol
Ethyl isobutyrate	0.01	Aliphatic ester
Toluene	0.01	Simple phenolic
Isobutyl acetate	0.04	Aliphatic ester
Methyl 2-methylbutyrate	0.01	Aliphatic ester
Methyl isovalerate	tr	Aliphatic ester
Octene	0.02	Alkene
Hexanal	0.02	Aliphatic aldehyde
Methyl angelate	0.07	Aliphatic ester
Ethyl 2-methylbutyrate	0.01	Aliphatic ester
(2E)-Hexenal	0.01	Aliphatic aldehyde
Propyl isobutyrate	0.07	Aliphatic ester
Isobutyl propionate	0.01	Aliphatic ester
(2E)-Hexenol	0.04	Aliphatic alcohol
Hexanol	0.01	Aliphatic alcohol
Isoamyl acetate	0.05	Aliphatic ester
2-Methylbutyl acetate	0.12	Aliphatic ester
Propyl methacrylate	0.03	Aliphatic ester
Ethyl angelate	0.04	Aliphatic ester
Isobutyl isobutyrate	4.04	Aliphatic ester
Tricyclene	0.01	Monoterpene
Tiglyl acetate?	0.38	Aliphatic ester
α -Pinene	2.39	Monoterpene
Methallyl isobutyrate	0.34	Aliphatic ester
Isobutyl methacrylate	1.30	Aliphatic ester
Camphene	0.48	Monoterpene
α -Fenchene	0.01	Monoterpene
Propyl 2-methylbutyrate	0.05	Aliphatic ester
Thuja-2,4(10)-diene	0.08	Monoterpene

Benzaldehyde	0.04	Simple phenolic
Butyl isobutyrate	0.06	Aliphatic ester
Methallyl methacrylate	0.34	Aliphatic ester
Sabinene	0.07	Monoterpene
β -Pinene	0.23	Monoterpene
2-Methylbutyl propionate	0.05	Aliphatic ester
Butyl methacrylate	0.04	Aliphatic ester
Octen-3-ol	0.04	Aliphatic alcohol
6-Methyl-5-hepten-2-one	0.02	Aliphatic ketone
Octan-3-one	0.01	Aliphatic ketone
2-Pentylfuran	0.02	Furan
Myrcene	0.07	Monoterpene
Propyl angelate	1.40	Aliphatic ester
Isobutyl 2-methylbutyrate	0.69	Aliphatic ester
(3Z)-Hexenyl acetate	0.02	Aliphatic ester
Isobutyl isovalerate	0.15	Aliphatic ester
Isoamyl isobutyrate	0.33	Aliphatic ester
2-Methylbutyl isobutyrate	2.64	Aliphatic ester
<i>para</i> -Cymene	0.05	Monoterpene
Methallyl 2-methylbutyrate	0.08	Aliphatic ester
Methallyl isovalerate?	0.03	Aliphatic ester
Limonene	1.42	Monoterpene
1,8-Cineole	0.08	Monoterpenic ether
Propyl tiglate	0.02	Aliphatic ester
Unknown	0.02	Unknown
2-Methylbutyl methacrylate	0.13	Aliphatic ester
Isoamyl methacrylate	0.70	Aliphatic ester
(E)- β -Ocimene	0.04	Monoterpene
γ -Terpinene	0.02	Monoterpene
Isobutyl angelate	32.37	Aliphatic ester
Prenyl isobutyrate	0.19	Aliphatic ester
Unknown	0.03	Unknown
Methallyl angelate	8.68	Aliphatic ester
3-Methylpentyl propionate?	0.05	Aliphatic ester
<i>para</i> -Cymenene	0.03	Monoterpene
Tiglyl methacrylate	0.11	Aliphatic ester
Butyl angelate	0.79	Aliphatic ester
α -Pinene oxide	0.05	Monoterpenic ether
Isobutyl tiglate	0.47	Aliphatic ester
2-Methylbutyl isovalerate?	0.04	Aliphatic ester
Linalool	0.07	Monoterpenic alcohol
α -Thujone	0.02	Monoterpenic ketone
Isoamyl 2-methylbutyrate	0.08	Aliphatic ester
2-Methylbutyl 2-methylbutyrate	0.43	Aliphatic ester
Isoamyl isovalerate	0.04	Aliphatic ester

Methallyl tiglate	0.13	Aliphatic ester
2-Methylbutyl isovalerate	0.02	Aliphatic ester
3-Methylpentyl isobutyrate	0.06	Aliphatic ester
α -Campholenal	0.04	Monoterpenic aldehyde
<i>trans</i> -Pinocarveol	4.88	Monoterpenic alcohol
<i>trans</i> -Verbenol	0.04	Monoterpenic alcohol
Camphene hydrate	0.24	Monoterpenic alcohol
3-Methylpentyl methacrylate	0.08	Aliphatic ester
Isoamyl angelate	4.47	Aliphatic ester
2-Methylbutyl angelate	17.17	Aliphatic ester
Pinocarvone	2.94	Monoterpenic ketone
Unknown	0.03	Oxygenated monoterpene
Angelyl angelate?	0.42	Aliphatic ester
Borneol	0.23	Monoterpenic alcohol
Isopinocampone	0.39	Monoterpenic ketone
Terpinen-4-ol	0.04	Monoterpenic alcohol
Hexyl methacrylate?	0.07	Aliphatic ester
Isobutyl 3-hydroxy-2-methylenebutyrate	0.12	Aliphatic ester
<i>para</i> -Cymen-8-ol	0.03	Monoterpenic alcohol
<i>trans</i> -Isocarveol	0.03	Monoterpenic alcohol
Myrtenal	0.71	Monoterpenic aldehyde
Amyl angelate	0.10	Aliphatic ester
Myrtenol	0.34	Monoterpenic alcohol
2-Methylbutyl tiglate	0.25	Aliphatic ester
Tiglyl angelate	1.30	Aliphatic ester
Verbenone	0.04	Monoterpenic ketone
3-Methylpentyl 2-methylbutyrate?	0.05	Aliphatic ester
3-Methylpentyl isovalerate?	0.02	Aliphatic ester
<i>trans</i> -Carveol	0.02	Monoterpenic alcohol
4-Methylhexyl isobutyrate	0.03	Aliphatic ester
Myrtenyl formate?	0.01	Monoterpenic ester
Carvone	0.03	Monoterpenic ketone
2-Hydroxy-2-methylbut-3-enyl angelate	0.22	Aliphatic ester
3-Methylpentyl angelate	0.35	Aliphatic ester
Linalyl acetate	0.03	Monoterpenic ester
2-Methylbutyl 3-hydroxy-2-methylenebutyrate	0.04	Aliphatic ester
(3Z)-Hexenyl angelate	0.08	Aliphatic ester
Bornyl acetate	0.04	Monoterpenic ester
Isoamyl 3-hydroxy-2-methylenebutyrate	0.17	Aliphatic ester
Hexyl angelate	0.13	Aliphatic ester
3-Methylpentyl tiglate	0.05	Aliphatic ester
Unknown	0.04	Unknown
Cyclosativene I	0.05	Sesquiterpene
Cyclosativene II	0.03	Sesquiterpene
α -Copaene	0.08	Sesquiterpene

Isobutyl phenylacetate	0.02	Phenolic ester
4-Methylpentyl 3-hydroxy-2-methylenebutyrate	0.01	Aliphatic ester
β -Elemene	0.03	Sesquiterpene
Phenylethyl isobutyrate	0.03	Phenolic ester
β -Caryophyllene	0.11	Sesquiterpene
Myrtenyl propionate?	0.03	Monoterpenic ester
<i>trans</i> - α -Bergamotene	0.05	Sesquiterpene
Benzyl angelate	0.05	Phenolic ester
α -Humulene	0.02	Sesquiterpene
(<i>E</i>)- β -Farnesene	0.05	Sesquiterpene
Myrtenyl isobutyrate	0.01	Monoterpenic ester
Germacrene D	0.10	Sesquiterpene
α -Curcumene	0.04	Sesquiterpene
β -Selinene	0.06	Sesquiterpene
Bicyclogermacrene	0.02	Sesquiterpene
(3 <i>Z</i> ,6 <i>E</i>)- α -Farnesene	0.02	Sesquiterpene
(3 <i>E</i> ,6 <i>E</i>)- α -Farnesene	0.06	Sesquiterpene
Presilphiperfolan-9 α -ol	0.16	Sesquiterpenic alcohol
δ -Cadinene	0.04	Sesquiterpene
(2 <i>Z</i> ?,8 <i>Z</i> ?) <i>-</i> Matricaria ester	0.02	Polyene ester
Spathulenol	0.11	Sesquiterpenic alcohol
Caryophyllene oxide isomer	0.02	Sesquiterpenic ether
Caryophyllene oxide	0.08	Sesquiterpenic ether
Phenylethyl tiglate	0.02	Phenolic ester
Copaborneol	0.10	Sesquiterpenic alcohol
Unknown	0.04	Oxygenated sesquiterpene
Unknown	0.02	Oxygenated sesquiterpene
Unknown	0.02	Oxygenated sesquiterpene
Phytone	0.01	Terpenic ketone
Unknown	0.05	Unknown
Consolidated total	99.14	

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

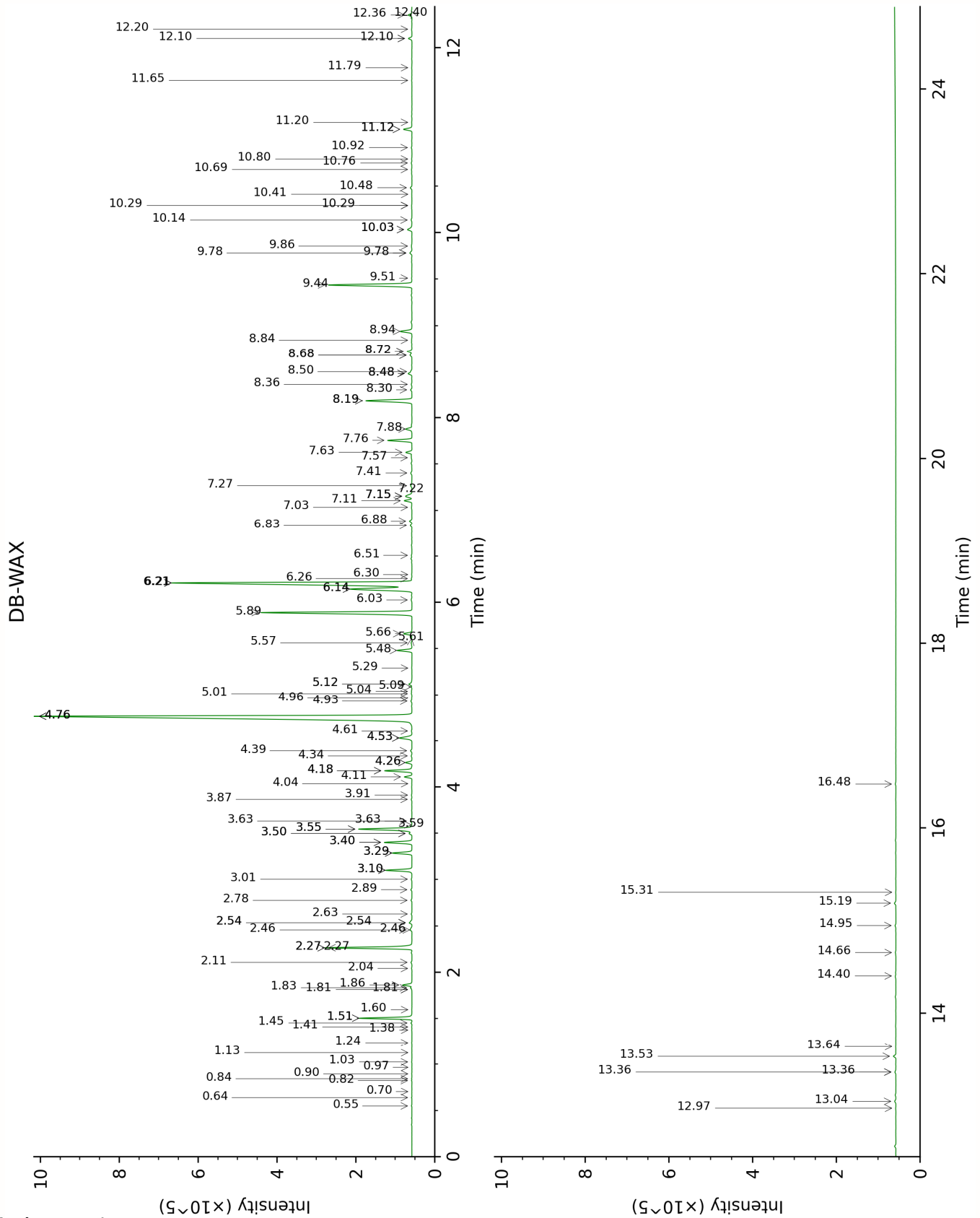
Note: no correction factor was applied

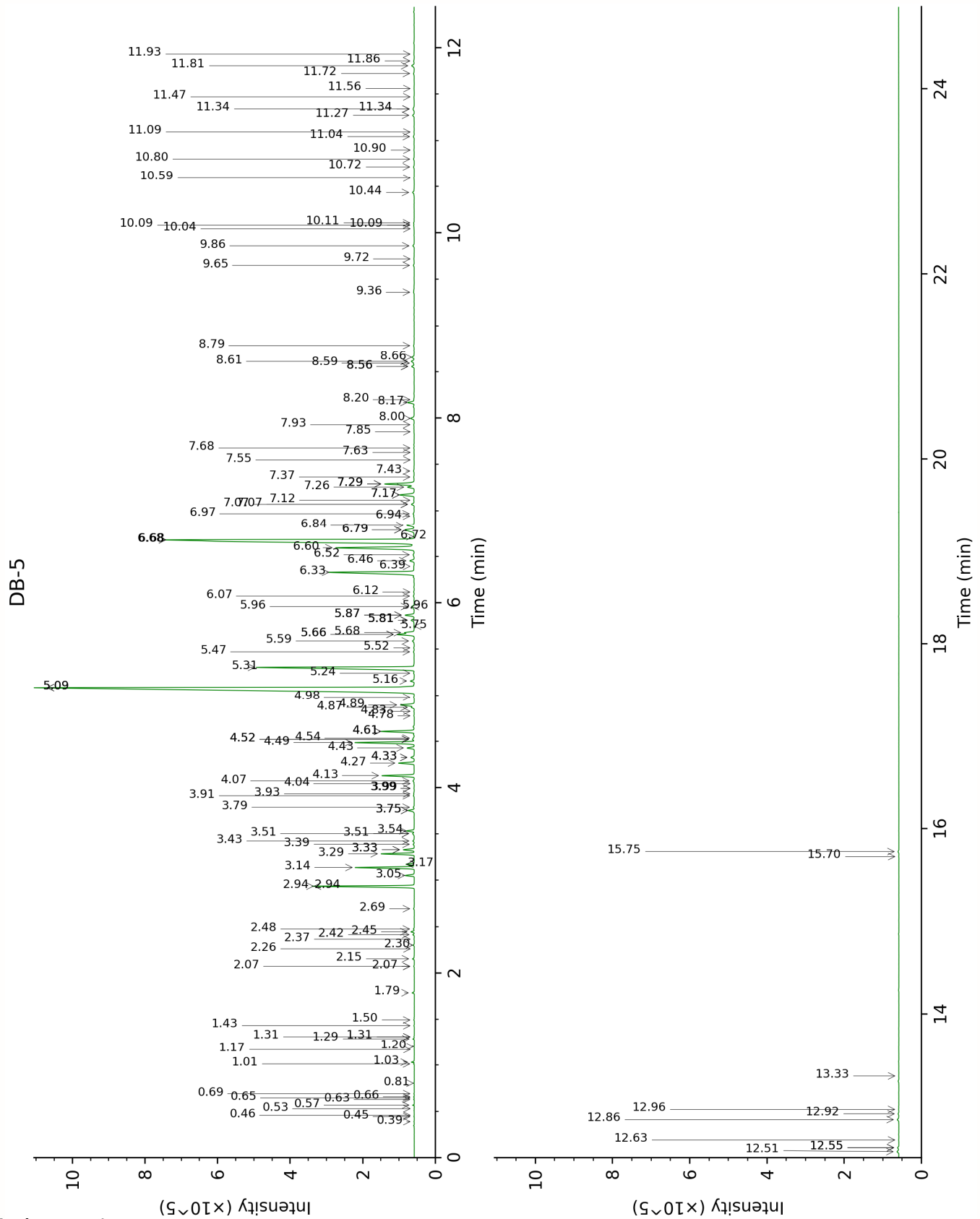
About "consolidated" data: The table above presents the breakdown of the sample volatile constituents after applying an algorithm to collapse data acquired from the multi-columns system of PhytoChemia into a single set of consolidated contents. In case of discrepancies between columns, the algorithm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

Ethanol	Column DB-WAX			Column DB-5		
	0.97	909.4	tr	0.39	499.8	tr
Isobutylal	0.55	773.5	0.01	0.44	537.3	0.01
Methacrolein	0.70	837.5	tr	0.46	549.4	tr
2-Methyl-3-buten-2-ol				0.53	607.0	tr
Isobutanol	2.27*	1066.4	[4.29]	0.57	620.3	0.03
Isovaleral	0.84	885.7	0.01	0.63	641.4	0.01
3-Methyl-2-butanone	0.90	898.3	0.01	0.65	646.9	0.01
2-Methylbutylal	0.82	878.8	0.01	0.66	651.5	0.01
3-Methyl-3-buten-2-one	1.24	951.4	0.01	0.69	663.0	0.01
2-Ethylfuran	1.03	918.5	0.01	0.81	702.3	0.01
Isoamyl alcohol	3.63*	1175.9	[0.12]	1.01	733.0	0.02
2-Methylbutanol	3.63*	1175.9	[0.12]	1.03	735.7	0.08
Ethyl isobutyrate	1.13	934.1	tr	1.17	755.1	0.01
Toluene	1.60	1002.5	0.01	1.20	759.6	0.01
Isobutyl acetate	1.45	984.7	0.04	1.29	771.7	0.04
Methyl 2-methylbutyrate	1.41	978.1	0.01	1.31*	774.9	[0.01]
Methyl isovalerate	1.51*	992.8	[2.38]	1.31*	774.9	[0.01]
Octene	0.64	815.2	0.01	1.43	791.8	0.02
Hexanal	2.04	1045.1	0.02	1.50	800.5	0.02
Methyl angelate	2.54*	1092.1	[0.19]	1.79	826.5	0.07
Ethyl 2-methylbutyrate	1.81*	1023.2	[0.01]	2.07*	850.2	[0.02]
(2E)-Hexenal	3.59	1172.9	0.01	2.07*	850.2	[0.02]
Propyl isobutyrate	1.83	1025.1	0.07	2.16	857.0	0.07
Isobutyl propionate	2.11	1051.4	0.05	2.26	865.9	0.01
(2E)-Hexenol	6.26	1367.3	0.03	2.30	869.2	0.04
Hexanol	5.61	1322.0	0.02	2.37	874.5	0.01
Isoamyl acetate	2.54*	1092.1	[0.19]	2.42	878.6	0.05
2-Methylbutyl acetate	2.54*	1092.1	[0.19]	2.45	881.2	0.12
Propyl methacrylate	2.63	1099.9	0.04	2.48	883.7	0.03
Ethyl angelate	3.01	1128.4	0.05	2.70	901.8	0.04
Isobutyl isobutyrate	2.27*	1066.4	[4.29]	2.94*	918.4	[4.05]
Tricyclene	1.38	972.9	0.01	2.94*	918.4	[4.05]
Tiglyl acetate?	4.11	1210.7	0.39	3.05	926.1	0.38
α-Pinene	1.51*	992.8	[2.38]	3.14	931.8	2.39

Methallyl isobutyrate	3.29*	1149.8	[1.03]	3.18	934.1	0.34
Isobutyl methacrylate	3.10*	1135.8	[1.36]	3.29	941.6	1.30
Camphene	1.86	1028.0	0.48	3.33*	944.5	[0.49]
α-Fenchene	1.81*	1023.2	[0.01]	3.33*	944.5	[0.49]
Propyl 2-methylbutyrate	2.78	1111.1	0.05	3.39	948.3	0.05
Thuja-2,4(10)-diene	2.46*	1084.7	[0.15]	3.43	950.7	0.08
Benzaldehyde	7.57	1462.0	0.04	3.51*	956.0	[0.10]
Butyl isobutyrate	2.89	1119.8	0.06	3.51*	956.0	[0.10]
Methallyl methacrylate	4.26*	1221.5	[0.34]	3.54	957.9	0.34
Sabinene	2.46*	1084.7	[0.15]	3.76*	972.5	[0.30]
β-Pinene	2.27*	1066.4	[4.29]	3.76*	972.5	[0.30]
2-Methylbutyl propionate	3.40*	1158.6	[1.47]	3.79	974.8	0.05
Butyl methacrylate	3.87	1193.6	0.04	3.91	983.0	0.04
Octen-3-ol	7.03	1422.9	0.04	3.93	984.4	0.04
6-Methyl-5-hepten-2-one	5.29	1299.3	0.02	3.99*	988.2	[0.03]
Octan-3-one	4.26*	1221.5	[0.34]	3.99*	988.2	[0.03]
2-Pentylfuran	3.91	1196.9	0.04	4.04	991.6	0.02
Myrcene	3.10*	1135.8	[1.36]	4.07	993.6	0.07
Propyl angelate	4.18*	1215.4	[1.45]	4.13	997.4	1.40
Isobutyl 2-methylbutyrate	3.29*	1149.8	[1.03]	4.27	1006.2	0.69
(3Z)-Hexenyl acetate	5.09	1279.2	0.02	4.33*	1010.0	[0.18]
Isobutyl isovalerate	3.50*	1165.8	[0.16]	4.33*	1010.0	[0.18]
Isoamyl isobutyrate	3.55*	1169.4	[2.97]	4.43	1016.5	0.33
2-Methylbutyl isobutyrate	3.55*	1169.4	[2.97]	4.49	1020.1	2.64
para-Cymene	4.34	1226.6	0.05	4.52*	1022.3	[0.10]
Methallyl 2-methylbutyrate	4.39	1230.6	0.08	4.52*	1022.3	[0.10]
Methallyl isovalerate?	4.61	1245.5	0.04	4.54	1023.1	0.03
Limonene	3.40*	1158.6	[1.47]	4.61*†	1027.7	[1.46]
1,8-Cineole	3.50*	1165.8	[0.16]	4.61*†	1027.7	[1.46]
Propyl tiglate	5.12*	1281.3	[0.20]	4.78	1038.2	0.02
Unknown CHNO I				4.82	1041.3	0.02

[m/z 43, 41 (84), 71 (62), 69 (59), 68 (51), 67 (48), 93 (41)...156 (4)]						
2-Methylbutyl methacrylate	4.53*	1240.2	[0.86]	4.87	1044.0	0.13
Isoamyl methacrylate	4.53*	1240.2	[0.86]	4.89	1045.6	0.70
(E)- β -Ocimene	4.18*	1215.4	[1.45]	4.98	1051.1	0.04
γ -Terpinene	4.04	1205.5	0.02	5.09*	1057.7	[32.38]
Isobutyl angelate	4.76*	1256.6	[32.56]	5.09*	1057.7	[32.38]
Prenyl isobutyrate	5.12*	1281.3	[0.20]	5.16	1062.2	0.19
Unknown CHNO II [m/z 71, 43 (28), 41 (21), 57 (19), 98 (11)... 116 (4), 129 (1), 156 (t)]	7.15*	1431.7	[0.50]	5.24	1067.5	0.03
Methallyl angelate	5.89	1341.5	8.67	5.31	1071.5	8.68
3-Methylpentyl propionate?	4.93	1268.1	0.06	5.47	1082.0	0.05
<i>para</i> -Cymenene	6.51	1385.0	0.04	5.52	1084.6	0.03
Tiglyl methacrylate	6.14*	1359.4	[4.30]	5.59	1089.3	0.11
Butyl angelate	5.48	1312.7	0.79	5.66*†	1093.7	[0.82]
α -Pinene oxide	5.56	1318.5	0.05	5.66*†	1093.7	[0.82]
Isobutyl tiglate	5.66	1325.4	0.47	5.68*†	1094.9	[0.42]
2-Methylbutyl isovalerate?				5.75	1099.3	0.04
Linalool	8.30	1516.4	0.07	5.81*	1103.4	[0.17]
α -Thujone	6.30	1370.3	0.02	5.81*	1103.4	[0.17]
Isoamyl 2-methylbutyrate	4.76*	1256.6	[32.56]	5.81*	1103.4	[0.17]
2-Methylbutyl 2-methylbutyrate	4.76*	1256.6	[32.56]	5.87*	1106.8	[0.47]
Isoamyl isovalerate	5.01	1274.1	0.04	5.87*	1106.8	[0.47]
Methallyl tiglate	6.88	1412.0	0.13	5.96*	1112.7	[0.20]
2-Methylbutyl isovalerate	4.96	1270.5	0.02	5.96*	1112.7	[0.20]
3-Methylpentyl isobutyrate	5.04	1275.8	0.03	6.07	1120.0	0.06
α -Campholenal	7.22	1436.4	0.02	6.12	1122.7	0.04
<i>trans</i> -Pinocarveol	9.44	1603.7	4.84	6.33	1136.4	4.88
<i>trans</i> -Verbenol	9.78*	1631.1	[0.15]	6.40	1140.5	0.04
Camphene hydrate	8.72*†	1548.4	[0.27]	6.46	1144.3	0.24
3-Methylpentyl methacrylate	6.03	1351.0	0.06	6.52	1148.5	0.08

Isoamyl angelate	6.14*	1359.4	[4.30]	6.60	1153.3	4.47
2-Methylbutyl angelate	6.21*	1364.0	[17.24]	6.68*	1158.7	[20.11]
Pinocarvone	8.18*	1507.5	[2.82]	6.68*	1158.7	[20.11]
Unknown CHNO III [m/z 96, 95 (72), 67 (45), 41 (42), 55 (32), 70 (27)... 152 (t)]	10.41	1681.6	0.02	6.72	1161.0	0.03
Angelyl angelate?	7.11	1428.2	0.42	6.79*	1165.7	[0.65]
Borneol	10.03*	1651.3	[0.33]	6.79*	1165.7	[0.65]
Isopinocampone	7.88	1484.6	0.39	6.84	1168.9	0.39
Terpinen-4-ol	8.84	1557.8	0.03	6.94	1175.5	0.04
Hexyl methacrylate?				6.97	1177.1	0.07
Isobutyl 3-hydroxy-2-methylenebutyrate	11.12*	1740.5	[0.50]	7.07*	1183.7	[0.15]
<i>para</i> -Cymen-8-ol	11.79	1796.5	0.03	7.07*	1183.7	[0.15]
<i>trans</i> -Isocarveol	11.20	1746.7	0.03	7.12	1186.5	0.03
Myrtenal	8.94	1565.1	0.71	7.17*	1190.2	[0.79]
Amyl angelate	6.83	1408.3	0.10	7.17*	1190.2	[0.79]
Myrtenol	11.12*	1740.5	[0.50]	7.26	1195.6	0.34
2-Methylbutyl tiglate	7.15*	1431.7	[0.50]	7.29*	1197.7	[1.55]
Tiglyl angelate	7.76	1475.7	1.30	7.29*	1197.7	[1.55]
Verbenone	9.86	1637.1	0.06	7.37	1202.5	0.04
3-Methylpentyl 2-methylbutyrate?	6.21*	1364.0	[17.24]	7.43	1206.7	0.05
3-Methylpentyl isovalerate?	6.21*	1364.0	[17.24]	7.55	1214.8	0.02
<i>trans</i> -Carveol	11.65	1784.7	0.02	7.63	1220.2	0.02
4-Methylhexyl isobutyrate				7.68	1223.4	0.03
Myrtenyl formate?				7.85	1235.1	0.01
Carvone	10.29*	1671.9	[0.03]	7.93	1240.2	0.03
2-Hydroxy-2-methylbut-3-enyl angelate	12.10*	1824.1	[0.20]	8.00	1244.8	0.22
3-Methylpentyl angelate	7.63	1466.2	0.35	8.17	1256.3	0.35
Linalyl acetate	8.36	1521.0	0.05	8.20	1258.3	0.03
2-Methylbutyl 3-hydroxy-2-methylenebutyrate	12.40	1850.2	0.04	8.56*	1282.3	[0.12]

(3Z)-Hexenyl angelate	8.48*	1529.9	[0.24]	8.56*	1282.3	[0.12]
Bornyl acetate	8.50	1531.5	0.06	8.59	1284.7	0.04
Isoamyl 3-hydroxy-2-methylenebutyrate	12.36	1846.4	0.22	8.61	1286.0	0.17
Hexyl angelate	8.18*	1507.5	[2.82]	8.66	1289.1	0.13
3-Methylpentyl tiglate	8.48*	1529.9	[0.24]	8.79	1297.8	0.05
Unknown CHNO V [m/z 83, 55 (79), 82 (26), 43 (25), 45 (18), 69 (15)...166 (8)]	14.40	2034.2	0.05	9.36	1338.0	0.04
Cyclosativene I	7.15*	1431.7	[0.50]	9.65	1358.3	0.05
Cyclosativene II	7.27	1440.0	0.08	9.72	1363.2	0.03
α -Copaene	7.40	1450.0	0.08	9.86	1373.1	0.08
Isobutyl phenylacetate	12.20	1832.9	0.03	10.04	1386.1	0.02
4-Methylpentyl 3-hydroxy-2-methylenebutyrate	13.64	1961.9	0.01	10.08*	1388.9	[0.04]
β -Elemene	8.68*†	1545.1	[0.13]	10.08*	1388.9	[0.04]
Phenylethyl isobutyrate	12.10*	1824.1	[0.20]	10.11	1390.5	0.03
β -Caryophyllene	8.68*†	1545.1	[0.13]	10.44	1414.1	0.11
Myrtenyl propionate?				10.59	1425.9	0.03
<i>trans</i> - α -Bergamotene	8.72*†	1548.4	[0.27]	10.72	1435.1	0.05
Benzyl angelate	13.36*	1936.5	[0.06]	10.80	1441.4	0.05
α -Humulene	9.51	1609.6	0.03	10.90	1448.6	0.02
(<i>E</i>)- β -Farnesene	9.78*	1631.1	[0.15]	11.04	1459.5	0.05
Myrtenyl isobutyrate	10.80	1713.6	0.03	11.09	1463.2	0.01
Germacrene D	10.03*	1651.3	[0.33]	11.27	1476.6	0.10
α -Curcumene	10.92	1723.9	0.04	11.34*	1481.7	[0.11]
β -Selinene	10.14	1659.4	0.06	11.34*	1481.7	[0.11]
Bicyclogermacrene	10.29*	1671.9	[0.03]	11.47	1491.4	0.02
(3Z,6E)- α -Farnesene	10.48	1687.2	0.11	11.56	1498.1	0.02
(3E,6E)- α -Farnesene	10.76	1710.0	0.05	11.72	1510.6	0.06
Presilphiperfolan-9 α -ol	13.53	1952.1	0.13	11.81	1517.1	0.16

δ-Cadinene	10.69	1704.2	0.04	11.86	1521.2	0.04
(2Z?,8Z?)- Matricaria ester	16.48	2240.6	0.04	11.93	1526.9	0.02
Spathulenol	14.66	2058.4	0.04	12.51	1572.1	0.11
Caryophyllene oxide isomer	12.97	1900.7	0.02	12.55*	1575.5	[0.08]
Caryophyllene oxide	13.04	1907.5	0.08	12.55*	1575.5	[0.08]
Phenylethyl tiglate	15.31	2122.1	0.02	12.64	1582.0	0.02
Copaborneol	15.19	2110.4	0.10	12.86	1599.3	0.10
Unknown ARAN XXXV [m/z 203, 218 (33), 161 (22), 91 (20), 204 (16)]	13.36*	1936.5	[0.06]	12.92	1604.2	0.04
Unknown CHNO VII [m/z 105, 131 (96), 91 (95), 93 (84), 159 (82), 43 (70)...220 (6)]				12.96	1608.1	0.02
Unknown CHNO VIII [m/z 43, 79 (65), 91 (64), 80 (63), 93 (60), 81 (59)...220 (5)]				13.33	1638.0	0.02
Phytone	14.95	2086.4	0.06	15.70	1842.5	0.01
Unknown UNKN CLVIII [m/z 187, 220 (93), 205 (32), 43 (30), 107 (23), 91 (22)...]				15.75	1847.4	0.05
Total reported		98.42%			99.03%	

*: 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