

Analysis Stinging Nettle Essential Oil

Laboratoire
PhytoChemia



Plus que des analyses... des conseils



Date : August 11, 2017

SAMPLE IDENTIFICATION

Internal code : 17G28-FSE6-1-CC

Customer identification : Stinging Nettle - Corsica - HEUD11163

Type : Essential oil

Source : *Urtica dioica*

Customer : Flowers Shining Everywhere Inc.



ANALYSIS



Method : PC-PA-001-15E06, "Analysis of the composition of a liquid essential oil by GC-FID" (in French).

+ **Identifications** double-checked by GC-MS

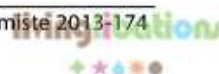
Analyst : Alexis St-Gelais

Analysis date : 2017-07-31



Checked and approved by :

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



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IDENTIFIED COMPOUNDS

Identification	Column: BP5			Column: WAX			Molecular Class
	R.T.	R.I.	%	%	R.I.	R.T.	
α-Pinene	3.44	930	0.01	0.01	948	1.02	Monoterpene
cis-Hex-3-en-1-yl acetate	4.90	1016	0.01	0.01	1255	4.05	Aliphatic ester
Carvomenthene	5.11	1027	0.02	0.01	1096	2.18	Monoterpene
β-Phellandrene	5.20	1032	0.01	0.01	1141	2.56	Monoterpene
cis-β-Ocimene	5.38	1042	0.06	0.05	1184	3.11	Monoterpene
δ-Elemene	15.42	1326	0.65	0.76	1425	6.59*	Sesquiterpene
α-Cubebene	16.09	1337	0.86	0.92	1416	6.44	Sesquiterpene
α-Ylangene	17.34	1356	0.11	[0.76]	1425	6.59*	Sesquiterpene
α-Copaene	17.91	1364	5.35	5.40	1448	6.98	Sesquiterpene
β-Cubebene	18.80	1378	0.51	0.53	1482	7.80	Sesquiterpene
β-Elemene	19.10	1382	1.35	62.99	1545	9.26*	Sesquiterpene
Cyperene	19.40	1387	0.27	0.29	1461	7.31	Sesquiterpene
β-Caryophyllene	21.25	1412	57.23	[62.99]	1545	9.26*	Sesquiterpene
β-Copaene	21.75	1418	0.20	0.34	1513	8.52	Sesquiterpene
γ-Elemene	22.11	1422	1.50	1.39	1578	10.44	Sesquiterpene
trans-α-Bergamotene	22.44	1426	4.04	[62.99]	1545	9.26*	Sesquiterpene
β-Humulene?	23.12	1434	0.19				Sesquiterpene
Sesquisabinene	23.26	1436	0.17	0.20	1586	10.75	Sesquiterpene
α-Humulene	23.73	1442	6.75	7.22	1594	11.01	Sesquiterpene
allo-Aromadendrene	23.89	1444	0.36	0.45	1571	10.22	Sesquiterpene
γ-Muurolene	25.82	1467	2.40	2.07	1619	11.93	Sesquiterpene
Germacrene D	25.91	1468	3.77	4.34	1634	12.43*	Sesquiterpene
trans-Muurola-4(14),5-diene	26.45	1474	0.74	[4.34]	1634	12.43*	Sesquiterpene
β-Selinene	26.61	1476	0.11	0.16	1624	12.11	Sesquiterpene
α-Muurolene	27.07*	1482	0.98	0.51	1637	12.58	Sesquiterpene
Bicyclogermacrene	27.07*	1482	[0.98]	0.29	1646	12.89	Sesquiterpene
γ-Cadinene	27.82	1491	0.50	0.38	1653	13.19	Sesquiterpene
β-Bisabolene	28.88	1504	0.63	0.42	1658	13.42	Sesquiterpene
δ-Cadinene	29.08	1507	1.35	1.41	1670	14.04	Sesquiterpene
Zonarene	29.60	1514	2.12	2.06	1685	14.76	Sesquiterpene
trans-Cadina-1,4-diene	29.92	1518	0.17	0.22	1702	15.64*	Sesquiterpene
α-Calacorene	30.59	1528	0.11	0.10	1810	21.82	Sesquiterpene
trans-α-Bisabolene	31.02	1534	0.24	[0.22]	1702	15.64*	Sesquiterpene
Isocaryophyllene epoxide B	31.99	1547	0.19				Sesquiterp. ether
Germacrene B	32.19	1550	0.57	0.52	1729	17.05	Sesquiterpene
Caryophyllenyl alcohol	33.88	1574	0.23				Sesquiterp. alcohol
Caryophyllene oxide	33.99*	1575	2.01	1.59	1856	24.82	Sesquiterp. ether
Caryophyllene oxide epimer	33.99*	1575	[2.01]	0.35	1851	24.51	Sesquiterp. ether
Humulene epoxide II	35.60	1598	0.14	0.13	1908	28.42	Sesquiterp. ether

Essential oil, *Urtica dioica*
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Report prepared for
Flowers Shining Everywhere Inc.

Junenol	36.08	1608	0.47	0.39	1932	30.16	Sesquiterp. alcohol
τ -Cadinol	37.14	1634	0.10	0.10	2073	37.25	Sesquiterp. alcohol
τ -Muuroiol	37.24	1636	0.05	0.05	2096	37.92	Sesquiterp. alcohol
α -Muuroiol	37.34	1639	0.04	0.22	2090	37.77	Sesquiterp. alcohol
α -Cadinol	37.75	1648	0.18	0.29	2132	39.00	Sesquiterp. alcohol
Total Identified		96.75%		96.18%			

*: Two or more compounds are coeluting on this column

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

Note: no correction factor was applied

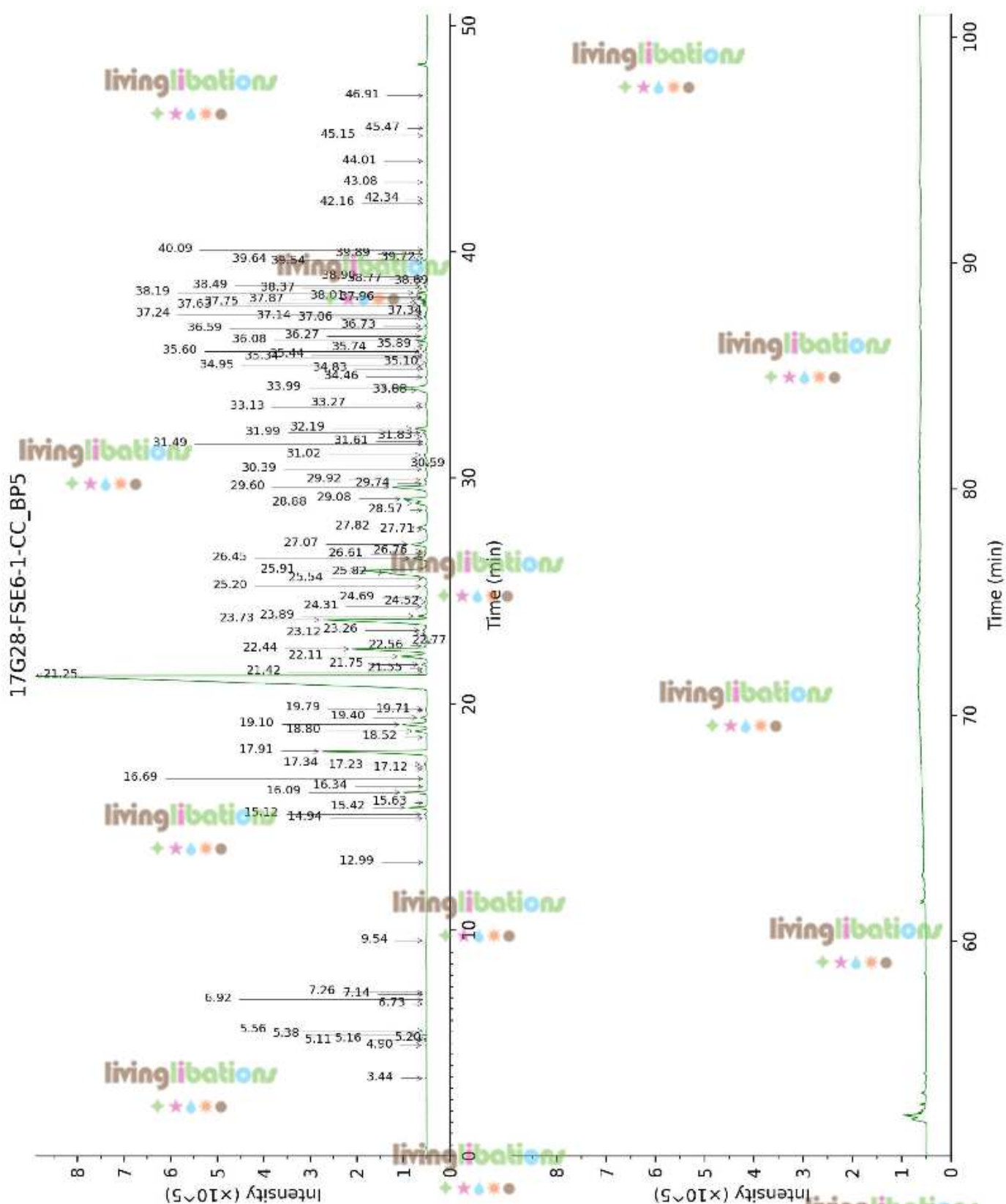
OTHER DATA

Physical aspect : Clear liquid

Refractive Index : 1.4995 \pm 0.0003 (20 °C)

CONCLUSION

No adulterant, contaminant or diluent were detected using this method.



17G28-FSE6-1-CC_WAX

