

Sample Information

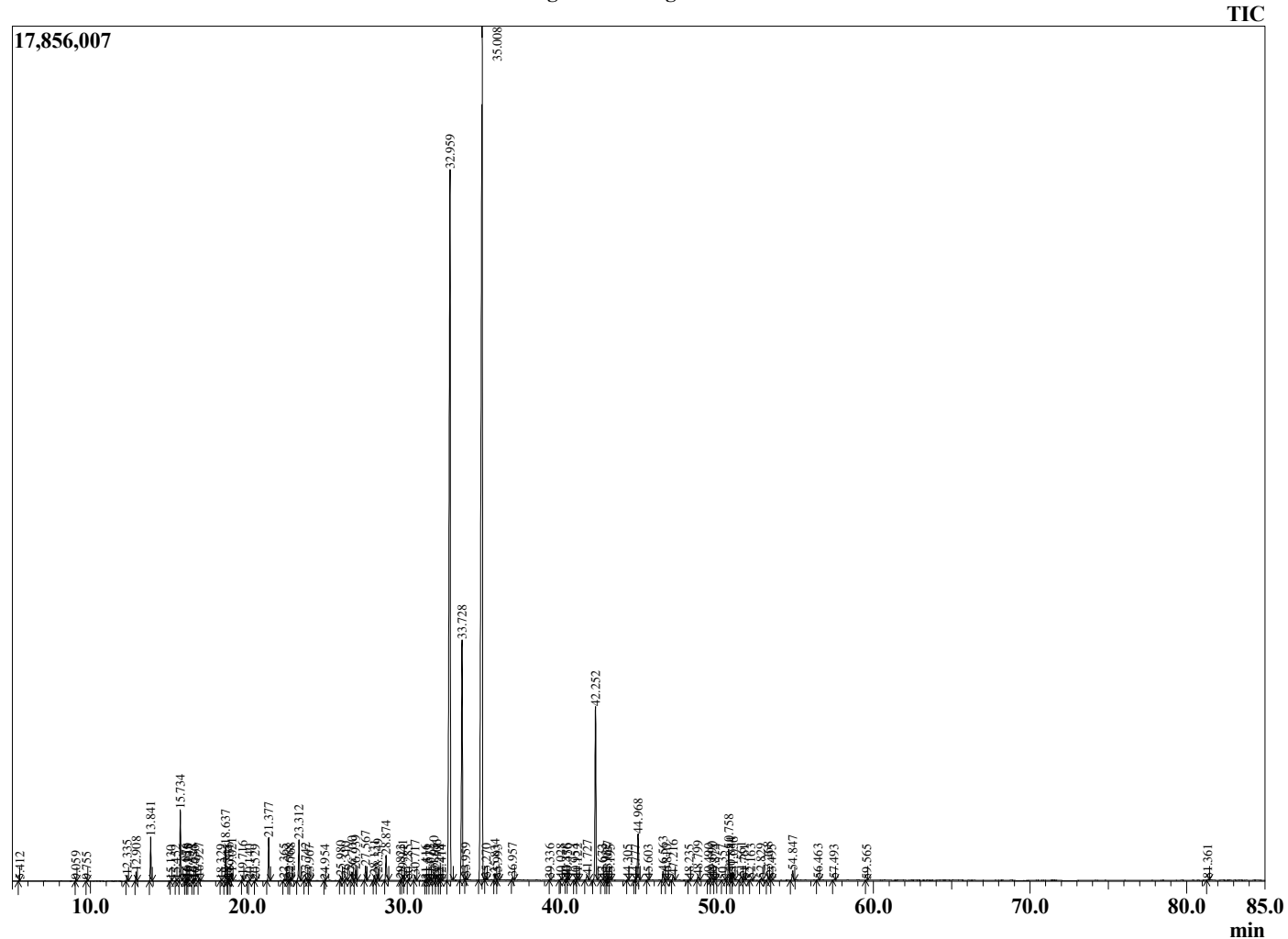
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 2/20/2021 3:30:37 AM
 Sample Type : Essential Oil
 Sample Name : Lemongrass Oil-Barefut
 Sample ID : 0107
 Injection Volume : 0.10
 Instrument ID : GC-3



Peak Report TIC

R.Time	Name	Area%
3.752	2-Methyl-3-buten-2-ol	0.03
4.208	3-Methylbutanal	0.01
5.412	1-Pentanol	0.01
9.059	Hex-3(Z)-enol	0.02
9.755	Butyrene	0.01
12.335	Tricyclene	0.13
12.908	alpha-Pinene	0.21
13.841	Camphene	1.04
15.130	Sabinene	0.01
15.452	beta-Pinene	0.01
15.734	6-Methyl-hept-5-en-2-one	1.71
16.076	Myrcene	0.06
16.158	2,3-dehydro-1,8-Cineole	0.04
16.245	Sulcatol	0.03
16.528	trans-Dehydroxylinalool oxide	0.03
16.650	Unidentified	0.01
16.927	Octanal	0.07
18.329	para-Cymene	0.01
18.637	Limonene	0.98
18.745	beta-Phellandrene	0.02
18.836	1,8-Cineole	0.07
19.021	(Z)-beta-Ocimene	0.20
19.716	(E)-beta-Ocimene	0.13
20.140	Bergamal	0.01
20.529	gamma-Terpinene	0.01
21.377	4-Nonanone	1.16
22.365	Terpinolene	0.06
22.668	4-Nonanol	0.03
22.768	Rosefuran	0.08
23.312	Linalool	1.22
23.742	alpha-Pinene oxide	0.10
23.967	Unidentified	0.03
24.954	Unidentified	0.01
25.980	Epiphocitral A	0.12
26.310	exo-Isocitral	0.11
26.700	trans-Chrysanthemal	0.25
26.939	Citronellal	0.30
27.567	Isoneral	0.42
28.131	Isoborneol	0.15
28.349	Borneol	0.21
28.874	Isogeranial	0.87
29.823	Unidentified	0.03
29.941	alpha-Terpineol	0.16
30.285	Unidentified	0.01
30.717	Decanal	0.18
31.416	Unidentified	0.01
31.511	trans-Carveol	0.03
31.672	Unidentified	0.02
31.930	Nerol	0.28
32.106	Citronellol	0.20
32.278	Unidentified	0.02
32.414	Unidentified	0.02
32.959	Neral	29.58
33.728	Geraniol	8.09
33.959	Piperitone	0.08
35.008	Geranial	39.76
35.270	4-Undecanone	0.05
35.834	trans-Carvone oxide	0.19
35.993	Unidentified	0.03
36.957	Geranyl formate	0.08
39.336	Unidentified	0.03
40.028	Geranic acid	0.04

Chromatogram Lemongrass Oil-Barefut



Comments:

The analysis of this Lemongrass batch sample meets the expected chemical profile for authentic essential oil of *Cymbopogon flexuosus*. 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.

R.Time	Name	Area%
40.376	Citronellyl acetate	0.05
40.456	Eugenol	0.03
40.954	Neryl acetate	0.04
41.122	Unidentified	0.03
41.727	Isoledene	0.23
42.252	Geranyl acetate	5.68
42.672	beta-Bourbonene	0.02
42.932	beta-Cubebene	0.03
43.027	beta-Elementene	0.13
43.195	Unidentified	0.03
44.305	Dodecanal	0.02
44.777	Unidentified	0.02
44.968	trans-beta-Caryophyllene	1.60
45.603	beta-Copaene	0.02
46.563	(E)-Isoeugenol	0.29
46.810	Unidentified	0.02
47.216	alpha-Humulene	0.17
48.235	10-beta-H-Cadina-1(6),4-diene	0.02
48.799	Germacrene D	0.14
49.490	Unidentified	0.04
49.690	Unidentified	0.11
49.874	alpha-Murolene	0.02
50.357	alpha-Chamigrene	0.03
50.758	gamma-Cadinene	1.03
50.884	Cubebol	0.22
51.056	delta-Cadinene	0.25
51.561	(E)-gamma-Bisabolene	0.16
51.761	Unidentified	0.02
52.163	alpha-Cadinene	0.03
52.829	Elemol	0.05
53.268	Geranyl butyrate	0.11
53.495	Germacrene B	0.01
54.847	Caryophyllene oxide	0.35
56.463	Humulene epoxide II	0.03
57.493	1-epi-Cubenol	0.02
59.565	Unidentified	0.01
81.361	Unidentified	0.02
		100.00