ELECTRONIC SUPPORTING INFORMATION (ESI)

An efficient transformation of furano-hydroxychalcones to furanoflavones via base mediated intramolecular tandem *O*-arylation and C-O bond cleavage: A new approach for synthesis of furanoflavones

Rajni Sharma,[a,b] Ram A. Vishwakarma,[a,b] and Sandip B. Bharate[a,b,*]

[a]Natural Products Chemistry Division, CSIR-Indian Institute of Integrative Medicine (CSIR), Canal Road, Jammu-180001, India

[b]Academy of Scientific & Innovative Research (AcSIR), CSIR-Indian Institute of Integrative Medicine, Canal Road, Jammu-180001, India

[c]Medicinal Chemistry Division, CSIR-Indian Institute of Integrative Medicine, Canal Road, Jammu-180001, India

*E-mail: sbharate@iiim.ac.in (SBB)

Fax: +91-191-2585333; Tel: +91-191-2585006

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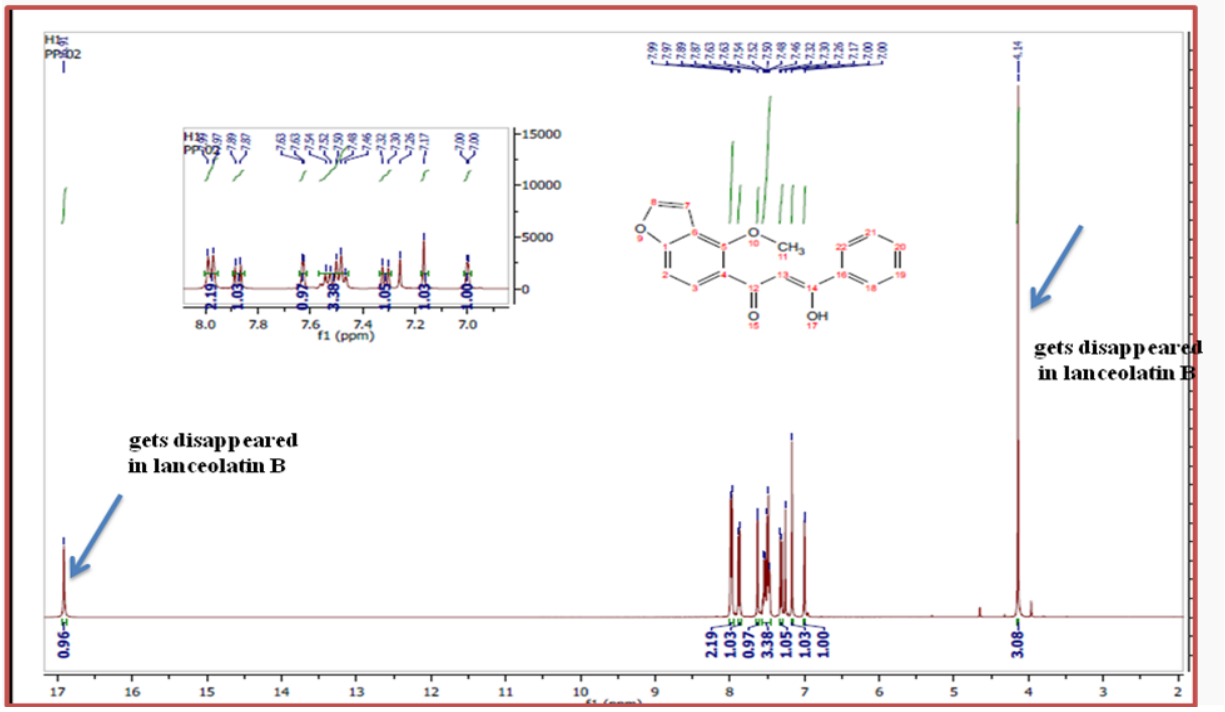
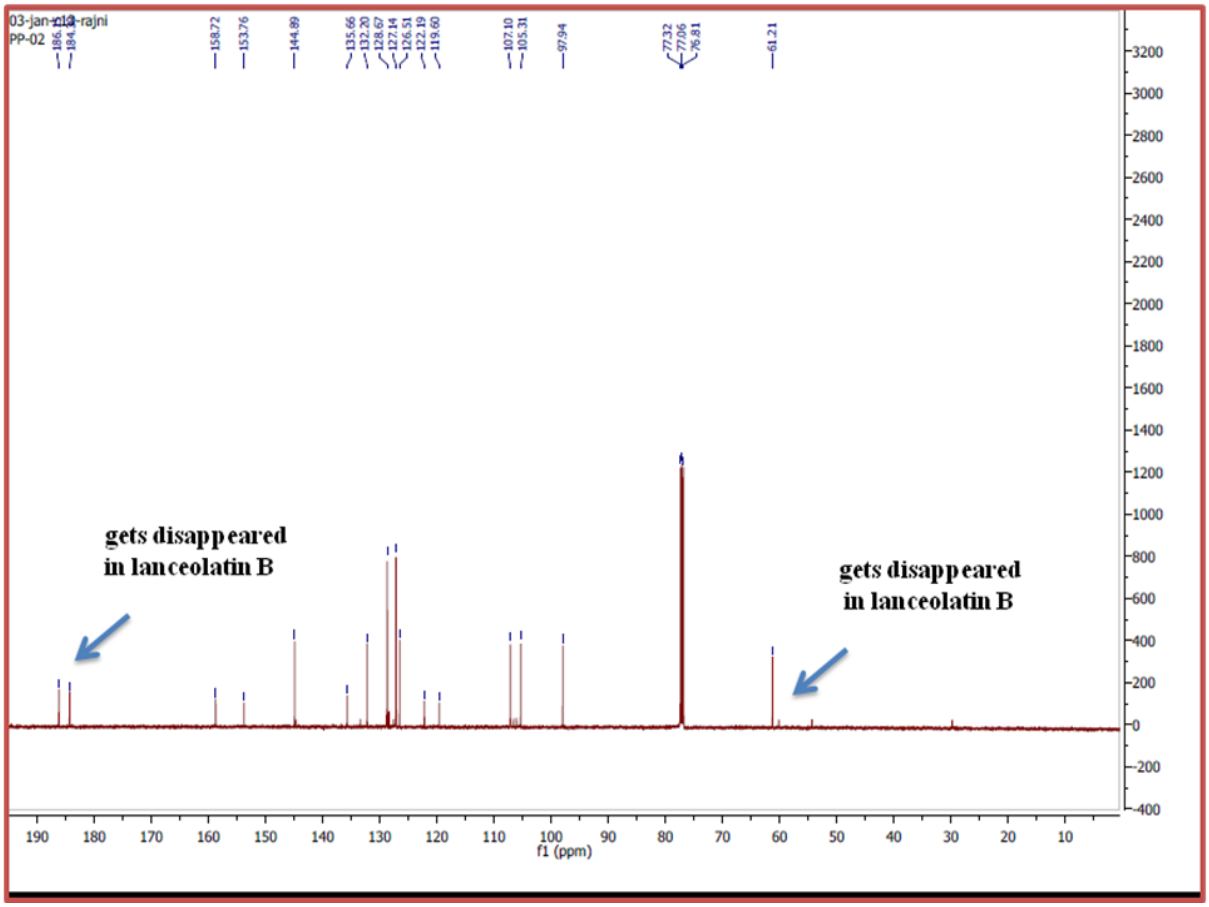
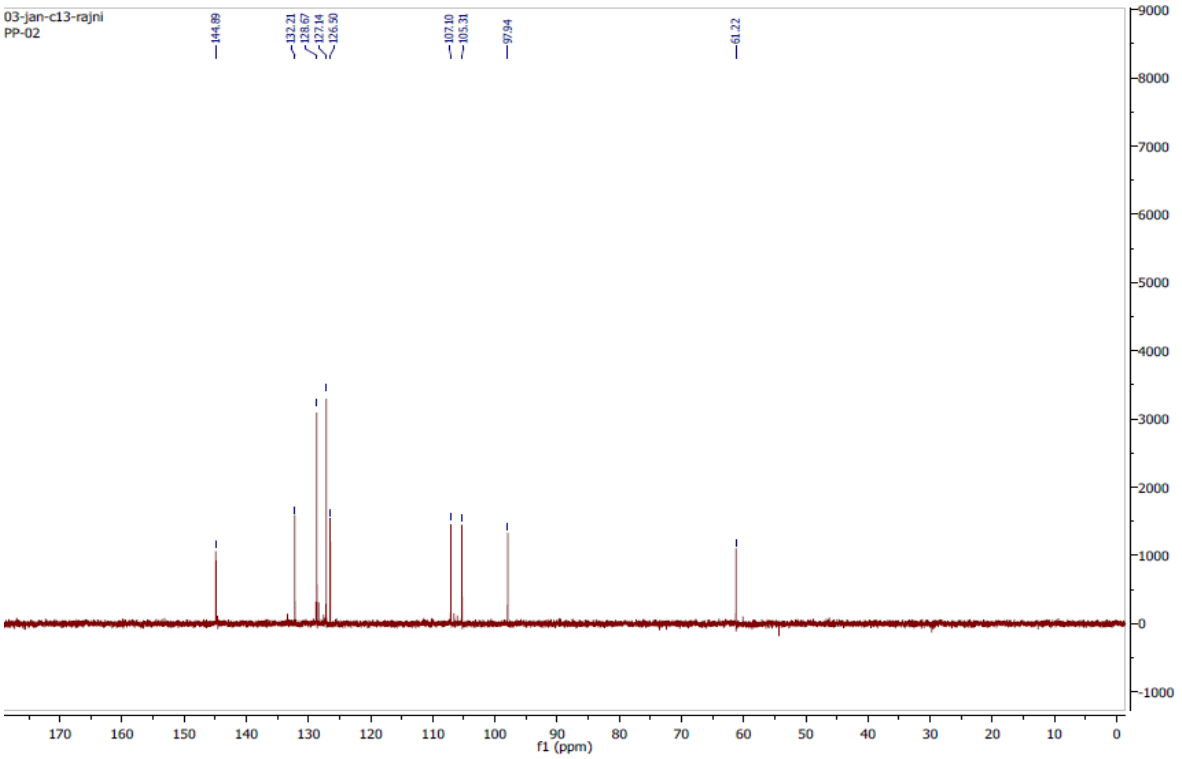
S1. Scan copies of ^{1}H, ^{13}C, DEPT-135 NMR (in $CDCl_3$) and HRMS of pongamol (**1a**)

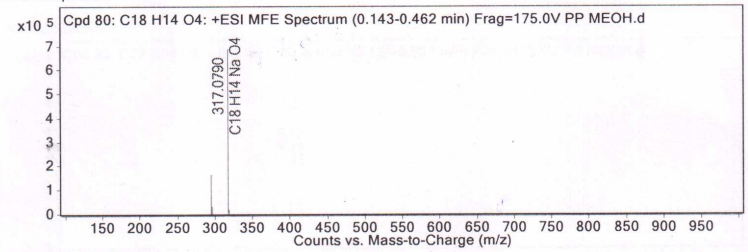






Compound Label	*m/z*	RT	Algorithm	Mass
Cpd 80: C18 H14 O4	317.079	0.197	Find by Molecular Feature	294.0897

MFE MS Spectrum



MS Spectrum Peak List

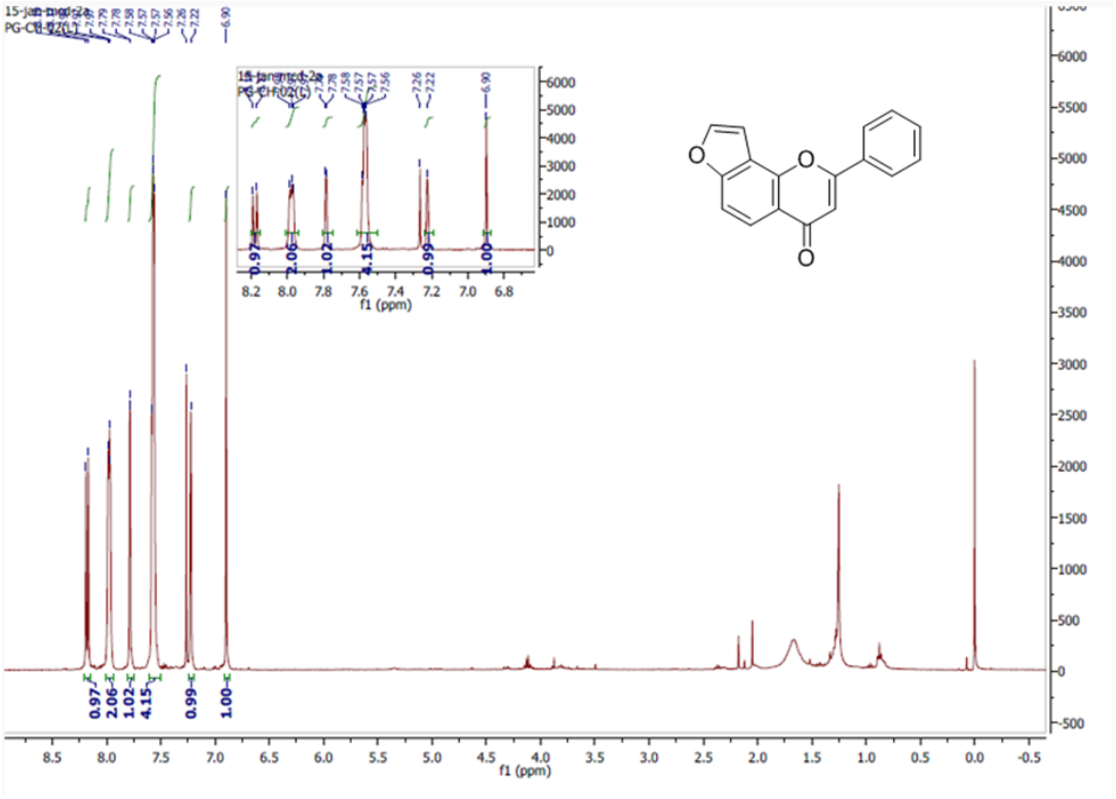
m/z	z	Abund	Formula	Ion
295.0955	1	162812.47	C18 H15 O4	(M+H)+
296.0994	1	31289.7	C18 H15 O4	(M+H)+
317.079	1	687940.25	C18 H14 Na O4	(M+Na)+
318.0818	1	124403.03	C18 H14 Na O4	(M+Na)+
319.0862	1	19246.07	C18 H14 Na O4	(M+Na)+

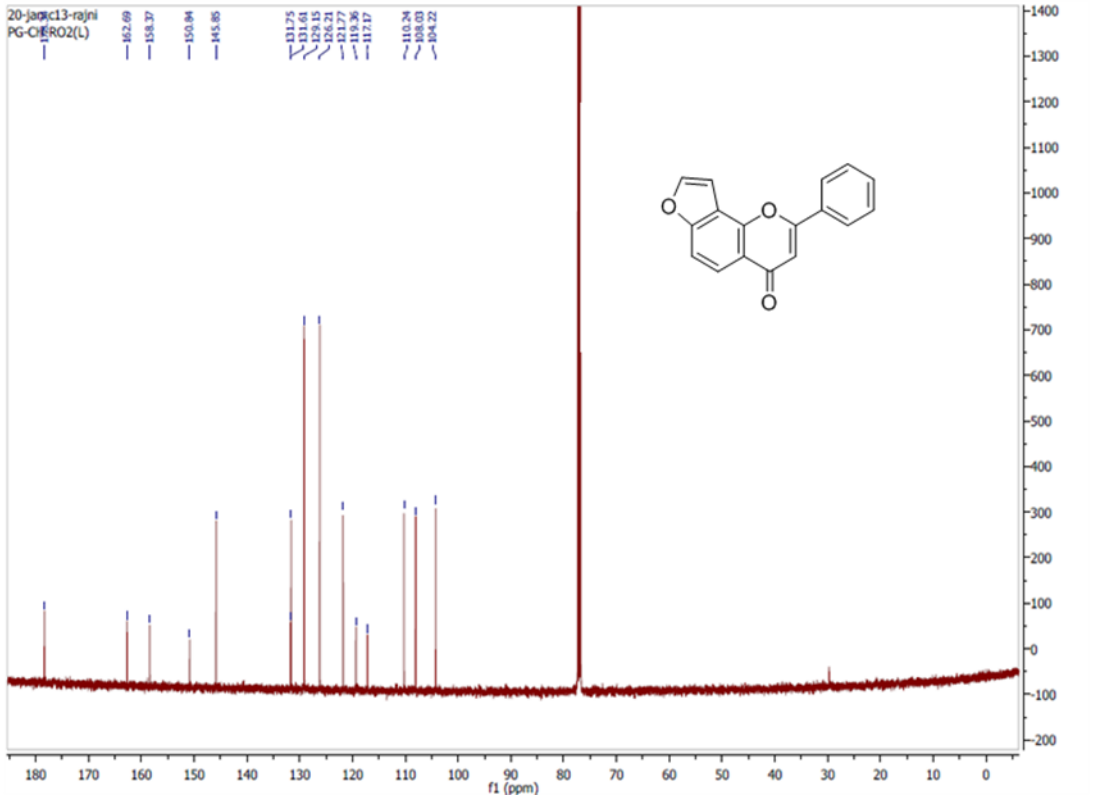
Predicted Isotope Match Table

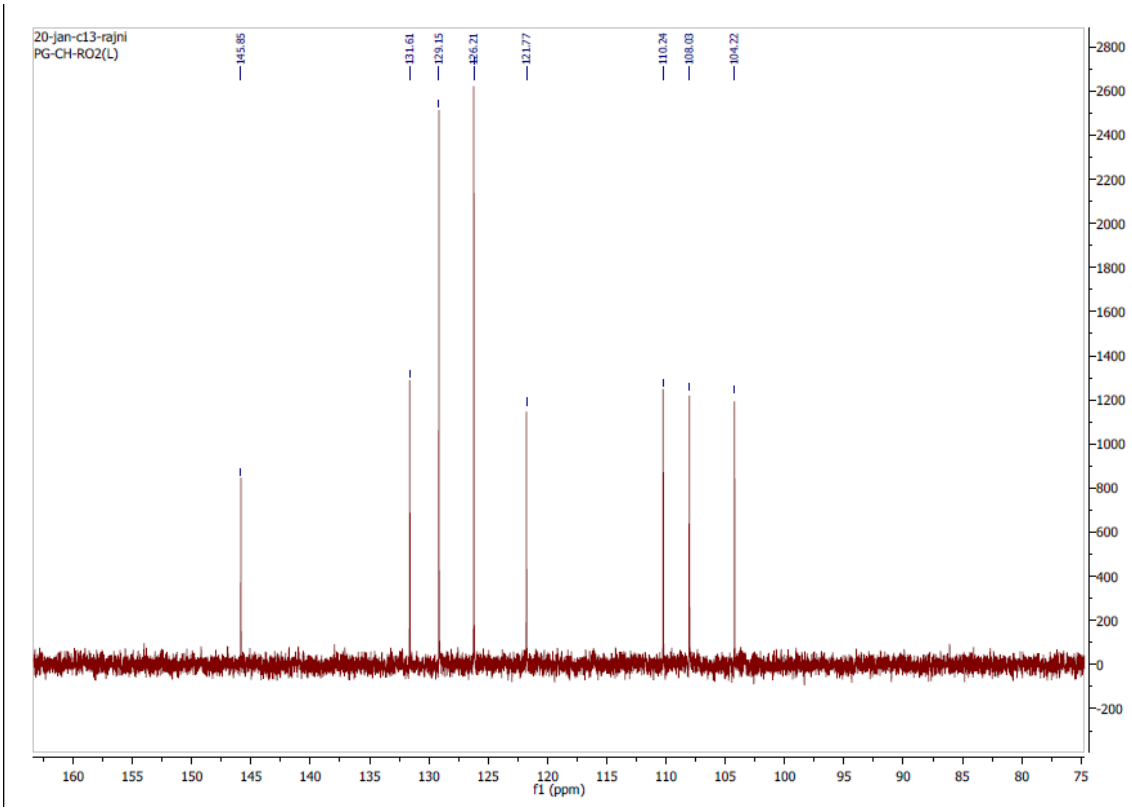
Isotope	*m/z*	Calc m/z	Diff (ppm)	Abund %	Calc Abund %	Abund Sum %	Calc Abund Sum %
1	295.0955	295.0965	3.36	100	100	83.88	83.48
2	296.0994	296.0999	1.64	19.22	19.79	16.12	16.52

--- End Of Report ---

S2. Scan copies of ^{1}H, ^{13}C, DEPT-135 NMR (in $CDCl_3$) and HRMS of lanceolatin B (**3ab**)







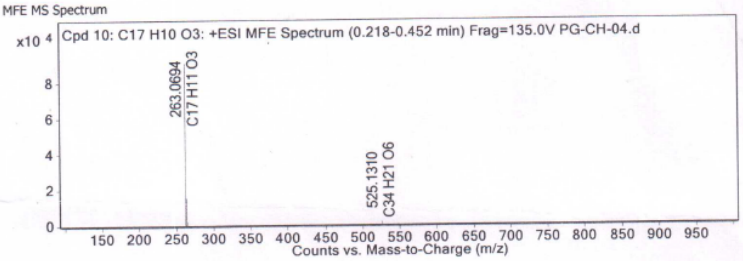
Compound Table

Compound Label	RT	Mass	Formula	MFG Formula	MFG Diff (ppm)	DB Formula
Cpd 10: C17 H10 O3	0.285	262.0622	C17 H10 O3	C17 H10 O3	3.17	C17 H10 O3

Compound Label	*m/z*	RT	Algorithm	Mass
Cpd 10: C17 H10 O3	263.0694	0.285	Find by Molecular Feature	262.0622

263.0702
263.0694

MFE MS Spectrum



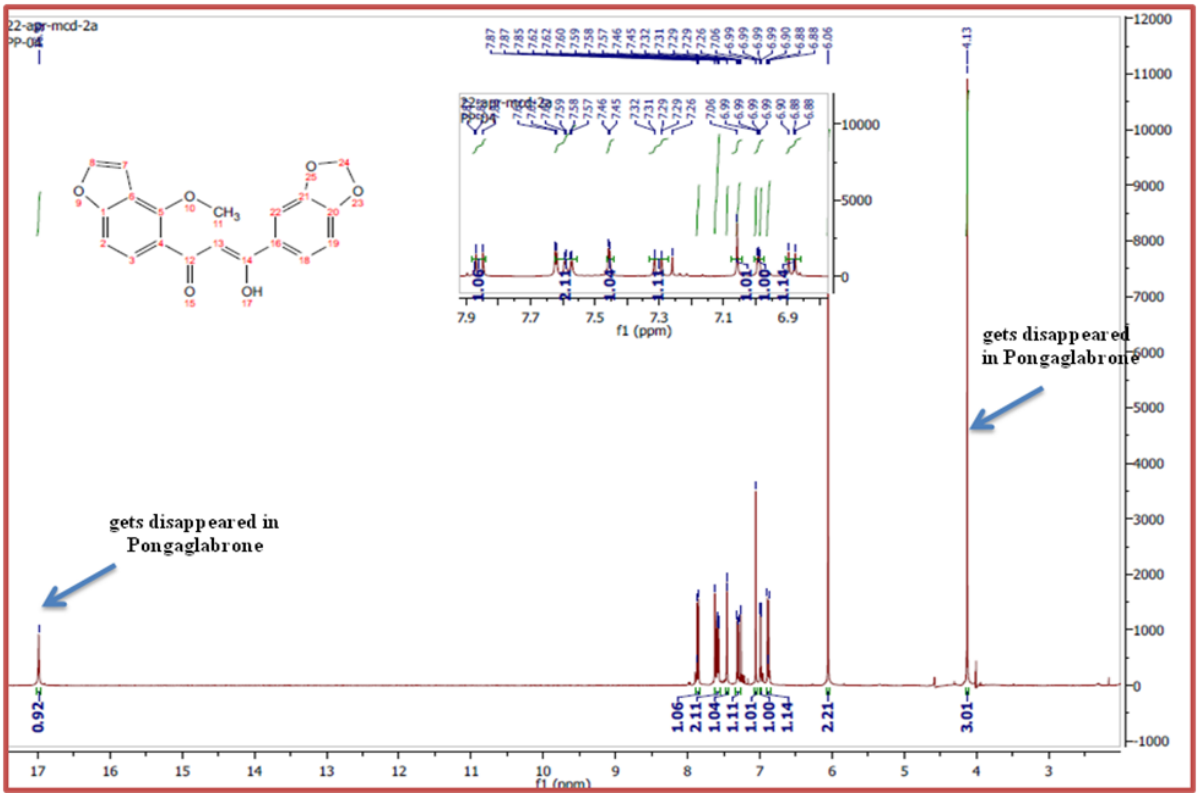
MS Spectrum Peak List

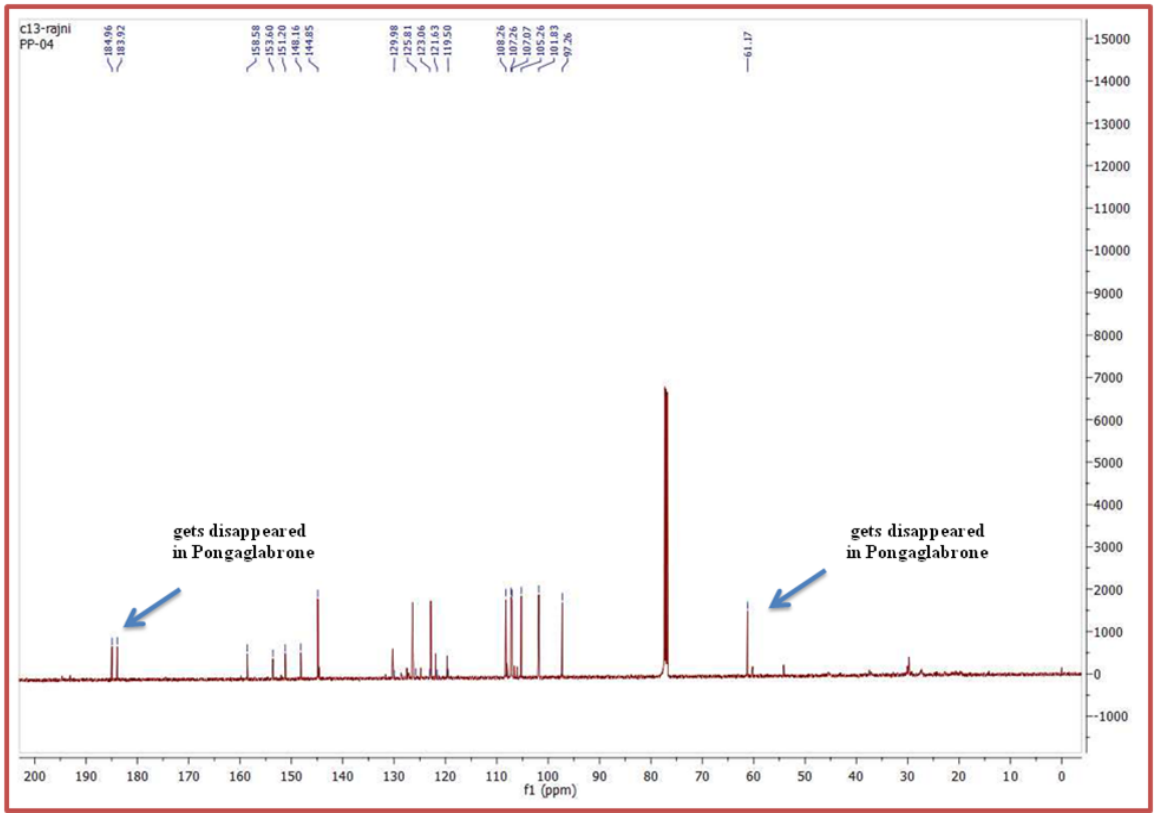
m/z	z	Abund	Formula	Ion
263.0694	1	90452.87	C17 H11 O3	(M+H)+
264.073	1	15573.41	C17 H11 O3	(M+H)+
265.0751	1	2236.65	C17 H11 O3	(M+H)+
266.0756	1	309.43	C17 H11 O3	(M+H)+
525.131	1	1565.03	C34 H21 O6	(2M+H)+
526.1338	1	518.08	C34 H21 O6	(2M+H)+

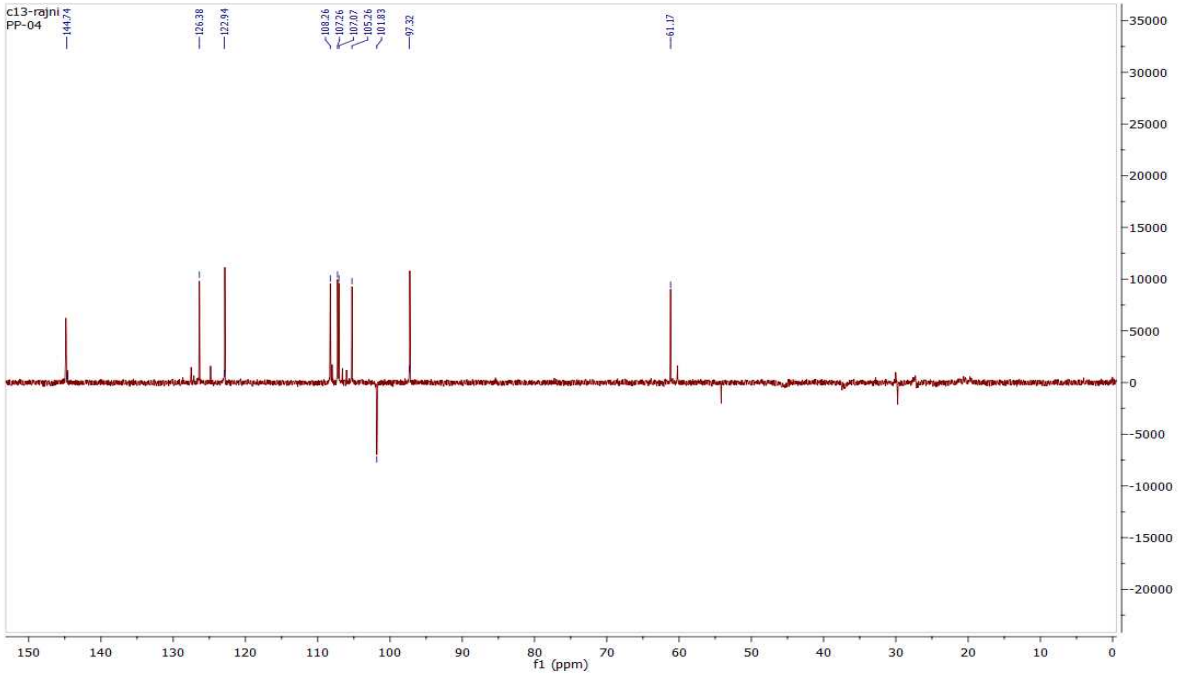
Predicted Isotope Match Table

Isotope	*m/z*	Calc m/z	Diff (ppm)	Abund %	Calc Abund %	Abund Sum %	Calc Abund Sum %
1	263.0694	263.0703	3.21	100	100	83.31	82.59
2	264.073	264.0737	2.39	17.22	18.63	14.34	15.38
3	265.0751	265.0763	4.72	2.47	2.25	2.06	1.86
4	266.0756	266.079	12.9	0.34	0.2	0.28	0.17

S3. Scan copies of ^{1}H, ^{13}C, DEPT-135 NMR (in $CDCl_3$) and HRMS of ovalitenone (**2a**)





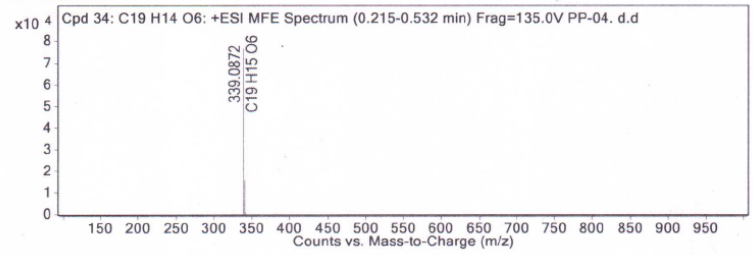


Compound Table

Compound Label	RT	Mass	Formula	MFG Formula	MFG Diff (ppm)	DB Formula
Cpd 34: C19 H14 O6	0.283	338.0798	C19 H14 O6	C19 H14 O6	-2.35	C19 H14 O6

Compound Label	*m/z*	RT	Algorithm	Mass
Cpd 34: C19 H14 O6	339.0872	0.283	Find by Molecular Feature	338.0798

MFE MS Spectrum



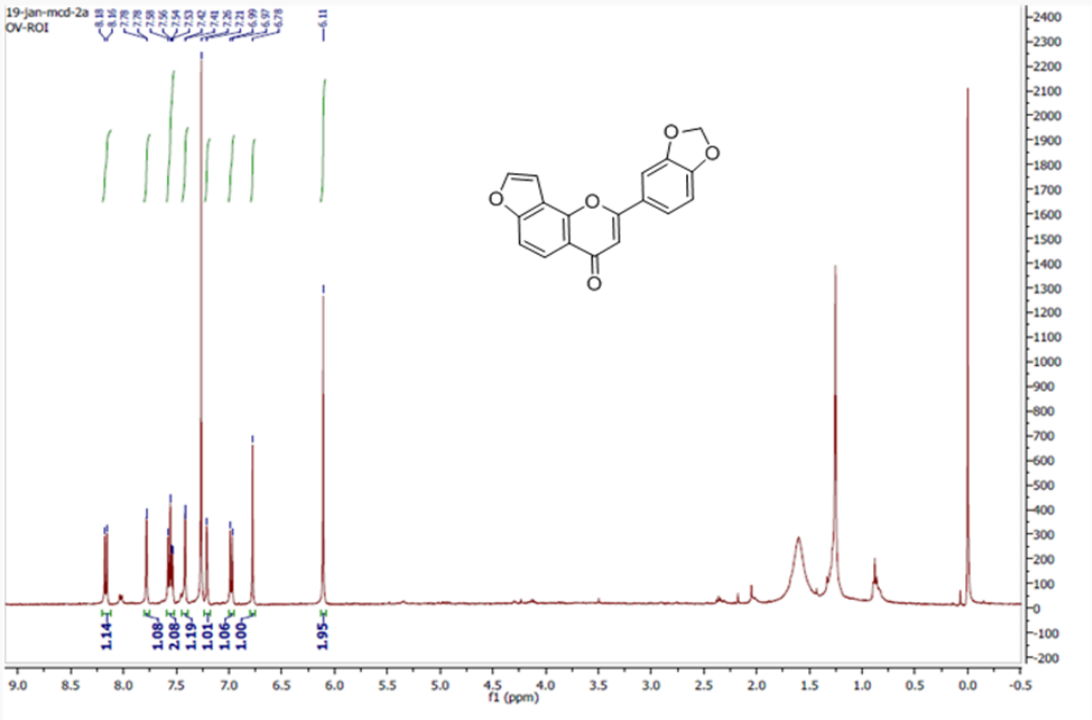
MS Spectrum Peak List

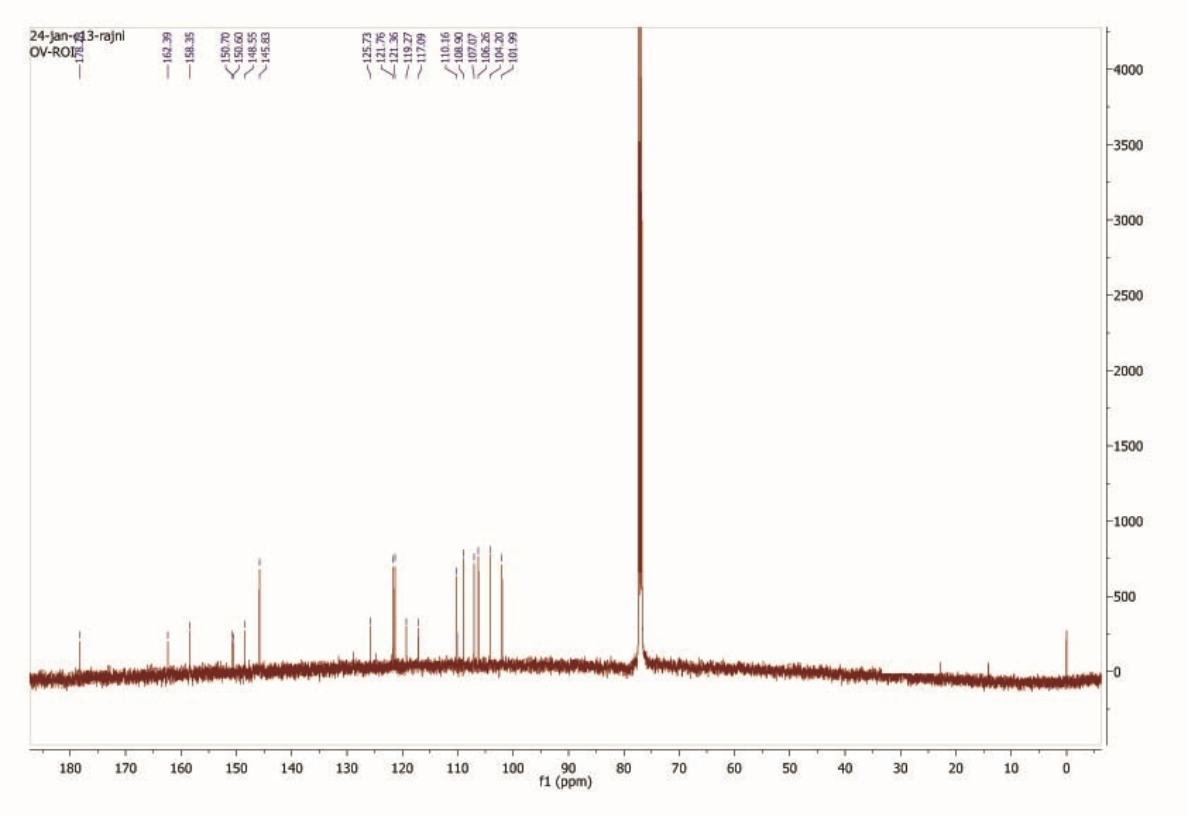
m/z	z	Abund	Formula	Ion
339.0872	1	76727.1	C19 H15 O6	(M+H)+
340.0903	1	15908.79	C19 H15 O6	(M+H)+
341.092	1	3410.74	C19 H15 O6	(M+H)+
342.0964	1	747.22	C19 H15 O6	(M+H)+

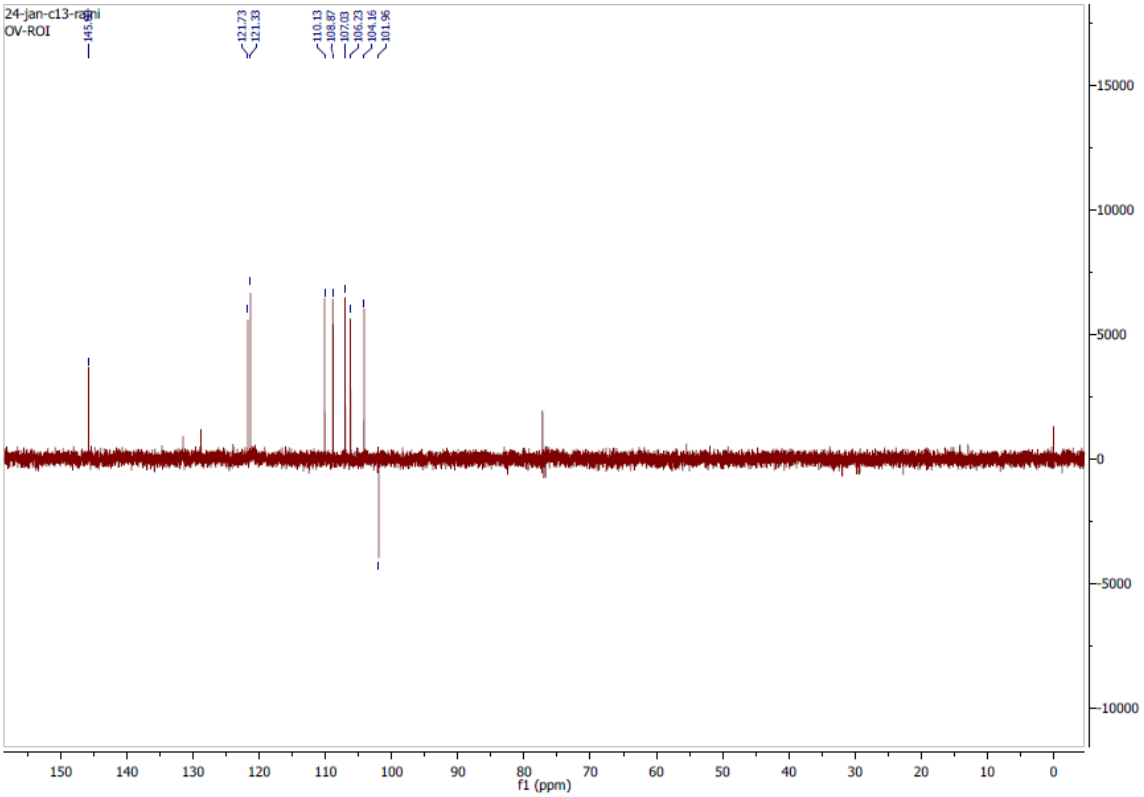
Predicted Isotope Match Table

Isotope	*m/z*	Calc m/z	Diff (ppm)	Abund %	Calc Abund %	Abund Sum %	Calc Abund Sum %
1	339.0872	339.0863	-2.58	100	100	79.27	80.22
2	340.0903	340.0897	-1.7	20.73	20.95	16.44	16.81
3	341.092	341.0922	0.45	4.45	3.32	3.52	2.66
4	342.0964	342.0948	-4.61	0.97	0.39	0.77	0.31

S4. Scan copies of ^{1}H, ^{13}C, DEPT-135 NMR (in $CDCl_3$) and HRMS of pongaglabrone (**4ab**)





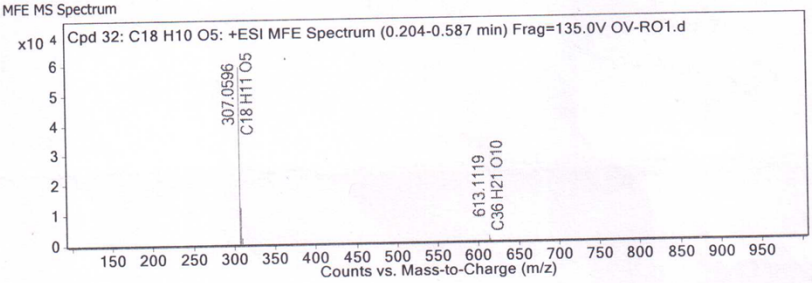


Compound Table

Compound Label	RT	Mass	Formula	MFG Formula	MFG Diff (ppm)	DB Formula
Cpd 32: C18 H10 O5	0.279	306.0524	C18 H10 O5	C18 H10 O5	1.29	C18 H10 O5

Compound Label	*m/z*	RT	Algorithm	Mass
Cpd 32: C18 H10 O5	307.0596	0.279	Find by Molecular Feature	306.0524

MFE MS Spectrum



307.0601δ

MS Spectrum Peak List

m/z	z	Abund	Formula	Ion
307.0596	1	59277.93	C18 H11 O5	(M+H)+
308.0633	1	11938.3	C18 H11 O5	(M+H)+
309.0674	1	2093.85	C18 H11 O5	(M+H)+
310.0655	1	287.5	C18 H11 O5	(M+H)+
613.1119	1	1631.01	C36 H21 O10	(2M+H)+
614.1119	1	809.91	C36 H21 O10	(2M+H)+
615.1076	1	128.85	C36 H21 O10	(2M+H)+

Predicted Isotope Match Table

Isotope	*m/z*	Calc m/z	Diff (ppm)	Abund %	Calc Abund %	Abund Sum %	Calc Abund Sum %
1	307.0596	307.0601	1.58	100	100	80.54	81.32
2	308.0633	308.0635	0.67	20.14	19.79	16.22	16.09
3	309.0674	309.066	-4.64	3.53	2.88	2.85	2.34
4	310.0655	310.0686	10.07	0.48	0.31	0.39	0.25