

Sample Information

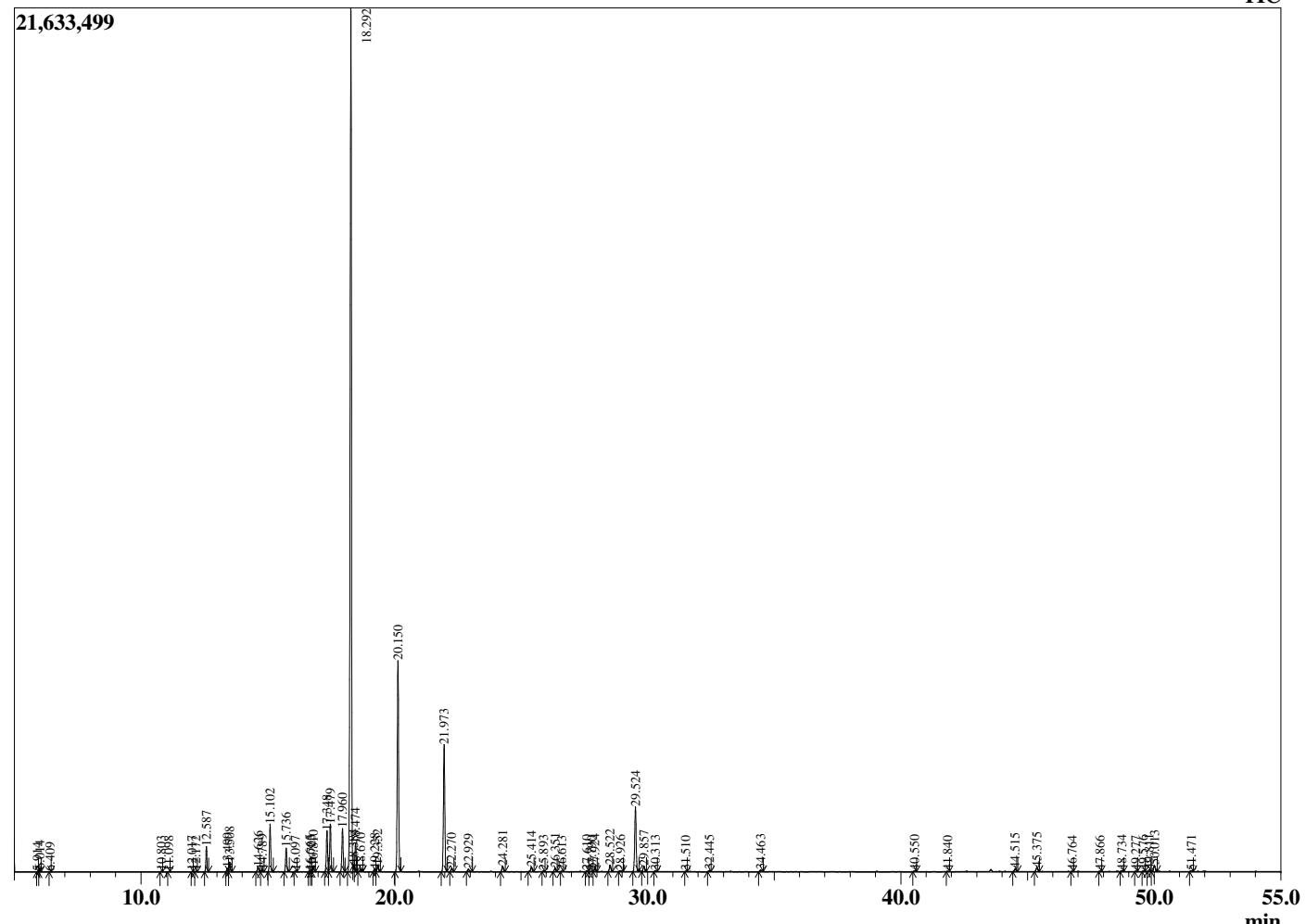
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 10/21/2018 8:08:30 AM
 Sample Type : Essential Oil
 Sample Name : Lime Oil, Distilled
 Sample ID : B0619W
 Injection Volume : 0.10
 Instrument ID: : GC-3



Peak Report TIC

R.Time	Name	Area%
5.914	Lime diene isomer	0.01
6.014	Lime diene isomer	0.07
6.409	Lime diene isomer	0.01
10.803	Nonane	0.03
11.098	Bornylene	0.01
12.017	Tricyclene	0.02
12.172	alpha-Thujene	0.03
12.587	alpha-Pinene	1.23
13.409	alpha-Fenchene	0.18
13.508	Camphene	0.49
14.626	Bois de Rose oxide	0.26
14.789	Sabinene	0.09
15.102	beta-Pinene	2.53
15.736	Myrcene	1.28
16.097	Unidentified	0.03
16.665	Pseudolimonene	0.03
16.723	Unidentified	0.04
16.810	alpha-Phellandrene	0.33
17.348	1,4-Cineole	2.35
17.479	alpha-Terpinene	2.67
17.960	para-Cymene	2.47
18.292	Limonene	54.87
18.384	beta-Phellandrene	0.05
18.474	1,8-Cineole	1.31
18.670	cis-beta-Ocimene	0.17
19.228	2,2-dimethyl-5-(1-methyl-1-propenyl)-tetrahydronaphthalene	0.17
19.352	trans-beta-Ocimene	0.42
20.150	gamma-Terpinene	12.58
21.973	Terpinolene	7.91
22.270	para-Cymenene	0.20
22.929	Linalool	0.19
24.281	alpha-Fenchol	0.38
25.414	Terpin-3-en-1-ol	0.32
25.893	Unidentified	0.04
26.351	trans-beta-Terpineol	0.22
26.613	Unidentified	0.02
27.610	Unidentified	0.06
27.790	delta-Terpineol	0.03
27.924	Borneol	0.17
28.522	Terpinen-4-ol	0.45
28.926	para-Cymen-8-ol	0.07
29.524	alpha-Terpineol	4.25
29.857	gamma-Terpineol	0.36
30.313	Decanal	0.04
31.510	Nerol	0.02
32.445	Neral	0.07
34.463	Geranial	0.11
40.550	Neryl acetate	0.07
41.840	Geranyl acetate	0.02
44.515	beta-Caryophyllene	0.21
45.375	trans-alpha-Bergamotene	0.30
46.764	alpha-Humulene	0.01
47.866	Unidentified	0.02
48.734	delta-Selinene	0.07
49.277	Unidentified	0.02
49.576	alpha-Bisabolene	0.03
49.811	(E,E)-alpha-Farnesene	0.12
50.013	beta-Bisabolene	0.44
51.471	alpha-Maaline	0.06
		100.00

Chromatogram Lime Oil, Distilled



Comments:

The analysis of this Lime Oil, Distilled batch sample meets the expected chemical profile for authentic essential oil of *Citrus aurantifolia*. 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.