



Essential Oil University

GC/MS Report

Item	Lot
Citronella (Java) EO <i>Cymbopogon winterianus</i>	3AP
Date	Analyst
3/3/2025	Dr. Robert S. Pappas

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The analysis of this batch sample, Citronella (Java) EO, meets the expected chemical profile for authentic essential oil of *Cymbopogon winterianus*. 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:** Citronella (Java) EO**Botanical Name:** Cymbopogon winterianus**Lot Number:** 3AP**Production Method:** Steam distilled**Sample Type:** EO - Single**Country of Origin:** Indonesia**Analysis Date:** 3/3/2025**Manufacture Date:** 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

-2.52

1.46737

0.88351



Ret. Time	Component	Ret. Idx.	Conc. %	
9.045	Unidentified	860	0.01%	
9.104	Unidentified	862	0.01%	
11.654	Tricyclene	920	0.03%	
12.208	alpha-Pinene	930	0.09%	
13.100	Camphene	946	0.08%	
14.362	Sabinene	969	0.01%	
14.990	6-Methyl hept-5-en-2-one	981	0.06%	
15.300	Myrcene	986	0.1%	
16.153	Unidentified	1001	0.01%	
16.351	Unidentified	1005	0.01%	
17.477	para-Cymene	1022	0.01%	
17.780	Limonene	1026	4.02%	IFRA
17.875	beta-Phellandrene	1028	0.01%	
17.951	Dihydromyrcenol isomer	1029	0.01%	
18.076	Dihydromyrcenol isomer	1031	0.03%	
18.180	cis-beta-Ocimene	1033	0.02%	
18.868	trans-beta-Ocimene	1043	0.02%	
19.008	Unidentified	1045	0.01%	
19.279	Melon aldehyde	1049	0.06%	
19.645	gamma-Terpinene	1055	0.01%	
20.450	Unidentified	1067	0.01%	
20.503	Unidentified	1068	0.02%	
21.450	Terpinolene	1083	0.07%	
22.396	Linalool	1097	0.69%	IFRA
23.114	cis-Rose oxide	1108	0.01%	
23.487	Unidentified	1113	0.01%	
24.210	Unidentified	1124	0.01%	
24.314	Citronellol	1125	0.04%	IFRA
25.736	Isopulegol	1146	1.09%	
26.115	Citronellal	1151	39.78%	IFRA
26.273	Menthone	1154	0.09%	
26.449	Neoisopulegol	1156	0.47%	
26.634	Unidentified	1159	0.02%	
26.891	Isomenthone	1163	0.04%	
27.173	Isoisopulegol	1167	0.07%	
27.338	Isoborneol	1169	0.03%	
27.805	Unidentified	1176	0.02%	
27.943	Terpinen-4-ol	1178	0.04%	
28.689	Unidentified	1189	0.01%	
28.943	alpha-Terpineol	1192	0.08%	



Ret. Time	Component	Ret. Idx.	Conc. %	
29.730	Decanal	1204	0.14%	
30.938	Nerol	1221	0.14%	
31.155	Citronellol	1225	12.12%	IFRA
31.879	Neral	1235	0.48%	IFRA
32.801	Geraniol	1249	19.23%	IFRA
33.167	Unidentified	1254	0.02%	
33.895	Geranial	1265	0.73%	IFRA
34.272	Unidentified	1270	0.02%	
34.824	Unidentified	1278	0.01%	
35.949	Unidentified	1295	0.02%	
36.471	Unidentified	1303	0.02%	
36.977	Unidentified	1310	0.02%	
38.589	Citriodiol isomer	1335	0.19%	
39.182	Unidentified	1344	0.01%	
39.349	Citronellyl acetate	1347	2.28%	IFRA
39.434	Eugenol	1348	0.6%	IFRA
39.925	Unidentified	1355	0.03%	
40.032	Citriodiol isomer	1357	0.06%	
40.635	Unidentified	1366	0.01%	
41.064	Unidentified	1373	0.03%	
41.207	Geranyl acetate	1375	3.18%	
41.469	Elemene isomer	1379	0.08%	
41.567	beta-Bourbonene	1380	0.1%	
41.755	Unidentified	1383	0.01%	
41.957	beta-Elemene	1386	1.8%	
43.790	Unidentified	1415	0.03%	
43.850	beta-Caryophyllene	1416	0.17%	
44.498	beta-Copaene	1426	0.03%	
44.714	Unidentified	1430	0.02%	
45.486	Unidentified	1442	0.01%	
45.695	Unidentified	1446	0.02%	
46.092	alpha-Humulene	1452	0.1%	
46.507	cis-Cadina-1(6),4-diene	1459	0.03%	
47.127	cis-Murrola-4(14),5-diene	1469	0.04%	
47.314	gamma-Muurolene	1472	0.17%	
47.689	Germacrene D	1478	1.77%	
47.849	Unidentified	1480	0.01%	
48.174	beta-Selinene	1485	0.03%	
48.348	gamma-Amorphene	1488	0.06%	
48.583	epi-Cubebol	1492	0.14%	



Ret. Time	Component	Ret. Idx.	Conc. %	
48.779	alpha-Muurolene	1495	0.41%	
49.285	Unidentified	1503	0.03%	
49.651	gamma-Cadinene	1509	0.62%	
49.770	Cubebol	1511	0.06%	
49.963	delta-Cadinene	1515	1.62%	
50.231	Unidentified	1519	0.02%	
50.806	Unidentified	1529	0.02%	
51.059	alpha-Cadinene	1533	0.1%	
51.736	Elemol	1545	2.83%	
52.199	Unidentified	1552	0.02%	
53.402	Germacren D-4-ol	1573	1.14%	
53.950	Unidentified	1582	0.01%	
55.577	Unidentified	1610	0.05%	
55.655	Unidentified	1611	0.01%	
56.040	Unidentified	1618	0.01%	
56.366	Epicubenol	1624	0.02%	
56.592	gamma-Eudesmol	1628	0.18%	
57.170	tau-Cadinol	1638	0.23%	
57.279	epi-alpha-Cadinol	1640	0.27%	
57.423	delta-Cadinol	1643	0.07%	
57.918	alpha-Cadinol	1652	0.98%	
58.085	Unidentified	1655	0.02%	
61.231	Unidentified	1711	0.02%	
66.567	Unidentified	1811	0.01%	
75.611	Unidentified	1993	0.02%	
106.331	Unidentified	2744	0.03%	
108.620	Unidentified	2809	0.03%	

Total Identified Compounds **99.26 %**

