

Sample Information

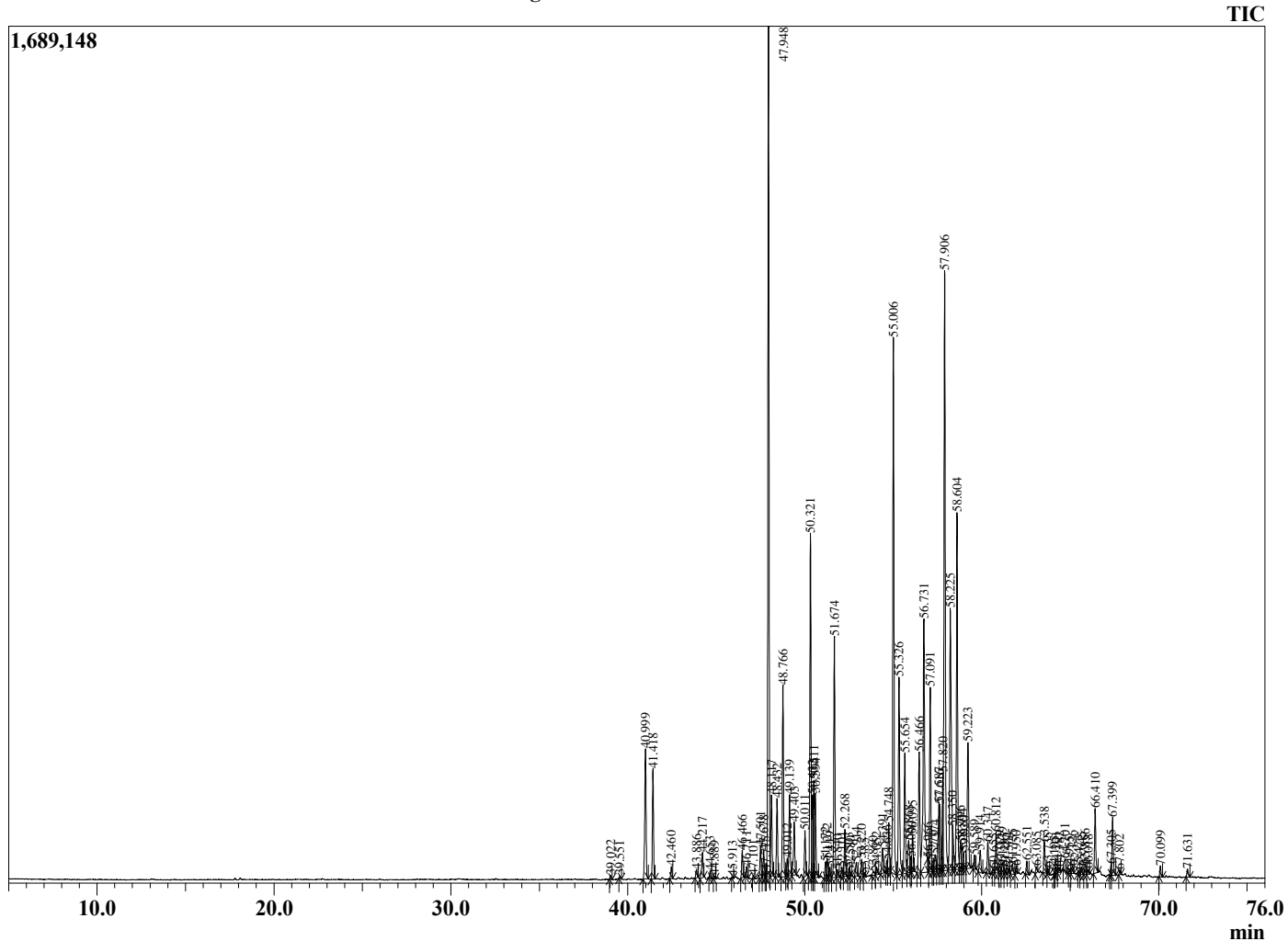
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 11/21/2020 1:56:50 PM
 Sample Type : Essential Oil
 Sample Name : Muhuhu Oil-Edens Garden
 Sample ID : BA18FAK
 Injection Volume : 0.10
 Instrument ID : GC-4



Peak Report TIC

R.Time	Name	Area%
39.022	Unidentified	0.05
39.551	Unidentified	0.03
40.999	alpha-Ylangene	2.12
41.418	alpha-Copaene	1.48
42.460	Sativene	0.16
43.886	Unidentified	0.13
44.217	trans-beta-Caryophyllene	0.42
44.653	Unidentified	0.09
44.889	Unidentified	0.03
45.913	Unidentified	0.02
46.466	alpha-Humulene	0.37
46.711	Unidentified	0.16
47.101	Unidentified	0.04
47.501	10-beta-H-Cadina-1(6),4-diene	0.44
47.678	trans-Cadina-1(6),4-diene	0.38
47.775	Unidentified	0.06
47.948	alpha-Amorphene	12.15
48.117	(Z)-4,10-Expoxy amorphane	1.17
48.432	delta-Selinene	1.08
48.766	trans-Murrola-4(14),5-diene	2.72
49.012	Epizonarene	0.25
49.139	alpha-Murolene	1.21
49.403	delta-Amorphene	0.86
50.011	gamma-Cadinene	0.62
50.321	delta-Cadinene	4.79
50.432	cis-Calamenene	1.07
50.511	trans-Calamenene	1.25
50.594	Zonarene	1.21
51.172	trans-Cadina-1,4-diene	0.23
51.272	Unidentified	0.32
51.419	Unidentified	0.14
51.674	alpha-Calacorene	3.39
51.840	Unidentified	0.13
52.101	Unidentified	0.12
52.268	Unidentified	0.65
52.503	Unidentified	0.11
52.580	Unidentified	0.08
52.914	Unidentified	0.23
53.220	Unidentified	0.24
53.385	Unidentified	0.06
53.860	Unidentified	0.09
54.052	Caryophyllene oxide	0.14
54.391	Unidentified	0.38
54.636	Unidentified	0.13
54.748	Unidentified	0.71
55.006	Brachyl oxide	7.87
55.326	beta-Oplopenone	3.08
55.654	Unidentified	1.83
55.868	Unidentified	0.68
56.000	Unidentified	0.20
56.095	Unidentified	0.53
56.466	Unidentified	1.94
56.731	1-epi-Cubenol	5.31
56.966	Unidentified	0.01
57.091	Unidentified	2.79
57.270	Unidentified	0.09
57.374	Unidentified	0.30
57.587	Unidentified	1.01
57.616	Unidentified	0.90
57.820	delta-Cadinol	1.05
57.906	Copaenal	9.73
58.225	alpha-Cadinol	4.97

Chromatogram Muhuhu Oil-Edens Garden



Comments:

The analysis of this Muhuhu batch sample meets the expected chemical profile for authentic essential oil of *Brachyleana hutchinsii*. 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%
58.350	Unidentified	0.57
58.604	Unidentified	5.11
58.796	Unidentified	0.42
58.894	Unidentified	0.41
59.020	Unidentified	0.46
59.223	Cadalene	2.31
59.589	Unidentified	0.18
59.914	Unidentified	0.40
60.347	Unidentified	0.46
60.655	Unidentified	0.06
60.812	Unidentified	0.62
61.029	Unidentified	0.13
61.179	Unidentified	0.21
61.295	Unidentified	0.09
61.504	Unidentified	0.07
61.735	Unidentified	0.21
61.950	Unidentified	0.12
62.551	Unidentified	0.18
63.085	Unidentified	0.09
63.538	Unidentified	0.51
63.735	Unidentified	0.09
64.105	Unidentified	0.05
64.201	Unidentified	0.10
64.382	Unidentified	0.09
64.701	Unidentified	0.30
64.955	Unidentified	0.04
65.126	Unidentified	0.15
65.473	Unidentified	0.04
65.645	Unidentified	0.12
65.856	Unidentified	0.17
66.018	Unidentified	0.09
66.410	Muhuhu unknown isomer A	0.96
67.305	Unidentified	0.11
67.399	Muhuhu unknown isomer B	0.92
67.802	Unidentified	0.06
70.099	Unidentified	0.15
71.631	Unidentified	0.14
		100.00