

Sample Information

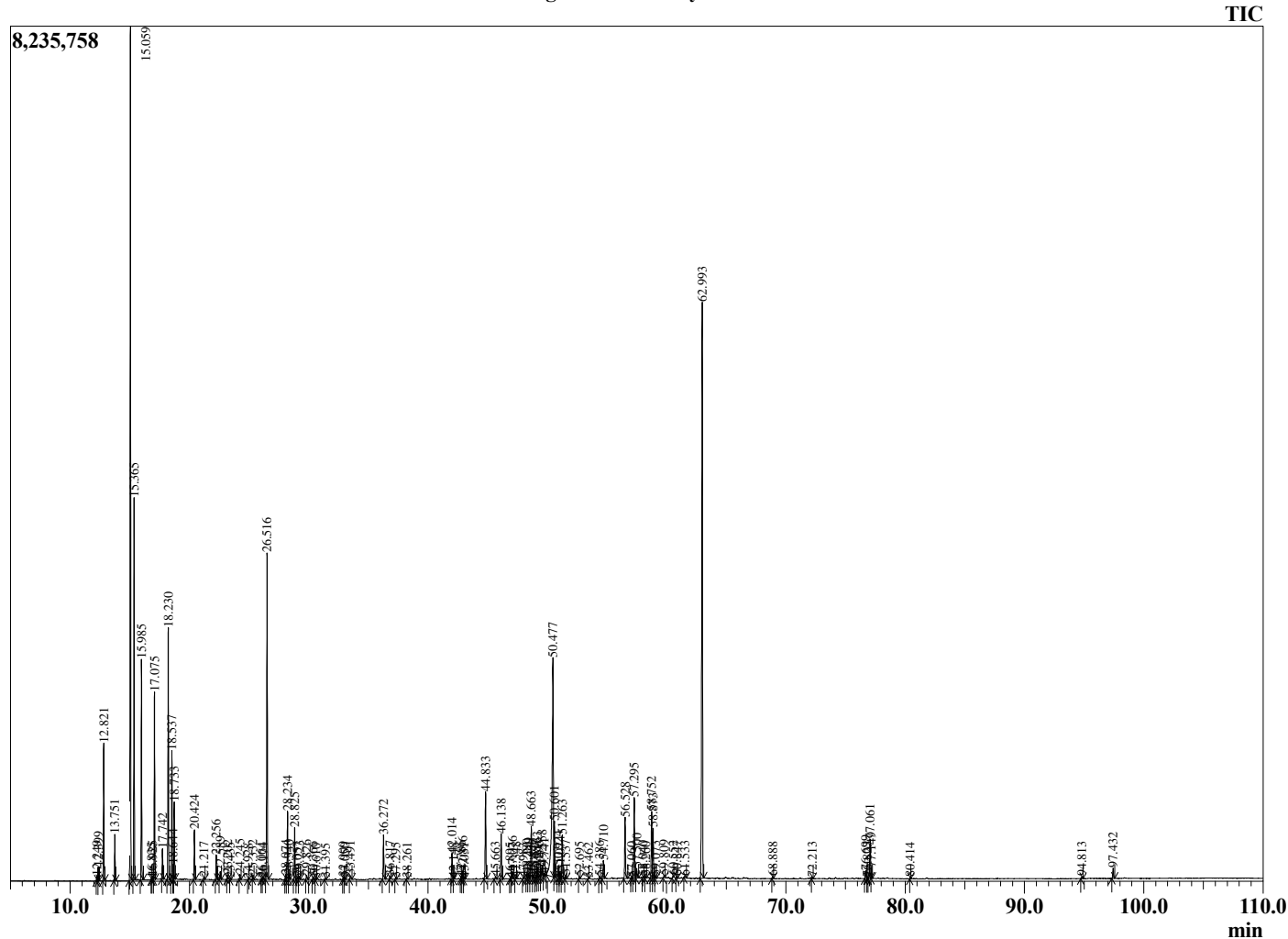
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 3/24/2021 11:43:09 PM
 Sample Type : Essential Oil
 Sample Name : Blue Tansy Oil - Barefut
 Sample ID : 0104
 Injection Volume : 0.10
 Instrument ID : GC-3



Peak Report TIC

R.Time	Name	Area%
12.249	Tricyclene	0.08
12.399	alpha-Thujene	0.23
12.821	alpha-Pinene	2.27
13.751	Camphene	0.79
15.059	Sabinene	15.37
15.365	beta-Pinene	6.62
15.985	Myrcene	3.88
16.835	Octanal	0.03
16.925	Pseudolimonene	0.06
17.075	alpha-Phellandrene	3.39
17.742	alpha-Terpinene	0.56
18.230	para-Cymene	4.72
18.537	Limonene	2.42
18.644	beta-Phellandrene	0.26
18.733	1,8-cineole	1.39
20.424	gamma-Terpinene	0.96
21.217	trans-Sabinene hydrate	0.05
22.256	Terpinolene	0.49
22.589	6,7-Epoxymyrcene	0.16
23.202	Linalool	0.09
23.435	2-Methylbutyl-2-methylbutyrate	0.03
24.245	Unidentified	0.10
24.928	cis-para-Menth-2-en-1-ol	0.02
25.332	4-Acetyl-1-methylcyclohexene	0.08
26.064	trans-Pinocarveol	0.02
26.174	trans-para-Menth-2-en-1-ol	0.05
26.516	Camphor	6.83
28.074	Unidentified	0.08
28.234	Borneol	1.49
28.340	Unidentified	0.09
28.825	Terpinen-4-ol	1.13
29.057	beta-Thujone	0.06
29.223	para-Cymen-8-ol	0.07
29.826	alpha-Terpineol	0.11
30.366	alpha-Phellandrene epoxide	0.05
30.610	Decanal	0.03
31.395	Unidentified	0.03
32.909	Unidentified	0.06
33.050	Cuminal	0.03
33.491	Carvotanacetone	0.11
36.272	Thymol	0.96
36.817	Carvacrol	0.05
37.295	Heptyl-2-methylbutyrate	0.03
38.261	Unidentified	0.04
42.014	alpha-Copaene	0.62
42.148	Unidentified	0.02
42.786	7-epi-Sesquithujene	0.07
42.896	beta-Elementene	0.19
43.031	Unidentified	0.03
44.833	trans-beta-Caryophyllene	2.11
45.663	trans-alpha-Bergamotene	0.08
46.138	(Z)-beta-Farnesene	1.08
46.895	(E)-beta-Farnesene	0.03
47.076	alpha-Humulene	0.16
47.348	Alloaromadendrene	0.04
47.983	4,5-di-epi-Aristolochene	0.02
48.280	trans-Cadina-1(6),4-diene	0.09
48.449	gamma-Curcumene	0.12
48.663	Germacrene D	1.29
48.840	(Z,E)-alpha-Farnesene	0.10
49.087	Valencene	0.06
49.163	beta-Selinene	0.27

Chromatogram Blue Tansy Oil - Barefut



Comments:

The analysis of this Blue Tansy batch sample meets the expected chemical profile for authentic essential oil of *Tanacetum annuum*. 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%
49.296	Unidentified	0.06
49.558	Bicyclogermacrene	0.31
49.741	alpha-Murolene	0.07
50.477	3,6-Dihydrochamazulene	9.57
50.601	Dihydrochamazulene isomer	1.23
50.924	delta-Cadinene	0.32
51.074	Dihydrochamazulene isomer	0.21
51.263	beta-Sesquiphellandrene	1.04
51.537	Dihydrochamazulene isomer	0.07
52.695	alpha-Elemol	0.05
53.462	Dihydrochamazulene isomer	0.03
54.386	Spathulenol	0.07
54.710	Caryophyllene oxide	0.46
56.528	5,6-Dihydrochamazulene	1.52
57.060	Humulane-1,6-dien-3-ol	0.02
57.295	7,12-Dehydro-5,6,7,8-tetrahydrochamazulene	1.96
57.500	Eremoligenol isomer	0.28
58.040	Unidentified	0.05
58.260	alpha-Cadinol	0.04
58.752	Dehydrotetrahydrochamazulene isomer	1.68
58.873	alpha-Eudesmol	1.29
59.073	Unidentified	0.06
59.809	beta-Bisabolol	0.06
60.552	Unidentified	0.04
60.847	Unidentified	0.04
61.533	Unidentified	0.07
62.993	Chamazulene	15.65
68.888	Phytone	0.05
72.213	Unidentified	0.04
76.699	Unidentified	0.22
76.823	Unidentified	0.04
77.061	9-(15,16-Dihydro-15-methylenegeranyl)-alph.	1.09
77.149	9-(15,16-Dihydro-15-methylenegeranyl)-para.	0.19
80.414	Unidentified	0.03
94.813	Unidentified	0.05
97.432	Unidentified	0.27
		100.00