CERTIFICATE OF ANALYSIS – GC PROFILING

SAMPLE IDENTIFICATION

Internal code : 22H12-PTH01
Customer identification : Periploca EO in 10 TEC NAT Chinese silk vine - China - PE2100217R
Type : Essential oil
Source : *Periploca sepium*
Customer : Plant Therapy

ANALYSIS

Method: PC-MAT-014 ✳ISO - Analysis of the composition of an essential oil or other volatile liquid by FAST GC-FID (in French); identifications validated by GC-MS.
Analyst : Amélie Simard, Analyste
Analysis date : August 24, 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Notes: This report may not be published, including online, without the written consent from Laboratoire PhytoChemia.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.

MÉTHODE CERTIFIÉE
✳ISO 17025:2017
CERTIFIED METHOD

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PHYSICOCHEMICAL DATA

Physical aspect: Light yellow viscous liquid
Refractive index: 1.4557 ± 0.0003 (20 °C; method PC-MAT-016)

CONCLUSION

No adulterant or contaminant has been detected using this method. The oil is carried in triethyl citrate, as per the sample identification.

Essential oil, *Periploca sepium*
Internal code: 22H12-PTH01   Periploca EO in 10 TEC NAT Chinese silk vine - China - PE2100217R   Report prepared for
Plant Therapy

ANALYSIS SUMMARY – CONSOLIDATED CONTENTS

New readers of similar reports are encouraged to read table footnotes at least once.

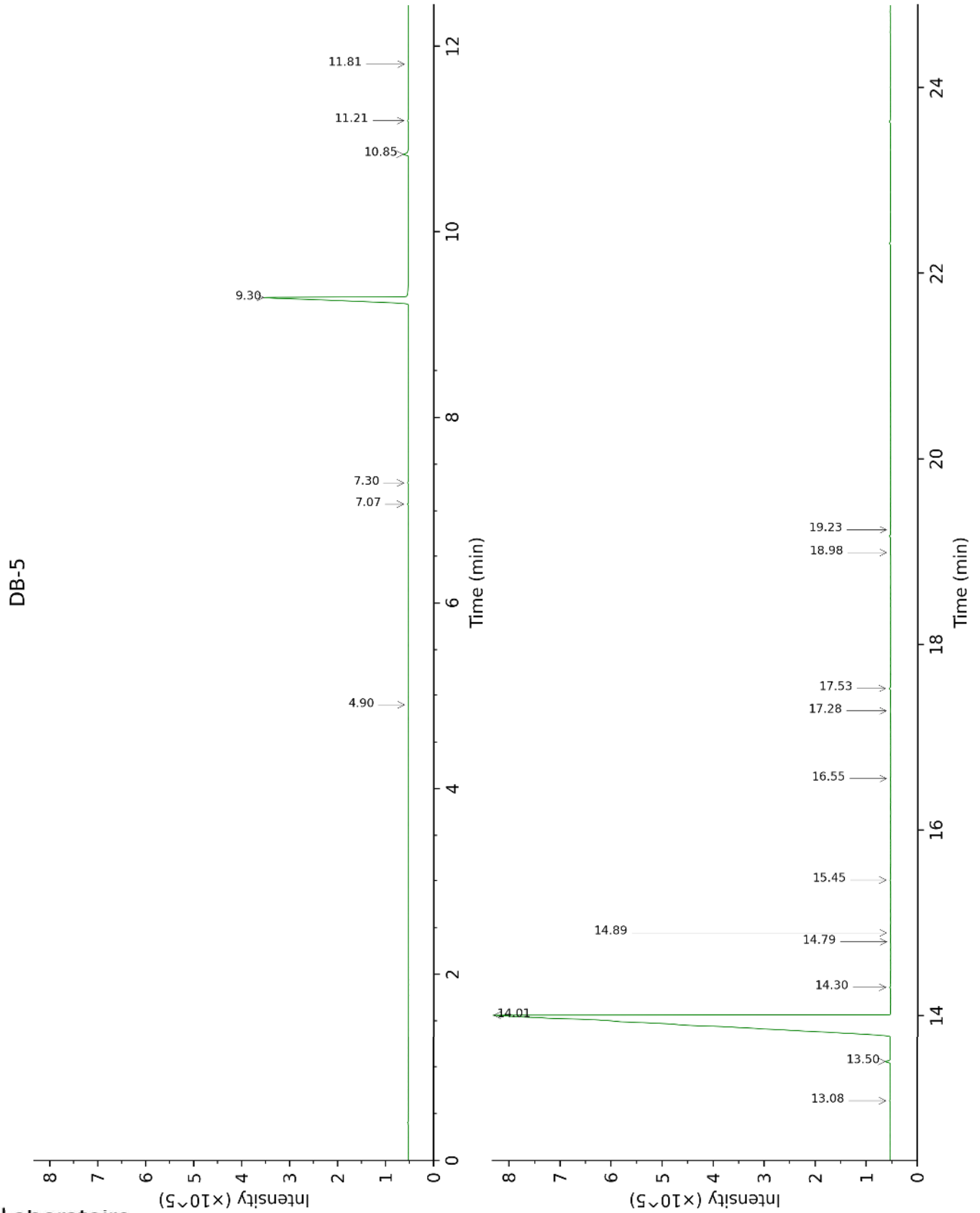| Identification	%	Class
Salicylaldehyde	0.01	Simple phenolic
Terpinen-4-ol	0.04	Monoterpenic alcohol
α-Terpineol	0.05	Monoterpenic alcohol
2-Hydroxy-para-anisaldehyde	11.47	Simple phenolic
Peonol	0.30	Simple phenolic
Methyl 4-methoxysalicylate?	0.06	Phenolic ester
Pentadecane	0.01	Alkane
Hexadecane	0.04	Alkane
Unknown	0.20	Unknown
Triethyl citrate	86.34	Aliphatic ester
Heptadecane	0.07	Alkane
Unknown	0.02	Unknown
Unknown	0.04	Unknown
Octadecane	0.04	Alkane
Nonadecane	0.03	Alkane
Palmitic acid	0.03	Aliphatic acid
Ethyl palmitate	0.07	Aliphatic ester
Oleic acid	0.02	Aliphatic acid
Ethyl oleate	0.03	Aliphatic ester
Consolidated total	**98.88%**	

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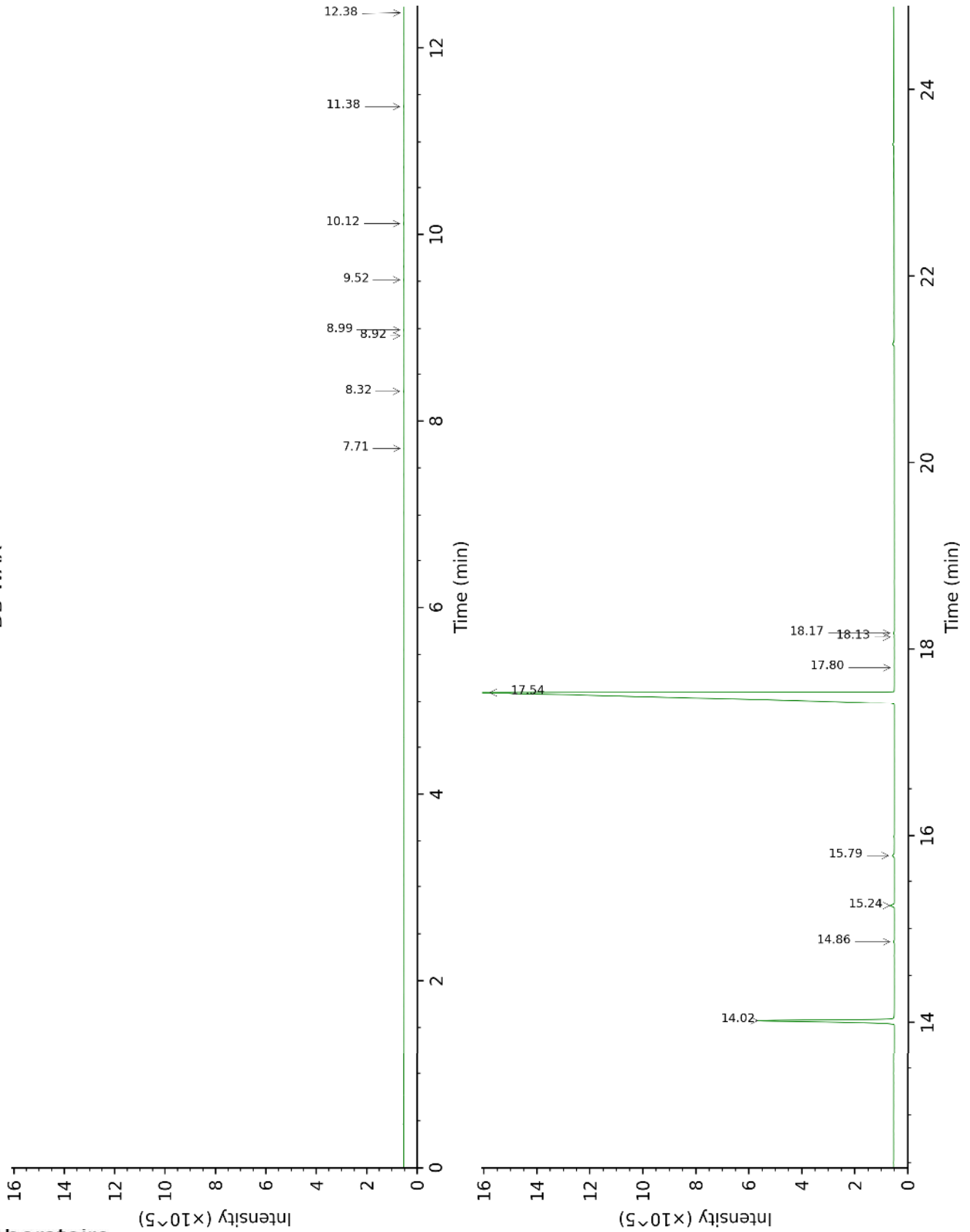
Note: no correction factor was applied

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

DB-WAX

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FULL ANALYSIS DATA

Identification	Column DB-5			Column DB-WAX		
	R.T	R.I	%	R.T	R.I	%
Salicylaldehyde	4.90	1037	0.01	8.99	1604	0.03
Terpinen-4-ol	7.07	1174	0.04	8.32	1551	0.05
α-Terpineol	7.30	1188	0.05	9.52	1648	0.04
2-Hydroxy-para-anisaldehyde	9.30	1322	11.47	14.02	2050	11.76
Peonol	10.84	1432	0.30	15.24	2171	0.33
Methyl 4-methoxysalicylate?	11.20	1459	0.06	14.86	2132	0.06
Pentadecane	11.81	1504	0.01	7.71	1504	0.01
Hexadecane	13.08	1603	0.04	8.92	1599	0.02
Unknown [m/z 112, 139 (62), 212 (42), 213 (41), 167 (36), 84 (36)...]	13.50	1638	0.20	15.79	2227	0.19
Triethyl citrate	14.01	1680	86.34	17.54	2415	86.02
Heptadecane	14.30	1704	0.07	10.12	1697	0.06
Unknown [m/z 157, 115 (31), 43 (22), 203 (9), 158 (8), 111 (8), 129 (8), 171 (6)... 217 (3)]	14.79	1746	0.02	18.13	2482	0.02
Unknown [m/z 157, 171 (44), 129 (39), 115 (28), 43 (28), 111 (17), 217 (11)]	14.89	1755	0.04	18.17	2486	0.06
Octadecane	15.45	1804	0.04	11.38	1805	0.04
Nonadecane	16.55	1903	0.03	12.38	1895	tr
Palmitic acid	17.28	1972	0.03			
Ethyl palmitate	17.53	1996	0.07			
Oleic acid	18.98	2142	0.02			
Ethyl oleate	19.23	2167	0.03	17.80	2445	0.03
Total identified	**98.63%**			**98.45%**		
Total reported	**98.88%**			**98.72%**		

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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