

## Helichrysum

*Helichrysum italicum* var. *serotinum*

Batch No. FR-58992  
 France (Corsica)

<b>Monoterpenes</b>	<b>10.84%</b>	<b>Sesquiterpenes</b>	<b>18.27%</b>	<b>Ketones</b>	<b>1.29%</b>
limonene	5.39	γ curcumene	9.93	4-methyl-3-hexanone	0.46
α pinene	2.31	ar-curcumene	2.35	2-nonanone	0.21
β pinene	0.71	italicene	2.28	2-methyl-3-pentanone	0.20
γ terpinene	0.64	β curcumene	0.82	2-undecanone	0.14
α fenchene	0.45	italicene isomer	0.63	3-pentanone	0.08
para cymene	0.27	β caryophyllene	0.48	phytone	0.07
camphene	0.21	trans-α-bergamotene + α guaiene	0.31	camphor	0.07
terpinolene	0.20	α acoradiene	0.31	pinocarvone	0.03
(E) β ocimene	0.20	10-epi-β acoradiene	0.22	6-Methyl-5-hepten-2-one	0.02
α terpinene	0.17	β bisabolene	0.20	artimesia ketone	0.01
myrcene	0.09	α humulene	0.18		
α phellandrene	0.04	isoitalicene	0.17		
bornylene	0.04	δ cadinene	0.12		
(Z) β ocimene	0.03	(E) α bisabolene	0.07		
sabinene	0.02	(E) γ bisabolene	0.06	<b>Phenols</b>	
α thujene	0.01	β selinene	0.05	methyl (E) isoeugenol	0.17
tricyclene	0.01	γ cadinene	0.02	elemicin	0.14
β fenchene	0.01	β copaene	0.02	para-methylanisole	0.05
thuja-2,4(10) diene	0.01	trans calamenene	0.02		
pseudolimonene	0.01	cis α bergamotene	0.01		
Δ 3 carene	0.01	α funebrene	0.01		
para cymenene	0.01	α copaene	0.01		

<b>Monoterpenols</b>	<b>5.58%</b>	<b>Sesquiterpenols</b>	<b>5.55%</b>	<b>Other</b>	<b>1.99%</b>
nerol	2.97	eudesm-5-en-11-ol	1.73	Unknown	1.57
linalool	1.29	guaiol	0.92	2-methyl-2-heptene	0.16
α terpineol	0.51	eudesmol analog	0.89	fenchone	0.10
terpinene-4-ol	0.50	β-eudesmol	0.62	nonanol	0.03
endo-fenchol	0.09	α eudesmol	0.41	6-methyl-5-hepten-2-ol	0.02
borneol	0.07	γ-eudesmol	0.26	tridecane	0.02
myrtenol	0.06	bulnesol	0.20	2-pentylfuran	0.01
trans-pinocarveol	0.02	10-epi-γ-eudesmol	0.14	2-ethylfuran	0.01
camphene hydrate	0.02	β bisabolol	0.12	octane	0.01
hotrienol	0.02	(E) nerolidol	0.10	2-methyloctane	0.01
carvacrol	0.02	α bisabolol	0.08	nonane	0.01
cis linalool oxide (fur)	0.01	hinesol	0.05	(3Z)-hexenol	0.01
		caryophyllenyl alcohol	0.03	(2E)-hexenol	0.01
				hexanol	0.01
				tetradecane	0.01

<b>Aldehydes</b>	<b>0.22%</b>	<b>Esters</b>	<b>38.37%</b>	<b>β Diketone</b>	<b>14.06%</b>
nonanal	0.08	ceryl acetate	32.62	Italidione II isomer I (2,4,6,9-Tetramethyl	4.22
neral	0.05	ceryl propionate	4.51	Italidione I (4,6,9-Trimethyldec-8-ene-3,5	3.35
geranial	0.03	2-methylbutyl angelate	0.35	Italidione II isomer II (5,7,10-Trimethylur	2.07
perillaldehyde	0.02	isobutyl angelate	0.15	italidione III isomer II	1.32
α campholenal	0.01	ceryl angelate	0.11	italidione III isomer I	0.77
2-methylbutyral	0.01	geranyl 4 methylvalerate	0.10	italidione II analog	0.69
hexanal	0.01	geranyl acetate	0.10	4,6-dimethylocatane-3,5-dione epimer II	0.49
heptanal	0.01	2 methylbutyl 2-methylbutyra	0.09	italidione III isomer III	0.47
		isoamyl angelate	0.06	4,6-dimethylocatane-3,5-dione epimer I	0.42
		isobutyl 2-methylbutyrate	0.04	2,4-dimethyl-heptane-3,5-dione	0.26
		(3Z) hexenyl angelate	0.04		
		isobutyl isovalerate	0.03		
<b>Ethers</b>	<b>1.2%</b>	linalyl acetate	0.03		
1,8 cineole	0.59	α terpinyl acetate	0.03		
nerol oxide	0.21	(3Z) hexenyl acetate	0.02		
italicene ether	0.20	hexyl 2-methylbutyrate	0.02		
10-epi italicene ether	0.10	ceryl 4 methylvalerate	0.02		
trans-Dehydroxylinalool oxide	0.10	bornyl acetate	0.02		
		hexyl hexanoate	0.01		
		isoamyl acetate	0.01		
		methanethiol 5-methylhexano	0.01		

**Date :** September 23, 2019

**CERTIFICATE OF ANALYSIS – GC PROFILING**

**SAMPLE IDENTIFICATION**

**Internal code :** 19I09-NGA01-1-SCC

**Customer identification :** Helichrysum Corsican Sero - FR-58992

**Type :** Essential oil

**Source :** *Helichrysum italicum* subsp. *serotinum*

**Customer :** Nature's Gift Aromatherapy

**ANALYSIS**

**Method:** PC-PA-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 :** September 18, 2019

Checked and approved by :

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

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#### PYHSICOCHEMICAL DATA

**Physical aspect:** Yellow liquid

**Refractive index:**  $1.4697 \pm 0.0003$  (20 °C)

#### 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	%	Classe
Dimethylsulfide	tr	Aliphatic sulfide
Isobutyral	tr	Aliphatic aldehyde
2-Methyl-3-buten-2-ol	tr	Aliphatic alcohol
Isovaleral	tr	Aliphatic aldehyde
2-Methylbutyral	0.01	Aliphatic aldehyde
3-Pentanone	0.08	Aliphatic ketone
2-Ethylfuran	0.01	Furan
Isoamyl alcohol	tr	Aliphatic alcohol
2-Methylbutanol	tr	Aliphatic alcohol
2-Methyl-3-pentanone	0.20	Aliphatic ketone
Unknown	0.01	Unknown
Unknown	0.04	Unknown
Hexanal	0.01	Aliphatic aldehyde
Octane	0.01	Alkane
2-Methyl-2-heptene	0.16	Alkene
4-Methyl-3-hexanone	0.46	Aliphatic ketone
Unknown	0.01	Unknown
(3Z)-Hexenol	0.01	Aliphatic alcohol
2-Methyloctane	0.01	Alkane
(2E)-Hexenol	0.01	Aliphatic alcohol
Hexanol	0.01	Aliphatic alcohol
Isoamyl acetate	0.01	Aliphatic ester
Heptanal	0.01	Aliphatic aldehyde
Nonane	0.01	Alkane
Bornylene	0.04	Monoterpene
Hashishene	tr	Monoterpene
Isobutyl isobutyrate	tr	Aliphatic ester
Tricyclene	0.01	Monoterpene
α-Thujene	0.01	Monoterpene
α-Pinene	2.31	Monoterpene
β-Fenchene?	0.01	Monoterpene
Campheene	0.21	Monoterpene
α-Fenchene	0.45	Monoterpene
Thuja-2,4(10)-diene	0.01	Monoterpene
Sabinene	0.02	Monoterpene
β-Pinene	0.71	Monoterpene
6-Methyl-5-hepten-2-one	0.02	Aliphatic ketone
2-Pentylfuran	0.01	Furan
trans-Dehydroxylinalool oxide	0.10	Monoterpenic ether
Myrcene	0.09	Monoterpene
6-Methyl-5-hepten-2-ol	0.02	Aliphatic alcohol
Unknown	tr	Monoterpene
α-Phellandrene	0.04	Monoterpene
Pseudolimonene	0.01	Monoterpene
Isobutyl 2-methylbutyrate	0.04	Aliphatic ester
Δ3-Carene	0.01	Monoterpene
Isobutyl isovalerate	0.03	Aliphatic ester

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(3Z)-Hexenyl acetate	0.02	Aliphatic ester
α-Terpinene	0.17	Monoterpane
para-Methylanisole	0.05	Simple phenolic
para-Cymene	0.27	Monoterpane
Limonene	5.39	Monoterpane
1,8-Cineole	0.59	Monoterpenic ether
(Z)-β-Ocimene	0.03	Monoterpane
(E)-β-Ocimene	0.20	Monoterpane
Isobutyl angelate	0.15	Aliphatic ester
γ-Terpinene	0.64	Monoterpane
Artemisia ketone	0.01	Monoterpenic ketone
Methanethiol 5-methylhexanoate?	0.01	Aliphatic thioester
cis-Linalool oxide (fur.)	0.01	Monoterpenic alcohol
Octanol	tr	Aliphatic alcohol
Fenchone	0.10	Aliphatic alcohol
Terpinolene	0.20	Monoterpane
para-Cymenene	0.01	Monoterpane
2-Nonanone	0.21	Aliphatic ketone
2,4-Dimethylheptane-3,5-dione	0.26	β-Diketone
Linalool	1.29	Monoterpenic alcohol
Hotrienol	0.02	Monoterpenic alcohol
Nonanal	0.08	Aliphatic aldehyde
2-Methylbutyl 2-methylbutyrate	0.09	Aliphatic ester
endo-Fenchol	0.09	Monoterpenic alcohol
α-Campholenal	0.01	Monoterpenic aldehyde
trans-Pinocarveol	0.02	Monoterpenic alcohol
Camphor	0.07	Monoterpenic ketone
Campheze hydrate	0.02	Monoterpenic alcohol
Pinocarvone	0.03	Monoterpenic ketone
Nerol oxide	0.21	Aliphatic ether
Isoamyl angelate	0.06	Aliphatic ester
2-Methylbutyl angelate	0.35	Aliphatic ester
Borneol	0.07	Monoterpenic alcohol
Nonanol	0.03	Aliphatic alcohol
Terpinen-4-ol	0.50	Monoterpenic alcohol
4,6-Dimethyloctane-3,5-dione epimer I	0.42	β-Diketone
4,6-Dimethyloctane-3,5-dione epimer II	0.49	β-Diketone
α-Terpineol	0.51	Monoterpenic alcohol
Myrtenol	0.06	Monoterpenic alcohol
Unknown	0.03	Unknown
Unknown	0.02	Unknown
Nerol	2.97	Monoterpenic alcohol
Hexyl 2-methylbutyrate	0.02	Aliphatic ester
Neral	0.05	Monoterpenic aldehyde
Linalyl acetate	0.03	Monoterpenic ester
Unknown	0.12	Aliphatic ester
Unknown	0.03	Aliphatic ester
Perillaldehyde	0.02	Monoterpenic aldehyde
Geranal	0.03	Monoterpenic aldehyde
(3Z)-Hexenyl angelate	0.04	Aliphatic ester
Bornyl acetate	0.02	Monoterpenic ester
2-Undecanone	0.14	Aliphatic ketone

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Carvacrol	0.02	Monoterpenic alcohol
Tridecane	0.02	Alkane
$\alpha$ -Terpinyl acetate	0.03	Monoterpenic ester
$\alpha$ -Copaene	0.01	Sesquiterpene
Neryl acetate	32.62	Monoterpenic ester
Italicene isomer	0.63	Sesquiterpene
Geranyl acetate	0.10	Monoterpenic ester
Isoitalicene	0.17	Sesquiterpene
$\alpha$ -Funebrene	0.01	Sesquiterpene
Hexyl hexanoate	0.01	Aliphatic ester
Unknown	0.31	Unknown
Italicene	2.28	Sesquiterpene
Tetradecane	0.01	Alkane
$\beta$ -Caryophyllene	0.48	Sesquiterpene
cis- $\alpha$ -Bergamotene	0.01	Sesquiterpene
$\beta$ -Copaene	0.02	Sesquiterpene
$\alpha$ -Guaiene	0.31*	Sesquiterpene
trans- $\alpha$ -Bergamotene	[0.31]*	Sesquiterpene
Italidione I (4,6,9-Trimethyldec-8-ene-3,5-dione)	3.35	$\beta$ -Diketone
$\alpha$ -Humulene	0.18	Sesquiterpene
$\alpha$ -Acoradiene	0.31	Sesquiterpene
Neryl propionate	4.51	Monoterpenic ester
10-epi- $\beta$ -Acoradiene	0.22	Sesquiterpene
$\gamma$ -Curcumene	9.93	Sesquiterpene
$\beta$ -Selinene	0.05	Sesquiterpene
Italidione II isomer I (2,4,6,9-Tetramethyldec-8-ene-3,5-dione)	4.22	$\beta$ -Diketone
ar-Curcumene	2.35	Sesquiterpene
Italidione II isomer II (5,7,10-Trimethylundec-9-ene-4,6-dione)	2.07	$\beta$ -Diketone
Italidione II analog	0.69	$\beta$ -Diketone
Methyl ( <i>E</i> )-isoeugenol	0.17	Phenylpropanoid
Unknown	0.23	Sesquiterpene
10-epi-Italicene ether	0.10	Sesquiterpenic ether
$\beta$ -Bisabolene	0.20	Sesquiterpene
$\gamma$ -Cadinene	0.02	Sesquiterpene
$\beta$ -Curcumene	0.82	Sesquiterpene
$\delta$ -Cadinene	0.12	Sesquiterpene
trans-Calamenene	0.02	Sesquiterpene
Italicene ether	0.20	Sesquiterpenic ether
( <i>E</i> )- $\gamma$ -Bisabolene	0.06	Sesquiterpene
( <i>E</i> )- $\alpha$ -Bisabolene	0.07	Sesquiterpene
Elemicin	0.14	Phenylpropanoid
Caryophyllenyl alcohol	0.03	Sesquiterpenic alcohol
( <i>E</i> )-Nerolidol	0.10	Sesquiterpenic alcohol
Italidione III isomer I	0.77	$\beta$ -Diketone
Italidione III isomer II	1.32	$\beta$ -Diketone
Italidione III isomer III	0.47	$\beta$ -Diketone
Unknown	0.23	Oxygenated sesquiterpene
Guaiol	0.92	Sesquiterpenic alcohol
Eudesm-5-en-11-ol	1.73	Sesquiterpenic alcohol
10-epi- $\gamma$ -Eudesmol	0.14	Sesquiterpenic alcohol

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Neryl angelate?	0.11	Monoterpenic ester
$\gamma$ -Eudesmol	0.26	Sesquiterpenic alcohol
Eudesmol analog?	0.89	Sesquiterpenic alcohol
Hinesol	0.05	Sesquiterpenic alcohol
Unknown	0.07	Oxygenated sesquiterpene
$\beta$ -Eudesmol	0.62	Sesquiterpenic alcohol
$\alpha$ -Eudesmol	0.41	Sesquiterpenic alcohol
Bulnesol	0.20	Sesquiterpenic alcohol
$\beta$ -Bisabolol	0.12	Sesquiterpenic alcohol
$\alpha$ -Bisabolol	0.08	Sesquiterpenic alcohol
Neryl 4-methylvalerate?	0.02	Monoterpenic ester
Unknown	0.04	Unknown
Geranyl 4-methylvalerate?	0.10	Monoterpenic ester
Unknown	0.08	Oxygenated sesquiterpene
Unknown	0.04	Oxygenated sesquiterpene
Unknown	0.01	Oxygenated sesquiterpene
Unknown	0.05	Oxygenated sesquiterpene
Unknown	0.03	Oxygenated sesquiterpene
Unknown	0.01	Oxygenated sesquiterpene
Unknown	0.06	Oxygenated sesquiterpene
Unknown	0.09	Oxygenated sesquiterpene
Unknown	0.02	Unknown
Phytone	0.07	Terpenic ketone
Unknown	0.04	Unknown
<b>Consolidated total</b>		<b>97.67%</b>

\*: Individual compounds concentration could not be found due to overlapping coelutions on columns considered

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

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

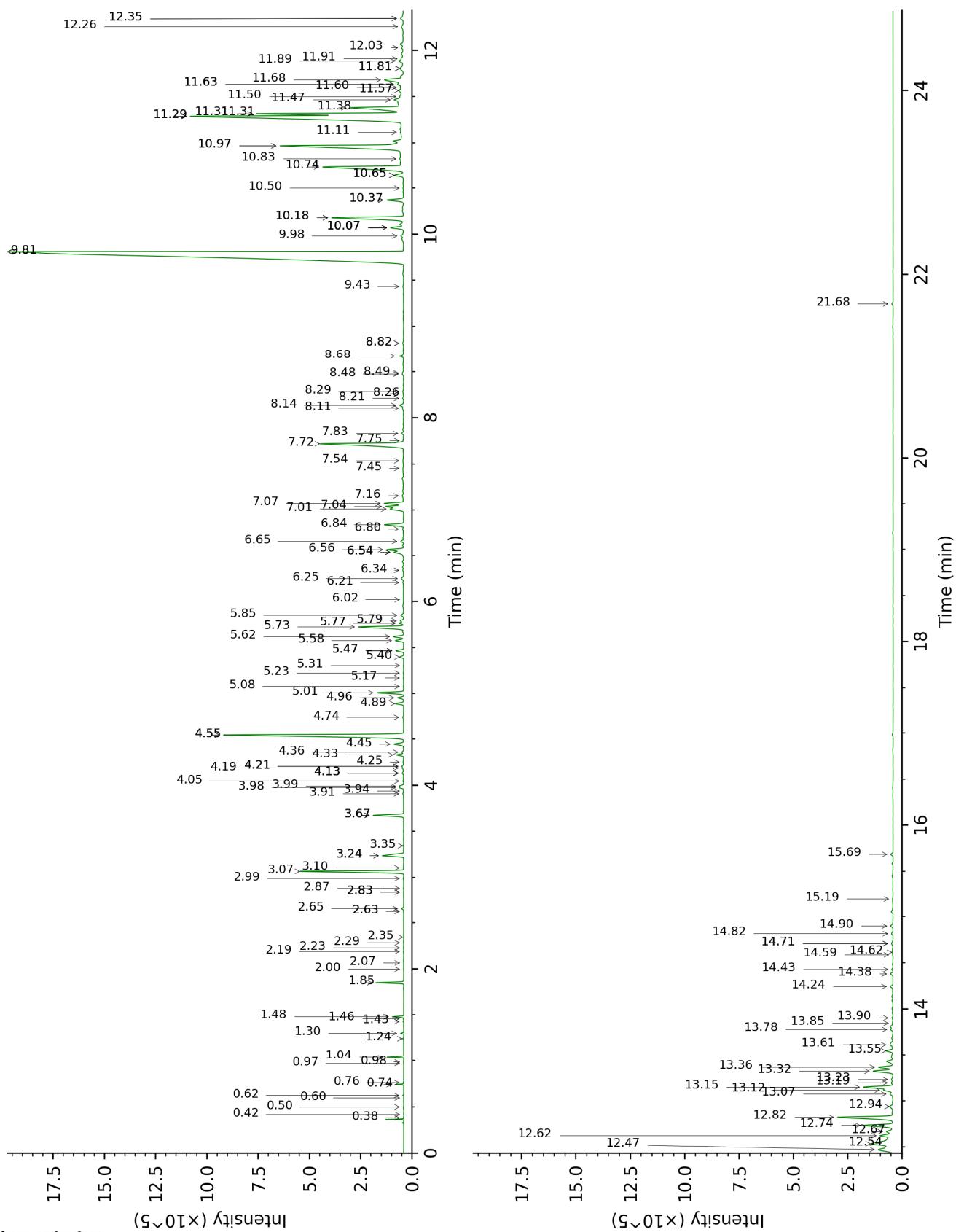
Note: no correction factor was applied

**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.

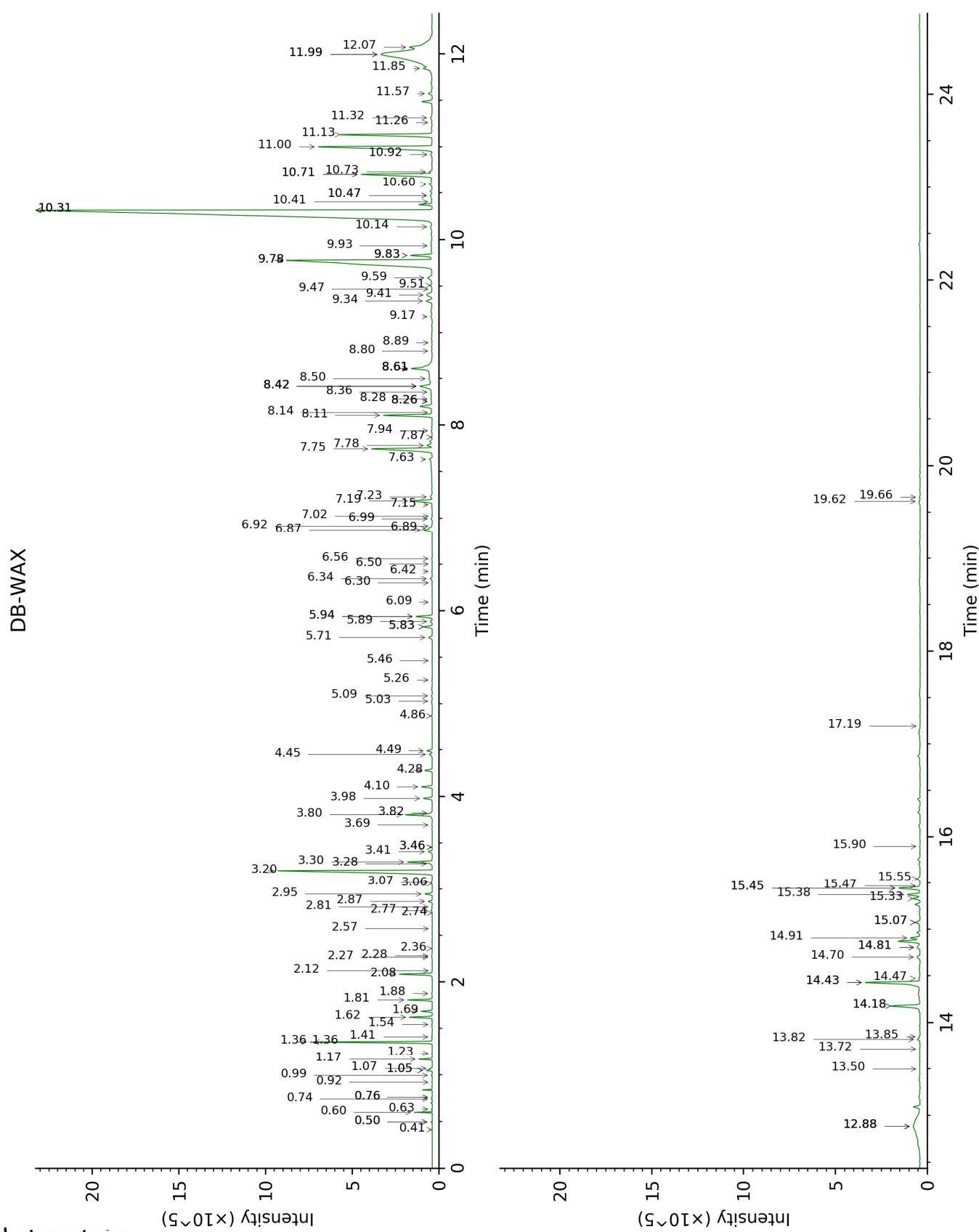
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DB-5



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FULL ANALYSIS DATA

Identification	Column DB-5			Column DB-WAX		
	R.T	R.I	%	R.T	R.I	%
Dimethylsulfide	0.38	519	tr	0.41	711	tr
Isobutyral	0.42	531	tr	0.50*	781	0.01
2-Methyl-3-buten-2-ol	0.50	591	tr	1.54	1011	0.01
Isovaleral	0.60	640	tr	0.76*	888	0.01
2-Methylbutyral	0.62	650	0.01	0.74	880	0.01
3-Pentanone	0.74	694	0.08	1.05*	940	0.12
2-Ethylfuran	0.76	702	0.01	0.92	919	0.01
Isoamyl alcohol	0.97	736	tr	3.46*	1178	0.01
2-Methylbutanol	0.98	738	tr	3.46*	1178	[0.01]
2-Methyl-3-pentanone	1.04	745	0.20	1.17	959	0.20
Unknown [m/z 73, 41 (54), 87 (50), 56 (47), 54 (29), 55 (25), 100 (23)... 115? (6)]	1.24	774	0.01	0.99	931	0.01
Unknown [m/z 73, 87 (52), 41 (45), 56 (42), 100 (29)...]	1.30	782	0.04	1.07	943	0.04
Hexanal	1.43	800	0.01	1.88	1044	0.01
Octane	1.46	804	0.01	0.50*	781	[0.01]
2-Methyl-2-heptene	1.48	807	0.16	0.60	829	0.17
4-Methyl-3-hexanone	1.85	837	0.46	1.81	1037	0.46
Unknown [m/z 56, 57 (93), 41 (87), 43 (81), 69 (75), 55 (59), 102 (48)...]	2.00	849	0.01			
(3Z)-Hexenol	2.07	855	0.01	5.83*	1351	0.22
2-Methyloctane	2.19	865	0.01	0.63	841	0.01
(2E)-Hexenol	2.23	868	0.01	6.09	1370	0.01
Hexanol	2.28	872	0.01	5.46	1325	0.01
Isoamyl acetate	2.34	877	0.01	2.36	1092	0.01
Heptanal	2.63*†	900	0.06	3.06	1147	0.01
Nonane	2.63*†	900	[0.06]	0.76*	888	[0.01]
Bornylene	2.66†	903	[0.06]	1.05*	940	[0.12]
Hashishene	2.83*	915	tr	1.36*	990	2.34
Isobutyl isobutyrate	2.83*	915	[tr]	2.12	1068	tr
Tricyclene	2.87	918	0.01	1.23	970	0.01
α-Thujene	2.99	925	0.01	1.41	998	0.01
α-Pinene	3.07	930	2.31	1.36*	990	[2.34]
β-Fenchene?	3.10	933	0.01			
Camphepane	3.24*	941	0.66	1.69	1025	0.21
α-Fenchene	3.24*	941	[0.66]	1.62	1019	0.45
Thuja-2,4(10)-	3.34	948	0.01	2.28†	1084	[0.03]

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diene						
Sabinene	3.67*	970	0.71	2.27†	1082	0.03
β-Pinene	3.67*	970	[0.71]	2.08	1064	0.71
6-Methyl-5-hepten-2-one	3.91	986	0.02	5.09	1298	0.03
2-Pentylfuran	3.94	988	0.01	3.69	1196	0.01
<i>trans</i> -Dehydroxylinalool oxide	3.98	990	0.10	3.41	1174	0.11
Myrcene	3.99	991	0.09	2.87	1132	0.10
6-Methyl-5-hepten-2-ol	4.05	995	0.02	6.92	1429	0.01
Unknown [m/z = 123, 43 (16), 152 (14), 124 (9), 137 (6)]	4.13*	1000	0.05	2.74	1122	tr
α-Phellandrene	4.13*	1000	[0.05]	2.77	1124	0.04
Pseudolimonene	4.13*	1000	[0.05]	2.81	1127	0.01
Isobutyl 2-methylbutyrate	4.19	1004	0.04	3.07	1148	0.04
Δ3-Carene	4.21*	1005	0.05	2.57	1109	0.01
Isobutyl isovalerate	4.21*	1005	[0.05]	3.28	1164	0.03
(3Z)-Hexenyl acetate	4.25	1008	0.02	4.86	1280	0.02
α-Terpinene	4.33	1013	0.17	2.95	1138	0.18
para-Methylanisole	4.36	1015	0.05	6.34	1387	0.06
para-Cymene	4.45	1020	0.27	4.10	1226	0.27
Limonene	4.55*	1027	5.87	3.20	1158	5.39
1,8-Cineole	4.55*	1027	[5.87]	3.30	1165	0.59
(Z)-β-Ocimene	4.74	1039	0.03	3.82	1205	0.03
(E)-β-Ocimene	4.89	1048	0.20	3.98	1217	0.22
Isobutyl angelate	4.96	1052	0.15	4.49	1254	0.14
γ-Terpinene	5.01	1056	0.64	3.80	1204	0.69
Artemisia ketone	5.08	1060	0.01	5.26	1310	0.01
Methanethiol 5-methylhexanoate?	5.17	1066	0.01			
<i>cis</i> -Linalool oxide (fur.)	5.23	1070	0.01	6.56	1403	0.01
Octanol	5.31	1075	tr	8.26*†	1528	0.08
Fenchone	5.40	1080	0.10	5.71	1343	0.12
Terpinolene	5.47*	1085	0.20	4.28	1238	0.20
para-Cymenene	5.47*	1085	[0.20]	6.30	1384	0.01
2-Nonanone	5.58	1092	0.21	5.83*	1351	[0.22]
2,4-Dimethylheptane-3,5-dione	5.62	1094	0.26	7.63	1481	0.17
Linalool	5.73	1101	1.29	8.11	1517	1.30
Hotrienol	5.77*†	1104	0.19	8.80	1570	0.02
Nonanal	5.77*†	1104	[0.19]	5.94*	1359	0.43
2-Methylbutyl 2-	5.79†	1105	[0.19]	4.45	1251	0.09

methylbutyrate						
endo-Fenchol	5.85	1109	0.09	8.42*	1541	0.60
$\alpha$ -Campholenal	6.02	1120	0.01	7.02	1437	0.01
<i>trans</i> -Pinocarveol	6.21	1132	0.02	9.17	1599	0.07
Camphor	6.25	1135	0.07	7.23	1452	0.08
Camphene hydrate	6.34	1141	0.02	8.50	1547	0.26
Pinocarvone	6.54*†	1154	0.72	7.94	1504	0.03
Nerol oxide	6.54*†	1154	[0.72]	6.87†	1426	0.33
Isoamyl angelate	6.54*†	1154	[0.72]	5.89	1355	0.06
2-Methylbutyl angelate	6.56†	1156	[0.72]	5.94*	1359	[0.43]
Borneol	6.65	1161	0.07	9.83*	1651	0.63
Nonanol	6.80	1171	0.03	9.47	1622	0.02
Terpinen-4-ol	6.84	1174	0.50	8.61*	1555	1.34
4,6- Dimethyloctane- 3,5-dione epimer I	7.01	1185	0.42	8.61*	1555	[1.34]
4,6- Dimethyloctane- 3,5-dione epimer II	7.04	1187	0.49	8.61*	1555	[1.34]
$\alpha$ -Terpineol	7.07	1189	0.51	9.83*	1651	[0.63]
Myrtenol	7.16	1194	0.06	10.92	1741	0.06
Unknown [m/z 81, 57 (91), 168 (73), 67 (52), 140 (45), 41 (36), 113 (27)...]	7.45	1214	0.03			
Unknown [m/z 81, 109 (85), 168 (72), 57 (69), 67 (58), 41 (49), 140 (45)...]	7.54	1220	0.02			
Nerol	7.72	1232	2.97	11.13	1759	2.80
Hexyl 2- methylbutyrate	7.75	1235	0.02	6.50	1399	0.01
Neral	7.83	1240	0.05	9.51	1626	0.07
Linalyl acetate	8.11	1259	0.03	8.14	1519	0.03
Unknown [m/z 83, 55 (29), 57 (24), 100 (21), 104 (13)...]	8.14	1261	0.12	6.89†	1427	[0.33]
Unknown [m/z 83, 55 (30), 57 (23), 100 (20), 98 (14)...]	8.21	1266	0.03	6.99	1435	0.03
Perillaldehyde	8.26	1270	0.02	10.71*	1723	2.36
Geranal	8.29	1272	0.03	10.14	1676	0.11
(3Z)-Hexenyl angelate	8.48	1285	0.04	8.26*†	1528	[0.08]
Bornyl acetate	8.49	1286	0.02	8.28†	1530	[0.08]
2-Undecanone	8.68	1298	0.14	8.61*	1555	[1.34]
Carvacrol	8.82*	1308	0.03	15.47	2158	0.02
Tridecane	8.82*	1308	[0.03]	5.03	1293	0.02

$\alpha$ -Terpinyl acetate	9.43	1347	0.03	9.78*	1647	9.96
$\alpha$ -Copaene	9.81*	1373	33.25	7.15	1446	0.01
Neryl acetate	9.81*	1373	[33.25]	10.32*	1690	33.01
Italiccene isomer	9.81*	1373	[33.25]	7.19	1449	0.63
Geranyl acetate	9.98	1386	0.10	10.60	1714	0.09
Isoitalicene	10.07*†	1392	0.50	7.78	1492	0.17
$\alpha$ -Funebrene	10.07*†	1392	[0.50]	7.87	1499	0.01
Hexyl hexanoate	10.07*†	1392	[0.50]	8.89	1577	0.01
Unknown [m/z 119, 43 (57), 91 (50), 134 (36), 93 (29), 79 (28)...]	10.07*†	1392	[0.50]			
Italicene	10.18*	1400	2.30	7.75	1490	2.28
Tetradecane	10.18*	1400	[2.30]	6.42	1393	0.01
$\beta$ -Caryophyllene	10.37*	1414	0.49	8.42*	1541	[0.60]
<i>cis</i> - $\alpha$ -Bergamotene	10.37*	1414	[0.49]	8.26*†	1528	[0.08]
$\beta$ -Copaene	10.50	1423	0.02	8.36	1536	0.10
$\alpha$ -Guaiene	10.65*	1434	0.31	8.42*	1541	[0.60]
<i>trans</i> - $\alpha$ -Bergamotene	10.65*	1434	[0.31]	8.42*	1541	[0.60]
Italidione I (4,6,9-Trimethyldec-8-ene-3,5-dione)	10.74	1441	3.35	11.84†	1820	9.87
$\alpha$ -Humulene	10.83	1448	0.18	9.34	1612	0.25
$\alpha$ -Acoradiene	10.97*	1458	5.31	9.41	1617	0.31
Neryl propionate	10.97*	1458	[5.31]	11.00	1748	4.51
10-epi- $\beta$ -Acoradiene	11.11	1469	0.22	9.59	1632	0.26
$\gamma$ -Curcumene	11.29*†	1482	14.13	9.78*	1647	[9.96]
$\beta$ -Selinene	11.29*†	1482	[14.13]	9.93	1660	0.05
Italidione II isomer I (2,4,6,9-Tetramethyldec-8-ene-3,5-dione)	11.32*†	1484	[14.13]	12.00*†	1833	[9.87]
<i>ar</i> -Curcumene	11.32*†	1484	[14.13]	10.71*	1723	[2.36]
Italidione II isomer II (5,7,10-Trimethylundec-9-ene-4,6-dione)	11.38	1489	2.07	12.07†	1840	[9.87]
Italidione II analog	11.47	1496	0.69	12.88*	1912	1.98
Methyl ( <i>E</i> )-isoeugenol	11.50	1498	0.17	15.08*	2119	0.17
Unknown [m/z 119, 91 (14), 120 (10), 117 (9)... 200? (2)]	11.57	1503	0.23	12.00*†	1833	[9.87]
10-epi-Italicene ether	11.60	1506	0.10	11.32	1774	0.09
$\beta$ -Bisabolene	11.64*	1508	0.22	10.32*	1690	[33.01]
$\gamma$ -Cadinene	11.64*	1508	[0.22]	10.41	1698	0.02
$\beta$ -Curcumene	11.68	1512	0.82	10.32*	1690	[33.01]

δ-Cadinene	11.81*	1522	0.22	10.47*†	1703	0.18
trans-Calamenene	11.81*	1522	[0.22]	11.26	1770	0.02
Italicene ether	11.89	1528	0.20	11.57	1796	0.12
(E)-γ-Bisabolene	11.91	1530	0.06	10.47*†	1703	[0.18]
(E)-α-Bisabolene	12.03	1540	0.07	10.73	1725	0.08
Elemicin	12.26	1558	0.14	15.55	2166	0.12
Caryophyllenyl alcohol	12.35*	1565	0.14	13.72	1988	0.03
(E)-Nerolidol	12.35*	1565	[0.14]	13.82	1998	0.10
Italidione III isomer I	12.47	1575	0.77	12.88*	1912	[1.98]
Italidione III isomer II	12.54	1580	1.32	12.88*	1912	[1.98]
Italidione III isomer III	12.62	1587	0.47			
Unknown [m/z 120, 59 (55), 121 (24), 93 (24), 81 (23), 107 (20)...]	12.67	1590	0.23	14.43*	2056	1.88
Guaiol	12.74	1595	0.92	14.18*	2032	0.98
Eudesm-5-en-11-ol	12.82	1602	1.73	14.43*	2056	[1.88]
10-epi-γ-Eudesmol	12.94	1612	0.14	14.18*	2032	[0.98]
Neryl angelate?	13.07	1623	0.11			
γ-Eudesmol	13.12	1626	0.26	14.91	2103	0.27
Eudesmol analog?	13.15	1629	0.89			
Hinesol	13.19	1633	0.05	15.08*	2119	[0.17]
Unknown [m/z 59, 161 (53), 81 (47), 204 (40), 107 (36), 95 (33), 93 (33)... 222 (1)]	13.23	1636	0.07	14.47	2060	0.06
β-Eudesmol	13.32	1643	0.62	15.44*	2156	0.66
α-Eudesmol	13.36	1647	0.41	15.38	2149	0.40
Bulnesol	13.55	1662	0.20	15.33	2145	0.21
β-Bisabolol	13.61	1667	0.12	14.81*	2092	0.15
α-Bisabolol	13.78	1681	0.08	15.44*	2156	[0.66]
Neryl 4-methylvalerate?	13.85	1687	0.02	13.50	1968	0.03
Unknown [m/z 196, 69 (62), 109 (58), 41 (54), 139 (41)... 249 (21)..]	13.90	1692	0.04	14.70	2082	0.14
Geranyl 4-methylvalerate?	14.24	1720	0.10	13.85	2000	0.03
Unknown [m/z 43, 69 (32), 198 (29), 41 (27), 93 (26)... 202 (20)..]	14.38	1732	0.08			
Unknown [m/z 82, 125 (40), 41 (35),	14.43	1736	0.04	15.90	2202	0.02

69 (31), 67 (27)... 236? (t)]					
Unknown [m/z 136, 121 (74), 135 (55), 218 (36), 148 (33), 40 (42)... 236? (1)]	14.59	1750	0.01		
Unknown [m/z 109, 138 (71), 82 (42), 123 (41), 127 (38)...]	14.62	1753	0.05		
Unknown [m/z 109, 127 (46), 138 (45), 82 (34), 81 (31)... 236? (t)]	14.71*	1761	0.07	19.62	2613
Unknown [m/z 96, 41 (29), 178 (28), 43 (27)... 236 (2)]	14.71*	1761	[0.07]	17.19	2338
Unknown [m/z 109, 138 (75), 123 (45), 127 (42), 81 (30)...]	14.82	1770	0.06	19.66	2618
Unknown [m/z 98, 82 (77), 83 (42), 137 (37), 41 (28)... 238 (1)]	14.90	1778	0.09		
Unknown [m/z 43, 82 (69), 41 (66), 93 (62), 96 (55), 55 (49), 67 (45), 154 (44)...]	15.19	1803	0.02		
Phytone	15.69	1848	0.07	14.81*	2092
Unknown [m/z 81, 69 (80), 137 (48), 95 (35), 41 (35), 98 (33)...]	21.68	2465	0.04		
<b>Total identified</b>	<b>94.61%</b>		<b>93.34%</b>		
<b>Total reported</b>	<b>95.82%</b>		<b>93.71%</b>		

\*: 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