

Date : 2026-01-09

CERTIFICATE OF ANALYSIS - GC PROFILING

SAMPLE IDENTIFICATION

Internal code : 25L16-PTH10

Customer Identification : Blue Tansy - Morocco - B50116R

Type : Essential Oil

Source : *Tanacetum annuum*

Customer : Plant Therapy

Checked and approved by:

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

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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 : Jean-Christophe Fortin, M. Sc.

Date : 2026-01-08

PHYSICOCHEMICAL DATA

Refractive index : 1.5082 ± 0.0003 (20 °C)

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

Analyst : Cindy Caron B. Sc.

Date : 2025-12-16

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
1,3-Cyclohexadiene	0.01	Alkene
Isovaleral	0.01	Aliphatic aldehyde
2-Methylbutyral	0.01	Aliphatic aldehyde
2-Methylbutanol	0.01	Aliphatic alcohol
Methyl 2-methylbutyrate	0.01	Aliphatic ester
Unknown	0.01	Unknown
Hexanal	0.01	Aliphatic aldehyde
Ethyl 2-methylbutyrate	0.08	Aliphatic ester
Ethyl isovalerate	0.03	Aliphatic ester
Propyl isobutyrate	0.02	Aliphatic ester
Hashishene	0.01	Monoterpene
Tricyclene	0.05	Monoterpene
Ethyl tiglate?	0.03	Aliphatic ester
α -Thujene	0.29	Monoterpene
α -Pinene	2.47	Monoterpene
α -Fenchene	0.01	Monoterpene
Thujadiene isomer	0.01	Monoterpene
Camphene	0.86	Monoterpene
Propyl 2-methylbutyrate	0.08	Aliphatic ester
Thuja-2,4(10)-diene	0.01	Monoterpene
Propyl isovalerate	0.01	Aliphatic ester
Sabinene	16.28	Monoterpene
β -Pinene	5.61	Monoterpene
6-Methyl-5-hepten-2-one	0.06	Aliphatic ketone
2-Pentylfuran	0.02	Furan
Myrcene	5.67	Monoterpene
Octanal	0.04	Aliphatic aldehyde
Menthatriene isomer I	0.03	Monoterpene
α -Phellandrene	6.13	Monoterpene
Δ^3 -Carene	0.02	Monoterpene
α -Terpinene	0.64	Monoterpene
Isoamyl isobutyrate	0.02	Aliphatic ester
<i>para</i> -Cymene	4.52	Monoterpene
β -Phellandrene	0.29	Monoterpene
Limonene	2.21	Monoterpene
1,8-Cineole	0.66	Monoterpenic ether
(Z)- β -Ocimene	0.01	Monoterpene
Butyl 2-methylbutyrate	0.02	Aliphatic ester
(E)- β -Ocimene	[0.05]	Monoterpene
Butyl isovalerate	[0.05]	Aliphatic ester

γ -Terpinene	1.15	Monoterpene
Prenyl isobutyrate	0.01	Aliphatic ester
<i>cis</i> -Sabinene hydrate	0.08	Monoterpenic alcohol
Octanol	0.05	Aliphatic alcohol
Terpinolene	0.46	Monoterpene
<i>para</i> -Cymenene	0.03	Monoterpene
6,7-Epoxyterpinene	0.22	Monoterpenic ether
<i>trans</i> -Sabinene hydrate	0.05	Monoterpenic alcohol
Linalool	0.15	Monoterpenic alcohol
Nonanal	0.04	Aliphatic aldehyde
2-Methylbutyl 2-methylbutyrate	0.12	Aliphatic ester
Amyl isovalerate	0.02	Aliphatic ester
<i>cis-para</i> -Menth-2-en-1-ol	0.10	Monoterpenic alcohol
(<i>E</i>)-4,8-Dimethylnona-1,3,7-triene	0.04	Terpene derivative
Unknown	0.17	Unknown
α -Campholenal	0.04	Monoterpenic aldehyde
Limona ketone	0.39	Normoterpenic ketone
<i>trans</i> -Pinocarveol	0.04	Monoterpenic alcohol
Camphor	9.73	Monoterpenic ketone
α ,4-Dimethyl-3-cyclohexene-1-methanol	0.11	Normoterpenic alcohol
α ,4-Dimethyl-3-cyclohexene-1-methanol epimer	0.08	Normoterpenic alcohol
Sabinaketone	0.04	Normoterpenic ketone
Citronellal	0.01	Monoterpenic aldehyde
Pinocarvone	0.03	Monoterpenic ketone
Borneol	2.37	Monoterpenic alcohol
Unknown	0.05	Oxygenated monoterpene
Unknown	0.07	Oxygenated monoterpene
Terpinen-4-ol	1.45	Monoterpenic alcohol
Unknown	0.06	Unknown
<i>para</i> -Cymen-8-ol	0.05	Monoterpenic alcohol
α -Terpineol	0.22	Monoterpenic alcohol
Myrtenal	0.04	Monoterpenic aldehyde
Myrtenol	0.05	Monoterpenic alcohol
Unknown	0.05	Unknown
<i>cis</i> - α -Phellandrene epoxide (iPr vs Me)	0.13	Monoterpenic ether
Decanal	0.05	Aliphatic aldehyde
<i>trans</i> -Carveol	0.02	Monoterpenic alcohol
Unknown	0.05	Oxygenated monoterpene
Cuminal	0.14	Monoterpenic aldehyde
Hexyl 2-methylbutyrate	0.03	Aliphatic ester
Pulegone	0.02	Monoterpenic ketone
Neral	0.03	Monoterpenic aldehyde
Carvotanacetone	0.08	Monoterpenic ketone
Piperitone	0.05	Monoterpenic ketone

Phellandral	0.12	Monoterpenic aldehyde
α -Terpinen-7-al	0.06	Monoterpenic aldehyde
Bornyl acetate	0.02	Monoterpenic ester
Cuminol	0.05	Monoterpenic alcohol
Thymol	0.73	Monoterpenic alcohol
4-Methylhexyl 2-methylbutyrate	0.08	Aliphatic ester
Carvacrol	0.05	Monoterpenic alcohol
6-Hydroxycarvotanacetone	0.02	Monoterpenic alcohol
<i>para</i> -Menth-5-en-1,2-diol isomer III	0.05	Monoterpenic alcohol
1,4- <i>para</i> -Menthadien-7-ol	0.04	Monoterpenic alcohol
α -Cubebene	0.02	Sesquiterpene
α -Terpinyl acetate	0.10	Monoterpenic ester
α -Copaene	0.07	Sesquiterpene
(<i>E</i>)- β -Damascenone	0.04	Apocarotenoid
7- <i>epi</i> -Sesquithujene?	0.04	Sesquiterpene
β -Elemene	0.38	Sesquiterpene
α -Cedrene	0.02	Sesquiterpene
β -Caryophyllene	1.97	Sesquiterpene
β -Copaene	0.02	Sesquiterpene
Octyl 2-methylbutyrate	0.11	Aliphatic ester
<i>trans</i> - α -Bergamotene	0.10	Sesquiterpene
Sesquisabinene A	0.95	Sesquiterpene
α -Humulene	0.19	Sesquiterpene
(<i>E</i>)- β -Farnesene	0.02	Sesquiterpene
4,5- <i>diepi</i> -Aristolochene	0.09	Sesquiterpene
Dehydrosesquicineole	0.06	Sesquiterpenic ether
γ -Murolene	0.04	Sesquiterpene
α -Amorphene	0.05	Sesquiterpene
Germacrene D	1.23	Sesquiterpene
γ -Curcumene	0.08	Sesquiterpene
β -Selinene	0.35	Sesquiterpene
<i>ar</i> -Curcumene	0.08	Sesquiterpene
Phenylethyl isovalerate	0.35	Phenolic ester
Bicyclogermacrene	0.30	Sesquiterpene
Phenylethyl 2-methylbutyrate	0.06	Phenolic ester
Eremophilene	0.05	Sesquiterpene
δ -Guaiene	0.11	Sesquiterpene
β -Curcumene	0.10	Sesquiterpene
3,6-Dihydrochamazulene	5.27	Azulene
γ -Cadinene	0.09	Sesquiterpene
Dihydrochamazulene isomer I	1.07	Azulene
δ -Cadinene	0.16	Sesquiterpene
β -Sesquiphellandrene	0.58	Sesquiterpene
Dihydrochamazulene isomer II	0.06	Azulene
Dihydrochamazulene isomer III	0.06	Azulene

Isocaryophyllene epoxide B	0.02	Sesquiterpenic ether
α-Elemol	0.08	Sesquiterpenic alcohol
(E)-Nerolidol	0.06	Sesquiterpenic alcohol
Spathulenol	0.05	Sesquiterpenic alcohol
Caryophyllene oxide	0.28	Sesquiterpenic ether
Caryophyllene oxide isomer	0.04	Sesquiterpenic ether
Humulene epoxide II	0.03	Sesquiterpenic ether
5,6-Dihydrochamazulene	0.44	Azulene
Junenol	0.03	Sesquiterpenic alcohol
Unknown	0.07	Sesquiterpene
γ-Eudesmol	0.15	Sesquiterpenic alcohol
7,12-Dehydro-5,6,7,8-tetrahydrochamazulene	1.47	Azulene
Eremoligenol	0.06	Sesquiterpenic alcohol
τ-Cadinol	0.03	Sesquiterpenic alcohol
β-Eudesmol	0.60	Sesquiterpenic alcohol
Dihydrochamazulene isomer IV	1.11	Azulene
α-Eudesmol	0.12	Sesquiterpenic alcohol
(3E,5E)-7-Hydroxyfarnesene	0.03	Sesquiterpenic alcohol
Unknown	0.15	Azulene
Chamazulene	8.54	Azulene
Dehydrochamazulene	0.02	Azulene
Phytone	0.06	Terpenic ketone
meta-Camphorene	0.22	Diterpene
9-(15,16-Dihydro-15-methyleneneryl)-α-terpinene?	0.20	Homoditerpene
9-(15,16-Dihydro-15-methyleneneryl)-para-cymene?	0.03	Homoditerpene
9-(15,16-Dihydro-15-methylenegeranyl)-para-cymene	0.23	Homoditerpene
9-(15,16-Dihydro-15-methylenegeranyl)-α-terpinene	0.96	Homoditerpene
Tricosane	0.02	Alkane
Unknown	0.29	Unknown
Unknown	1.01	Unknown
Unknown	0.06	Unknown
Unknown	0.06	Unknown
Consolidated total	96.44	

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

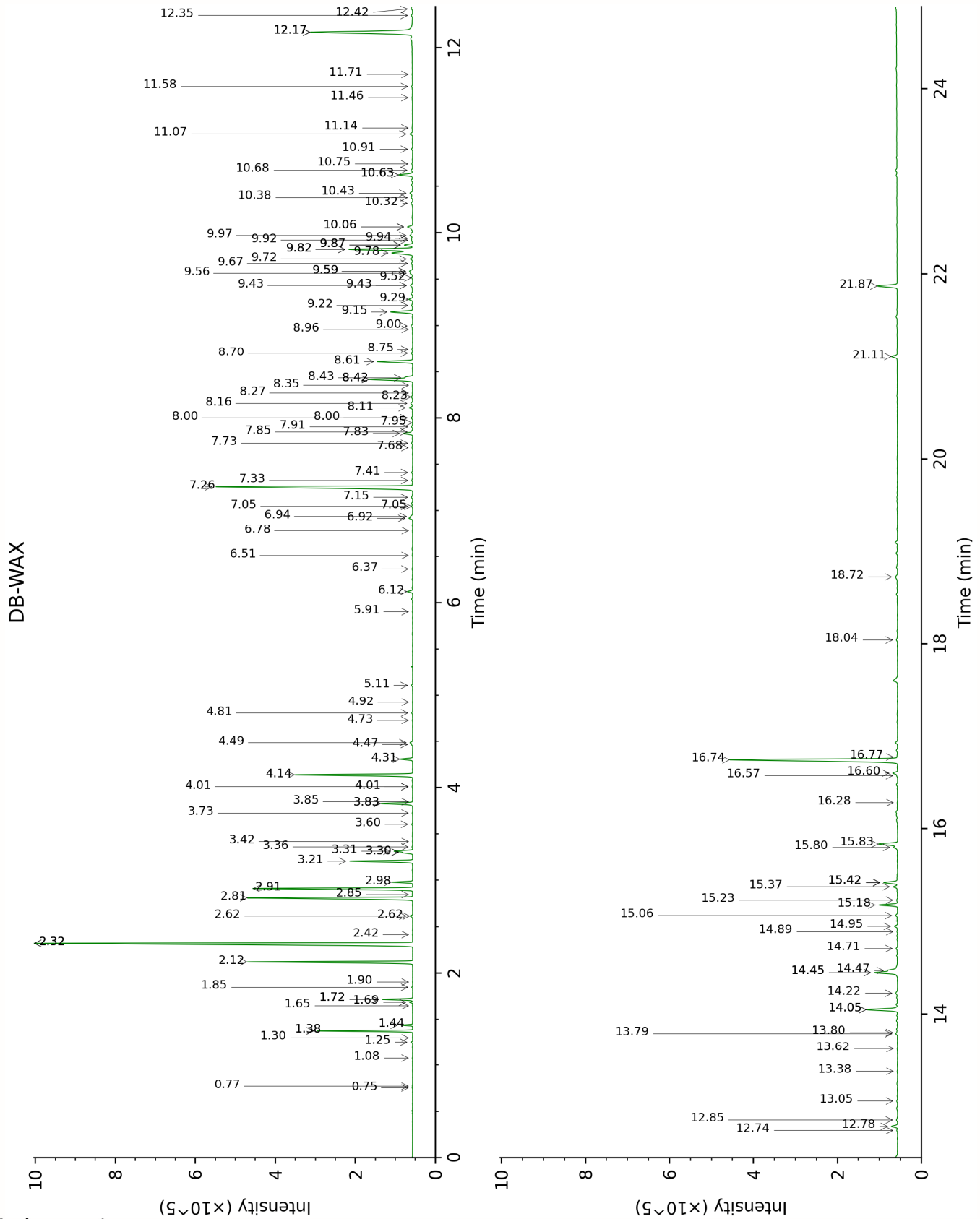
Note: no correction factor was applied

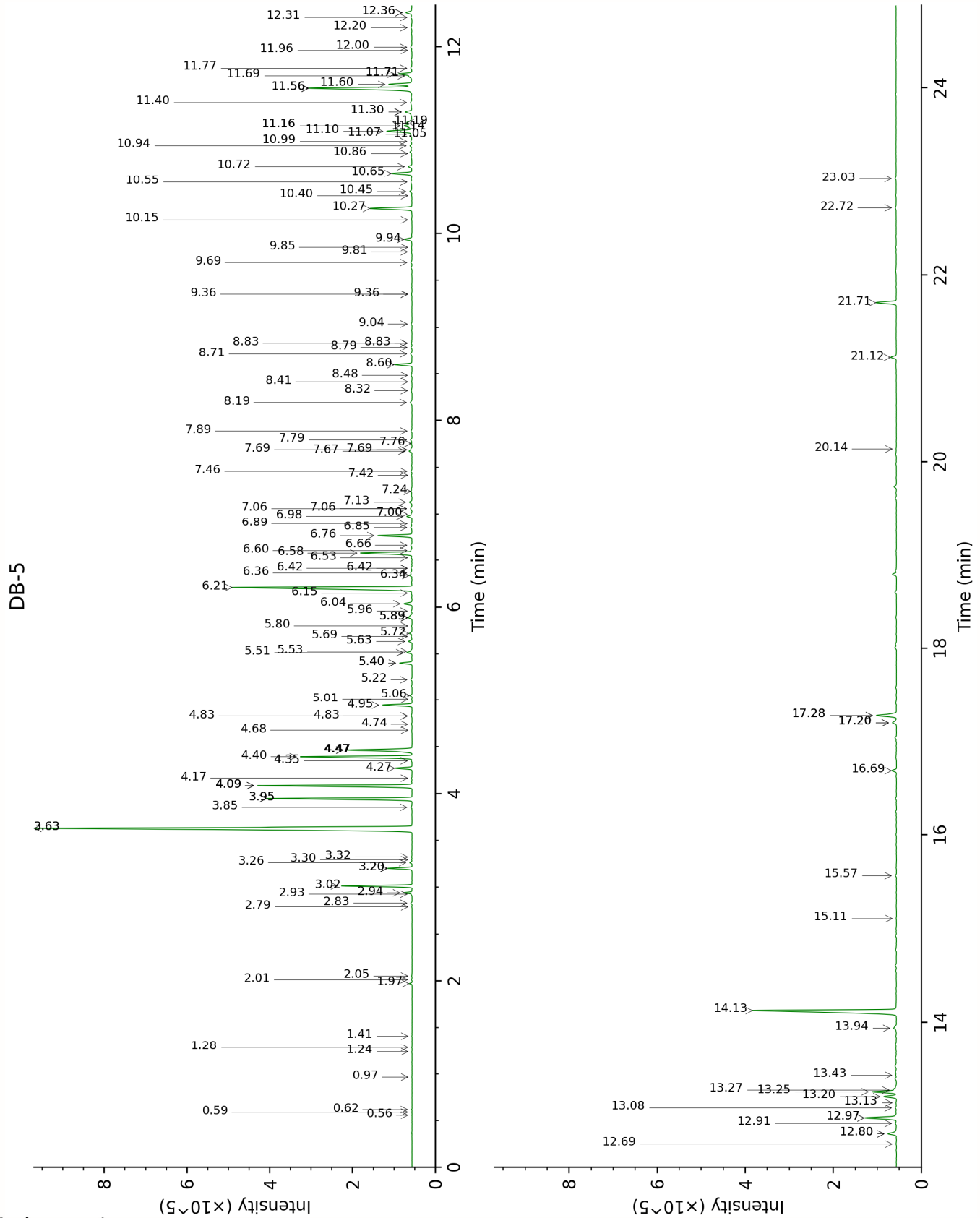
About "consolidated" data: The table above presents the breakdown of the sample volatile constituents after applying an algorithm to collapse data acquired from the multi-columns system of PhytoChemia into a single set of consolidated contents. In case of discrepancies between columns, the algorithm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

This page was intentionally left blank. The following pages present the complete data of the analysis.





FULL ANALYSIS DATA

1,3-Cyclohexadiene	Column DB-WAX			Column DB-5		
				0.56	631.3	0.01
Isovaleral	0.77	889.0	0.01	0.59	643.2	0.01
2-Methylbutyral	0.75	882.0	0.01	0.62	653.2	0.01
2-Methylbutanol	3.42	1175.6	0.01	0.97	735.9	0.01
Methyl 2-methylbutyrate	1.30	979.2	0.01	1.24	775.5	0.01
Unknown HEIT II [m/z 73, 87 (52), 41 (45), 56 (42), 100 (29)...]	1.08	942.5	0.01	1.28	782.2	0.01
Hexanal	1.90	1045.6	0.01	1.41	800.6	0.01
Ethyl 2-methylbutyrate	1.69	1023.9	0.08	1.97	850.0	0.08
Ethyl isovalerate	1.85	1040.0	0.02	2.01	853.5	0.03
Propyl isobutyrate	1.72*	1027.0	[0.88]	2.05	856.9	0.02
Hashishene	1.38*	991.6	[2.47]	2.79	916.4	0.01
Tricyclene	1.26	971.5	0.04	2.83	919.1	0.05
Ethyl tiglate?	3.60	1190.3	0.03	2.93	925.5	0.03
α -Thujene	1.44	999.4	0.29	2.94	926.4	0.29
α -Pinene	1.38*	991.6	[2.47]	3.02	931.3	2.47
α -Fenchene	1.65	1020.2	0.01	3.20*	943.9	[0.88]
Thujadiene isomer	2.42	1096.6	0.01	3.20*	943.9	[0.88]
Camphene	1.72*	1027.0	[0.88]	3.20*	943.9	[0.88]
Propyl 2-methylbutyrate	2.62*	1112.3	[0.10]	3.26	948.0	0.08
Thuja-2,4(10)-diene	2.32*	1087.2	[16.20]	3.30	950.1	0.01
Propyl isovalerate	2.85	1130.5	0.02	3.32	952.1	0.01
Sabinene	2.32*	1087.2	[16.20]	3.63*	972.7	[21.89]
β -Pinene	2.12	1067.2	5.61	3.63*	972.7	[21.89]
6-Methyl-5-hepten-2-one	5.11	1299.5	0.05	3.85	987.7	0.06
2-Pentylfuran	3.73	1199.7	0.02	3.95*	994.0	[5.70]
Myrcene	2.91	1135.6	5.67	3.95*	994.0	[5.70]
Octanal	4.47	1254.1	0.04	4.09*	1003.3	[6.18]
Menthatriene isomer I	3.36	1171.0	0.03	4.09*	1003.3	[6.18]
α -Phellandrene	2.81	1127.7	6.13	4.09*	1003.3	[6.18]
Δ^3 -Carene	2.62*	1112.3	[0.10]	4.17	1008.4	0.02
α -Terpinene	2.98	1141.0	0.64	4.27	1015.1	0.64
Isoamyl isobutyrate	3.30*	1166.5	[0.32]	4.35	1020.2	0.02
<i>para</i> -Cymene	4.14	1230.1	4.54	4.40	1023.0	4.52
β -Phellandrene	3.30*	1166.5	[0.32]	4.47*	1027.5	[3.16]
Limonene	3.21	1158.9	2.21	4.47*	1027.5	[3.16]
1,8-Cineole	3.32	1167.4	0.66	4.47*	1027.5	[3.16]
(<i>Z</i>)- β -Ocimene	3.83*	1207.3	[1.16]	4.68	1041.0	0.01
Butyl 2-methylbutyrate	3.85	1208.7	0.01	4.74	1045.0	0.02
(<i>E</i>)- β -Ocimene	4.01*	1220.6	[0.03]	4.83*	1050.6	[0.05]
Butyl isovalerate	4.01*	1220.6	[0.03]	4.83*	1050.6	[0.05]

γ-Terpinene	3.83*	1207.3	[1.16]	4.95	1058.0	1.15
Prenyl isobutyrate	4.92	1287.9	0.01	5.01	1061.9	0.01
cis-Sabinene hydrate	6.94	1431.0	0.09	5.06	1064.9	0.08
Octanol	8.23	1527.2	0.08	5.22	1075.7	0.05
Terpinolene	4.31	1242.5	0.46	5.40*	1087.0	[0.50]
para-Cymenene	6.36	1388.9	0.03	5.40*	1087.0	[0.50]
6,7-Epoxymyrcene	6.12	1371.6	0.22	5.51	1094.2	0.22
trans-Sabinene hydrate	8.00*	1509.9	[0.07]	5.53	1095.1	0.05
Linalool	8.11	1518.2	0.14	5.63	1101.8	0.15
Nonanal	5.90	1356.1	0.02	5.69	1105.2	0.04
2-Methylbutyl 2-methylbutyrate	4.49	1255.6	0.11	5.72	1107.3	0.12
Amyl isovalerate	4.73	1273.3	0.02	5.80	1112.5	0.02
cis-para-Menth-2-en-1-ol	8.16	1521.8	0.10	5.89*	1118.2	[0.27]
(E)-4,8-Dimethylnona-1,3,7-triene	4.81	1279.2	0.04	5.89*	1118.2	[0.27]
Unknown TAAN I [m/z 71, 43 (95), 81 (82), 79 (73), 67 (67), 41 (49), 109 (14)...]	6.92	1429.5	0.17	5.89*	1118.2	[0.27]
α-Campholenal	7.05*	1439.0	[0.05]	5.96	1122.7	0.04
Limona ketone	7.83	1497.0	0.40	6.04	1127.9	0.39
trans-Pinocarveol	9.22	1604.0	0.06	6.15	1135.2	0.04
Camphor	7.26	1454.5	9.84	6.21	1139.1	9.73
α,4-Dimethyl-3-cyclohexene-1-methanol				6.34	1147.4	0.11
α,4-Dimethyl-3-cyclohexene-1-methanol epimer				6.36	1149.2	0.08
Sabinaketon	8.75	1567.2	0.04	6.42*	1152.5	[0.05]
Citronellal	7.05*	1439.0	[0.05]	6.42*	1152.5	[0.05]
Pinocarvone	7.95	1505.8	0.02	6.53	1159.8	0.03
Borneol	9.82*	1652.5	[2.82]	6.58	1163.0	2.37
Unknown CALU II [m/z 95, 110 (38), 81 (21), 79 (16)... 152 (7)]	7.68	1485.7	0.04	6.60	1164.8	0.05
Unknown CALU III [m/z 95, 110 (43), 81 (28), 41 (15)... 152 (8)]	7.73	1489.2	0.05	6.66	1168.5	0.07
Terpinen-4-ol	8.61	1556.6	1.46	6.76	1175.2	1.45
Unknown EUDI I [m/z 69, 68 (65), 110 (51), 67 (39), 41 (27), 83 (26)...]	7.90	1502.4	0.06	6.85	1180.8	0.06
para-Cymen-8-ol	11.58	1799.4	0.04	6.89	1183.7	0.05
α-Terpineol	9.82*	1652.5	[2.82]	6.98	1189.0	0.22

Myrtenal	8.70	1563.6	0.06	7.00	1190.6	0.04
Myrtenol	10.91	1742.1	0.05	7.06*	1194.4	[0.10]
Unknown ABCO I [m/z 79, 107 (72), 41 (58), 55 (47), 77 (41), 67 (41)...]				7.06*	1194.4	[0.10]
<i>cis</i> - α -Phellandrene epoxide (iPr vs Me)	11.07	1755.9	0.12	7.13	1198.9	0.13
Decanal	7.33	1459.6	0.05	7.24	1206.5	0.05
<i>trans</i> -Carveol	11.46	1789.0	0.03	7.42	1218.3	0.02
Unknown TAAN II [m/z 93, 41 (68), 79 (67), 91 (66), 92 (57), 67 (42), 77 (41)... 150 (12)]				7.46	1221.1	0.05
Cuminal	10.63*	1718.8	[0.66]	7.67	1235.8	0.14
Hexyl 2-methylbutyrate	6.51	1399.4	0.03	7.69*	1236.8	[0.05]
Pulegone	8.96	1583.8	0.02	7.69*	1236.8	[0.05]
Neral	9.52	1627.9	0.05	7.76	1241.4	0.03
Carvotanacetone	9.43*	1621.3	[0.15]	7.79	1244.1	0.08
Piperitone	9.92	1660.6	0.06	7.89	1250.5	0.05
Phellandral	9.97	1664.6	0.13	8.19	1271.4	0.12
α -Terpinen-7-al	10.75	1728.7	0.05	8.32	1280.1	0.06
Bornyl acetate	8.27	1530.5	0.02	8.41	1286.6	0.02
Cuminol	14.22	2040.5	0.12	8.48	1291.3	0.05
Thymol	15.18	2133.7	0.75	8.60	1299.2	0.73
4-Methylhexyl 2- methylbutyrate	7.41	1465.9	0.04	8.71	1307.1	0.08
Carvacrol	15.42*	2157.8	[0.65]	8.79	1309.1	0.05
6- Hydroxycarvotanacetone	11.71	1810.9	0.02	8.83*	1312.3	[0.04]
<i>para</i> -Menth-5-en-1,2- diol isomer III	15.23	2138.9	0.05	8.83*	1312.3	[0.04]
1,4- <i>para</i> -Menthadien-7- ol	13.80	1999.7	0.03	9.04	1326.8	0.04
α -Cubebene	6.78	1419.2	0.02	9.36*	1349.4	[0.03]
α -Terpinyl acetate	9.72	1644.2	0.10	9.36*	1349.4	[0.03]
α -Copaene	7.15	1446.2	0.07	9.69	1373.3	0.07
(<i>E</i>)- β -Damascenone	11.14	1761.4	0.05	9.81	1381.4	0.04
7-epi-Sesquithujene?	7.85	1498.2	0.05	9.85	1384.8	0.04
β -Elemene	8.42*†	1541.8	[2.02]	9.94	1390.8	0.38
α -Cedrene	8.00*	1509.9	[0.07]	10.15	1405.5	0.02
β -Caryophyllene	8.42*†	1541.8	[2.02]	10.27	1414.7	1.97
β -Copaene	8.35	1536.9	0.03	10.40	1424.9	0.02
Octyl 2-methylbutyrate	9.00	1586.7	0.09	10.45	1428.2	0.11
<i>trans</i> - α -Bergamotene	8.43*†	1543.1	[0.27]	10.55	1435.8	0.10
Sesquisabinene A	9.15	1598.4	0.96	10.65	1443.0	0.95

α -Humulene	9.28	1609.3	0.17	10.72	1448.6	0.19
(E)- β -Farnesene	9.56	1631.8	0.11	10.86	1459.1	0.02
4,5-diepi-Aristolochene	9.43*	1621.3	[0.15]	10.94	1465.4	0.09
Dehydrosesquicineole	10.06*	1672.0	[0.30]	10.99	1468.8	0.06
γ -Muurolene	9.59*	1633.5	[0.15]	11.05	1473.5	0.04
α -Amorphene	9.59*	1633.5	[0.15]	11.07	1474.5	0.05
Germacrene D	9.78	1649.4	1.18	11.10	1477.0	1.23
γ -Curcumene	9.67	1640.3	0.07	11.14	1479.9	0.08
β -Selinene	9.87*	1656.3	[0.37]	11.16*	1481.3	[0.43]
ar-Curcumene	10.68	1722.9	0.08	11.16*	1481.3	[0.43]
Phenylethyl isovalerate	13.05	1930.7	0.05	11.19	1483.9	0.35
Bicyclogermacrene	10.06*	1672.0	[0.30]	11.30*	1492.4	[0.41]
Phenylethyl 2-methylbutyrate	12.85	1911.9	0.06	11.30*	1492.4	[0.41]
Eremophilene	9.94	1662.1	0.05	11.30*	1492.4	[0.41]
δ -Guaiene	9.87*	1656.3	[0.37]	11.40	1500.0	0.11
β -Curcumene	10.32	1692.3	0.10	11.56*	1511.7	[5.46]
3,6-Dihydrochamazulene	12.17*	1850.9	[6.12]	11.56*	1511.7	[5.46]
γ -Cadinene	10.38	1697.5	0.09	11.56*	1511.7	[5.46]
Dihydrochamazulene isomer I	12.17*	1850.9	[6.12]	11.60*	1515.0	[1.07]
δ -Cadinene	10.43	1701.6	0.15	11.69	1522.1	0.16
β -Sesquiphellandrene	10.63*	1718.8	[0.66]	11.71*	1523.7	[0.64]
Dihydrochamazulene isomer II	12.42	1873.5	0.06	11.71*	1523.7	[0.64]
Dihydrochamazulene isomer III	12.35	1866.9	0.06	11.77	1528.6	0.06
Isocaryophyllene epoxide B	12.17*	1850.9	[6.12]	11.96	1543.6	0.02
α -Elemol	14.05*	2023.5	[1.46]	12.00	1546.3	0.08
(E)-Nerolidol	13.79	1998.5	0.08	12.20	1562.7	0.06
Spathulenol	14.45*	2061.9	[1.14]	12.31	1571.4	0.05
Caryophyllene oxide	12.78	1905.4	0.28	12.36*	1575.4	[0.33]
Caryophyllene oxide isomer	12.74	1901.4	0.04	12.36*	1575.4	[0.33]
Humulene epoxide II	13.38	1960.2	0.03	12.69	1601.2	0.03
5,6-Dihydrochamazulene	14.47	2064.0	0.44	12.80*	1610.0	[0.50]
Junenol	13.62	1982.9	0.03	12.80*	1610.0	[0.50]
Unknown TAAN III [m/z 145, 173 (83), 159 (57), 174 (47), 129 (47), 115 (44), 128 (43), 91 (43), 157 (36), 202 (30)]				12.91	1619.3	0.07
γ -Eudesmol	14.95	2110.7	0.15	12.97*	1624.1	[1.62]
7,12-Dehydro-5,6,7,8-	14.05*	2023.5	[1.46]	12.97*	1624.1	[1.62]

tetrahydrochamazulene						
Eremoligenol	15.06	2122.2	0.10	13.08	1633.1	0.06
τ -Cadinol	14.89	2104.9	0.03	13.13	1637.6	0.03
β -Eudesmol	15.42*	2157.8	[0.65]	13.20	1643.1	0.60
Dihydrochamazulene isomer IV	14.45*	2061.9	[1.14]	13.25	1647.4	1.11
α -Eudesmol	15.37	2153.3	0.20	13.27	1648.9	0.12
(3E,5E)-7-Hydroxyfarnesene	16.28	2246.2	0.03	13.43	1662.0	0.03
Unknown TAAN IV [m/z 143, 142 (92), 157 (79), 158 (61), 141 (59), 128 (57), 159 (43), 115 (41), 202 (41)]	18.72	2513.7	0.17	13.94	1704.4	0.15
Chamazulene	16.74	2294.5	8.45	14.13	1720.8	8.54
Dehydrochamazulene	18.04	2436.5	0.08	15.11	1806.2	0.02
Phytone	14.71	2086.8	0.07	15.57	1848.0	0.06
<i>meta</i> -Camphorene	15.42*	2157.8	[0.65]	16.69	1952.2	0.22
9-(15,16-Dihydro-15-methyleneneryl)- α -terpinene?	15.80	2196.0	0.20	17.20*	2000.9	[0.24]
9-(15,16-Dihydro-15-methyleneneryl)- <i>para</i> -cymene?	16.57	2276.5	0.03	17.20*	2000.9	[0.24]
9-(15,16-Dihydro-15-methylenegeranyl)- <i>para</i> -cymene	16.60	2279.4	0.23	17.28*	2008.4	[1.13]
9-(15,16-Dihydro-15-methylenegeranyl)- α -terpinene	15.83	2199.8	0.96	17.28*	2008.4	[1.13]
Tricosane	16.77	2297.8	0.03	20.14	2304.7	0.02
Unknown TAAN V analog I	21.10	2801.7	0.30	21.12	2414.5	0.29
Unknown TAAN V [m/z 186, 157 (37), 171 (18), 322 (15)]	21.87	2900.3	1.00	21.71	2483.0	1.01
Unknown TAAN V analog II				22.72	2603.9	0.06
Unknown TAAN V analog III				23.03	2642.8	0.06
Total reported		95.20%			96.27%	

*: 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

Essential Oil, *Tanacetum annuum*

Internal code: 25L16-PTH10

Blue Tansy - Morocco - B50116R

Report prepared for:

Plant Therapy

†: 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