

Sample Information

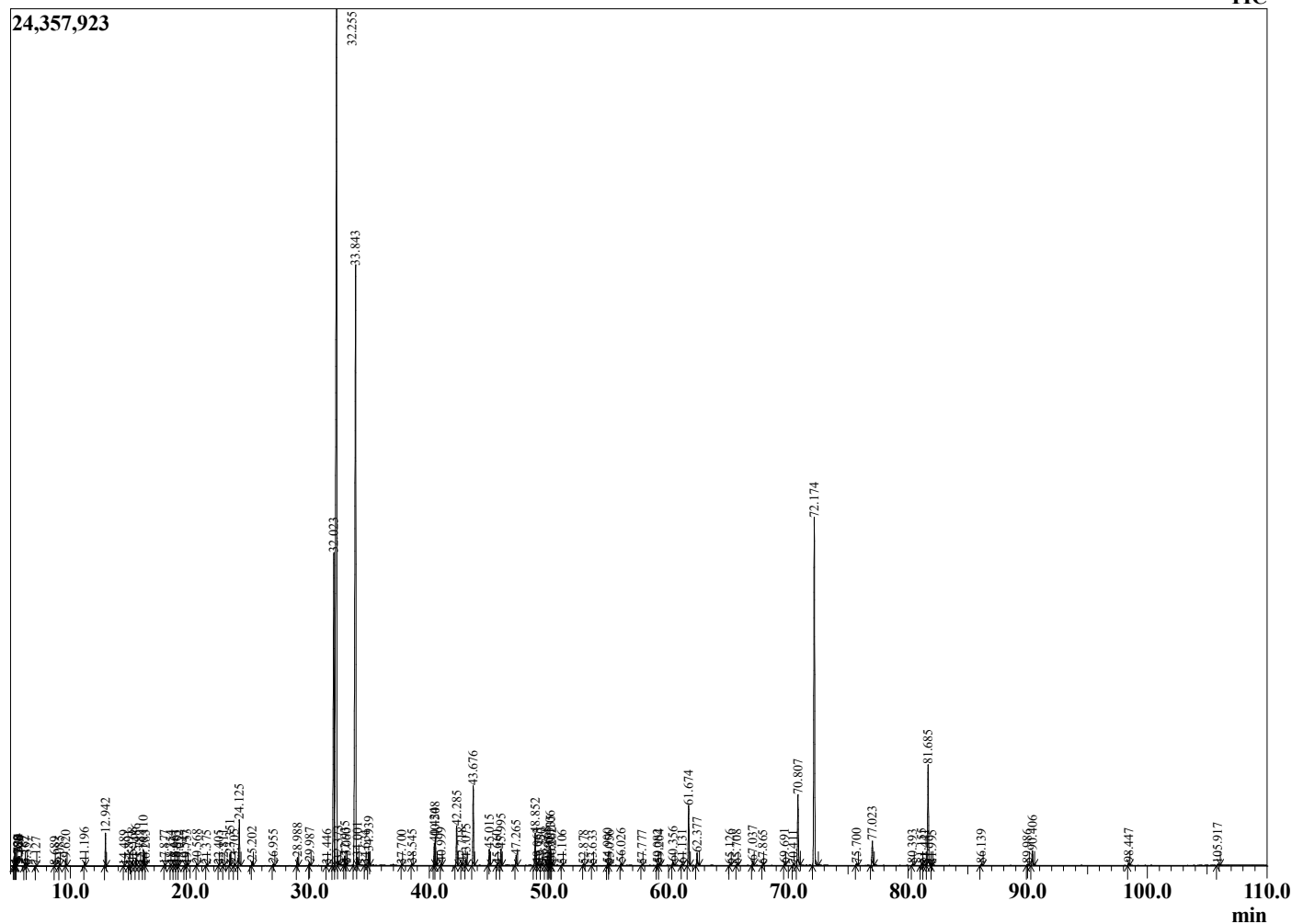
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 3/22/2021 4:36:03 PM
 Sample Type : Essential Oil
 Sample Name : Rose, Bulgaria - Edens Garden
 Sample ID : BB22AY
 Injection Volume : 0.10
 Instrument ID : GC-3



Peak Report TIC

R.Time	Name	Area%
3.052	Ethanol	1.52
3.691	Unidentified	0.01
3.905	Unidentified	0.01
4.785	Pentanal	0.03
5.280	1,1-Diethoxyethane	0.02
5.368	3-Isopentenyl alcohol	0.01
5.434	3-Methylbutanol	0.05
5.520	2-Methylbutanol	0.04
6.162	1-Pentanol	0.02
6.357	Prenol	0.01
7.127	Hexanal	0.01
8.689	3-Methyl pentanol	0.01
9.085	Hex-3(Z)-enol	0.03
9.620	n-Hexanol	0.12
11.196	Heptanal	0.06
12.942	alpha-Pinene	0.63
14.489	Benzaldehyde	0.01
14.891	Heptanol	0.01
15.168	Sabinene	0.07
15.486	beta-Pinene	0.15
15.782	6-Methylhept-5-en-2-one	0.01
16.110	Myrcene	0.32
16.283	Sulcatol	0.01
17.877	alpha-Terpinene	0.02
18.354	para-Cymene	0.01
18.661	Limonene	0.04
18.863	1,8-Cineole	0.02
19.052	(Z)-beta-Ocimene	0.01
19.547	Benzeneacetaldehyde	0.01
19.753	(E)-beta-Ocimene	0.02
20.568	gamma-Terpinene	0.04
21.375	trans-Sabinene hydrate	0.02
22.405	Terpinolene	0.02
22.811	Rosefuran	0.03
23.351	Linalool	0.25
23.705	Nonanal	0.04
24.125	Phenethyl alcohol	1.28
25.202	trans-Rose oxide	0.10
26.955	Unidentified	0.04
28.988	Terpinen-4-ol	0.21
29.987	alpha-Terpineol	0.09
31.446	Unidentified	0.02
32.023	Nerol	9.48
32.255	Citronellol	33.86
32.373	Isogeraniol isomer	0.13
32.935	Neral	0.23
33.060	Isogeraniol isomer	0.05
33.843	Geraniol	21.74
34.001	2-Phenethyl acetate	0.24
34.634	Isogeraniol isomer	0.01
34.939	Geranial	0.34
37.700	Undecenal	0.01
38.545	Methyl geranate	0.04
40.424	Citronellyl acetate	0.57
40.508	Eugenol	0.74
40.999	Neryl acetate	0.07
42.285	Geranyl acetate	1.05
42.718	beta-Bourbonene	0.08
43.075	beta-Elemene	0.17
43.676	Methyleugenol	2.04
45.015	trans-beta-Caryophyllene	0.47
45.660	beta-Copaene	0.02

Chromatogram Rose, Bulgaria - Edens Garden



Comments:

The analysis of this Rose Oil, Bulgaria batch sample meets the expected chemical profile for authentic essential oil of *Rosa damascena*. 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%
45.995	alpha-Guaiene	0.46
47.265	alpha-Humulene	0.28
48.852	Germacrene D	0.94
49.063	Phenethyl-2-methylbutyrate	0.05
49.350	beta-Selinene	0.06
49.768	Aciphyllene	0.12
49.954	alpha-Selinene	0.03
50.106	Pentadecane	0.54
50.135	alpha-Bulnesene	0.13
50.262	(E,E)-alpha-Farnesene	0.09
51.106	delta-Cadinene	0.02
52.878	alpha-Elemol	0.02
53.633	trans-Nerolidol	0.02
54.900	2-Phenylethyl tiglate	0.05
55.056	Spathulenol	0.02
56.026	Hexadecane	0.06
57.777	gamma-Eudesmol	0.01
59.082	alpha-Eudesmol	0.06
59.204	Pogostol	0.04
60.356	(Z)-8-Heptadecene isomer	0.13
61.131	Farnesol isomer	0.03
61.674	Heptadecane	1.72
62.377	(2E,6E)-Farnesol	0.38
65.126	Benzyl benzoate	0.03
65.708	Unidentified	0.02
67.037	Octadecane	0.13
67.865	Hexadecanal	0.02
69.691	Phenethyl benzoate	0.05
70.411	Unidentified	0.02
70.807	(Z)-9-Nonadecene	2.19
72.174	Nonadecane	10.65
75.700	Unidentified	0.06
77.023	Eicosane	0.75
80.393	Unidentified	0.05
81.155	Unidentified	0.06
81.441	Unidentified	0.05
81.685	Heneicosane	3.23
81.995	Unidentified	0.02
86.139	Docosane	0.05
89.986	Tricosane isomer	0.04
90.406	Tricosane isomer	0.44
98.447	Pentacosane	0.07
105.917	Heptacosane	0.06
		100.00