



Essential Oil University

GC/MS Report

Ylang Complete Oil, Madagascar

Cananga odorata var. genuina

Item	Lot
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8M

Date	Analyst
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10/11/2024	Dr. Robert S. Pappas
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The analysis of this batch sample, Ylang Complete Oil, Madagascar, meets the expected chemical profile for authentic essential oil of *Cananga odorata var. genuina*. No contamination or adulteration was detected. The results provided in this GCMS quality analysis reflect the chemical composition of the oil and lot referenced above on the date of analysis.



Sample Information

Company: Revive**Sample Name:** Ylang Complete Oil, Madagascar**Botanical Name:** Cananga odorata var. genuina**Lot Number:** 8M**Production Method:** Steam distilled**Sample Type:** EO - Single**Country of Origin:** Madagascar**Analysis Date:** 10/11/2024**Date of Distillation:** October 2024

GC/MS

Inst. ID: Shimadzu GCMS-QP2010Ultra**Injection Type:** Split**Split Ratio:** 24.4**Column Type:** ZB-5**Injection Volume:** 0.1 µL**Temperature Program:** 2C/min

Physical Data

ANALYSIS

Optical Rotation @20°C

Refractive Index @20°C

Specific Gravity @20°C

METHOD

USP[781]

USP[831]

USP[841]

RESULTS

-36.84

1.50197

0.93066



Ret. Time	Component	Ret. Idx.	Conc. %	
9.711	Unidentified	878	0.02%	
11.088	Amyl acetate	910	0.12%	
11.466	Prenyl acetate	917	0.47%	
12.214	alpha-Pinene	930	0.16%	
13.762	Benzaldehyde	958	0.01%	IFRA
14.664	beta-Pinene	975	0.05%	
15.305	Myrcene	986	0.08%	
16.232	Hex-(3Z)-enyl acetate	1003	0.03%	
16.665	Hexyl acetate	1009	0.07%	
17.207	para-Methylanisole	1018	2.89%	
17.794	Limonene	1027	0.03%	IFRA
17.953	1,8-Cineole	1029	0.12%	
18.035	Benzyl alcohol	1030	0.02%	IFRA
18.190	cis-beta-Ocimene	1033	0.01%	
18.872	trans-beta-Ocimene	1043	0.02%	
20.448	Unidentified	1067	0.01%	
20.516	para-Cresol	1068	0.03%	IFRA
21.509	Unidentified	1084	0.01%	
22.021	Methyl benzoate	1091	1.6%	
22.425	Linalool	1098	5.83%	IFRA
26.669	Benzyl acetate	1159	4%	
27.227	Ethyl benzoate	1167	0.02%	
28.715	Methyl salicylate	1189	0.01%	
28.945	alpha-Terpineol	1192	0.09%	
29.165	Estragole	1196	0.04%	IFRA
30.940	Nerol	1221	0.02%	
32.700	Geraniol	1247	0.78%	IFRA
32.941	2-Phenethyl acetate	1251	0.06%	
33.903	Geranial	1265	0.02%	IFRA
35.152	trans-Anethole	1283	0.1%	
35.915	1-Nitro-2-phenylethane	1294	0.02%	
36.670	4-Vinyl-guaiacol	1306	0.01%	
37.812	Unidentified	1323	0.02%	
38.204	Unidentified	1329	0.04%	
38.348	Unidentified	1331	0.08%	
39.192	alpha-Cubebene	1344	0.18%	
39.434	Eugenol	1348	0.37%	IFRA
39.672	Unidentified	1352	0.02%	
39.939	Neryl acetate	1356	0.02%	
40.411	Unidentified	1363	0.01%	



Ret. Time	Component	Ret. Idx.	Conc. %	
40.644	alpha-Ylangene	1366	0.15%	
40.920	Unidentified	1371	0.02%	
41.060	alpha-Copaene	1373	1.16%	
41.229	Geranyl acetate	1375	7.06%	
41.476	Elemene isomer	1379	0.02%	
41.572	alpha-Copaene	1381	0.03%	
41.848	beta-Cubebene	1385	0.1%	
41.960	beta-Elemene	1386	0.47%	
42.259	Unidentified	1391	0.04%	
42.441	Unidentified	1394	0.01%	
42.626	Unidentified	1397	0.01%	
42.797	Cyperene	1399	0.02%	
43.314	Unidentified	1407	0.01%	
43.896	beta-Caryophyllene + Unidentified	1417	12.89%	
44.165	Unidentified	1421	0.03%	
44.356	Unidentified	1424	0.02%	
44.505	beta-Copaene	1427	0.43%	
44.738	Unidentified	1430	0.05%	
44.860	Unidentified	1432	0.01%	
45.043	Aromadendrene	1435	0.04%	
45.433	trans-Cinnamyl acetate	1441	1.33%	
45.500	trans-Isoeugenol	1442	0.18%	IFRA
45.705	cis-Murrola-3,5-diene	1446	0.24%	
45.822	trans-Murrola-3,5-diene	1448	0.12%	
45.968	trans-beta-Farnesene	1450	0.07%	
46.107	alpha-Humulene	1452	3.64%	
46.258	Unidentified	1455	0.04%	
46.368	Cadina-1(6),4-diene	1456	0.06%	
46.515	cis-Muurolo-4(14),5-diene	1459	0.16%	
47.143	10-beta-H-Cadina-1(6),4-diene	1469	0.26%	
47.347	gamma-Murolene	1472	1.93%	
47.746	Germacrene D	1478	16.1%	
48.183	Prenyl benzoate	1485	0.13%	
48.392	trans-Murrola-4(14),5-diene	1489	0.88%	
48.585	Bicyclogermacrene	1492	0.43%	
48.785	alpha-Muurolo-4(14),5-diene	1495	1.2%	
48.990	(Z,E)-alpha-Farnesene	1498	2.26%	
49.174	trans,trans-alpha-Farnesene	1501	9.08%	
49.367	beta-Bisabolene	1505	0.06%	
49.420	Unidentified	1506	0.04%	



Ret. Time	Component	Ret. Idx.	Conc. %	
49.662	gamma-Cadinene	1510	1.1%	
49.985	delta-Cadinene	1515	3.71%	
50.165	cis-Calamenene	1518	0.08%	
50.244	Zonarene	1519	0.21%	
50.479	trans-gamma-Bisabolene	1523	0.02%	
50.818	trans-Cadine-1,4-diene	1529	0.23%	
51.068	alpha-Cadinene	1533	0.3%	
51.240	Unidentified	1536	0.02%	
51.303	alpha-Calacorene	1537	0.05%	
51.729	Elemol	1544	0.05%	
52.353	Germacrene B	1555	0.01%	
52.493	trans-Nerolidol	1557	0.16%	
53.062	Hex-(3Z)-enyl benzoate	1567	0.02%	
53.406	Unidentified	1573	0.06%	
53.721	10-epi-Junenol	1578	0.13%	
53.937	Globulol	1582	0.09%	
54.189	Unidentified	1586	0.08%	
54.382	Unidentified	1589	0.1%	
54.578	Guaiol	1593	0.06%	
55.153	Rosifoliol	1602	0.02%	
55.321	Humulene epoxide II	1605	0.02%	
55.484	Unidentified	1608	0.02%	
55.655	Unidentified	1611	0.09%	
56.047	Humulane-1,6-dien-3-ol	1618	0.36%	
56.150	Unidentified	1620	0.02%	
56.367	1-Epicubenol	1624	0.26%	
56.592	gamma-Eudesmol	1628	0.04%	
56.720	Epicubenol isomer	1630	0.1%	
56.999	Unidentified	1635	0.02%	
57.175	tau-Cadinol	1638	0.57%	
57.277	epi-alpha-Muurolol	1640	0.96%	
57.428	delta-Cadinol	1643	0.33%	
57.573	Cadinol isomer	1645	0.05%	
57.725	Unidentified	1648	0.01%	
57.925	alpha-Cadinol	1652	1.97%	
58.074	Unidentified	1654	0.03%	
58.767	Striatol	1667	0.14%	
59.150	Unidentified	1673	0.03%	
61.233	(2E,6E)-Farnesol	1711	1.25%	IFRA
61.951	Unidentified	1724	0.02%	



Ret. Time	Component	Ret. Idx.	Conc. %	
62.397	Unidentified	1733	0.01%	
63.988	Benzyl benzoate	1762	5.58%	IFRA
64.289	Unidentified	1768	0.01%	
67.454	Farnesyl acetate	1828	1.44%	
67.673	Neophytadiene	1833	0.04%	
69.259	Benzyl salicylate	1864	1.71%	IFRA
73.858	Geranyl benzoate	1957	0.06%	
80.216	Benzyl cinnamate	2091	0.08%	IFRA

Total Identified Compounds **86.09 %**

