

Sample Information

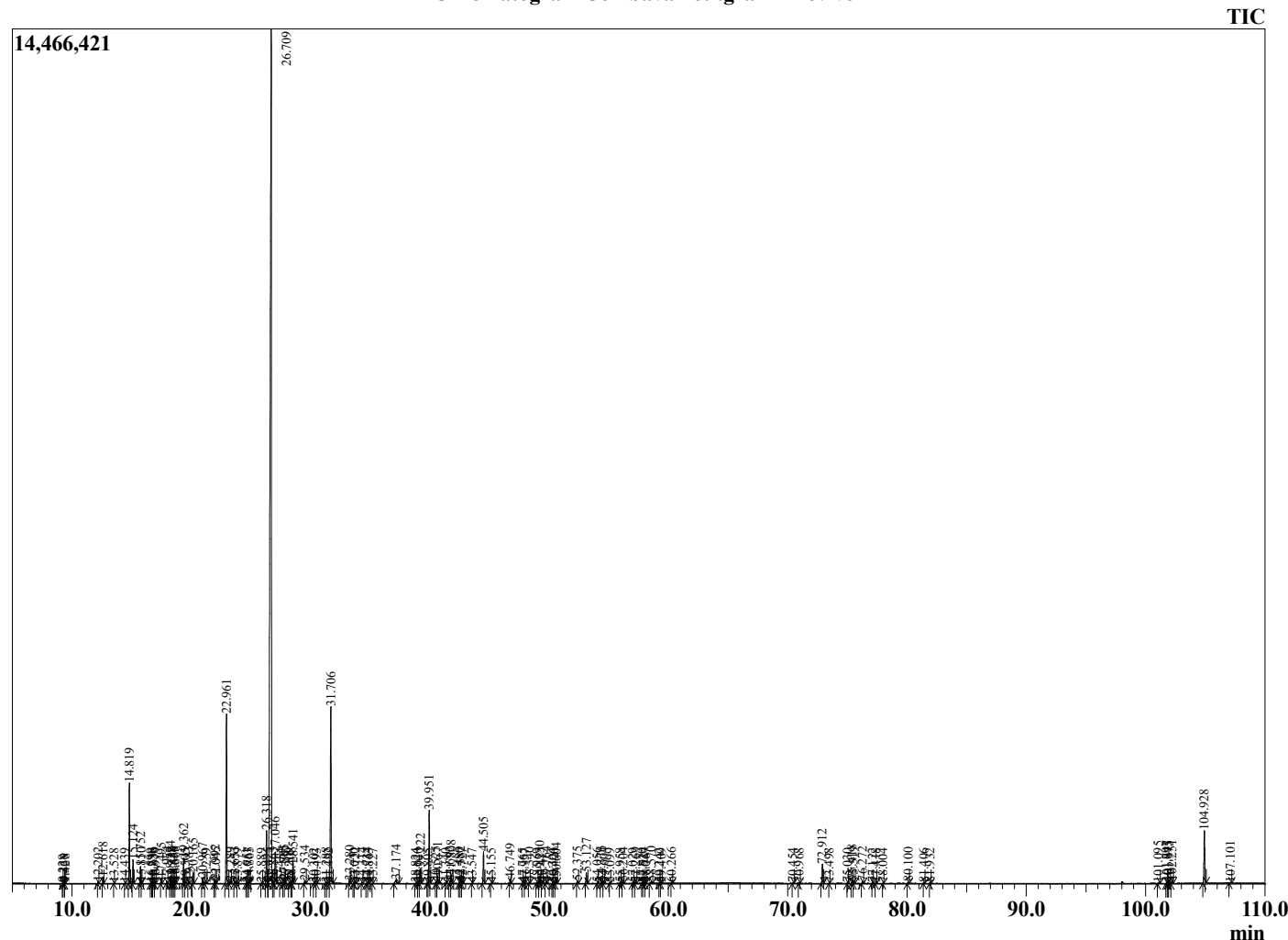
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 7/1/2023 5:03:37 PM
 Sample Type : Essential Oil
 Sample Name : Combava Petitgrain - Revive
 Sample ID : 1P
 Injection Volume : 0.10
 Instrument ID: : GC-3



Peak Report TIC

R.Time	Name	Area%
3.881	Unidentified	0.01
9.228	trans-7-Methyl-3-octene	0.01
9.369	Unidentified	0.01
9.428	1-Methyl-3-(1-methylethyl)-cyclopentane	0.02
12.202	alpha-Thujene	0.04
12.618	alpha-Pinene	0.19
13.528	Camphene	0.01
14.439	Unidentified	0.01
14.819	Sabinene	3.01
15.124	beta-Pinene	0.73
15.752	Myrcene	0.52
15.810	Unidentified	0.02
16.599	Octanal	0.01
16.738	Unidentified	0.01
16.830	alpha-Phellandrene	0.02
16.979	delta-3-Carene	0.04
17.495	alpha-Terpinene	0.19
17.974	para-Cymene	0.06
18.274	Limonene	0.24
18.378	beta-Phellandrene	0.04
18.458	Dihydromyrcenol isomer	0.08
18.579	Dihydromyrcenol	0.07
18.668	cis-beta-Ocimene	0.08
19.362	trans-beta-Ocimene	0.83
19.505	Unidentified	0.01
19.783	Bergamal	0.08
20.165	gamma-Terpinene	0.36
20.967	cis-Linalool oxide (furanoid)	0.24
21.259	Unidentified	0.03
21.992	Terpinolene	0.16
22.045	trans-Linalool oxide (furanoid)	0.04
22.961	Linalool	6.32
23.289	Nonanal	0.07
23.653	cis-Rose oxide	0.08
23.879	(E)-4,8-dimethyl-nona-1,3,7-triene	0.02
24.651	cis-para-Menth-2-en-1-ol	0.02
24.767	trans-Rose oxide	0.03
24.865	Citronellol	0.06
25.889	trans-para-Menth-2-en-1-ol	0.02
26.318	Isopulegol	2.02
26.425	Unidentified	0.03
26.709	Citronellal	61.89
26.863	Isomenthone	0.05
27.046	Neoisopulegol	1.51
27.484	Isomenthone	0.02
27.781	Isopulegol	0.12
27.805	cis-Piperitol	0.10
28.209	Unidentified	0.01
28.408	Neoisopulegol	0.03
28.541	Terpinen-4-ol	0.73
29.534	alpha-Terpineol	0.13
30.302	Decanal	0.02
30.493	trans-Piperitol	0.01
31.288	Citronellyl nitrile	0.05
31.492	Unidentified	0.04
31.706	Citronellol	7.04
33.280	Geraniol	0.11
33.630	Unidentified isomer I	0.03
33.722	Unidentified isomer I	0.05
34.314	Unidentified	0.04
34.734	Unidentified	0.04
34.863	Citronellyl formate	0.03

Chromatogram Combava Petitgrain - Revive



Comments:

The analysis of this Combava Petitgrain batch sample meets the expected chemical profile for authentic essential oil of *Citrus hystrix*. 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%
35.227	Unidentified	0.01
37.174	Citronellic acid	0.27
38.824	delta-Elemene	0.02
39.020	Unidentified	0.02
39.222	Citriodiol	0.60
39.805	Unidentified	0.01
39.951	Citronellyl acetate	2.85
40.525	Neryl acetate	0.07
40.671	Citriodiol isomer	0.28
41.340	Unidentified	0.02
41.692	alpha-Copaene	0.09
41.808	Geranyl acetate	0.33
42.480	beta-Cubebene	0.04
42.582	beta-Elemene	0.07
42.727	Unidentified	0.02
43.547	Unidentified	0.01
44.505	beta-Caryophyllene	1.27
45.155	beta-Copaene	0.01
46.749	alpha-Humulene	0.18
47.765	Unidentified	0.01
47.957	trans-Cadina-1(6),4-diene	0.01
48.340	Germacrene D	0.05
48.969	Valencene	0.03
49.230	Bicyclgermacrene	0.33
49.417	alpha-Murolene	0.04
49.764	trans,trans-alpha-Farnesene	0.07
50.304	gamma-Cadinene	0.01
50.420	Cubebol	0.02
50.604	delta-Cadinene	0.24
52.375	alpha-Elemol	0.10
53.127	(E)-Nerolidol	0.43
54.056	Spathulenol	0.03
54.376	Caryophyllene oxide	0.09
54.604	Unidentified	0.02
55.099	Unidentified	0.01
55.958	Unidentified	0.02
56.204	Unidentified	0.06
57.029	Epicubenol	0.03
57.269	epi-gamma-Eudesmol	0.04
57.810	Unidentified	0.01
57.924	Unidentified	0.03
58.067	Unidentified	0.01
58.570	alpha-Cadinol	0.12
59.242	Unidentified	0.01
59.409	Unidentified	0.01
60.266	Unidentified	0.03
70.454	Unidentified	0.02
70.968	Unidentified	0.02
72.912	Citriodiol acetal	0.86
73.498	Citriodiol acetal isomer	0.02
75.030	Unidentified	0.02
75.418	Citriodiol acetal isomer	0.18
75.519	Citriodiol acetal isomer	0.07
76.272	Unidentified	0.09
77.122	Unidentified	0.02
77.418	Unidentified	0.03
78.004	Unidentified	0.01
80.100	Unidentified	0.05
81.406	Phytol	0.02
81.932	Unidentified	0.02
101.095	Unidentified	0.04
101.797	Unidentified	0.06
101.845	Unidentified	0.04

R.Time	Name	Area%
101.975	Unidentified	0.08
102.251	Unidentified	0.10
104.928	Unidentified	2.39
107.101	Unidentified	0.04
		100.00