

Sample Information

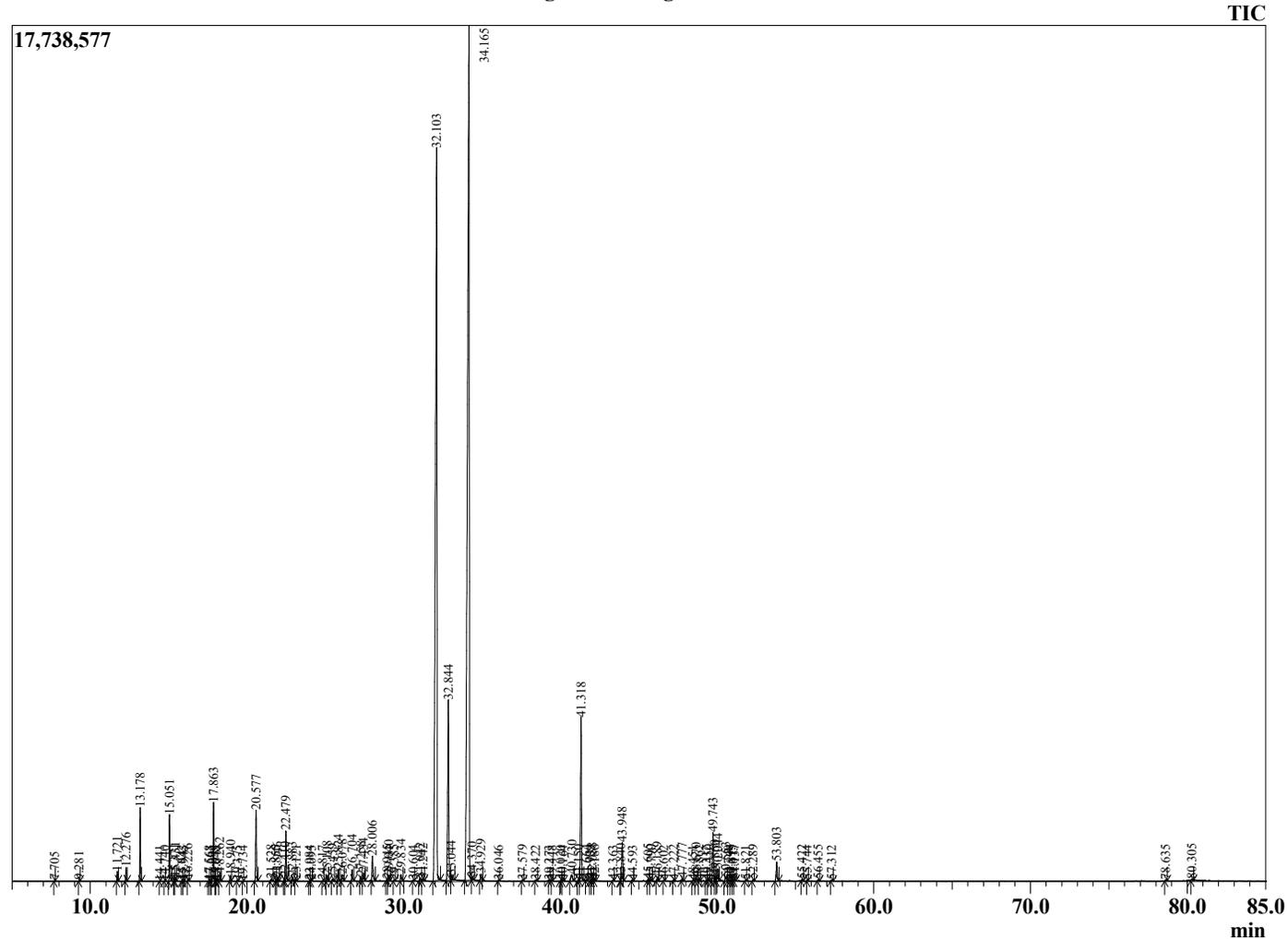
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 10/6/2021 2:36:04 AM
 Sample Type : Essential Oil
 Sample Name : Lemongrass Oil -Barefut
 Sample ID : 0108
 Injection Volume : 0.10
 Instrument ID : GC-4



Peak Report TIC

R.Time	Name	Area%
3.602	2-Methyl-3-buten-2-ol	0.03
4.031	3-Methylbutanal	0.01
7.705	Unidentified	0.01
9.281	Butyrene	0.01
11.721	Tricyclene	0.18
12.276	alpha-Pinene	0.25
13.178	Camphene	1.39
14.441	Sabinene	0.01
14.740	beta-Pinene	0.01
15.051	6-Methyl hept-5-en-2--one	1.32
15.371	Myrcene	0.04
15.431	dehydro-1,8-Cineole	0.07
15.842	trans-Dehydroxylinalool oxide	0.02
15.945	Unidentified	0.01
16.226	Octanal	0.04
17.568	para-Cymene	0.02
17.663	Unidentified	0.01
17.863	Limonene	1.70
17.975	beta-Phellandrene	0.01
18.048	1,8-Cineole	0.01
18.262	cis-beta-Ocimene	0.18
18.940	trans-beta-Ocimene	0.12
19.375	Bergamal	0.02
19.734	gamma-Terpinene	0.01
20.577	4-Nonanone	1.59
21.528	Terpinolene	0.05
21.855	4-Nonanol	0.03
21.946	Rosefuran	0.10
22.410	Perillene	0.07
22.479	Linalool	1.18
22.883	alpha-Pinene oxide	0.10
23.121	Unidentified	0.04
23.984	Unidentified	0.01
24.095	Unidentified	0.01
24.817	Unidentified	0.01
25.108	Epiphocitral A	0.13
25.459	exo-Isocitral	0.05
25.824	trans-Chrysanthemal	0.27
26.078	Citronellal	0.16
26.704	cis-Isocitral	0.27
27.258	Isoborneol	0.11
27.434	Borneol	0.20
28.006	trans-Isocitral	0.71
28.945	Unidentified	0.04
29.040	alpha-Terpineol	0.15
29.385	Unidentified	0.02
29.834	Decanal	0.16
30.604	Unidentified	0.01
31.042	Nerol	0.08
31.242	Citronellol	0.06
32.103	Neral	31.57
32.844	Geraniol	5.45
33.044	Piperitone	0.17
34.165	Geranial	42.17
34.370	4-Undecanone	0.09
34.929	trans-Carvone oxide	0.17
36.046	Geranyl formate	0.02
37.579	Methyl geranopate	0.02
38.422	Unidentified	0.02
39.273	alpha-Cubebene	0.01
39.448	Citronellyl acetate	0.01
40.020	Neryl acetate	0.02

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%
40.164	Unidentified	0.02
40.730	Cyclosativene	0.29
41.150	alpha-Copaene	0.03
41.318	Geranyl acetate	4.12
41.664	beta-Bourbonene	0.02
41.939	beta-Cubebene	0.02
42.038	beta-Elemene	0.08
42.186	Sativene	0.02
43.363	Dodecanal	0.02
43.840	Unidentified	0.02
43.948	trans-beta-Caryophyllene	1.12
44.593	beta-Copaene	0.02
45.605	trans-Isoeugenol	0.06
45.790	Unidentified	0.04
46.189	alpha-Humulene	0.12
46.602	Unidentified	0.01
47.222	Cadina-1(6),4-diene	0.03
47.777	Germacrene D	0.07
48.451	trans-Muurolo-4(14),5-diene	0.01
48.670	4-epi-cubedol	0.10
48.862	alpha-Muuroloene	0.03
49.312	alpha-Chamigrene	0.02
49.450	Cuparene	0.03
49.743	gamma-Cadinene	1.34
49.860	trans-Cubebol	0.14
50.044	delta-Cadinene	0.33
50.553	trans-gamma-Bisabolene	0.14
50.740	Unidentified	0.02
50.895	trans-Cadine-1,4-diene	0.02
51.015	Unidentified	0.02
51.137	alpha-Cadinene	0.04
51.821	Elemol	0.02
52.289	Geranyl butyrate	0.04
53.803	Caryophyllene oxide	0.57
55.422	Humulene epoxide II	0.04
55.744	Unidentified	0.01
56.455	1-epi-Cubenol	0.03
57.312	Epicubenol	0.02
78.635	Unidentified	0.03
80.305	Unidentified	0.04
		100.00