

Date : December 10, 2020

CERTIFICATE OF ANALYSIS – GC PROFILING

SAMPLE IDENTIFICATION

Internal code : 20L04-PTH07

Customer identification : Geranium Organic (Egyptian) - Egypt - GI0107911R

Type : Essential oil

Source : Pelargonium x asperum ct. Egyptian

Customer : Plant Therapy

ANALYSIS

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

Analyst : Sylvain Mercier, M. Sc., Chimiste

Analysis date : December 07, 2020

Checked and approved by :

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

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PYHSICOCHEMICAL DATA

Physical aspect: Light yellow liquid

Refractive index: 1.4677 ± 0.0003 (20 °C; method PC-MAT-016)

ISO 4731:2012 - OIL OF GERANIUM - NORTH AFRICA

Compound	Min. %	Max. %	Observed %	Complies?
Phenylethyl tiglate	0.5	1.2	0.8	Yes
Geranyl tiglate	0.9	2.0	1.1	Yes
10-epi-γ-Eudesmol	3.0	6.2	4.5	Yes
Geranyl butyrate	0.7	2.0	1.0	Yes
Geraniol	10.0	18.0	14.1	Yes
Citronellol	25.0	36.0	31.2	Yes
Geranyl formate	2.0	7.0	2.7	Yes
α-Terpineol	0.3	0.6	0.4	Yes
Citronellyl formate	4.0	8.0	6.7	Yes
6,9-Guaiadiene		0.5	0.4	Yes
Linalool	4.0	8.5	3.8	No
Isomenthone	4.0	8.0	5.3	Yes
Menthone		2.1	1.1	Yes
trans-Rose oxide	0.3	0.6	0.4	Yes
cis-Rose oxide	0.7	1.5	0.9	Yes
Refractive index	1.4610	1.4750	1.4677	Yes

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
Dimethylsulfide	0.01	Aliphatic sulfide
Isobutyral	tr	Aliphatic aldehyde
2-Methyl-3-buten-2-ol	0.01	Aliphatic alcohol
Isovaleral	tr	Aliphatic aldehyde
2-Methylbutyral	0.01	Aliphatic aldehyde
2-Methylbutanol	0.01	Aliphatic alcohol
Toluene	tr	Simple phenolic
Hexanal	0.01	Aliphatic aldehyde
3-Methylpentanol	0.03	Aliphatic alcohol
(3Z)-Hexenol	0.01	Aliphatic alcohol
3-Acetyl-3-methylcyclopentene	0.01	Aliphatic ketone
3-Methylpentyl formate?	0.01	Aliphatic ester
α-Thujene	0.02	Monoterpene
α-Pinene	0.48	Monoterpene
Camphepane	0.01	Monoterpene
Sabinene	0.12	Monoterpene
β-Pinene	0.02	Monoterpene
Octen-3-ol	0.02	Aliphatic alcohol
6-Methyl-5-hepten-2-one	0.06	Aliphatic ketone
Myrcene	0.13	Monoterpene
trans-Dehydroxylinalool oxide	0.05	Monoterpenic ether
6-Methyl-5-hepten-2-ol	0.01	Aliphatic alcohol
cis-Dehydroxylinalool oxide	0.02	Monoterpenic ether
α-Phellandrene	0.07	Monoterpene
Δ3-Carene	0.03	Monoterpene
α-Terpinene	0.14	Monoterpene
para-Cymene	0.14	Monoterpene
Unknown	0.02	Unknown
1,8-Cineole	0.02	Monoterpenic ether
β-Phellandrene	0.09	Monoterpene
Limonene	0.20	Monoterpene
Unknown	0.03	Unknown
Benzeneacetaldehyde	0.01	Simple phenolic
(Z)-β-Ocimene	0.10	Monoterpene
(E)-β-Ocimene	0.11	Monoterpene
Unknown	0.03	Unknown
2,6-Dimethyl-5-heptenal (melonal)	0.02	Aliphatic aldehyde
γ-Terpinene	0.22	Monoterpene
cis-Sabinene hydrate	0.08	Monoterpenic alcohol
Unknown	0.02	Oxygenated monoterpene
cis-Linalool oxide (fur.)	0.18	Monoterpenic alcohol
Octanol	0.01	Aliphatic alcohol
Fenchone	0.02	Monoterpenic ketone
para-Cymenene	0.04	Monoterpene

Terpinolene	0.08	Monoterpene
<i>trans</i> -Linalool oxide (fur.)	0.06	Monoterpenic alcohol
<i>trans</i> -Sabinene hydrate	0.34	Monoterpenic alcohol
Linalool	3.82	Monoterpenic alcohol
(Z)-6-Methyl-3,5-heptadien-2-one	0.08	Aliphatic ketone
<i>cis</i> -Rose oxide	0.89	Monoterpenic ether
Phenylethyl alcohol	0.08	Simple phenolic
<i>trans</i> -Rose oxide	0.41	Monoterpenic ether
Unknown	0.04	Unknown
Unknown	0.02	Oxygenated normonoterpene
Isopulegol	0.08	Monoterpenic alcohol
Menthone	1.13	Monoterpenic ketone
Unknown	0.06	Unknown
Citronellal	0.10	Monoterpenic aldehyde
iso-Isopulegol	0.06	Monoterpenic alcohol
Isomenthone	5.29	Monoterpenic ketone
Borneol	0.03	Monoterpenic alcohol
neo-Menthol	0.07	Monoterpenic alcohol
Terpinen-4-ol	0.26	Monoterpenic alcohol
Menthol	0.22	Monoterpenic alcohol
Isomenthol	0.16	Monoterpenic alcohol
para-Cymen-8-ol	0.04	Monoterpenic alcohol
α -Terpineol	0.38	Monoterpenic alcohol
Unknown	0.02	Unknown
Unknown	0.04	Oxygenated monoterpene
β -Cyclocitral	0.03	Monoterpenic aldehyde
Nerol	0.38	Monoterpenic alcohol
Citronellol	31.21	Monoterpenic alcohol
Neral	0.50	Monoterpenic aldehyde
Piperitone	0.09	Monoterpenic ketone
Geraniol	14.08	Monoterpenic alcohol
Geranial	0.79	Monoterpenic aldehyde
Citronellyl formate	6.65	Monoterpenic ester
Neryl formate	0.10	Monoterpenic ester
Geranyl formate	2.71	Monoterpenic ester
(3Z)-Hexenyl tiglate	0.02	Aliphatic ester
Methyl geranate	0.03	Monoterpenic ester
Citronellic acid	0.04	Monoterpenic acid
α -Cubebene	0.22	Sesquiterpene
Phenylethyl propionate	0.09	Phenolic ester
Citronellyl acetate	0.16	Monoterpenic ester
Neryl acetate	0.07	Monoterpenic ester
α -Ylangene	0.05	Sesquiterpene
α -Copaene	0.50	Sesquiterpene
β -Bourbonene	1.00	Sesquiterpene
1,5-diepi- β -Bourbonene	0.08	Sesquiterpene
Geranyl acetate	0.42	Monoterpenic ester
β -Elemene	0.07	Sesquiterpene
Phenylethyl isobutyrate	0.04	Phenolic ester
Isocaryophyllene	0.08	Sesquiterpene
α -Gurjunene	0.02	Sesquiterpene
β -Caryophyllene	1.32	Sesquiterpene

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β -Copaene	0.14	Sesquiterpene
Thymohydroquinone dimethyl ether	0.08	Monoterpenic ether
Heptyl tiglate	0.06	Aliphatic ester
Aromadendrene	0.03	Sesquiterpene
6,9-Guaiadiene	0.38	Sesquiterpene
Isogermacrene D	0.03	Sesquiterpene
Unknown	0.40	Sesquiterpene
Citronellyl propionate	0.44	Monoterpenic ester
α -Humulene	0.28	Sesquiterpene
allo-Aromadendrene	0.21	Sesquiterpene
trans-Cadina-1(6),4-diene	0.26	Sesquiterpene
γ -Murolene	0.10	Sesquiterpene
Geranyl propionate	0.65	Monoterpenic ester
Germacrene D	1.24	Sesquiterpene
α -Amorphene	0.33	Sesquiterpene
β -Selinene	0.16	Sesquiterpene
γ -Amorphene	0.09	Sesquiterpene
Phenylethyl isovalerate	0.05	Phenolic ester
Viridiflorene	0.11	Sesquiterpene
Bicyclogermacrene	0.32	Sesquiterpene
α -Selinene	0.13	Sesquiterpene
4-epi-cis-Dihydroagarofuran	0.07	Sesquiterpenic ether
α -Murolene	0.29	Sesquiterpene
γ -Cadinene	0.42	Sesquiterpene
7-epi- α -Selinene	0.09	Sesquiterpene
Geranyl isobutyrate	0.20	Monoterpenic ester
trans-Calamenene	0.04	Sesquiterpene
Zonarene	0.05	Sesquiterpene
δ -Cadinene	0.93	Sesquiterpene
trans-Cadina-1,4-diene	0.13	Sesquiterpene
Citronellyl butyrate	0.50	Monoterpenic ester
Phenylethyl angelate?	0.14	Phenolic ester
α -Agarofuran	0.34	Sesquiterpenic ether
1-nor-Bourbonanone	0.06	Norsesquiterpenic ketone
Geranyl butyrate	0.98	Monoterpenic ester
Spathulenol	0.19	Sesquiterpenic alcohol
Caryophyllene oxide	0.17	Sesquiterpenic ether
Globulol	0.09	Sesquiterpenic alcohol
Phenylethyl tiglate	0.76	Phenolic ester
Viridiflorol	0.06	Sesquiterpenic alcohol
Geranyl 2-methylbutyrate?	0.10	Monoterpenic ester
Geranyl isovalerate	0.10	Monoterpenic ester
10-epi- γ -Eudesmol	4.46	Sesquiterpenic alcohol
1-epi-Cubenol	0.16	Sesquiterpenic alcohol
γ -Eudesmol	0.23	Sesquiterpenic alcohol
Unknown	0.20	Oxygenated sesquiterpene
Citronellyl valerate?	0.08	Monoterpenic ester
τ -Murolol	0.02	Sesquiterpenic alcohol
Cubenol	0.17	Sesquiterpenic alcohol
τ -Cadinol	0.07	Sesquiterpenic alcohol
β -Eudesmol	0.27	Sesquiterpenic alcohol
α -Eudesmol	0.28	Sesquiterpenic alcohol

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α -Cadinol	0.12	Sesquiterpenic alcohol
Valerianol	0.06	Sesquiterpenic alcohol
Geranyl valerate	0.19	Monoterpenic ester
<i>trans</i> -Calamenen-10-ol	0.02	Sesquiterpenic alcohol
Citronellyl tiglate	0.29	Monoterpenic ester
Citronellyl 4-methylvalerate	0.13	Monoterpenic ester
3 β ,4 β -Oxidoagarofuran?	0.04	Sesquiterpenic ether
Geranyl tiglate	1.09	Monoterpenic ester
Geranyl 4-methylvalerate?	0.17	Monoterpenic ester
Citronellyl caproate	0.05	Monoterpenic ester
Geranyl caproate	0.10	Monoterpenic ester
Citronellyl heptanoate	0.07	Monoterpenic ester
Phytone	0.04	Terpenic ketone
Geranyl heptanoate	0.10	Monoterpenic ester
Citronellyl caprylate	0.04	Monoterpenic ester
Geranyl caprylate	0.05	Monoterpenic ester
Unknown	0.05	Unknown
Unknown	0.04	Unknown
Consolidated total	96.89%	

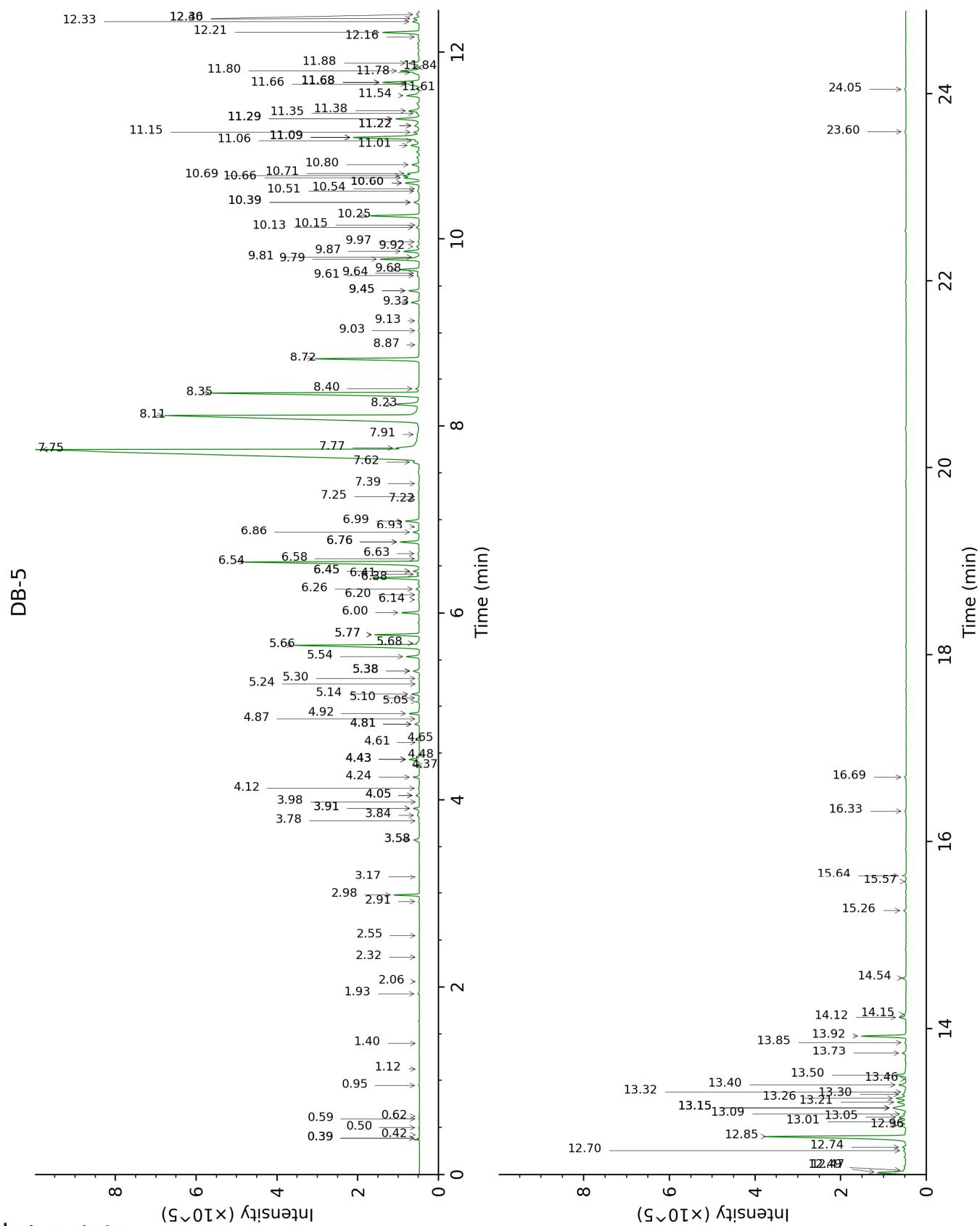
tr: The compound has been detected below 0.005% of total signal.

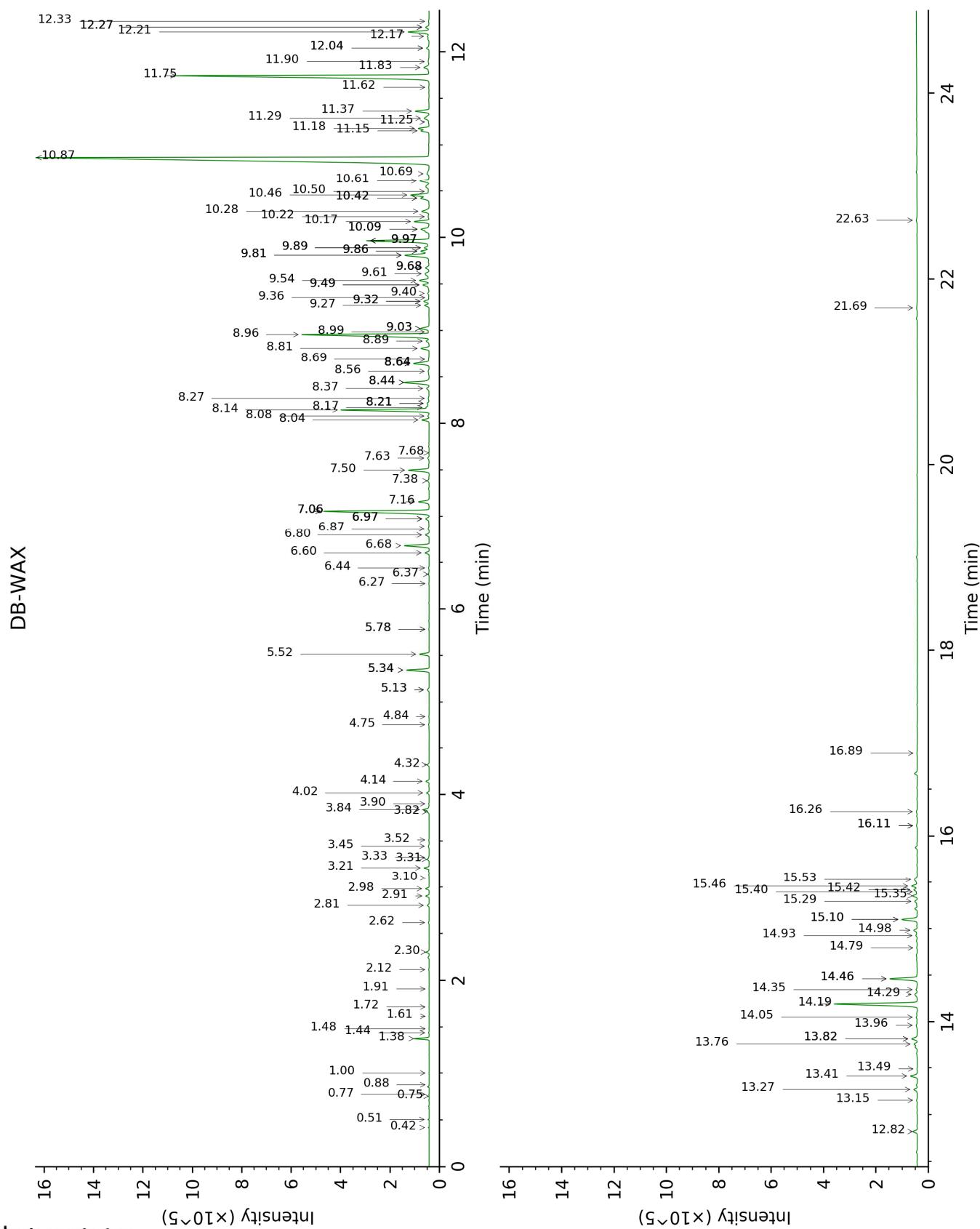
Note: no correction factor was applied

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.

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





FULL ANALYSIS DATA

Identification	Column DB-5			Column DB-WAX		
	R.T	R.I	%	R.T	R.I	%
Ethanol	0.39*	520	0.01	0.88	907	tr
Dimethylsulfide	0.39*	520	[0.01]	0.42	707	0.01
Isobutyral	0.42	540	tr	0.50	782	0.02
2-Methyl-3-buten-2-ol	0.50	589	0.01	1.62	1015	tr
Isovaleral	0.59	638	tr	0.77	888	0.01
2-Methylbutyral	0.62	650	0.01	0.75	881	tr
2-Methylbutanol	0.95	739	0.01	3.52	1181	0.02
Toluene	1.12	763	tr	1.48	1002	0.01
Hexanal	1.40	804	0.01	1.91	1044	0.01
3-Methylpentanol	1.93	849	0.03	5.13*	1298	0.09
(3Z)-Hexenol	2.06	860	0.01	5.78*	1345	0.02
3-Acetyl-3-methylcyclopentene	2.32	882	0.01	1.00	928	0.01
3-Methylpentyl formate?	2.55	901	0.01	3.10	1148	0.01
α -Thujene	2.91	926	0.02	1.44	997	0.02
α -Pinene	2.98	930	0.48	1.38	990	0.47
Camphene	3.18	943	0.01	1.72	1025	tr
Sabinene	3.58*	970	0.17	2.30	1084	0.12
β -Pinene	3.58*	970	[0.17]	2.12	1065	0.02
Octen-3-ol	3.78	983	0.02	6.87	1423	0.06
6-Methyl-5-hepten-2-one	3.84	987	0.06	5.13*	1298	[0.09]
Myrcene	3.91*	992	0.16	2.91	1133	0.13
<i>trans</i> -Dehydroxylinalool oxide	3.91*	992	[0.16]	3.45	1176	0.05
6-Methyl-5-hepten-2-ol	3.98	996	0.01	6.98*	1432	0.20
<i>cis</i> -Dehydroxylinalool oxide	4.05*	1001	0.08	3.90	1210	0.02
α -Phellandrene	4.05*	1001	[0.08]	2.81	1125	0.07
Δ 3-Carene	4.12	1006	0.03	2.62	1111	0.03
α -Terpinene	4.24	1013	0.14	2.98	1139	0.14
para-Cymene	4.37	1021	0.14	4.14	1227	0.13
Unknown [m/z 59, 43 (11), 109 (10), 41 (10), 127 (8)...]	4.43*	1025	0.32	6.27	1380	0.02
1,8-Cineole	4.43*	1025	[0.32]	3.33	1166	0.02
β -Phellandrene	4.43*	1025	[0.32]	3.31	1164	0.09
Limonene	4.43*	1025	[0.32]	3.21	1157	0.20
Unknown [m/z 59, 43 (12), 109 (11), 41 (10), 127 (8)...]	4.48	1028	0.03	6.44	1392	0.03
Benzeneacetaldehyde	4.61	1036	0.01	8.89	1577	0.16
(Z)- β -Ocimene	4.65	1039	0.10	3.82†	1204	0.33
(E)- β -Ocimene	4.81*	1049	0.12	4.02	1218	0.11

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Unknown [m/z 125, 69 (75), 41 (34), 55 (25), 93 (22)... 140 (3)]	4.81*	1049	[0.12]	4.75	1272	0.03
2,6-Dimethyl-5-heptenal (melonal)	4.86	1052	0.02	5.34*	1313	0.97
γ -Terpinene	4.92	1056	0.22	3.84†	1205	[0.33]
cis-Sabinene hydrate	5.05	1064	0.08	6.98*	1432	[0.20]
Unknown [m/z 79, 93 (60), 43 (40), 94 (35), 137 (33), 77 (26), 91 (20), 152 (18)]	5.10	1067	0.02	4.84	1278	0.02
cis-Linalool oxide (fur.)	5.14	1069	0.18	6.60	1404	0.18
Octanol	5.24	1076	0.01	8.21*	1525	0.11
Fenchone	5.30	1080	0.02	5.78*	1345	[0.02]
para-Cymenene	5.38*	1085	0.18	6.37	1387	0.04
Terpinolene	5.38*	1085	[0.18]	4.32	1240	0.08
trans-Linalool oxide (fur.)	5.38*	1085	[0.18]	6.98*	1432	[0.20]
trans-Sabinene hydrate	5.54	1095	0.34	8.04	1511	0.32
Linalool	5.66	1102	3.82	8.14	1519	3.86
(Z)-6-Methyl-3,5-heptadien-2-one	5.68	1104	0.08	8.27	1529	0.06
cis-Rose oxide	5.77*	1110	0.98	5.34*	1313	[0.97]
Phenylethyl alcohol	5.77*	1110	[0.98]	12.17	1849	0.08
trans-Rose oxide	6.00	1125	0.41	5.52	1326	0.41
Unknown [m/z 95, 67 (86), 41 (68), 82 (64), 123 (62)...]	6.14	1134	0.04	7.63	1480	0.08
Unknown [m/z 41, 69 (87), 82 (66), 67 (55), 109 (46)... 142 (18)]	6.20	1137	0.02	9.40	1617	0.07
Isopulegol	6.26	1141	0.08	8.17	1521	0.12
Menthone	6.38	1149	1.13	6.68	1410	1.12
Unknown [m/z 43, 141 (51), 55 (36), 69 (31), 41 (29)... 156 (4)]	6.41	1151	0.06	8.56	1551	0.06
Citronellal	6.45*	1153	0.16	7.06*	1438	5.34
iso-Isopulegol	6.45*	1153	[0.16]	8.08	1514	0.06
Isomenthone	6.54	1160	5.29	7.06*	1438	[5.34]
Borneol	6.58	1162	0.03	9.86*	1654	0.43
neo-Menthol	6.63	1165	0.07	8.64*	1558	0.82
Terpinen-4-ol	6.76*	1173	0.48	8.64*	1558	[0.82]
Menthol	6.76*	1173	[0.48]	9.27	1607	0.22
Isomenthol	6.86	1180	0.16	9.02*	1587	0.46
para-Cymen-8-ol	6.93	1184	0.04	11.62	1801	0.03
α -Terpineol	6.99	1188	0.38	9.86*	1654	[0.43]
Unknown [m/z 43, 99 (84), 81 (46), 986 (43), 126 (36), 71 (28)... 170 (12)]	7.22	1203	0.02			

Unknown [m/z 123, 81 (40), 67 (29), 79 (29), 93 (26), 121 (25), 41 (24), 55 (18), 69 (15)...]	7.25	1205	0.04			
β -Cyclocitral	7.39	1215	0.03	8.69	1561	0.03
Nerol	7.62†	1230	31.93	11.15	1762	0.38
Citronellol	7.75†	1240	[31.93]	10.87	1737	31.21
Neral	7.77†	1241	[31.93]	9.54	1628	0.50
Piperitone	7.91	1251	0.09	9.97*	1663	3.00
Geraniol	8.11	1265	14.08	11.75	1812	14.04
Geranial	8.23	1273	0.79	10.17	1679	0.68
Citronellyl formate	8.35	1281	6.65	8.96	1582	6.58
Neryl formate	8.40	1284	0.10	9.49*	1625	0.35
Geranyl formate	8.72	1302	2.71	9.97*	1663	[3.00]
(3Z)-Hexenyl tiglate	8.87	1312	0.02	9.36	1614	0.02
Methyl geranate	9.03	1323	0.03	9.81*	1650	1.47
Citronellic acid	9.13	1331	0.04	16.11*	2225	0.06
α -Cubebene	9.33	1345	0.22	6.80	1418	0.18
Phenylethyl propionate	9.45*	1354	0.26	12.04*	1838	0.14
Citronellyl acetate	9.45*	1354	[0.26]	9.49*	1625	[0.35]
Neryl acetate	9.61	1365	0.07	10.22	1684	0.07
α -Ylangene	9.64	1367	0.05	7.06*	1438	[5.34]
α -Copaene	9.68	1370	0.50	7.16	1445	0.52
β -Bourbonene	9.79†	1378	1.07	7.50	1470	1.00
1,5-diepi- β -Bourbonene	9.81†	1379	[1.07]	7.38	1462	0.08
Geranyl acetate	9.87	1384	0.42	10.61	1716	0.46
β -Elemene	9.92	1387	0.07	8.44*	1542	1.33
Phenylethyl isobutyrate	9.97	1391	0.04	12.04*	1838	[0.14]
Isocaryophyllene	10.13	1402	0.08	8.21*	1525	[0.11]
α -Gurjunene	10.15	1403	0.02	7.68	1484	0.02
β -Caryophyllene	10.25	1411	1.32	8.44*	1542	[1.33]
β -Copaene	10.39*	1422	0.17	8.37	1537	0.14
Thymohydroquinone dimethyl ether	10.39*	1422	[0.17]	11.90	1826	0.08
Heptyl tiglate	10.51	1431	0.06			
Aromadendrene	10.54	1432	0.03	8.64*	1558	[0.82]
6,9-Guaiadiene	10.60*	1437	0.41	8.64*	1558	[0.82]
Isogermacrene D	10.60*	1437	[0.41]	8.99	1584	0.03
Unknown [m/z 91, 161 (92), 105 (85), 119 (63), 133 (53), 79 (49), 204 (46)]	10.66	1442	0.40	8.81	1571	0.38
Citronellyl propionate	10.68	1444	0.44	10.28	1688	0.44
α -Humulene	10.71	1445	0.28	9.32*	1610	0.27
allo-Aromadendrene	10.80	1452	0.21	9.02*	1587	[0.46]
trans-Cadina-1(6),4-diene	11.01	1468	0.26	9.32*	1610	[0.27]
γ -Muurolene	11.06	1471	0.10	9.68*	1639	0.21

Geranyl propionate	11.09*	1474	2.22	11.36	1779	0.65
Germacrene D	11.09*	1474	[2.22]	9.81*	1650	[1.47]
α -Amorphene	11.09*	1474	[2.22]	9.61	1634	0.33
β -Selinene	11.15	1478	0.16	9.89*	1657	0.25
γ -Amorphene	11.22*	1484	0.19	9.89*	1657	[0.25]
Phenylethyl isovalerate	11.22*	1484	[0.19]	13.15	1938	0.05
Viridiflorene	11.29*	1489	0.74	9.68*	1639	[0.21]
Bicyclogermacrene	11.29*	1489	[0.74]	10.09*†	1673	0.61
α -Selinene	11.29*	1489	[0.74]	9.97*	1663	[3.00]
4-epi- <i>cis</i> -Dihydroagarofuran	11.35	1493	0.07	9.97*	1663	[3.00]
α -Murolene	11.38	1495	0.29	10.09*†	1673	[0.61]
γ -Cadinene	11.54	1508	0.42	10.42*	1700	0.47
7-epi- α -Selinene	11.61	1514	0.09	10.50	1706	0.04
Geranyl isobutyrate	11.66	1517	0.20	11.29	1773	0.36
<i>trans</i> -Calamenene	11.68*	1519	1.11	11.25	1769	0.04
Zonarene	11.68*	1519	[1.11]	10.42*	1700	[0.47]
δ -Cadinene	11.68*	1519	[1.11]	10.46	1703	0.93
<i>trans</i> -Cadina-1,4-diene	11.78	1527	0.13	10.69	1723	0.18
Citronellyl butyrate	11.80	1528	0.50	11.18	1764	0.49
Phenylethyl angelate?	11.84	1532	0.14	14.29	2045	0.16
α -Agarofuran	11.88	1535	0.34	11.83	1820	0.32
1-nor-Bourbonanone	12.16	1557	0.06	13.49	1969	0.02
Geranyl butyrate	12.21	1561	0.98	12.22	1854	0.98
Spathulenol	12.33	1570	0.19	14.46*	2061	1.33
Caryophyllene oxide	12.36	1573	0.17	12.82	1908	0.21
Globulol	12.40	1576	0.09	13.96	2013	0.08
Phenylethyl tiglate	12.47	1581	0.76	15.10*	2123	0.78
Viridiflorol	12.49	1583	0.06	14.05	2021	0.06
Geranyl 2-methylbutyrate?	12.70	1599	0.10	12.27*	1858	0.18
Geranyl isovalerate	12.74	1602	0.10	12.27*	1858	[0.18]
10-epi- γ -Eudesmol	12.85	1612	4.46	14.19	2035	4.14
1-epi-Cubenol	12.96	1621	0.16	13.82*	1999	0.31
γ -Eudesmol	13.01	1624	0.23	14.98	2111	0.20
Unknown [m/z 147, 162 (79), 43 (64), 59 (64), 95 (47), 91 (44), 105 (43)... 238 (13)]	13.05	1628	0.20	15.35	2148	0.22
Citronellyl valerate?	13.09	1631	0.08	12.33	1864	0.04
τ -Muurolol	13.15*	1637	0.56	15.10*	2123	[0.78]
Cubenol	13.15*	1637	[0.56]	13.76	1994	0.17
τ -Cadinol	13.15*	1637	[0.56]	14.92	2106	0.07
β -Eudesmol	13.21	1642	0.27	15.46	2158	0.28
α -Eudesmol	13.26	1645	0.28	15.42	2154	0.17
α -Cadinol	13.30	1648	0.12	15.53	2166	0.24
Valerianol	13.32	1651	0.06	15.40	2152	0.03
Geranyl valerate	13.40	1657	0.19	13.27	1949	0.19
<i>trans</i> -Calamenen-10-ol	13.46	1662	0.02	16.89	2306	0.04

Citronellyl tiglate	13.50	1665	0.29	13.41	1962	0.33
Citronellyl 4-methylvalerate	13.73	1685	0.13			
3β,4β-Oxidoagarofuran?	13.85	1694	0.04	16.11*	2225	[0.06]
Geranyl tiglate	13.92	1700	1.09	14.46*	2061	[1.33]
Geranyl 4-methylvalerate?	14.12	1717	0.17	13.82*	1999	[0.31]
Citronellyl caproate	14.15	1720	0.05			
Geranyl caproate	14.54	1754	0.10	14.34	2050	0.06
Citronellyl heptanoate	15.26	1817	0.07			
Phytone	15.57	1845	0.04	14.79	2093	0.04
Geranyl heptanoate	15.64	1851	0.10	15.29	2142	0.13
Citronellyl caprylate	16.33	1914	0.04			
Geranyl caprylate	16.69	1948	0.05	16.26	2240	0.07
Unknown [m/z 69, 83 (59), 81 (56), 137 (48), 41 (29), 139 (28)...]	23.60	2699	0.05	21.69	2864	0.06
Unknown [m/z 69, 81 (84), 137 (53), 83 (30), 95 (27), 41 (19)...]	24.05	2756	0.04	22.63	2986	0.06
Total identified	96.37%			95.61%		
Total reported	97.29%			96.63%		

*: Two or more compounds are coeluting on this column

[xx]: Duplicate percentage due to coelutions, not taken into account in the consolidated 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