Rao et al., ***BioImpacts,*** 2021, 11(3), 187-197
doi: 10.34172/bi.2021.09
http://bi.tbzmed.ac.ir/

Characterization of isolated compounds from *Morus* spp. and their biological activity as anticancer molecules

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Supplementary file 1`

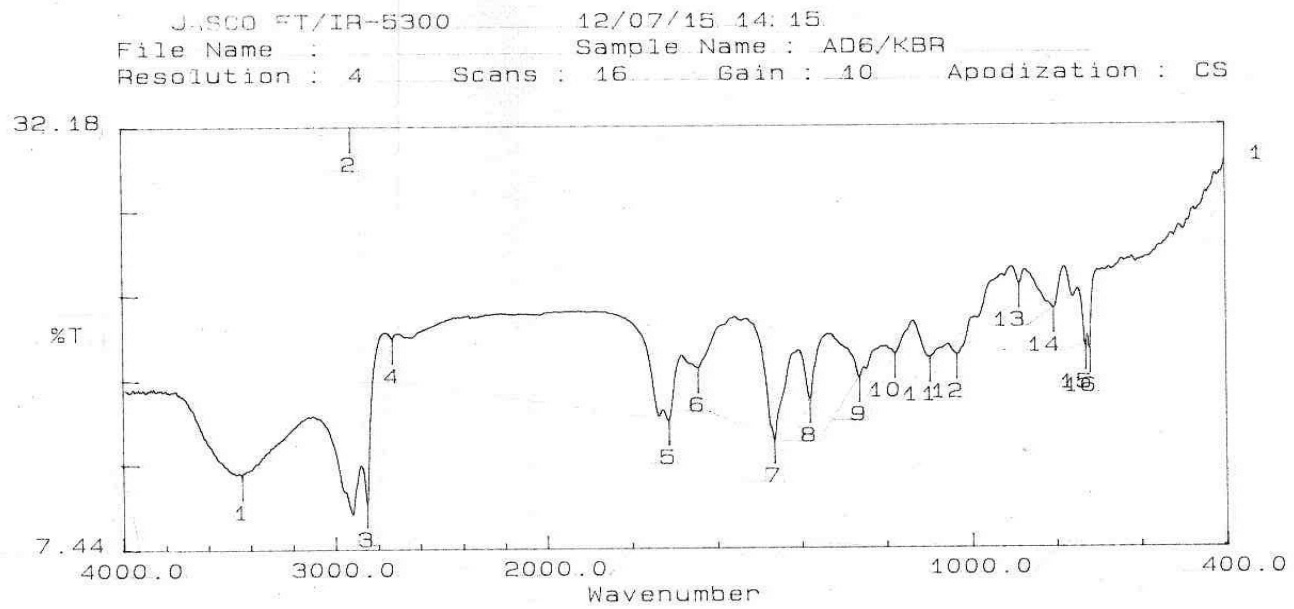
Table S1: Equivalence and Inhibition/effective concentration (IC50/EC50) of *In vitro* antioxidant activities of different solvent extracts of three species of *Morus*.

Antioxidant Activities	Standard	MAPE	MACH	MAME	MSPE	MSCH	MSME	MLPE	MLCH	MLME
Total plenolics content (µg of catechol/mg of extract)	-	26±1.53	57±2.08	76±1.73	21±2.08	55±1.15	68±1.73	19±1.53	49±2.08	54±1.53
Total flavonoids (µg of catechol/mg of extract)	-	16±0.58	16±1.0	27±1.53	13±1.0	14±1.15	25±1.53	10±1.15	1.15	24±0.58
total antioxidants (µg of ascorbic acid/mg of extract)	-	35±1.15	45±0.58	76±0.58	33±0.58	41±1.15	70±1.73	32±1.73	40±1.0	68±1.0

Reducing power	77.46±0.85	1712.32±0.46	1479.29±1.2	190.47±1.13	2066.11±1.15	1773.05±0.58	392.15±1.73	3267.97±1.15	1858.73±1.5	626.3±1.25
DPPH Radical scavenging	12.41±1.07	203.74±1.15	181.81±1.73	66.71±0.58	238.72±1.33	194.12±1.15	78.74±0.23	250.81±1.33	201.97±0.75	104.86±1.73
Nitric oxide Radical scavenging	195.11±0.65	1449.27±1.15	975.9±1.56	320±1.15	1876.34±0.81	997.25±0.75	365±0.58	2526.52±1.15	1007.04±0.87	465±1.15
Hydroxyl Radical scavenging	7.15±0.9	210±1.15	127±0.58	32±1.73	223±0.58	133±1.0	80±1.53	232±1.73	155±1.53	96±1.15
Iron chelating	56.63±0.79	1772±2.0	1333.33±3.0	745.34±1.73	1989.24±3.06	1528.27±1.53	1212.61±2	2081.88±1.53	1556.84±1.15	1252.34±2

Table S2: *In vitro* cytotoxicity effects of bioactive isolates and methanolic extracts of *M. alba*, *M. serrata* and *M. laevigata*

	% of cell Survival against MCF7 cell lines			% of cell Survival against 3T3 cell lines		
Conc in µg/ml	**MAME**	**MSME**	**MLME**	**MAME**	**MSME**	**MLME**
50	90.79±0.56	91.06±1.3	94.95±0.48	93.28±0.82	93.51±0.43	92.92±0.42
100	83.98±0.28	87.07±0.18	87.41±0.46	75.99±0.43	74.52±0.84	82.28±0.43
200	75.48±1.2	79.08±0.82	81.77±0.34	58.34±0.62	53.8±0.18	69.43±0.84
400	65.45±0.86	72.69±0.42	72.77±0.81	42.16±0.58	44.16±0.26	44.32±0.62
800	34.78±0.46	27.96±0.62	21.57±0.53	15.86±0.45	14.84±0.42	6.27±0.42
Conc in µg/ml	**Cathafuran B**	**Ursolic acid**	**Moracin M**	**Cathafuran B**	**Ursolic acid**	**Moracin M**
1.8	94.14±0.76	82.9±0.42	86.04±0.41	92.68±1.4	87.38±1	83.62±0.42
3.6	93.94±0.82	75.8±0.31	79.24±0.13	90.37±0.52	82.18±1.2	79.8±1.2
7.25	78.63±1.2	73.33±0.52	77.24±0.23	81.58±0.46	77.44±0.46	74.58±0.42
12.5	78.31±0.82	65.36±0.61	75.35±0.82	73.74±0.28	70.47±0.31	67.38±0.72
25	69.58±0.62	54.97±0.2	67.48±0.61	61.76±0.43	57.57±0.84	51.44±0.44
50	54.37±0.41	33.98±0.16	57.58±0.42	51.44±0.92	45.86±0.34	47.36±0.82
100	35.87±0.34	21.32±0.42	43.25±0.34	33.72±0.42	31.58±0.51	33.58±0.34
200	8.89±0.52	8.46±0.62	16.09±0.52	20.58±0.44	17.58±0.42	21.6±0.62

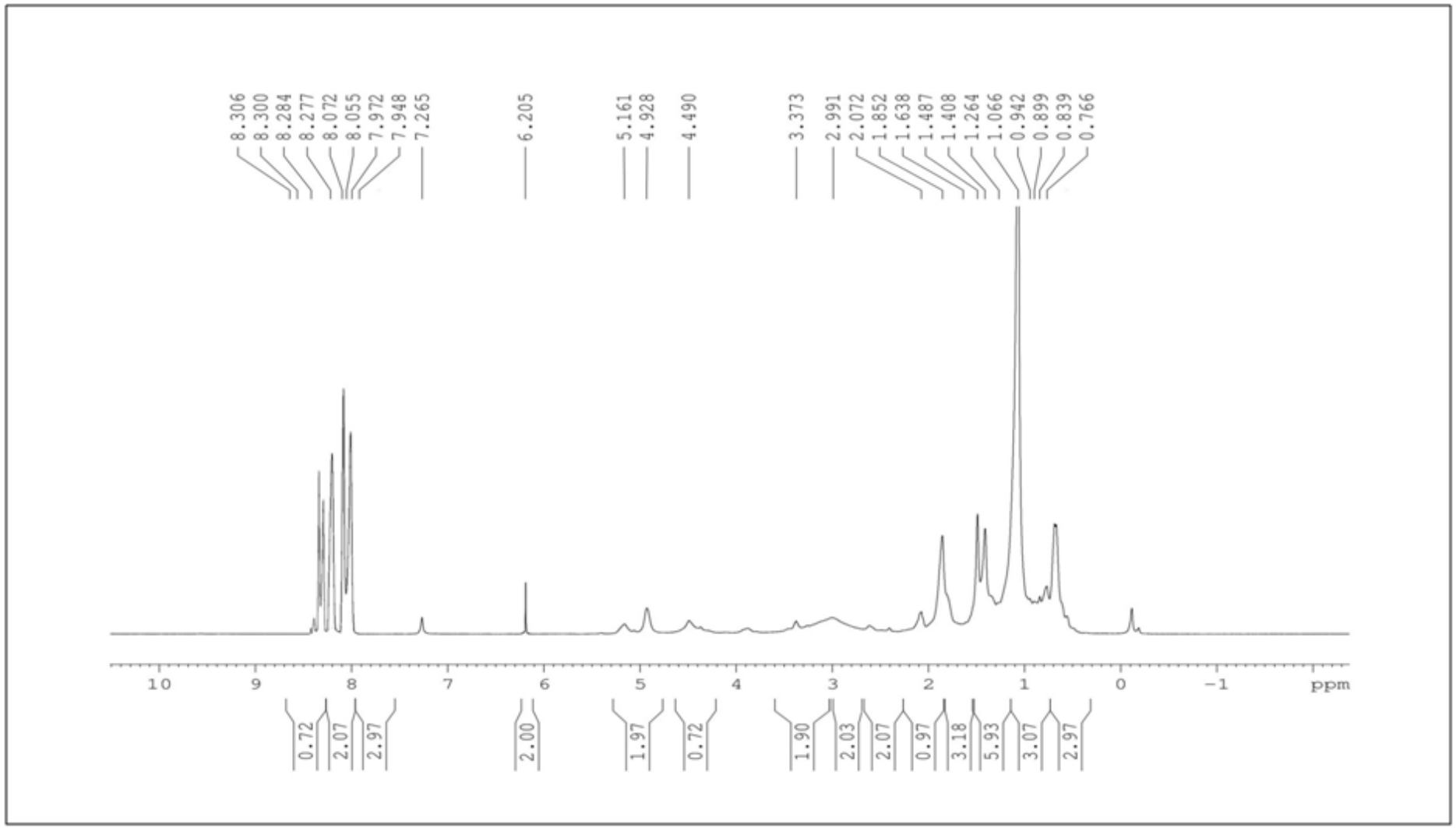


Condition
upper 32.17 lower 7.43 depth 0.50

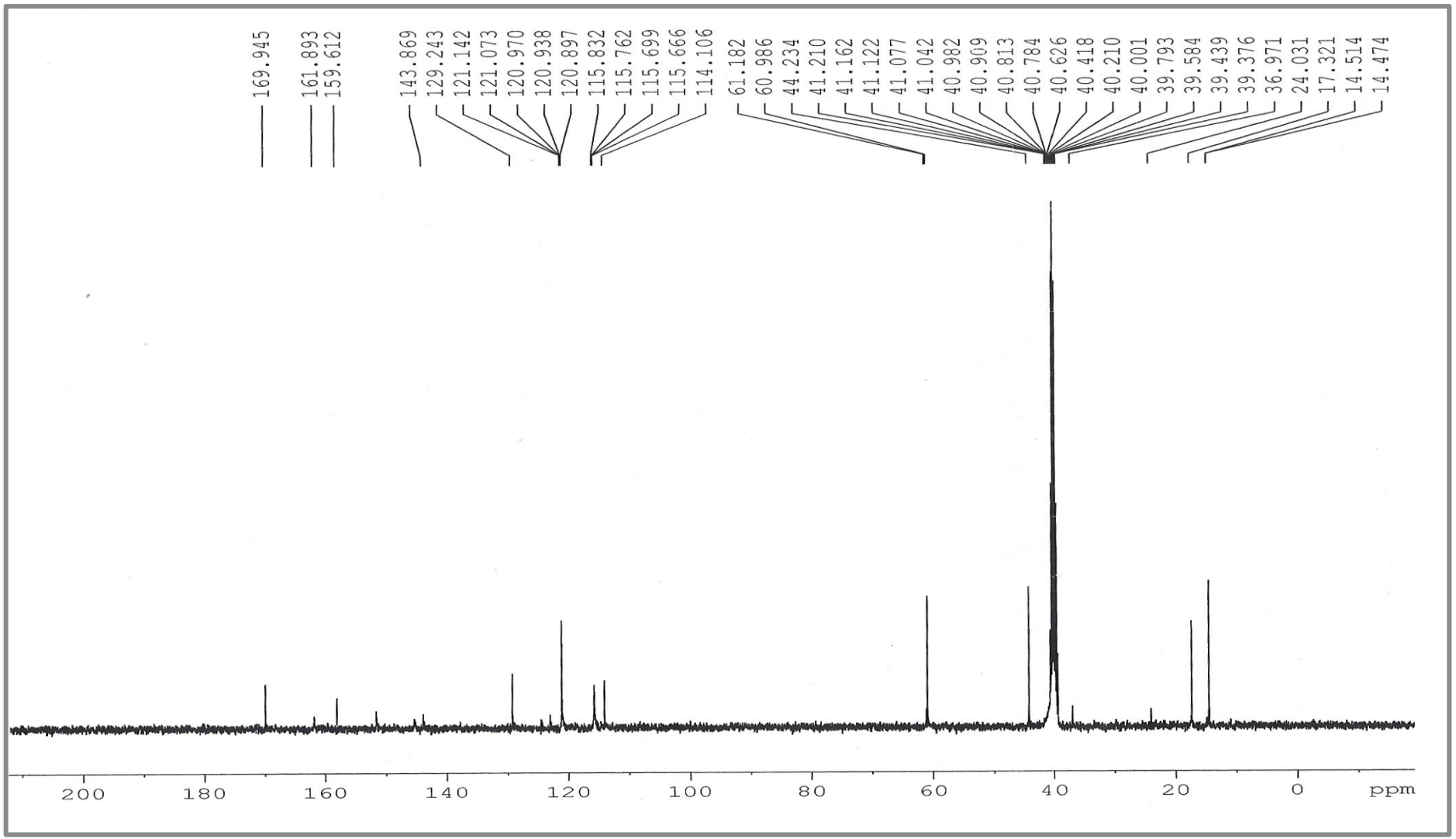
Peak table

1:	3443.25 (11.8)	2:	2918.56 (9.5)	3:	2851.05 (10.2)	4:	2727.59 (19.8)
5:	1712.94 (15.0)	6:	1643.50 (18.0)	7:	1464.10 (13.8)	8:	1379.23 (16.2)
9:	1261.56 (17.4)	10:	1178.61 (18.8)	11:	1097.60 (18.6)	12:	1033.94 (18.7)
13:	885.41 (22.9)	14:	804.39 (21.4)	15:	729.16 (19.3)	16:	719.51 (19.0)

FTIR of Compound-1



^{1}H NMR of Compound-1



^{13}C NMR of Compound-1

LCMS-2010A DATA REPORT
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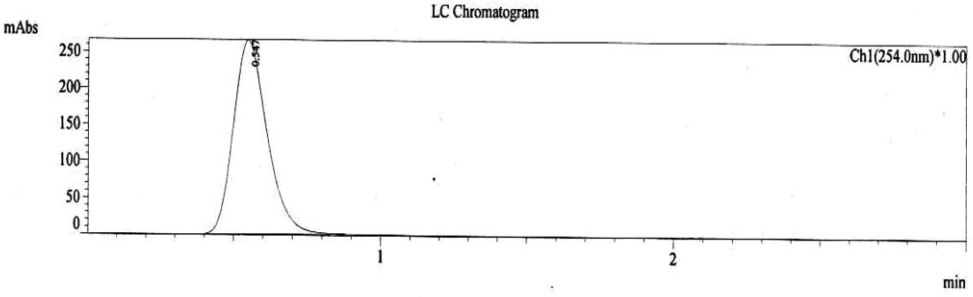
LC Chromatogram



MS Spectrum

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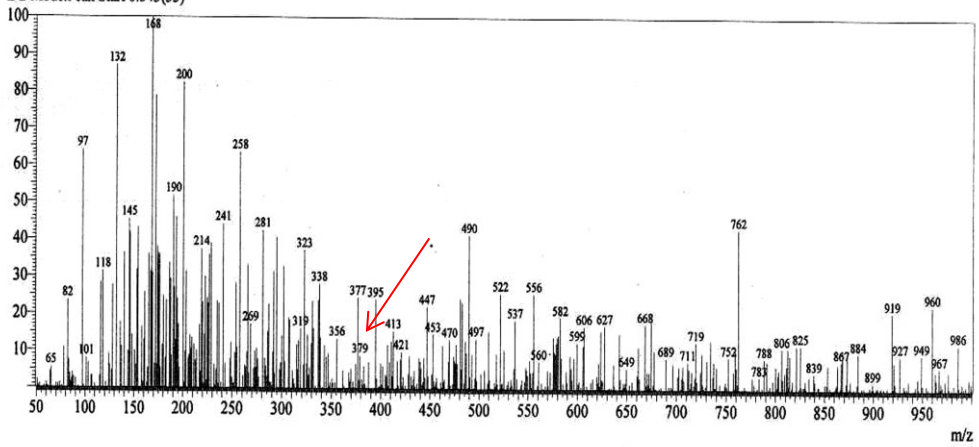
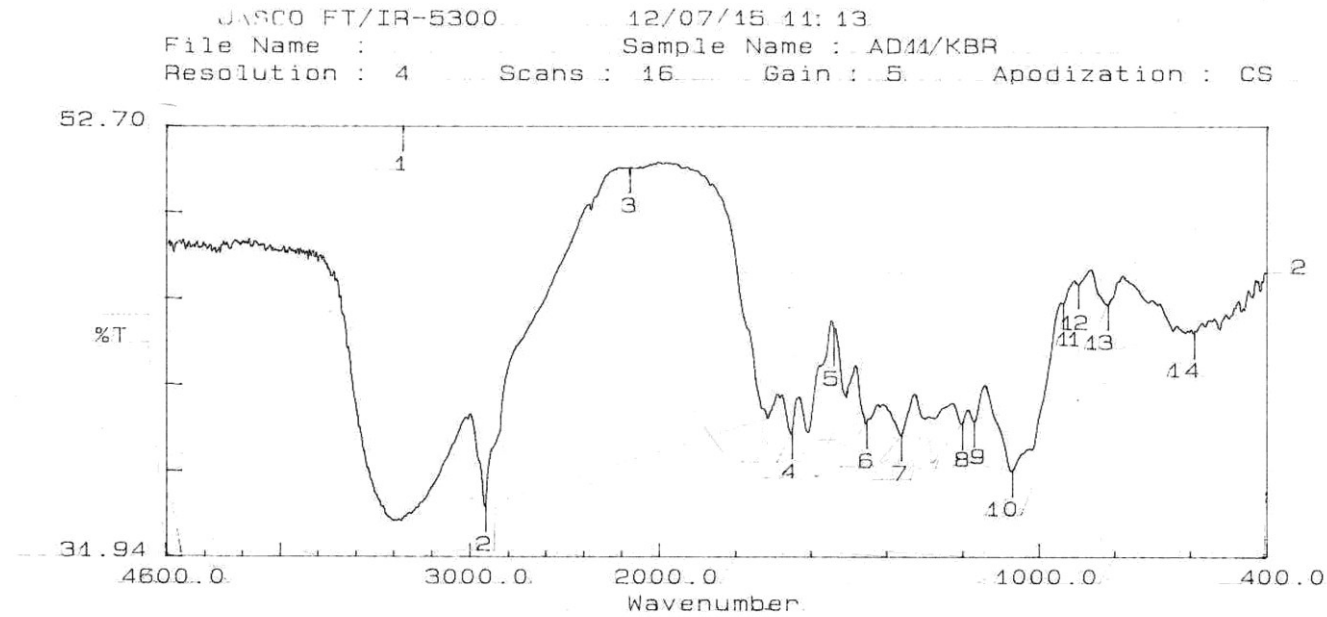
RawMode:Single 0.741(45)
BG Mode:Peak Start 0.543(33)



LCMS of Compound-1

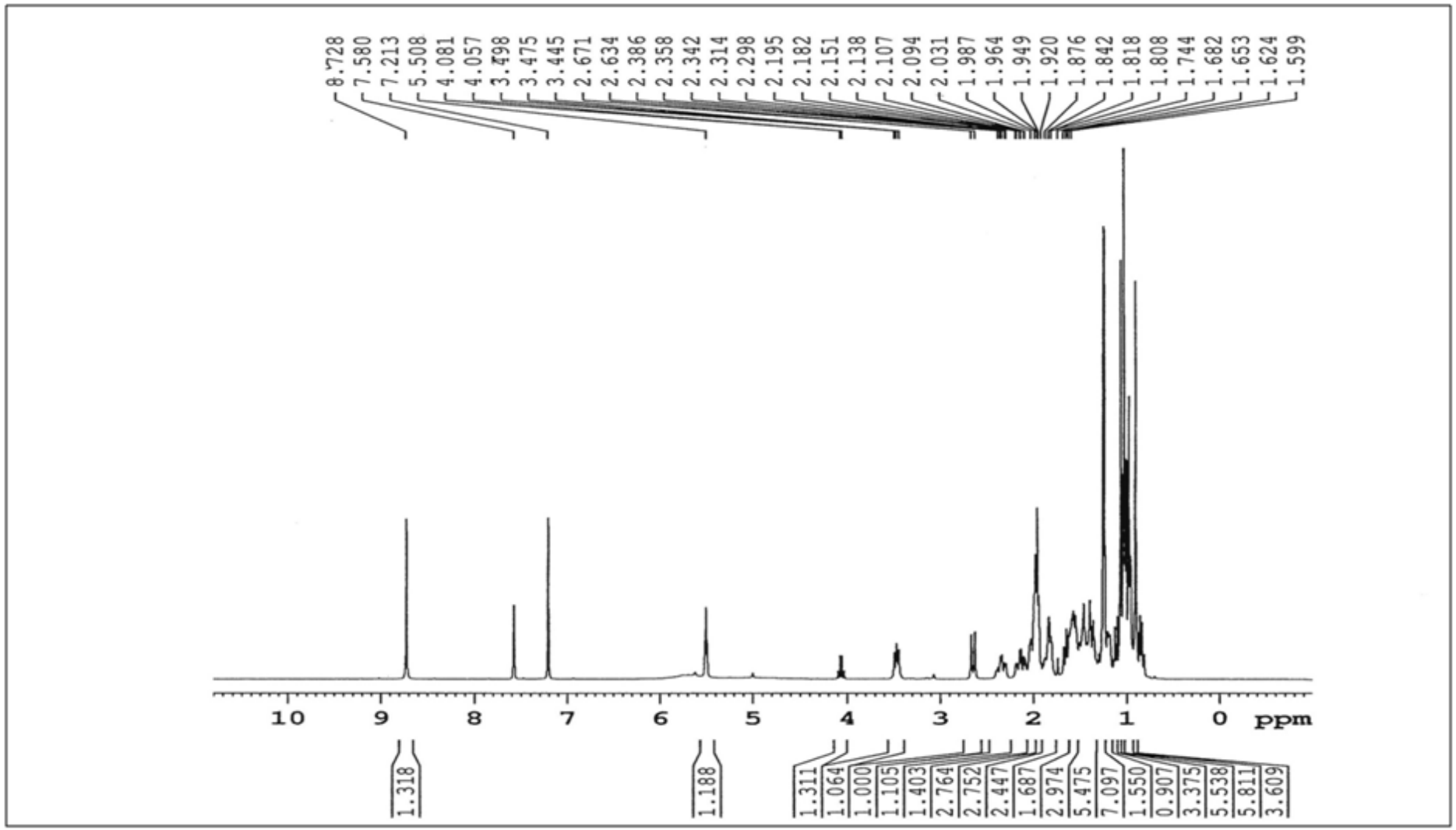


Condition
upper 52.70 lower 31.94 depth 1.00

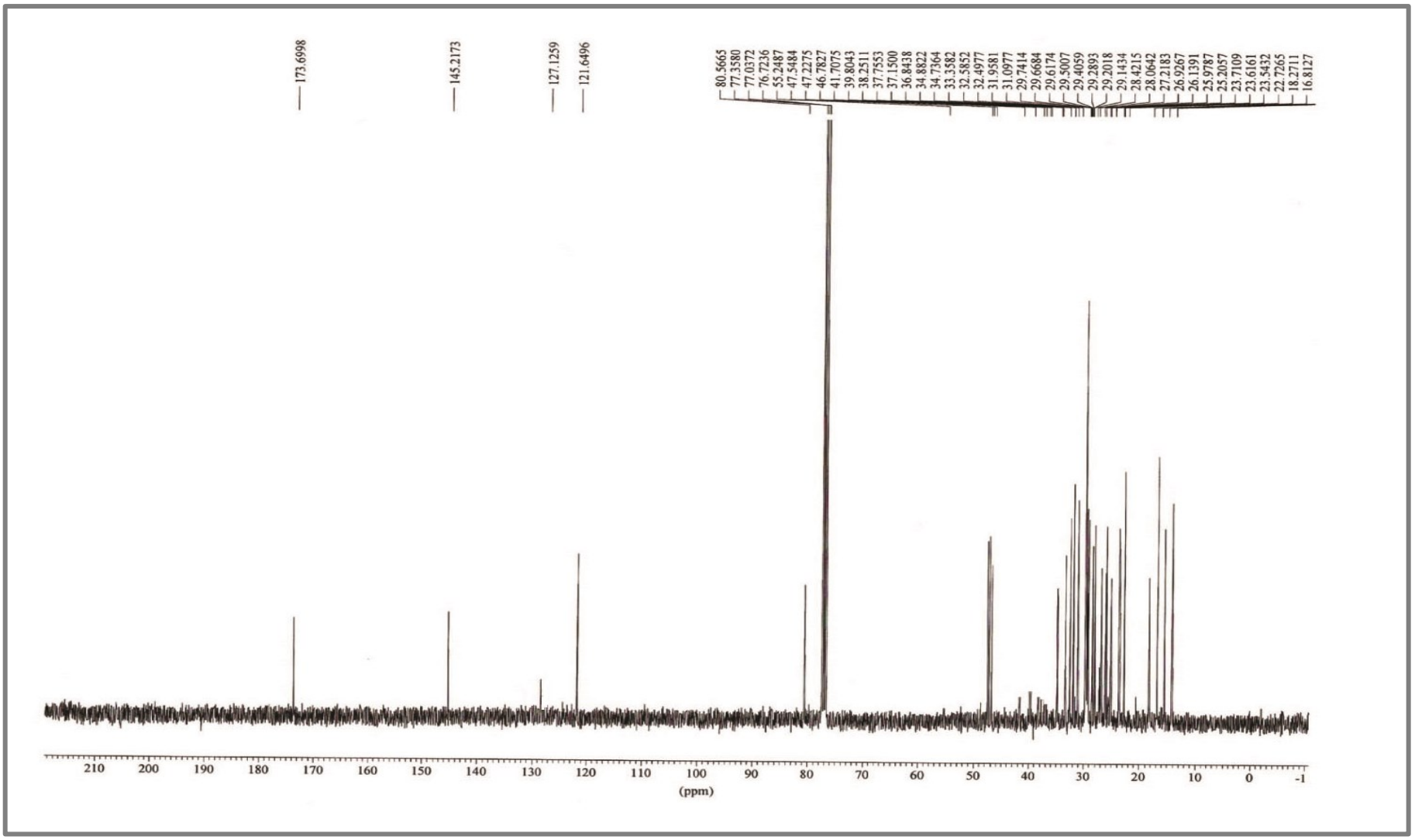
Peak table

1:	3362.23 (33.7)	2:	2924.35 (34.4)	3:	2158.76 (36.9)	4:	1658.87 (38.6)
5:	1553.14 (37.9)	6:	1454.78 (38.0)	7:	1361.47 (39.7)	8:	1203.46 (38.4)
9:	1172.87 (37.8)	10:	1072.07 (38.6)	11:	924.69 (38.3)	12:	907.83 (38.5)
13:	819.52 (36.1)	14:	592.20 (42.7)				

FTIR of Compound-2



^{1}H NMR of Compound-2



^{13}C NMR of Compound-2

LCMS-2010A DATA REPORT
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MS Spectrum

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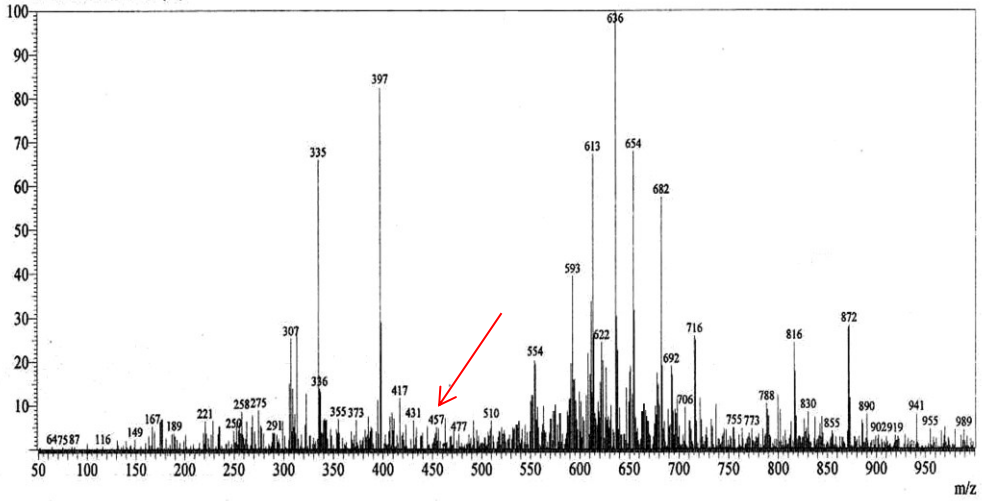
RawMode:Single 0.643(39)
BG Mode:Peak Start 0.427(26)



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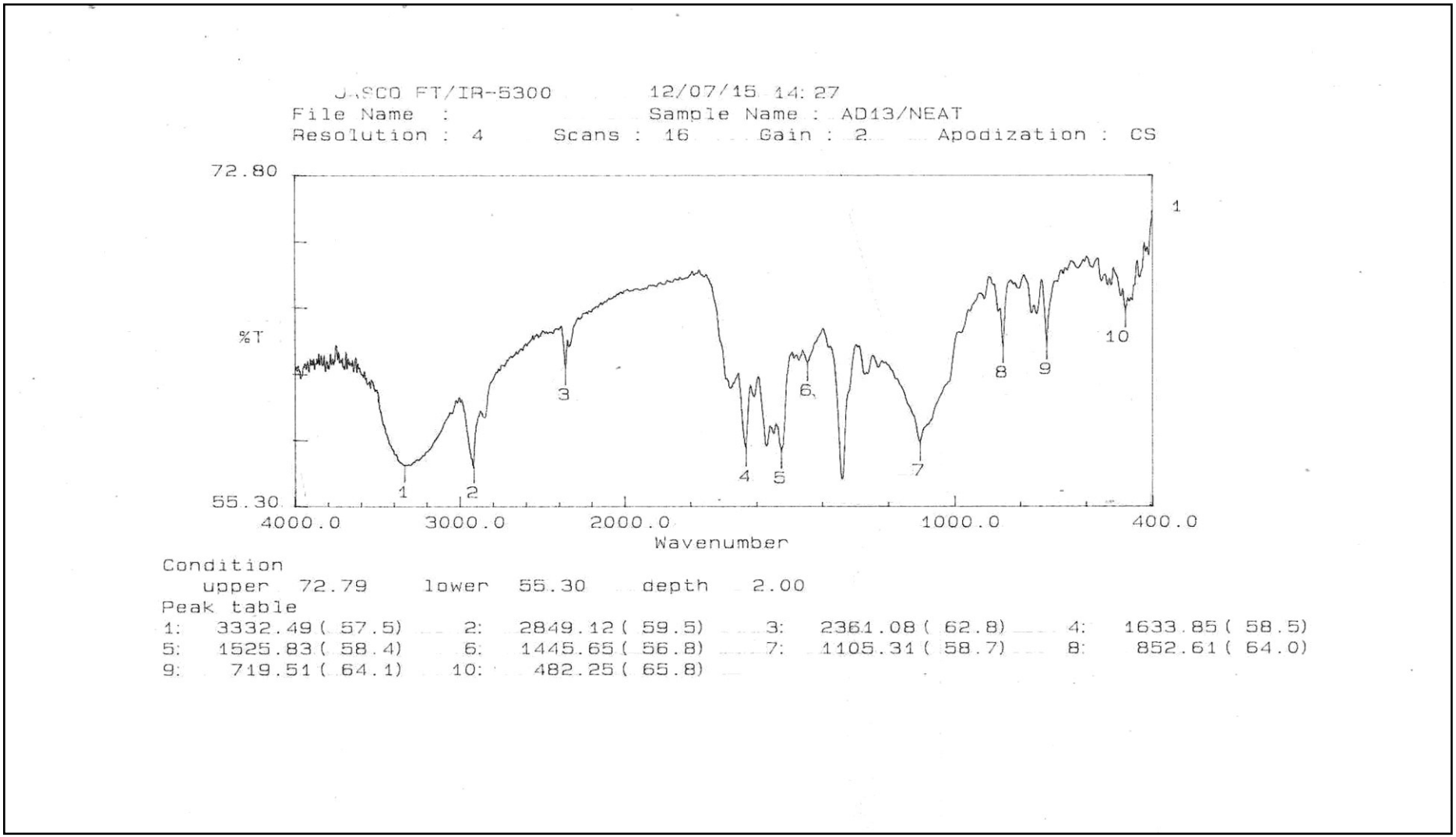
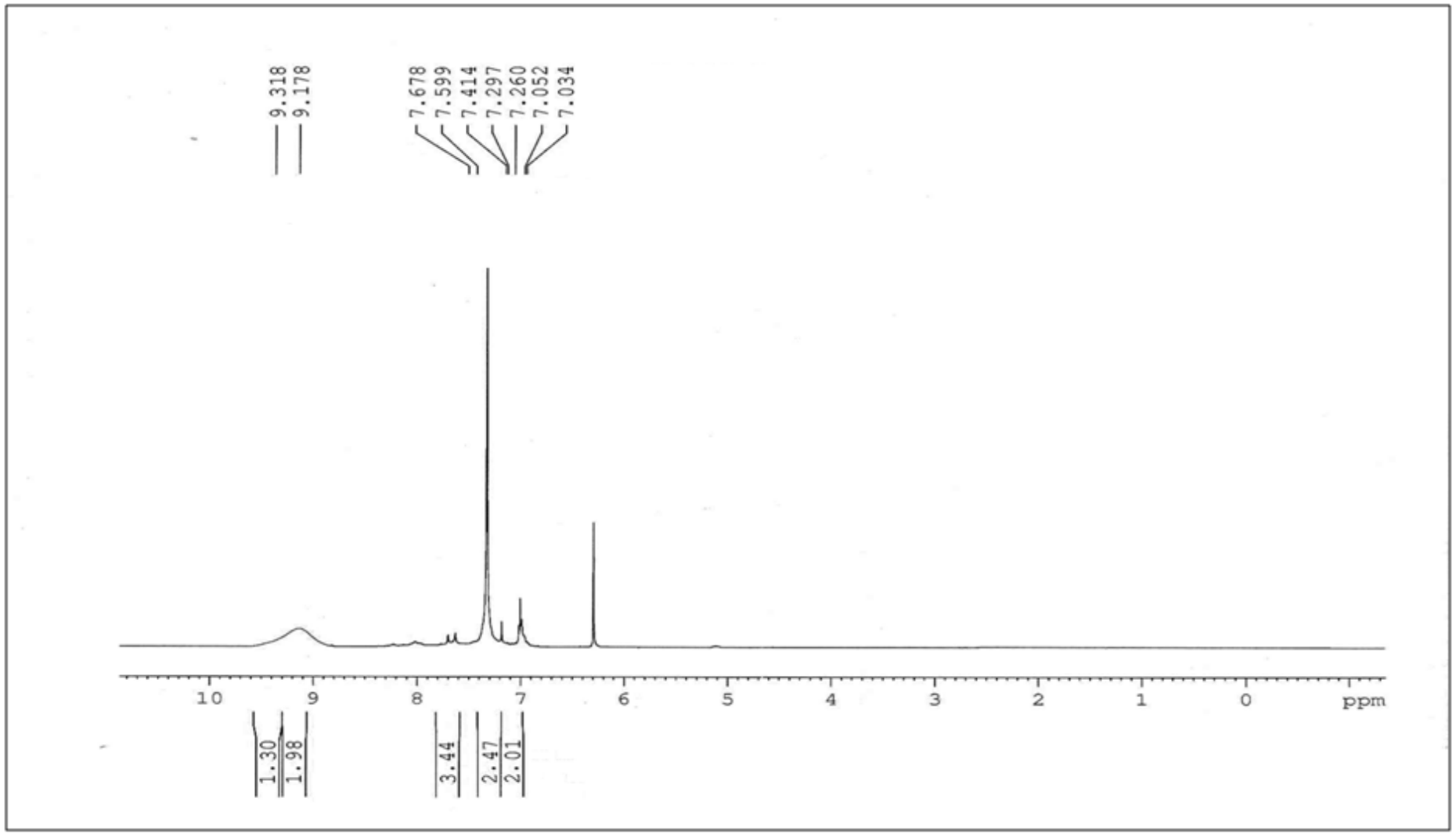


Condition
upper 72.79 lower 55.30 depth 2.00

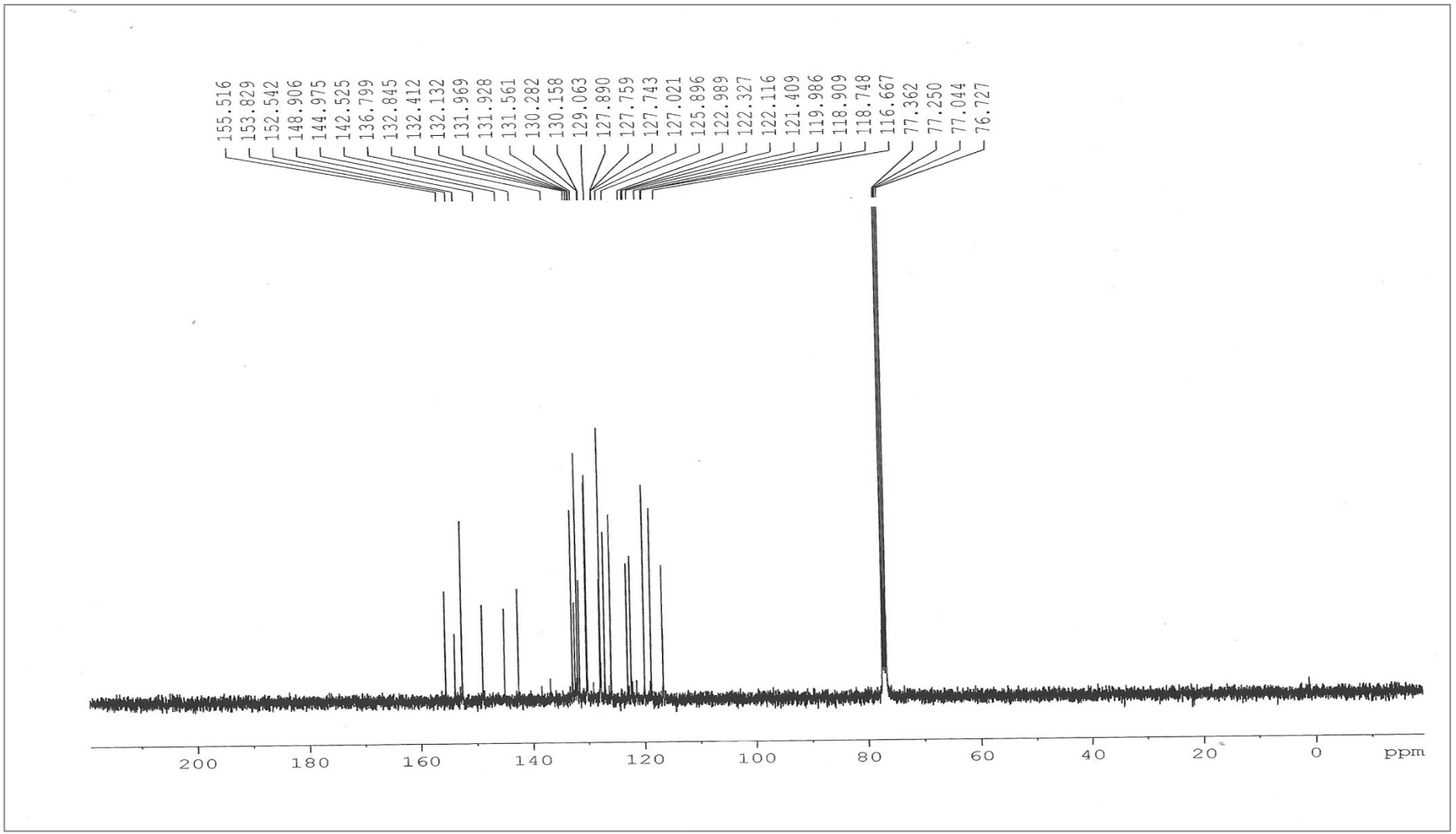
Peak table

1:	3332.49 (57.5)	2:	2849.12 (59.5)	3:	2361.08 (62.8)	4:	1633.85 (58.5)
5:	1525.83 (58.4)	6:	1445.65 (56.8)	7:	1105.31 (58.7)	8:	852.61 (64.0)
9:	719.51 (64.1)	10:	482.25 (65.8)				

FTIR of Compound-3



^{1}H NMR of Compound-3



^{13}C NMR of Compound-3

LCMS-2010A DATA REPORT
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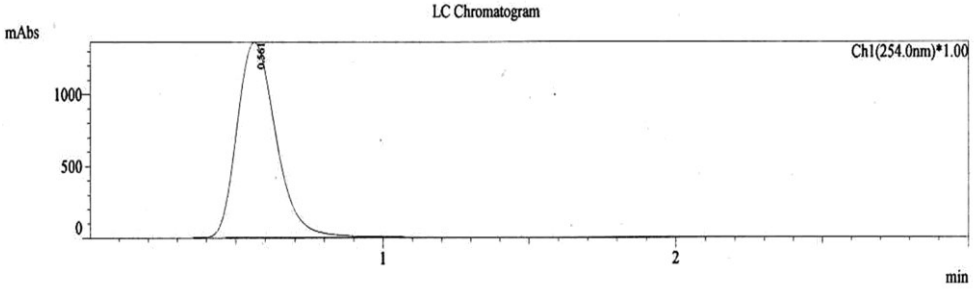
LC Chromatogram



MS Spectrum

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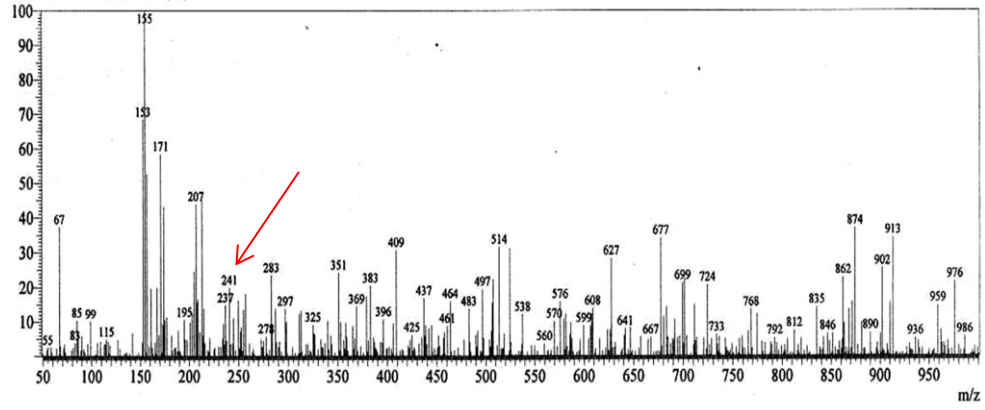
RawMode:Single 0.812(49)
BG Mode:Peak Start 0.510(31)



LCMS of Compound-3