

Laboratory Test Report

SAMPLE NAME : Sweet Marjoram
CLIENT NAME : Plant Therapy
CLIENT LOT # : M20115R
APRC LOT# : PT250617F

Column : ZB5 (60 m length × 0.25 mm inner diameter × 0.25 µm film thickness)
Instrument : Shimadzu GCMS-QP2010 Ultra
Carrier gas : Helium 80 psi
Temperature ramp : 2 degrees Celsius per minute up to 260-degree Celsius
Split ratio : 30:1
Sample preparation : 5% w/v solution with Dichloromethane

Interpretation on this sample

The analysis of sweet Marjoram sample meets the standard chemical profile of *Origanum majorana* essential oil.

Analyzed by : Dr Prabodh Satyal
Reviewed by : Ambika Poudel

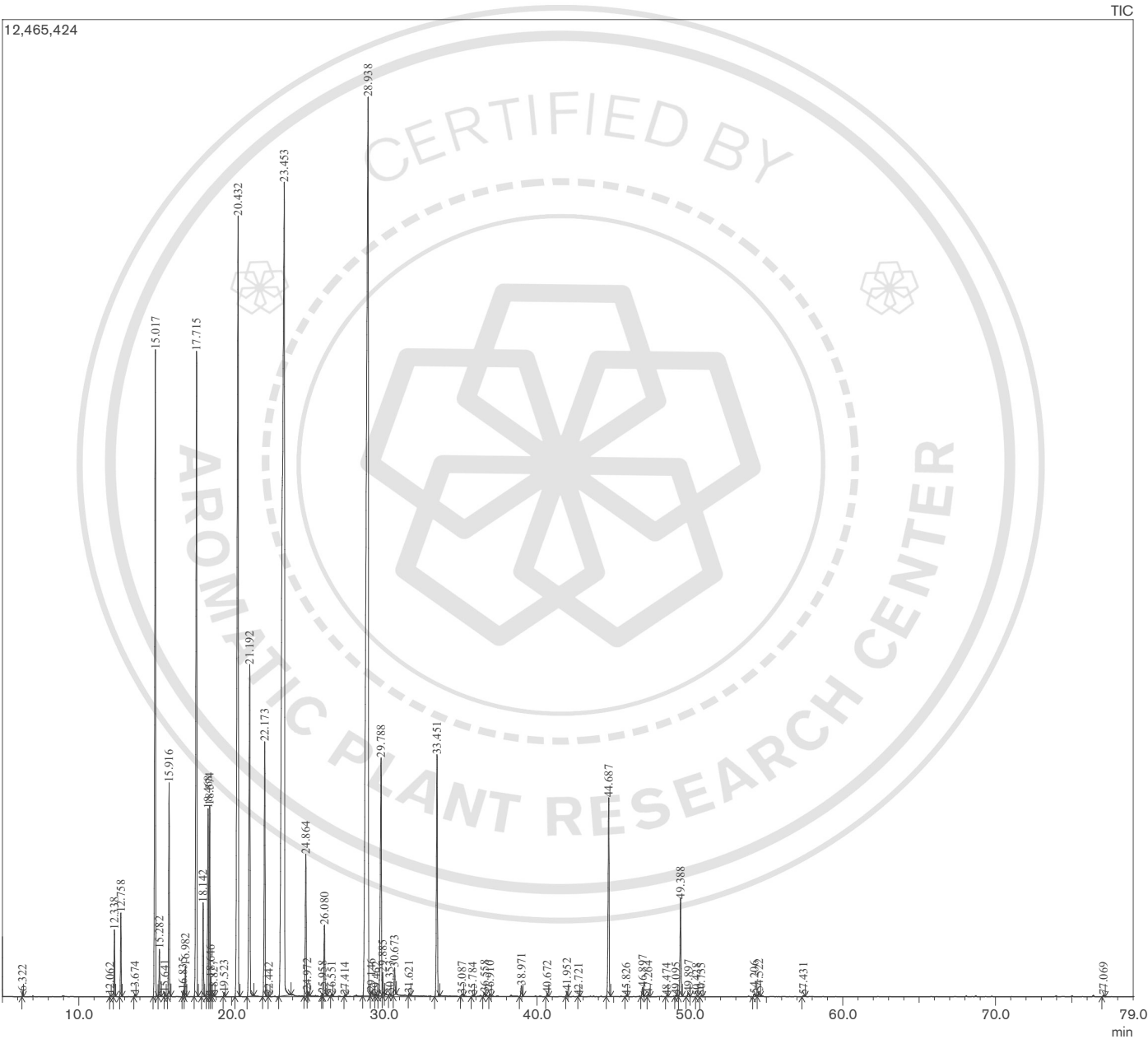
Issued Date : 6/18/2025

GCMS Analysis

Sample Information

Analyzed by : Dr. Prabodh Satyal
Analyzed : 6/18/2025 6:43:28 AM
Sample Type : Essential Oil
Sample Name : Sweet Marjoram
Client Name : Plant Therapy
Client Lot# : M20115R
APRC Lot# : PT250617F
Injection Volume : 0.30

Chromatogram



Peak Report

Peak#	R.Time	Name	Area%
1	6.322	Methyl alpha-methyl butyrate	0.03
2	12.062	Hashishene	0.01
3	12.338	alpha-Thujene	0.51
4	12.758	alpha-Pinene	0.66
5	13.674	Camphene	0.02
6	15.017	Sabinene	6.98
7	15.282	beta-Pinene	0.38
8	15.641	3-Octanone	0.04
9	15.916	Myrcene	1.89
10	16.835	para-Mentha-1(7),8-diene	0.06
11	16.982	alpha-Phellandrene	0.28
12	17.715	alpha-Terpinene	7.42
13	18.142	para-Cymene	0.84
14	18.468	Limonene	2.02
15	18.574	beta-Phellandrene	1.66
16	18.646	1,8-Cineole	0.12
17	18.827	cis-beta-Ocimene	0.03
18	19.523	trans-beta-Ocimene	0.04
19	20.432	gamma-Terpinene	11.57
20	21.192	cis-Sabinene hydrate	4.23
21	22.173	Terpinolene	2.66
22	22.442	para-Cymenene	0.01
23	23.453	trans-Sabinene hydrate	22.51
24	24.864	cis-para-Menth-2-en-1-ol	1.52
25	24.972	alpha-Campholenal	0.06
26	25.958	trans-Pinocarveol	0.02
27	26.080	trans-para-Menth-2-en-1-ol	0.82
28	26.551	Verbenol	0.02
29	27.414	Pinocarvone	0.01
30	28.938	Terpinen-4-ol	22.58
31	29.146	para-Cymen-8-ol	0.09
32	29.462	Methyl salicylate	0.02
33	29.788	alpha-Terpineol	3.22
34	29.885	cis-Piperitol	0.27
35	30.353	trans-Dihydro carvone	0.02
36	30.673	trans-Piperitol	0.28
37	31.621	trans-Chrysanthenyl acetate	0.03
38	33.451	Linalyl acetate	2.79
39	35.087	trans-Ascaridol glycol	0.03
40	35.784	Bornyl acetate	0.01
41	36.558	Terpinen-4-ol acetate	0.05
42	36.910	Tridecane	0.03
43	38.971	delta-Elemene	0.12
44	40.672	Neryl acetate	0.03
45	41.952	Geranyl acetate	0.06
46	42.721	beta-Elemene	0.01
47	44.687	beta-Caryophyllene	2.43
48	45.826	Aromadendrene	0.01
49	46.897	alpha-Humulene	0.11
50	47.264	4,6,8,10-Tridecane tetramethyl	0.03
51	48.474	Germacrene D	0.01
52	49.095	Viridiflorene	0.02
53	49.388	Bicyclogermacrene	1.13
54	49.897	trans-trans-alpha-Farnesene	0.05
55	50.428	gamma-Cadinene	0.01
56	50.735	delta-Cadinene	0.01
57	54.206	Spathulenol	0.04
58	54.522	Caryophyllene oxide	0.06
59	57.431	iso-Spathulenol	0.02
60	77.069	Palustradiene	0.02
			100.00