CERTIFICATE OF ANALYSIS - GC PROFILING

SAMPLE IDENTIFICATION

Internal code : 24F12-PTH03
Customer Identification : Black Pepper - India - B40111R
Type : Essential Oil
Source : *Piper nigrum*
Customer : Plant Therapy

Checked an approved by:

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

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ISO 17025:2017 CERTIFIED METHOD
MÉTHODE CERTIFIÉE

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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 : 2024-06-18

PHYSICOCHEMICAL DATA

Refractive index : 1.4844 ± 0.0003 (20 ℃)

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

Analyst : Cindy Caron B. Sc.

Date : 2024-06-14

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
Toluene	tr	Simple phenolic
Tricyclene	tr	Monoterpene
α-Thujene	0.95	Monoterpene
α-Pinene	8.07	Monoterpene
Camphene	0.23	Monoterpene
α-Fenchene	0.01	Monoterpene
3,7,7-Trimethylcyclohepta-1,3,5-triene	0.03	Monoterpene
Sabinene	9.97	Monoterpene
β-Pinene	7.98	Monoterpene
Dehydro-1,8-cineole	0.01	Monoterpenic ether
Myrcene	1.47	Monoterpene
2-Carene	0.01	Monoterpene
α-Phellandrene	0.84	Monoterpene
Pseudolimonene	0.03	Monoterpene
Unknown	0.02	Monoterpene
Δ3-Carene	6.80	Monoterpene
α-Terpinene	0.10	Monoterpene
Carvomenthene	0.02	Aliphatic alcohol
meta-Cymene	0.02	Monoterpene
para-Cymene	0.78	Monoterpene
Limonene	14.30	Monoterpene
β-Phellandrene	1.81	Monoterpene
(*Z*)-β-Ocimene	0.03	Monoterpene
(*E*)-β-Ocimene	0.17	Monoterpene
Unknown	0.01	Monoterpene
Unknown	0.01	Monoterpene
γ-Terpinene	0.23	Monoterpene
cis-Sabinene hydrate	0.20	Monoterpenic alcohol
Isoterpinolene	0.10	Monoterpene
para-Cymenene	0.02	Monoterpene
Terpinolene	0.34	Monoterpene
para-Cresol	0.02	Simple phenolic
α-Pinene oxide	0.02	Monoterpenic ether
trans-Sabinene hydrate	0.12	Monoterpenic alcohol
Rosefuran	0.02	Monoterpenic ether
Linalool	0.41	Monoterpenic alcohol
Verbenol analog?	0.01	Monoterpenic alcohol
Unknown	0.01	Unknown
trans-para-Mentha-2,8-dien-1-ol	0.04	Monoterpenic alcohol
cis-para-Menth-2-en-1-ol	0.02	Monoterpenic alcohol

cis-Limonene oxide	0.03	Monoterpenic ether
trans-Limonene oxide	0.01	Monoterpenic ether
cis-para-Mentha-2,8-dien-1-ol	0.06	Monoterpenic alcohol
trans-para-Menth-2-en-1-ol	0.03	Monoterpenic alcohol
trans-Verbenol	0.04	Monoterpenic alcohol
meta-Mentha-4,6-dien-8-ol	0.01	Monoterpenic alcohol
1,4-Dimethyl-4-acetylcyclohexene	0.02	Monoterpenic ketone
Sabinaketone	0.01	Normonoterpenic ketone
Pinocarvone	0.01	Monoterpenic ketone
cis-Sabinol	0.03	Monoterpenic alcohol
Terpinen-4-ol	0.60	Monoterpenic alcohol
Cryptone	0.05	Normonoterpenic ketone
meta-Cymen-8-ol	0.02	Monoterpenic alcohol
para-Cymen-8-ol	0.04	Monoterpenic alcohol
Unknown	0.01	Unknown
Myrtenal	0.02	Monoterpenic aldehyde
α-Terpineol	0.09	Monoterpenic alcohol
Unknown	0.05	Oxygenated monoterpene
trans-Isopiperitenol	0.01	Monoterpenic alcohol
cis-α-Phellandrene epoxide (iPr vs Me)	0.03	Monoterpenic ether
Unknown	0.01	Oxygenated monoterpene
Verbenone	0.02	Monoterpenic ketone
Car-2-en-4-one?	0.02	Monoterpenic ketone
trans-Carveol	0.04	Monoterpenic alcohol
cis-Carveol	0.02	Monoterpenic alcohol
Cuminal	0.03	Monoterpenic aldehyde
Carvone	0.02	Monoterpenic ketone
Car-3-en-2-one	0.01	Monoterpenic ketone
Unknown	0.04	Unknown
Methyl citronellate	0.01	Monoterpenic ester
trans-Ascaridole glycol	0.02	Monoterpenic alcohol
Unknown	0.01	Monoterpenic ester
Car-3-en-5-one	0.04	Monoterpenic ketone
para-Menth-5-en-1,2-diol isomer II	0.02	Monoterpenic alcohol
para-Menth-5-en-1,2-diol isomer III	0.08	Monoterpenic alcohol
Unknown	0.02	Oxygenated monoterpene
Methyl geranate	0.02	Monoterpenic ester
Bicycloelemene	0.05	Sesquiterpene
δ-Elemene isomer	0.02	Sesquiterpene
δ-Elemene	2.35	Sesquiterpene
α-Cubebene	0.31	Sesquiterpene
Cyclosativene I	0.14	Sesquiterpene
Cyclosativene II	0.03	Sesquiterpene
α-Ylangene	0.01	Sesquiterpene
α-Copaene	4.55	Sesquiterpene

cis-β-Elemene	0.02	Sesquiterpene
β-Cubebene	0.38	Sesquiterpene
β-Elemene	0.41	Sesquiterpene
Isocaryophyllene	0.03	Sesquiterpene
α-Gurjunene	0.13	Sesquiterpene
α-Santalene	0.01	Sesquiterpene
β-Caryophyllene	22.84	Sesquiterpene
β-Copaene	0.24	Sesquiterpene
γ-Elemene	0.01	Sesquiterpene
α-Guaiene	[0.08]	Sesquiterpene
trans-α-Bergamotene	[0.08]	Sesquiterpene
Unknown	0.01	Sesquiterpene
trans-Muurola-3,5-diene	0.04	Sesquiterpene
α-Humulene	1.17	Sesquiterpene
all*o*-Aromadendrene	0.05	Sesquiterpene
β-Santalene	0.02	Sesquiterpene
(*E*)-β-Farnesene	0.16	Sesquiterpene
trans-Cadina-1(6),4-diene	0.06	Sesquiterpene
α-Amorphene	[0.17]	Sesquiterpene
γ-Muurolene	[0.17]	Sesquiterpene
Germacrene D	0.41	Sesquiterpene
β-Selinene	0.30	Sesquiterpene
Bicyclogermacrene	0.19	Sesquiterpene
epi-Cubebol	0.14	Sesquiterpenic alcohol
α-Selinene	0.18	Sesquiterpene
Viridiflorene	0.13	Sesquiterpene
α-Muurolene	0.59	Sesquiterpene
Cubebol	0.17	Sesquiterpenic alcohol
γ-Cadinene	0.05	Sesquiterpene
β-Bisabolene	1.97	Sesquiterpene
(3*E*,6*E*)-α-Farnesene	0.07	Sesquiterpene
7-epi-α-Selinene	0.13	Sesquiterpene
δ-Cadinene	1.62	Sesquiterpene
trans-Calamenene	0.16	Sesquiterpene
trans-Cadina-1,4-diene	0.07	Sesquiterpene
α-Cadinene	0.01	Sesquiterpene
α-Calacorene	0.05	Sesquiterpene
(*E*)-α-Bisabolene	0.04	Sesquiterpene
Isocaryophyllene epoxide B	0.15	Sesquiterpenic ether
Germacrene B	0.06	Sesquiterpene
(*E*)-Nerolidol	0.05	Sesquiterpenic alcohol
Caryophyllene oxide isomer	0.30	Sesquiterpenic ether
Caryophyllene oxide	1.22	Sesquiterpenic ether
Unknown	0.02	Oxygenated sesquiterpene
Humulene epoxide I	0.02	Sesquiterpenic ether

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Humulene epoxide II	0.08	Sesquiterpenic ether
α-Corocalene	0.02	Sesquiterpene
Unknown	0.04	Oxygenated sesquiterpene
Alismol	0.21	Sesquiterpenic alcohol
Caryophylladienol II	0.06	Sesquiterpenic alcohol
Isospathulenol	0.04	Sesquiterpenic alcohol
τ-Muurolol	0.07	Sesquiterpenic alcohol
α-Muurolol	0.19	Sesquiterpenic alcohol
α-Cadinol	0.03	Sesquiterpenic alcohol
cis-Calamenen-10-ol	0.03	Sesquiterpenic alcohol
trans-Calamenen-10-ol	0.01	Sesquiterpenic alcohol
(3*Z*)-Caryophylla-3,8(13)-dien-5β-ol	0.02	Sesquiterpenic alcohol
Dehydrojinkoh-eremol	0.02	Sesquiterpenic alcohol
α-Bisabolol	0.01	Sesquiterpenic alcohol
Phytone	0.01	Terpenic ketone
meta-Camphorene	0.01	Diterpene
para-Camphorene	0.01	Diterpene
Consolidated total	**99.02**	

tr: The compound has been detected below 0.005% of the total signal
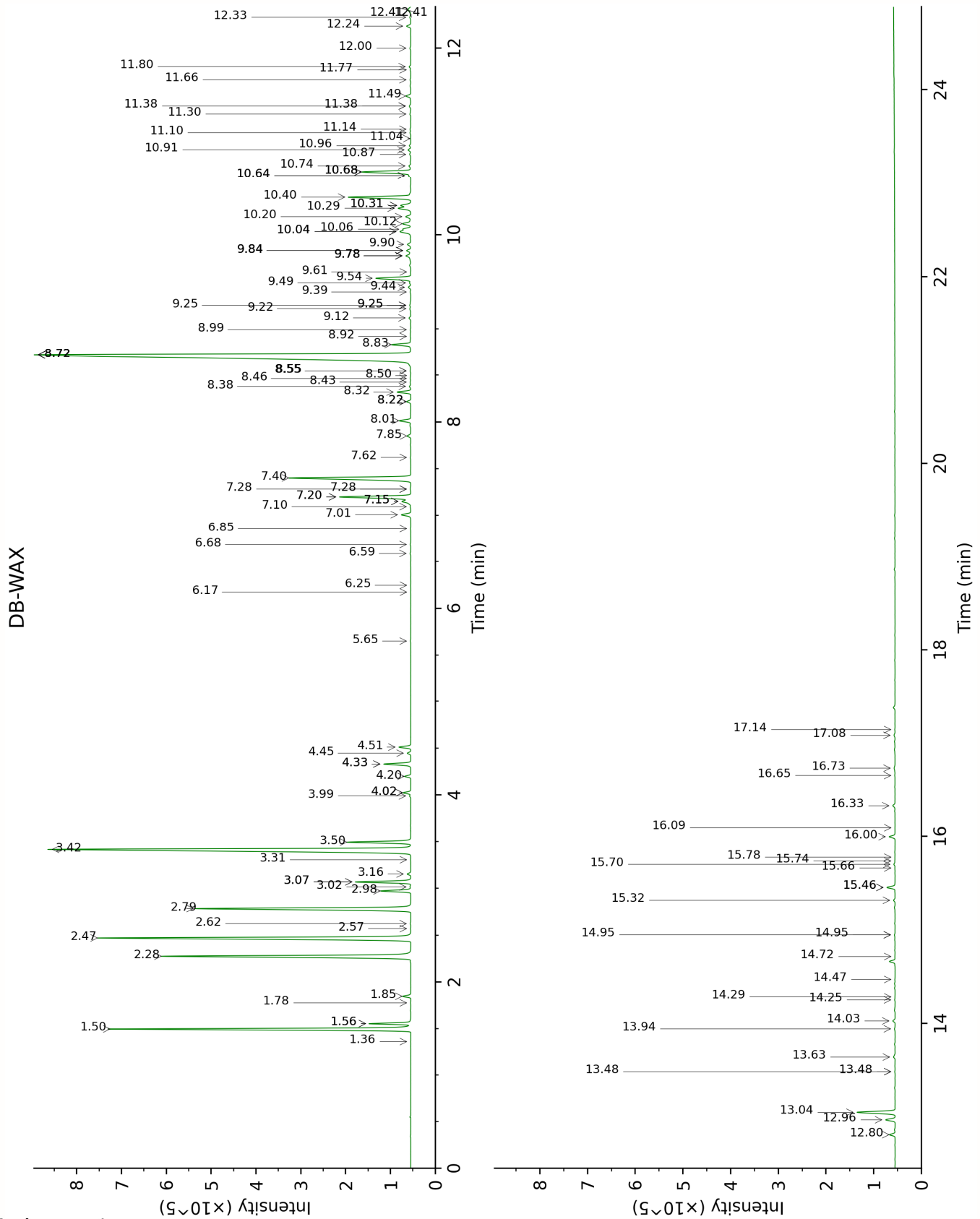
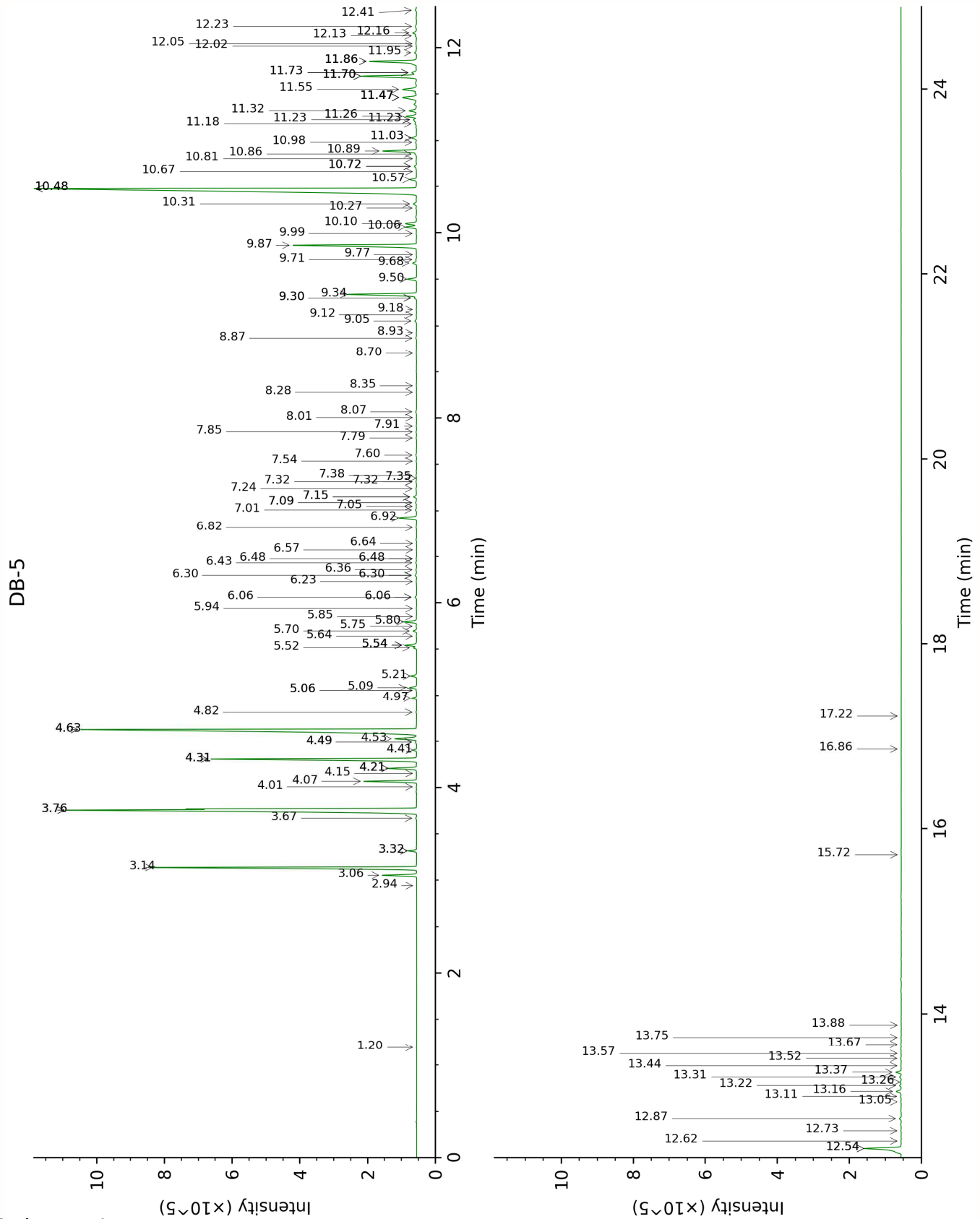Note: no correction factor was applied

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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DB-WAX

Top chromatogram (Time 0–12 min):

12.41 12.41
12.33
12.24
12.00
11.80
11.77
11.66
11.49
11.38
11.38
11.30
11.14
11.10
11.04
10.96
10.91
10.87
10.74
10.68
10.64
10.40
10.31
10.29
10.20
10.12
10.06
10.04
9.90
9.84
9.78
9.61
9.54
9.49
9.44
9.39
9.25
9.25
9.22
9.12
8.99
8.92
8.83
8.72
8.55
8.50
8.46
8.43
8.38
8.32
8.22
8.01
7.85
7.62
7.40
7.28
7.28
7.20
7.15
7.10
7.01
6.85
6.68
6.59
6.25
6.17
5.65
4.51
4.45
4.33
4.20
4.02
3.99
3.50
3.42
3.31
3.16
3.07
3.02
2.98
2.79
2.62
2.57
2.47
2.28
1.85
1.78
1.56
1.50
1.36

Time (min)

Intensity (×10^5)

Bottom chromatogram (Time 12–24 min):

17.14
17.08
16.65
16.73
16.33
16.09
16.00
15.78
15.74
15.70
15.66
15.46
15.32
14.95
14.95
14.72
14.47
14.29
14.25
14.03
13.94
13.63
13.48
13.48
13.04
12.96
12.80

Time (min)

Intensity (×10^5)

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Essential Oil, *Piper nigrum*
Internal code: 24F12-PTH03

Black Pepper - India - B40111R

Report prepared for:
Plant Therapy

DB-5

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FULL ANALYSIS DATA

Toluene	Column DB-WAX			Column DB-5		
	1.56*	996.7	[0.99]	1.20	758.2	tr
Tricyclene	1.36	969.1	tr	2.94	918.7	tr
α-Thujene	1.56*	996.7	[0.99]	3.06	926.2	0.95
α-Pinene	1.50	990.0	8.00	3.14	931.7	8.07
Camphene	1.85	1024.8	0.23	3.32*	943.6	[0.25]
α-Fenchene	1.78	1018.0	0.01	3.32*	943.6	[0.25]
3,7,7-Trimethylcyclohepta-1,3,5-triene	3.07*	1131.6	[1.53]	3.67	966.8	0.03
Sabinene	2.47	1084.2	9.97	3.76*	972.6	[17.95]
β-Pinene	2.28	1065.7	7.98	3.76*	972.6	[17.95]
Dehydro-1,8-cineole	3.31	1149.4	0.01	4.01	989.2	0.01
Myrcene	3.07*	1131.6	[1.53]	4.07	993.2	1.47
2-Carene	2.57	1093.7	0.01	4.15	998.8	0.01
α-Phellandrene	2.98	1124.2	0.84	4.21*	1002.5	[0.85]
Pseudolimonene	3.02	1127.5	0.03	4.21*	1002.5	[0.85]
Unknown PINI II [m/z 91, 92 (53), 77 (19), 41 (14)... 134 (5)]				4.31*	1008.9	[6.81]
Δ3-Carene	2.79	1110.0	6.80	4.31*	1008.9	[6.81]
α-Terpinene	3.16	1137.9	0.11	4.41	1014.9	0.10
Carvomenthene	2.62	1097.7	0.02	4.49*	1020.4	[0.04]
meta-Cymene	4.33*	1224.0	[0.81]	4.49*	1020.4	[0.04]
para-Cymene	4.33*	1224.0	[0.81]	4.53	1022.6	0.78
Limonene	3.42	1157.8	14.30	4.63*	1028.8	[16.08]
β-Phellandrene	3.50	1163.6	1.81	4.63*	1028.8	[16.08]
(*Z*)-β-Ocimene	3.99	1200.1	0.04	4.82	1040.6	0.03
(*E*)-β-Ocimene	4.20	1214.8	0.18	4.97	1050.3	0.17
Unknown CUSE I [m/z 93, 91 (54), 92 (31), 77 (29), 79 (17), 43 (13), 41 (10), 136 (9)]	4.02*	1202.5	[0.23]	5.06*	1055.8	[0.02]
Unknown MYGA II [m/z 41, 69 (97), 95 (33), 67 (31), 53 (18)...]	6.18	1357.1	0.01	5.06*	1055.8	[0.02]
γ-Terpinene	4.02*	1202.5	[0.23]	5.09	1057.6	0.23
cis-Sabinene hydrate	7.15*	1428.1	[0.36]	5.21	1065.5	0.20
Isoterpinolene	4.45	1232.1	0.11	5.52	1084.6	0.10
para-Cymenene	6.59	1386.7	0.02	5.54*	1086.4	[0.36]
Terpinolene	4.51	1236.6	0.34	5.54*	1086.4	[0.36]
para-Cresol	14.25	2017.6	0.02	5.54*	1086.4	[0.36]

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α-Pinene oxide	5.65	1319.7	0.02	5.64	1092.5	0.02
trans-Sabinene hydrate	8.22*	1507.5	[0.13]	5.70	1096.0	0.12
Rosefuran	6.25	1362.4	tr	5.75	1099.2	0.02
Linalool	8.32	1515.4	0.41	5.80	1102.2	0.41
Verbenol analog?	8.55*	1532.8	[0.02]	5.85	1105.8	0.01
Unknown BORI V [m/z 94, 59 (83), 43 (81), 95 (56), 109 (50), 79 (50), 91 (40)...]				5.94	1111.3	0.01
trans-para-Mentha-2,8-dien-1-ol	9.22	1584.4	0.04	6.06*	1119.1	[0.06]
cis-para-Menth-2-en-1-ol	8.43	1523.6	0.02	6.06*	1119.1	[0.06]
cis-Limonene oxide	6.68	1393.6	0.02	6.23	1129.9	0.03
trans-Limonene oxide	6.85	1406.2	0.01	6.30*	1134.2	[0.06]
cis-para-Mentha-2,8-dien-1-ol	9.78*	1629.3	[0.22]	6.30*	1134.2	[0.06]
trans-para-Menth-2-en-1-ol	9.25*	1587.1	[0.06]	6.36	1138.0	0.03
trans-Verbenol	9.78*	1629.3	[0.22]	6.43	1142.9	0.04
meta-Mentha-4,6-dien-8-ol	9.61	1615.5	0.01	6.48*	1145.6	[0.02]
1,4-Dimethyl-4-acetylcyclohexene	7.62	1462.8	0.02	6.48*	1145.6	[0.02]
Sabinaketone	8.99	1567.2	0.02	6.57	1151.8	0.01
Pinocarvone	8.22*	1507.5	[0.13]	6.64	1156.2	0.01
cis-Sabinol	11.14	1740.4	0.03	6.82	1167.3	0.03
Terpinen-4-ol	8.83	1554.9	0.59	6.92	1174.2	0.60
Cryptone	9.44	1602.4	0.08	7.01	1179.7	0.05
meta-Cymen-8-ol	11.77	1793.9	0.01	7.05	1182.2	0.02
para-Cymen-8-ol	11.80	1796.9	0.04	7.09*	1184.7	[0.05]
Unknown UNKN VI [m/z 43, 135 (73), 59 (46), 93 (39), 91 (35), 81 (32)...]				7.09*	1184.7	[0.05]
Myrtenal	8.92	1561.7	0.02	7.15*	1188.8	[0.11]
α-Terpineol	10.04*	1650.0	[0.45]	7.15*	1188.8	[0.11]
Unknown PINI VI [m/z 67, 41 (99), 109 (98), 43 (97), 81 (94), 91 (93)...152 (12)]				7.24	1194.4	0.05
trans-Isopiperitenol	10.68*	1702.1	[1.63]	7.32*	1199.2	[0.03]
cis-α-Phellandrene	11.30	1754.1	0.03	7.32*	1199.2	[0.03]

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Compound						
epoxide (iPr vs Me)						
Unknown PINI IV [m/z 109, 91 (100), 81 (88), 94 (75), 119 (74), 96 (73), 41 (63)... 150 (2)]	11.10	1737.4	0.03	7.35	1201.7	0.01
Verbenone	9.84*	1633.8	[0.15]	7.38	1203.5	0.02
Car-2-en-4-one?	9.78*	1629.3	[0.22]	7.54	1213.8	0.02
trans-Carveol	11.66	1784.8	0.02	7.60	1218.2	0.04
cis-Carveol	12.00	1814.2	0.03	7.79	1230.5	0.02
Cuminal	10.87	1717.8	0.04	7.85	1235.1	0.03
Carvone	10.29*†	1670.0	[0.44]	7.91	1239.1	0.02
Car-3-en-2-one	10.64*	1698.7	[0.06]	8.01	1245.3	0.01
Unknown CALU IV [m/z 43, 97 (69), 107 (46), 41 (28), 55 (21), 109 (20)...]	11.38*	1761.2	[0.06]	8.07	1249.5	0.04
Methyl citronellate	8.46	1526.5	0.02	8.28	1263.6	0.01
trans-Ascaridole glycol	14.47	2038.3	0.01	8.35	1268.3	0.02
Unknown SCMO II [m/z 93, 43 (60), 108 (58), 69 (36), 41 (35)... 150 (5), 184 (1)]	13.48*	1945.7	[0.02]	8.70	1291.9	0.01
Car-3-en-5-one	12.33	1843.0	0.03	8.87	1303.1	0.04
para-Menth-5-en-1,2-diol isomer II	14.72	2061.6	0.01	8.93	1307.1	0.02
para-Menth-5-en-1,2-diol isomer III	15.46*	2133.4	[0.26]	9.05	1316.1	0.08
Unknown MISC XI [m/z 91, 79 (94), 77 (72), 41 (37), 93 (31)... 152 (1)]				9.12	1320.9	0.02
Methyl geranate	10.06	1652.0	0.23	9.18	1324.9	0.02
Bicycloelemene	7.28*	1437.9	[0.03]	9.30*	1333.6	[0.07]
δ-Elemene isomer	7.10	1424.0	0.02	9.30*	1333.6	[0.07]
δ-Elemene	7.20*	1431.7	[2.37]	9.34	1336.3	2.35
α-Cubebene	7.01	1417.6	0.32	9.50	1347.9	0.31
Cyclosativene I	7.15*	1428.1	[0.36]	9.68	1360.1	0.14
Cyclosativene II	7.20*	1431.7	[2.37]	9.71	1362.7	0.03
α-Ylangene	7.28*	1437.9	[0.03]	9.77	1366.5	0.01
α-Copaene	7.40	1446.7	4.53	9.87	1373.5	4.55
cis-β-Elemene	8.55*	1532.8	[0.02]	9.99	1382.5	0.02
β-Cubebene	8.01	1491.8	0.37	10.06	1387.4	0.38
β-Elemene	8.72*	1546.0	[23.41]	10.10	1390.0	0.41

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Compound						
Isocaryophyllene	8.38	1520.0	0.04	10.27	1401.8	0.03
α-Gurjunene	7.85	1479.7	0.13	10.31	1404.9	0.13
α-Santalene	8.50	1529.0	0.01	10.48*	1417.2	[22.85]
β-Caryophyllene	8.72*	1546.0	[23.41]	10.48*	1417.2	[22.85]
β-Copaene	8.72*	1546.0	[23.41]	10.58	1424.5	0.24
γ-Elemene	9.25*	1587.1	[0.06]	10.67	1431.4	0.01
α-Guaiene	8.72*	1546.0	[23.41]	10.72*	1435.6	[0.08]
trans-α-Bergamotene	8.72*	1546.0	[23.41]	10.72*	1435.6	[0.08]
Unknown ZIOF XV [m/z 139, 69 (60), 41 (51), 43 (47), 119 (41)... 204 (1)]				10.81	1441.7	0.01
trans-Muurola-3,5-diene	9.12	1576.8	0.06	10.86	1445.5	0.04
α-Humulene	9.54	1610.1	1.21	10.89	1448.0	1.17
allo-Aromadendrene	9.25*	1587.1	[0.06]	10.98	1454.9	0.05
β-Santalene	9.39	1598.3	0.02	11.03*	1458.5	[0.18]
(*E*)-β-Farnesene	9.78*	1629.3	[0.22]	11.03*	1458.5	[0.18]
trans-Cadina-1(6),4-diene	9.49	1606.2	0.04	11.18	1469.8	0.06
α-Amorphene	9.84*	1633.8	[0.15]	11.23*	1473.1	[0.17]
γ-Muurolene	9.84*	1633.8	[0.15]	11.23*	1473.1	[0.17]
Germacrene D	10.04*	1650.0	[0.45]	11.26	1475.8	0.41
β-Selinene	10.12	1656.7	0.31	11.32	1480.3	0.30
Bicyclogermacrene	10.32*†	1672.3	[0.35]	11.47*	1490.9	[0.68]
epi-Cubebol	12.24	1834.8	0.14	11.47*	1490.9	[0.68]
α-Selinene	10.20	1662.8	0.18	11.47*	1490.9	[0.68]
Viridiflorene	9.90	1639.1	0.13	11.47*	1490.9	[0.68]
α-Muurolene	10.32*†	1672.3	[0.35]	11.55	1497.4	0.59
Cubebol	12.80	1884.4	0.17	11.70*	1508.3	[2.01]
γ-Cadinene	10.64*	1698.7	[0.06]	11.70*	1508.3	[2.01]
β-Bisabolene	10.40	1679.5	1.97	11.70*	1508.3	[2.01]
(3*E*,6*E*)-α-Farnesene	10.74	1707.5	0.07	11.73*	1511.3	[0.19]
7-epi-α-Selinene	10.68*	1702.1	[1.63]	11.73*	1511.3	[0.19]
δ-Cadinene	10.68*	1702.1	[1.63]	11.86*	1520.8	[1.79]
trans-Calamenene	11.49	1770.2	0.16	11.86*	1520.8	[1.79]
trans-Cadina-1,4-diene	10.92	1721.9	0.09	11.95	1528.1	0.07
α-Cadinene	11.04	1732.1	0.01	12.02	1533.7	0.01
α-Calacorene	12.41*	1849.8	[0.15]	12.05	1535.8	0.05
(*E*)-α-Bisabolene	10.96	1725.7	0.05	12.13	1542.4	0.04
Isocaryophyllene epoxide B	12.41*	1849.8	[0.15]	12.16	1544.9	0.15
Germacrene B	11.38*	1761.2	[0.06]	12.23	1550.4	0.06

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Compound	R.T.	R.I.	%	R.T.	R.I.	%
(*E*)-Nerolidol	14.03	1996.3	0.07	12.41	1564.4	0.05
Caryophyllene oxide isomer	12.96	1898.8	0.30	12.54*	1574.9	[1.70]
Caryophyllene oxide	13.04	1906.2	1.22	12.54*	1574.9	[1.70]
Unknown MECA III [m/z 161, 105 (84), 43 (80), 119 (72), 93 (62), 121 (54)... 204 (38), 222 (2)]	14.28	2020.6	0.01	12.62	1581.1	0.02
Humulene epoxide I	13.48*	1945.7	[0.02]	12.73	1589.8	0.02
Humulene epoxide II	13.64	1960.0	0.07	12.87	1600.2	0.08
α-Corocalene	13.94	1988.3	0.03	13.05	1614.9	0.02
Unknown MECA IV [m/z 161, 43 (74), 105 (57), 121 (45), 81 (43)... 204 (31)...]	14.95*	2083.5	[0.03]	13.11	1619.8	0.04
Alismol	16.00	2186.8	0.19	13.16	1624.3	0.21
Caryophylladienol II	16.33	2220.6	0.09	13.22	1629.6	0.06
Isospathulenol	15.70	2157.6	0.05	13.26	1632.6	0.04
τ-Muurolol	15.32	2119.9	0.05	13.32	1637.1	0.07
α-Muurolol	15.46*	2133.4	[0.26]	13.37	1641.5	0.19
α-Cadinol	15.78	2165.1	0.01	13.44	1647.2	0.03
cis-Calamenen-10-ol	16.73	2261.6	0.05	13.52	1653.9	0.03
trans-Calamenen-10-ol	17.08	2298.1	0.04	13.57	1658.3	0.01
(3*Z*)-Caryophylla-3,8(13)-dien-5β-ol	17.14	2304.6	0.01	13.67	1666.5	0.02
Dehydrojinkoh-eremol	16.65	2253.6	0.02	13.75	1672.8	0.02
α-Bisabolol	15.74	2161.1	0.01	13.88	1684.0	0.01
Phytone	14.95*	2083.5	[0.03]	15.72	1844.4	0.01
meta-Camphorene	15.66	2153.8	0.01	16.86	1950.0	0.01
para-Camphorene	16.09	2196.6	0.01	17.22	1983.9	0.01
Total reported		98.66%			99.01%	

*: 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

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