



316 Old Hickory Blvd East, Madison, TN 37115

tel (615)612-4270 fax (615)860-9171

sold@naturesgift.com

Balancing Body, Mind and Spirit with Pure Essential Oils

Since 1995

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Frankincense Boswellia carterii var Birdwell

Batch #SO-59307

Somalia, Organically produced

Monoterpenes 81.73%

α fenchene	tr
α pinene	40.65
limonene	12.80
myrcene	8.34
sabinene	6.07
para cymene	3.48
α phellandrene	1.90
α thujene	1.75
β pinene	1.39
Δ^3 -carene	1.26
hashishene	0.75
camphene	0.67
β phellandrene	0.58
(Z) β ocimene	0.48
thuja-2,4(10)-diene	0.44
γ terpinene	0.34
α terpinene	0.20
3,7,7-Trimethylcyclohepta-1,3,5-t	0.15
(E) β ocimene	0.14
terpinolene	0.12
tricyclene	0.06
ortho-cymene	0.04
para-cymenene	0.04
pseudolimonene	0.03
alloocimene	0.02
2 carene	0.02
meta-cymenene	0.01

Monoterpenols 3.42%

terpinen-4-ol	0.53
trans-verbenol	0.48
trans-pinocarveol	0.39
cis sabinene hydrate	0.34
α terpineol	0.25
α phellandren-8-ol	0.23
linalool	0.2
myrtenol	0.13
meta-mentha-4,6-dien-8-ol	0.12
trans-carveol	0.12
cis verbenol	0.09
para-cymen-8-ol	0.09
verbenol analog?	0.07
cis-para-menth-2-en-1-ol	0.06
borneol	0.06
cis-carveol	0.04
meta-cymen-8-ol	0.04
para-cymene-7-ol	0.04
trans sabinene hydrate	0.03
trans-sabinol	0.03
cis-sabinol	0.03
thymol	0.02
carvacrol	0.02
β phellandren-8-ol	0.01

Sesquiterpenes 8.84%

β caryophyllene	2.26
β elemene	0.98
α copaene	0.66
germacrene D	0.46
α humulene	0.45
δ cadinene	0.42
β selinene	0.39
β bourbonene	0.34
α selinene	0.29
γ cadinene	0.26
γ muurolene	0.24
α cubebene	0.17
α gurjunene	0.16
allo-aromadendrene	0.15
α muurolene	0.14
(E) α bergamotene	0.12
epi-cubenol	0.12
6,9-guaiadiene	0.11
germacrene A	0.10
zonarene	0.10
β cubebene	0.09
(E) muurola-4(15),5 diene	0.09
germacrene B	0.08
β copaene	0.07
veridiflorene	0.07
(E) cadina-1(6),4-diene	0.06
cyclosativene I	0.05
bicycloelemene	0.05
isocaryophyllene	0.05
(E) muurola-3,5-diene	0.05
1,5-diepi β bourbonene	0.04
(Z) muurola-4(15),5-diene	0.04
(E) cadina-1,4-diene	0.03
α ylanguene	0.03
α cadinene	0.03
(E) calamenene	0.03
(E)- α -bergamotene	0.02

Sesquiterpenes cont.

δ selinene	0.02
α calacorene	0.01
(E) β farnesene	0.01
bicyclgermacrene	tr



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Esters 0.3%

bornyl acetate	0.22
α terpinyl acetate	tr
amyl isovalerate	0.04
octyl acetate	0.02
hexyl isovalerate	0.01
linalyl acetate	0.01

Aldehydes 0.39%

prenal	tr
α campholenal	0.21
myrtanal	0.13
octanal	0.03
6-methyl-5-hepten-2-one	0.02

Ketones 0.7%

verbenone	0.28
carvotanacetone	tr
carvone	0.11
piperitone	0.07
β thujone	0.06
pinocarvone	0.05
pinocamphone	0.04
2-nonanone	0.03
α thujone	0.03
sabinaketone	0.03

Ethers 0.84%

1,8-cineole	0.19
caryophyllene oxide	0.33
cis α phellandrene epoxide (iF)	0.10
dehydro-1,8-cineole	0.06
humulene epoxide II	0.06
α pinene oxide	0.04
cis limonene oxide	0.03
caryophyllene oxide isomer	0.03

Phenols 0.22%

toluene	0.07
ortho-methylanisole	0.11
3,5-dimethoxytoluene	0.04

Other 1.19%

serratol	0.33
(3E) cembrene C	0.10
incensole	0.07
cembrenol	0.05
α phellandrene dimer II	0.04
octanol	0.03
carvomenthene	0.02
cembrene C	0.02
2-methyl-3-buten-2-ol	0.01
(E) 2-methyl-1,3-pentadiene	0.01
3-methyl-2-butanone	0.01
salvia-4(14)-en-1-one	0.01
α phellandrene dimer III	0.01
unknown	0.48

Sesquiterpenols 1.48%

viridiflorol	0.68
cubebol	0.25
τ cadinol	0.14
copaborneol	0.07
germacrene D-4-ol	0.06
α muurolol	0.06
junenol	0.04
1,10-di-epi-cubebol	0.03
α cadinol	0.03
palustrol	0.02
ledol	0.02
τ muurolol	0.02
α eudesmol	0.02
(3Z)-Caryophylla-3,8(13)-diol	0.02
shyobunol	0.02

Date : February 26, 2022

CERTIFICATE OF ANALYSIS – GC PROFILING

SAMPLE IDENTIFICATION

Internal code : 22B16-BWN01


Customer identification : Organic Frankincense - BCE000109-021122

Type : Essential oil

Source : *Boswellia carteri*

Customer : Böswellness

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 2014-005

Analysis date : February 21, 2022

Checked and approved by :

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

Notes: This report may not be published, including online, without the written consent from Laboratoire PhytoChemia. This report is digitally signed, it is only considered valid if the digital signature is intact. The results only describe the samples that were submitted to the assays.

PHYSICOCHEMICAL DATA

Physical aspect: Clear liquid

Refractive index: 1.4738 ± 0.0003 (20 °C; method PC-MAT-016)

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
2-Methyl-3-buten-2-ol	0.01	Aliphatic alcohol
(E)-2-Methyl-1,3-pentadiene	0.01	Alkene
3-Methyl-2-butanone	0.01	Aliphatic ketone
Toluene	0.07	Simple phenolic
Prenal	tr	Aliphatic aldehyde
Unknown	0.02	Alkene
Unknown	0.01	Unknown
Unknown	0.01	Unknown
Unknown	0.01	Unknown
Hashishene	0.75	Monoterpene
Tricyclene	0.06	Monoterpene
α -Thujene	1.75	Monoterpene
α -Pinene	40.65	Monoterpene
Camphene	0.67	Monoterpene
α -Fenchene	tr	Monoterpene
Unknown	0.06	Monoterpene
Thuja-2,4(10)-diene	0.44	Monoterpene
3,7,7-Trimethylcyclohepta-1,3,5-triene	0.15	Monoterpene
β -Pinene	1.39	Monoterpene
Sabinene	6.07	Monoterpene
Unknown	0.03	Monoterpene
6-Methyl-5-hepten-2-one	0.02	Aliphatic ketone
Dehydro-1,8-cineole	0.06	Monoterpenic ether
Myrcene	8.34	Monoterpene
2-Carene	0.02	Monoterpene
α -Phellandrene	1.90	Monoterpene
Pseudolimonene	0.03	Monoterpene
Octanal	0.03	Aliphatic aldehyde
Δ^3 -Carene	1.26	Monoterpene
ortho-Methylanisole	0.11	Simple phenolic
α -Terpinene	0.20	Monoterpene
Carvomenthene	0.02	Aliphatic alcohol
para-Cymene	3.48	Monoterpene
Limonene	12.80	Monoterpene
β -Phellandrene	0.58	Monoterpene
1,8-Cineole	0.19	Monoterpenic ether
ortho-Cymene	0.04	Monoterpene
(Z)- β -Ocimene	0.48	Monoterpene
(E)- β -Ocimene	0.14	Monoterpene
γ -Terpinene	0.34	Monoterpene
cis-Sabinene hydrate	0.04	Monoterpenic alcohol
Unknown	0.02	Oxygenated monoterpene
Octanol	0.03	Aliphatic alcohol
Unknown	0.02	Oxygenated monoterpene
meta-Cymenene	0.01	Monoterpene

Terpinolene	0.12	Monoterpene
para-Cymenene	0.04	Monoterpene
α -Pinene oxide	0.04	Monoterpenic ether
2-Nonanone	0.03	Aliphatic ketone
<i>trans</i> -Sabinene hydrate	0.03	Monoterpenic alcohol
α -Thujone	0.03	Monoterpenic ketone
Verbenol analog?	0.07	Monoterpenic alcohol
Linalool	0.20	Monoterpenic alcohol
Unknown	0.03	Monoterpenic alcohol
Amyl isovalerate	0.04	Aliphatic ester
β -Thujone	0.06	Monoterpenic ketone
<i>cis</i> -para-Menth-2-en-1-ol	0.06	Monoterpenic alcohol
α -Campholenal	0.21	Monoterpenic aldehyde
Unknown	0.11	Unknown
<i>cis</i> -Limonene oxide	0.03	Monoterpenic ether
allo-Ocimene	0.02	Monoterpene
<i>trans</i> -Pinocarveol	0.39	Monoterpenic alcohol
<i>cis</i> -Verbenol	0.09	Monoterpenic alcohol
<i>trans</i> -Sabinol	0.03	Monoterpenic alcohol
<i>trans</i> -Verbenol	0.48	Monoterpenic alcohol
meta-Mentha-4,6-dien-8-ol	0.12	Monoterpenic alcohol
Sabinaketone	0.03	Normonoterpenic ketone
Pinocamphone	0.04	Monoterpenic ketone
Pinocarvone	0.05	Monoterpenic ketone
Borneol	0.06	Monoterpenic alcohol
α -Phellandren-8-ol	0.23	Monoterpenic alcohol
<i>cis</i> -Sabinol	0.03	Monoterpenic alcohol
Terpinen-4-ol	0.53	Monoterpenic alcohol
meta-Cymen-8-ol	0.04	Monoterpenic alcohol
para-Cymen-8-ol	0.09	Monoterpenic alcohol
Myrtenal	0.13	Monoterpenic aldehyde
α -Terpineol	0.25	Monoterpenic alcohol
β -Phellandren-8-ol	0.01	Monoterpenic alcohol
Myrtenol	0.13	Monoterpenic alcohol
<i>cis</i> - α -Phellandrene epoxide (iPr vs Me)	0.10	Monoterpenic ether
Verbenone	0.28	Monoterpenic ketone
Octyl acetate	0.02	Aliphatic ester
<i>trans</i> -Carveol	0.12	Monoterpenic alcohol
<i>cis</i> -Carveol	0.04	Monoterpenic alcohol
Carvone	0.11	Monoterpenic ketone
Carvotanacetone	tr	Monoterpenic ketone
Hexyl isovalerate	0.01	Aliphatic ester
Unknown	0.02	Unknown
Piperitone	0.07	Monoterpenic ketone
Linalyl acetate	0.01	Monoterpenic ester
3,5-Dimethoxytoluene	0.04	Simple phenolic
Unknown	0.03	Oxygenated monoterpene
Bornyl acetate	0.22	Monoterpenic ester
para-Cymen-7-ol	0.04	Monoterpenic alcohol
Thymol	0.02	Monoterpenic alcohol
Carvacrol	0.02	Monoterpenic alcohol
Unknown	0.03	Unknown

Bicycloelemene	0.05	Sesquiterpene
Unknown	0.02	Unknown
α -Terpinyl acetate	tr	Monoterpenic ester
α -Cubebene	0.17	Sesquiterpene
Cyclosativene I	0.05	Sesquiterpene
α -Ylangene	0.03	Sesquiterpene
α -Copaene	0.66	Sesquiterpene
β -Bourbonene	0.34	Sesquiterpene
1,5-diepi- β -Bourbonene	0.04	Sesquiterpene
β -Cubebene	0.09	Sesquiterpene
β -Elemene	0.98	Sesquiterpene
Isocaryophyllene	0.05	Sesquiterpene
α -Gurjunene	0.16	Sesquiterpene
β -Caryophyllene	2.26	Sesquiterpene
<i>cis</i> - α -Bergamotene	0.02	Sesquiterpene
β -Copaene	0.07	Sesquiterpene
<i>trans</i> - α -Bergamotene	0.12	Sesquiterpene
6,9-Guaiadiene	0.11	Sesquiterpene
Unknown	0.02	Sesquiterpene
<i>trans</i> -Muurolo-3,5-diene	0.05	Sesquiterpene
α -Humulene	0.45	Sesquiterpene
allo-Aromadendrene	0.15	Sesquiterpene
<i>cis</i> -Muurolo-4(15),5-diene	0.04	Sesquiterpene
(<i>E</i>)- β -Farnesene	0.01	Sesquiterpene
4,5-diepi-Aristolochene	0.01	Sesquiterpene
<i>trans</i> -Cadina-1(6),4-diene	0.06	Sesquiterpene
γ -Muurolole	0.24	Sesquiterpene
Germacrene D	0.46	Sesquiterpene
β -Selinene	0.39	Sesquiterpene
<i>trans</i> -Muurolo-4(15),5-diene	0.09	Sesquiterpene
δ -Selinene	0.02	Sesquiterpene
α -Selinene	0.29	Sesquiterpene
epi-Cubebol	0.12	Sesquiterpenic alcohol
Bicyclogermacrene	tr	Sesquiterpene
Viridiflorene	0.07	Sesquiterpene
Germacrene A	0.10	Sesquiterpene
α -Muurolole	0.14	Sesquiterpene
γ -Cadinene	0.26	Sesquiterpene
Cubebol	0.25	Sesquiterpenic alcohol
δ -Cadinene	0.42	Sesquiterpene
<i>trans</i> -Calamenene	0.03	Sesquiterpene
Zonarene	0.10	Sesquiterpene
<i>trans</i> -Cadina-1,4-diene	0.03	Sesquiterpene
α -Cadinene	0.03	Sesquiterpene
α -Calacorene	0.01	Sesquiterpene
Germacrene B	0.08	Sesquiterpene
Palustrol	0.02	Sesquiterpenic alcohol
Unknown	0.04	Oxygenated sesquiterpene
Germacrene D-4-ol	0.06	Sesquiterpenic alcohol
Caryophyllene oxide isomer	0.03	Sesquiterpenic ether
Caryophyllene oxide	0.33	Sesquiterpenic ether
Salvial-4(14)-en-1-one	0.01	Aliphatic alcohol

Viridiflorol	0.68	Sesquiterpenic alcohol
Ledol	0.02	Sesquiterpenic alcohol
Copaborneol	0.07	Sesquiterpenic alcohol
Humulene epoxide II	0.06	Sesquiterpenic ether
10-epi-Cubenol	0.03	Sesquiterpenic alcohol
Junenol	0.04	Sesquiterpenic alcohol
τ -Cadinol	0.14	Sesquiterpenic alcohol
τ -Muurolol	0.02	Sesquiterpenic alcohol
α -Muurolol	0.06	Sesquiterpenic alcohol
α -Eudesmol	0.02	Sesquiterpenic alcohol
α -Cadinol	0.03	Sesquiterpenic alcohol
(3Z)-Caryophylla-3,8(13)-dien-5 β -ol	0.02	Sesquiterpenic alcohol
Shyobunol	0.02	Sesquiterpenic alcohol
α -Phellandrene dimer II	0.04	Diterpene
α -Phellandrene dimer III	0.01	Diterpene
(3E)-Cembrene A	0.10	Diterpene
Cembrene C	0.02	Diterpene
Cembrenol	0.05	Diterpenic alcohol
Incensole	0.07	Diterpenic alcohol
Serratol	0.33	Diterpenic alcohol
Consolidated total	98.81%	

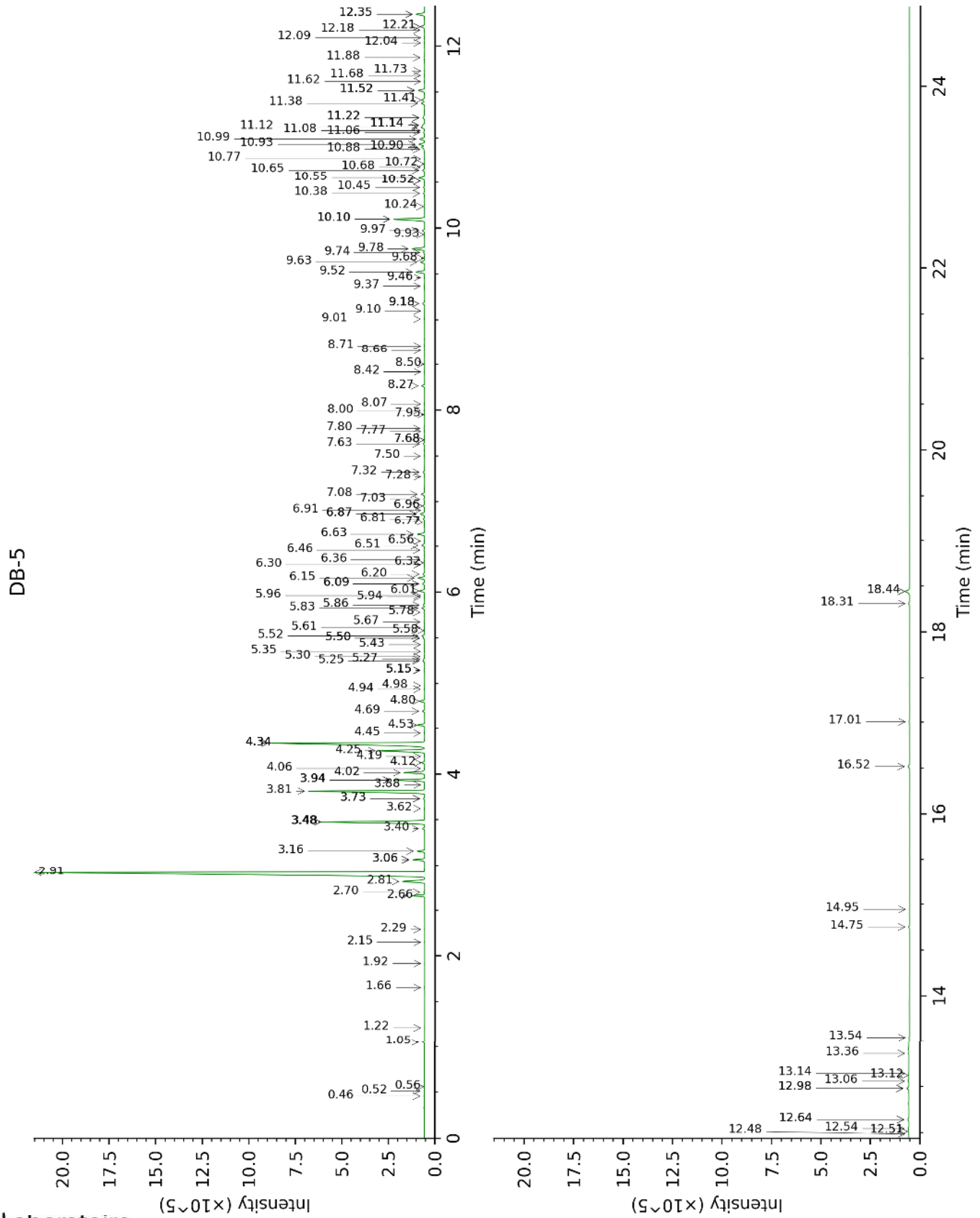
tr: The compound has been detected below 0.005% of total signal.

Note: no correction factor was applied

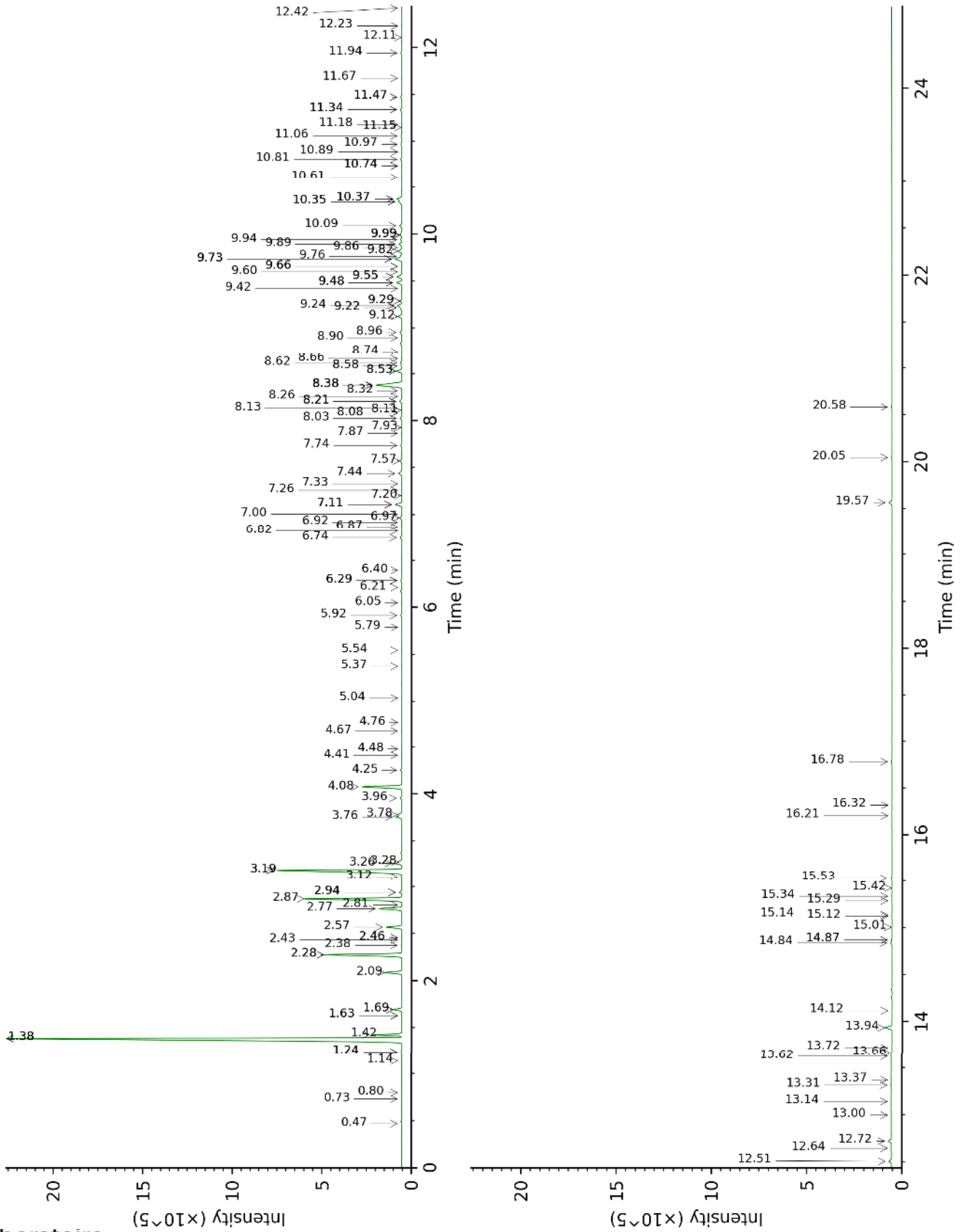
About "consolidated" data: The table above presents the breakdown of the sample volatile constituents after applying an algorithm to collapse data acquired from the multi-columns system of PhytoChemia into a single set of consolidated contents. In case of discrepancies between columns, the algorithm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



DB-WAX



FULL ANALYSIS DATA

Identification	Column DB-5			Column DB-WAX		
	R.T	R.I	%	R.T	R.I	%
2-Methyl-3-buten-2-ol	0.46	606	0.01	1.63*	1018	0.02
(E)-2-Methyl-1,3-pentadiene	0.52	628	0.01	0.47	761	0.01
3-Methyl-2-butanone	0.56	646	0.01	0.80	898	tr
Toluene	1.05	757	0.07	1.38*	992	41.24
Prenal	1.22	783	tr	3.19*	1157	12.80
Unknown [m/z 109, 67 (32), 81 (14), 41 (12), 124 (10)]	1.66	831	0.02	0.73	875	0.01
Unknown [m/z 109, 43 (28), 124 (28), 41 (14), 55 (11), 79 (9), 81 (8)...]	1.92	854	0.01	1.69*	1024	0.68
Unknown [m/z 79, 78 (45), 91 (28), 77 (28), 41 (13), 80 (12), 107 (11)... 122 (1)]	2.15	874	0.01	1.14	952	0.02
Unknown [m/z 119, 91 (35), 79 (17), 77 (13), 120 (11), 117 (9)... 134 (1)]	2.29	886	0.01	1.24*	968	0.07
Hashishene	2.66	915	0.75	1.38*	992	[41.24]
Tricyclene	2.70	918	0.06	1.24*	968	[0.07]
α-Thujene	2.81	926	1.75	1.42	998	1.86
α-Pinene	2.91	933	40.65	1.38*	992	[41.24]
Camphene	3.06*	943	0.73	1.69*	1024	[0.68]
α-Fenchene	3.06*	943	[0.73]	1.63*	1018	[0.02]
Unknown [m/z 91, 92 (47), 65 (11)... 134 (1)]	3.06*	943	[0.73]	2.38	1092	0.06
Thuja-2,4(10)-diene	3.16	949	0.44	2.28*	1082	6.51
3,7,7-Trimethylcyclohepta-1,3,5-triene	3.40	966	0.15	2.94*	1137	0.22
β-Pinene	3.48*	971	7.50	2.09	1063	1.39
Sabinene	3.48*	971	[7.50]	2.28*	1082	[6.51]
Unknown [m/z 93, 79 (73), 67 (49), 95 (42), 91 (41), 121 (38)...]	3.62	981	0.03	2.43†	1097	0.04
6-Methyl-5-hepten-2-one	3.73*	988	0.09	5.04	1297	0.02
Dehydro-1,8-cineole	3.73*	988	[0.09]	3.12	1151	0.06
Myrcene	3.81	994	8.34	2.87	1132	8.45
2-Carene	3.88	998	0.02	2.46*†	1099	[0.04]
α-Phellandrene	3.94*	1002	2.00	2.77	1123	1.90
Pseudolimonene	3.94*	1002	[2.00]	2.81	1126	0.03
Octanal	3.94*	1002	[2.00]	4.41	1250	0.03

Δ^3 -Carene	4.02†	1007	1.37	2.57	1108	1.26
ortho-Methylanisole	4.06†	1010	[1.37]	5.92	1355	0.11
α -Terpinene	4.12	1014	0.20	2.94*	1137	[0.22]
Carvomenthene	4.19	1018	0.02	2.46*†	1099	[0.04]
para-Cymene	4.26	1022	3.48	4.08	1225	3.50
Limonene	4.34*	1028	13.58	3.19*	1157	[12.80]
β -Phellandrene	4.34*	1028	[13.58]	3.26	1162	0.58
1,8-Cineole	4.34*	1028	[13.58]	3.28	1164	0.19
ortho-Cymene	4.45	1035	0.04	4.48	1255	0.03
(Z)- β -Ocimene	4.53	1040	0.48	3.78†	1203	[0.85]
(E)- β -Ocimene	4.69	1050	0.14	3.96	1216	0.14
γ -Terpinene	4.80	1057	0.34	3.76†	1202	0.85
cis-Sabinene hydrate	4.94	1066	0.04	6.87	1425	0.06
Unknown [m/z 79, 93 (60), 43 (40), 94 (35), 137 (33), 77 (26), 91 (20), 152 (18)]	4.98	1068	0.02	4.76	1276	0.02
Octanol	5.15*	1079	0.06	8.21*	1526	0.27
Unknown [m/z 43, 94 (63), 109 (61), 59 (55), 79 (51)...152 (2)]	5.15*	1079	[0.06]	7.26	1454	0.02
meta-Cymenene	5.15*	1079	[0.06]	6.21	1377	0.01
Terpinolene	5.25†	1085	0.19	4.25	1238	0.12
para-Cymenene	5.27†	1087	[0.19]	6.29*	1382	0.10
α -Pinene oxide	5.30	1088	0.04	5.37	1316	0.03
2-Nonanone	5.35	1092	0.03	5.79	1346	0.02
trans-Sabinene hydrate	5.43	1097	0.03	7.93	1504	0.03
α -Thujone	5.50*	1101	0.09	6.05	1365	0.03
Verbenol analog?	5.50*	1101	[0.09]	8.32	1534	0.07
Linalool	5.52	1103	0.20	8.03	1512	0.15
Unknown [m/z 119, 109 (94), 43 (61), 95 (56), 91 (48), 77 (32), 152 (32), 137 (31), 134 (24)]	5.58	1107	0.03	8.53*	1551	0.55
Amyl isovalerate	5.61	1108	0.04	4.67	1270	0.04
β -Thujone	5.68	1113	0.06	6.29*	1382	[0.10]
cis-para-Menth-2-en-1-ol	5.78	1119	0.06	8.08	1516	0.04
α -Campholenal	5.83	1122	0.21	6.97	1432	0.18
Unknown [m/z 111, 43 (22), 55 (14), 41 (12), 110 (11)...]	5.86	1124	0.11			
cis-Limonene oxide	5.94	1130	0.03	6.40	1390	0.03
allo-Ocimene	5.96	1131	0.02	5.54	1329	0.02
trans-Pinocarveol	6.01	1134	0.39	9.12	1597	0.37
cis-Verbenol	6.09*	1139	0.16	9.22*	1604	0.15
trans-Sabinol	6.09*	1139	[0.16]	9.86	1656	0.03
trans-Verbenol	6.15	1143	0.48	9.48*	1626	0.51
meta-Mentha-4,6-dien-8-ol	6.20	1146	0.12	9.29*	1610	0.14

Sabinaketon	6.30	1153	0.03	8.66	1561	0.04
Pinocamphone	6.32	1154	0.04	7.20	1450	0.04
Pinocarvone	6.36	1156	0.05	7.87	1499	0.05
Borneol	6.46	1163	0.06	9.74*	1646	0.78
α -Phellandren-8-ol	6.51	1166	0.23	10.09	1675	0.22
<i>cis</i> -Sabinol	6.56	1169	0.03	10.89	1742	0.02
Terpinen-4-ol	6.63	1174	0.53	8.53*	1551	[0.55]
meta-Cymen-8-ol	6.77	1183	0.04	11.47*	1791	0.10
para-Cymen-8-ol	6.81	1186	0.09	11.47*	1791	[0.10]
Myrtenal	6.87*†	1189	0.39	8.62	1558	0.13
α -Terpineol	6.87*†	1189	[0.39]	9.74*	1646	[0.78]
β -Phellandren-8-ol	6.91†	1192	[0.39]	10.74*	1729	0.03
Myrtenol	6.96	1195	0.13	10.81	1735	0.11
<i>cis</i> - α -Phellandrene epoxide (iPr vs Me)	7.03	1200	0.10	10.97	1749	0.09
Verbenone	7.08	1203	0.28	9.55*	1631	0.51
Octyl acetate	7.28	1216	0.02	7.11*	1443	0.64
<i>trans</i> -Carveol	7.32	1219	0.12	11.34*	1780	0.18
<i>cis</i> -Carveol	7.50	1231	0.04	11.67	1809	0.04
Carvone	7.63	1240	0.11	9.99*†	1667	0.23
Carvotanacetone	7.68*	1243	0.02	9.48*	1626	[0.51]
Hexyl isovalerate	7.68*	1243	[0.02]	6.82	1421	0.01
Unknown [m/z 43, 97 (69), 107 (46), 41 (28), 55 (21), 109 (20)...]	7.77	1249	0.02	11.15	1764	0.03
Piperitone	7.80	1251	0.07	9.94	1663	0.12
Linalyl acetate	7.95	1261	0.01	8.11	1518	0.03
3,5-Dimethoxytoluene	8.00	1264	0.04	11.34*	1780	[0.18]
Unknown [m/z 109, 41 (22), 81 (14), 43 (11)... 152 (4)]	8.07	1269	0.03			
Bornyl acetate	8.27	1282	0.22	8.21*	1526	[0.27]
para-Cymen-7-ol	8.42	1293	0.04	14.12	2033	0.02
Thymol	8.50	1298	0.02	15.12	2131	0.02
Carvacrol	8.66	1309	0.02	15.34	2152	0.05
Unknown [m/z 69, 41 (75), 55 (58), 83 (33), 121 (33)...]	8.71	1313	0.03	14.87*	2106	0.07
Bicycloelemene	9.01	1334	0.05	7.00	1435	0.06
Unknown [m/z 133, 105 (45), 91 (38), 119 (36)... 150 (3)]	9.10	1340	0.02			
α -Terpinyl acetate	9.18*	1346	0.17	9.66*	1640	0.04
α -Cubebene	9.18*	1346	[0.17]	6.74	1416	0.17
Cyclosativene I	9.37	1359	0.05	6.92	1429	0.05
α -Ylangene	9.46	1366	0.03	7.11*	1443	[0.64]
α -Copaene	9.52	1370	0.66	7.11*	1443	[0.64]
β -Bourbonene	9.63	1378	0.34	7.44	1467	0.38
1,5-diepi- β -Bourbonene	9.68	1381	0.04	7.33	1459	0.03
β -Cubebene	9.74	1385	0.09	7.74	1490	0.12

β-Elemene	9.78	1388	0.98	8.38*	1539	3.44
Isocaryophyllene	9.93	1399	0.05	8.13	1520	0.04
α-Gurjunene	9.97	1402	0.16	7.57	1477	0.17
β-Caryophyllene	10.10*	1412	2.43	8.38*	1539	[3.44]
cis-α-Bergamotene	10.10*	1412	[2.43]	8.26	1530	0.02
β-Copaene	10.24	1422	0.07	8.38*	1539	[3.44]
trans-α-Bergamotene	10.38	1432	0.12	8.38*	1539	[3.44]
6,9-Guaiadiene	10.45	1438	0.11	8.58	1555	0.08
Unknown [m/z 91, 161 (92), 105 (85), 119 (63), 133 (53), 79 (49), 204 (46)]	10.52*	1443	0.05	8.74	1567	0.02
trans-Muurolo-3,5-diene	10.52*	1443	[0.05]	8.90	1579	0.05
α-Humulene	10.55	1445	0.45	9.24	1606	0.47
allo-Aromadendrene	10.65	1452	0.15	8.96	1584	0.20
cis-Muurolo-4(15),5-diene	10.68	1455	0.04	9.29*	1610	[0.14]
(E)-β-Farnesene	10.72	1458	0.01	9.55*	1631	[0.51]
4,5-diepi-Aristolochene	10.77	1462	0.01	9.42	1621	0.03
trans-Cadina-1(6),4-diene	10.88	1470	0.06	9.22*	1604	[0.15]
γ-Muurolole	10.90	1471	0.24	9.55*	1631	[0.51]
Germacrene D	10.93	1474	0.46	9.74*	1646	[0.78]
β-Selinene	10.99	1478	0.39	9.82	1653	0.41
trans-Muurolo-4(15),5-diene	11.06	1483	0.09	9.76	1649	0.09
δ-Selinene	11.08	1485	0.02	9.66*	1640	[0.04]
α-Selinene	11.12†	1488	0.47	9.89	1659	0.29
epi-Cubebol	11.14*†	1489	[0.47]	11.94	1833	0.12
Bicyclogermacrene	11.14*†	1489	[0.47]	9.99*†	1667	[0.23]
Viridiflorene	11.14*†	1489	[0.47]	9.60	1635	0.07
Germacrene A	11.22*	1495	0.20	10.37*	1698	0.52
α-Muurolole	11.22*	1495	[0.20]	9.99*†	1667	[0.23]
γ-Cadinene	11.38	1507	0.26	10.34*	1696	0.36
Cubebol	11.41	1510	0.25	12.51	1883	0.24
δ-Cadinene	11.52*	1518	0.55	10.37*	1698	[0.52]
trans-Calamenene	11.52*	1518	[0.55]	11.18	1767	0.03
Zonarene	11.52*	1518	[0.55]	10.34*	1696	[0.36]
trans-Cadina-1,4-diene	11.62	1526	0.03	10.61	1718	0.04
α-Cadinene	11.68	1531	0.03	10.74*	1729	[0.03]
α-Calacorene	11.73	1535	0.01	12.11	1848	0.01
Germacrene B	11.88	1546	0.08	11.06	1756	0.09
Palustrol	12.04	1559	0.02	12.23	1858	0.03
Unknown [m/z 152, 109 (61), 43 (21), 137 (16), 151 (16)... 222 (6)]	12.09	1564	0.04			
Germacrene D-4-ol	12.18	1570	0.06	13.72	1994	0.03

Caryophyllene oxide isomer	12.22*	1573	0.36	12.64	1895	0.03
Caryophyllene oxide	12.22*	1573	[0.36]	12.72	1902	0.33
Salvial-4(14)-en-1-one	12.35*	1584	0.70	13.00	1928	0.01
Viridiflorol	12.35*	1584	[0.70]	13.94	2015	0.68
Ledol	12.48	1594	0.02	13.37	1962	0.01
Copaborneol	12.51	1597	0.07	14.87*	2106	[0.07]
Humulene epoxide II	12.54	1599	0.06	13.31	1957	0.06
10-epi-Cubenol	12.64*	1607	0.10	13.66	1989	0.03
Junenol	12.64*	1607	[0.10]	13.62	1986	0.04
τ -Cadinol	12.98*	1635	0.16	14.84	2103	0.14
τ -Muurolol	12.98*	1635	[0.16]	15.00	2119	0.02
α -Muurolol	13.06	1641	0.06	15.14	2132	0.02
α -Eudesmol	13.12	1646	0.02	15.29	2147	0.03
α -Cadinol	13.14	1648	0.03	15.42	2161	0.02
(3Z)-Caryophylla-3,8(13)-dien-5 β -ol	13.36	1666	0.02	16.78	2301	0.08
Shyobunol	13.54	1682	0.02	16.32	2253	0.01
α -Phellandrene dimer II	14.75	1786	0.04	12.42	1876	0.04
α -Phellandrene dimer III	14.95	1802	0.01	13.14	1941	0.02
(3E)-Cembrene A	16.52	1947	0.10	15.53	2172	0.10
Cembrene C	17.01	1994	0.02	16.21	2241	0.02
Cembrenol	18.31	2124	0.05	20.04	2671	0.04
Incensole	18.44*	2138	0.39	20.58	2737	0.07
Serratol	18.44*	2138	[0.39]	19.57	2614	0.33
Total identified		98.75%			98.26%	
Total reported		99.12%			98.48%	

*: Two or more compounds are coeluting on this column

[xx]: Duplicate percentage due to coelutions, not 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