

GC/MS BATCH NUMBER: GI0102

ESSENTIAL OIL: GERANIUM EGYPTIAN ORGANIC
BOTANICAL NAME: PELARGONIUM X ASPERUM
ORIGIN: EGYPT

KEY CONSTITUENTS PRESENT IN THIS BATCH OF GERANIUM EGYPTIAN ORGANIC OIL	%
CITRONELLO	33.9
GERANIOL	13.1
CITRONELLYL FORMATE	7.0
ISOMENTHONE	4.8
10-EPI- γ -EUDESMOL	4.4
LINALOOL	4.3
GERANYL FORMATE	2.6
MENTHONE	1.9
β -CARYOPHYLLENE	1.4
cis-ROSE OXIDE	1.1
GERANYL BUTYRATE	1.1
β -BOURBONENE	1.0

Comments from Robert Tisserand: Beautifully radiant, green-floral odor quality. All fifteen key ISO constituents are within range.

Date : May 11, 2018

CERTIFICATE OF ANALYSIS - GC PROFILING

SAMPLE IDENTIFICATION

Internal code : 18D30-PTH4-1-CC

Customer identification : Geranium Organic - Egypt - GI010276R

Type : Essential oil

Source : *Pelargonium x asperum* ct. Egyptian

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 : Sarah-Eve Tremblay, M. Sc. A., Chimiste

Analysis date : May 08, 2018

Checked and approved by :

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

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PHYSICOCHEMICAL DATA

Physical aspect: Light yellow liquid

Refractive index: 1.4665 ± 0.0003 (20 °C)

CONCLUSION

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

ANALYSIS SUMMARY

Identification	DB-5 (%)	DB-WAX (%)	Classe
Ethanol	0.04	0.03	Aliphatic alcohol
Dimethylsulfide	0.01		Aliphatic sulfide
Acetic acid	tr	1.80*	Aliphatic acid
2-Methyl-3-buten-2-ol	tr	0.01	Aliphatic alcohol
Isovaleral	tr	tr	Aliphatic aldehyde
2-Methylbutyral	tr	tr	Aliphatic aldehyde
Isoamyl alcohol	0.01	0.04*	Aliphatic alcohol
2-Methylbutanol	tr	[0.04]*	Aliphatic alcohol
Toluene	tr	0.02	Simple phenolic
Isobutyric acid	0.01	0.35	Aliphatic acid
Hexanal	0.01	0.01	Aliphatic aldehyde
Dimethyl sulfoxide	0.01	tr	Aliphatic sulfoxide
3-Methylpentanol	0.03	0.09*	Aliphatic alcohol
(3Z)-Hexenol	0.02	0.02	Aliphatic alcohol
Hexanol	tr	0.43*	Aliphatic alcohol
Unknown	0.01	0.01	Unknown
3-Methylpentyl formate?	0.01	0.02	Aliphatic ester
Tricyclene	tr	tr	Monoterpene
α -Pinene	0.39	0.39	Monoterpene
Camphene	0.01	0.01	Monoterpene
Geranic oxide	0.07	0.05	Monoterpenic ether
Sabinene	tr	tr	Monoterpene
Octen-3-ol	0.02	0.20*	Aliphatic alcohol
6-Methyl-5-hepten-2-one	0.06	[0.09]*	Aliphatic ketone
<i>trans</i> -Dehydroxylinalool oxide	0.03	[0.04]*	Monoterpenic ether
Myrcene	0.19	0.16	Monoterpene
6-Methyl-5-hepten-2-ol	0.01	0.11*	Aliphatic alcohol
α -Phellandrene	0.06	0.05	Monoterpene
<i>cis</i> -Dehydroxylinalool oxide	0.02	0.03	Monoterpenic ether
Δ^3 -Carene	0.02	0.02	Monoterpene
α -Terpinene	0.01	0.01	Monoterpene
ortho-Cymene	0.03	0.07*	Simple phenolic
para-Cymene	0.08	[0.07]*	Monoterpene
Limonene	0.22*	0.14	Monoterpene
Unknown	[0.22]*	0.02	Unknown
1,8-Cineole	[0.22]*	0.07*	Monoterpenic ether
β -Phellandrene	[0.22]*	[0.07]*	Monoterpene
Unknown	0.03	0.03	Unknown
(Z)- β -Ocimene	0.08	0.06	Monoterpene
(E)- β -Ocimene	0.12	0.11	Monoterpene
Unknown	0.02	0.03	Unknown
2,6-Dimethyl-5-heptenal (melonal)	0.01	1.06*	Aliphatic aldehyde
Isobutyl angelate	0.01		Aliphatic ester
γ -Terpinene	0.02	0.01	Monoterpene
Unknown	0.03	0.02	Oxygenated monoterpene
<i>cis</i> -Linalool oxide (fur.)	0.20	0.20	Monoterpenic alcohol
Fenchone	0.01	0.02	Aliphatic alcohol
<i>trans</i> -Linalool oxide (fur.)	0.14*	[0.11]*	Monoterpenic alcohol

para-Cymenene	[0.14]*	0.01	Monoterpene
Terpinolene	[0.14]*	0.03	Monoterpene
Linalool	4.28	4.22	Monoterpenic alcohol
cis-Rose oxide	1.07*	[1.06]*	Monoterpenic ether
(Z)-6-Methyl-3,5-heptadien-2-one	[1.07]*	0.01	Aliphatic ketone
trans-Rose oxide	0.43	[0.43]*	Monoterpenic ether
Unknown	0.02	0.08	Unknown
Unknown	0.09	0.05*	Oxygenated normonoterpene
Isopulegol	0.03	0.04	Monoterpenic alcohol
Menthone	1.85	[1.80]*	Monoterpenic ketone
Citronellal	0.15*	[5.03]*	Monoterpenic aldehyde
iso-Isopulegol	[0.15]*	0.05	Monoterpenic alcohol
Isomenthone	4.81	5.03	Monoterpenic ketone
neo-Menthol	0.09	0.09	Monoterpenic alcohol
Terpinen-4-ol	0.03	0.36*	Monoterpenic alcohol
Menthol	0.16	0.37	Monoterpenic alcohol
Isomenthol	0.04	[0.36]*	Monoterpenic alcohol
para-Cymen-8-ol	0.35*	0.02	Monoterpenic alcohol
α-Terpineol	[0.35]*	1.05*	Monoterpenic alcohol
Nerol	0.16	0.34	Monoterpenic alcohol
Citronellol	33.85	33.82*	Monoterpenic alcohol
Neral	0.30	0.36*	Monoterpenic aldehyde
Piperitone	0.04	2.79*	Monoterpenic ketone
Geraniol	13.08	13.09	Monoterpenic alcohol
Geranial	0.41	0.40*	Monoterpenic aldehyde
Citronellyl formate	7.40	7.51	Monoterpenic ester
Neryl formate	0.08	[0.36]*	Monoterpenic ester
Geranyl formate	2.63	[2.79]*	Monoterpenic ester
(3Z)-Hexenyl tiglate	0.02	[0.05]*	Aliphatic ester
Methyl geranate	0.10	[1.05]*	Monoterpenic ester
Citronellic acid	0.10	0.05	Monoterpenic acid
α-Cubebene	0.23	[0.20]*	Sesquiterpene
Phenylethyl propionate	0.04	0.02	Phenolic ester
Citronellyl acetate	0.37	0.39	Monoterpenic ester
Neryl acetate	0.19	0.05	Monoterpenic ester
α-Ylangene	0.08	[5.03]*	Sesquiterpene
α-Copaene	0.53	0.54	Sesquiterpene
Geranic acid	0.01	0.01	Aliphatic acid
β-Bourbonene	1.12*	1.04	Sesquiterpene
1,5-diepi-β-Bourbonene	[1.12]*	0.10	Sesquiterpene
Geranyl acetate	0.43	0.47	Monoterpenic ester
Phenylethyl isobutyrate	0.09	0.11	Phenolic ester
Isocaryophyllene	0.03	0.03	Sesquiterpene
α-Gurjunene	0.08	0.01	Sesquiterpene
β-Caryophyllene	1.44	1.29	Sesquiterpene
β-Copaene	0.19*	0.22	Sesquiterpene
Thymohydroquinone dimethyl ether	[0.19]*	0.07	Monoterpenic ether
Heptyl tiglate	0.14		Aliphatic ester
Aromadendrene	0.04	[0.36]*	Sesquiterpene
Isogermacrene D	0.46*	0.34*	Sesquiterpene
6,9-Guaiadiene	[0.46]*	[0.36]*	Sesquiterpene
Unknown	0.45	0.41	Sesquiterpene

Citronellyl propionate	0.91*	0.43	Monoterpenic ester
α-Humulene	[0.91]*	0.30*	Sesquiterpene
allo-Aromadendrene	0.22	[0.34]*	Sesquiterpene
<i>trans</i> -Cadina-1(6),4-diene	0.30	[0.30]*	Sesquiterpene
γ-Murolene	0.19	0.26*	Sesquiterpene
Germacrene D	1.58*	[1.05]*	Sesquiterpene
α-Amorphene	[1.58]*	[0.26]*	Sesquiterpene
Geranyl propionate	[1.58]*	0.67	Monoterpenic ester
β-Selinene	0.16	0.27*	Sesquiterpene
Phenylethyl isovalerate	0.06*	0.04	Phenolic ester
γ-Amorphene	[0.06]*	[0.27]*	Sesquiterpene
Viridiflorene	0.72*	0.04	Sesquiterpene
Bicyclgermacrene	[0.72]*	[0.40]*	Sesquiterpene
4-epi- <i>cis</i> -Dihydroagarofuran	0.07	0.16	Sesquiterpenic ether
α-Murolene	0.24	0.22	Sesquiterpene
γ-Cadinene	0.42	0.52	Sesquiterpene
7-epi-α-Selinene	0.08	1.05*	Sesquiterpene
δ-Cadinene	1.56*	[1.05]*	Sesquiterpene
Geranyl isobutyrate	[1.56]*	0.33	Monoterpenic ester
<i>trans</i> -Calamenene	[1.56]*	0.08	Sesquiterpene
<i>trans</i> -Cadina-1,4-diene	0.14	0.20	Sesquiterpene
Citronellyl butyrate	0.64	0.62	Monoterpenic ester
Phenylethyl angelate?	0.19*	0.08	Phenolic ester
α-Cadinene	[0.19]*	[33.82]*	Sesquiterpene
α-Agarofuran	0.43	0.35	Sesquiterpenic ether
1-nor-Bourbonanone	0.06	0.02	Norsesquiterpenic ketone
Geranyl butyrate	1.05	1.08	Monoterpenic ester
Spathulenol	0.19	1.06*	Sesquiterpenic alcohol
Caryophyllene oxide	0.13*	0.11	Sesquiterpenic ether
Caryophyllene oxide isomer	[0.13]*	0.08	Sesquiterpenic ether
Globulol	0.07	0.08	Sesquiterpenic alcohol
Phenylethyl tiglate	0.79	0.79*	Phenolic ester
Viridiflorol	0.05	0.03	Sesquiterpenic alcohol
Geranyl isovalerate	0.09	0.18	Monoterpenic ester
10-epi-γ-Eudesmol	4.35	4.10	Sesquiterpenic alcohol
1-epi-Cubenol	0.14	0.24*	Sesquiterpenic alcohol
γ-Eudesmol	0.15	0.16*	Sesquiterpenic alcohol
Citronellyl valerate?	0.04	0.02	Monoterpenic ester
τ-Cadinol	0.48*	[0.16]*	Sesquiterpenic alcohol
τ-Murolol	[0.48]*	[0.79]*	Sesquiterpenic alcohol
Cubenol	[0.48]*	0.18	Sesquiterpenic alcohol
Unknown	0.20	0.17*	Oxygenated sesquiterpene
β-Eudesmol	0.21	[0.17]*	Sesquiterpenic alcohol
α-Eudesmol	0.09	0.18	Sesquiterpenic alcohol
α-Cadinol	0.03*	0.04	Sesquiterpenic alcohol
Valerianol	[0.03]*	0.16	Sesquiterpenic alcohol
<i>cis</i> -Calamenen-10-ol	0.16*	0.04	Sesquiterpenic alcohol
Geranyl valerate	[0.16]*	0.15	Monoterpenic ester
<i>trans</i> -Calamenen-10-ol	0.01	0.04	Sesquiterpenic alcohol
Citronellyl tiglate	0.30	0.32	Monoterpenic ester
Citronellyl 4-methylvalerate	0.10		Monoterpenic ester
Geranyl tiglate	0.80*	[1.06]*	Monoterpenic ester

3 β ,4 β -Oxidoagarofuran?	[0.80]*	0.04	Sesquiterpenic ether
Geranyl 4-methylvalerate?	0.12	[0.24]*	Monoterpenic ester
Citronellyl caproate	0.04		Monoterpenic ester
Geranyl caproate	0.06	0.04	Monoterpenic ester
Citronellyl heptanoate	0.03		Monoterpenic ester
Phytone	0.01	0.01	Terpenic ketone
Geranyl heptanoate	0.05	0.04	Monoterpenic ester
Citronellyl caprylate	0.01		Monoterpenic ester
Geranyl caprylate	0.02	0.03	Monoterpenic ester
Stearic acid	0.02		Aliphatic acid
Total identified	96.45%	94.98%	

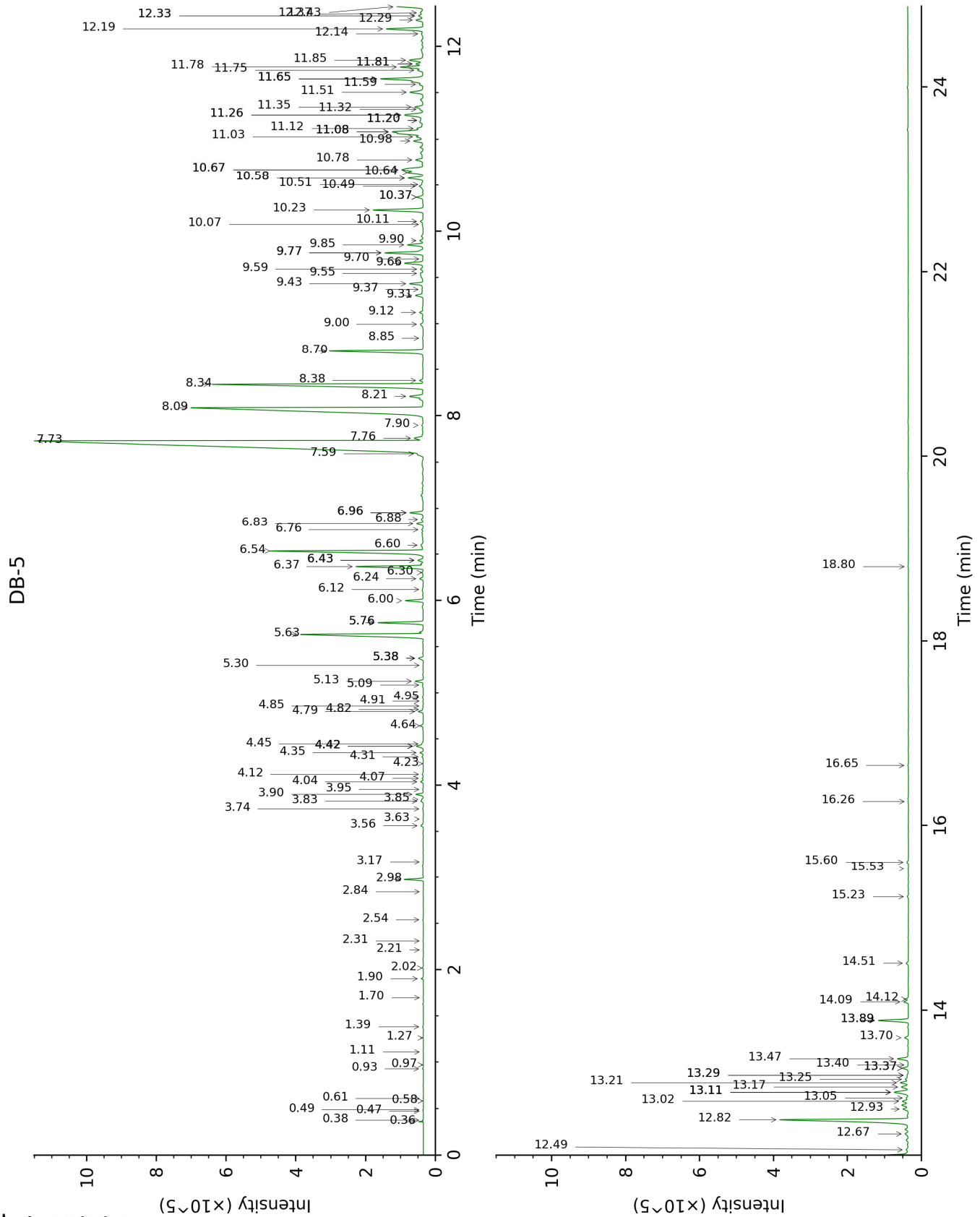
*: Two or more compounds are coeluting on this column

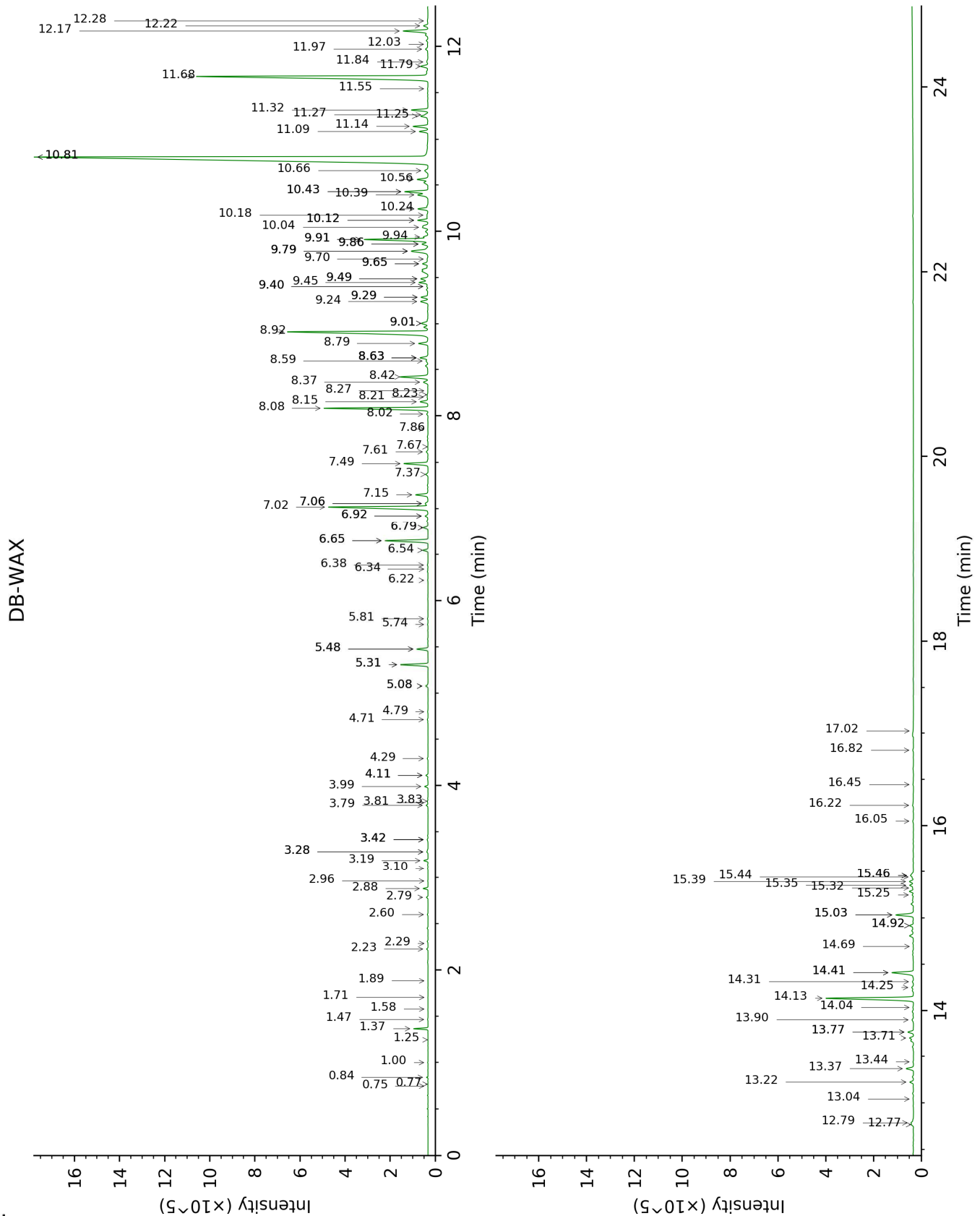
[xx]: Duplicate percentage due to coelutions, not taken account in the identified total

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

Note: no correction factor was applied

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FULL ANALYSIS DATA

Identification	Column DB-5			Column DB-WAX		
	R.T	R.I	%	R.T	R.I	%
Ethanol	0.36	496	0.04	0.84	905	0.03
Dimethylsulfide	0.38	504	0.01			
Acetic acid	0.47	596	tr	6.65*	1410	1.80
2-Methyl-3-buten-2-ol	0.49	604	tr	1.58	1016	0.01
Isovaleral	0.58	637	tr	0.77	886	tr
2-Methylbutyral	0.61	647	tr	0.75	878	tr
Isoamyl alcohol	0.93	725	0.01	3.42*	1176	0.04
2-Methylbutanol	0.97	731	tr	3.42*	1176	[0.04]
Toluene	1.11	752	tr	1.47	1005	0.02
Isobutyric acid	1.27	776	0.01	8.15	1523	0.35
Hexanal	1.38	793	0.01	1.88	1046	0.01
Dimethyl sulfoxide	1.70	823	0.01	7.86	1500	tr
3-Methylpentanol	1.90	841	0.03	5.08*	1296	0.09
(3Z)-Hexenol	2.02	851	0.02	5.81	1349	0.02
Hexanol	2.21	868	tr	5.48*	1326	0.43
Unknown [m/z 81, 79 (20), 80 (12), 82 (9)... 124 (7)]	2.31	876	0.01	1.00	931	0.01
3-Methylpentyl formate?	2.54	896	0.01	3.10	1152	0.02
Tricyclene	2.84	917	tr	1.25	973	tr
α -Pinene	2.98	926	0.39	1.37	992	0.39
Camphene	3.17	939	0.01	1.71	1029	0.01
Geranic oxide	3.56	966	0.07	2.23	1080	0.05
Sabinene	3.63	970	tr	2.29	1086	tr
Octen-3-ol	3.74	978	0.02	6.79*	1420	0.20
6-Methyl-5-hepten-2-one	3.83	984	0.06	5.08*	1296	[0.09]
<i>trans</i> -Dehydroxylinalool oxide	3.85	985	0.03	3.42*	1176	[0.04]
Myrcene	3.90	989	0.19	2.88	1135	0.16
6-Methyl-5-hepten-2-ol	3.95	992	0.01	6.92*	1430	0.11
α -Phellandrene	4.04	998	0.06	2.79	1128	0.05
<i>cis</i> -Dehydroxylinalool oxide	4.07	1000	0.02	3.83	1207	0.03
Δ^3 -Carene	4.12	1003	0.02	2.60	1113	0.02
α -Terpinene	4.23	1010	0.01	2.96	1141	0.01
ortho-Cymene	4.31	1015	0.03	4.11*	1227	0.07
para-Cymene	4.35	1018	0.08	4.11*	1227	[0.07]
Limonene	4.42*	1022	0.22	3.19	1159	0.14
Unknown [m/z 59, 43 (11), 109 (10), 41 (10), 127 (8)...]	4.42*	1022	[0.22]	6.22	1379	0.02
1,8-Cineole	4.42*	1022	[0.22]	3.28*†	1166	0.07

β-Phellandrene	4.42*	1022	[0.22]	3.28*†	1166	[0.07]
Unknown [m/z 59, 43 (12), 109 (11), 41 (10), 127 (8)...]	4.44	1024	0.03	6.38	1391	0.03
(Z)-β-Ocimene	4.64	1036	0.08	3.79	1204	0.06
(E)-β-Ocimene	4.79	1046	0.12	3.99	1219	0.11
Unknown [m/z 125, 69 (75), 41 (34), 55 (25), 93 (22)... 140 (3)]	4.82	1047	0.02	4.71	1270	0.03
2,6-Dimethyl-5-heptenal (melonal)	4.85	1050	0.01	5.31*	1314	1.06
Isobutyl angelate	4.91	1053	0.01			
γ-Terpinene	4.95	1056	0.02	3.82	1206	0.01
Unknown [m/z 79, 93 (60), 43 (40), 94 (35), 137 (33), 77 (26), 91 (20), 152 (18)]	5.09	1064	0.03	4.80	1276	0.02
cis-Linalool oxide (fur.)	5.13	1067	0.20	6.54	1402	0.20
Fenchone	5.30	1078	0.01	5.74	1345	0.02
trans-Linalool oxide (fur.)	5.38*	1083	0.14	6.92*	1430	[0.11]
para-Cymenene	5.38*	1083	[0.14]	6.34	1387	0.01
Terpinolene	5.38*	1083	[0.14]	4.29	1240	0.03
Linalool	5.64	1099	4.28	8.08	1517	4.22
cis-Rose oxide	5.76*	1107	1.07	5.31*	1314	[1.06]
(Z)-6-Methyl-3,5-heptadien-2-one	5.76*	1107	[1.07]	8.27	1532	0.01
trans-Rose oxide	6.00	1122	0.43	5.48*	1326	[0.43]
Unknown [m/z 95, 67 (86), 41 (68), 82 (64), 123 (62)...]	6.12	1130	0.02	7.61	1482	0.08
Unknown [m/z 41, 69 (87), 82 (66), 67 (55), 109 (46)... 142 (18)]	6.24	1138	0.09	9.40*	1621	0.05
Isopulegol	6.30	1142	0.03	8.20	1526	0.04
Menthone	6.37	1146	1.85	6.65*	1410	[1.80]
Citronellal	6.43*	1150	0.15	7.06*†	1440	[5.03]
iso-Isopulegol	6.43*	1150	[0.15]	8.02	1512	0.05
Isomenthone	6.54	1157	4.81	7.02†	1437	5.03
neo-Menthol	6.60	1161	0.09	8.59	1557	0.09
Terpinen-4-ol	6.76	1172	0.03	8.63*	1559	0.36
Menthol	6.83	1176	0.16	9.24	1607	0.37
Isomenthol	6.88	1179	0.04	8.63*	1559	[0.36]
para-Cymen-8-ol	6.96*	1184	0.35	11.55	1799	0.02
α-Terpineol	6.96*	1184	[0.35]	9.79*	1652	1.05
Nerol	7.59	1226	0.16	11.08	1760	0.34
Citronellol	7.73	1235	33.85	10.81*	1736	33.82
Neral	7.76	1237	0.30	9.49*	1627	0.36
Piperitone	7.90	1247	0.04	9.91*	1662	2.79
Geraniol	8.09	1259	13.08	11.68	1810	13.09
Geranial	8.21	1268	0.41	10.12*	1678	0.40

Citronellyl formate	8.34	1276	7.40	8.92	1582	7.51
Neryl formate	8.38	1279	0.08	9.49*	1627	[0.36]
Geranyl formate	8.70	1301	2.63	9.91*	1662	[2.79]
(3Z)-Hexenyl tiglate	8.85	1311	0.02	9.40*	1621	[0.05]
Methyl geranate	9.00	1322	0.10	9.79*	1652	[1.05]
Citronellic acid	9.12	1331	0.10	16.22	2244	0.05
α -Cubebene	9.31	1344	0.23	6.79*	1420	[0.20]
Phenylethyl propionate	9.37	1348	0.04	12.03	1841	0.02
Citronellyl acetate	9.43	1353	0.37	9.45	1624	0.39
Neryl acetate	9.55	1360	0.19	10.18	1683	0.05
α -Ylangene	9.59	1364	0.08	7.06*†	1440	[5.03]
α -Copaene	9.66	1368	0.53	7.15	1447	0.54
Geranic acid	9.70	1371	0.01	17.02	2329	0.01
β -Bourbonene	9.77*	1376	1.12	7.49	1472	1.04
1,5-diepi- β -Bourbonene	9.77*	1376	[1.12]	7.37	1463	0.10
Geranyl acetate	9.85	1382	0.43	10.56	1715	0.47
Phenylethyl isobutyrate	9.90	1386	0.09	11.97	1836	0.11
Isocaryophyllene	10.07	1398	0.03	8.23	1528	0.03
α -Gurjunene	10.11	1400	0.08	7.67	1486	0.01
β -Caryophyllene	10.23	1409	1.44	8.42	1543	1.29
β -Copaene	10.37*	1420	0.19	8.37	1539	0.22
Thymohydroquinone dimethyl ether	10.37*	1420	[0.19]	11.84	1824	0.07
Heptyl tiglate	10.49	1428	0.14			
Aromadendrene	10.50	1430	0.04	8.63*	1559	[0.36]
Isogermacrene D	10.58*	1435	0.46	9.01*	1589	0.34
6,9-Guaiadiene	10.58*	1435	[0.46]	8.63*	1559	[0.36]
Unknown [m/z 91, 161 (92), 105 (85), 119 (63), 133 (53), 79 (49), 204 (46)]	10.64	1440	0.45	8.79	1572	0.41
Citronellyl propionate	10.67*	1442	0.91	10.24	1688	0.43
α -Humulene	10.67*	1442	[0.91]	9.29*	1611	0.30
allo-Aromadendrene	10.78	1450	0.22	9.01*	1589	[0.34]
<i>trans</i> -Cadina-1(6),4-diene	10.98	1466	0.30	9.29*	1611	[0.30]
γ -Murolene	11.03	1469	0.19	9.65*	1640	0.26
Germacrene D	11.08*	1473	1.58	9.79*	1652	[1.05]
α -Amorphene	11.08*	1473	[1.58]	9.65*	1640	[0.26]
Geranyl propionate	11.08*	1473	[1.58]	11.32	1779	0.67
β -Selinene	11.12	1476	0.16	9.86*	1658	0.27
Phenylethyl isovalerate	11.20*	1482	0.06	13.04	1933	0.04
γ -Amorphene	11.20*	1482	[0.06]	9.86*	1658	[0.27]
Viridiflorene	11.26*	1486	0.72	9.70	1644	0.04
Bicylogermacrene	11.26*	1486	[0.72]	10.12*	1678	[0.40]
4-epi- <i>cis</i> -Dihydroagarofuran	11.32	1491	0.07	9.94	1664	0.16

α-Muurolene	11.35	1493	0.24	10.04	1672	0.22
γ-Cadinene	11.51	1505	0.42	10.39	1701	0.52
7-epi-α-Selinene	11.59	1512	0.08	10.43*	1704	1.05
δ-Cadinene	11.65*	1516	1.56	10.43*	1704	[1.05]
Geranyl isobutyrate	11.65*	1516	[1.56]	11.25	1774	0.33
trans-Calamenene	11.65*	1516	[1.56]	11.26	1775	0.08
trans-Cadina-1,4-diene	11.75	1524	0.14	10.66	1724	0.20
Citronellyl butyrate	11.78	1527	0.64	11.14	1764	0.62
Phenylethyl angelate?	11.81*	1529	0.19	14.25	2047	0.08
α-Cadinene	11.81*	1529	[0.19]	10.81*	1736	[33.82]
α-Agarofuran	11.85	1532	0.43	11.79	1820	0.35
1-nor-Bourbonanone	12.14	1555	0.06	13.44	1970	0.02
Geranyl butyrate	12.19	1559	1.05	12.17	1854	1.08
Spathulenol	12.29	1566	0.19	14.41*	2062	1.06
Caryophyllene oxide	12.33*	1570	0.13	12.79	1909	0.11
Caryophyllene oxide isomer	12.33*	1570	[0.13]	12.77	1908	0.08
Globulol	12.37	1573	0.07	13.90	2013	0.08
Phenylethyl tiglate	12.43	1578	0.79	15.03*	2123	0.79
Viridiflorol	12.50	1583	0.05	14.04	2026	0.03
Geranyl isovalerate	12.67	1596	0.09	12.22	1859	0.18
10-epi-γ-Eudesmol	12.82	1609	4.35	14.13	2036	4.10
1-epi-Cubenol	12.93	1618	0.14	13.77*	2000	0.24
γ-Eudesmol	13.02	1625	0.15	14.92*	2112	0.16
Citronellyl valerate?	13.05	1628	0.04	12.28	1864	0.02
τ-Cadinol	13.11*	1633	0.48	14.92*	2112	[0.16]
τ-Muurolol	13.11*	1633	[0.48]	15.03*	2123	[0.79]
Cubenol	13.11*	1633	[0.48]	13.71	1994	0.18
Unknown [m/z 147, 162 (79), 43 (64), 59 (64), 95 (47), 91 (44), 105 (43)... 238 (13)]	13.17	1638	0.20	15.46*	2166	0.17
β-Eudesmol	13.21	1642	0.21	15.46*	2166	[0.17]
α-Eudesmol	13.25	1644	0.09	15.39	2159	0.18
α-Cadinol	13.29*	1648	0.03	15.44	2164	0.04
Valerianol	13.29*	1648	[0.03]	15.35	2155	0.16
cis-Calamenen-10-ol	13.37*	1654	0.16	16.45	2268	0.04
Geranyl valerate	13.37*	1654	[0.16]	13.22	1950	0.15
trans-Calamenen-10-ol	13.40	1657	0.01	16.82	2307	0.04
Citronellyl tiglate	13.47	1663	0.30	13.37	1963	0.32
Citronellyl 4-methylvalerate	13.70	1682	0.10			
Geranyl tiglate	13.89*	1698	0.80	14.41*	2062	[1.06]
3β,4β-Oxidoagarofuran?	13.89*	1698	[0.80]	16.05	2227	0.04
Geranyl 4-methylvalerate?	14.09	1715	0.12	13.77*	2000	[0.24]
Citronellyl caproate	14.12	1718	0.04			
Geranyl caproate	14.51	1751	0.06	14.31	2053	0.04

Citronellyl heptanoate	15.23	1814	0.03			
Phytone	15.53	1842	0.01	14.69	2089	0.01
Geranyl heptanoate	15.60	1849	0.05	15.25	2145	0.04
Citronellyl caprylate	16.26	1909	0.01			
Geranyl caprylate	16.65	1946	0.02	15.32	2152	0.03
Stearic acid	18.80	2161	0.02			
Total identified		96.45%			94.98%	
Total reported		97.29%			95.57%	

*: Two or more compounds are coeluting on this column

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