

Sample Information

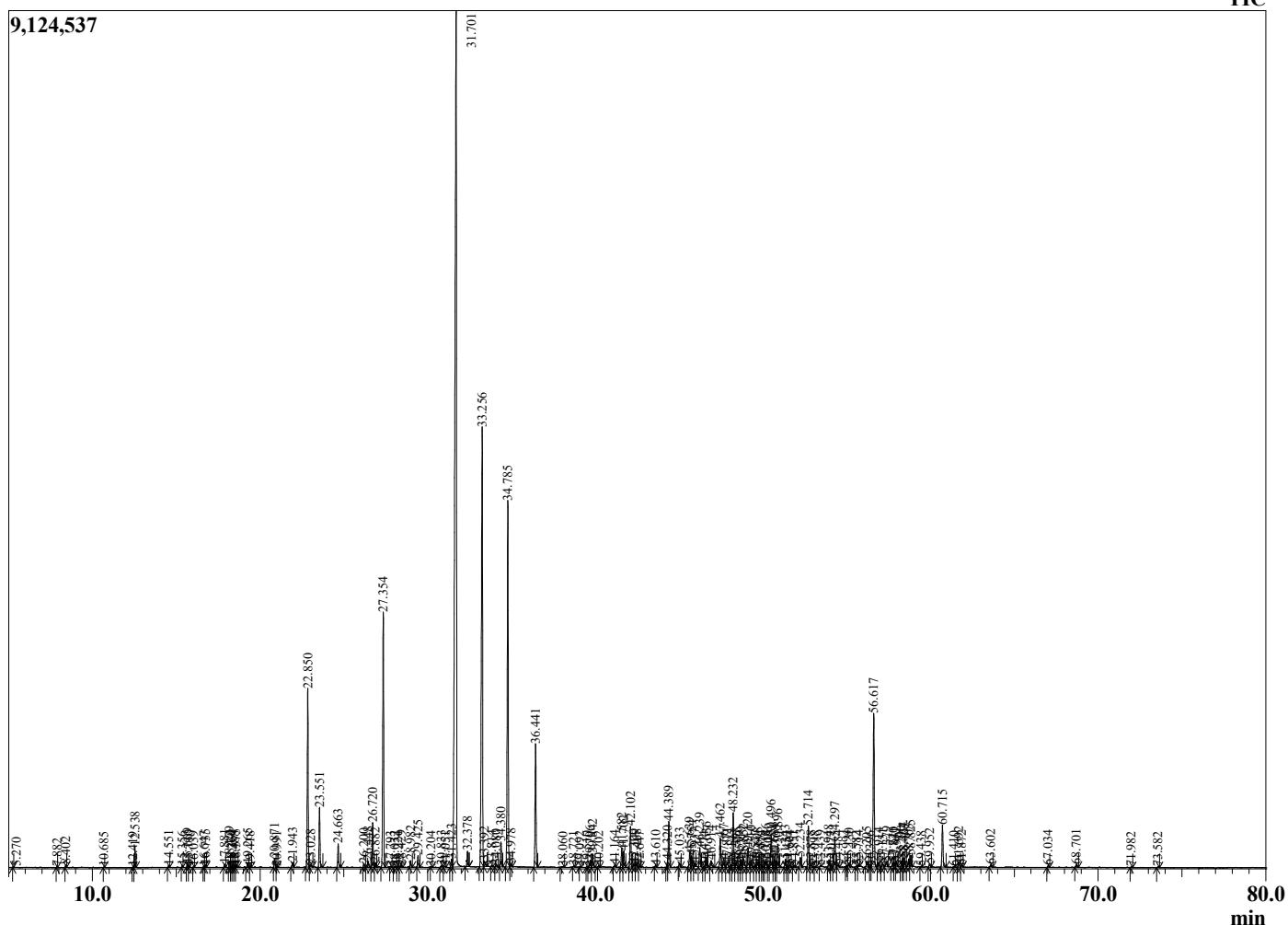
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 4/11/2023 12:13:45 PM
 Sample Type : Essential Oil
 Sample Name : Geranium, Egypt - Revive
 Sample ID : 0G
 Injection Volume : 0.10
 Instrument ID: : GC-3



Peak Report TIC

R.Time	Name	Area%
5.270	3-Methylbutanol	0.01
7.882	Unidentified	0.01
8.402	3-Methyl pentanol	0.04
10.685	Unidentified	0.01
12.419	Unidentified	0.01
12.538	alpha-Pinene	0.37
14.551	Bois de Rose oxide	0.04
15.356	6-Methyl hept-5-en-2-one	0.03
15.669	Myrcene	0.08
15.730	trans-5-Isopropenyl-2-methyl-2-vinyltetrahyd	0.02
16.039	Unidentified	0.02
16.647	cis-Dihydrolinalool oxide	0.02
16.735	alpha-Phellandrene	0.05
17.881	para-Cymene	0.06
18.179	Limonene	0.13
18.279	beta-Phellandrene	0.04
18.364	Unidentified	0.04
18.488	Dihydromyrcenol	0.03
18.575	cis-beta-Ocimene	0.06
19.265	trans-beta-Ocimene	0.08
19.418	Unidentified	0.02
20.871	cis-Linalool oxide (furanoid)	0.20
20.991	Unidentified	0.01
21.943	trans-Linalool oxide (furanoid)	0.13
22.850	Linalool	3.88
23.028	6-Methyl heptadi-3,5-en-2-one	0.07
23.551	cis-Rose oxide	1.34
24.663	trans-Rose oxide	0.54
26.200	Isopulegol	0.09
26.448	Citronellal	0.16
26.720	Menthone	1.03
26.882	Unidentified	0.12
27.354	Isomenthone	6.17
27.793	Unidentified	0.02
28.032	Unidentified	0.03
28.224	Unidentified	0.02
28.429	Terpinen-4-ol	0.05
28.982	Isomenthol	0.16
29.425	alpha-Terpineol	0.27
30.204	Unidentified	0.02
30.833	Unidentified	0.07
31.051	Unidentified	0.03
31.423	Nerol	0.21
31.701	Citronellol	34.29
32.378	Neral	0.35
33.256	Geraniol	12.78
33.392	Unidentified	0.18
33.814	Unidentified	0.03
34.080	Isogeraniol	0.07
34.380	Geranal	0.58
34.785	Citronellyl formate	8.93
34.978	Neryl formate	0.07
36.441	Geranyl formate	3.07
38.060	(3Z)-Hexenyl tiglate	0.04
38.721	delta-Elemene	0.03
39.092	Unidentified	0.01
39.510	Neric acid	0.02
39.706	alpha-Cubebene	0.19
39.842	Citronellyl acetate	0.34
40.202	Unidentified	0.03
41.164	alpha-Ylangener	0.05
41.582	alpha-Copaene	0.50

Chromatogram Geranium, Egypt - Revive



Comments:

The analysis of this Geranium batch sample meets the expected chemical profile for authentic essential oil of *Pelargonium graveolens*. 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%
41.702	Geranyl acetate	0.42
42.102	beta-Bourbonene	1.06
42.300	alpha-Bourbonene	0.09
42.468	beta-Elemene	0.09
42.647	Phenethyl isobutyrate	0.03
43.610	alpha-Gurjunene	0.05
44.320	beta-Ylangene	0.10
44.389	beta-Caryophyllene	1.20
45.033	beta-Copaene	0.11
45.639	Citronellyl propionate	0.41
45.754	6,9-Guaiadiene	0.29
45.937	Isogermacrene D	0.08
46.239	Guanidiene isomer	0.48
46.474	trans-beta-Farnesene	0.02
46.636	alpha-Humulene	0.27
46.914	Alloaromodendrene	0.22
47.462	Geranyl propanoate	0.76
47.667	trans-Cadina-1(6),4-diene	0.25
47.871	Unidentified	0.18
48.145	alpha-Amorphene	0.06
48.232	Germacrene D	1.44
48.398	Selina-4,11-diene	0.16
48.599	delta-Selinene	0.04
48.719	beta-Selinene	0.16
48.852	Viridiflorene	0.34
49.120	Bicyclogermacrene	0.56
49.310	alpha-Muurolene	0.19
49.577	Unidentified	0.07
49.698	beta-Dihydroagarofuran	0.20
49.851	Geranyl isobutyrate	0.08
49.978	Dihydroagarofuran isomer	0.02
50.186	gamma-Cadinene	0.23
50.306	Cubebol	0.03
50.496	delta-Cadinene	0.89
50.684	cis-Calamenene	0.23
50.768	Zonarene	0.16
50.896	Citronellyl butyrate	0.60
51.343	trans-Cadina-1,4-diene	0.20
51.457	Unidentified	0.03
51.604	Selina-4(15),7(11)-diene	0.07
51.851	alpha-Calacorene	0.05
52.234	alpha-Agarofuran	0.27
52.714	Geranyl butyrate	1.07
52.878	1-nor-Bourbonanone	0.07
53.098	Unidentified	0.02
53.439	Unidentified	0.03
53.948	Spathulenol	0.19
54.077	Unidentified	0.02
54.297	Phenethyl tiglate	0.84
54.484	Globulol	0.06
54.994	Viridifloro	0.03
55.130	Neryl (S)-2-methylbutanoate	0.10
55.582	Unidentified	0.03
55.714	Eudesm-5-en-11-ol	0.04
56.205	1,10-Epicubenol	0.15
56.396	Unidentified	0.01
56.617	10-epi-gamma-Eudesmol	4.24
56.914	1-Epicubenol	0.13
57.151	gamma-Eudesmol	0.10
57.379	Hinesol	0.15
57.770	Unidentified	0.11
57.841	Unidentified	0.13
57.962	Unidentified	0.14

R.Time	Name	Area%
58.290	Unidentified	0.14
58.364	Unidentified	0.22
58.427	alpha-Eudesmol	0.29
58.703	Unidentified	0.24
58.825	Citronellyl tiglate	0.30
59.438	Unidentified	0.02
59.952	Citronellyl hexanoate	0.10
60.715	Geranyl tiglate	1.11
61.410	Unidentified	0.02
61.692	Neryl hexanoate	0.15
61.872	Citronellyl hexanoate	0.05
63.602	Geraniol hexanoate	0.07
67.034	Unidentified	0.05
68.701	Unidentified	0.07
71.982	Unidentified	0.02
73.582	Geranyl octanoate	0.02
		100.00