

**ANTIMICROBIAL ACETOPHENONE AND
PHENALENONE DERIVATIVES FROM A SOIL-
DERIVED FUNGUS *PENICILLIUM VERRUCISPORUM*
JX1**

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a.

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GAACTGAGTGAGGGCTCTGGGTCCACCTCCCACCCGTGTTTATTGTACCTTGTTGCTTCGGCAGGCCCGCCTCACGGC
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CCGAAAGGCAGCGGCGGCACCGTGTCCGGTCTCGAGCGTATGGGGCTTGTACCCGCTCTGTAGGCCCGGCCGG
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b.

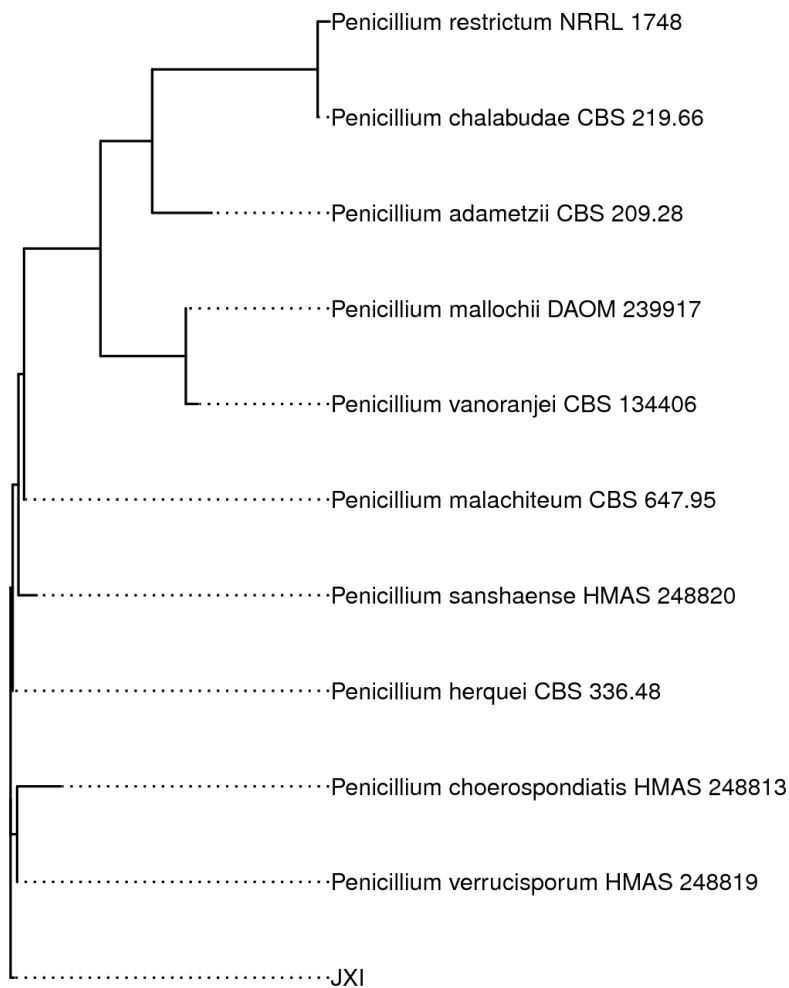


Figure S1. ITS gene sequences (a) and neighbor-joining phylogenetic tree of strain JX1 (b).

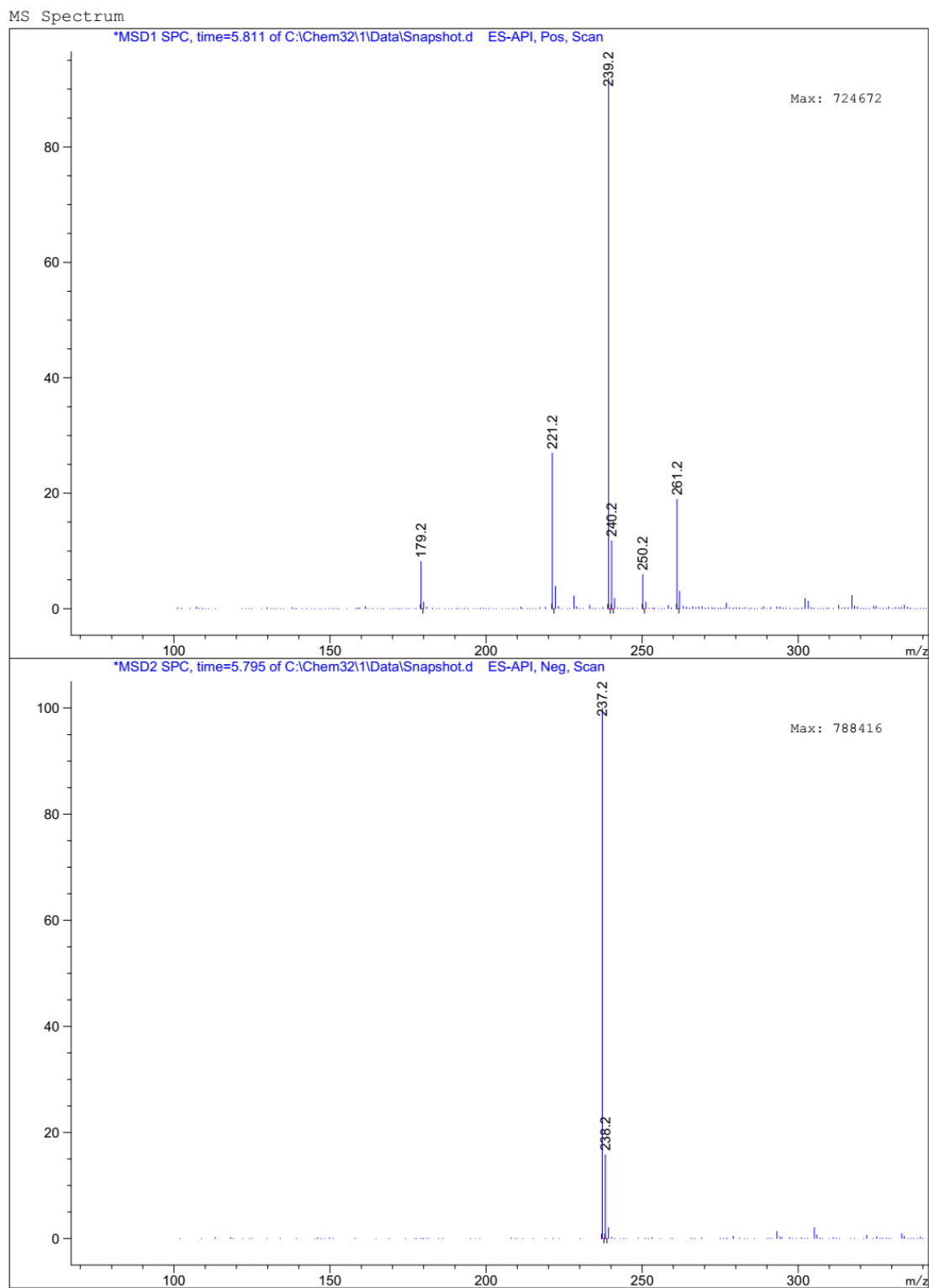
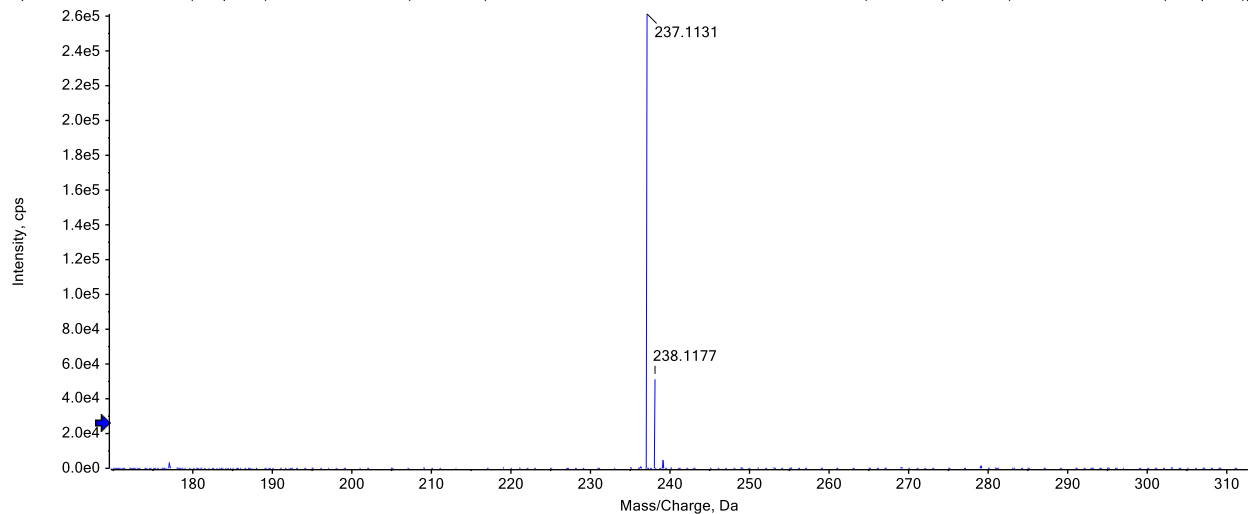


Figure S2. (+)-ESIMS and (-)-ESIMS spectrum of compound **1**.

Spectrum from 1231.wiff2 (sample 14) - JX19-2, -TOF MS (100 - 1600) from 0.171 to 0.194 min...76 to 0.832 min, noise filtered (noise multiplier = 1.5), Gaussian smoothed (10.0 points)]



Ion Formula	Calculated m/z	Error (ppm)	Error (mmu)	RDB
C13H17O4	237.11214	4.0	0.95	6.0

Figure S3. (-)-HRESIMS spectrum of compound **1**.

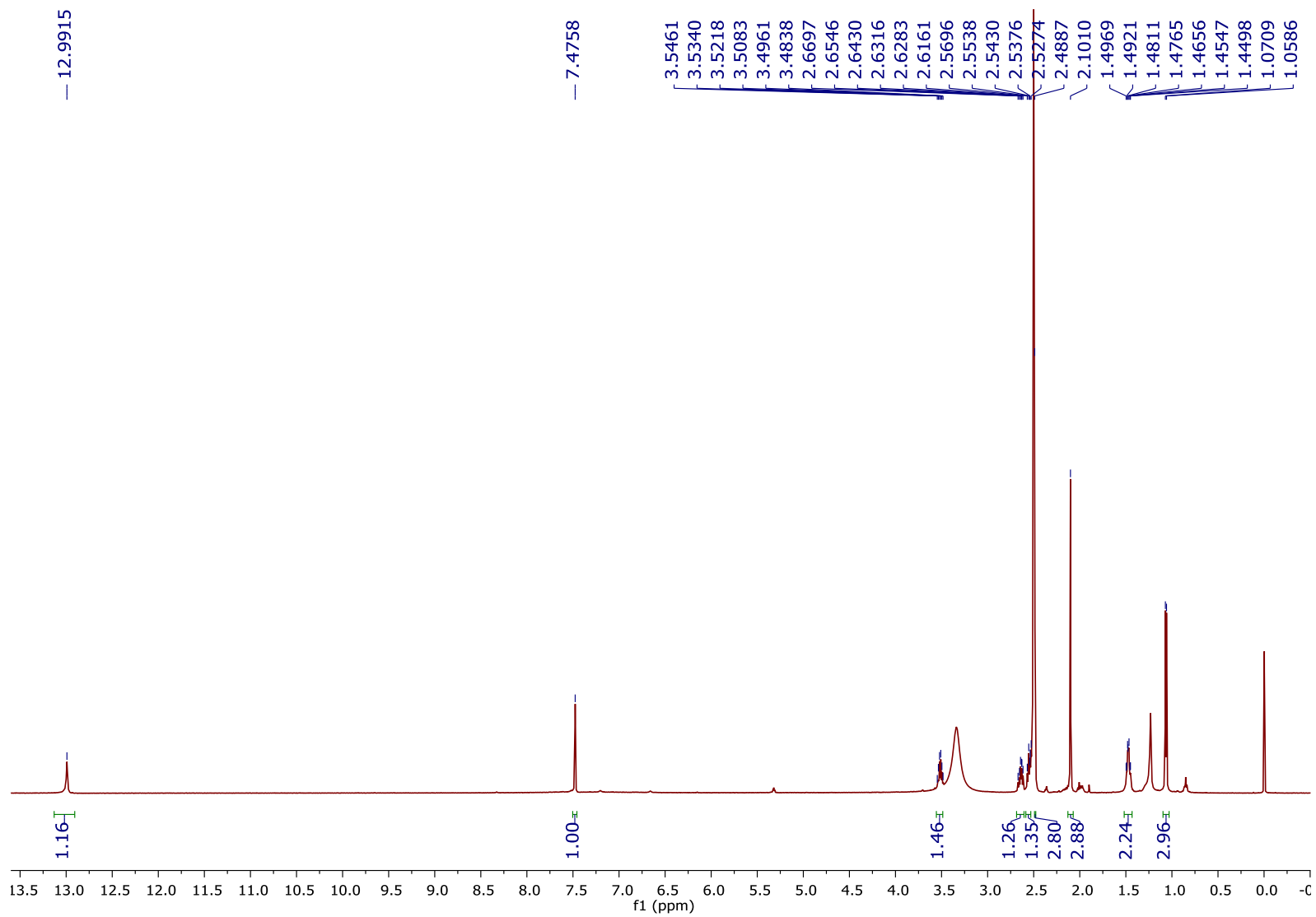


Figure S4. ^1H NMR spectrum of compound **1**.

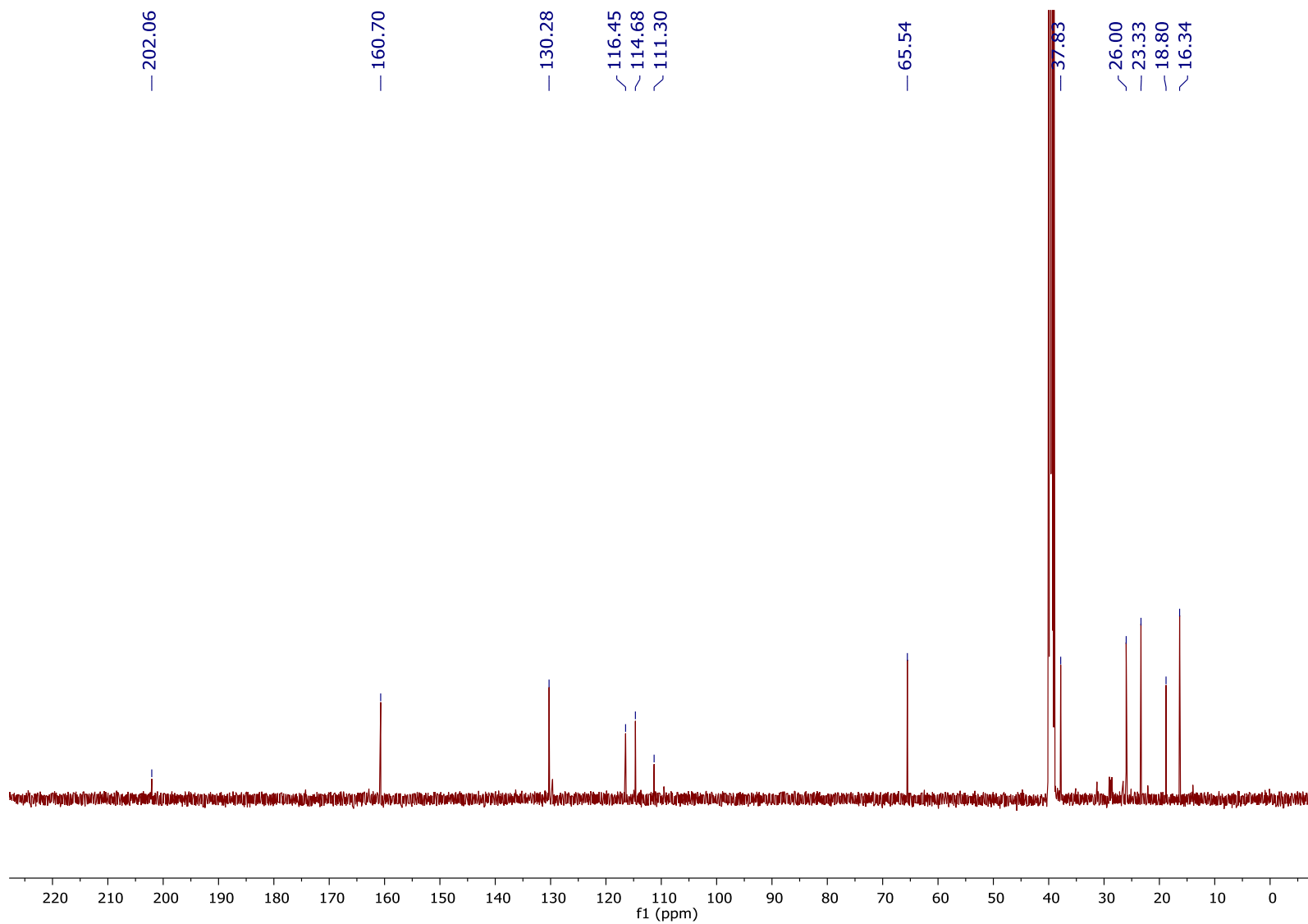


Figure S5. ^{13}C NMR spectrum of compound **1**.

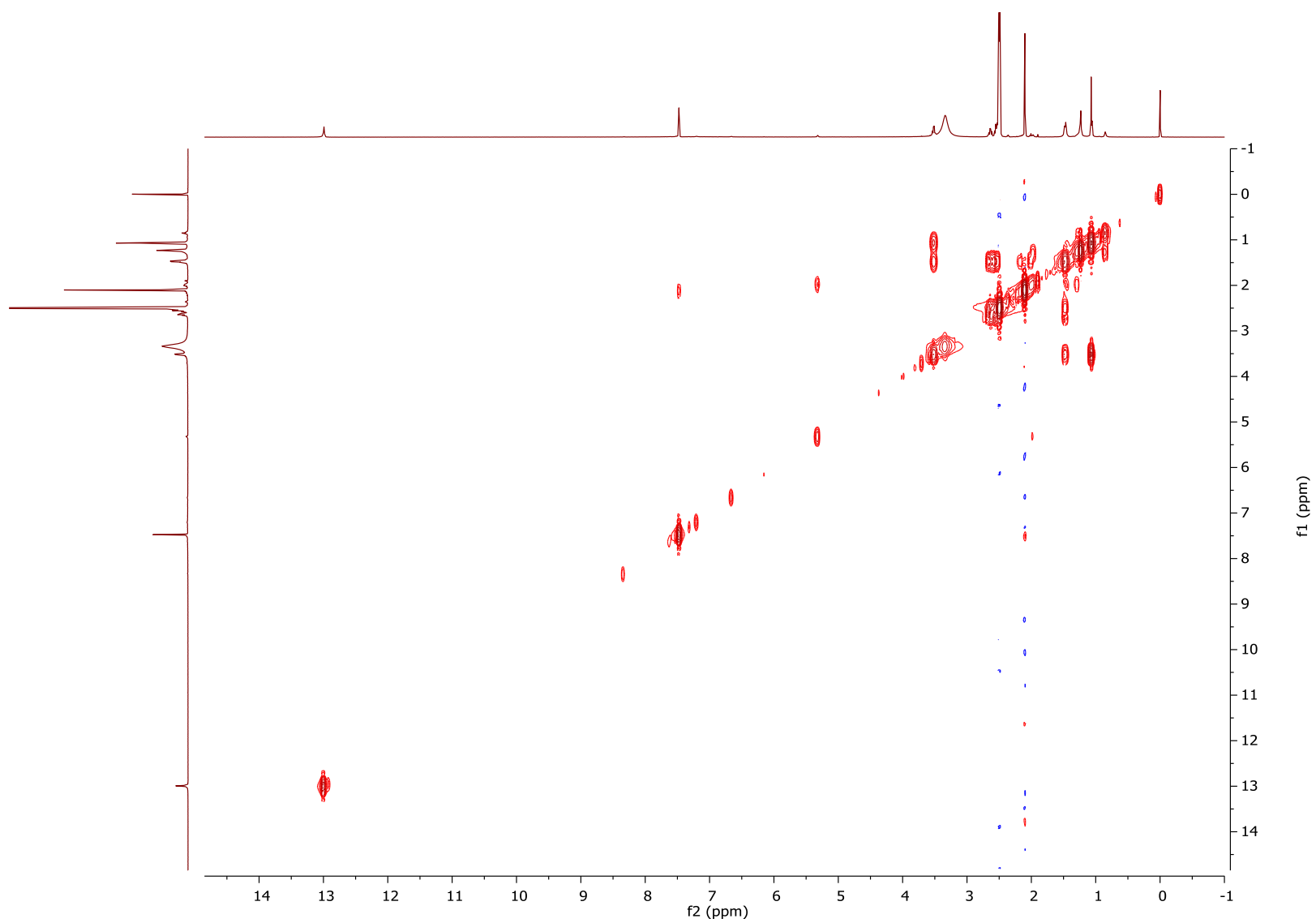


Figure S6. ^1H - ^1H COSY spectrum of compound **1**.

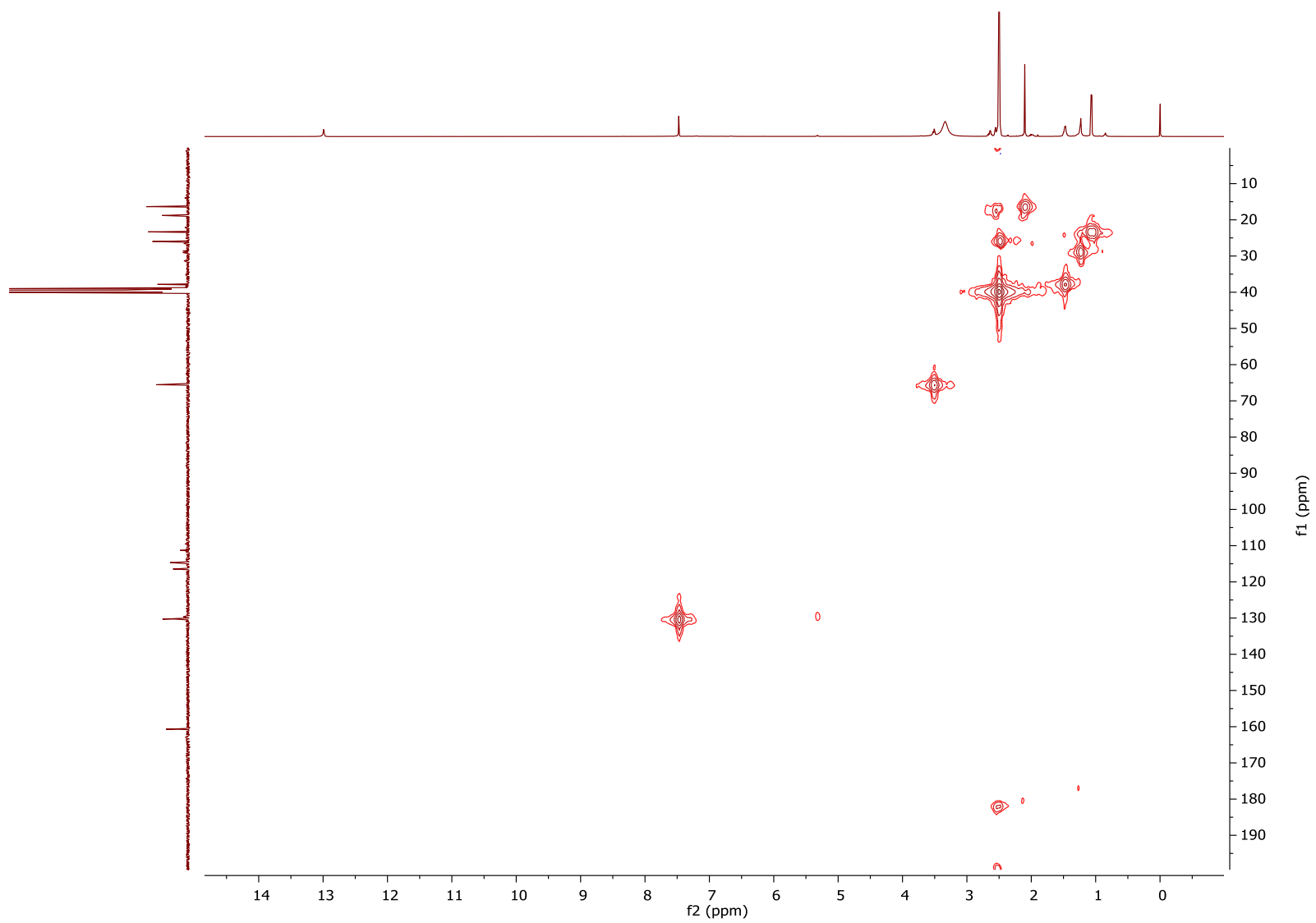


Figure S7. HSQC spectrum of compound **1**.

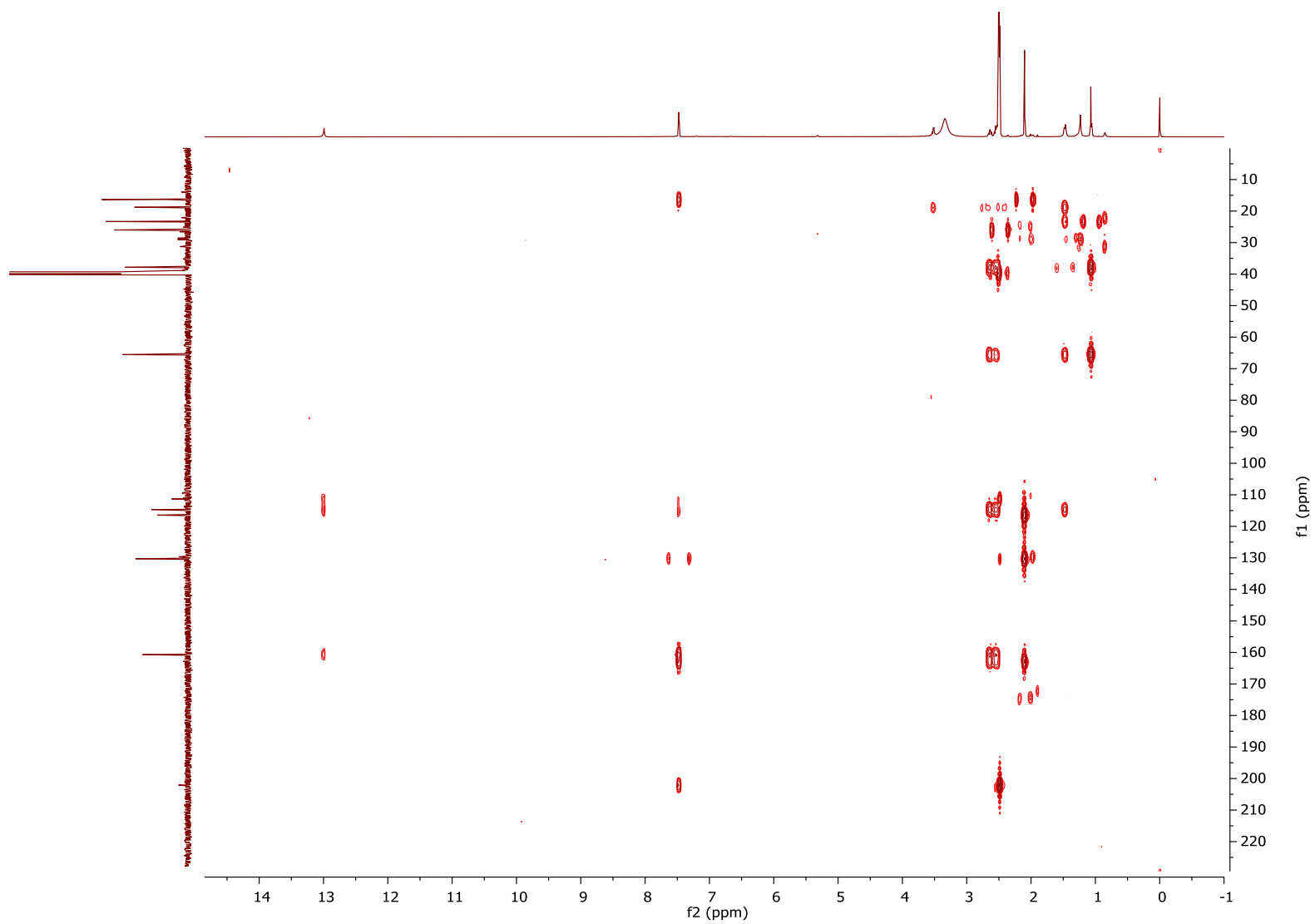


Figure S8. HMBC spectrum of compound **1**.

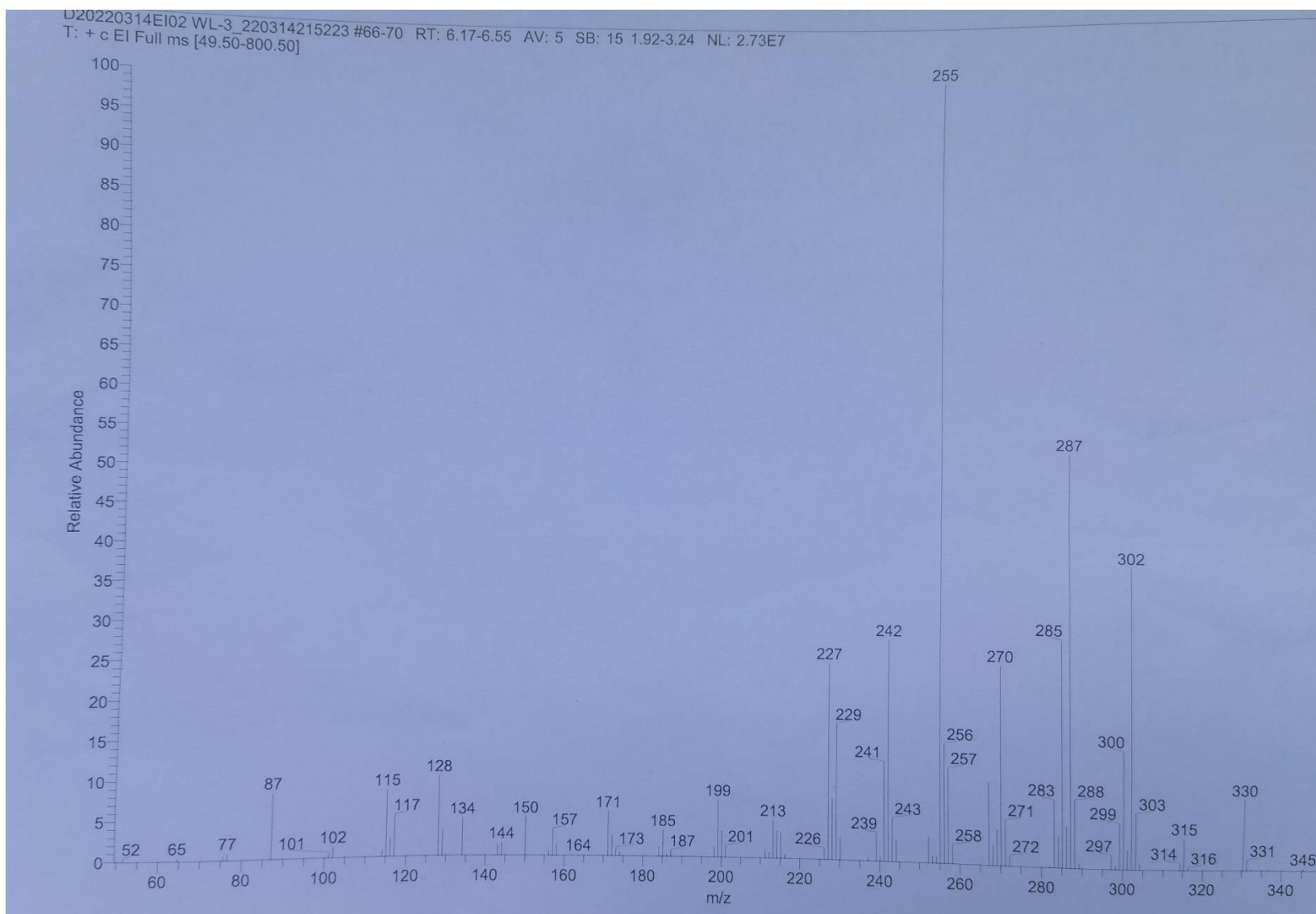


Figure S9. (+)-EIMS spectrum of compound **4**.

Data File: E:\DATA\2021\0513\L3.lcd

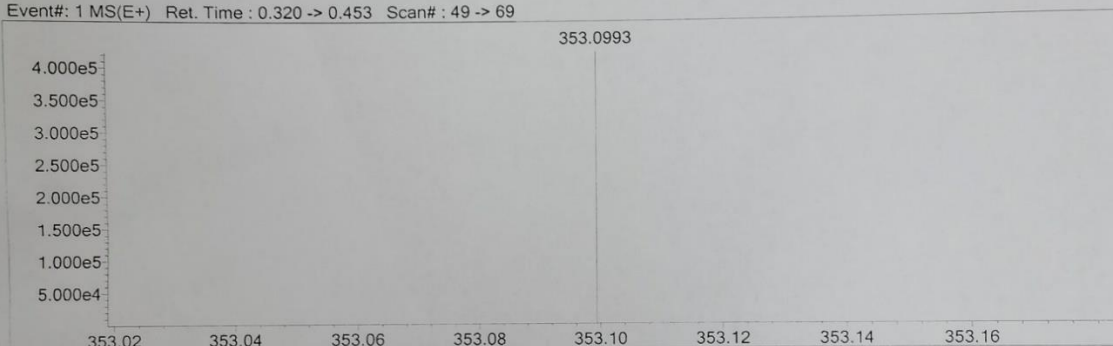
Elmt	Val.	Min	Max	Elmt	Val.	Min	Max	Elmt	Val.	Min	Max	Elmt	Val.	Min	Max	Use Adduct
H	1	5	100	F	1	0	0	Cl	1	0	0	Ag	1	0	0	Na
2H	1	0	0	Na	1	0	0	Co	2	0	0	I	3	0	0	
B	3	0	0	Mg	2	0	0	Cu	2	0	0	Ir	3	0	0	
C	4	5	50	Si	4	0	5	Se	2	0	0					
N	3	0	20	P	3	0	0	Br	1	0	0					
O	2	0	30	S	2	0	0	Pd	2	0	0					

Error Margin (ppm): 5
 HC Ratio: unlimited
 Max Isotopes: all
 MSn Iso RI (%): 75.00

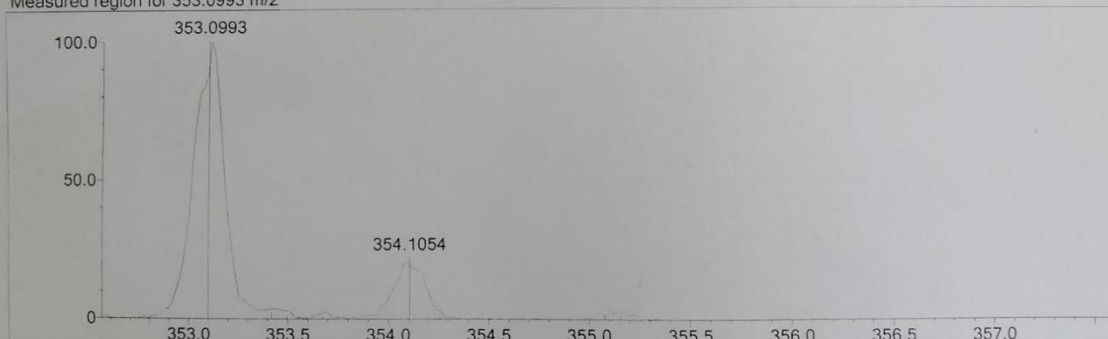
DBE Range: not fixed
 Apply N Rule: yes
 Isotope RI (%): 1.00
 MSn Logic Mode: OR

Electron Ions: both
 Use MSn Info: yes
 Isotope Res: 10000
 Max Results: 20

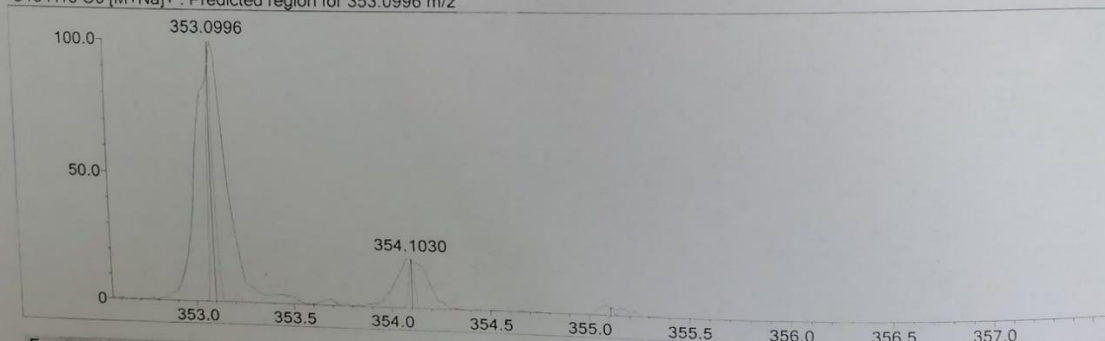
Event#: 1 MS(E+) Ret. Time : 0.320 -> 0.453 Scan# : 49 -> 69



Measured region for 353.0993 m/z



C18 H18 O6 [M+Na]+ : Predicted region for 353.0996 m/z



Formula (M)	Ion	Meas. m/z	Pred. m/z	Df. (mDa)	Df. (ppm)	DBE
C18 H18 O6	[M+Na]+	353.0993	353.0996	-0.3	-0.85	10.0

Figure S10. (+)-HRESIMS spectrum of compound 4.

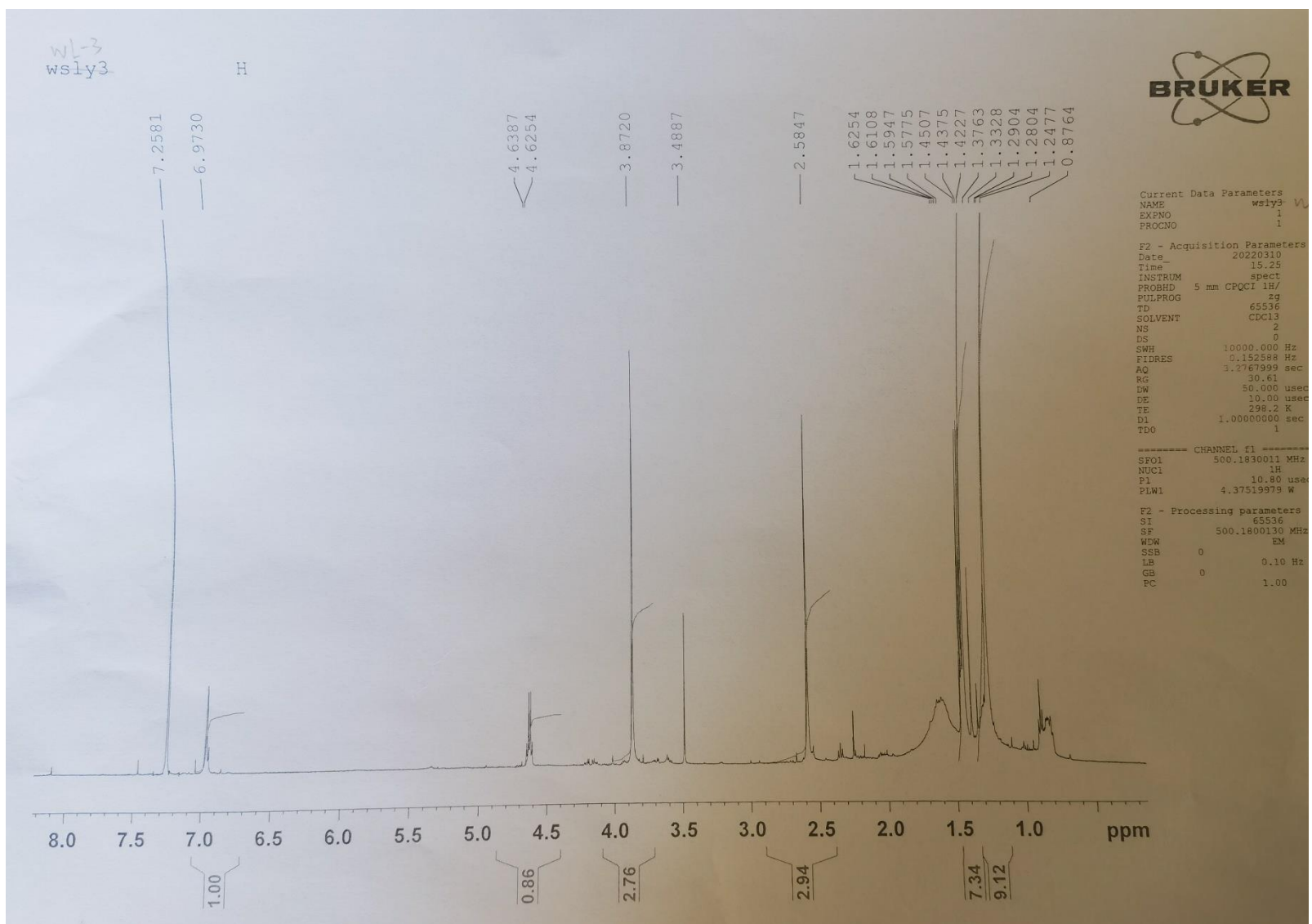


Figure S11. ^1H NMR (CDCl_3 , 500 MHz) spectrum of compound **4**.

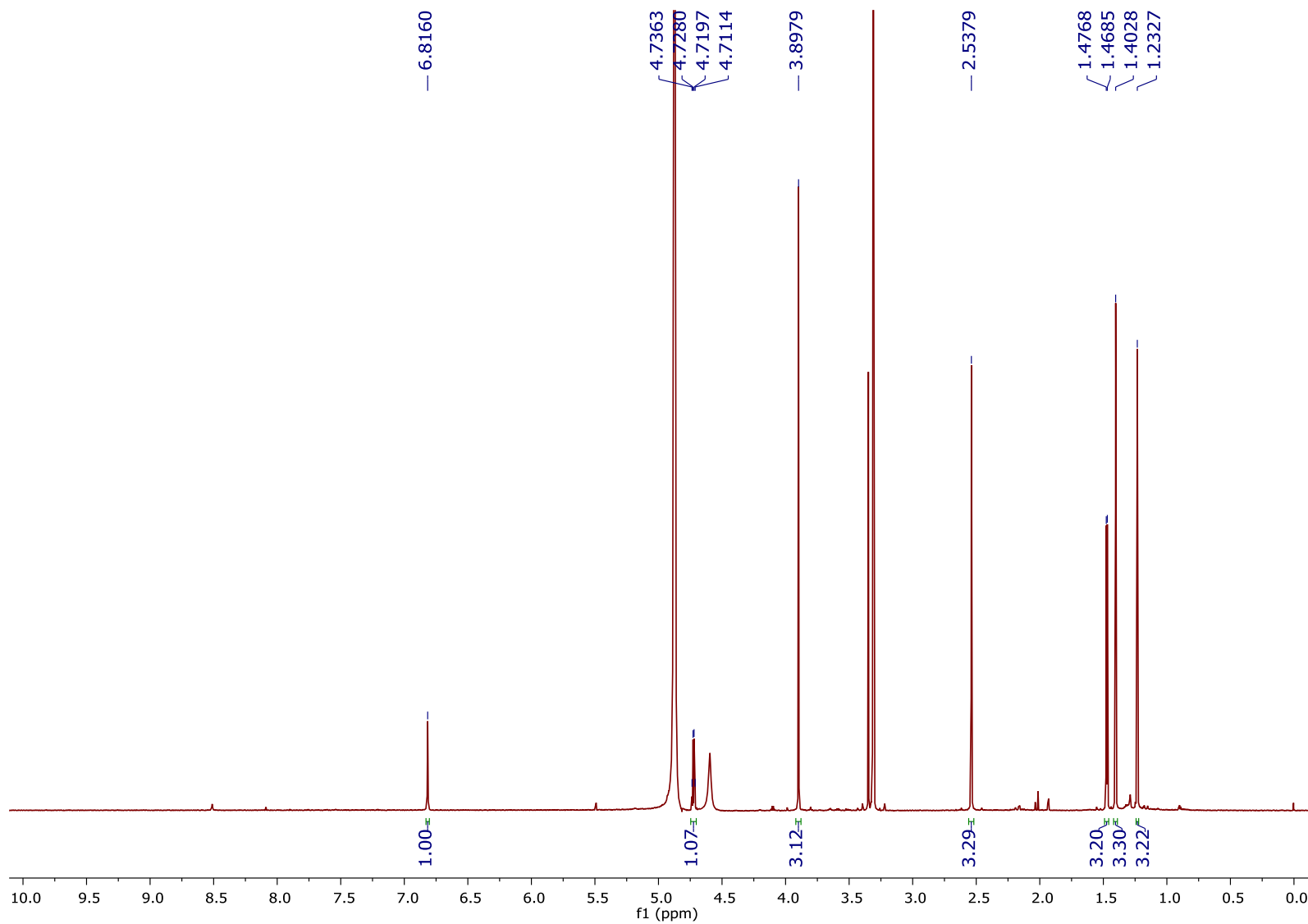


Figure S12. ^1H NMR (CD_3OD , 800 MHz) spectrum of compound **4**.

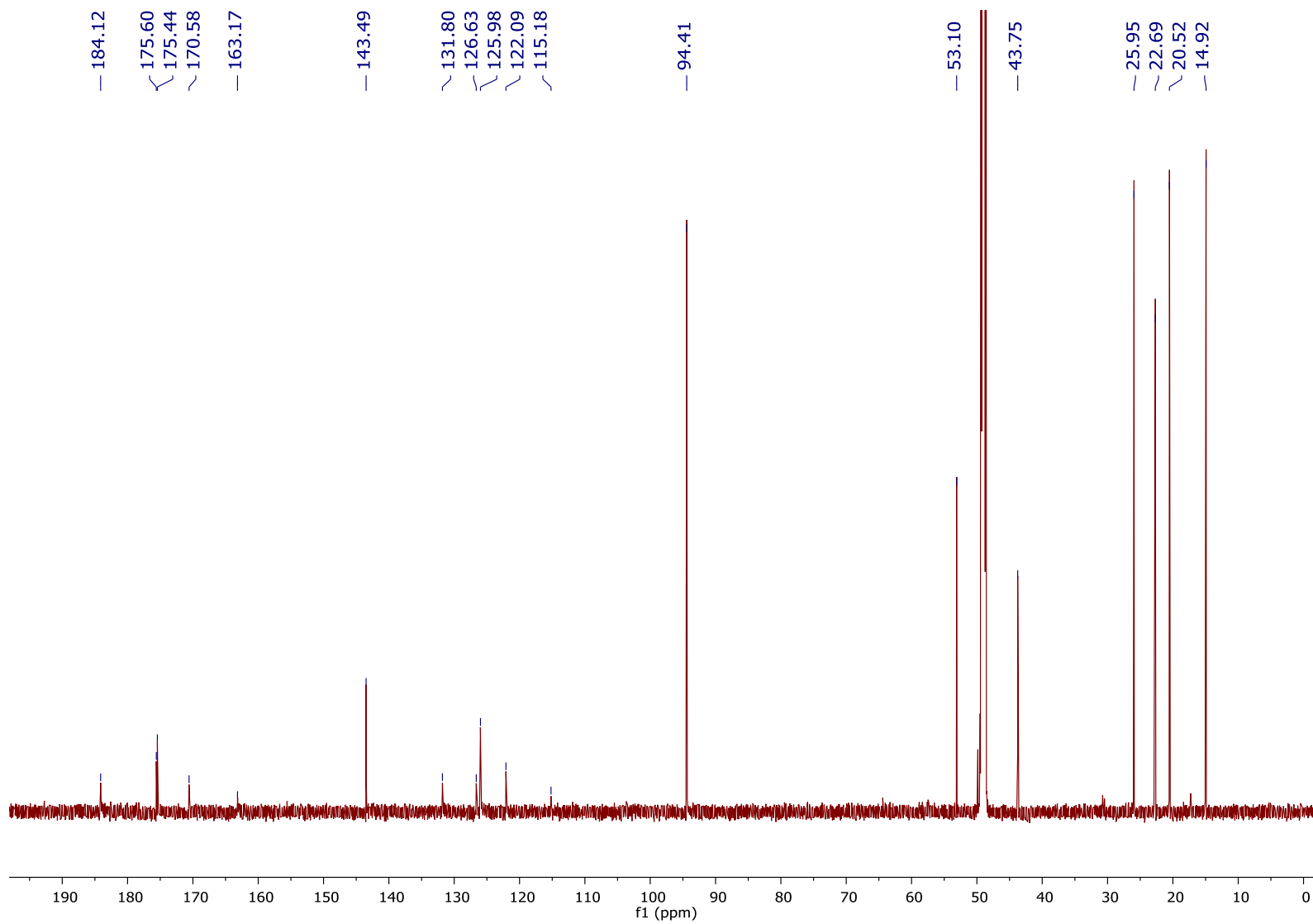


Figure S13. ^{13}C NMR (CD_3OD , 200 MHz) spectrum of compound **4**.

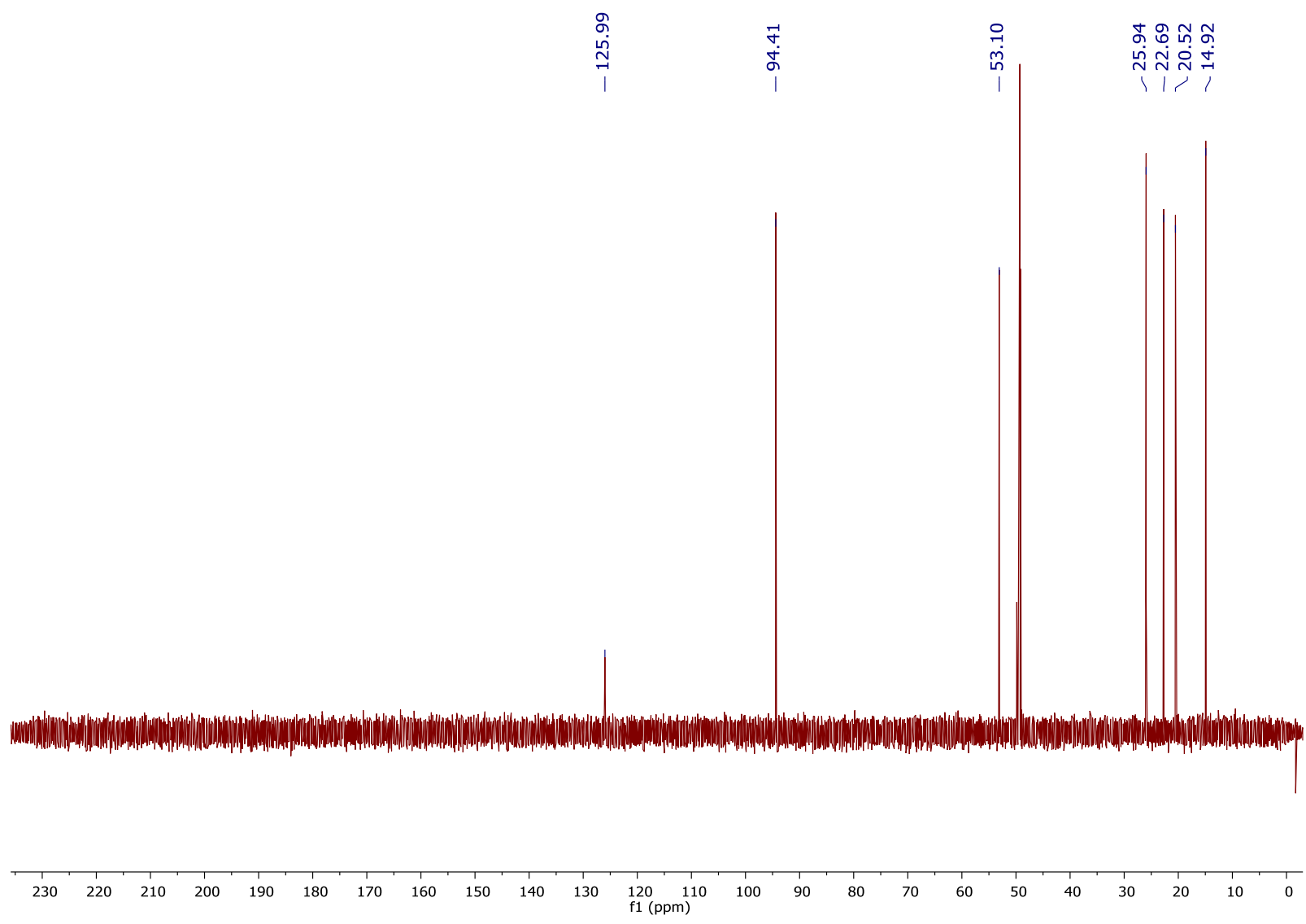


Figure S14. DEPT-135 spectrum of compound **4**.

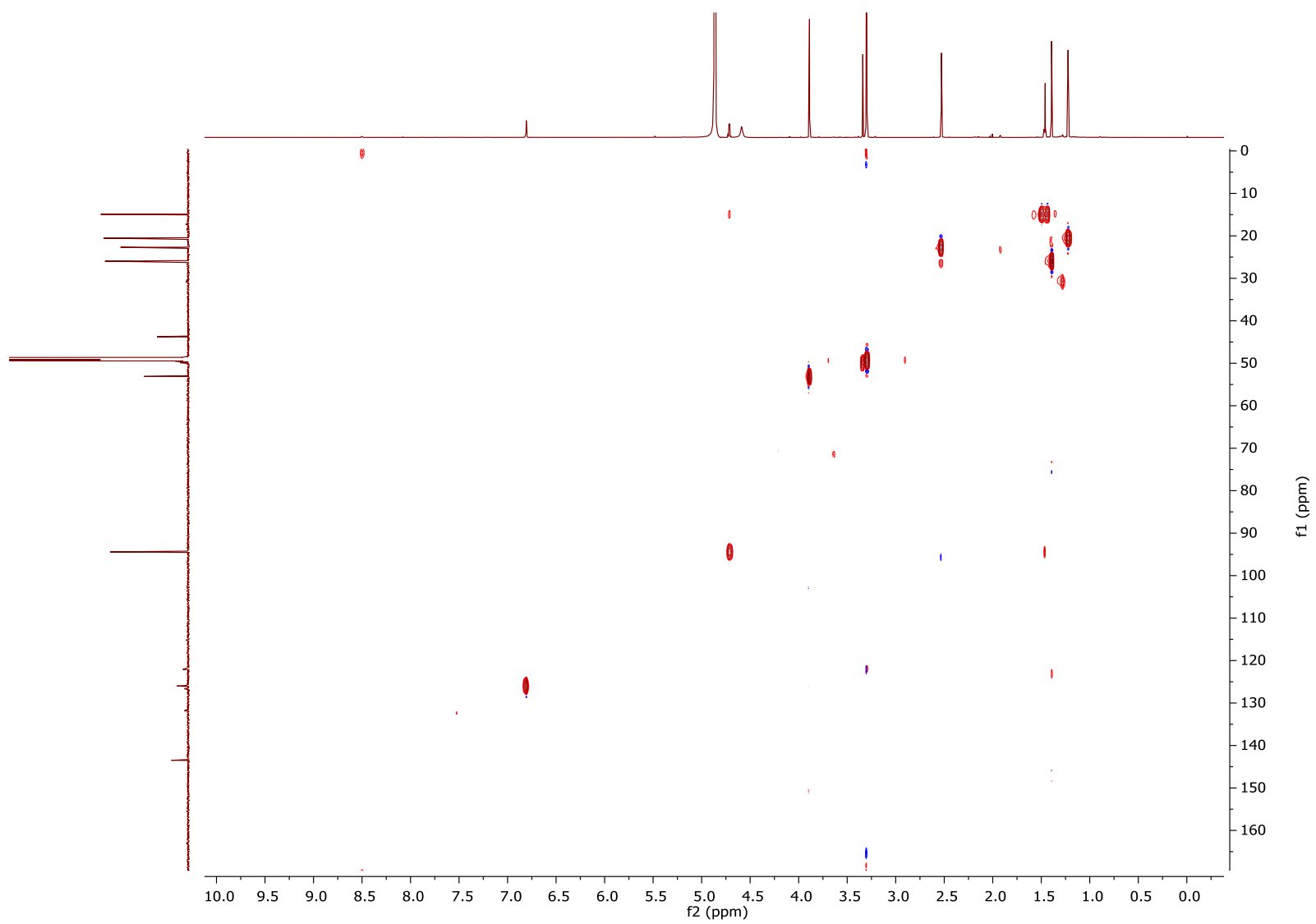


Figure S15. HSQC spectrum of compound **4**.

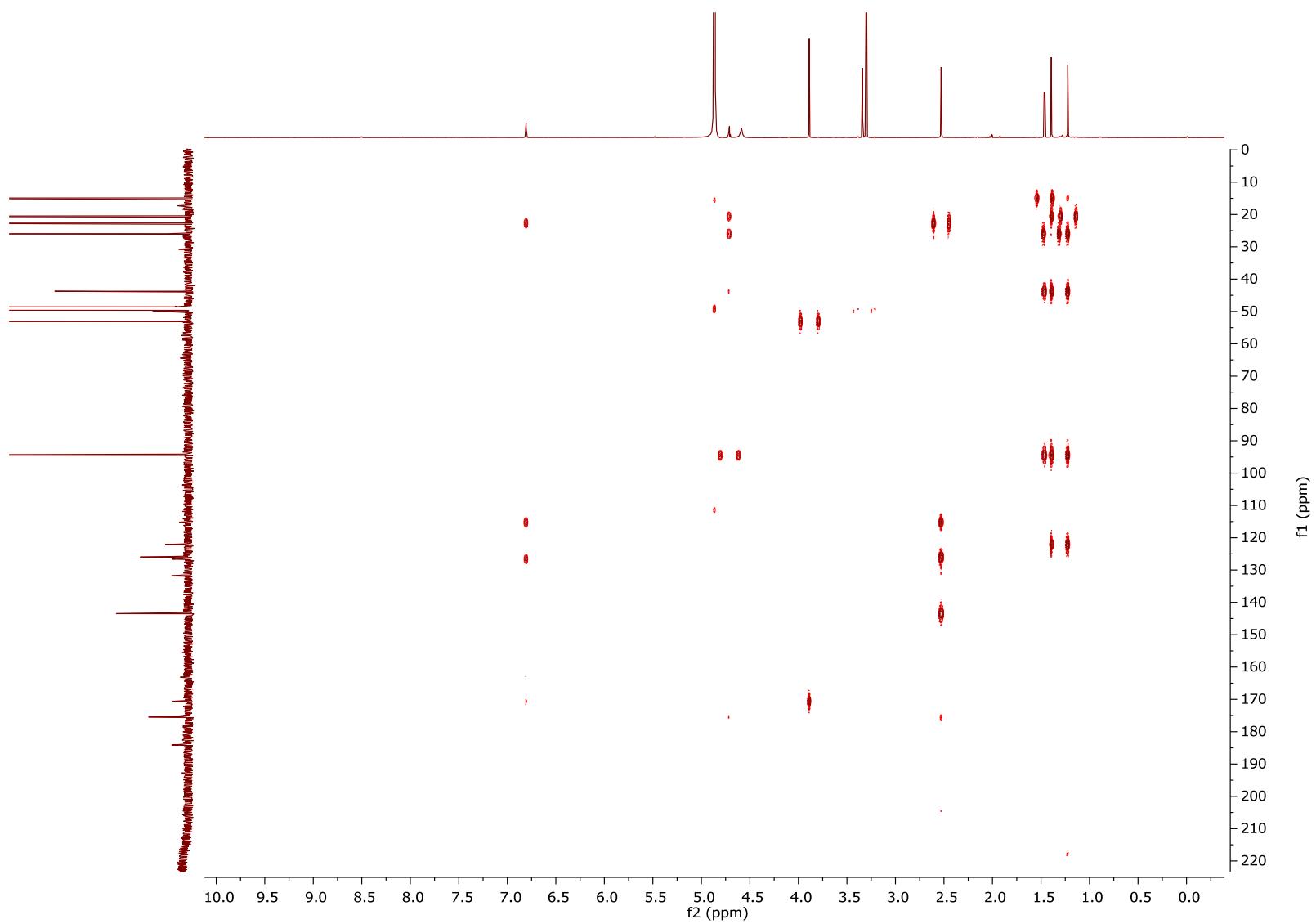


Figure S16. HMBC spectrum of compound **4**.