

Supplementary Data

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Two New Ecdysteroid Glycosides from the Rhizomes of *Silene tatarinowii* Regel

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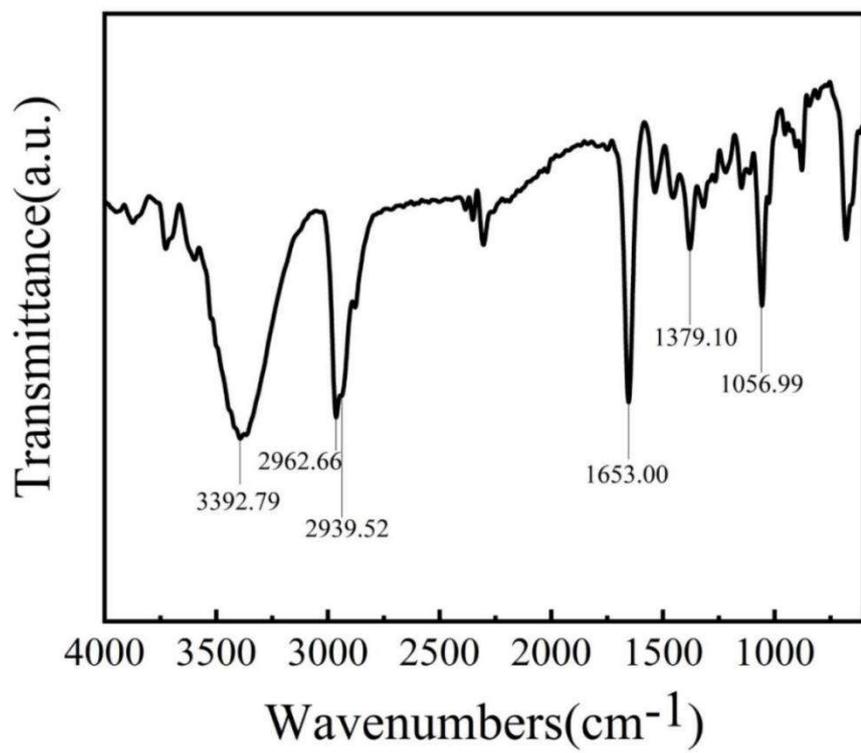


Figure S1: The IR spectrum of 1 (in KBr)

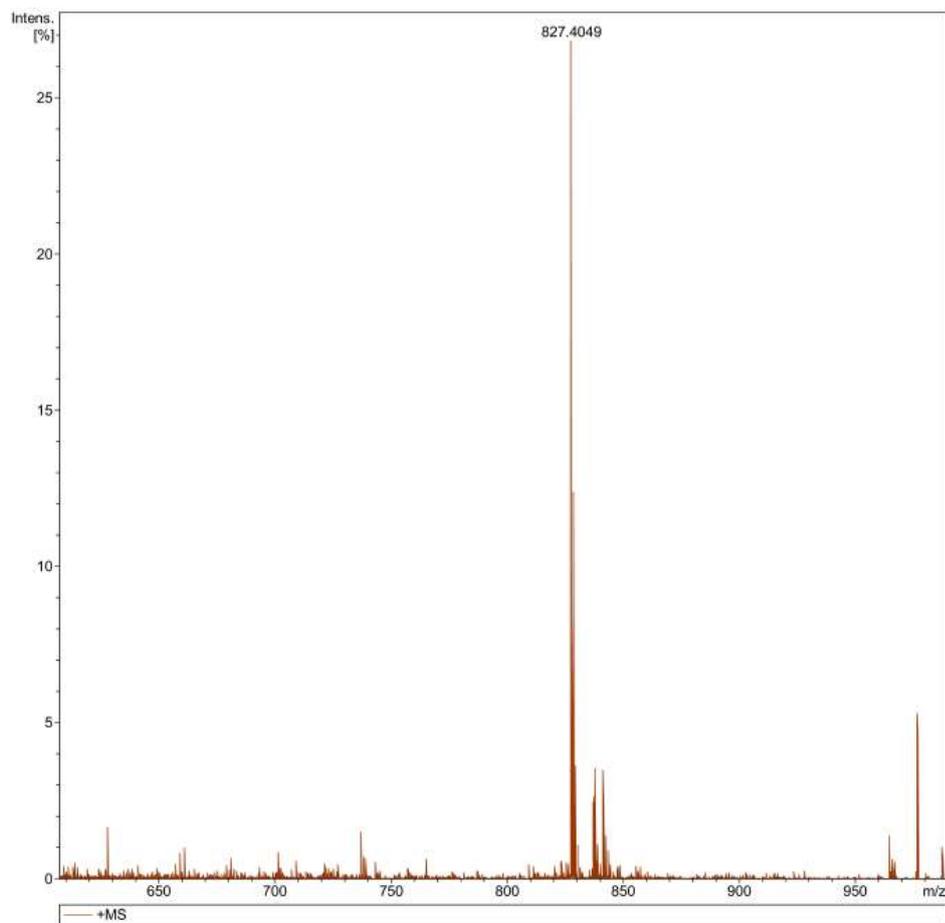


Figure S2: The HR-ESI-MS spectrum of 1 (in MeOH)

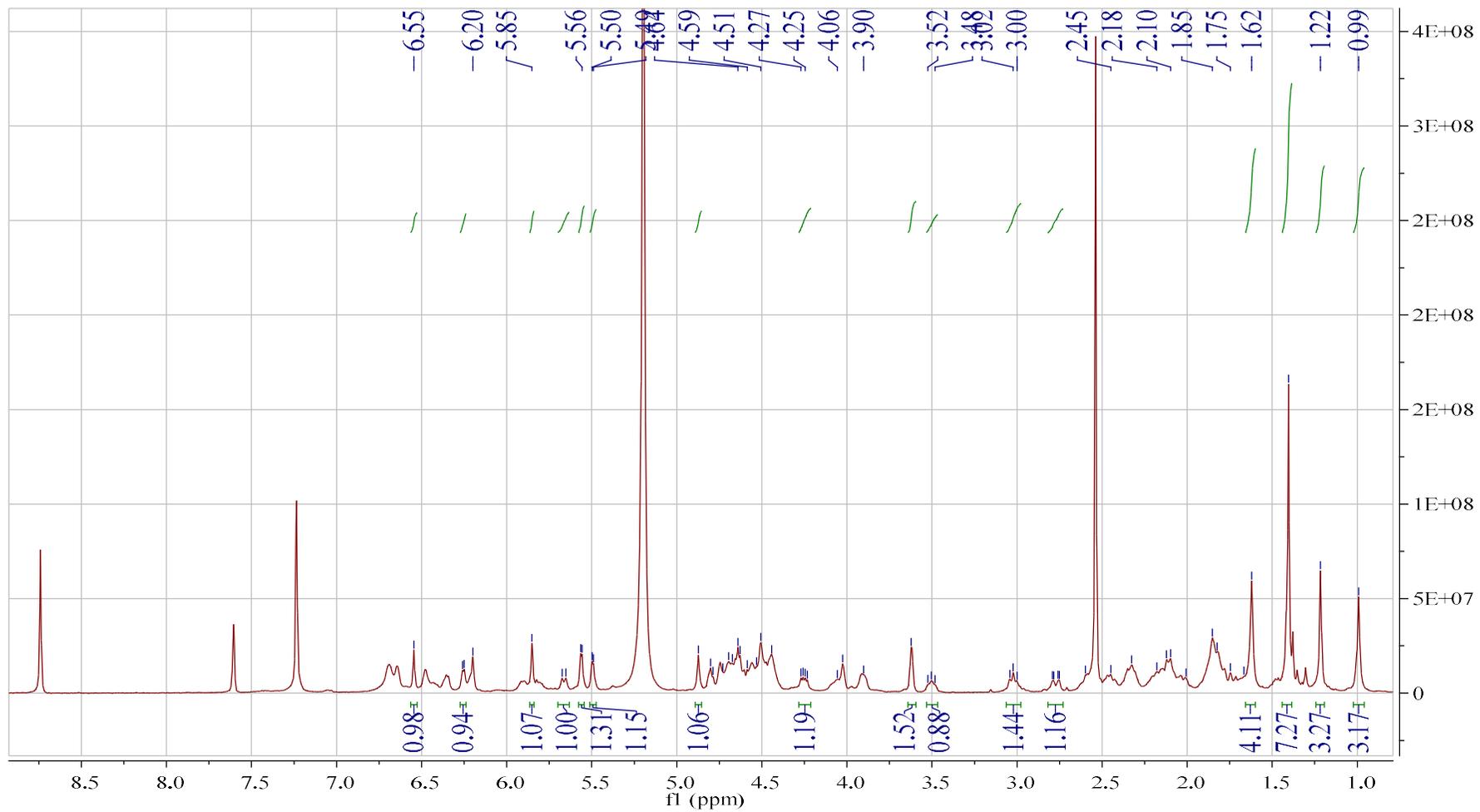


Figure S3: The ¹H NMR spectrum of 1 (in pyridine-*d*₅)

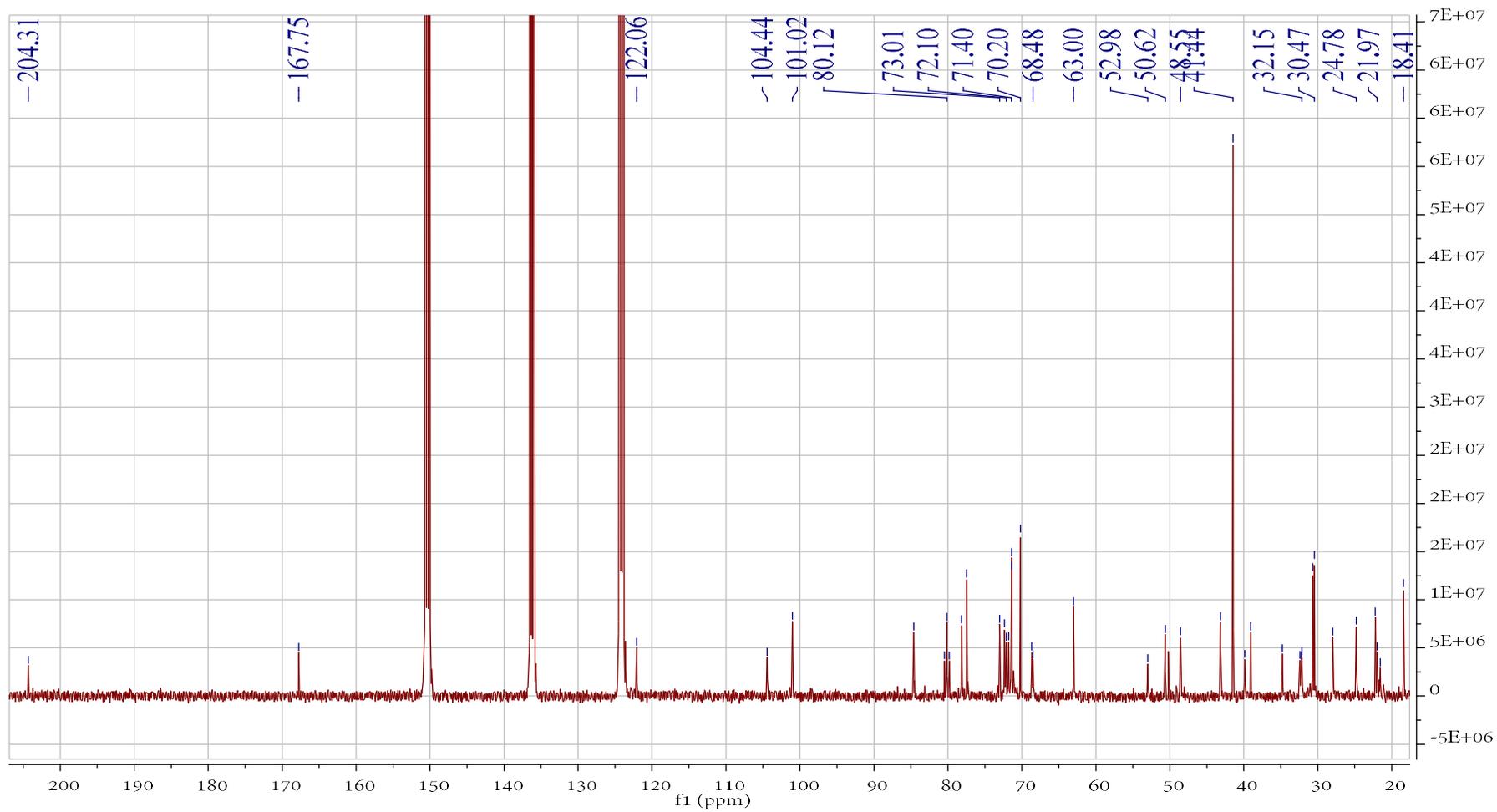


Figure S4: The ^{13}C NMR spectrum of 1 (in $\text{pyridine-}d_5$)

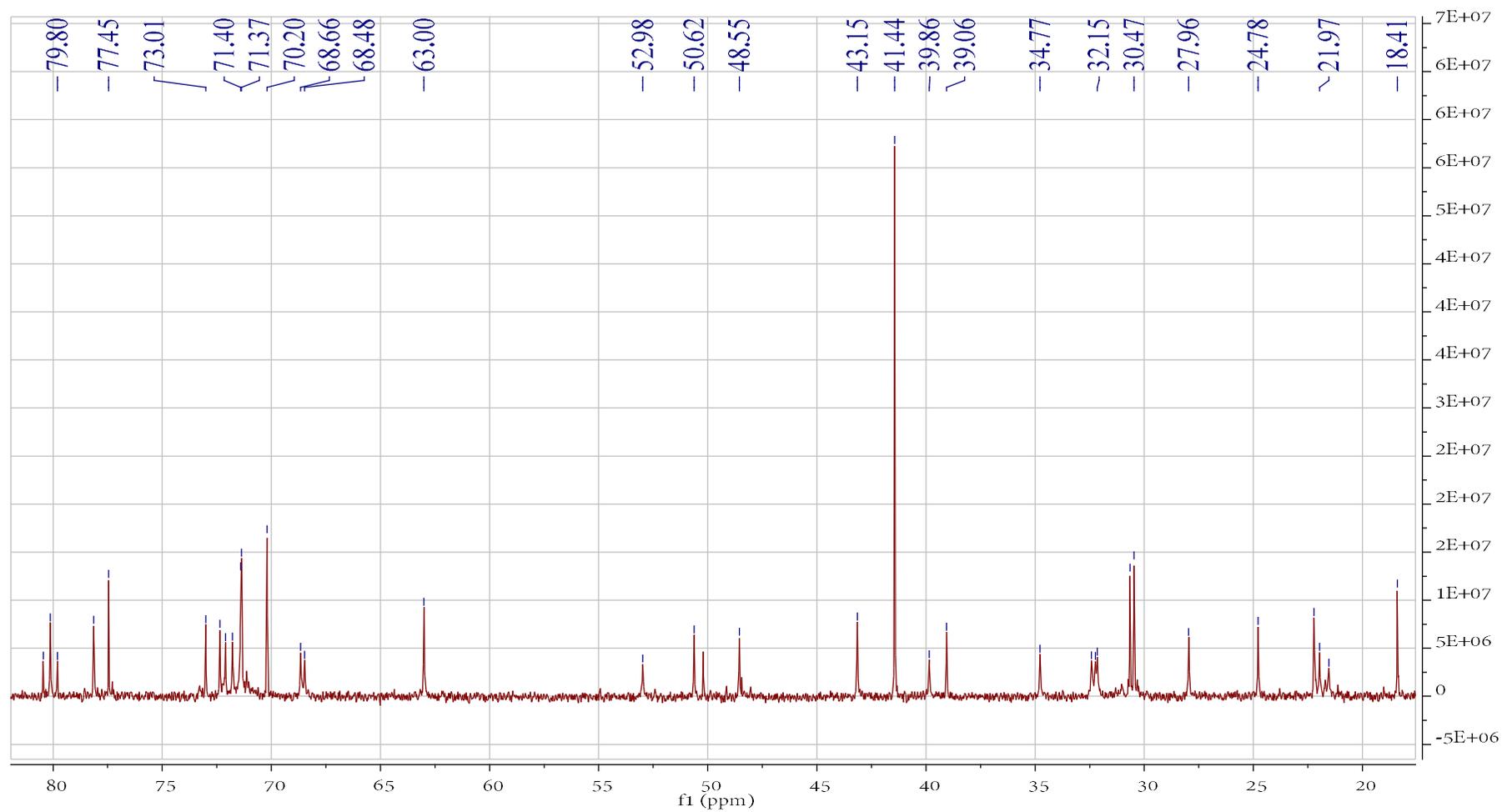


Figure S5: The ^{13}C NMR spectrum of 1 (in pyridine- d_5) (From δ_{C} 15 ppm to δ_{C} 80 ppm)

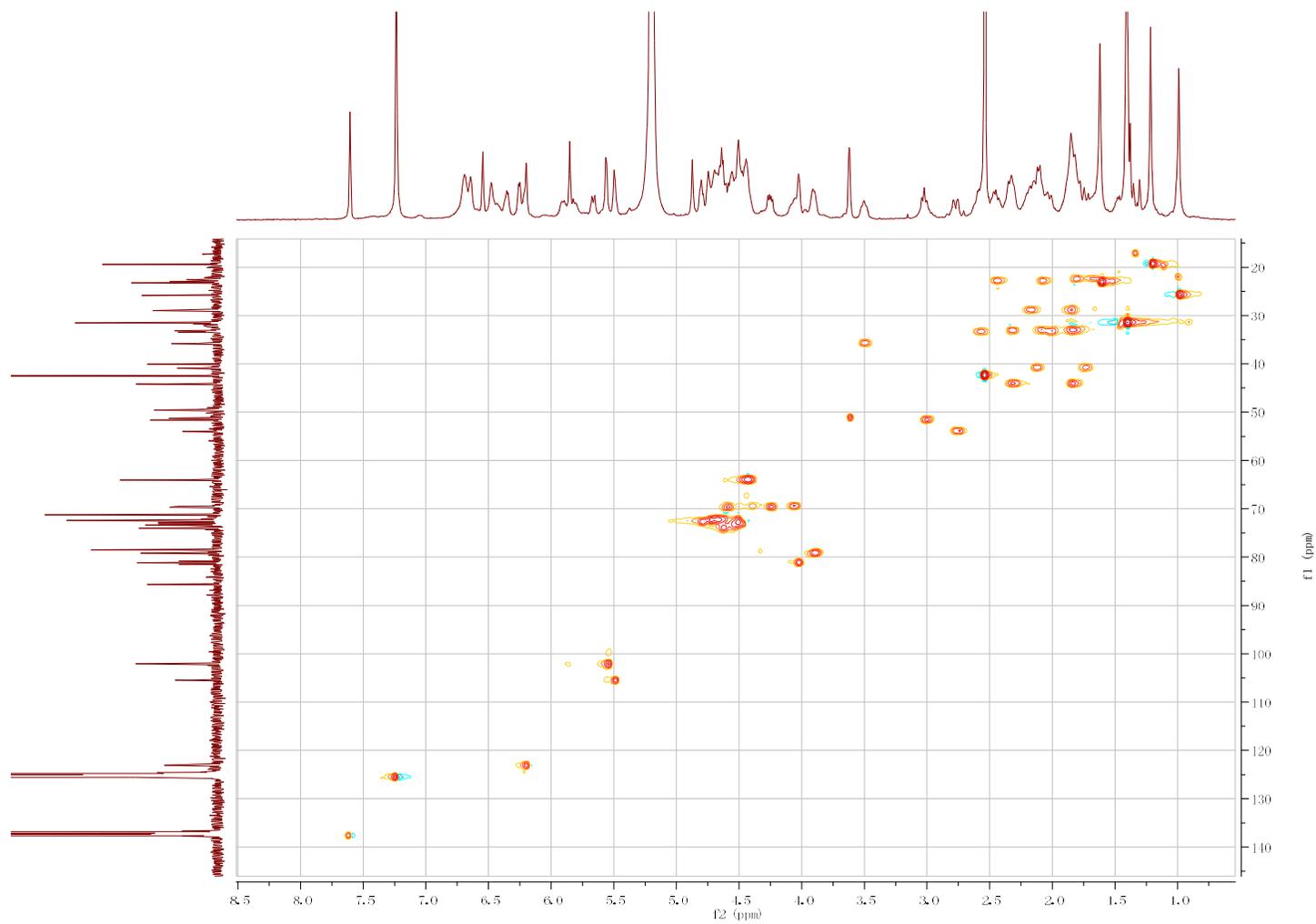


Figure S6: The HMQC spectrum of 1 (in pyridine-*d*₅)

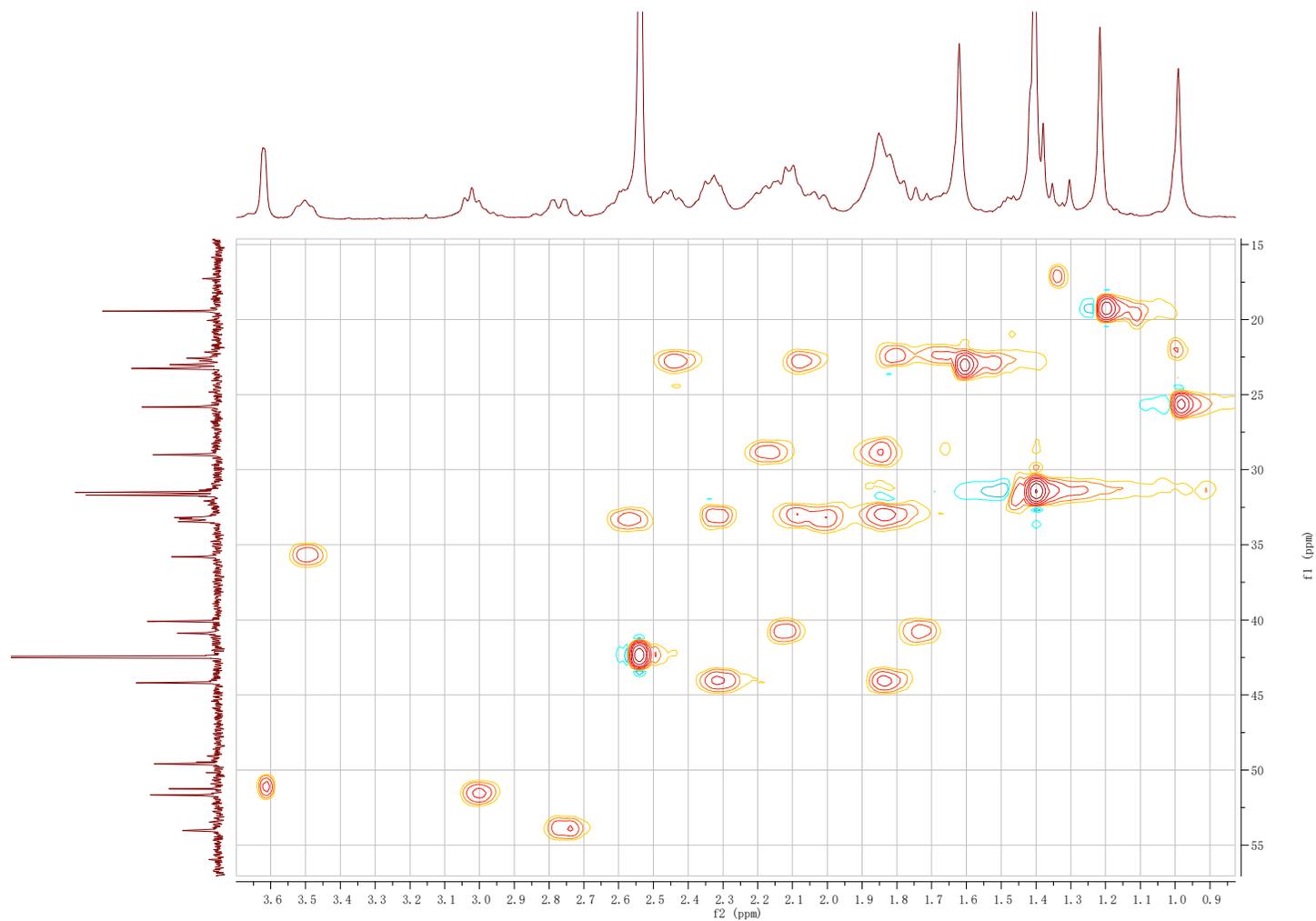


Figure S7: The HMQC spectrum of 1 (in pyridine-*d*₅) (From δ_c 15 ppm to δ_c 55 ppm)

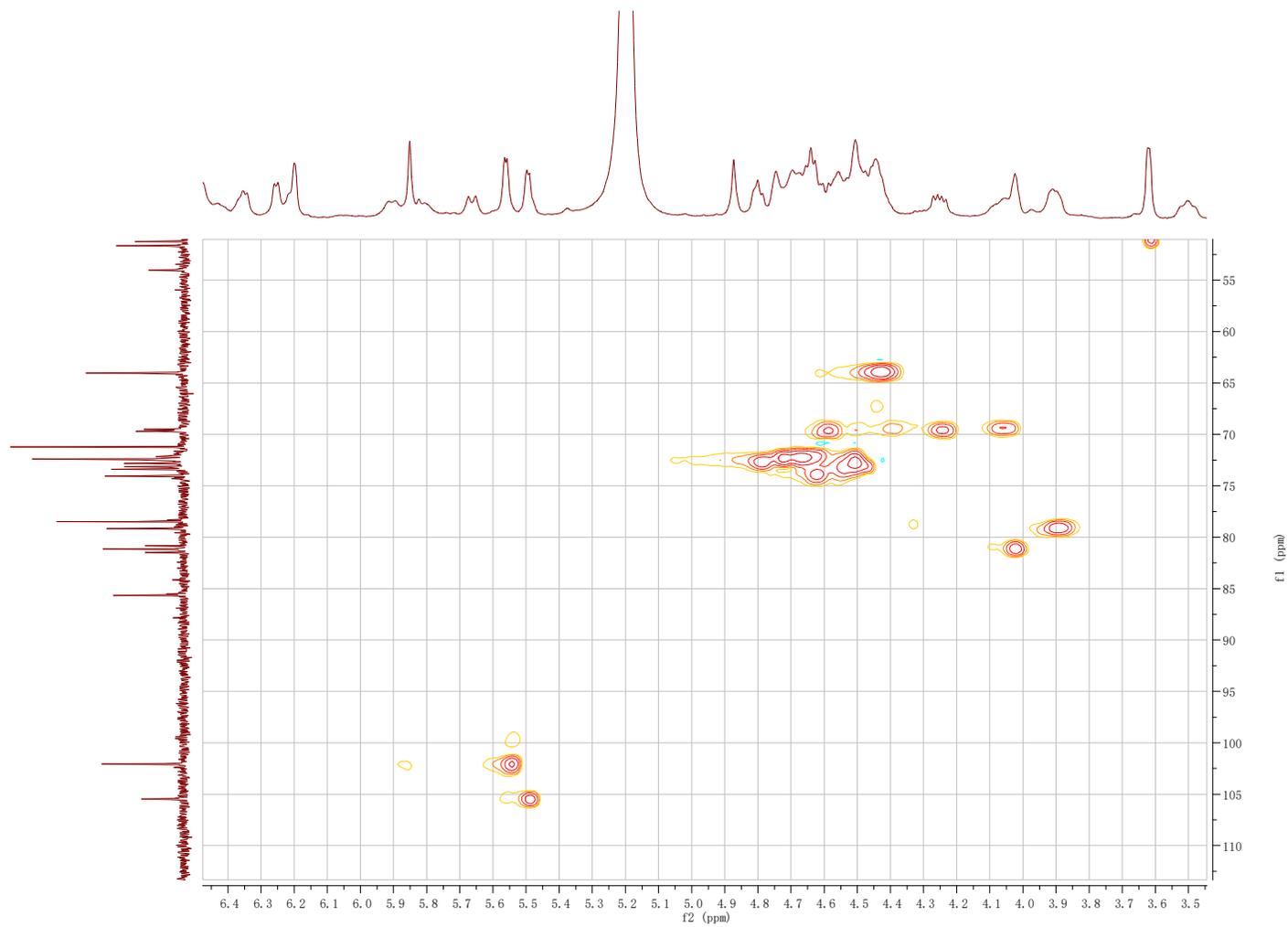


Figure S8: The HMPC spectrum of 1 (in pyridine-*d*₅) (From δ_c 55 ppm to δ_c 110 ppm)

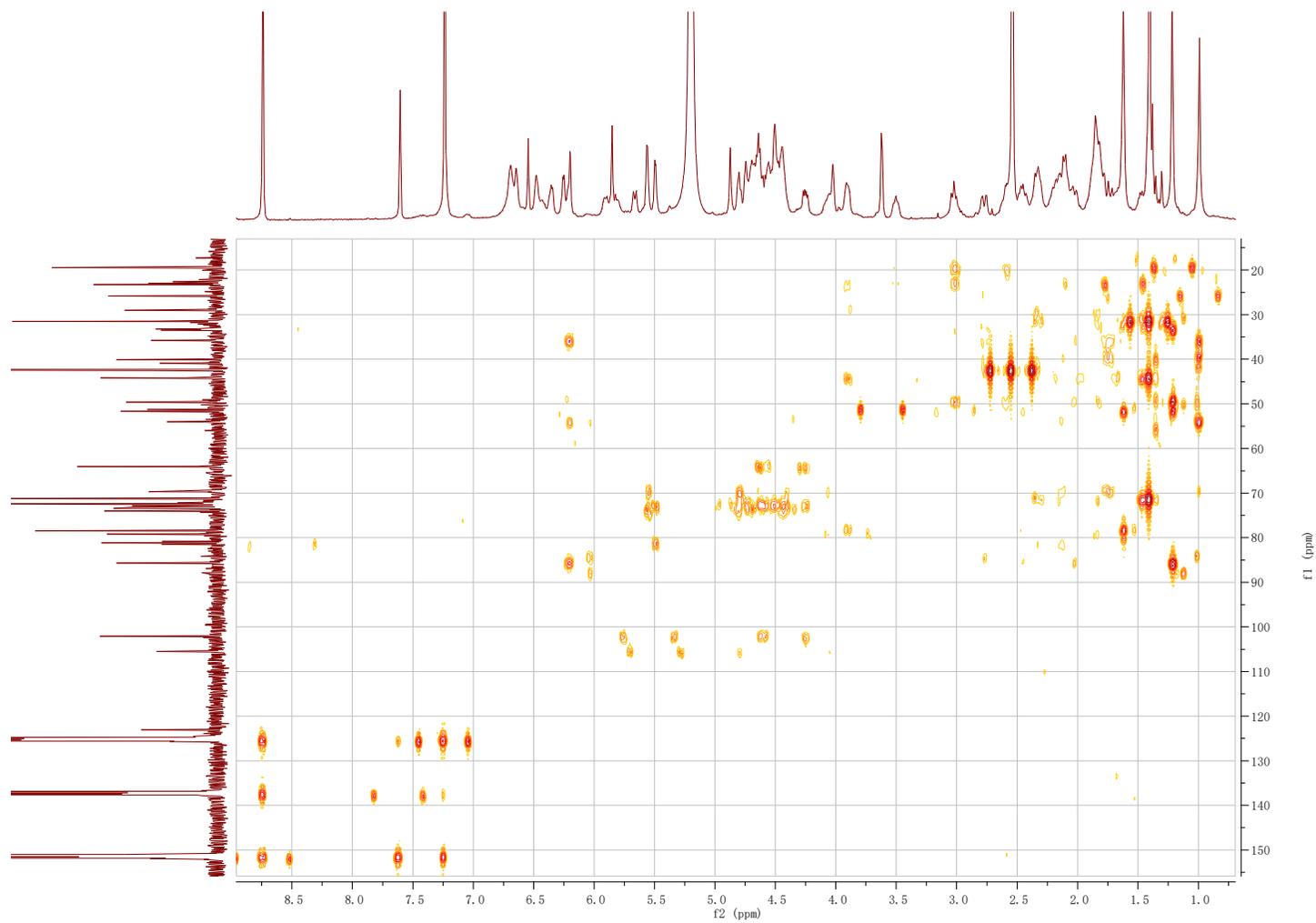


Figure S9: The HMBC spectrum of 1 (in pyridine- d_5)

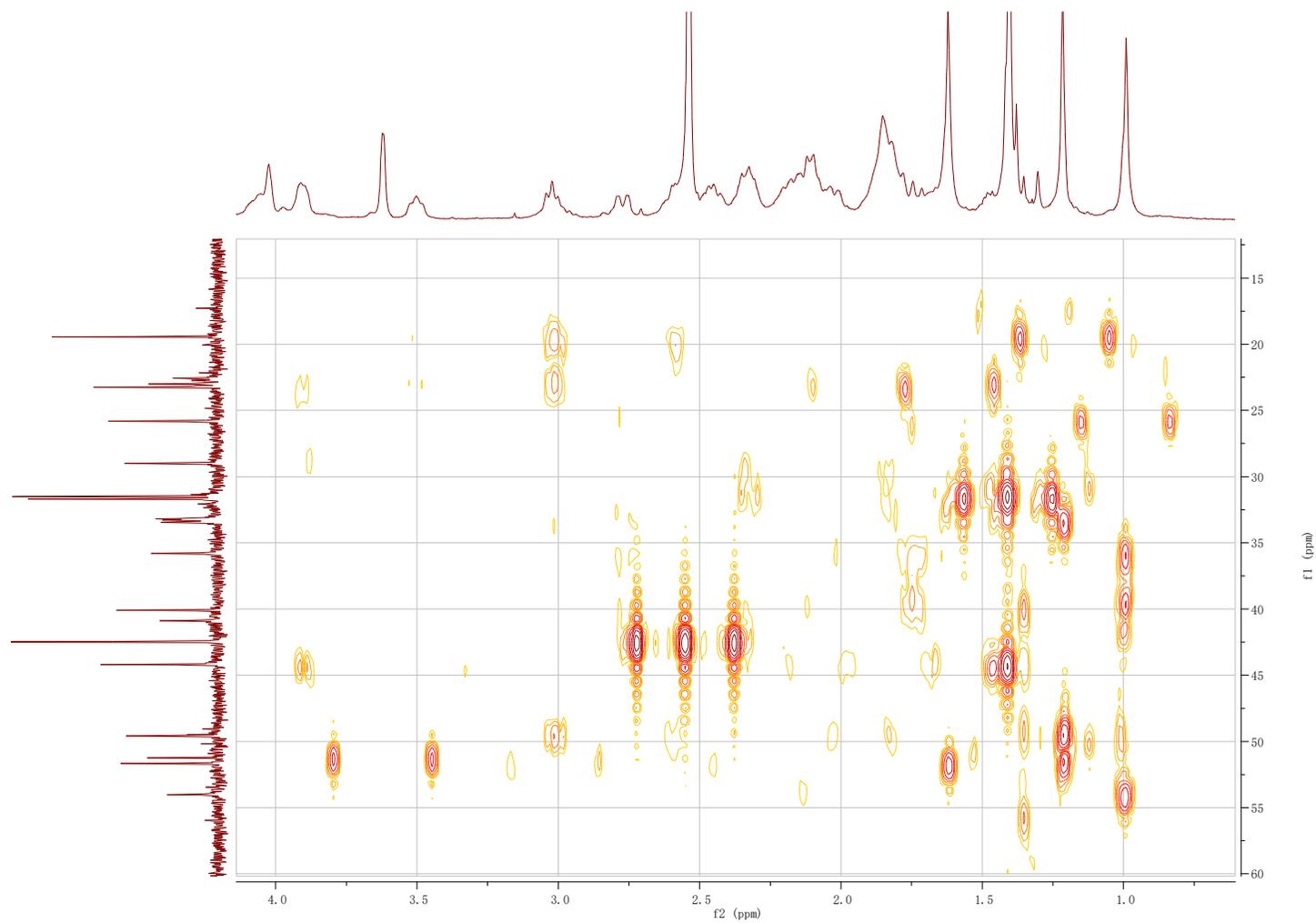


Figure S10: The HMBC spectrum of 1 (in pyridine- d_5) (From δ_c 15 ppm to δ_c 55 ppm)

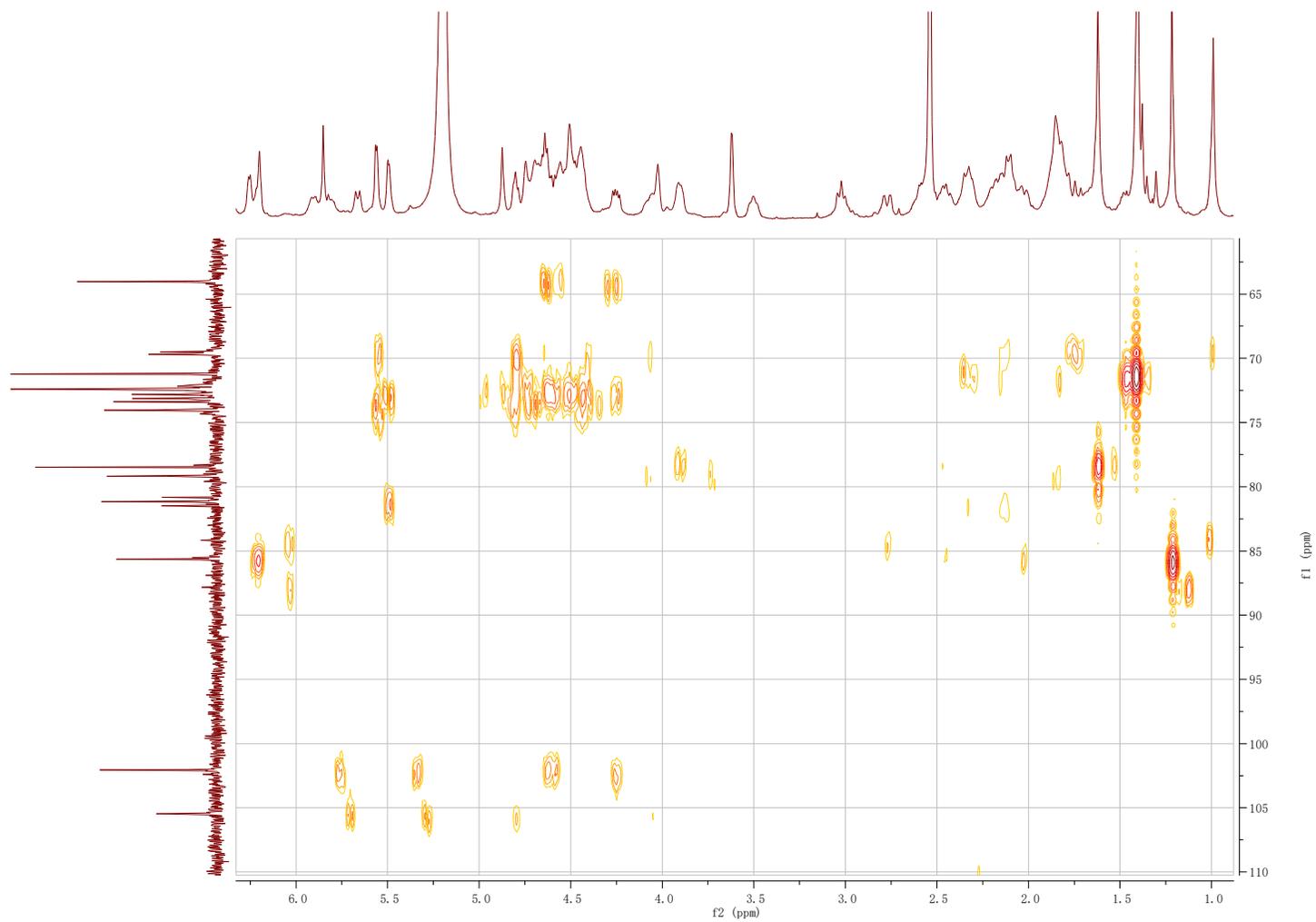


Figure S11: The HMBC spectrum of **1** (in pyridine-*d*₅) (From δ_c 55 ppm to δ_c 110 ppm)

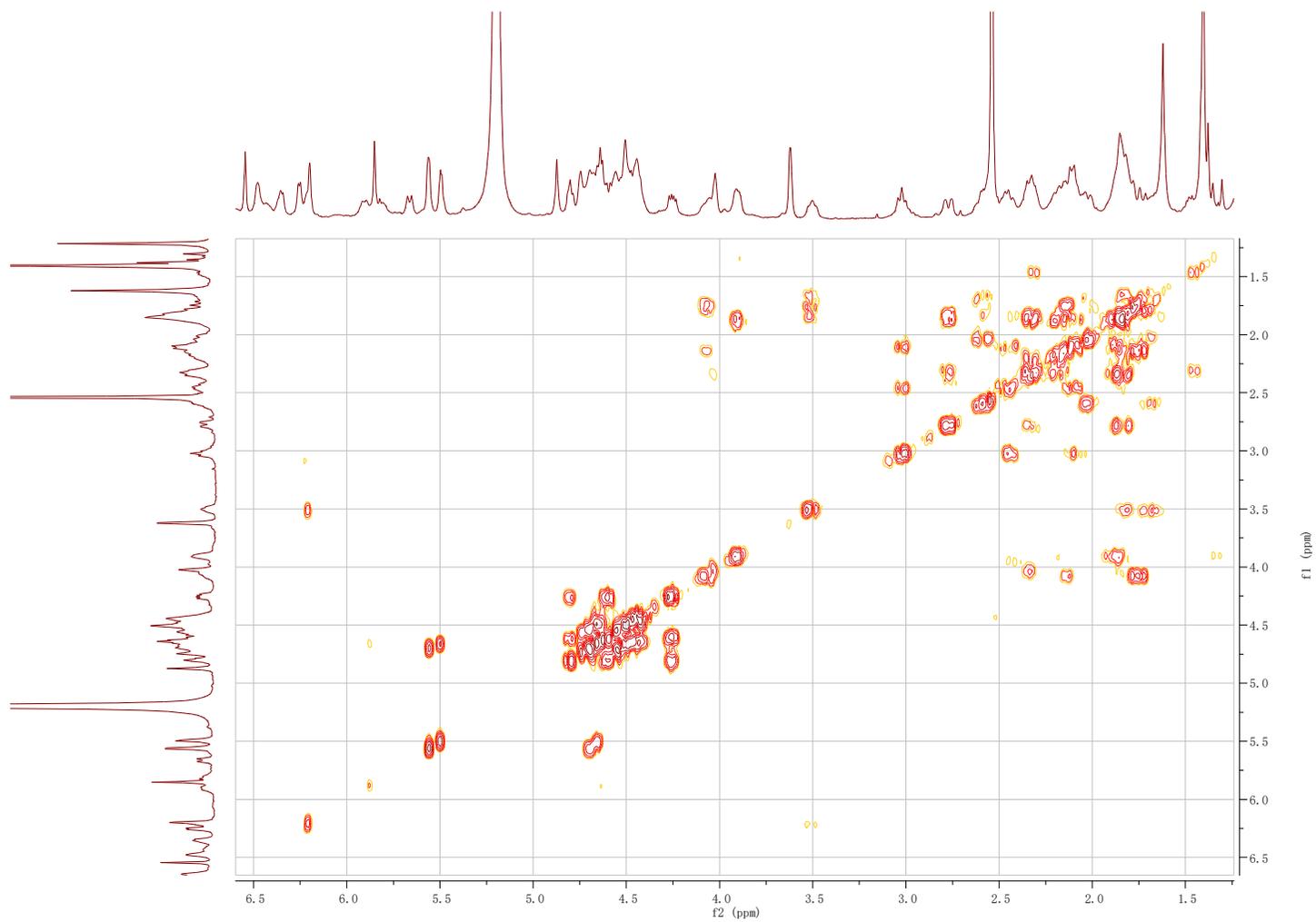


Figure S12: The ^1H - ^1H COSY spectrum of **1** (in pyridine- d_5)

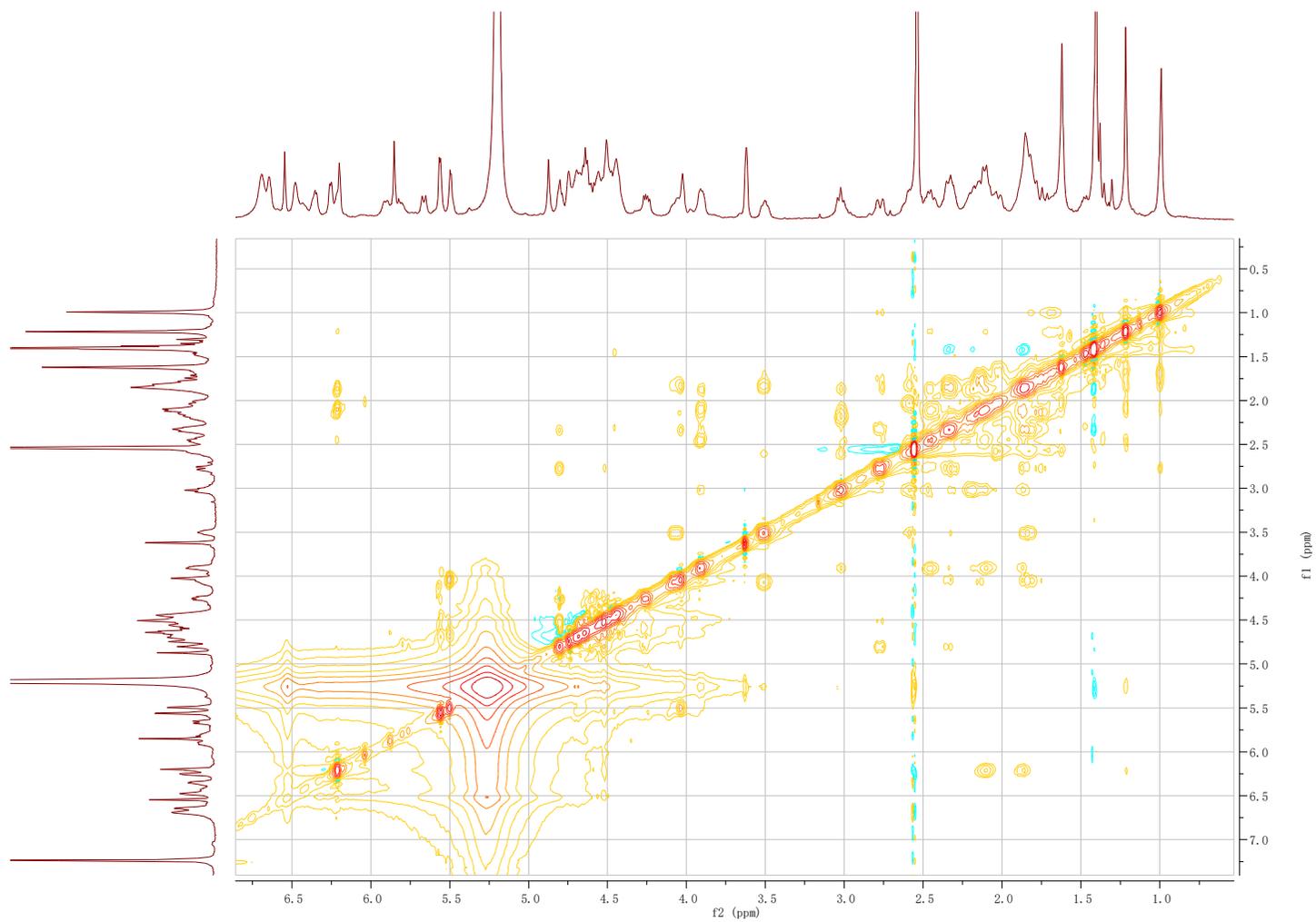
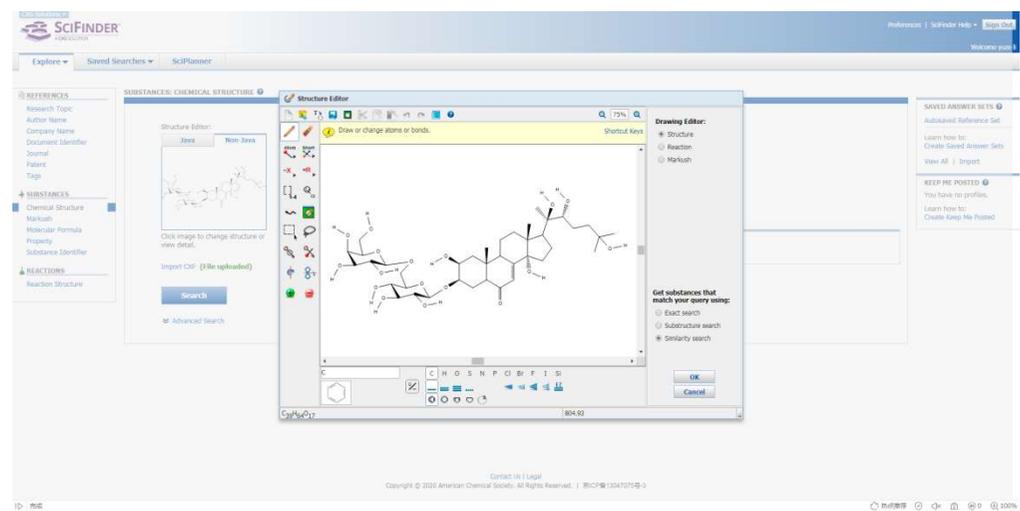


Figure S13: The NOESY spectrum of 1 (in pyridine-*d*₅)



Score	Substance ID	Chemical Name	Key Physical Properties
96	208950-88-4	Rotation (+), Absolute stereochemistry.	
96	405291-86-3	Absolute stereochemistry.	
95	84699-93-4	C ₃₉ H ₆₄ O ₁₆ Cholest-7-en-6-one, 3-[(3-O-D-glucopyranosyl)-9-D-xylopyranosyl]oxy]-2,14,20,22,25-pentahydroxy-, (2S,3S,5S,22R)-	• Key Physical Properties
95	168409-67-4	Absolute stereochemistry.	
95	241478-02-4	Rotation (+), Absolute stereochemistry.	
95	168409-67-4	C ₃₉ H ₆₄ O ₁₇ Cholest-7-en-6-one, 3,22-bis[(o-D-glucopyranosyl)-2,14,20,25-tetrahydroxy-, (2S,3S,5S,22R)- (K1)	• Key Physical Properties
95	241478-02-4	C ₃₉ H ₆₄ O ₁₇ Cholest-7-en-6-one, 3-[(o-D-glucopyranosyl)-22-(o-D-glucopyranosyl)oxy]-2,14,20,25-tetrahydroxy-, (2S,3S,5S,22R)-	• Key Physical Properties

Figure S14: New compound search report of SciFinder

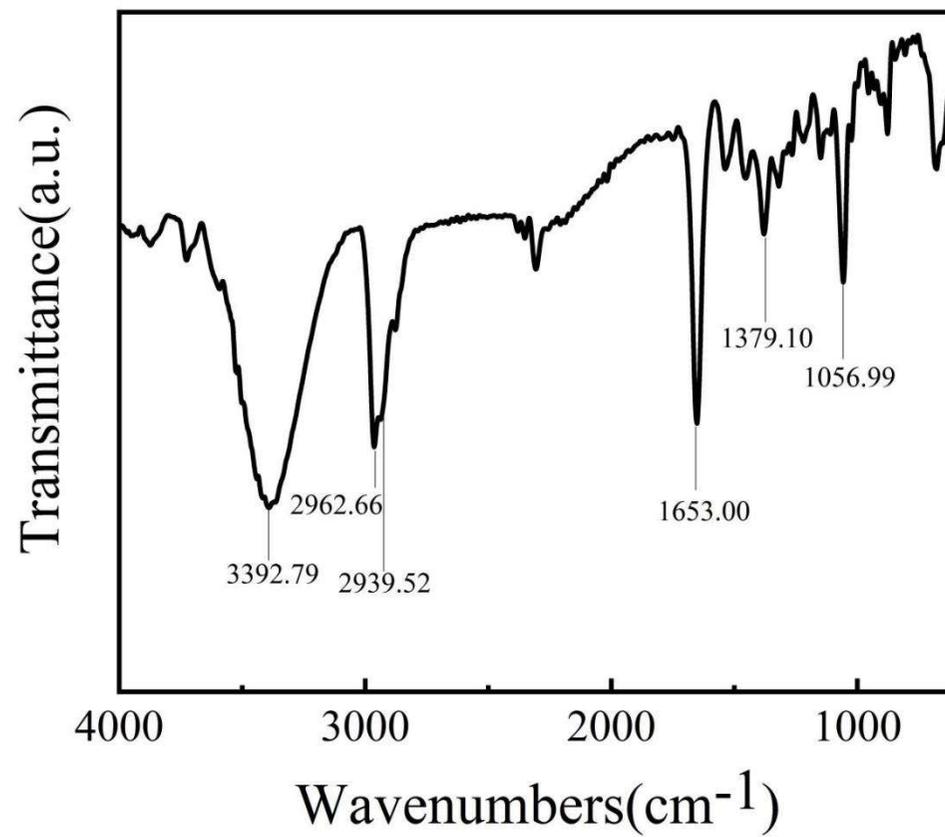


Figure S15: The IR spectrum of 2 (in KBr)

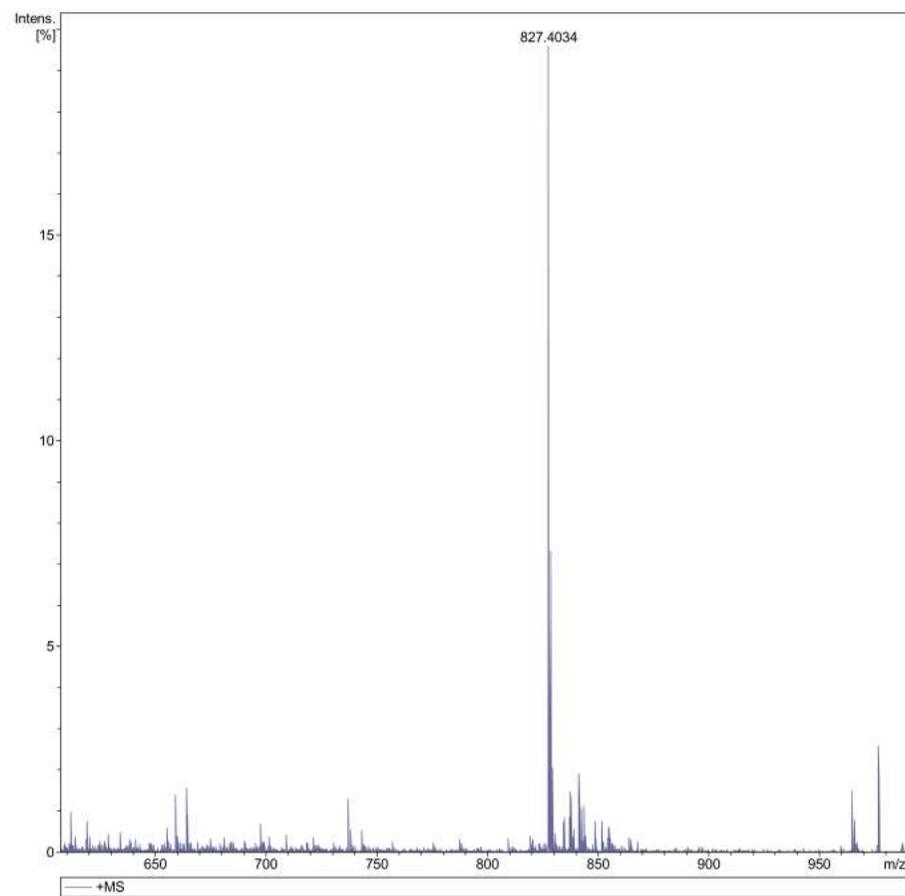


Figure S16: The HR-ESI-MS spectrum of 2 (in CH₃OH)

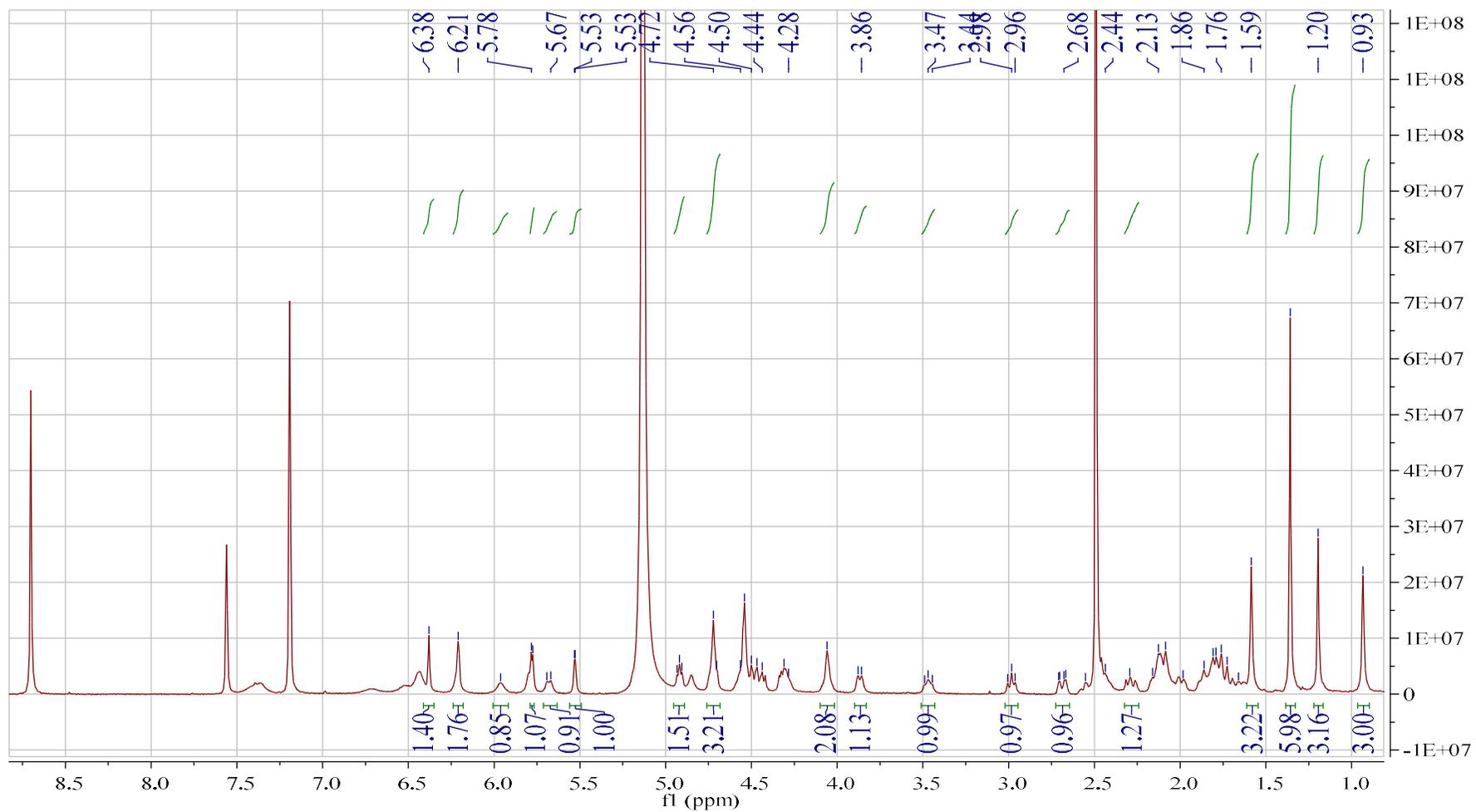


Figure S17: The ^1H NMR spectrum of 2 (in $\text{pyridine-}d_5$)

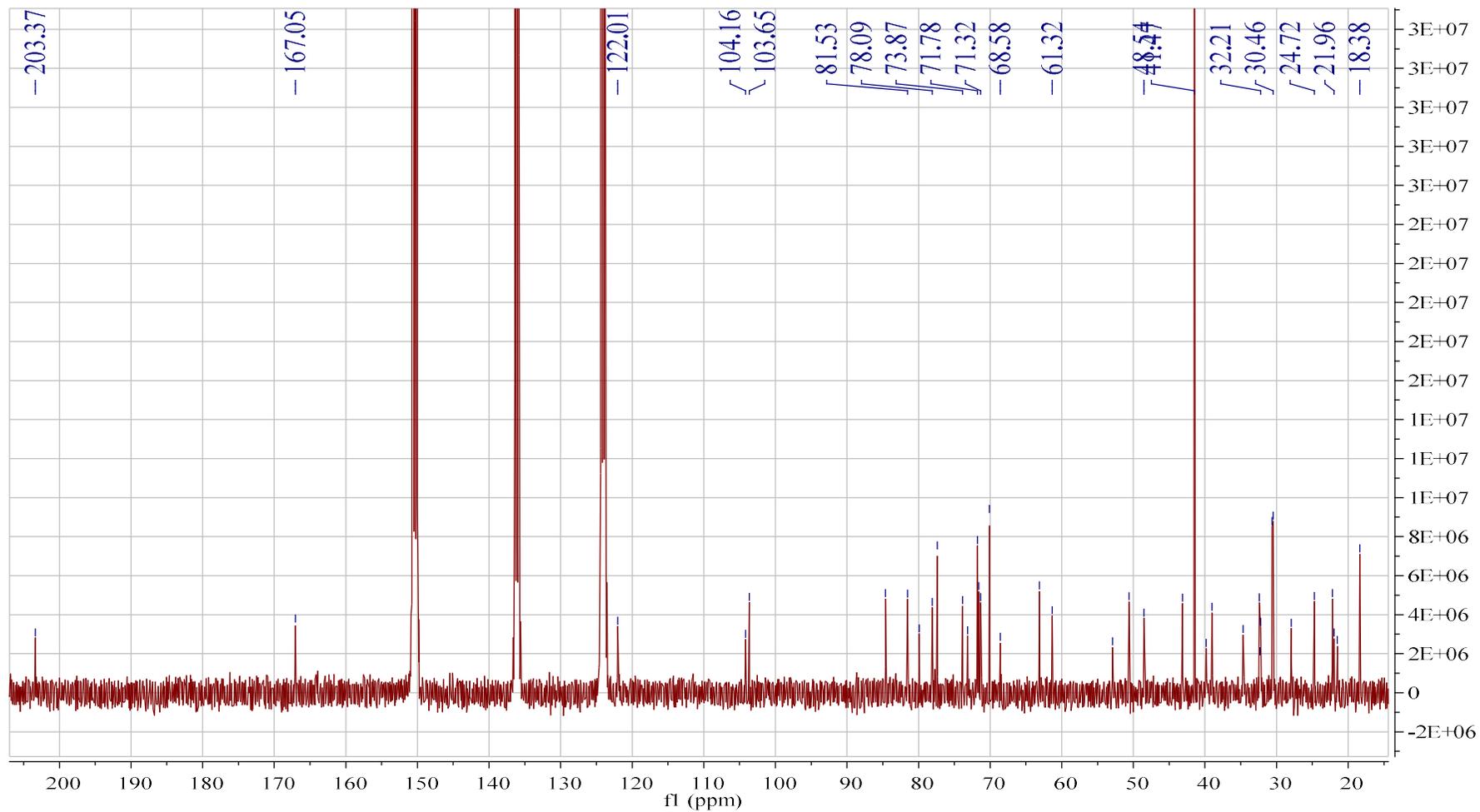


Figure S18: The ^{13}C NMR spectrum of 2 (in $\text{pyridine-}d_5$)

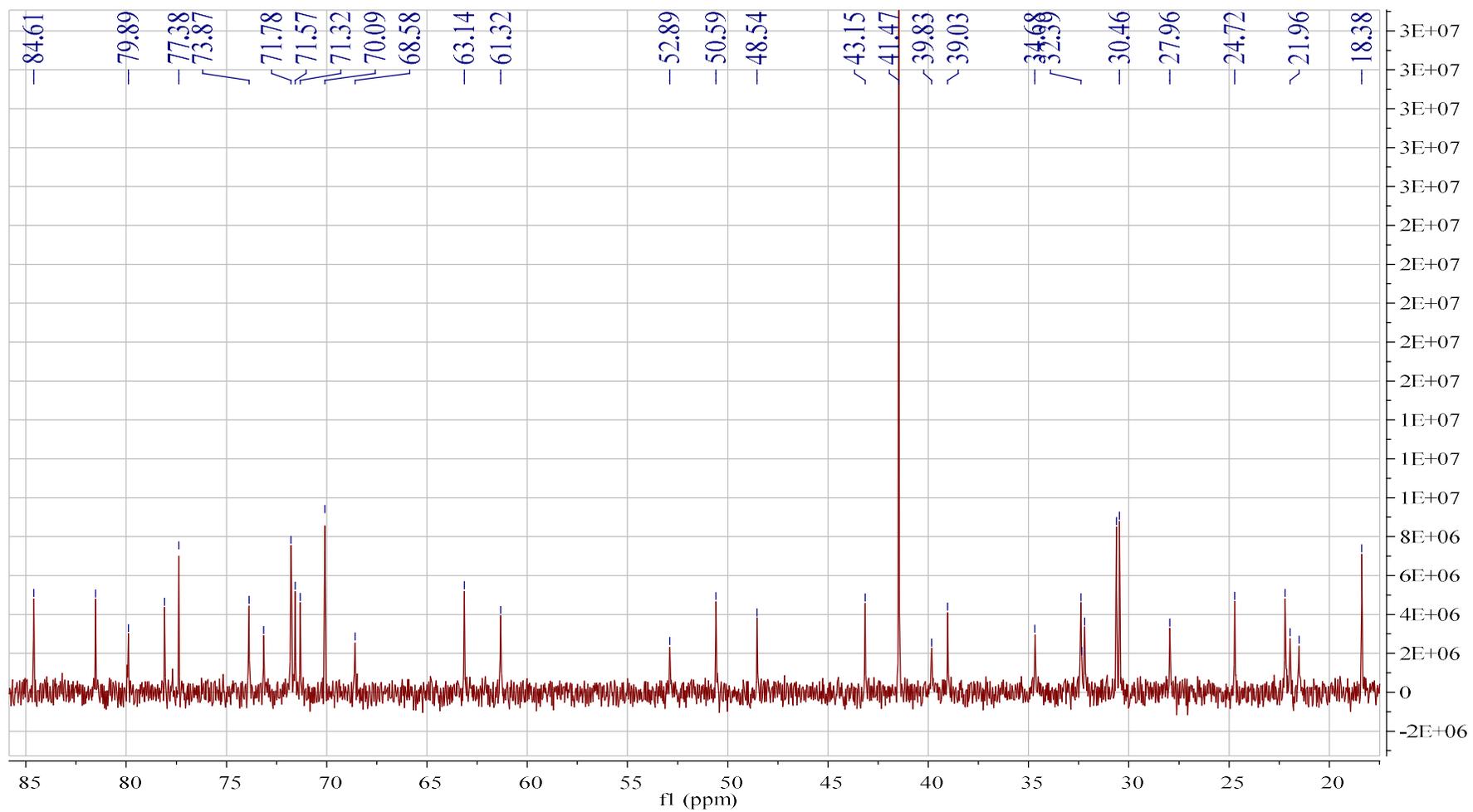


Figure S19: The ^{13}C NMR spectrum of **2** (in pyridine- d_5) (From δ_c 15 ppm to δ_c 85 ppm)

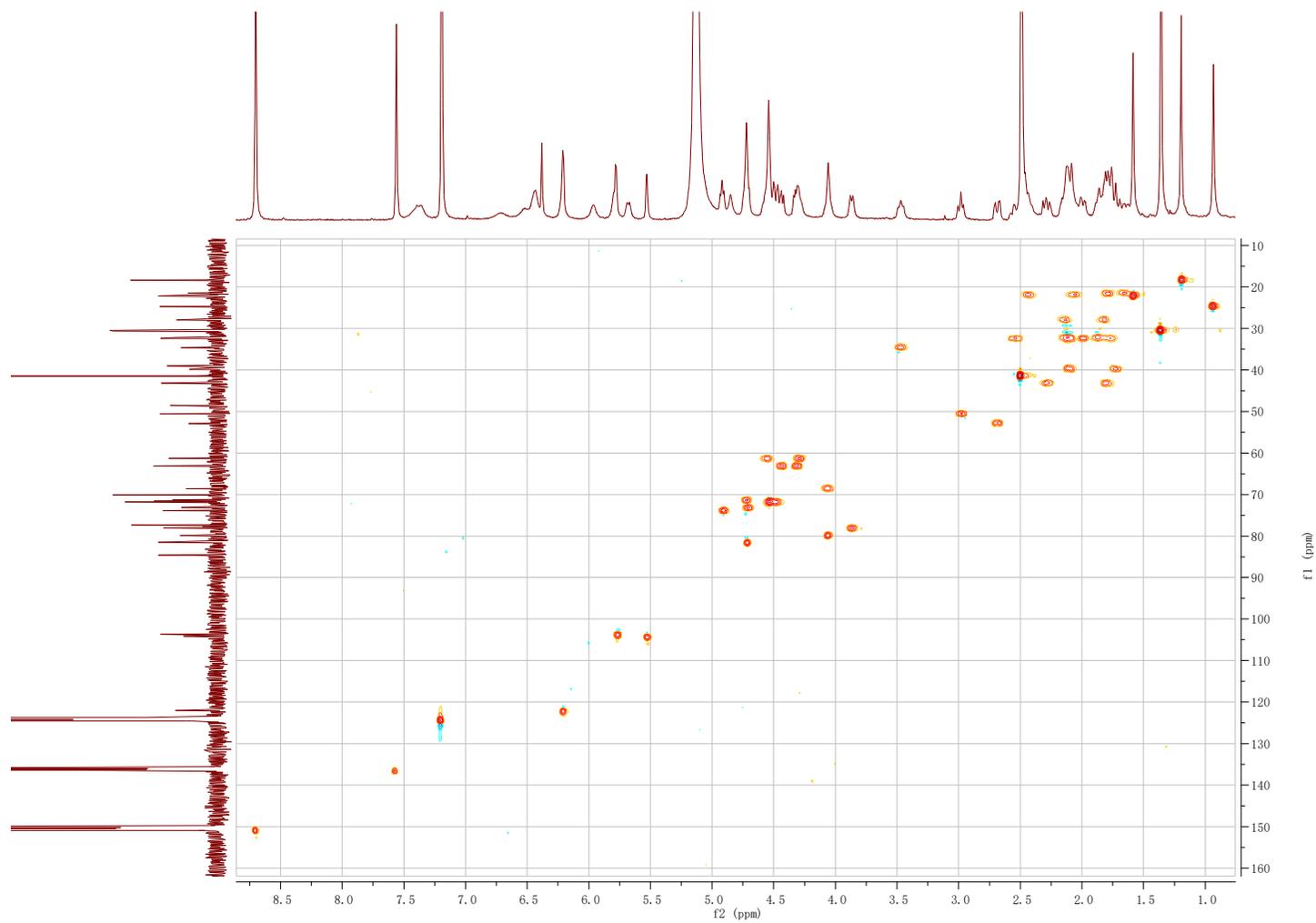


Figure S20: The HMQC spectrum of **2** (in pyridine- d_5)

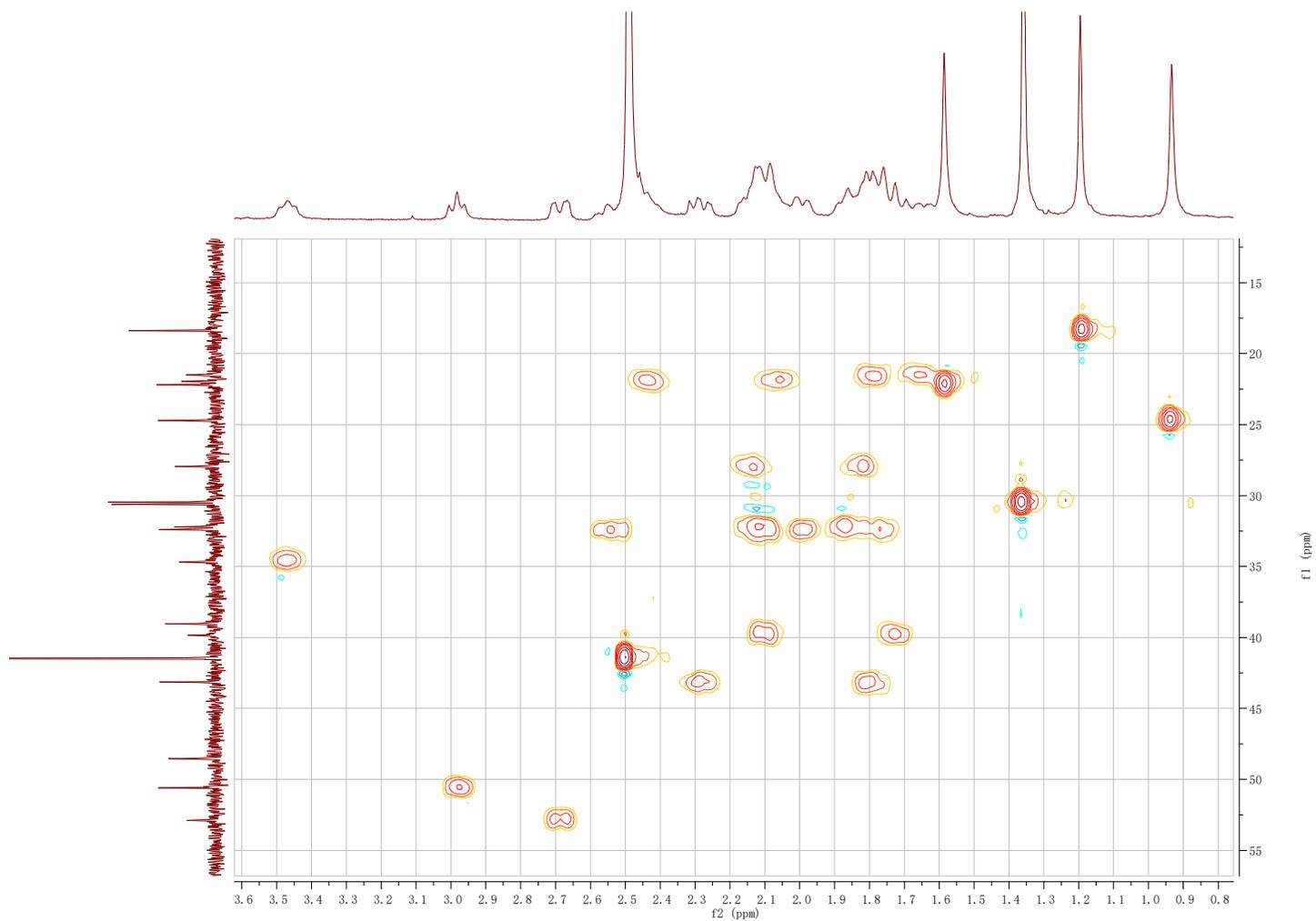


Figure S21: The HMQC spectrum of **2** (in pyridine- d_5) (From δ_C 15 ppm to δ_C 55 ppm)

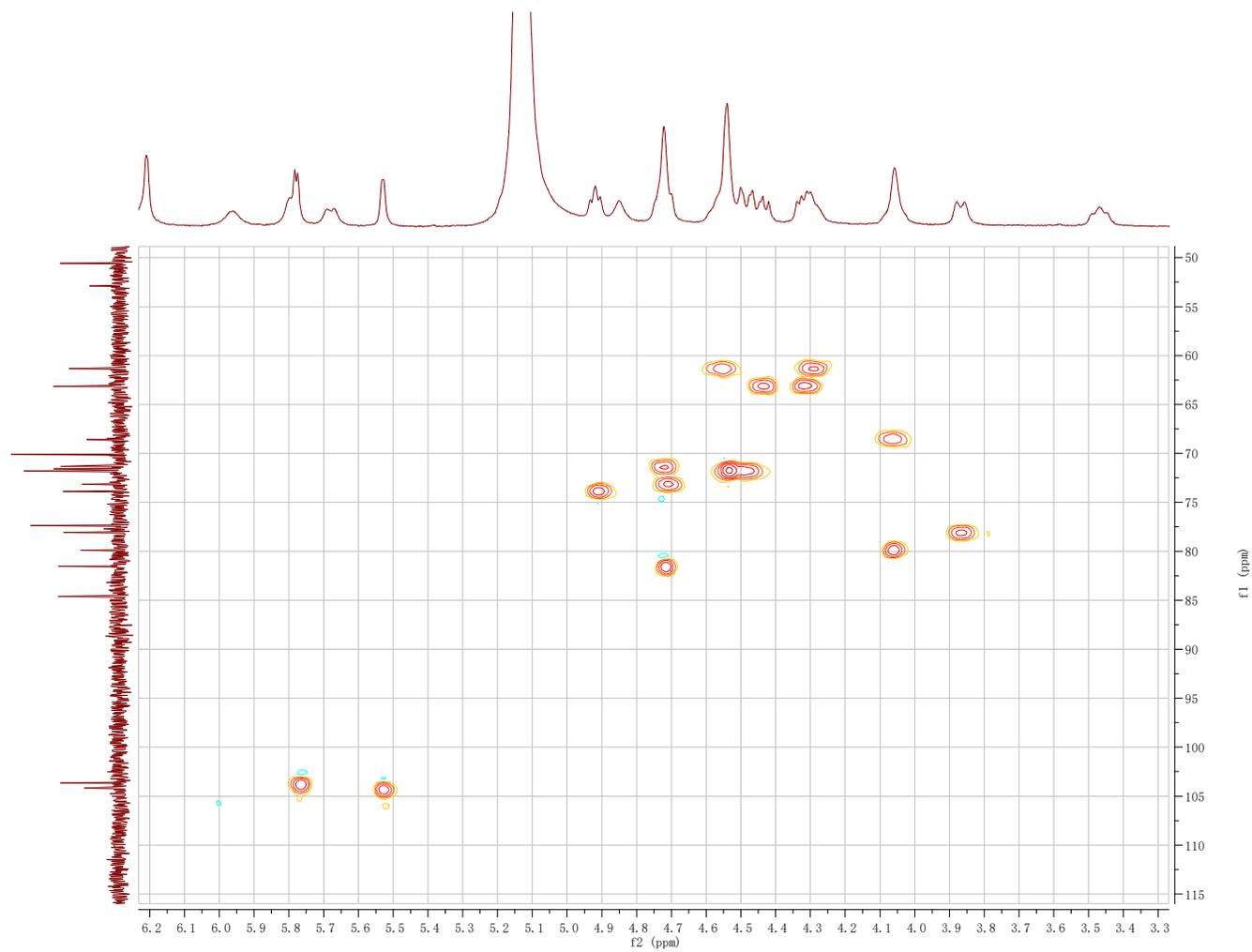


Figure S22: The HMQC spectrum of 2 (in pyridine- d_5) (From δ_{C} 55 ppm to δ_{C} 110 ppm)

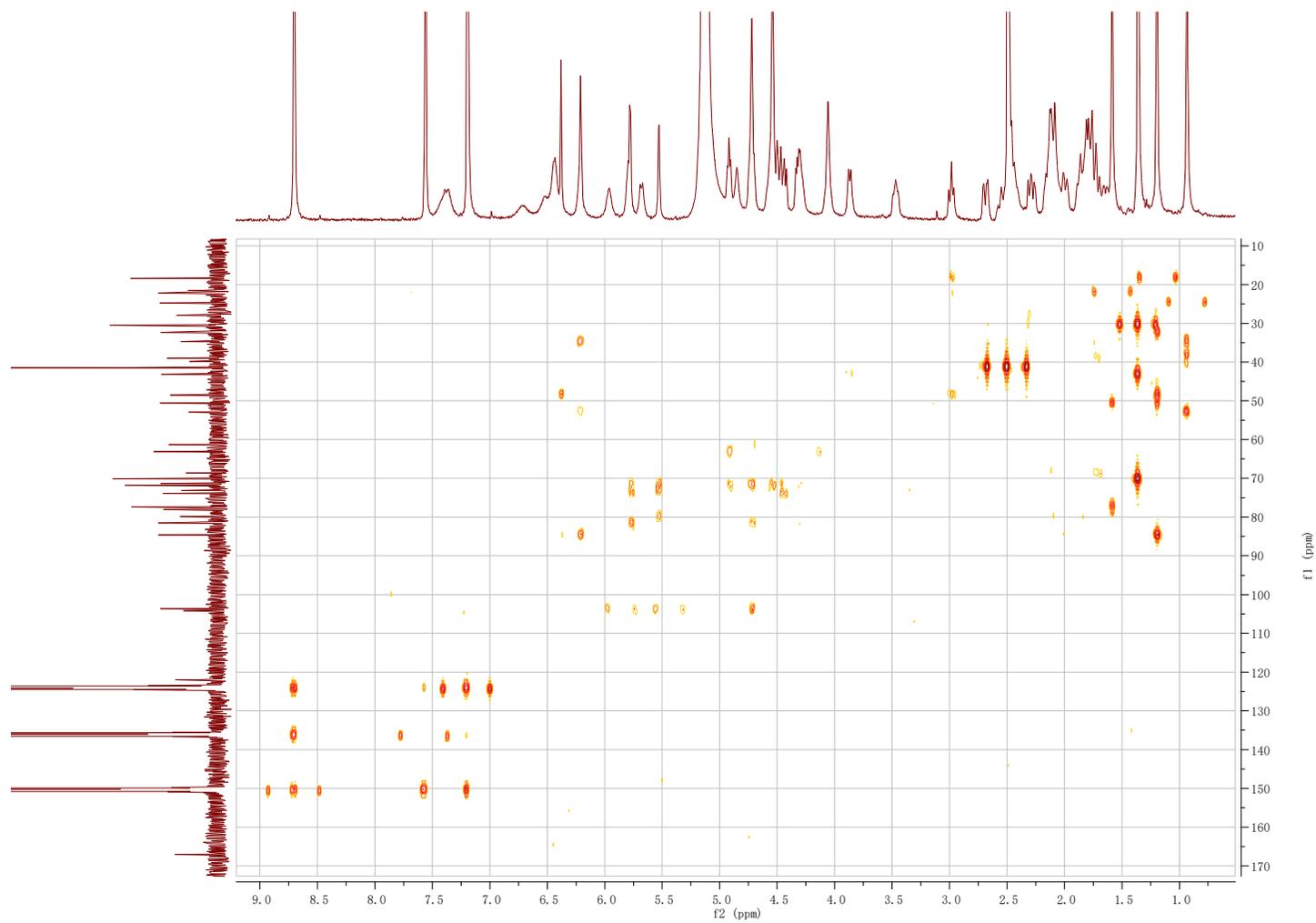


Figure S23: The HMBC spectrum of **2** (in pyridine-*d*₅)

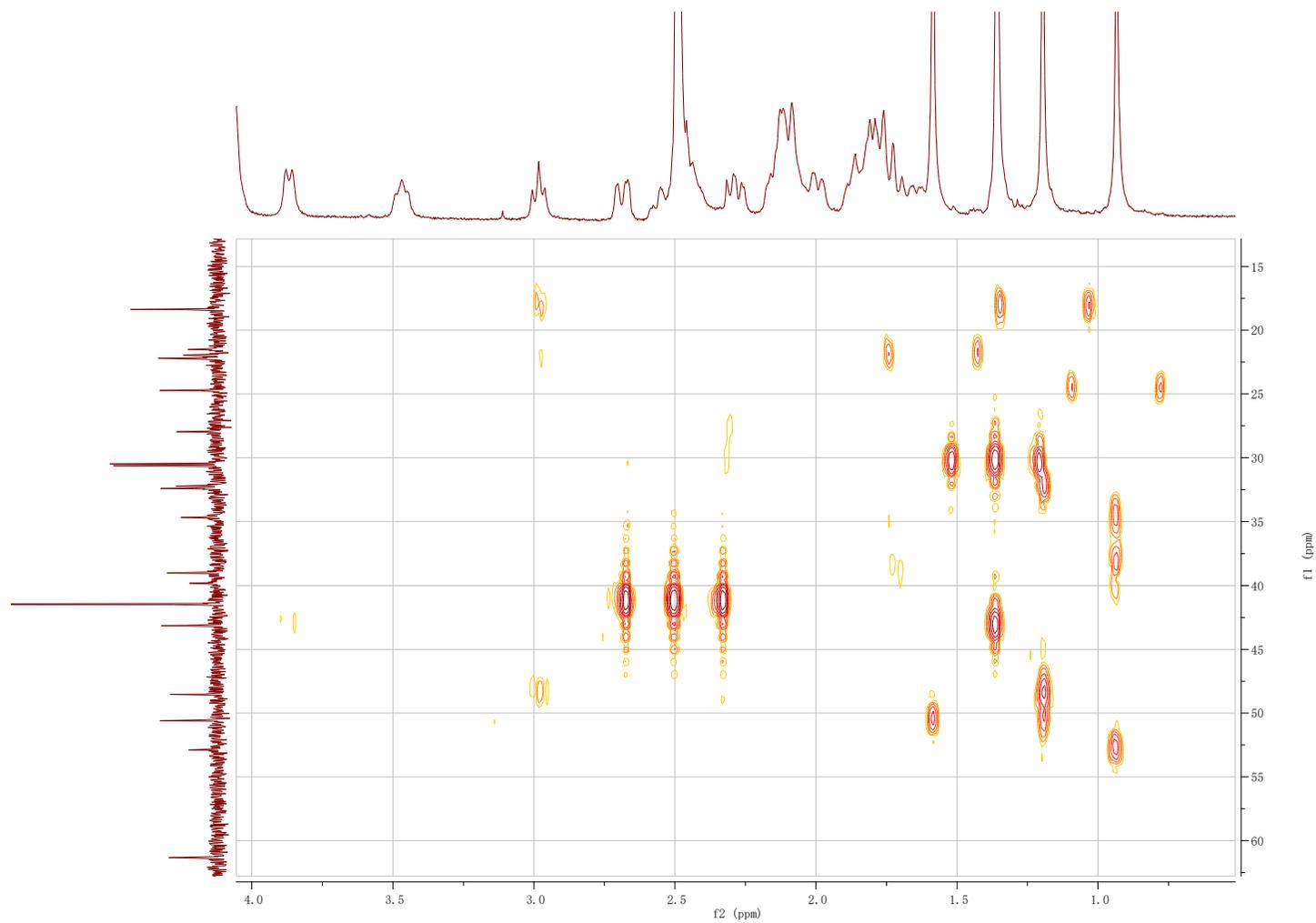


Figure S24: The HMBC spectrum of 2 (in pyridine- d_5) (From δ_C 15 ppm to δ_C 55 ppm)

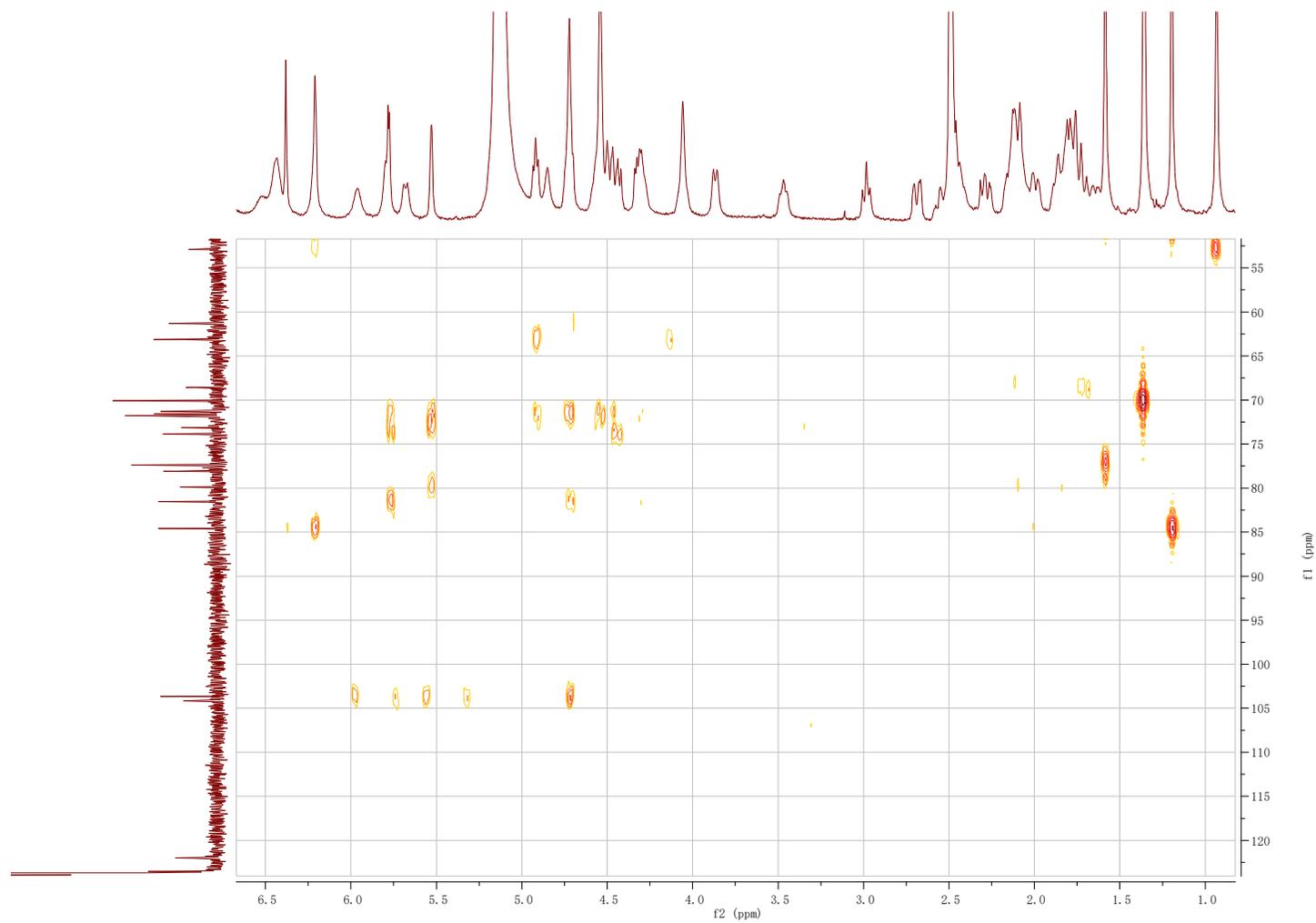


Figure S25: The HMBC spectrum of **2** (in pyridine-*d*₅) (From δ_c 55 ppm to δ_c 110 ppm)

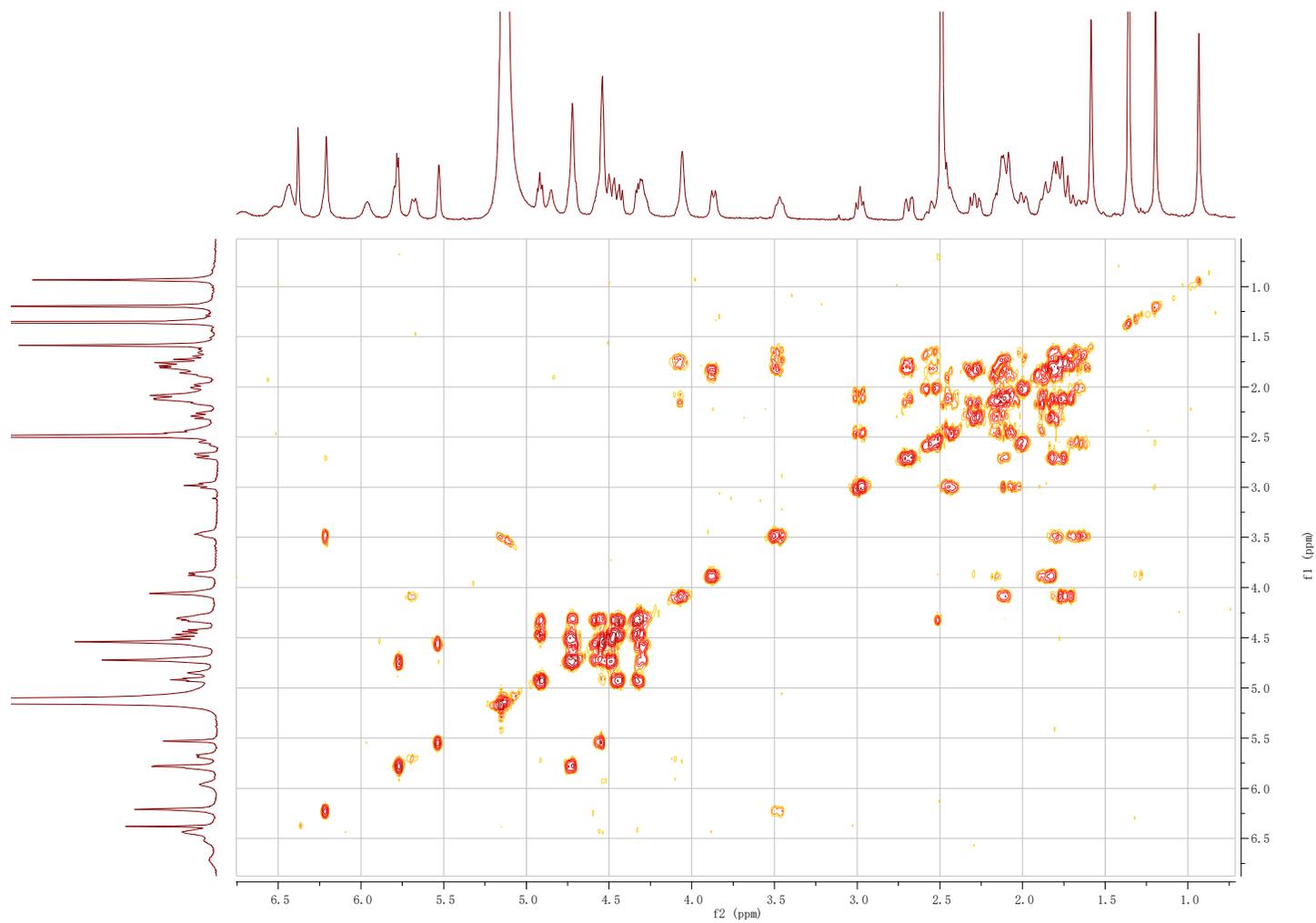


Figure S26: The ^1H - ^1H COSY spectrum of 2 (in $\text{pyridine-}d_5$)

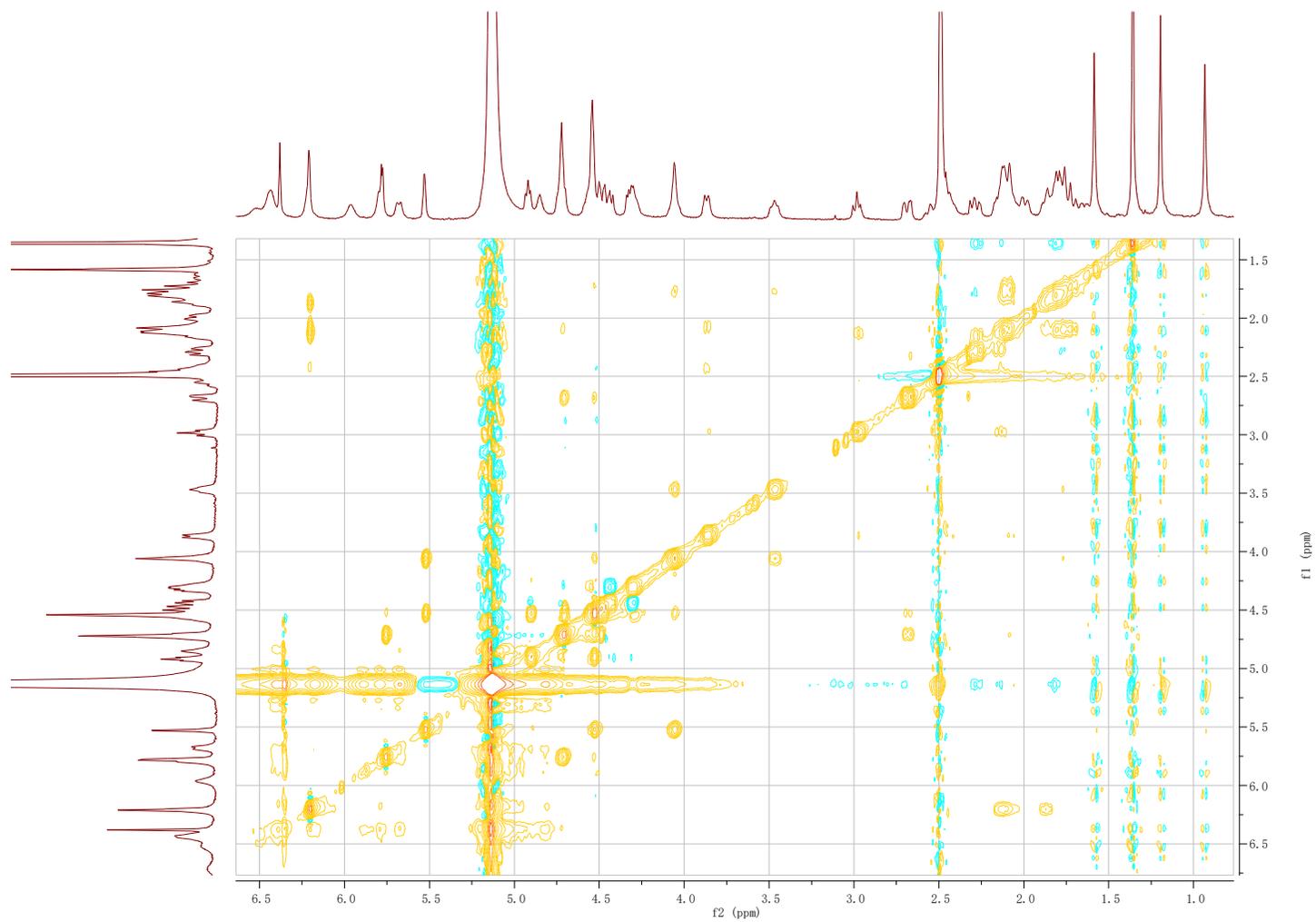
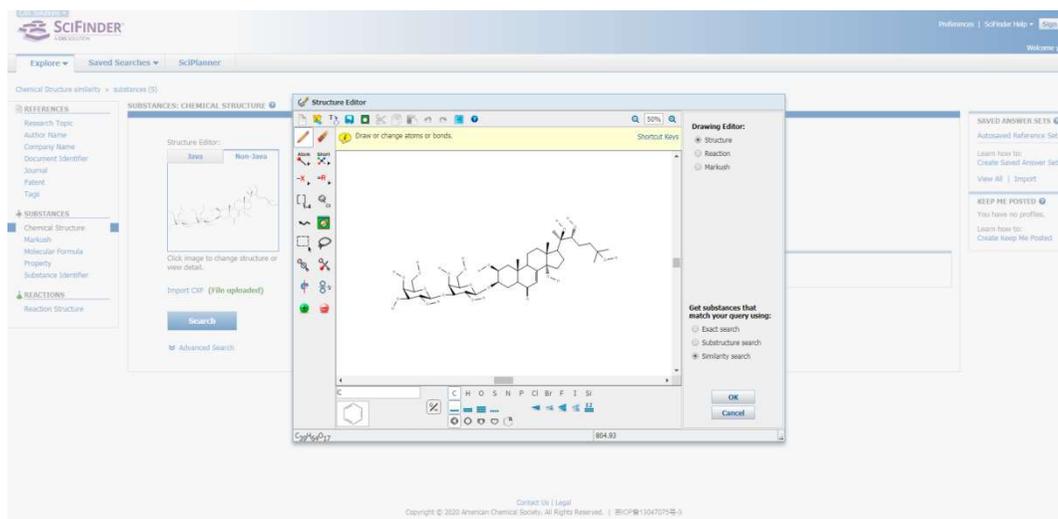


Figure S27: The NOESY spectrum of 2 (in pyridine- d_5)



Score	IDs	Description
Score: 90	1. 405291-86-3	Absolute stereochemistry.
Score: 97	2. 8032409-47-4	Absolute stereochemistry.
Score: 96	3. 846999-93-4	Absolute stereochemistry.
Score: 96	4. 168499-67-4	Absolute stereochemistry.
Score: 96	5. 209850-89-4	Rotation (+), Absolute stereochemistry.
Score: 96	6. 241478-02-4	Rotation (+), Absolute stereochemistry.

Figure S28: New compound search report of SciFinder

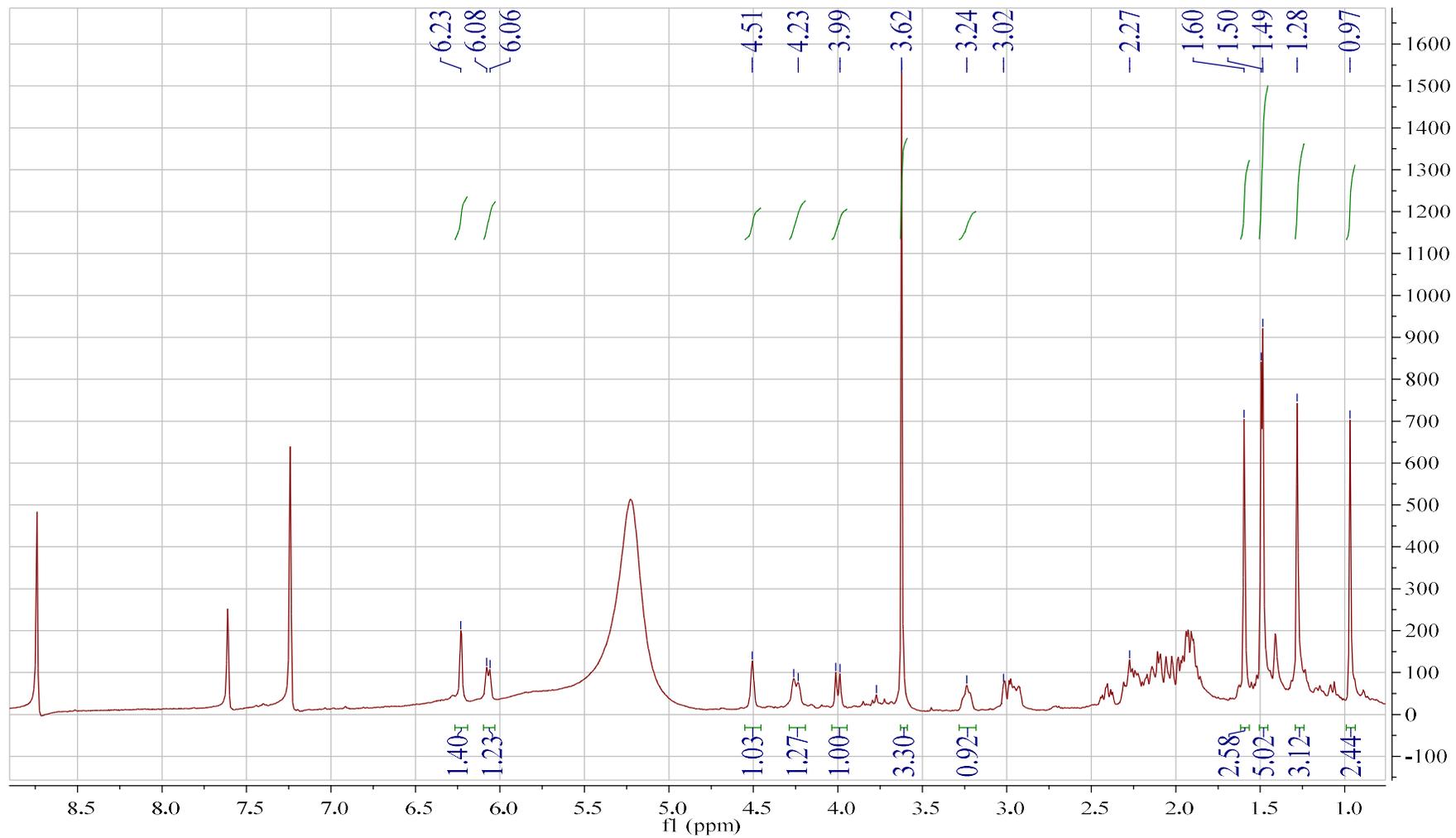


Figure S29: The ^1H NMR spectrum of 3 (in $\text{pyridine-}d_5$)

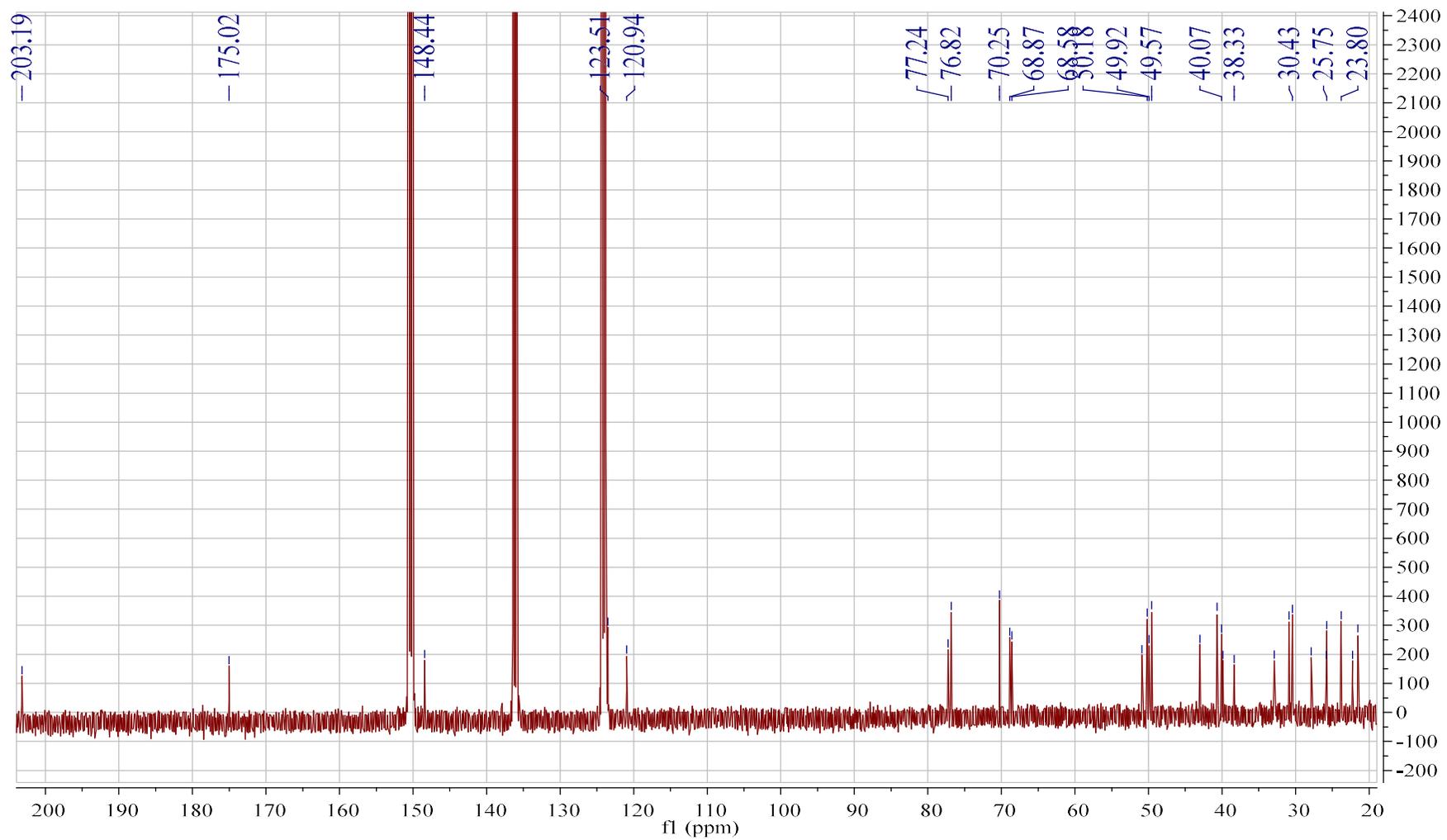


Figure S30: The ^{13}C NMR spectrum of 3 (in $\text{pyridine-}d_5$)

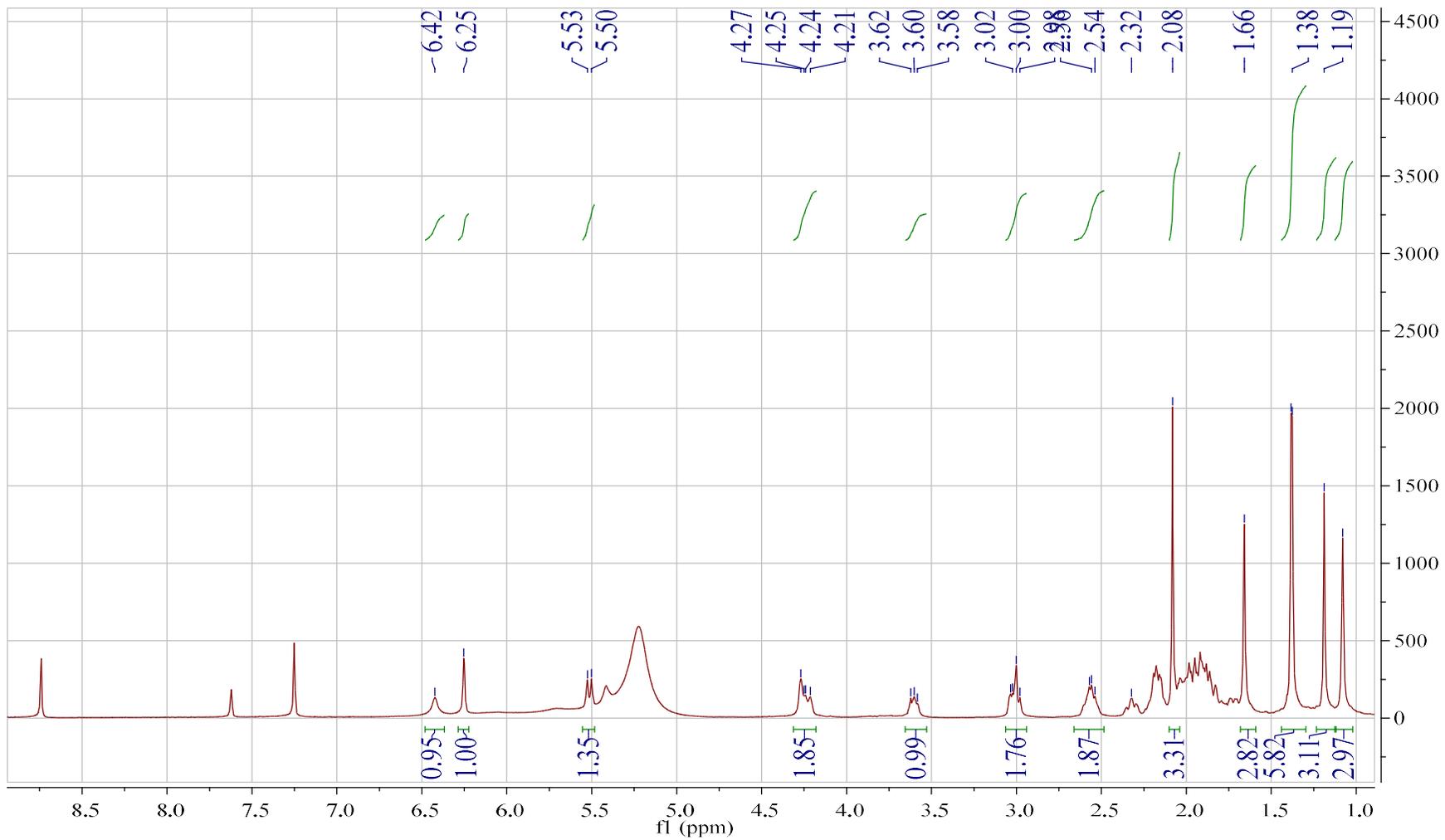


Figure S31: The ^1H NMR spectrum of 4 (in $\text{pyridine-}d_5$)

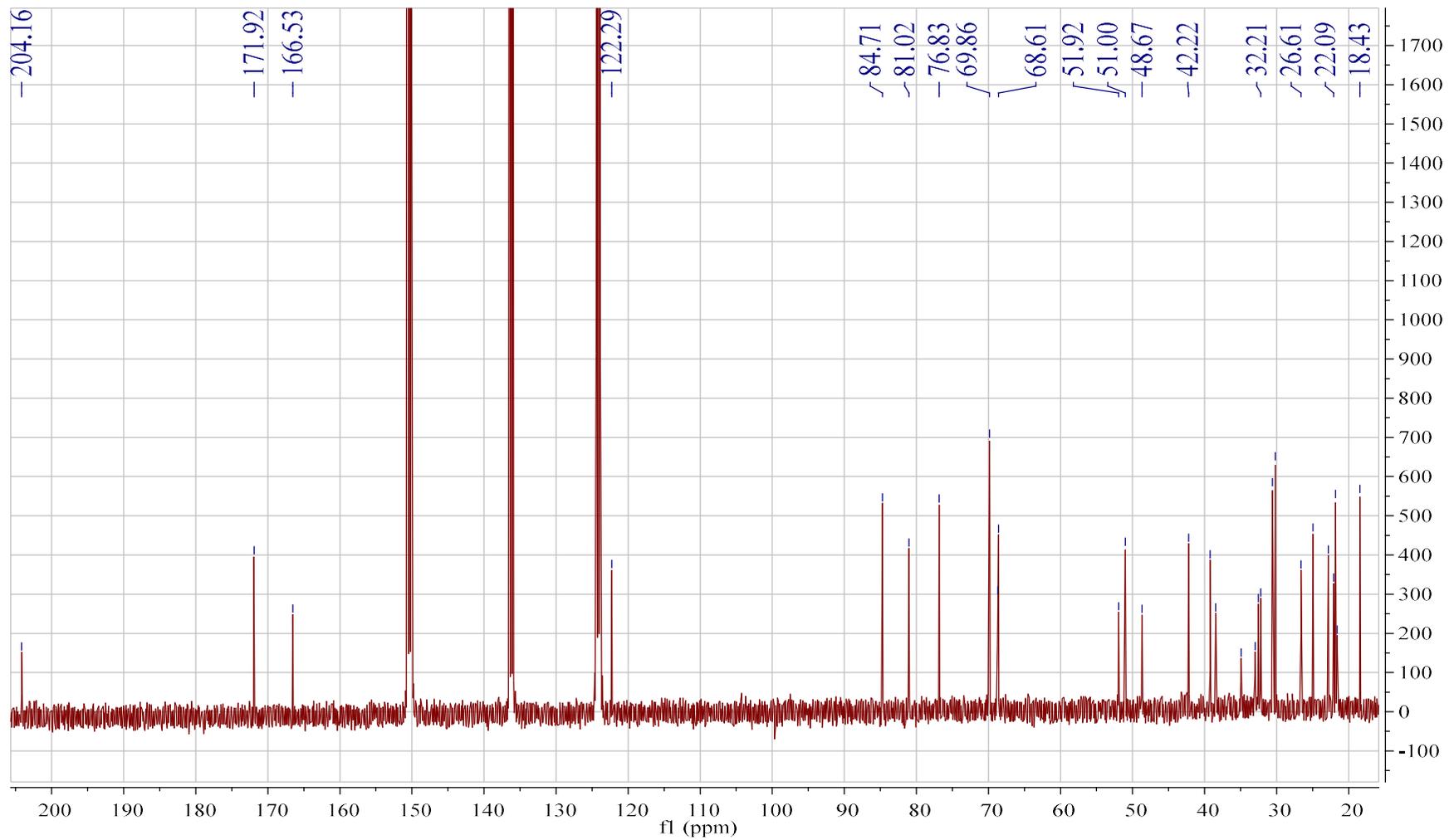


Figure S32: The ^{13}C NMR spectrum of 4 (in $\text{pyridine-}d_5$)

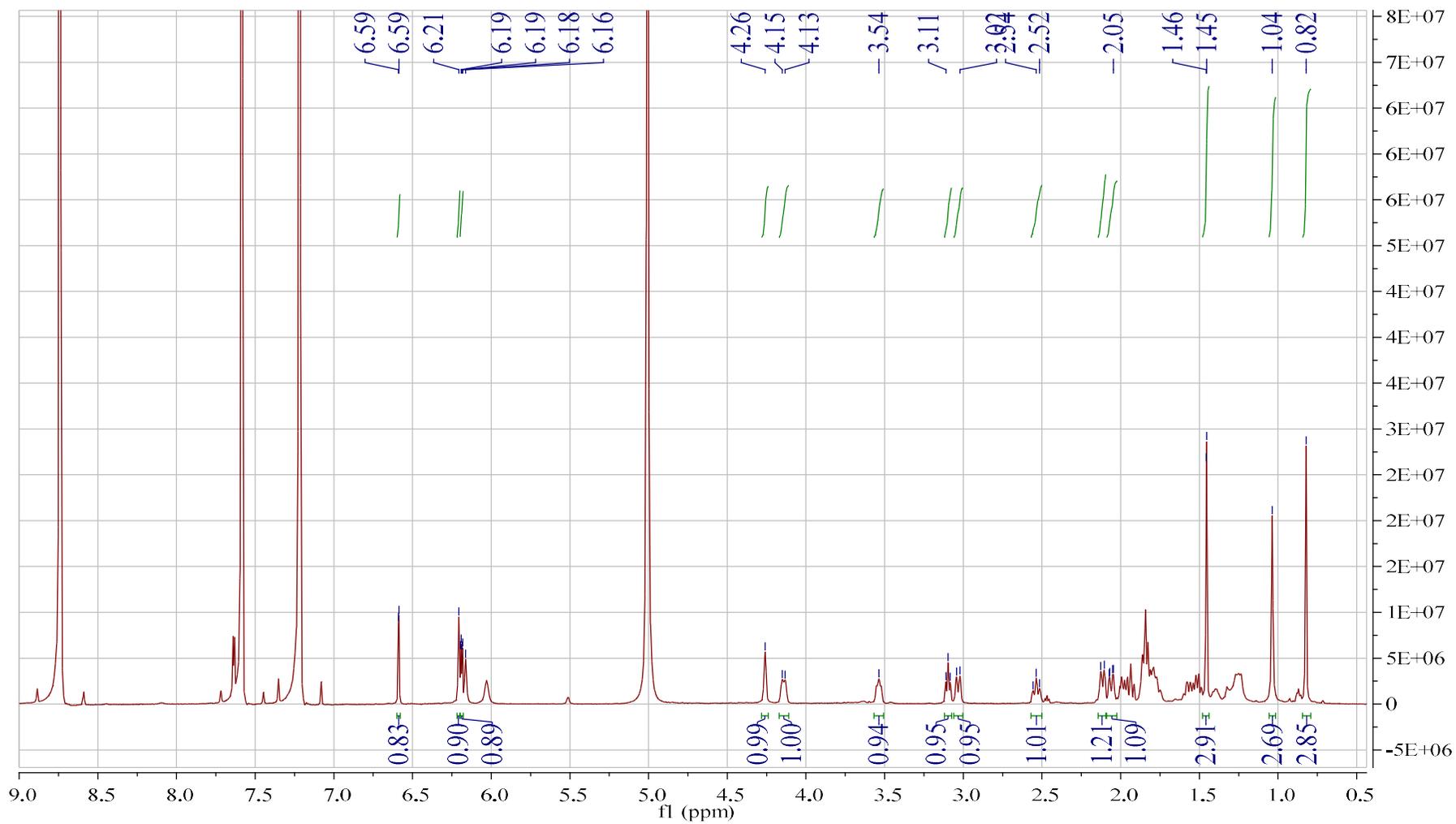


Figure S33: The ^1H NMR spectrum of 5 (in $\text{pyridine-}d_5$)

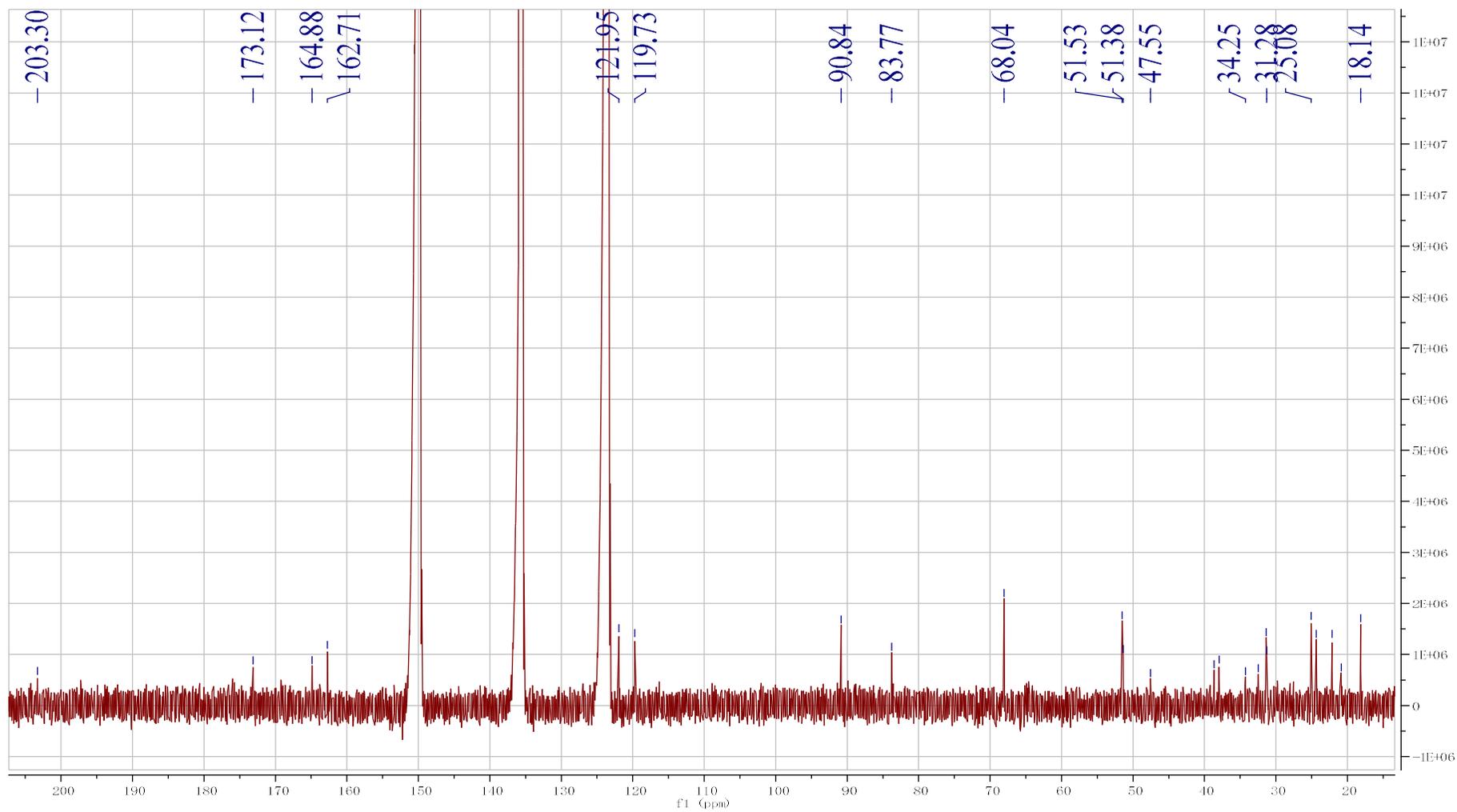


Figure S34: The ^{13}C NMR spectra of 5 (in $\text{pyridine-}d_5$)

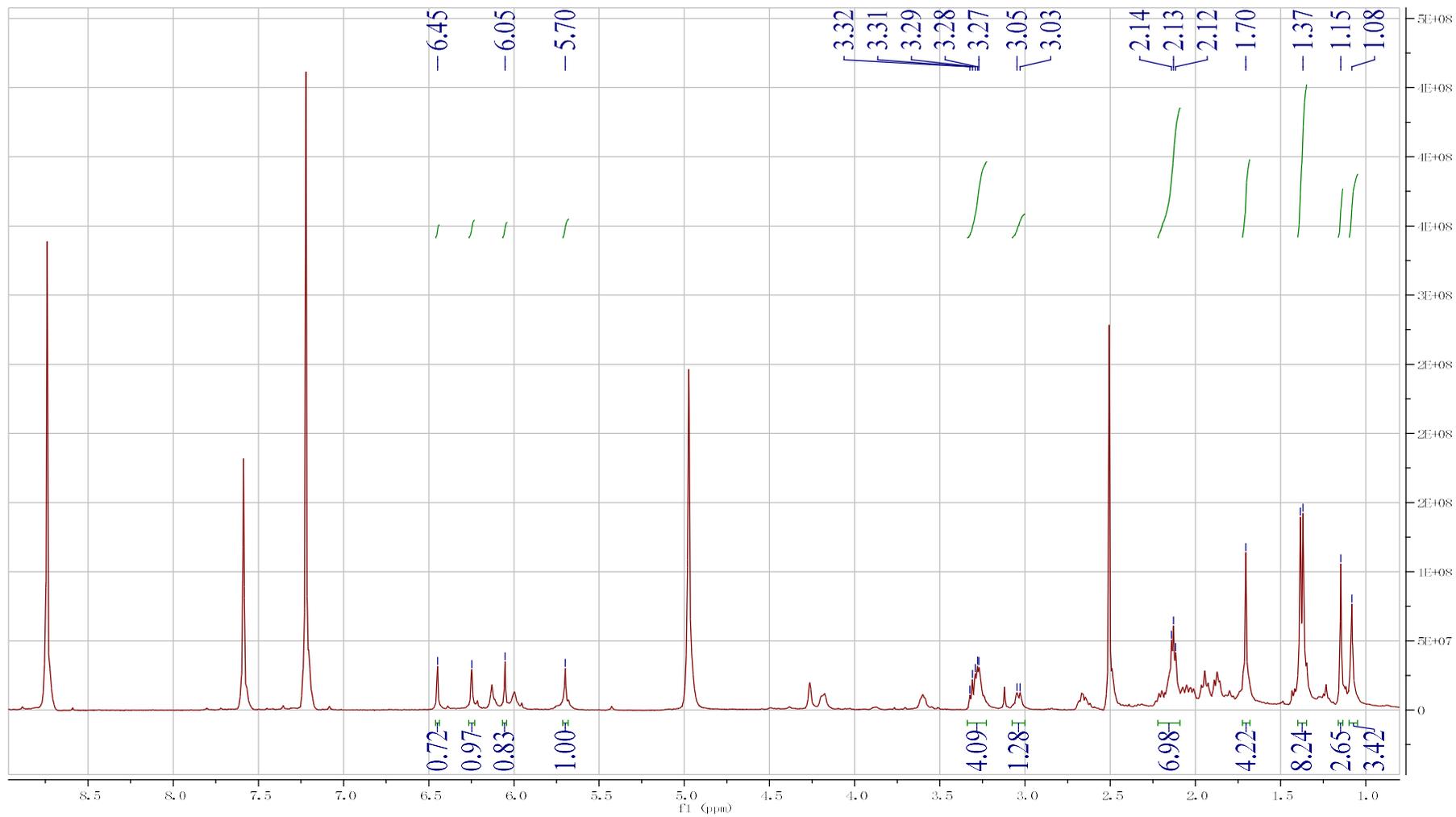


Figure S35: The ^1H NMR spectrum of 6 (in $\text{pyridine-}d_5$)

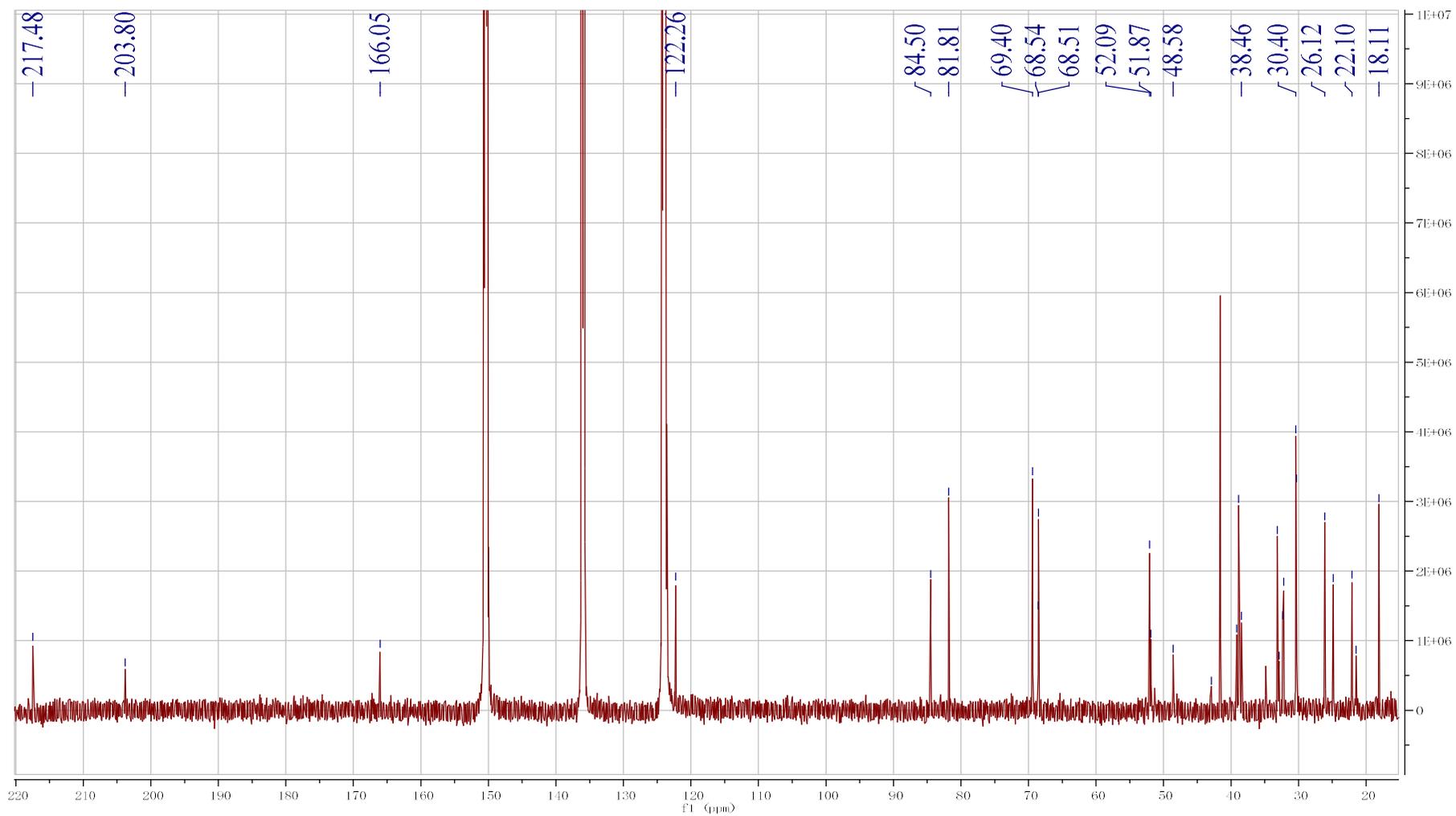


Figure S36: The ^{13}C NMR spectra of 6 (in $\text{pyridine-}d_5$)

Table S1: ¹³C NMR data for compounds **1–6** and 20-hydroxyecdysone

Position	1	2	3	4	5	6	20-hydroxyecdysone
1	39.9	39.0	38.3	38.5	38.0	38.5	37.4
2	68.5	68.6	68.6	68.6	68.1	68.5	68.7
3	80.1	81.5	68.9	68.7	68.0	68.5	68.5
4	32.2	32.2	32.9	33.0	32.5	33.1	32.2
5	53.0	52.9	50.9	51.9	51.5	52.1	50.5
6	204.3	203.4	203.2	204.2	203.3	203.8	206.4
7	122.1	122.0	123.5	122.3	121.9	122.3	122.1
8	167.8	167.1	148.4	166.5	164.9	166.1	168.0
9	34.8	34.7	39.9	34.9	34.3	32.9	35.1
10	39.1	39.8	40.7	39.2	38.7	39.2	39.1
11	21.5	21.5	25.8	21.8	20.9	22.1	21.5
12	32.4	32.4	120.9	81.0	31.4	32.2	32.5
13	48.6	48.5	175.0	48.7	47.6	48.6	57.3
14	84.6	84.6	49.6	84.7	83.8	84.5	85.2
15	32.2	32.4	40.1	32.2	31.3	32.3	31.7
16	22.2	22.2	22.3	22.1	22.1	21.5	24.4
17	50.6	50.6	49.9	51.1	51.4	51.9	37.4
18	18.4	18.4	23.8	18.4	18.1	18.1	18.1
19	24.8	24.7	25.8	25.0	24.4	24.9	24.4
20	77.5	77.4	76.8	76.8	90.8	81.9	78.4
21	22.0	22.0	21.5	22.8	25.1	26.1	21.5
22	78.1	78.1	77.2	81.0	162.7	217.5	77.9
23	28.0	28.0	27.9	26.6	119.7	42.9	27.3
24	43.2	43.2	43.0	42.2	173.1	38.9	43.8
25	70.2	70.1	70.3	69.9		69.4	71.3
26	30.7	30.6	30.9	30.2		30.4	28.9
27	30.5	30.5	30.4	30.6		30.3	29.7
28				171.9			
29				21.6			
	Glc	Gal					
1'	104.4	104.2					
2'	73.0	71.3					
3'	80.5	79.9					
4'	72.1	71.8					
5'	79.8	73.1					
6'	68.7	61.3					
	Gal	Gal					
1'	101.0	103.7					
2'	71.4	71.8					
3'	71.8	71.6					
4'	71.4	71.8					
5'	72.4	73.9					
6'	63.0	63.1					