**Date :** March 13, 2019

# *Certificate of Analysis – GC Profiling*

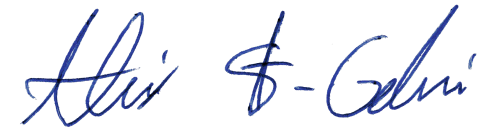
## *Sample identification*

**Internal code :** 19C04-PTH04-1-SCC
**Customer identification :** Organic Juniper Berry - Albania - J50102711R
**Type :** Essential oil
**Source :** *Juniperus communis*
**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 :** Benoit Roger, Ph. D.
**Analysis date :** March 12, 2019

Checked and approved by :



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

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Laboratoire PhytoChemia
628 Boulevard du Saguenay Ouest, Saguenay (Qc) G7J 1H4 | www.phytochemia.com

*PHYSICOCHEMICAL DATA*

**Physical aspect:** Clear liquid
**Refractive index:** 1.4740 ± 0.0003 (20 °C)

*ISO 8897:2010 - OIL OF JUNIPER BERRY*

| Compound | Min. % | Max. % | Observed % | Complies? |
|---|---|---|---|---|
| δ-Cadinene | 1.0 | 3.5 | 0.8 | No |
| Germacrene D | 1.0 | 5.0 | 4.5 | Yes |
| α-Humulene | 1.0 | 4.0 | 1.1 | Yes |
| β-Caryophyllene | 1.5 | 5.0 | 1.6 | Yes |
| Bornyl acetate | | 0.6 | 0.2 | Yes |
| Terpinen-4-ol | 1.0 | 6.0 | 1.3 | Yes |
| Limonene | 2.0 | 8.0 | 4.2 | Yes |
| Myrcene | 3.0 | 22.0 | 16.5 | Yes |
| β-Pinene | 1.0 | 12.0 | 2.1 | Yes |
| Sabinene | 4.0 | 20.0 | 17.4 | Yes |
| α-Pinene | 25.0 | 45.0 | 33.7 | Yes |
| **Refractive index** | 1.4700 | 1.4830 | 1.4740 | Yes |

*CONCLUSION*

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

*ANALYSIS SUMMARY*

| Identification | DB-5 (%) | DB-WAX (%) | Classe |
|---|---|---|---|
| Tricyclene | 0.07 | 0.08 | Monoterpene |
| α-Thujene | 1.72 | 1.73 | Monoterpene |
| α-Pinene | 33.71 | 33.56 | Monoterpene |
| Camphene | 0.24* | 0.21 | Monoterpene |
| α-Fenchene | [0.24]* | 0.03 | Monoterpene |
| Thuja-2,4(10)-diene | 0.01 | 17.38* | Monoterpene |
| meta-Cymene | 0.06 | 16.42* | Monoterpene |
| β-Pinene | 19.59* | 2.06 | Monoterpene |
| Sabinene | [19.59]* | [17.38]* | Monoterpene |
| Octen-3-ol | tr | 0.50* | Aliphatic alcohol |
| 6-Methyl-5-hepten-2-one | 0.01 | | Aliphatic ketone |
| Myrcene | 16.52 | [16.42]* | Monoterpene |
| 2-Carene | 0.01 | 0.01 | Monoterpene |
| Menthatriene isomer I | 0.08* | tr | Monoterpene |
| α-Phellandrene | [0.08]* | 0.06 | Monoterpene |
| Δ3-Carene | 0.13 | 0.12 | Monoterpene |
| α-Terpinene | 0.66* | 0.67* | Monoterpene |
| 1,4-Cineole | [0.66]* | [0.67]* | Monoterpenic ether |
| para-Cymene | 0.27 | 0.26 | Monoterpene |
| β-Phellandrene | 4.71* | 0.43* | Monoterpene |
| 1,8-Cineole | [4.71]* | [0.43]* | Monoterpenic ether |
| Limonene | [4.71]* | 4.22 | Monoterpene |
| (*Z*)-β-Ocimene | 0.01 | 1.16* | Monoterpene |
| (*E*)-β-Ocimene | 0.02 | 0.02 | Monoterpene |
| γ-Terpinene | 1.17 | [1.16]* | Monoterpene |
| *cis*-Sabinene hydrate | 0.14 | [0.50]* | Monoterpenic alcohol |
| *cis*-Linalool oxide (fur.) | 0.01 | 0.01 | Monoterpenic alcohol |
| Terpinolene | 1.25* | 1.19 | Monoterpene |
| para-Cymenene | [1.25]* | 0.01 | Monoterpene |
| 6,7-Epoxymyrcene | 0.01 | 0.02 | Monoterpenic ether |
| *trans*-Sabinene hydrate | 0.11 | 0.10 | Monoterpenic alcohol |
| Linalool | 0.07 | 0.11* | Monoterpenic alcohol |
| Nonanal | 0.02 | 0.03 | Aliphatic aldehyde |
| endo-Fenchol | 0.01 | 0.05* | Monoterpenic alcohol |
| *cis*-para-Menth-2-en-1-ol | 0.07 | [0.11]* | Monoterpenic alcohol |
| α-Campholenal | 0.02 | 0.01 | Monoterpenic aldehyde |
| *trans*-Pinocarveol | 0.03 | 0.03 | Monoterpenic alcohol |
| *cis*-Verbenol | 0.05 | 0.01 | Monoterpenic alcohol |
| *trans*-Verbenol | 0.04 | 0.06 | Monoterpenic alcohol |
| meta-Mentha-4,6-dien-8-ol | 0.01 | 1.12* | Monoterpenic alcohol |
| Citronellal | 0.02 | 0.01 | Monoterpenic aldehyde |
| Borneol | 0.03 | 0.16* | Monoterpenic alcohol |
| α-Phellandren-8-ol | 0.01 | 0.67* | Monoterpenic alcohol |
| Isopinocamphone | 0.02 | 0.06* | Monoterpenic ketone |
| Terpinen-4-ol | 1.32 | 1.32 | Monoterpenic alcohol |
| para-Cymen-8-ol | 0.04 | 0.03 | Monoterpenic alcohol |
| Myrtenal | 0.13* | 0.01 | Monoterpenic aldehyde |
| α-Terpineol | [0.13]* | [0.16]* | Monoterpenic alcohol |

| | | | |
|---|---|---|---|
| Myrtenol | 0.06 | 0.06 | Monoterpenic alcohol |
| Verbenone | 0.03 | 0.45* | Monoterpenic ketone |
| *trans*-Carveol | 0.02 | 0.01 | Monoterpenic alcohol |
| Citronellol | 0.05 | 0.06 | Monoterpenic alcohol |
| Thymol methyl ether | 0.05 | 0.05 | Monoterpenic ether |
| Carvacrol methyl ether | 0.01 | 0.08* | Monoterpenic ether |
| Piperitone | 0.01 | 4.60* | Monoterpenic ketone |
| Geraniol | 0.01 | 0.01 | Monoterpenic alcohol |
| Methyl citronellate | 0.04 | 0.04 | Monoterpenic ester |
| Geranial | 0.01 | [0.67]* | Monoterpenic aldehyde |
| Bornyl acetate | 0.18 | 0.20 | Monoterpenic ester |
| 2-Undecanone | 0.01 | [0.08]* | Aliphatic ketone |
| Thymol | 0.03 | 0.04* | Monoterpenic alcohol |
| Myrtenyl acetate | 0.03 | [0.45]* | Monoterpenic ester |
| Terpinyl acetate analog | 0.02 | [0.45]* | Monoterpenic ester |
| α-Cubebene | 0.44* | [0.50]* | Sesquiterpene |
| α-Terpinyl acetate | [0.44]* | 0.11 | Monoterpenic ester |
| α-Ylangene | 0.02 | 0.02 | Sesquiterpene |
| α-Copaene | 0.18 | 0.18 | Sesquiterpene |
| *cis*-β-Elemene | 0.04 | [0.05]* | Sesquiterpene |
| β-Cubebene | 0.05 | 0.06 | Sesquiterpene |
| β-Elemene | 0.92 | 2.45* | Sesquiterpene |
| Sibirene | 0.10* | 0.07 | Sesquiterpene |
| Longifolene | [0.10]* | 0.06 | Sesquiterpene |
| α-Gurjunene | 0.02 | [0.06]* | Sesquiterpene |
| β-Caryophyllene | 1.57 | [2.45]* | Sesquiterpene |
| β-Copaene | 0.07* | [2.45]* | Sesquiterpene |
| *cis*-Thujopsene | [0.07]* | 0.04 | Sesquiterpene |
| γ-Elemene | 0.26 | 0.26 | Sesquiterpene |
| α-Himachalene | 0.02 | 0.02 | Sesquiterpene |
| α-Humulene | 1.12 | [1.12]* | Sesquiterpene |
| (*E*)-β-Farnesene | 0.42* | [0.45]* | Sesquiterpene |
| allo-Aromadendrene | [0.42]* | 0.03 | Sesquiterpene |
| β-Acoradiene | [0.42]* | 0.07 | Sesquiterpene |
| 10-epi-β-Acoradiene | 0.03* | [0.45]* | Sesquiterpene |
| *trans*-Cadina-1(6),4-diene | [0.03]* | [1.12]* | Sesquiterpene |
| Germacrene D | 4.69* | [4.60]* | Sesquiterpene |
| γ-Muurolene | [4.69]* | 0.19 | Sesquiterpene |
| β-Selinene | 0.18 | 0.21 | Sesquiterpene |
| γ-Amorphene | 0.06 | [4.60]* | Sesquiterpene |
| α-Selinene | 0.68* | 0.19 | Sesquiterpene |
| Bicyclogermacrene | [0.68]* | [0.67]* | Sesquiterpene |
| α-Muurolene | 0.64 | [0.67]* | Sesquiterpene |
| 1,2-Dihydrocuparene | [0.64]* | 0.14 | Sesquiterpene |
| Germacrene A | [0.64]* | [0.74]* | Sesquiterpene |
| γ-Cadinene | 0.33 | 0.74 | Sesquiterpene |
| *trans*-Calamenene | 0.74* | 0.02 | Sesquiterpene |
| δ-Cadinene | [0.74]* | 0.78 | Sesquiterpene |
| Selina-4(15),7(11)-diene | 0.06 | 0.06 | Sesquiterpene |
| α-Cadinene | 0.06* | 0.02 | Sesquiterpene |
| (*E*)-γ-Bisabolene | [0.06]* | [0.74]* | Sesquiterpene |
| Selina-3,7(11)-diene | 0.04 | 0.03 | Sesquiterpene |

| | | | |
|---|---|---|---|
| Germacrene B | 2.46 | 2.50 | Sesquiterpene |
| Caryophyllenyl alcohol | 0.02 | 0.17* | Sesquiterpenic alcohol |
| Germacrene D-4-ol | 0.22* | [0.17]* | Sesquiterpenic alcohol |
| Spathulenol | [0.22]* | 0.07 | Sesquiterpenic alcohol |
| Caryophyllene oxide | 0.03 | 0.03 | Sesquiterpenic ether |
| Humulene epoxide II | 0.02 | 0.02 | Sesquiterpenic ether |
| 10-epi-Cubenol | 0.02 | 0.05 | Sesquiterpenic alcohol |
| τ-Muurolol | 0.08* | [0.04]* | Sesquiterpenic alcohol |
| τ-Cadinol | [0.08]* | 0.06 | Sesquiterpenic alcohol |
| α-Muurolol | 0.03 | 0.01 | Sesquiterpenic alcohol |
| α-Cadinol | 0.07 | 0.19* | Sesquiterpenic alcohol |
| meta-Camphorene | 0.12 | [0.19]* | Diterpene |
| Trachylobane? | 0.04 | 0.04 | Diterpene |
| para-Camphorene | 0.04 | 0.04 | Diterpene |
| ar-Abietatriene | 0.02 | 0.02 | Diterpene |
| **Total identified** | **98.86%** | **98.46%** | |

*: 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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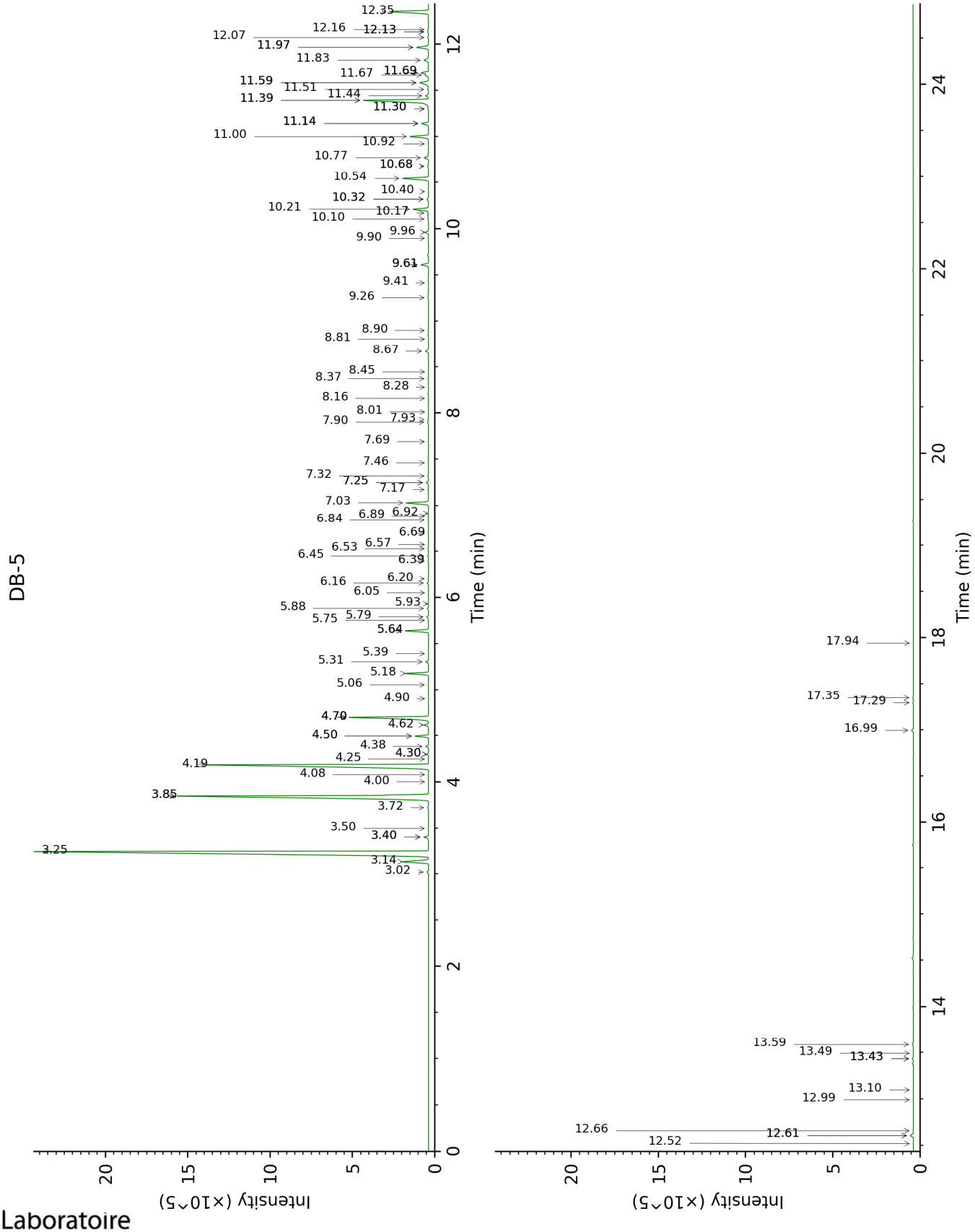
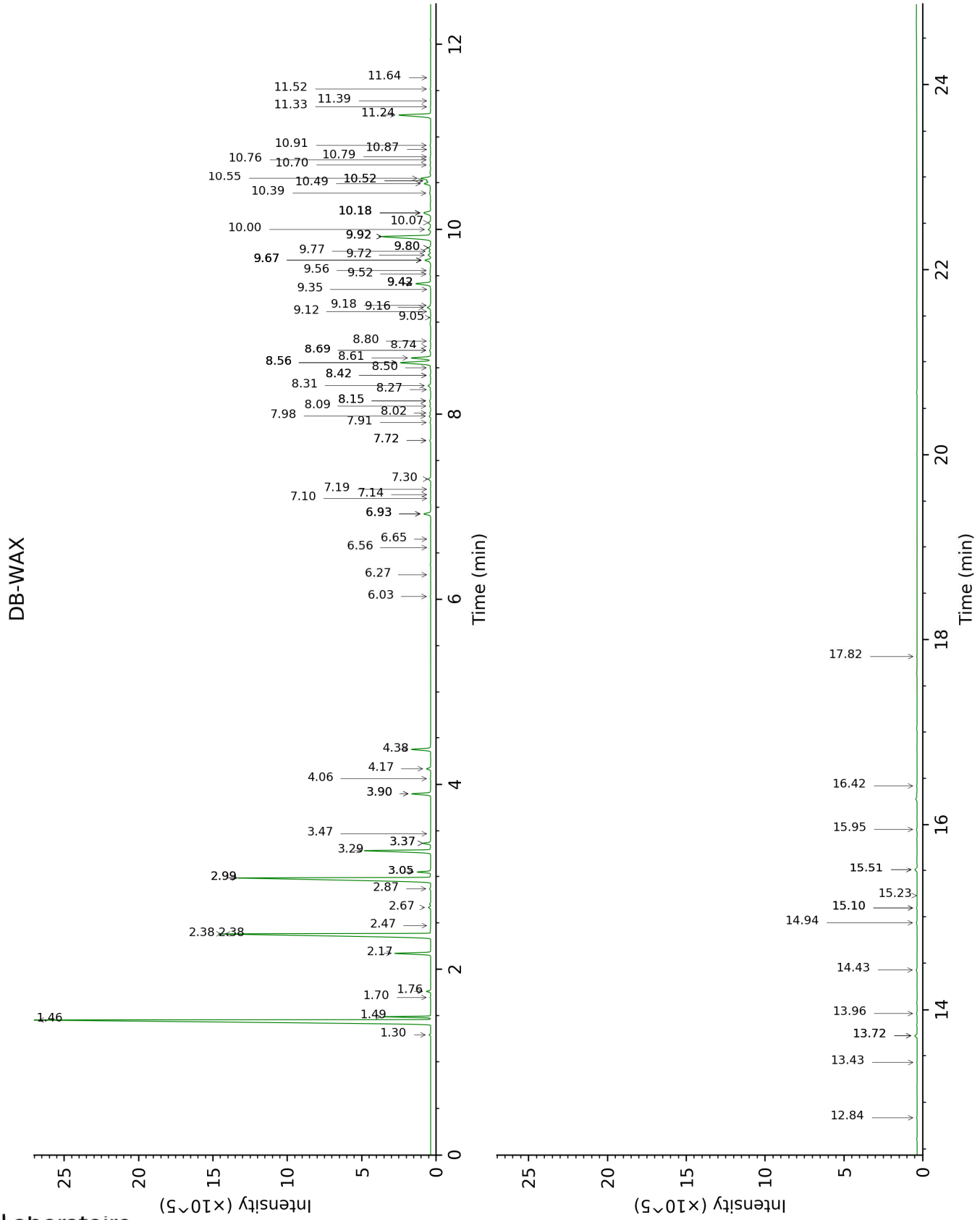

DB-5
Time (min)
Intensity (×10^5)
12.35
12.16
12.13
12.07
11.97
11.83
11.67
11.69
11.59
11.51
11.44
11.39
11.30
11.14
11.00
10.92
10.77
10.68
10.54
10.40
10.32
10.21
10.17
10.10
9.90
9.96
9.61
9.41
9.26
8.90
8.81
8.67
8.45
8.37
8.28
8.16
8.01
7.93
7.90
7.69
7.46
7.32
7.25
7.17
7.03
6.92
6.89
6.84
6.69
6.57
6.53
6.45
6.39
6.20
6.16
6.05
5.93
5.88
5.79
5.75
5.64
5.39
5.31
5.18
5.06
4.90
4.70
4.62
4.50
4.38
4.30
4.25
4.19
4.08
4.00
3.85
3.72
3.50
3.40
3.25
3.14
3.02
17.94
17.35
17.29
16.99
13.59
13.49
13.43
13.10
12.99
12.66
12.61
12.52


DB-WAX
Time (min)
Intensity (×10^5)
11.64
11.52
11.39
11.33
11.24
10.91
10.87
10.76
10.79
10.70
10.55
10.49
10.52
10.39
10.18
10.07
10.00
9.92
9.77
9.80
9.72
9.67
9.56
9.52
9.42
9.35
9.12
9.18
9.16
9.05
8.80
8.74
8.69
8.61
8.56
8.50
8.42
8.31
8.27
8.15
8.09
8.02
7.98
7.91
7.72
7.30
7.19
7.10
7.14
6.93
6.65
6.56
6.27
6.03
4.38
4.17
4.06
3.90
3.47
3.37
3.29
3.05
2.99
2.87
2.67
2.47
2.38
2.38
2.17
1.76
1.70
1.49
1.46
1.30
17.82
16.42
15.95
15.51
15.23
15.10
14.94
14.43
13.96
13.72
13.43
12.84

*FULL ANALYSIS DATA*

| Identification | Column DB-5 | | | Column DB-WAX | | |
|---|---|---|---|---|---|---|
| | R.T | R.I | % | R.T | R.I | % |
| Tricyclene | 3.02 | 917 | 0.07 | 1.30 | 976 | 0.08 |
| α-Thujene | 3.14 | 924 | 1.72 | 1.49 | 1004 | 1.73 |
| α-Pinene | 3.25 | 932 | 33.71 | 1.46 | 999 | 33.56 |
| Camphene | 3.40* | 942 | 0.24 | 1.76 | 1029 | 0.21 |
| α-Fenchene | 3.40* | 942 | [0.24] | 1.70 | 1023 | 0.03 |
| Thuja-2,4(10)-diene | 3.50 | 948 | 0.01 | 2.38* | 1087 | 17.38 |
| meta-Cymene | 3.72 | 962 | 0.06 | 2.99* | 1136 | 16.42 |
| β-Pinene | 3.85* | 971 | 19.59 | 2.17 | 1067 | 2.06 |
| Sabinene | 3.85* | 971 | [19.59] | 2.38* | 1087 | [17.38] |
| Octen-3-ol | 4.00 | 981 | tr | 6.93* | 1422 | 0.50 |
| 6-Methyl-5-hepten-2-one | 4.08 | 986 | 0.01 | | | |
| Myrcene | 4.19 | 993 | 16.52 | 2.99* | 1136 | [16.42] |
| 2-Carene | 4.25 | 997 | 0.01 | 2.47 | 1096 | 0.01 |
| Menthatriene isomer I | 4.30* | 1000 | 0.08 | 3.47 | 1175 | tr |
| α-Phellandrene | 4.30* | 1000 | [0.08] | 2.87 | 1127 | 0.06 |
| Δ3-Carene | 4.38 | 1006 | 0.13 | 2.67 | 1112 | 0.12 |
| α-Terpinene | 4.50* | 1012 | 0.66 | 3.05* | 1142 | 0.67 |
| 1,4-Cineole | 4.50* | 1012 | [0.66] | 3.05* | 1142 | [0.67] |
| para-Cymene | 4.62 | 1020 | 0.27 | 4.17 | 1230 | 0.26 |
| β-Phellandrene | 4.70* | 1025 | 4.71 | 3.37* | 1167 | 0.43 |
| 1,8-Cineole | 4.70* | 1025 | [4.71] | 3.37* | 1167 | [0.43] |
| Limonene | 4.70* | 1025 | [4.71] | 3.29 | 1160 | 4.22 |
| (*Z*)-β-Ocimene | 4.90 | 1038 | 0.01 | 3.90* | 1209 | 1.16 |
| (*E*)-β-Ocimene | 5.06 | 1047 | 0.02 | 4.06 | 1222 | 0.02 |
| γ-Terpinene | 5.18 | 1055 | 1.17 | 3.90* | 1209 | [1.16] |
| *cis*-Sabinene hydrate | 5.31 | 1063 | 0.14 | 6.93* | 1422 | [0.50] |
| *cis*-Linalool oxide (fur.) | 5.39 | 1068 | 0.01 | 6.65 | 1401 | 0.01 |
| Terpinolene | 5.64* | 1084 | 1.25 | 4.38 | 1246 | 1.19 |
| para-Cymenene | 5.64* | 1084 | [1.25] | 6.56 | 1394 | 0.01 |
| 6,7-Epoxymyrcene | 5.75 | 1091 | 0.01 | 6.27 | 1372 | 0.02 |
| *trans*-Sabinene hydrate | 5.79 | 1093 | 0.11 | 7.98 | 1502 | 0.10 |
| Linalool | 5.88 | 1099 | 0.07 | 8.15*† | 1515 | 0.11 |
| Nonanal | 5.93 | 1102 | 0.02 | 6.03 | 1355 | 0.03 |
| endo-Fenchol | 6.05 | 1110 | 0.01 | 8.42* | 1537 | 0.05 |
| *cis*-para-Menth-2-en-1-ol | 6.16 | 1116 | 0.07 | 8.15*† | 1515 | [0.11] |
| α-Campholenal | 6.20 | 1120 | 0.02 | 7.14 | 1438 | 0.01 |
| *trans*-Pinocarveol | 6.39 | 1132 | 0.03 | 9.18 | 1597 | 0.03 |
| *cis*-Verbenol | 6.45 | 1135 | 0.05 | 9.35 | 1611 | 0.01 |
| *trans*-Verbenol | 6.53 | 1140 | 0.04 | 9.56 | 1628 | 0.06 |
| meta-Mentha-4,6-dien-8-ol | 6.57 | 1143 | 0.01 | 9.42* | 1616 | 1.12 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Citronellal | 6.69 | 1151 | 0.02 | 7.10 | 1435 | 0.01 |
| Borneol | 6.84 | 1160 | 0.03 | 9.80* | 1648 | 0.16 |
| α-Phellandren-8-ol | 6.89 | 1163 | 0.01 | 10.18* | 1679 | 0.67 |
| Isopinocamphone | 6.92 | 1165 | 0.02 | 7.72* | 1482 | 0.06 |
| Terpinen-4-ol | 7.03 | 1172 | 1.32 | 8.61 | 1552 | 1.32 |
| para-Cymen-8-ol | 7.17 | 1182 | 0.04 | 11.52 | 1793 | 0.03 |
| Myrtenal | 7.25* | 1187 | 0.13 | 8.74 | 1562 | 0.01 |
| α-Terpineol | 7.25* | 1187 | [0.13] | 9.80* | 1648 | [0.16] |
| Myrtenol | 7.32 | 1191 | 0.06 | 10.91 | 1741 | 0.06 |
| Verbenone | 7.46 | 1200 | 0.03 | 9.67* | 1637 | 0.45 |
| *trans*-Carveol | 7.69 | 1216 | 0.02 | 11.39 | 1782 | 0.01 |
| Citronellol | 7.90 | 1230 | 0.05 | 10.76 | 1728 | 0.06 |
| Thymol methyl ether | 7.93 | 1232 | 0.05 | 8.50 | 1543 | 0.05 |
| Carvacrol methyl ether | 8.01 | 1238 | 0.01 | 8.69* | 1558 | 0.08 |
| Piperitone | 8.16 | 1248 | 0.01 | 9.92* | 1658 | 4.60 |
| Geraniol | 8.28 | 1256 | 0.01 | 11.64 | 1804 | 0.01 |
| Methyl citronellate | 8.37 | 1262 | 0.04 | 8.27 | 1525 | 0.04 |
| Geranial | 8.45 | 1267 | 0.01 | 10.18* | 1679 | [0.67] |
| Bornyl acetate | 8.67 | 1282 | 0.18 | 8.31 | 1528 | 0.20 |
| 2-Undecanone | 8.81 | 1291 | 0.01 | 8.69* | 1558 | [0.08] |
| Thymol | 8.90 | 1298 | 0.03 | 15.10* | 2127 | 0.04 |
| Myrtenyl acetate | 9.26 | 1319 | 0.03 | 9.67* | 1637 | [0.45] |
| Terpinyl acetate analog | 9.41 | 1330 | 0.02 | 9.67* | 1637 | [0.45] |
| α-Cubebene | 9.61* | 1344 | 0.44 | 6.93* | 1422 | [0.50] |
| α-Terpinyl acetate | 9.61* | 1344 | [0.44] | 9.76 | 1645 | 0.11 |
| α-Ylangene | 9.90 | 1364 | 0.02 | 7.19 | 1442 | 0.02 |
| α-Copaene | 9.96 | 1369 | 0.18 | 7.30 | 1451 | 0.18 |
| *cis*-β-Elemene | 10.10 | 1379 | 0.04 | 8.42* | 1537 | [0.05] |
| β-Cubebene | 10.17 | 1383 | 0.05 | 7.91 | 1497 | 0.06 |
| β-Elemene | 10.21 | 1386 | 0.92 | 8.56* | 1548 | 2.45 |
| Sibirene | 10.32* | 1394 | 0.10 | 8.02 | 1505 | 0.07 |
| Longifolene | 10.32* | 1394 | [0.10] | 8.09 | 1511 | 0.06 |
| α-Gurjunene | 10.40 | 1400 | 0.02 | 7.72* | 1482 | [0.06] |
| β-Caryophyllene | 10.54 | 1410 | 1.57 | 8.56* | 1548 | [2.45] |
| β-Copaene | 10.68* | 1420 | 0.07 | 8.56* | 1548 | [2.45] |
| *cis*-Thujopsene | 10.68* | 1420 | [0.07] | 8.80 | 1566 | 0.04 |
| γ-Elemene | 10.77 | 1427 | 0.26 | 9.16 | 1595 | 0.26 |
| α-Himachalene | 10.92 | 1438 | 0.02 | 9.05 | 1586 | 0.02 |
| α-Humulene | 11.00 | 1444 | 1.12 | 9.42* | 1616 | [1.12] |
| (*E*)-β-Farnesene | 11.14* | 1455 | 0.42 | 9.67* | 1637 | [0.45] |
| allo-Aromadendrene | 11.14* | 1455 | [0.42] | 9.12 | 1592 | 0.03 |
| β-Acoradiene | 11.14* | 1455 | [0.42] | 9.52 | 1625 | 0.07 |
| 10-epi-β-Acoradiene | 11.30* | 1466 | 0.03 | 9.67* | 1637 | [0.45] |
| *trans*-Cadina-1(6),4-diene | 11.30* | 1466 | [0.03] | 9.42* | 1616 | [1.12] |
| Germacrene D | 11.39* | 1473 | 4.69 | 9.92* | 1658 | [4.60] |
| γ-Muurolene | 11.39* | 1473 | [4.69] | 9.72 | 1641 | 0.19 |

| | | | | | | |
|---|---|---|---|---|---|---|
| β-Selinene | 11.44 | 1477 | 0.18 | 10.00 | 1664 | 0.21 |
| γ-Amorphene | 11.51 | 1482 | 0.06 | 9.92* | 1658 | [4.60] |
| α-Selinene | 11.58* | 1488 | 0.68 | 10.07 | 1670 | 0.19 |
| Bicyclogermacrene | 11.58* | 1488 | [0.68] | 10.18* | 1679 | [0.67] |
| α-Muurolene | 11.67† | 1494 | 0.64 | 10.18* | 1679 | [0.67] |
| 1,2-Dihydrocuparene | 11.69*† | 1495 | [0.64] | 10.39 | 1696 | 0.14 |
| Germacrene A | 11.69*† | 1495 | [0.64] | 10.52*† | 1708 | [0.74] |
| γ-Cadinene | 11.83 | 1506 | 0.33 | 10.49† | 1705 | 0.74 |
| *trans*-Calamenene | 11.97* | 1517 | 0.74 | 11.33 | 1777 | 0.02 |
| δ-Cadinene | 11.97* | 1517 | [0.74] | 10.55 | 1710 | 0.78 |
| Selina-4(15),7(11)-diene | 12.07 | 1525 | 0.06 | 10.70 | 1723 | 0.06 |
| α-Cadinene | 12.13* | 1530 | 0.06 | 10.87 | 1737 | 0.02 |
| (*E*)-γ-Bisabolene | 12.13* | 1530 | [0.06] | 10.52*† | 1708 | [0.74] |
| Selina-3,7(11)-diene | 12.16 | 1532 | 0.04 | 10.79 | 1730 | 0.03 |
| Germacrene B | 12.35 | 1547 | 2.46 | 11.24 | 1769 | 2.50 |
| Caryophyllenyl alcohol | 12.52 | 1560 | 0.02 | 13.72* | 1993 | 0.17 |
| Germacrene D-4-ol | 12.61* | 1567 | 0.22 | 13.72* | 1993 | [0.17] |
| Spathulenol | 12.61* | 1567 | [0.22] | 14.43 | 2062 | 0.07 |
| Caryophyllene oxide | 12.66 | 1571 | 0.03 | 12.84 | 1911 | 0.03 |
| Humulene epoxide II | 12.99 | 1597 | 0.02 | 13.43 | 1966 | 0.02 |
| 10-epi-Cubenol | 13.10 | 1606 | 0.02 | 13.96 | 2016 | 0.05 |
| τ-Muurolol | 13.43* | 1633 | 0.08 | 15.10* | 2127 | [0.04] |
| τ-Cadinol | 13.43* | 1633 | [0.08] | 14.94 | 2111 | 0.06 |
| α-Muurolol | 13.49 | 1638 | 0.03 | 15.23 | 2140 | 0.01 |
| α-Cadinol | 13.58 | 1646 | 0.07 | 15.51* | 2168 | 0.19 |
| meta-Camphorene | 16.99 | 1947 | 0.12 | 15.51* | 2168 | [0.19] |
| Trachylobane? | 17.29 | 1975 | 0.04 | 16.42 | 2262 | 0.04 |
| para-Camphorene | 17.35 | 1980 | 0.04 | 15.95 | 2213 | 0.04 |
| ar-Abietatriene | 17.94 | 2039 | 0.02 | 17.82 | 2412 | 0.02 |
| **Total identified** | | **98.86%** | | | **98.46%** | |
| **Total reported** | | **98.86%** | | | **98.46%** | |

*: 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