

Sample Information

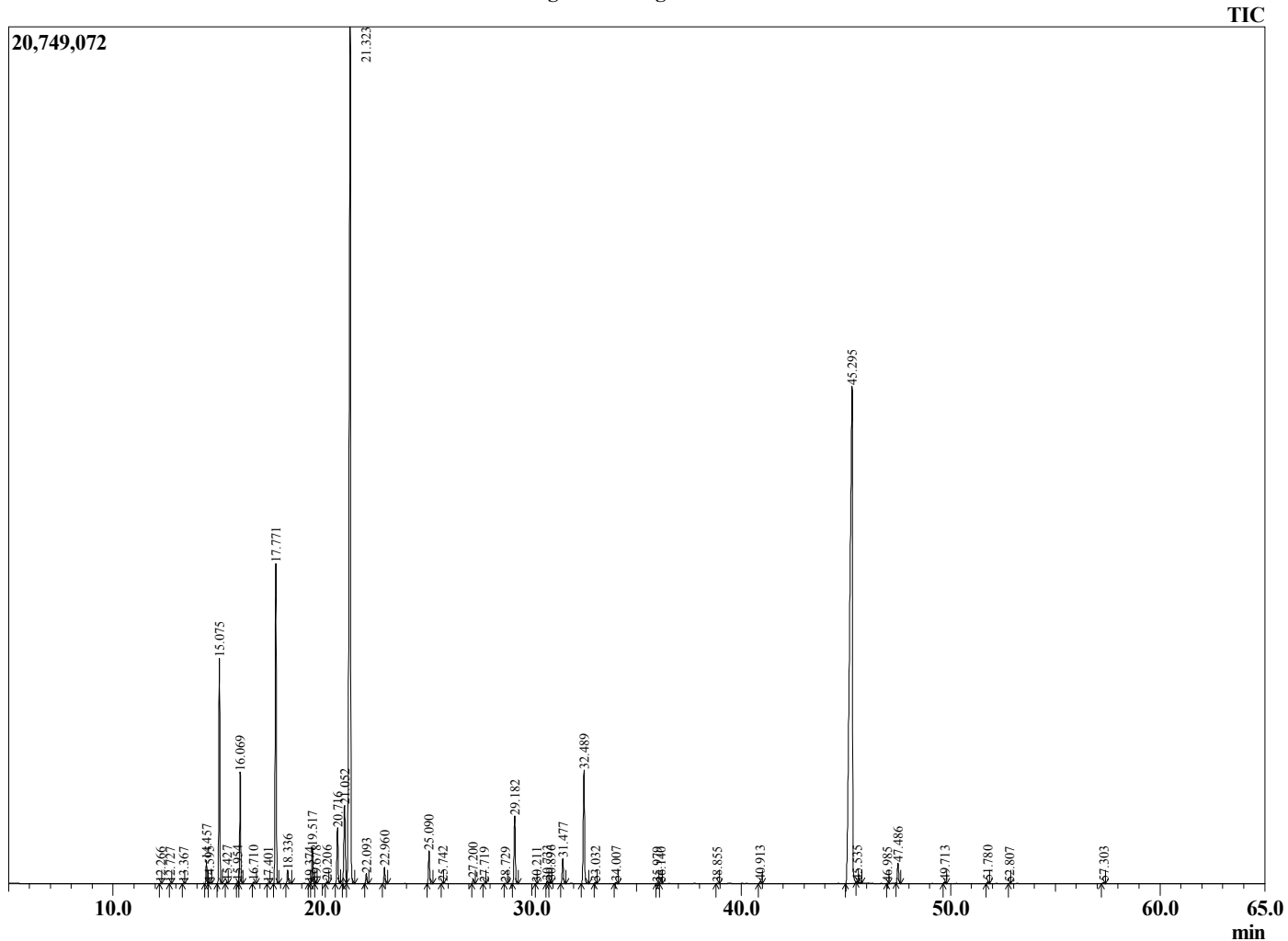
Analyzed by : Dr. Robert S. Pappas  
 Analyzed : 5/8/2020 8:04:11 AM  
 Sample Type : Essential Oil  
 Sample Name : Galangal Root - Barefut  
 Sample ID : 0103  
 Injection Volume : 0.10  
 Instrument ID : GC-2



Peak Report TIC

R.Time	Name	Area%
12.266	Cyclofenchene	0.02
12.727	Styrene	0.01
13.367	2-Bornene	0.02
14.457	Tricyclene	0.55
14.595	alpha-Thujene	0.04
15.075	alpha-Pinene	5.52
15.427	beta-Fenchene	0.04
15.954	alpha-Fenchene	0.06
16.069	Camphene	2.81
16.710	Benzaldehyde	0.05
17.401	Sabinene	0.02
17.771	beta-Pinene	8.71
18.336	Myrcene	0.36
19.374	Pseudolimonene	0.02
19.517	alpha-Phellandrene	0.97
19.678	3-Carene	0.04
20.206	alpha-Terpinene	0.05
20.716	para-Cymene	1.65
21.052	Limonene	2.88
21.323	1,8-Cineole	32.23
22.093	(E)-beta-Ocimene	0.27
22.960	gamma-Terpinene	0.47
25.090	Fenchone	0.96
25.742	Linalool	0.02
27.200	endo-Fenchol	0.14
27.719	allo-Ocimene	0.02
28.729	trans-Pinocarveol	0.02
29.182	Camphor	2.08
30.211	Pinocarvone	0.01
30.733	Terpineol isomer	0.06
30.896	Borneol	0.03
31.477	Terpinen-4-ol	0.78
32.489	alpha-Terpineol	3.68
33.032	alpha-Phellandrene epoxide	0.03
34.007	endo-Fenchyl acetate	0.05
35.979	Unidentified	0.02
36.140	Unidentified	0.02
38.855	Unidentified	0.02
40.913	Unidentified	0.07
45.295	(E)-Methyl cinnamate	34.31
45.535	beta-Elemene	0.01
46.985	cis-alpha-Bergamotene	0.01
47.486	trans-beta-Caryophyllene	0.68
49.713	alpha-Humulene	0.06
51.780	beta-Selinene	0.06
52.807	beta-Bisabolene	0.01
57.303	Caryophyllene oxide	0.04
		100.00

Chromatogram Galangal Root - Barefut



Comments:

The analysis of this Galangal Root batch sample meets the expected chemical profile for authentic essential oil of *Alpinia galanga*. 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.