

Supporting information

2,2'-Biphenols via protecting group free thermal or microwave accelerated Suzuki-Miyaura coupling in water

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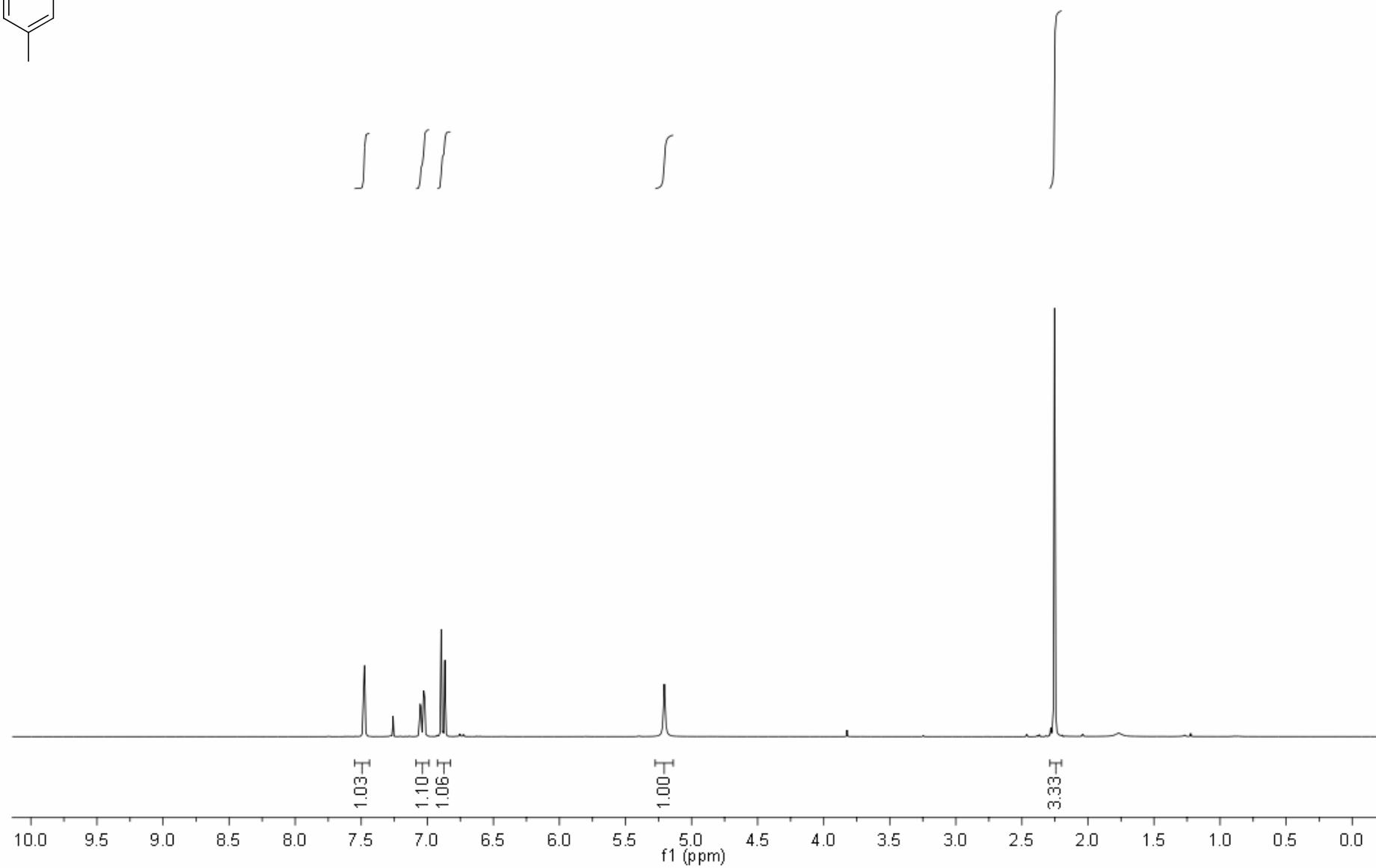
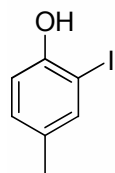
bernd.schmidt@uni-potsdam.de

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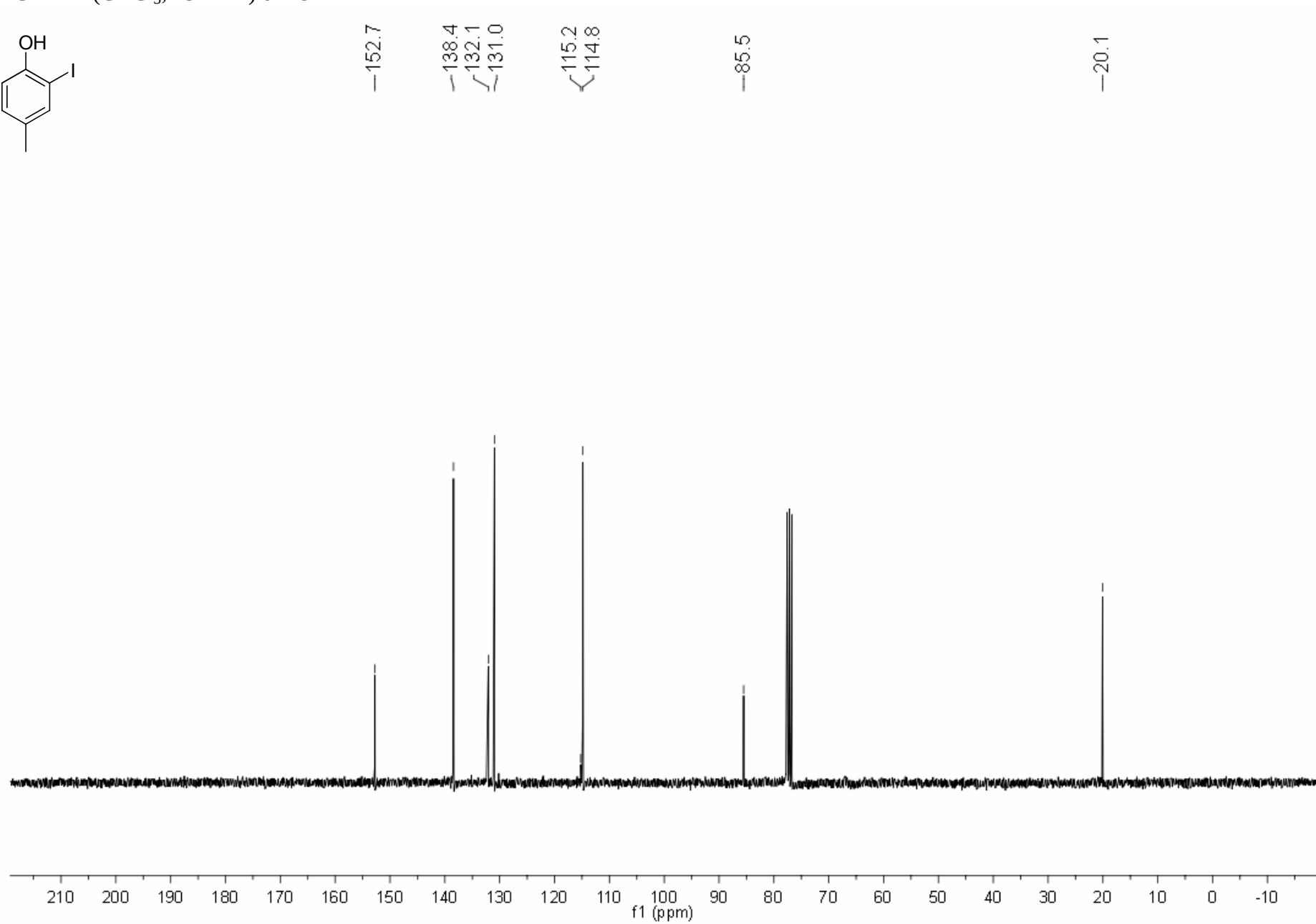
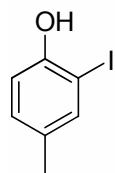
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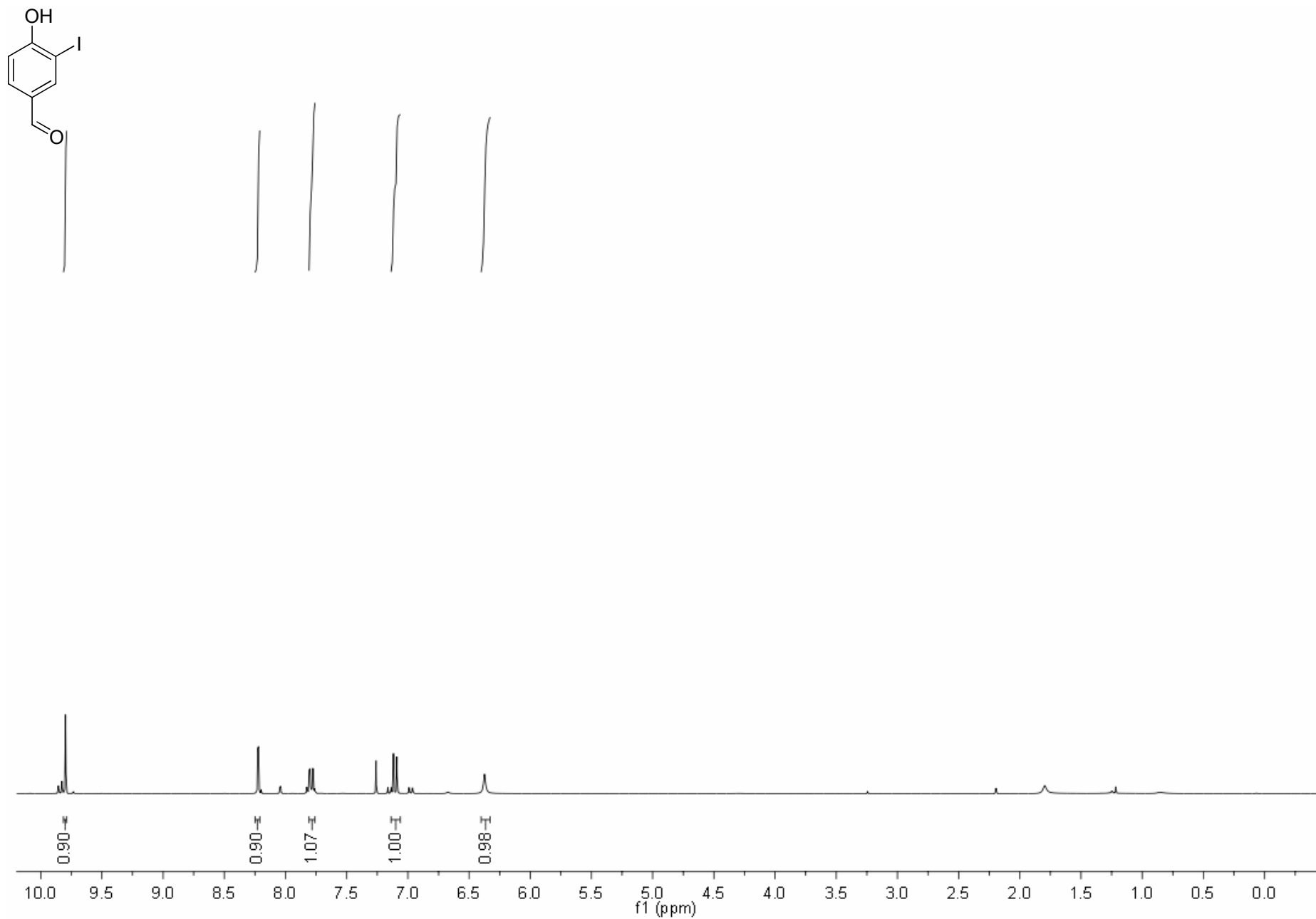
^1H NMR (CDCl_3 , 300 MHz) of **1b**



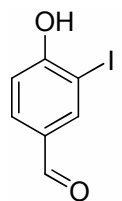
^{13}C NMR (CDCl_3 , 75 MHz) of **1b**



^1H NMR (CDCl_3 , 300 MHz) of **1d**



^{13}C NMR (CDCl_3 , 75 MHz) of **1d**



—189.6

—160.3

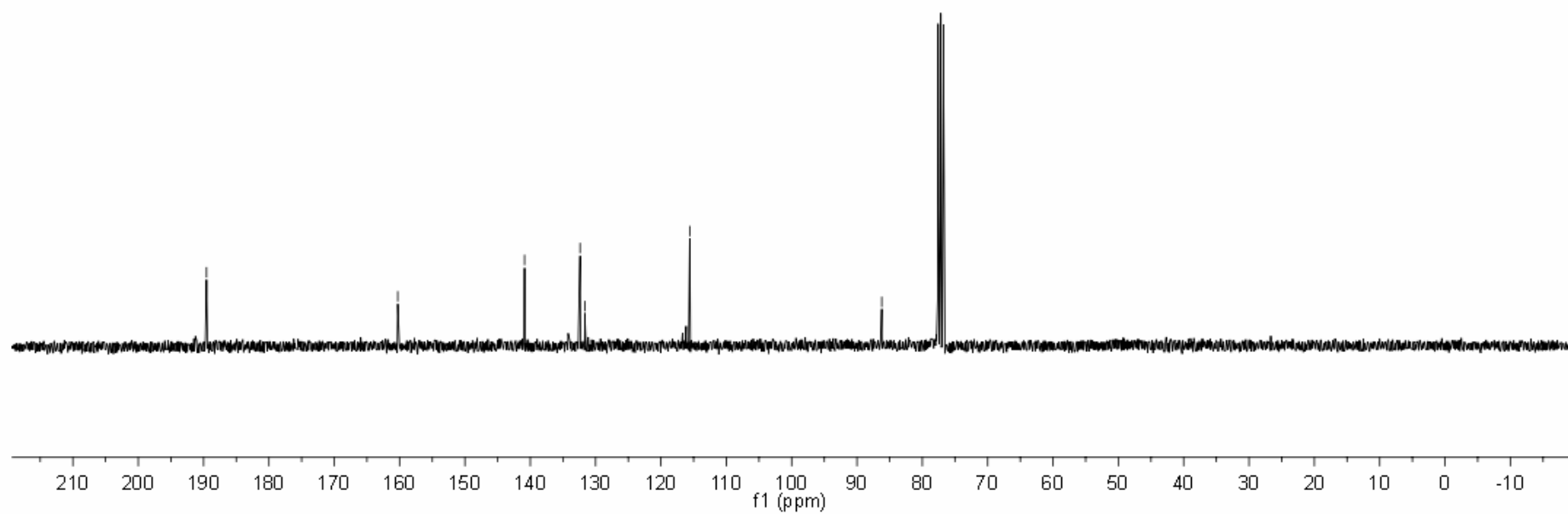
—140.9

—132.4

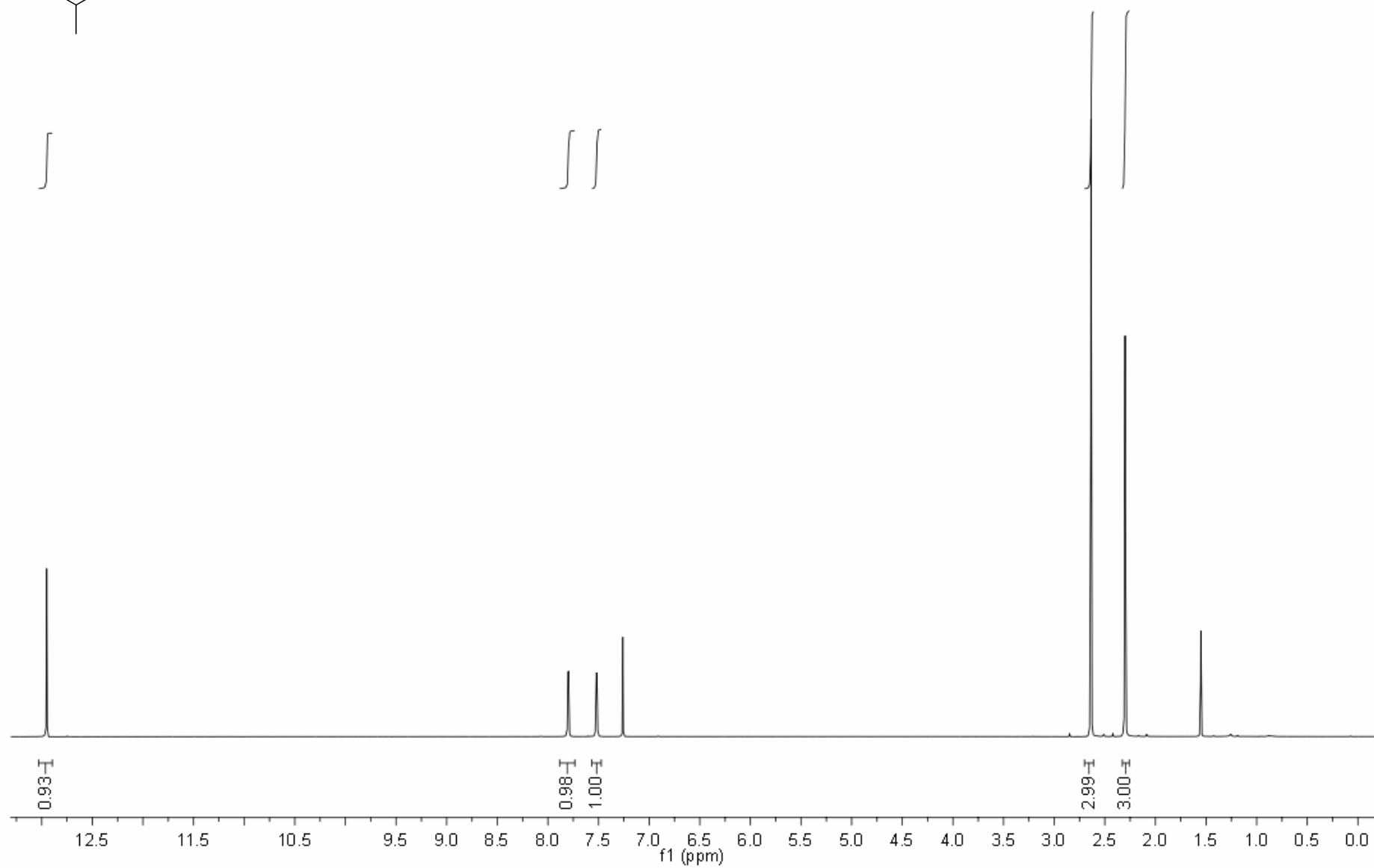
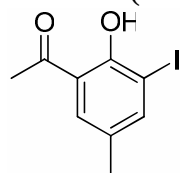
—131.6

—115.6

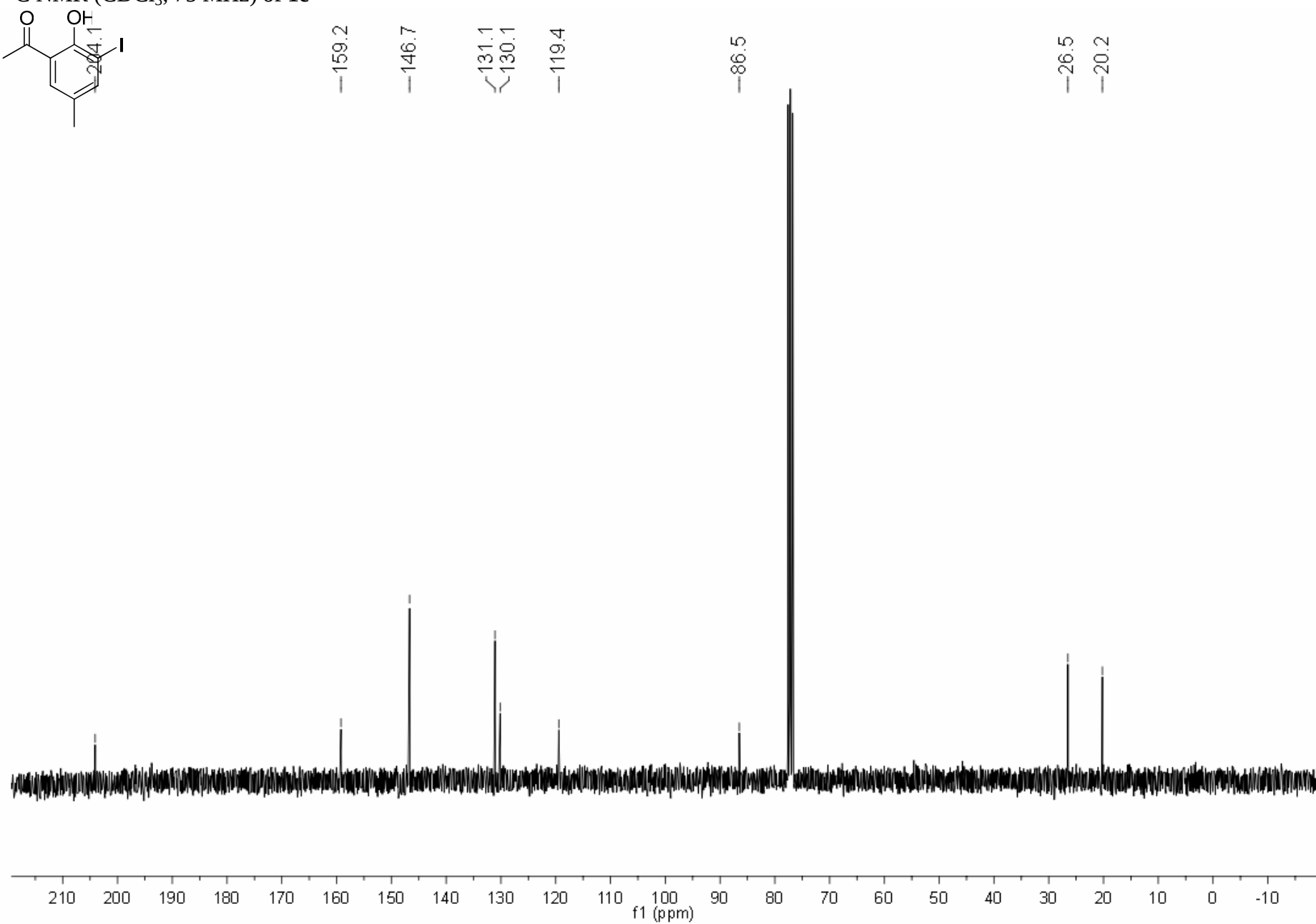
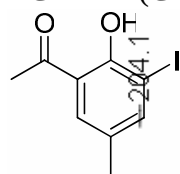
—86.2



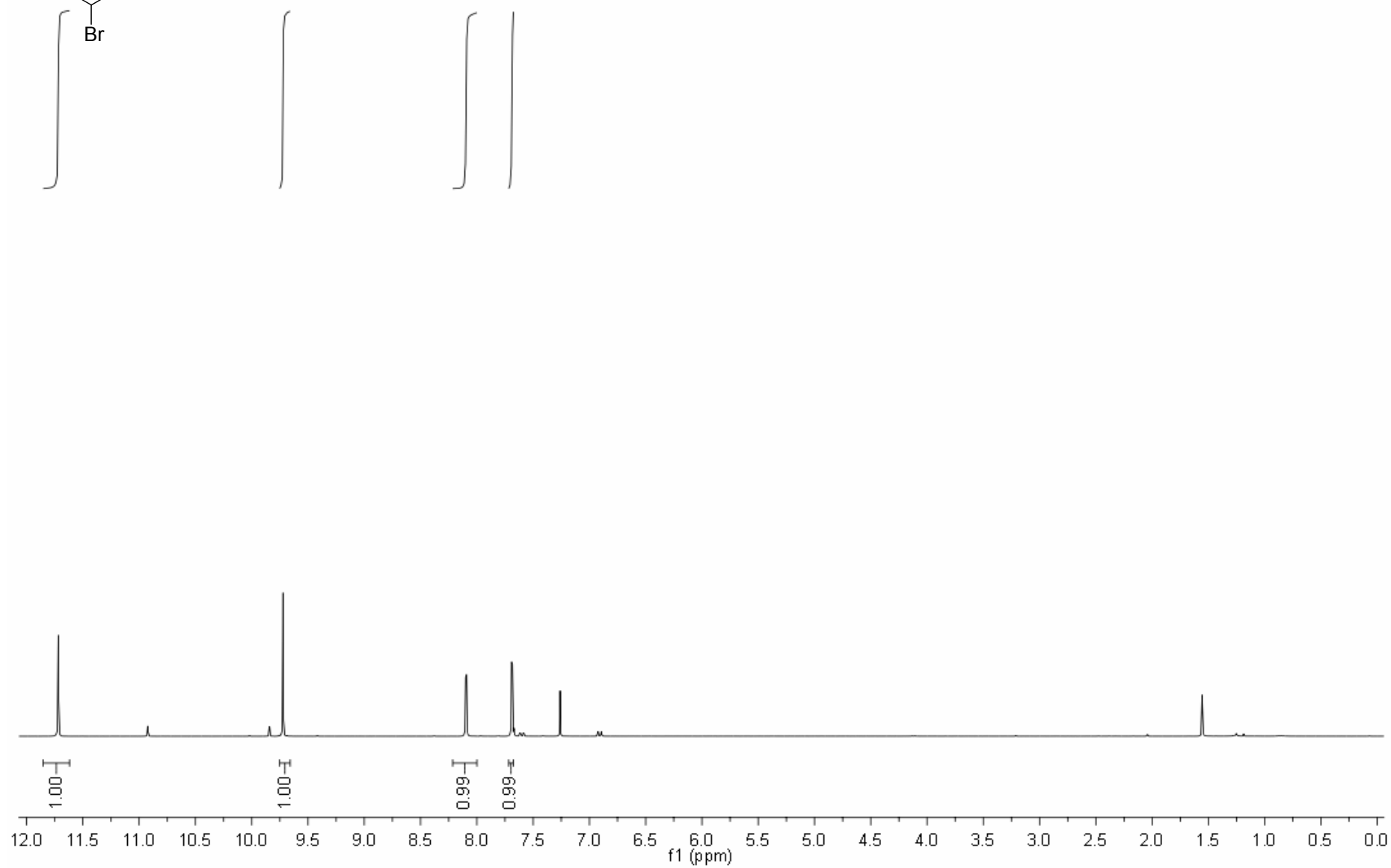
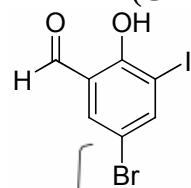
^1H NMR (CDCl_3 , 300 MHz) of **1e**



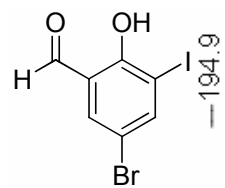
^{13}C NMR (CDCl_3 , 75 MHz) of **1e**



^1H NMR (CDCl_3 , 300 MHz) of **1f**



^{13}C NMR (CDCl_3 , 75 MHz) of **1f**



—159.7

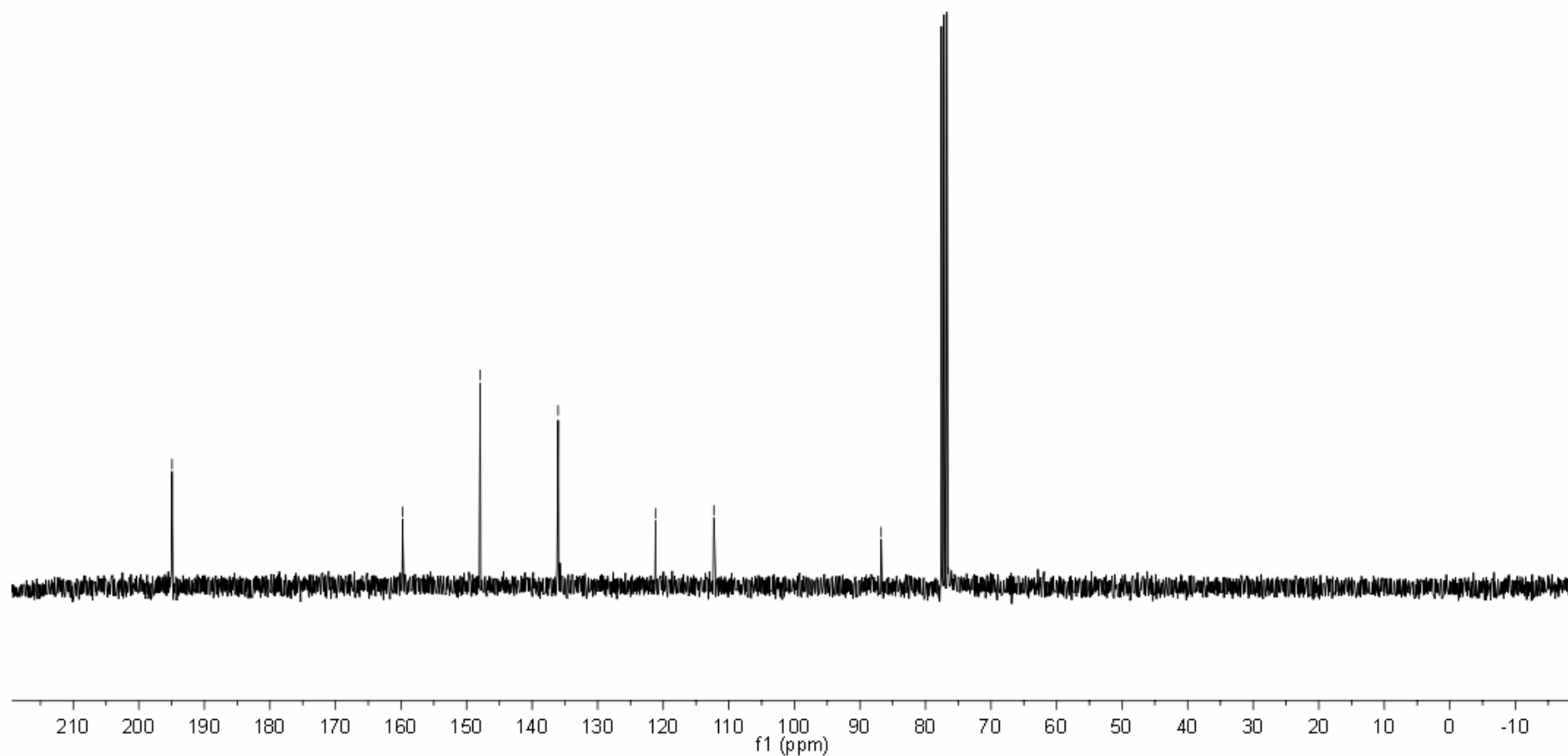
—147.9

—136.0

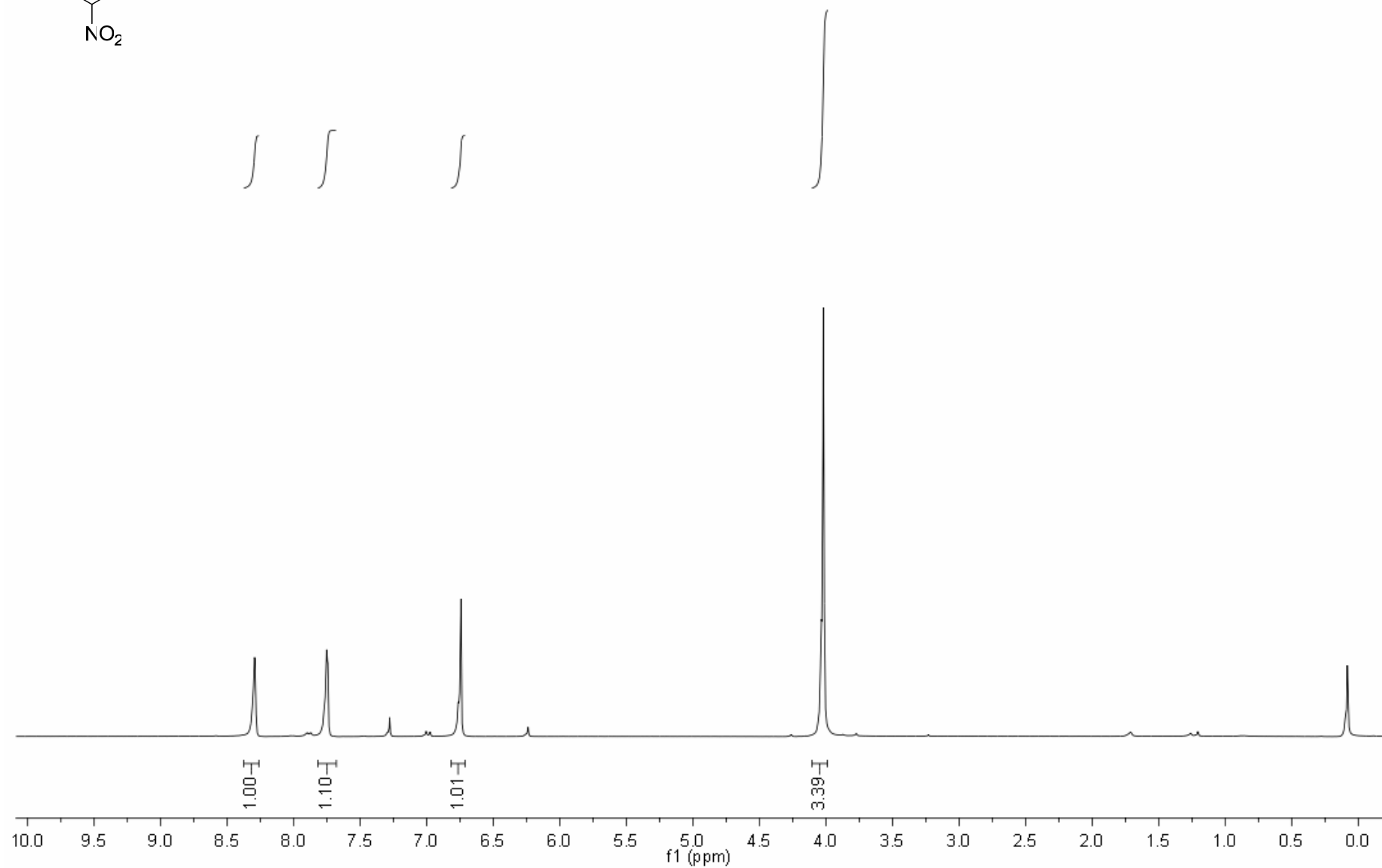
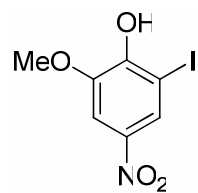
—121.2

—112.3

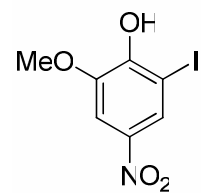
—86.8



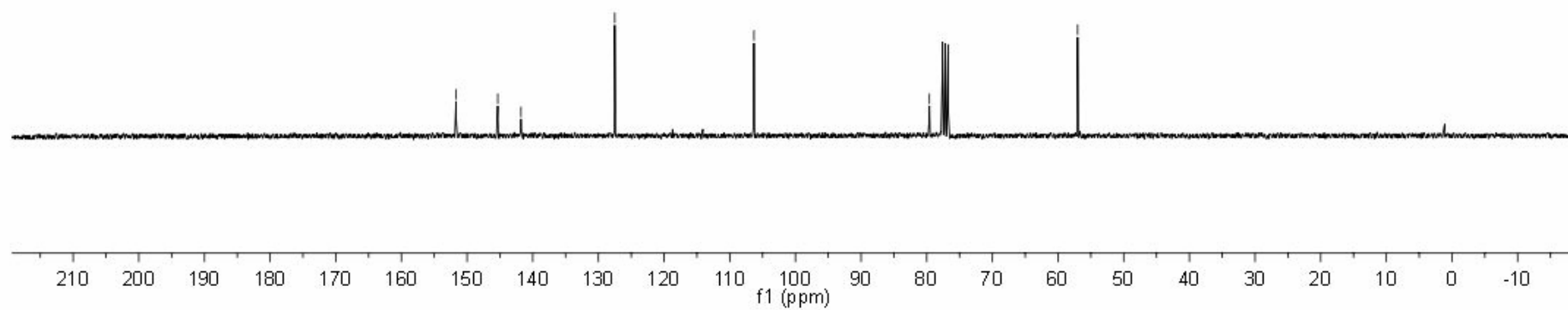
^1H NMR (CDCl_3 , 300 MHz) of **1g**



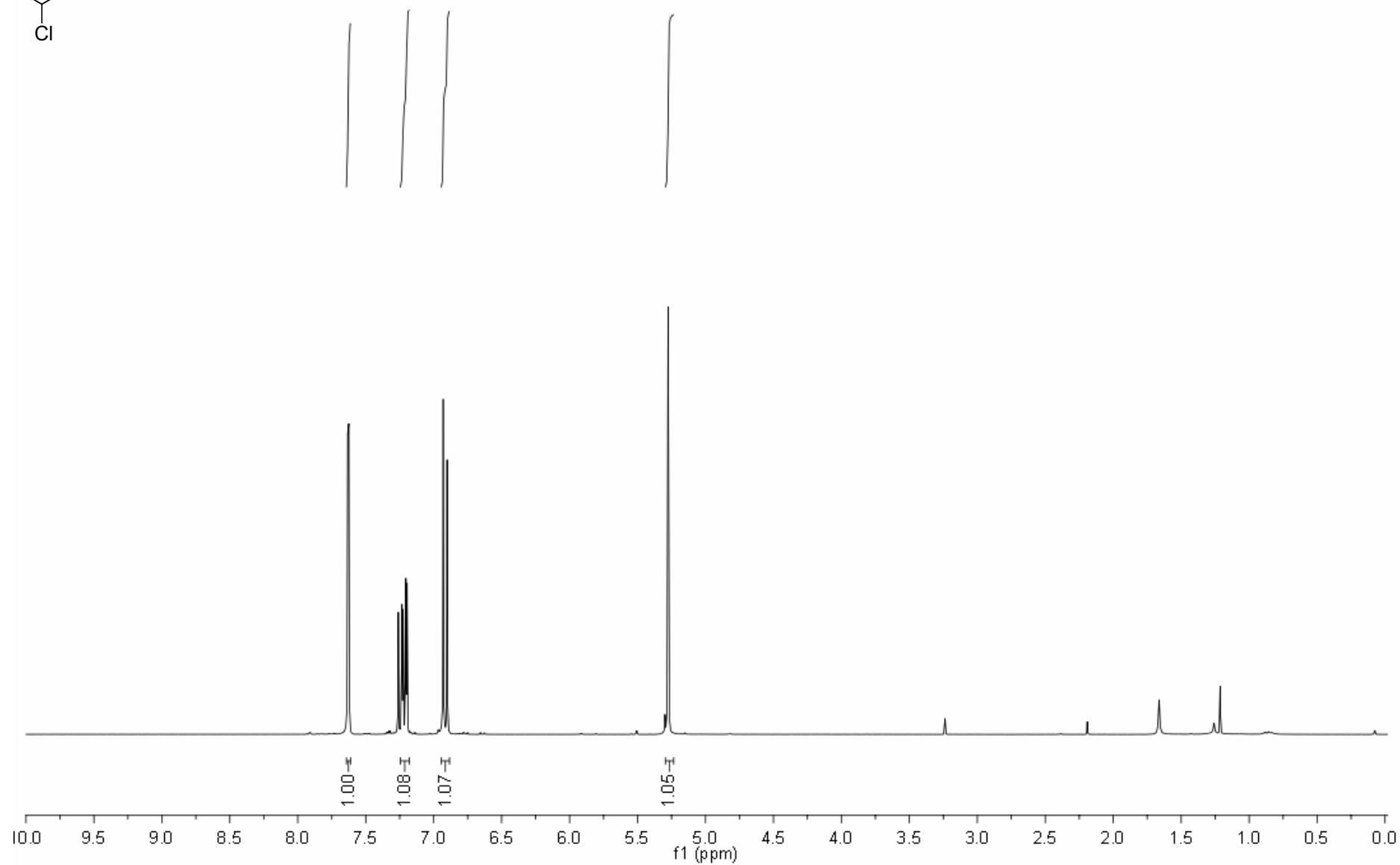
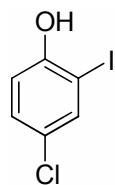
^{13}C NMR (CDCl_3 , 75 MHz) of **1g**



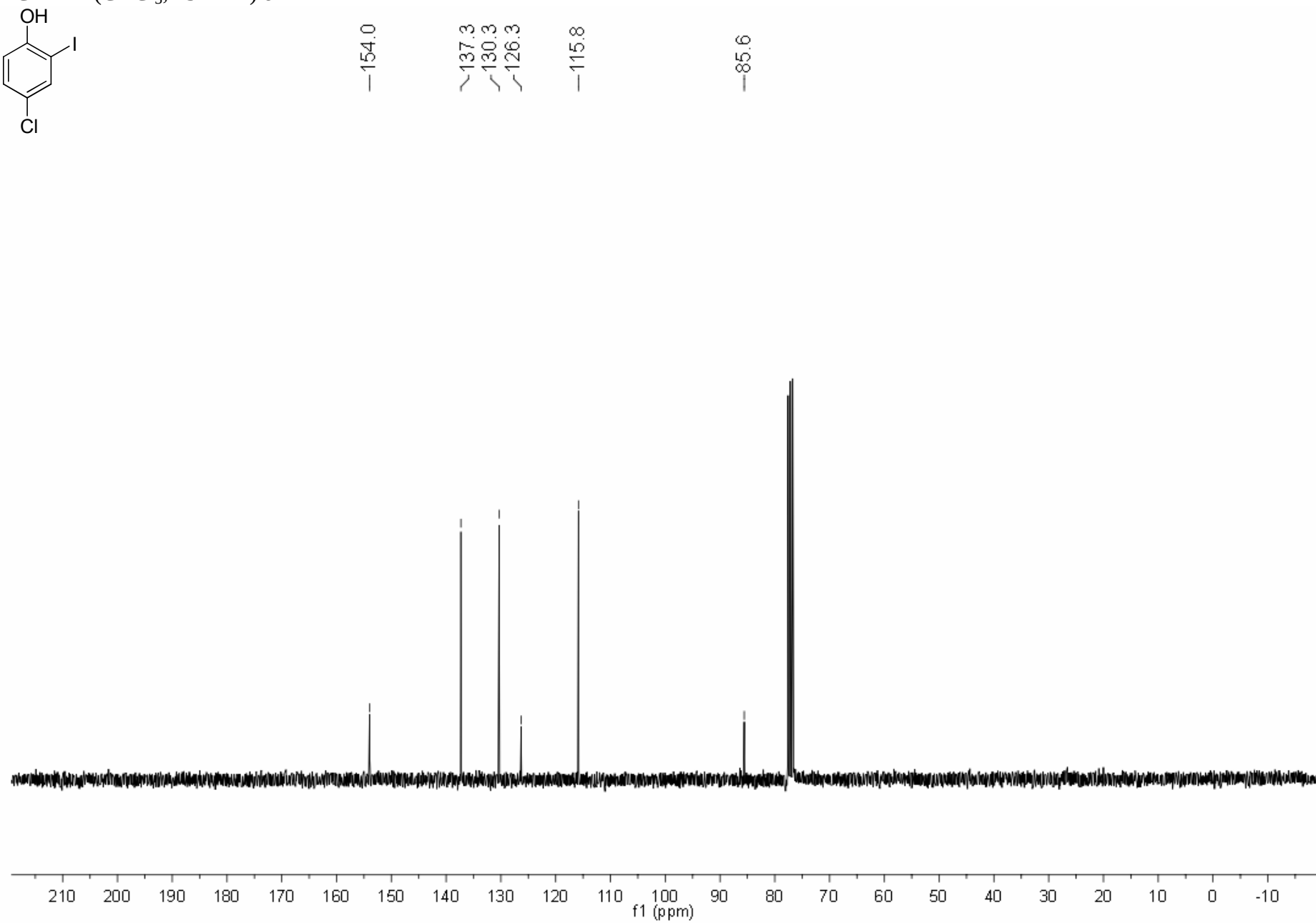
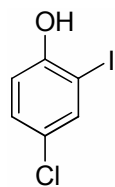
~151.68
~145.33
~141.79
—127.51
—106.31
—79.59
—57.01



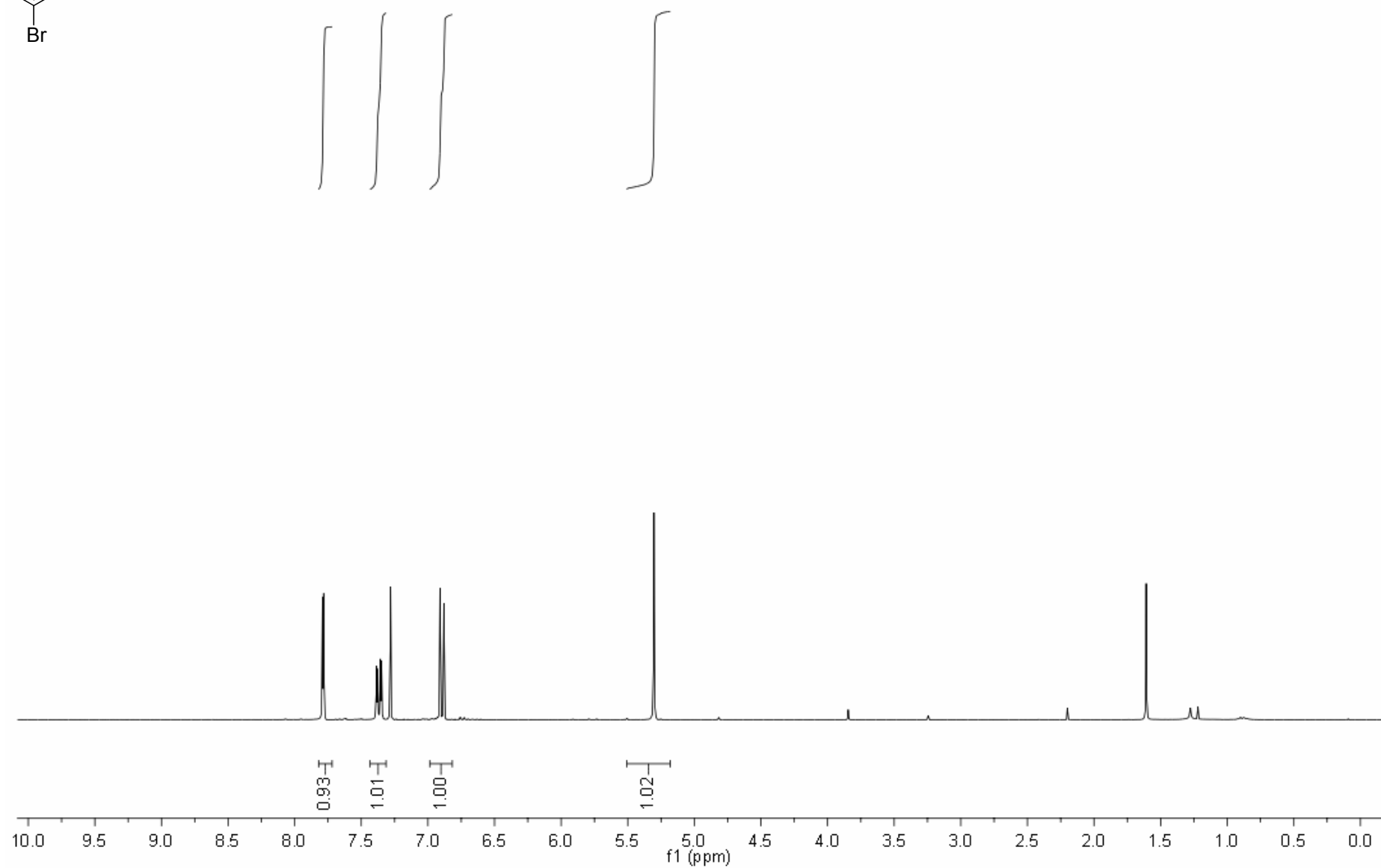
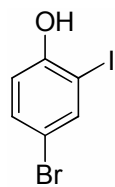
^1H NMR (CDCl_3 , 300 MHz) of **1h**



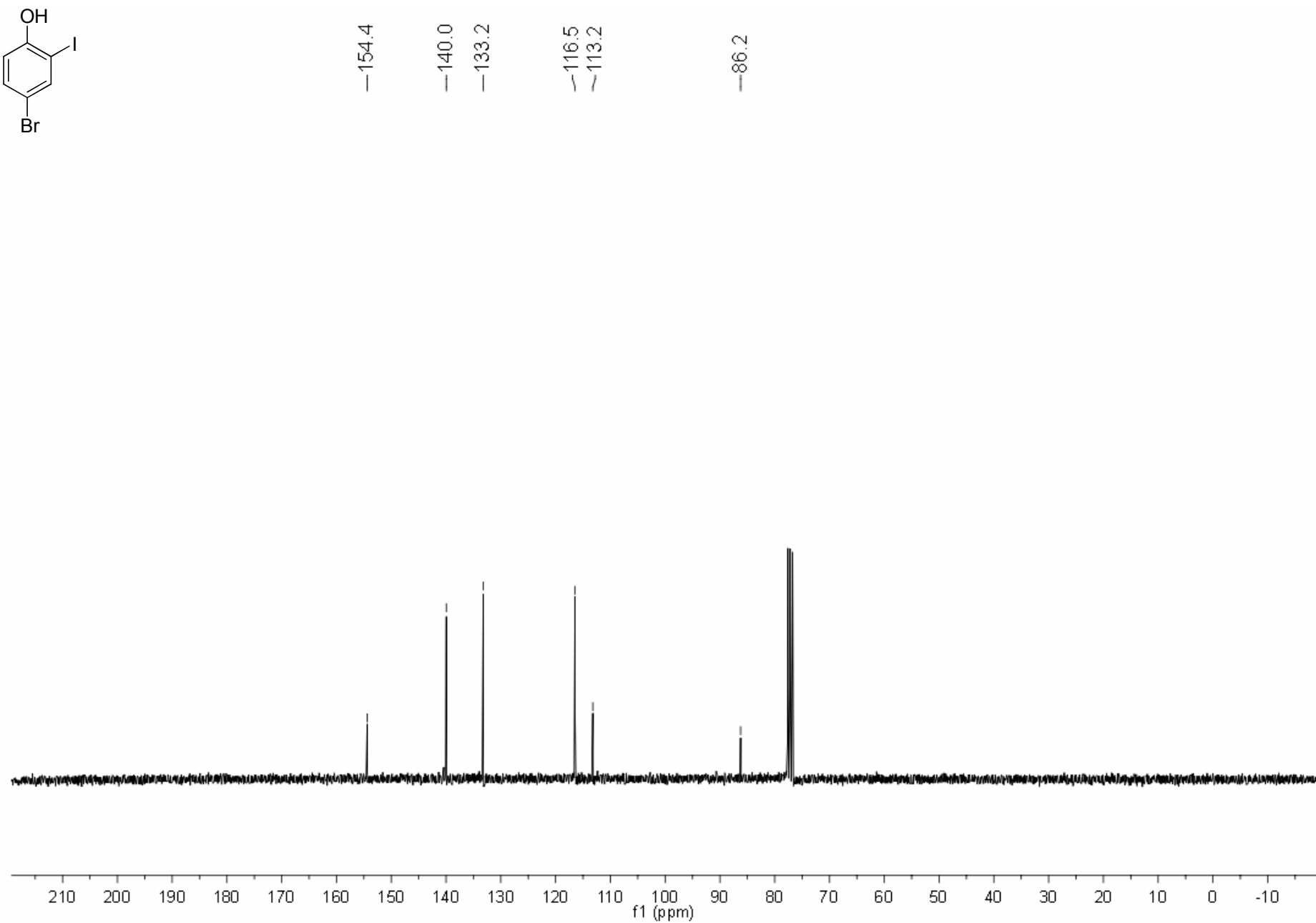
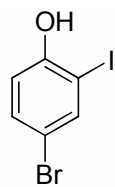
^{13}C NMR (CDCl_3 , 75 MHz) of **1h**



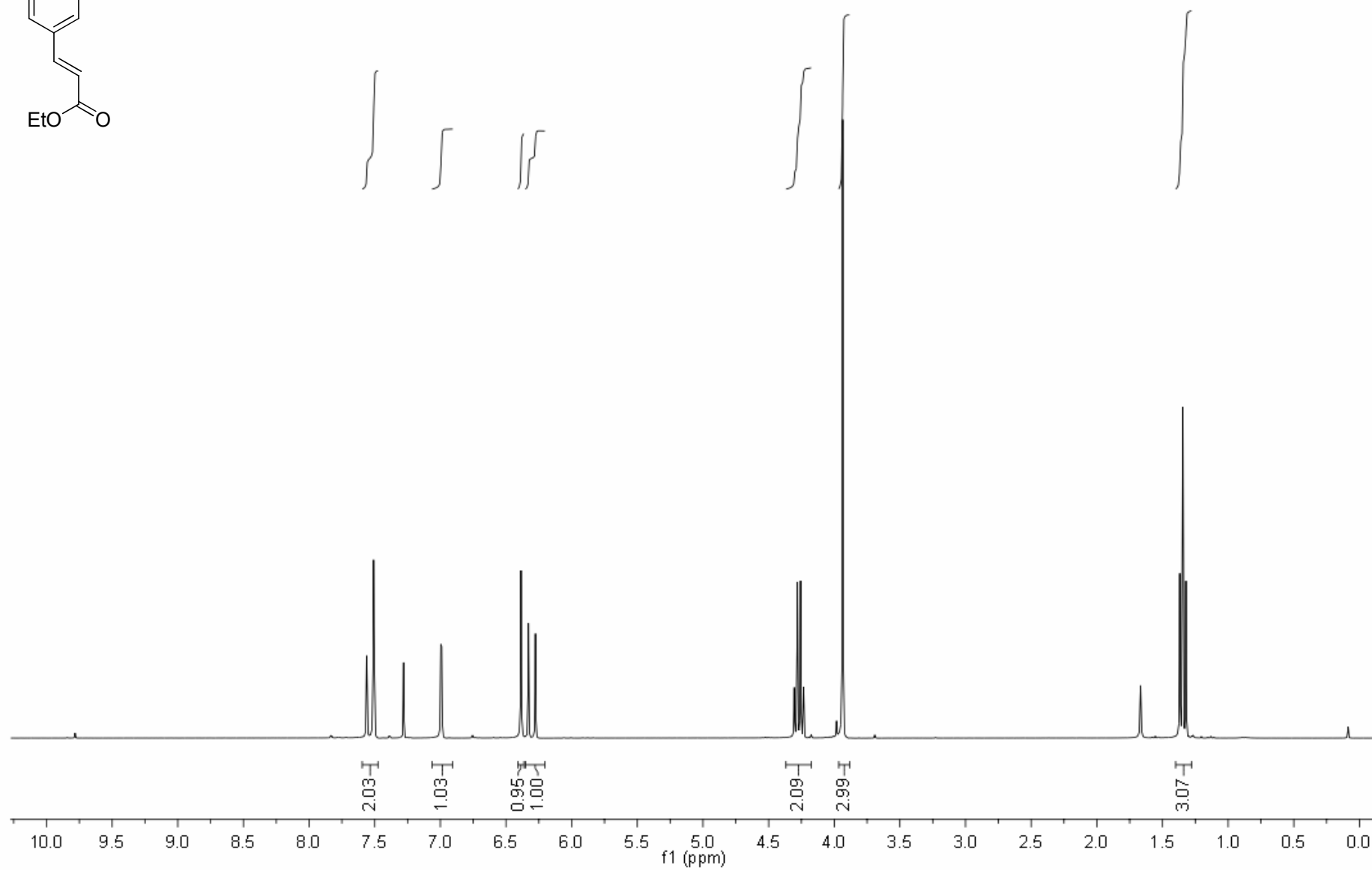
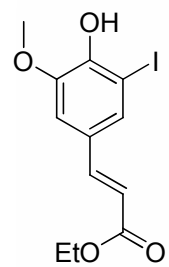
^1H NMR (CDCl_3 , 300 MHz) of **1i**



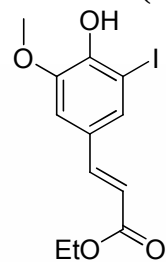
^{13}C NMR (CDCl_3 , 75 MHz) of **1i**



^1H NMR (CDCl_3 , 300 MHz) of **1j**



^{13}C NMR (CDCl_3 , 75 MHz) of **1j**



—167.0

~147.8

~146.3

~143.2

~131.7

~128.8

—117.1

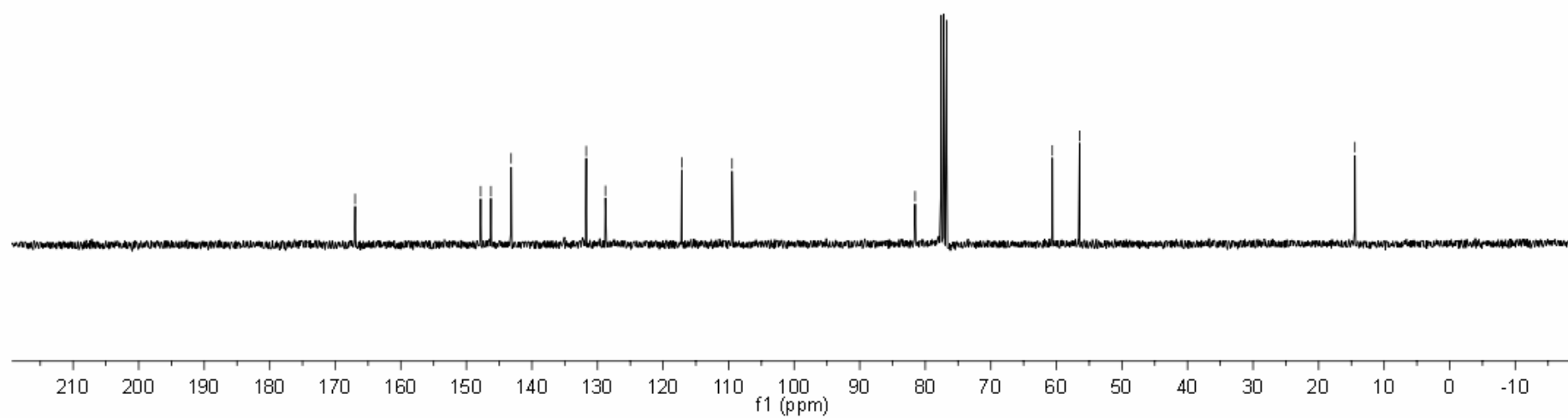
—109.5

—81.6

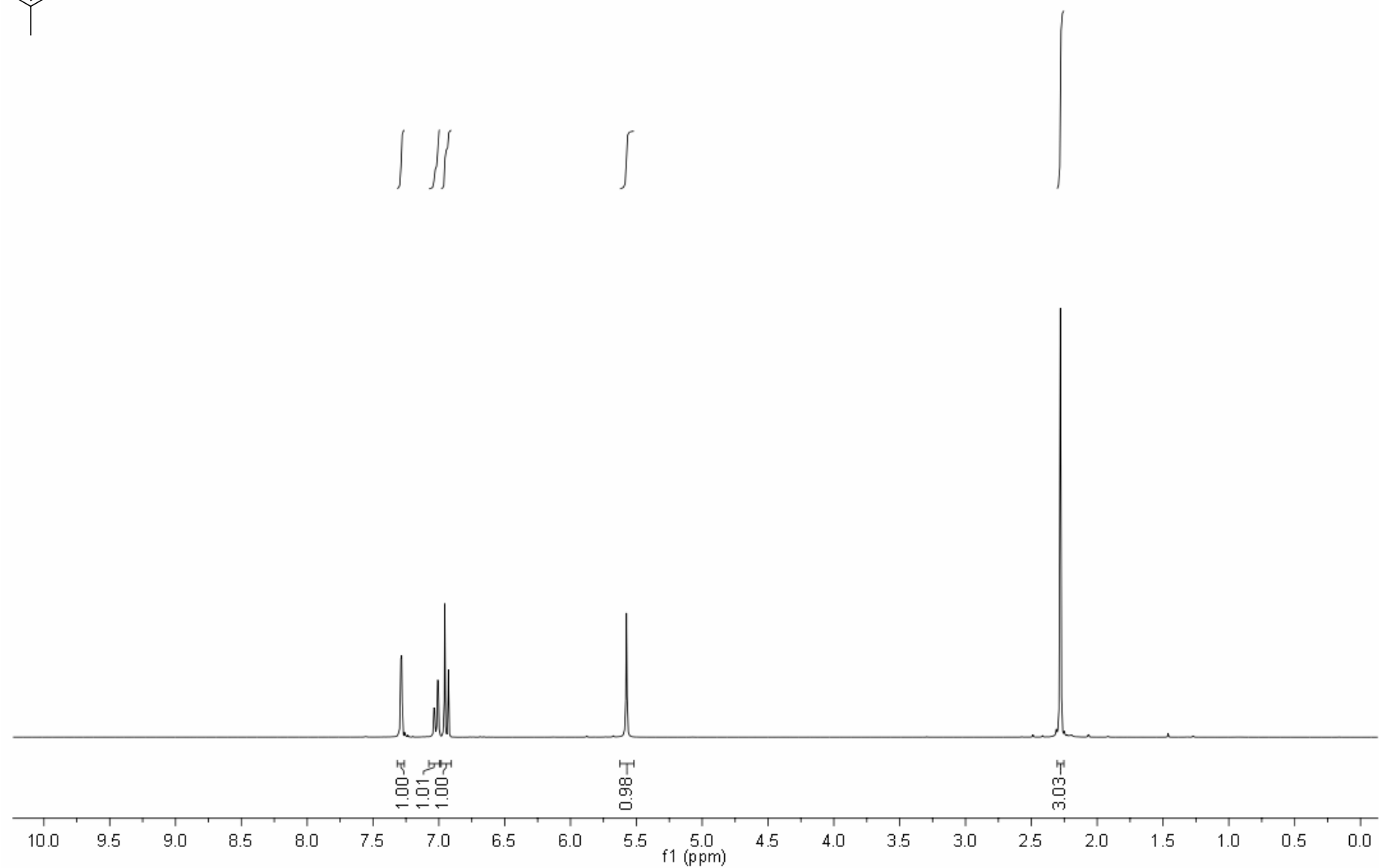
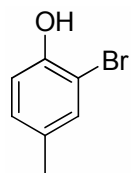
—60.6

—56.5

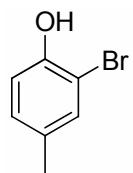
—14.5



^1H NMR (CDCl_3 , 300 MHz) of **4b**

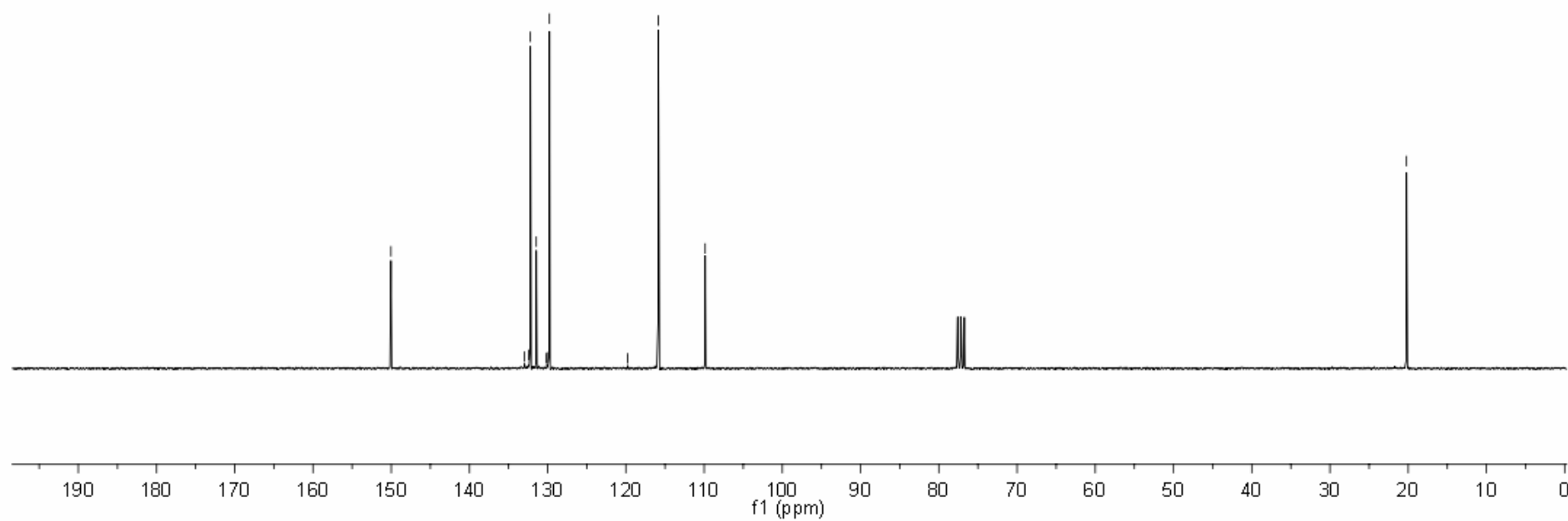


^{13}C NMR (CDCl_3 , 75 MHz) of **4b**

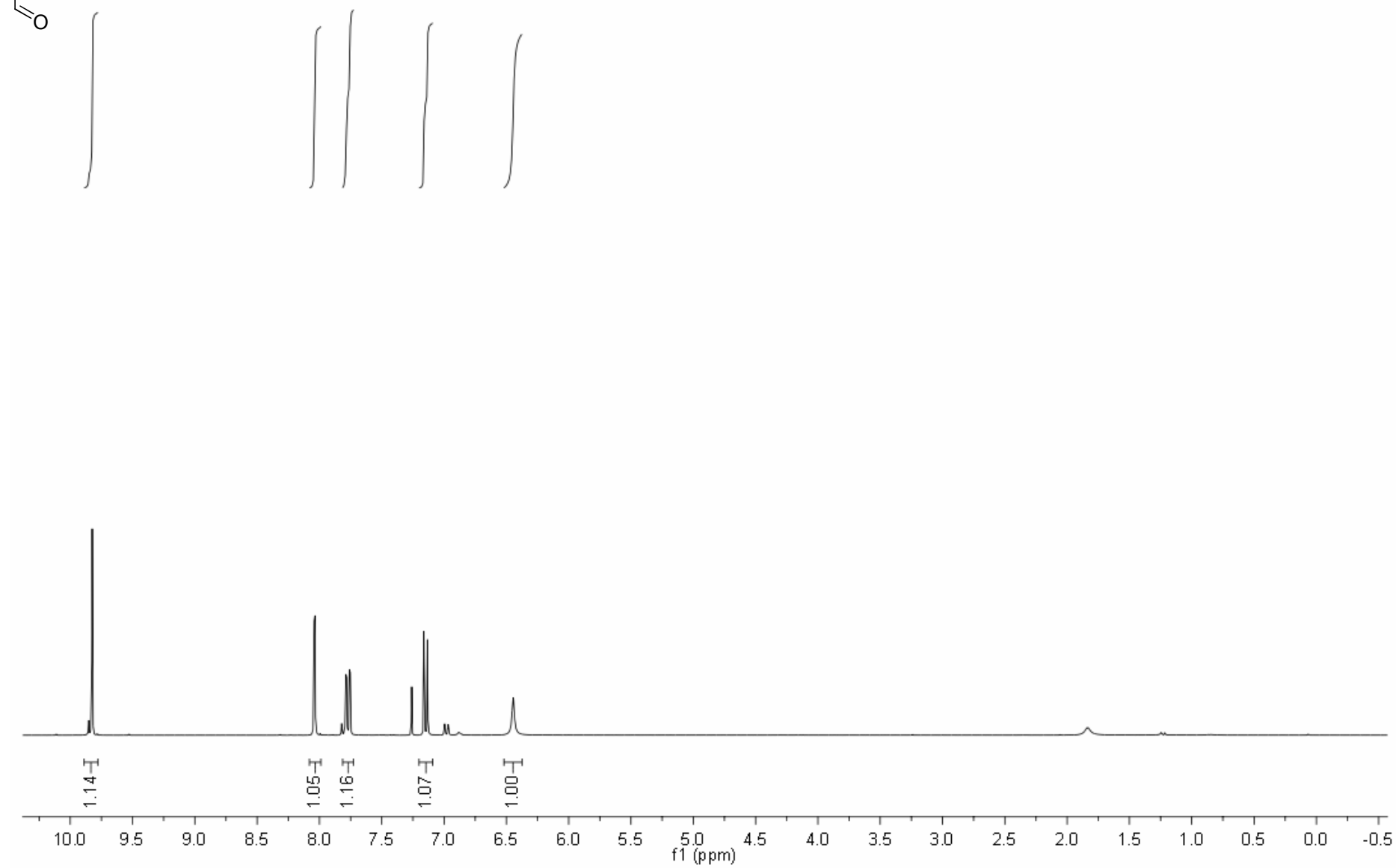
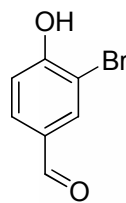


150.0
133.0
132.4
132.2
131.5
130.2
130.1
129.8
119.8
115.9
109.9

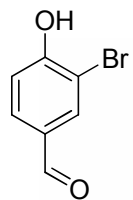
20.2



^1H NMR (CDCl_3 , 300 MHz) of **4d**



^{13}C NMR (CDCl_3 , 75 MHz) of **4d**



—189.7

—157.8

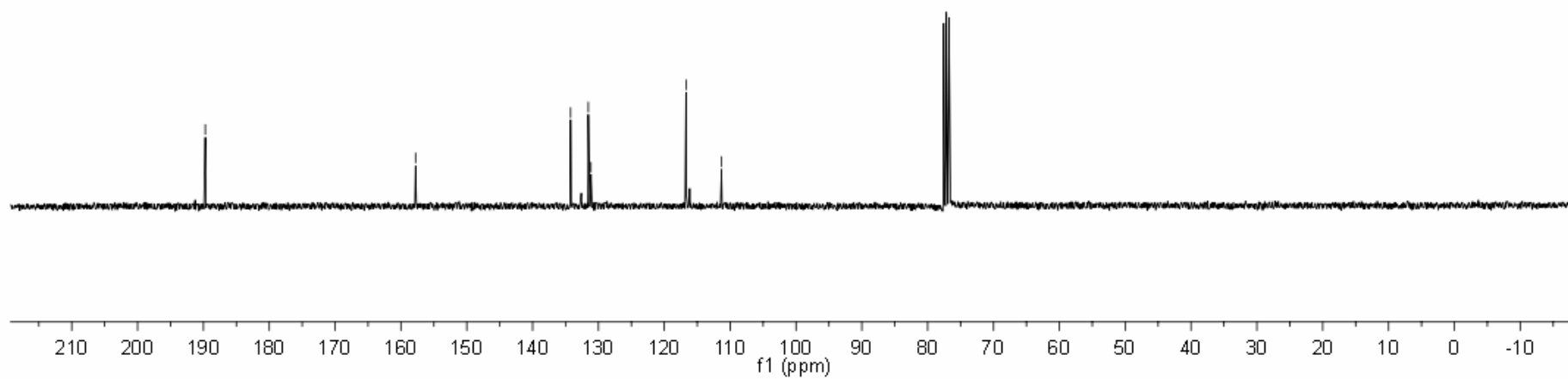
134.2

131.5

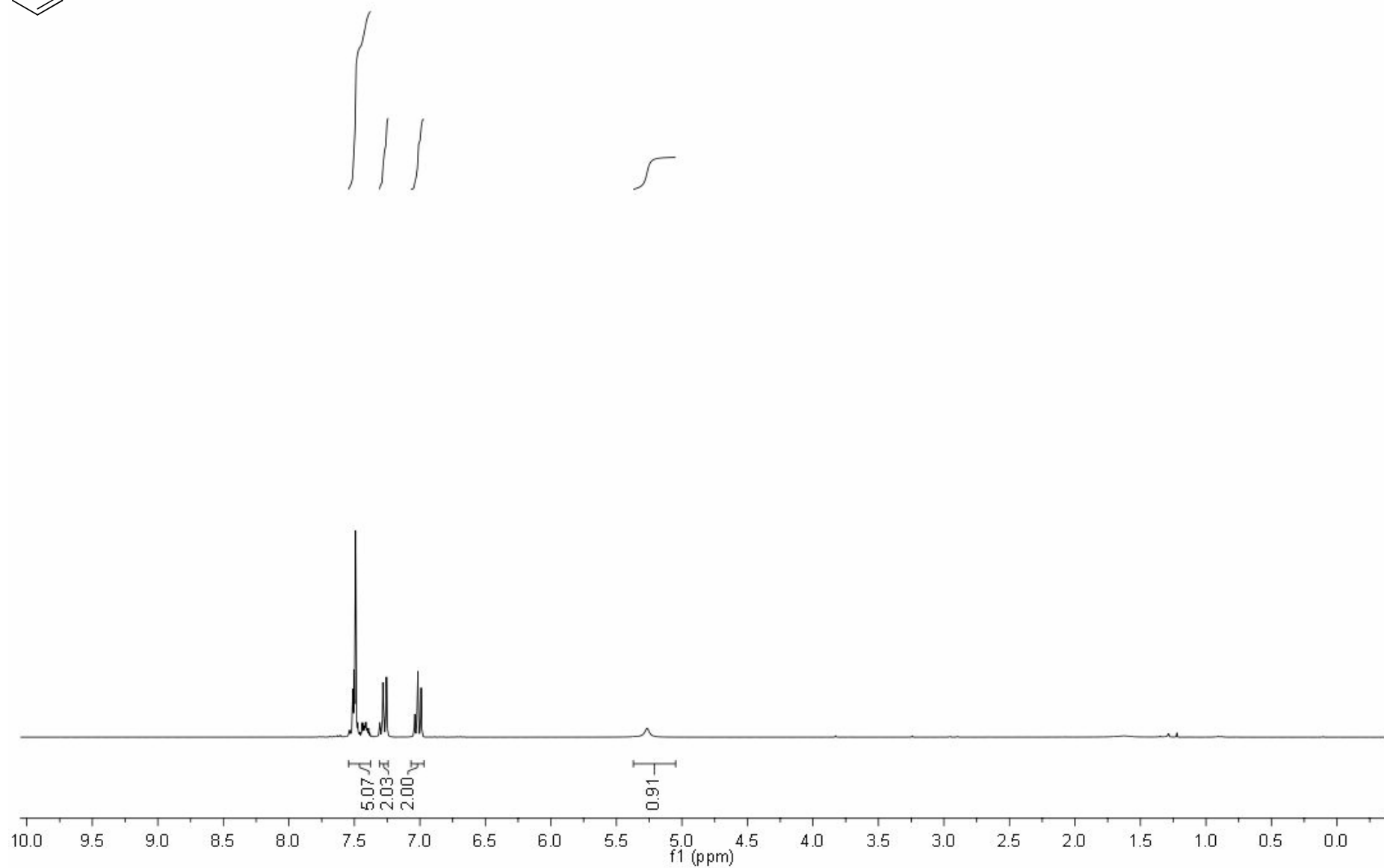
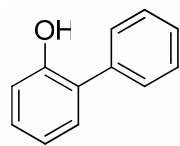
131.1

—116.7

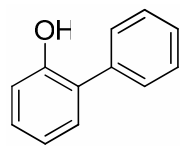
—111.3



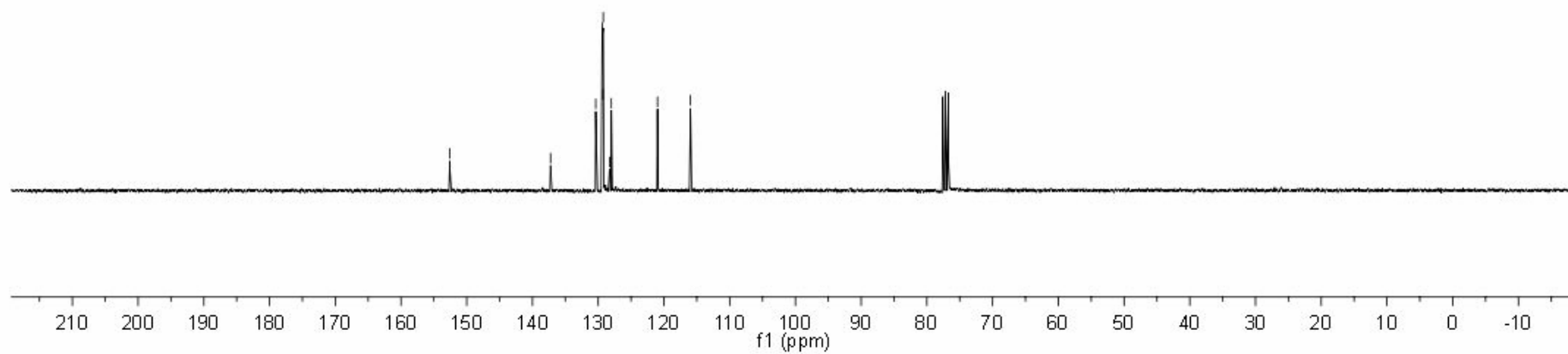
^1H NMR (CDCl_3 , 300 MHz) of **3ab**



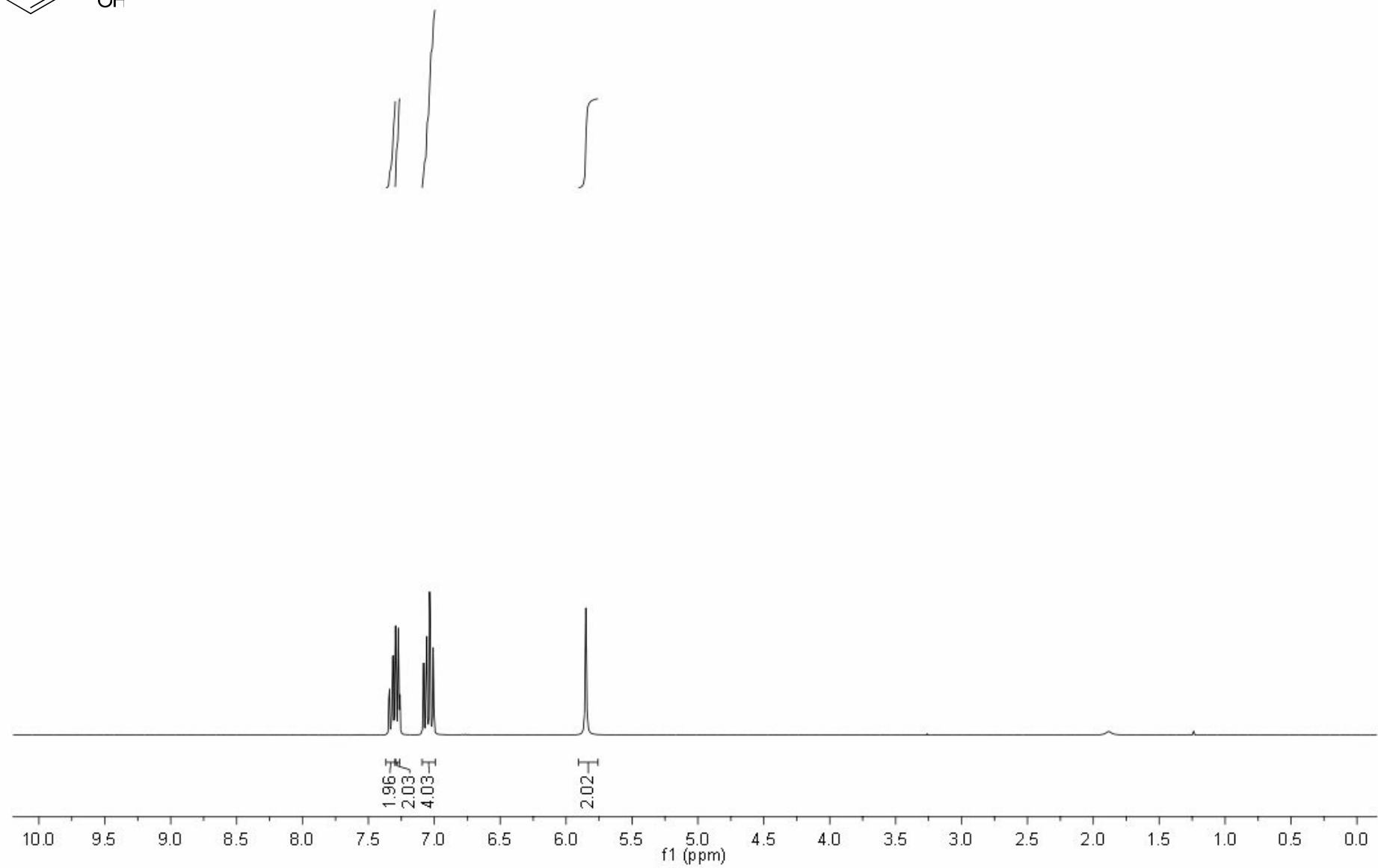
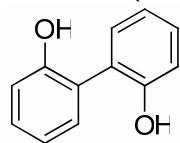
^{13}C NMR (CDCl_3 , 75 MHz) of **3ab**



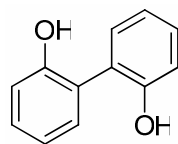
152.6
137.2
130.4
129.4
129.3
129.2
128.3
128.0
121.0
116.0



^1H NMR (CDCl_3 , 300 MHz) of **3aa**



^{13}C NMR (CDCl_3 , 75 MHz) of **3aa**



—153.0

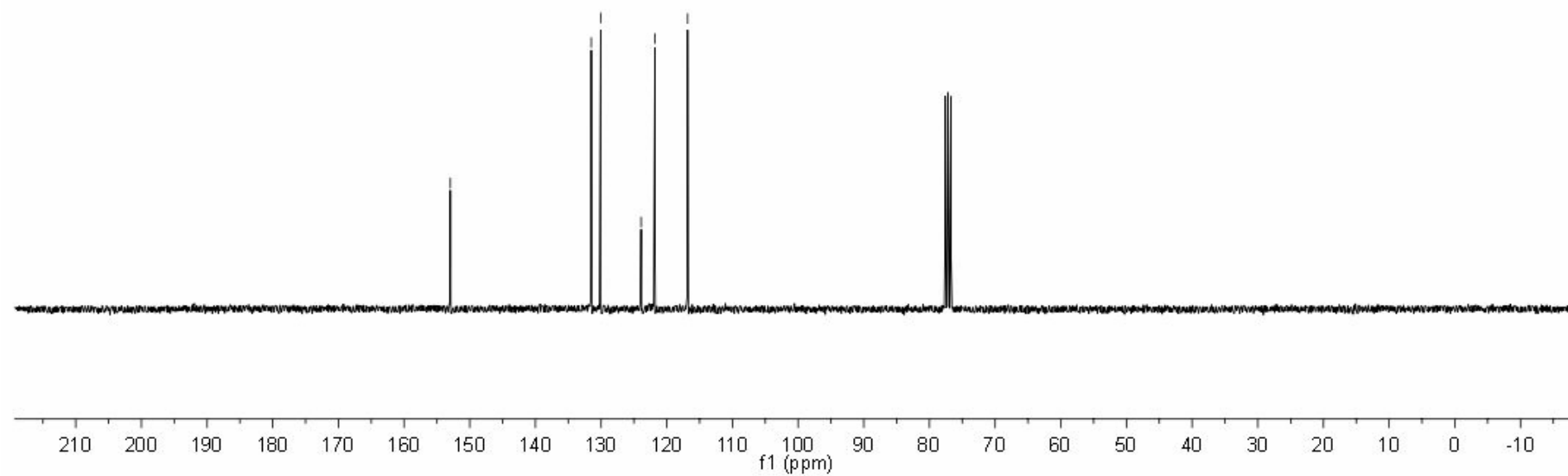
~131.5

~130.1

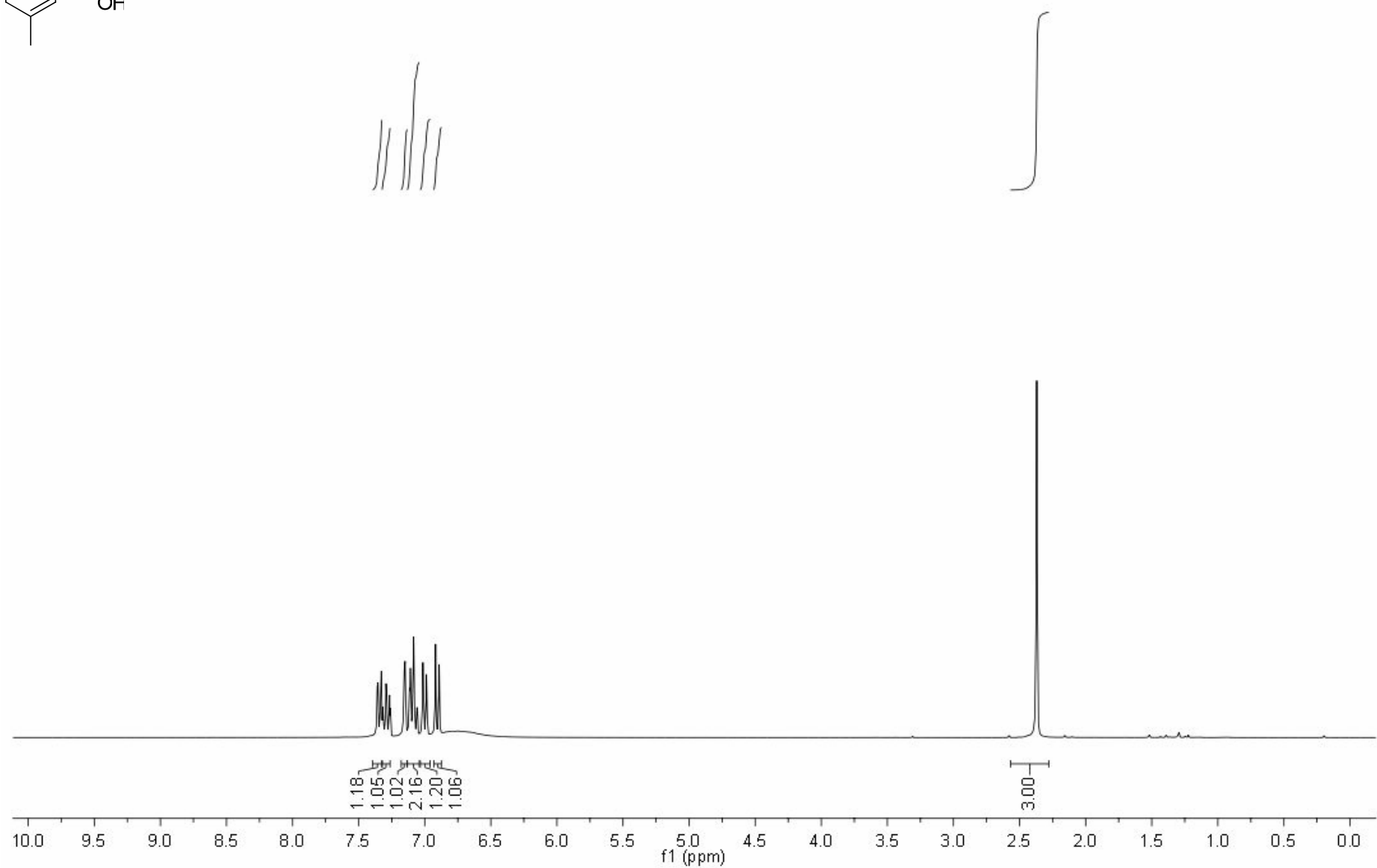
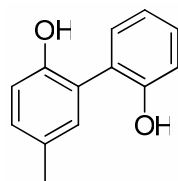
~123.9

~121.8

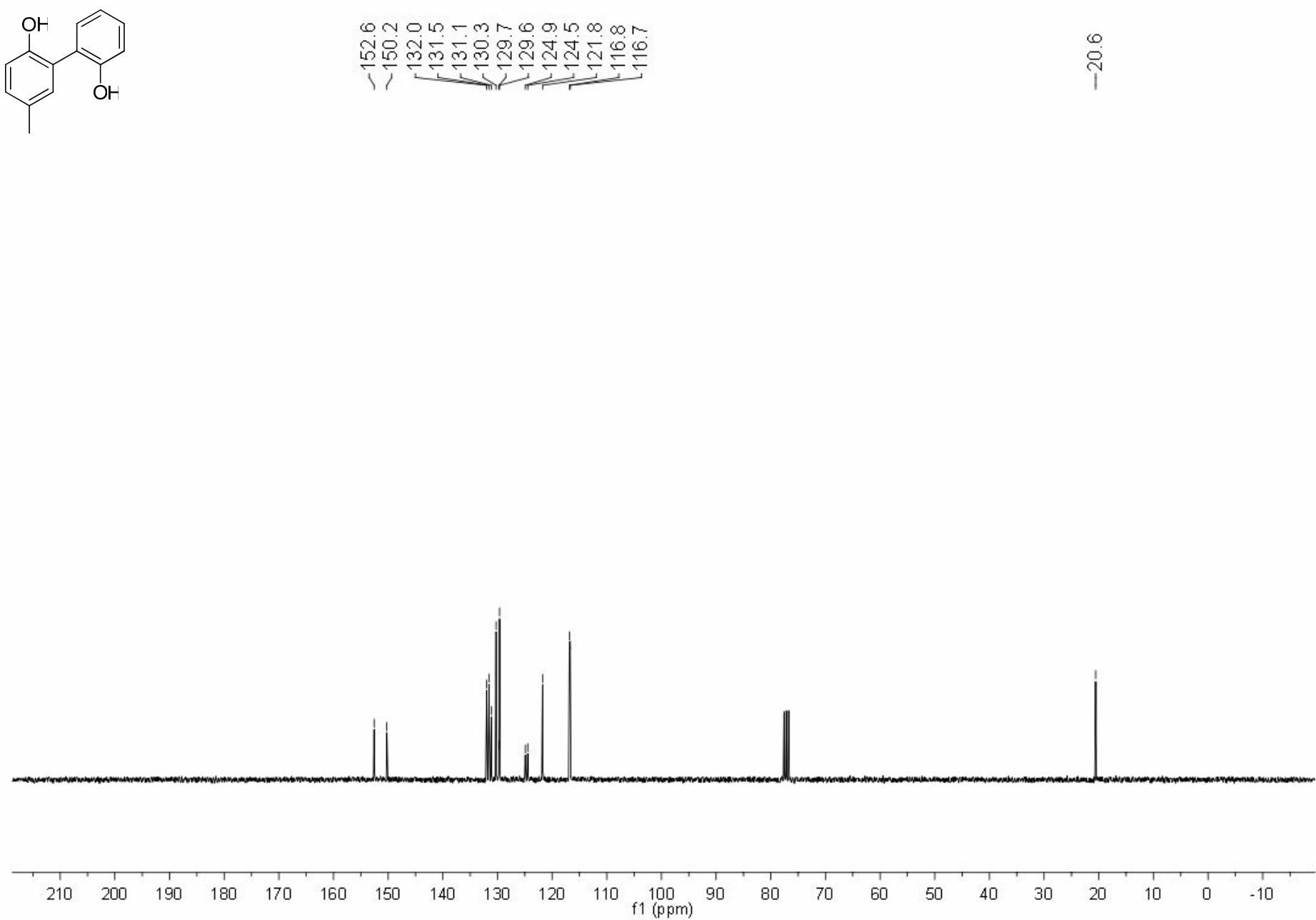
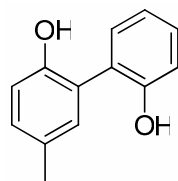
~116.8



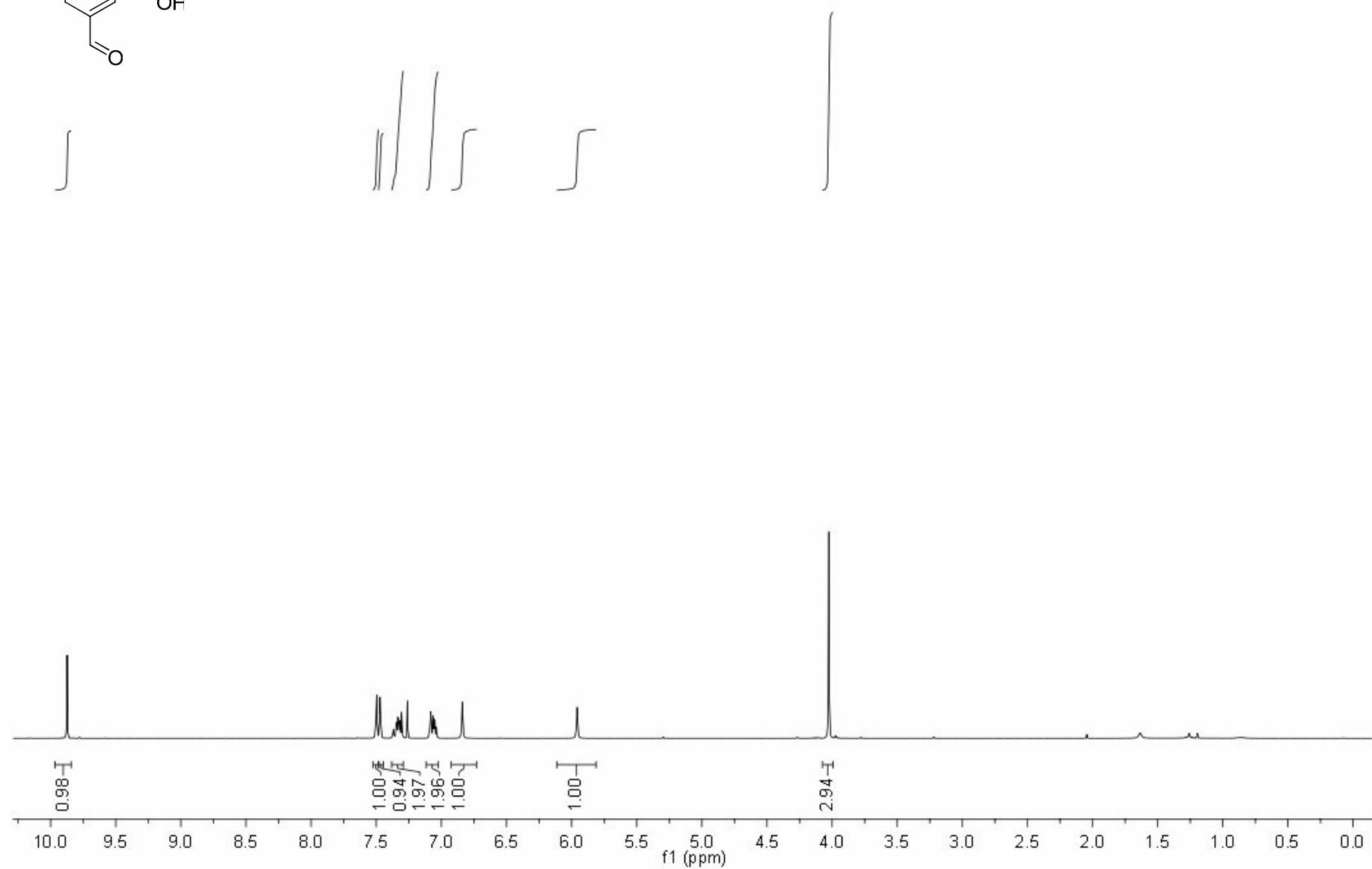
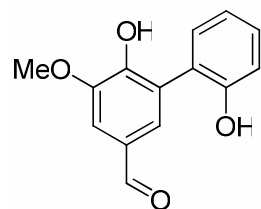
^1H NMR (CDCl_3 , 300 MHz) of **3ba**



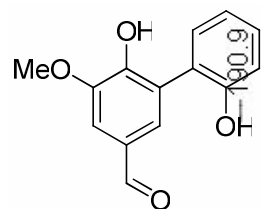
^{13}C NMR (CDCl_3 , 75 MHz) of **3ba**



^1H NMR (CDCl_3 , 300 MHz) of **3ca**

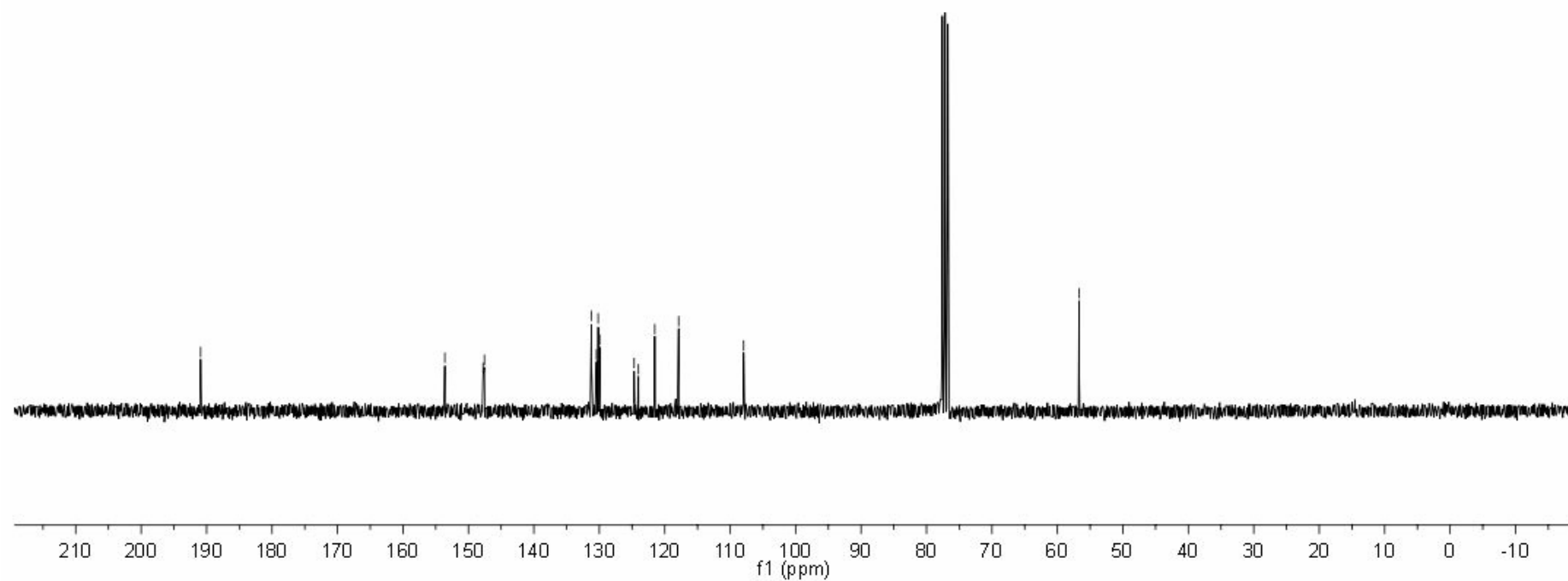


^{13}C NMR (CDCl_3 , 75 MHz) of **3ca**

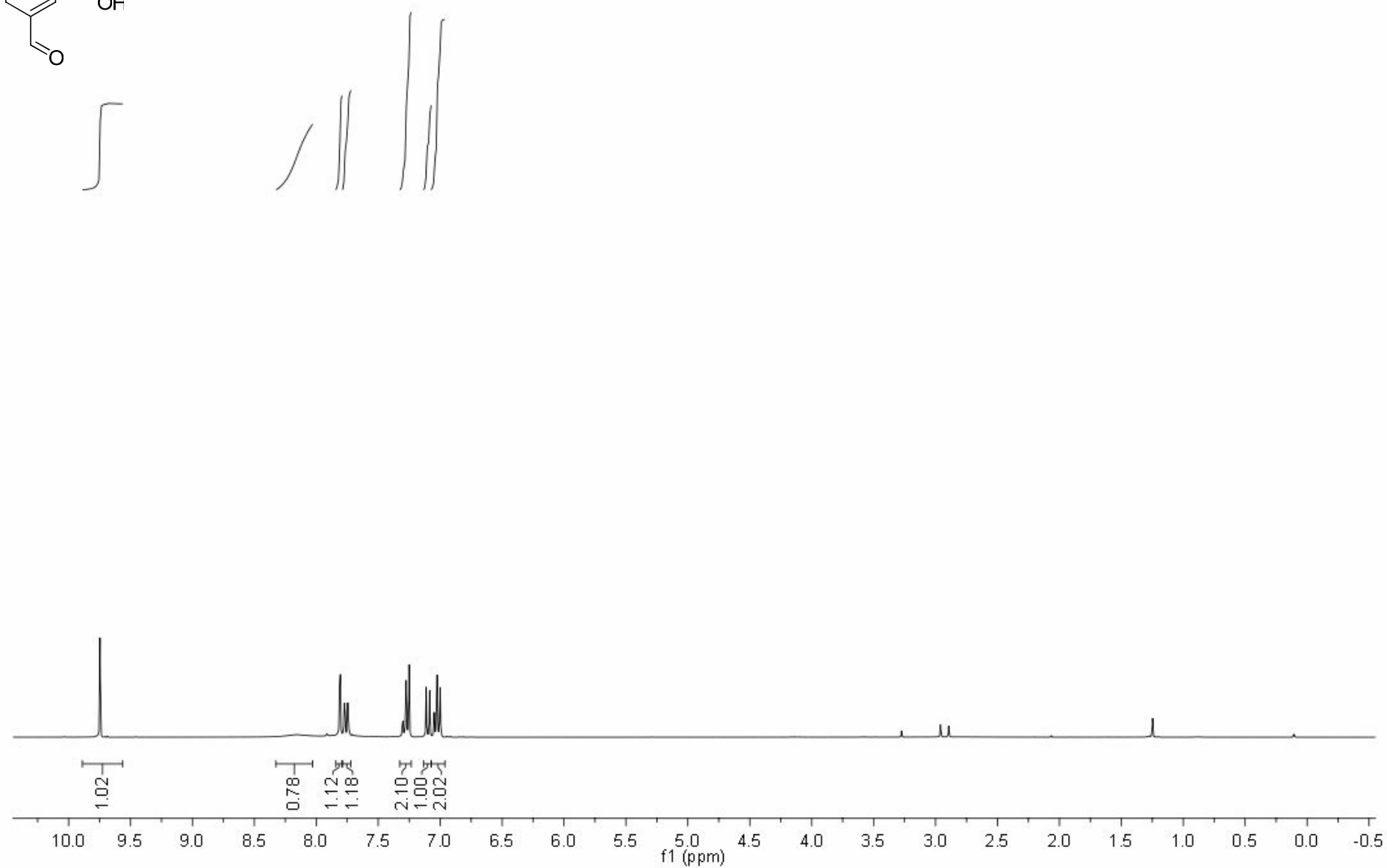
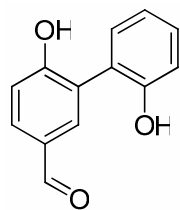


153.6
147.8
147.6
131.2
130.4
130.2
129.9
124.7
124.0
121.5
117.9
107.9

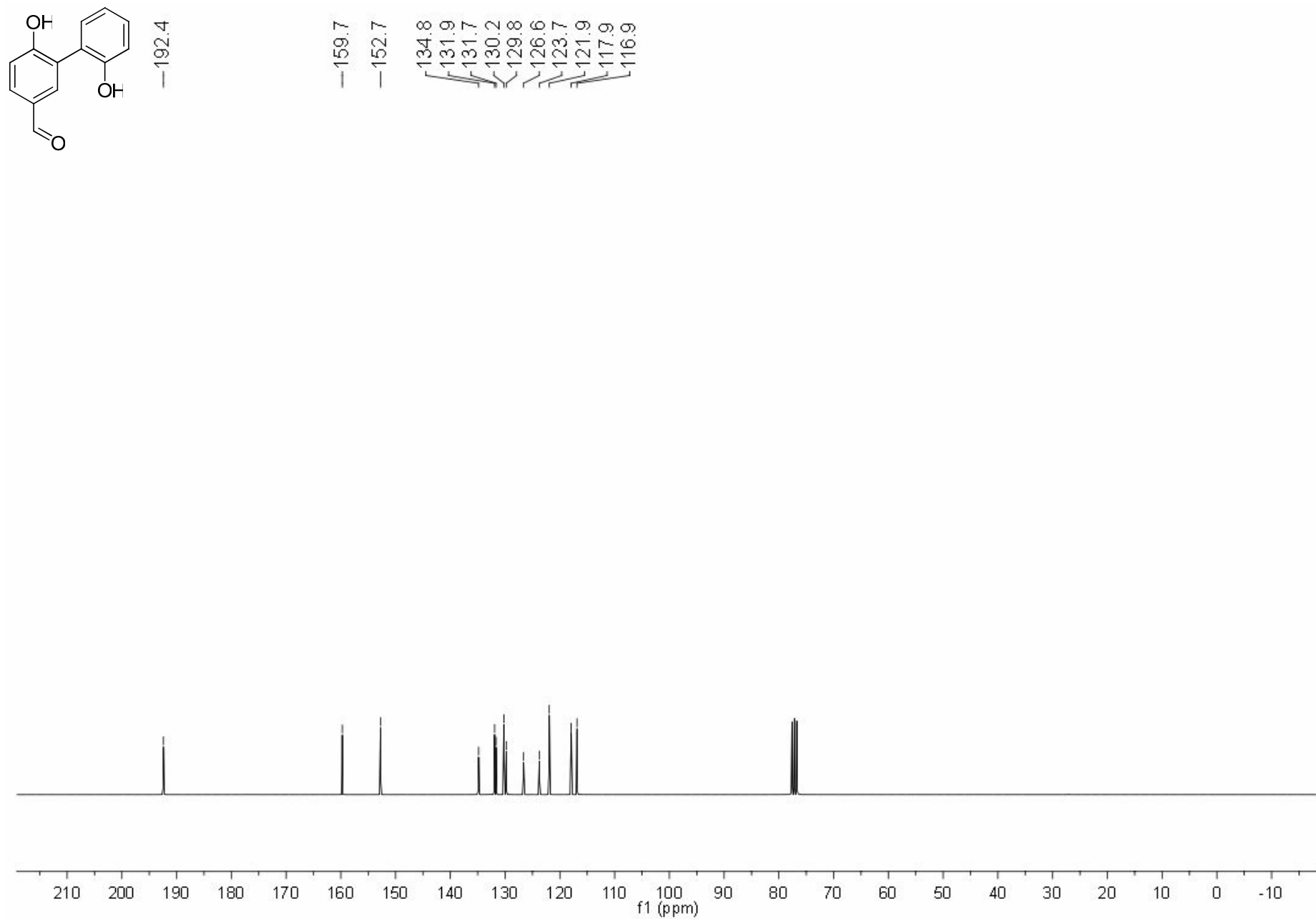
56.7



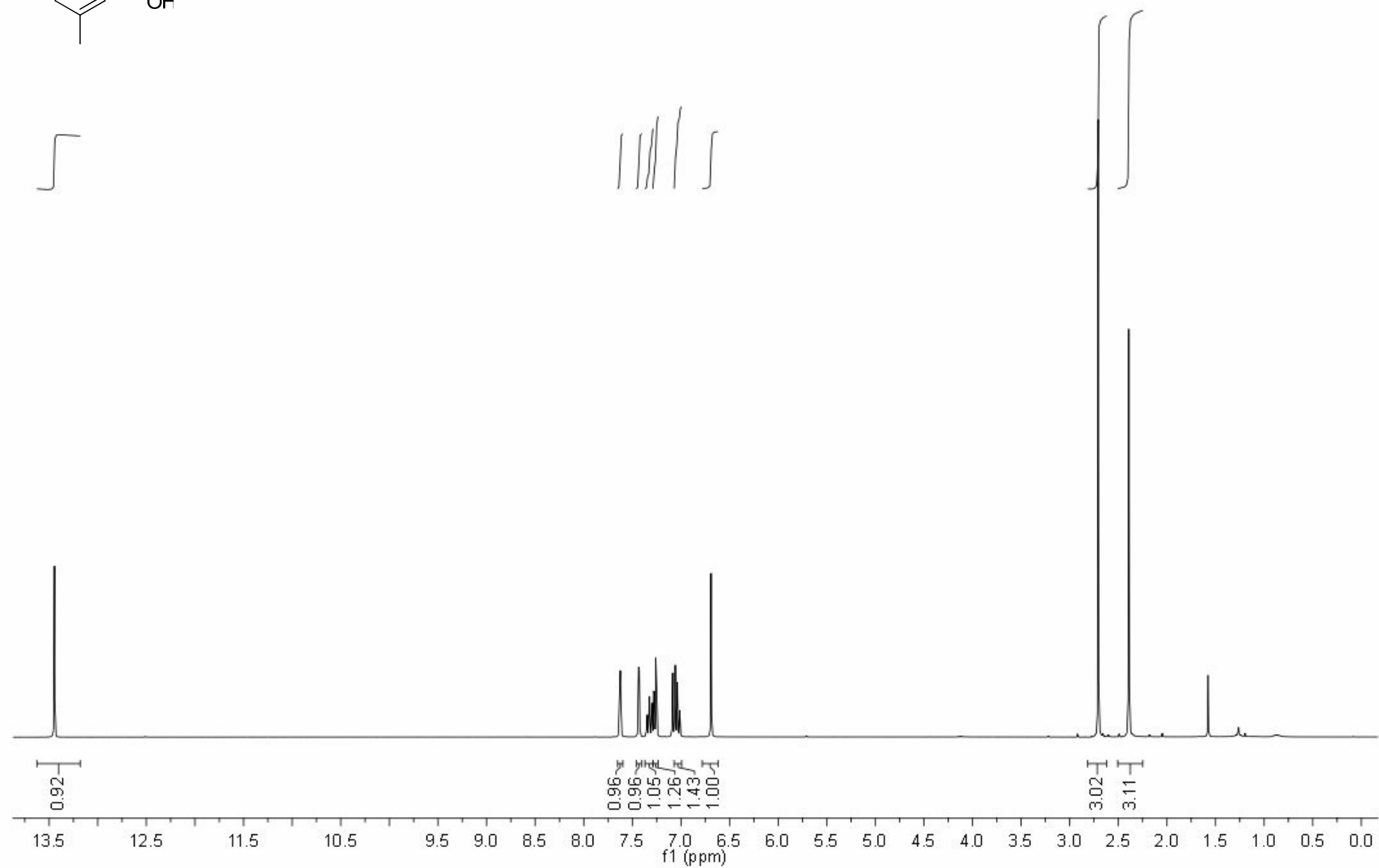
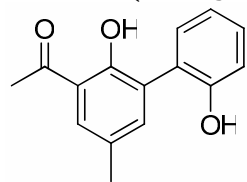
^1H NMR (CDCl_3 , 300 MHz) of **3da**



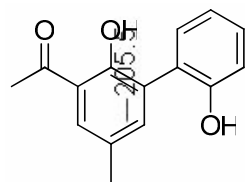
^{13}C NMR (CDCl_3 , 75 MHz) of **3da**



^1H NMR (CDCl_3 , 300 MHz) of **3ea**



^{13}C NMR (CDCl_3 , 75 MHz) of **3ea**



156.0
154.2

140.2

131.2

130.6

129.8

129.5

128.3

125.6

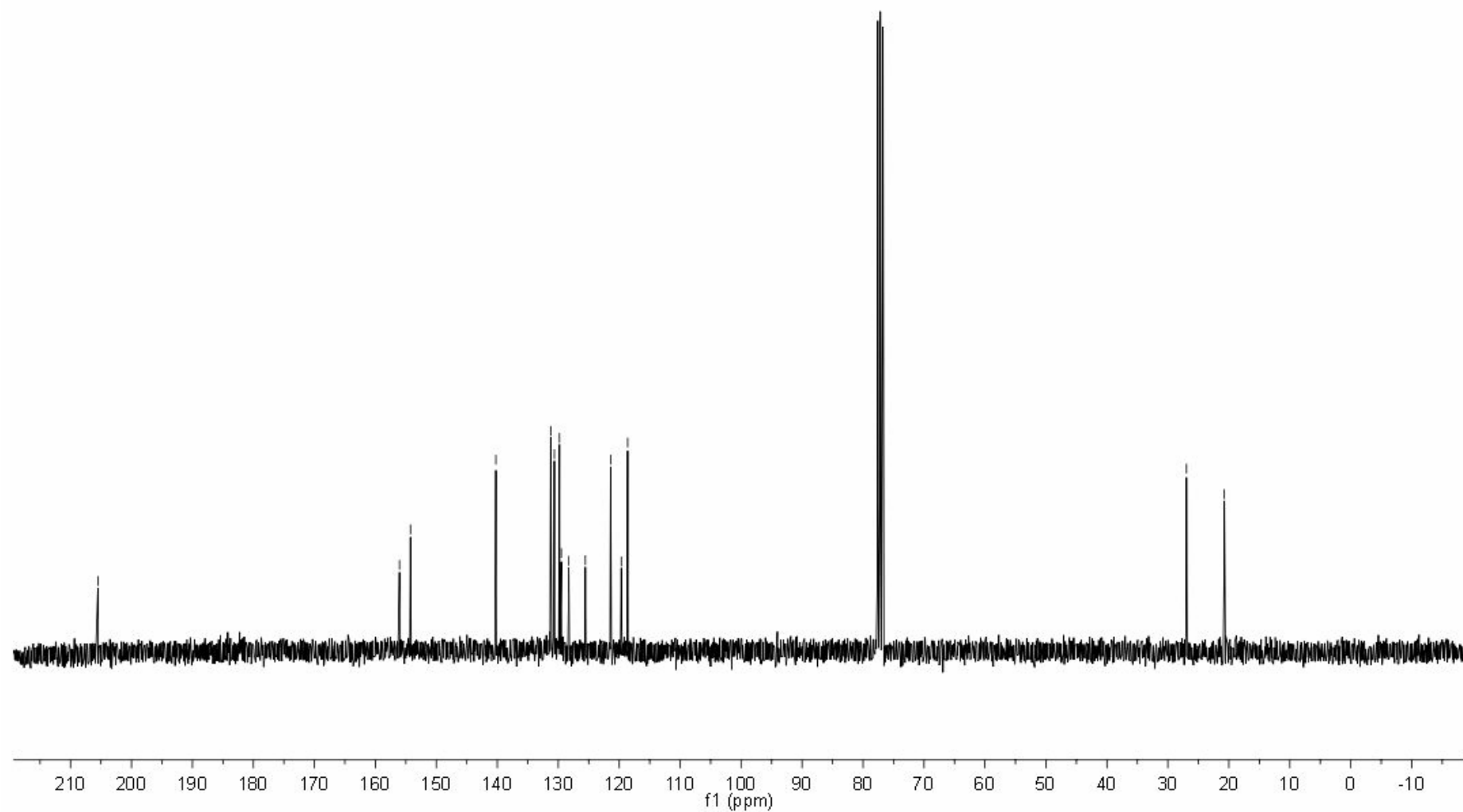
121.4

119.7

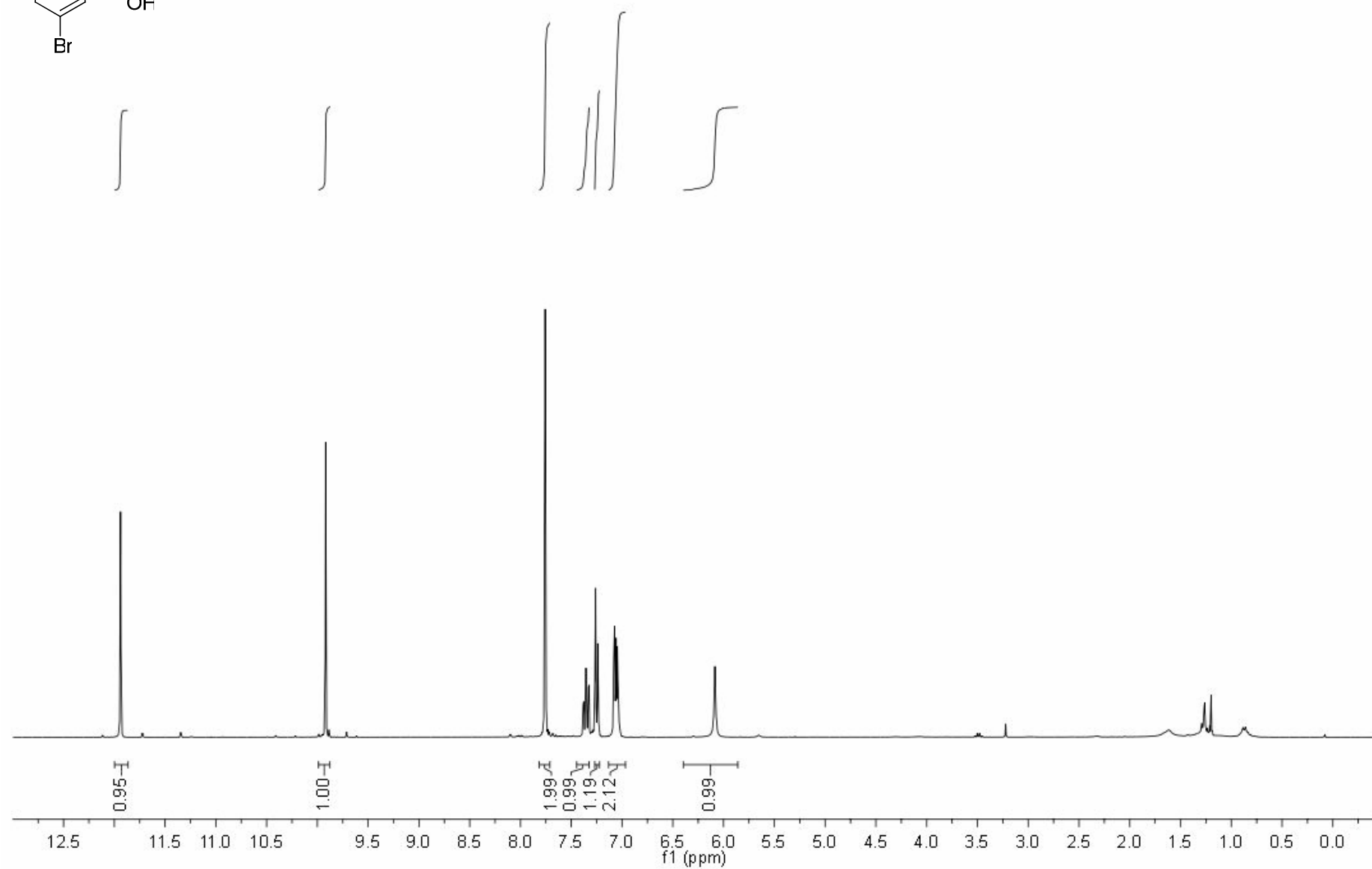
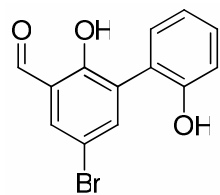
118.6

27.0

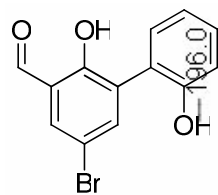
20.7



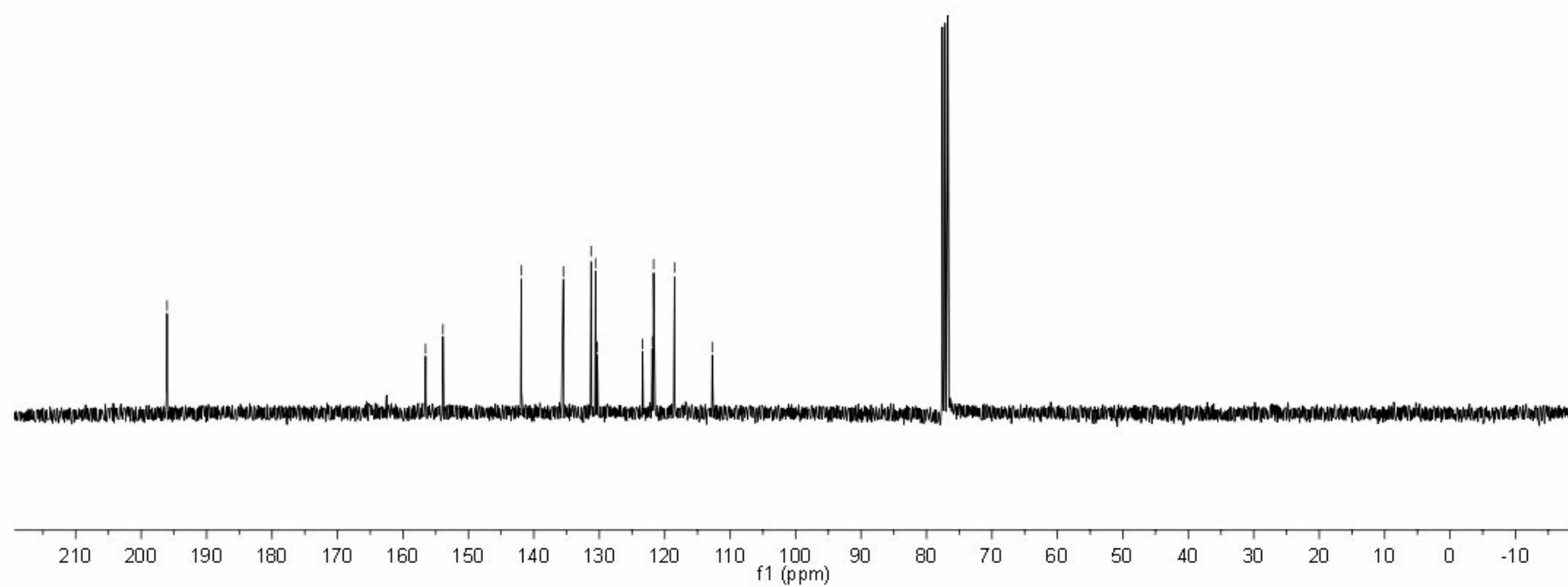
^1H NMR (CDCl_3 , 300 MHz) of **3fa**



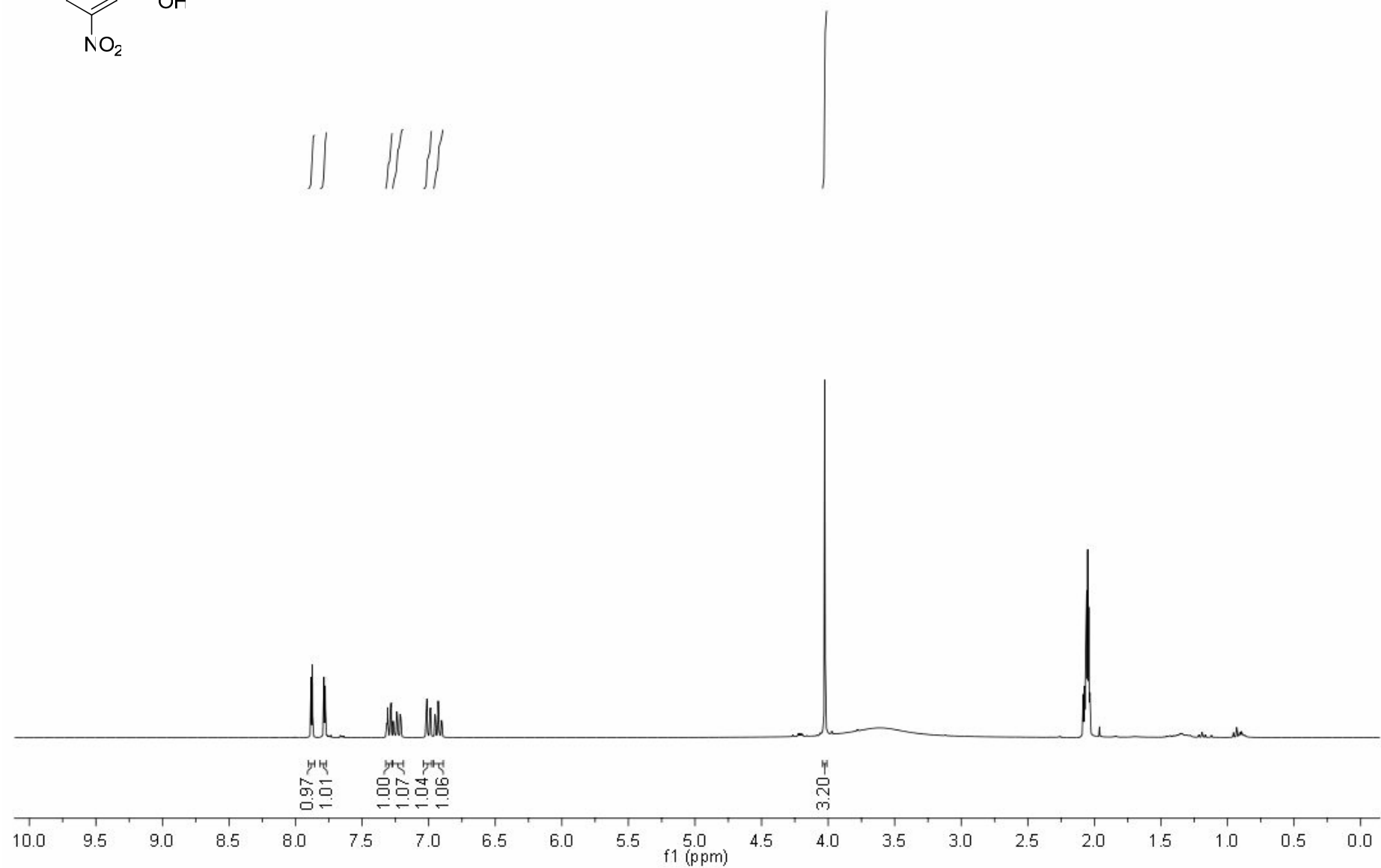
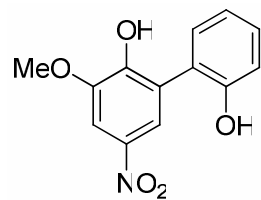
^{13}C NMR (CDCl_3 , 75 MHz) of **3fa**



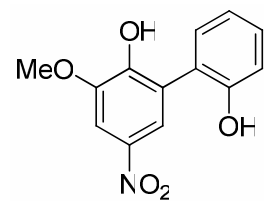
~156.5
~153.9
141.9
135.5
131.2
130.6
130.3
123.4
121.9
121.7
118.5
112.7



^1H NMR (acetone- d_6 , 300 MHz) of **3ga**

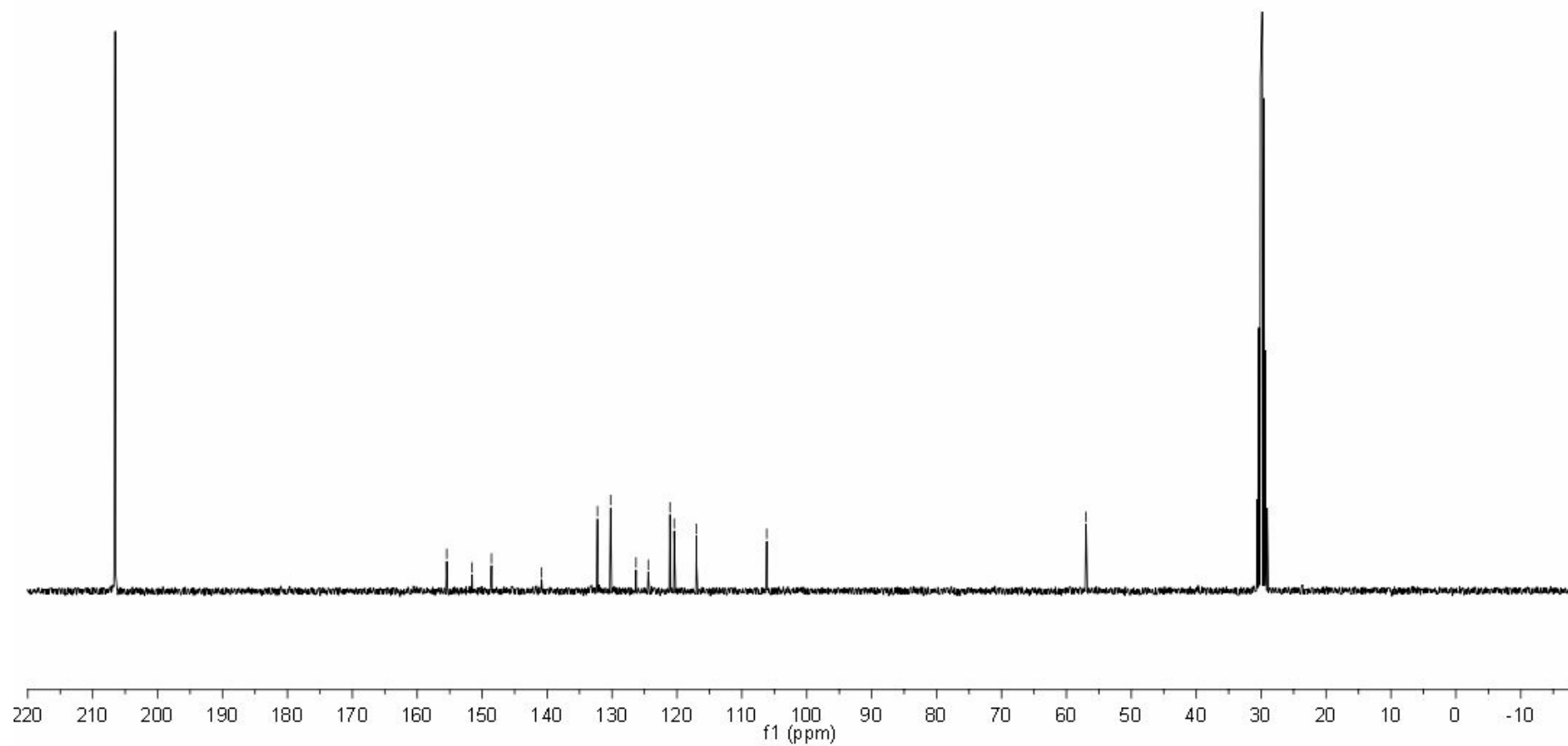


^{13}C NMR (acetone- d_6 , 75 MHz) of **3ga**

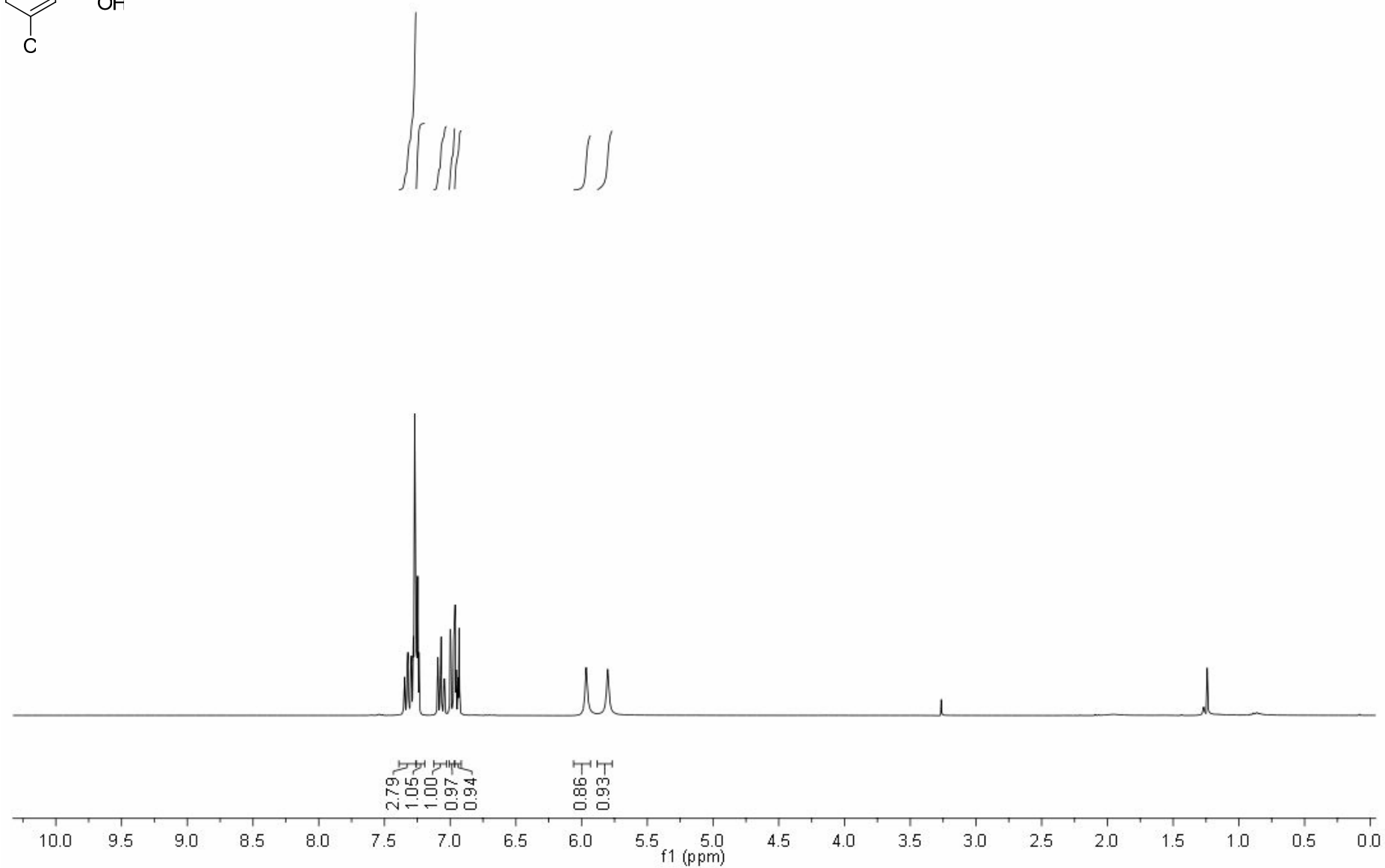
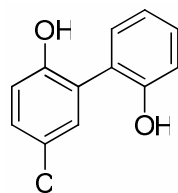


~155.5
~151.5
~148.6
~140.8
~132.2
~130.2
~126.3
~124.4
~121.1
~120.4
~117.0
—106.2

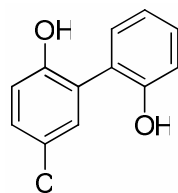
—57.0



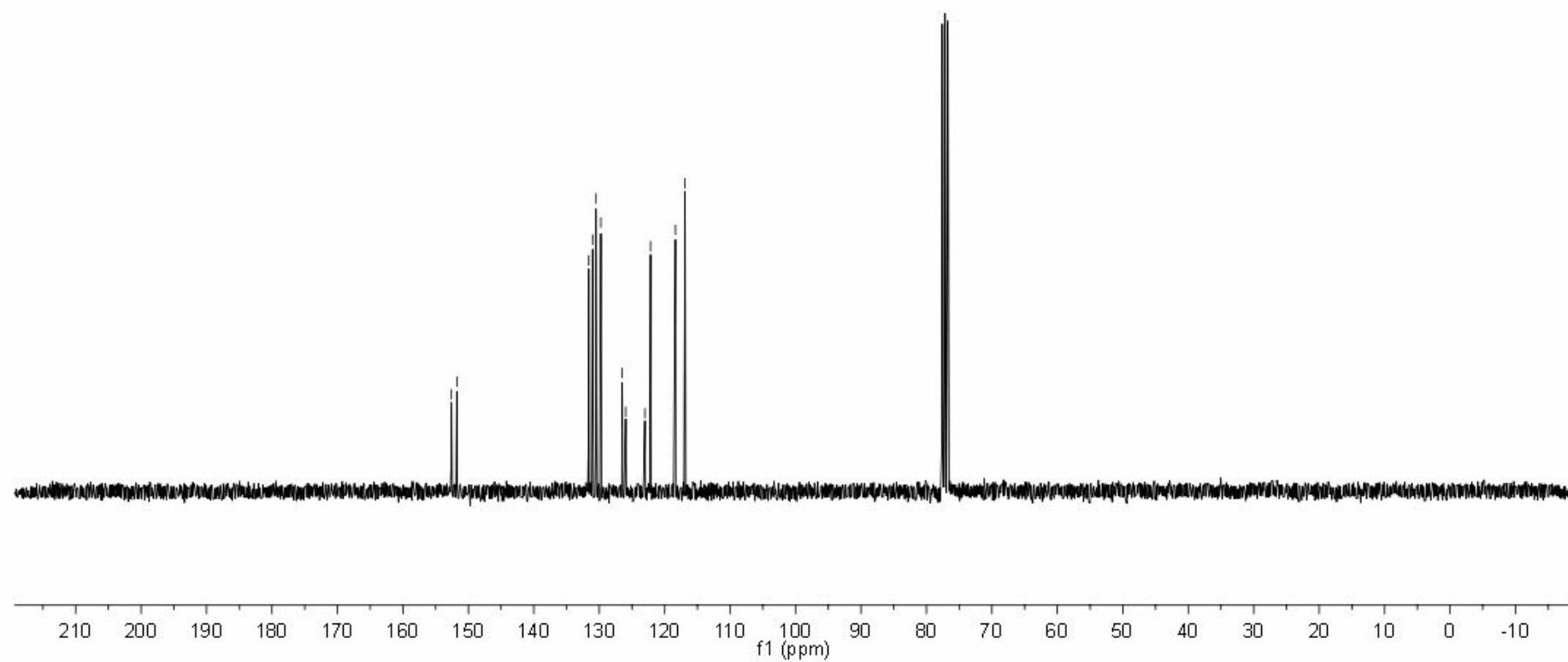
^1H NMR (CDCl_3 , 300 MHz) of **3ha**



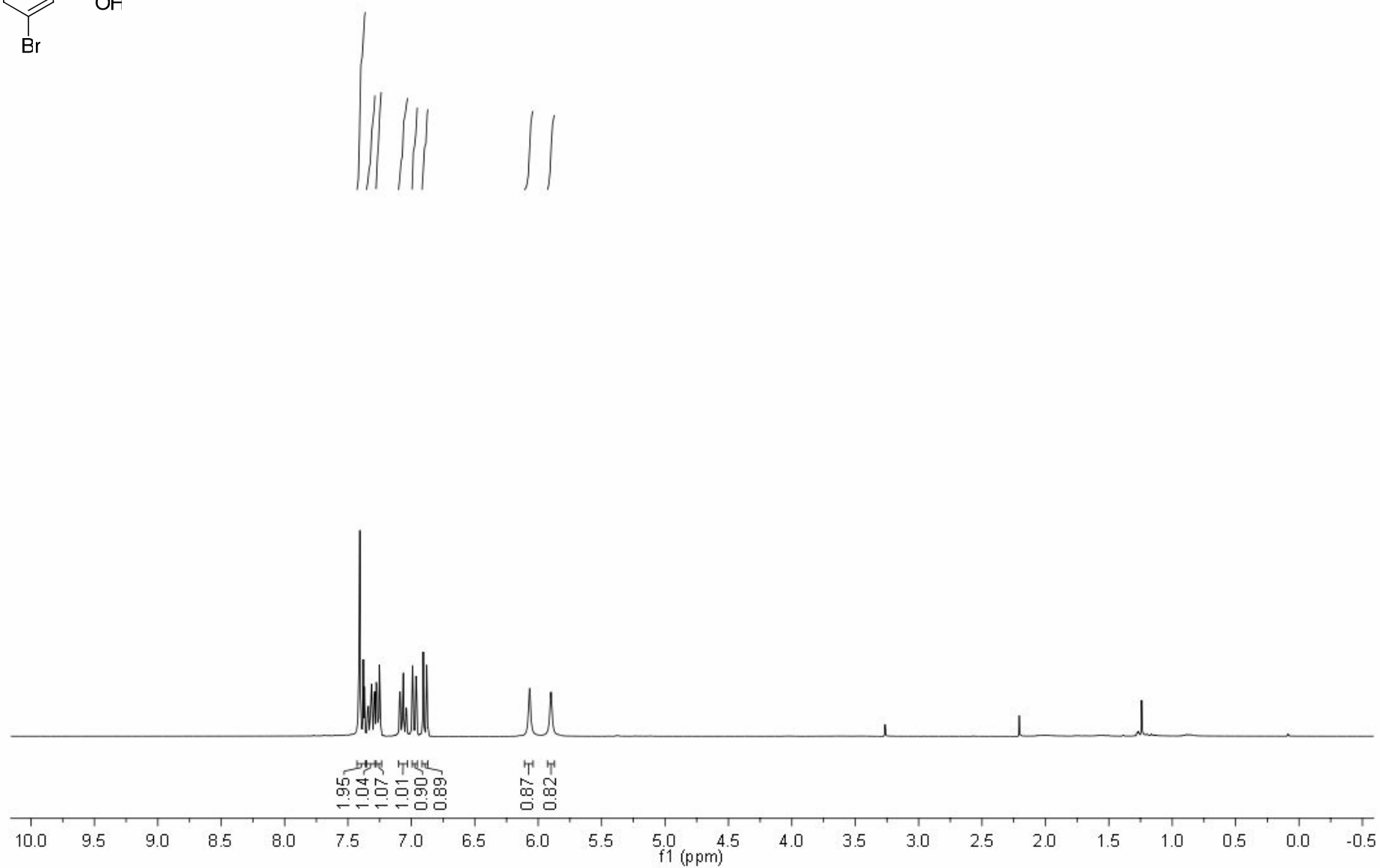
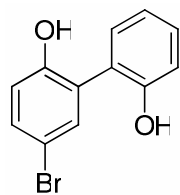
^{13}C NMR (CDCl_3 , 75 MHz) of **3ha**



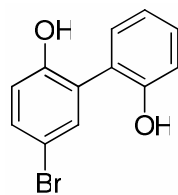
152.6
151.7
131.6
131.0
130.5
129.7
126.5
125.9
123.0
122.2
118.4
116.9



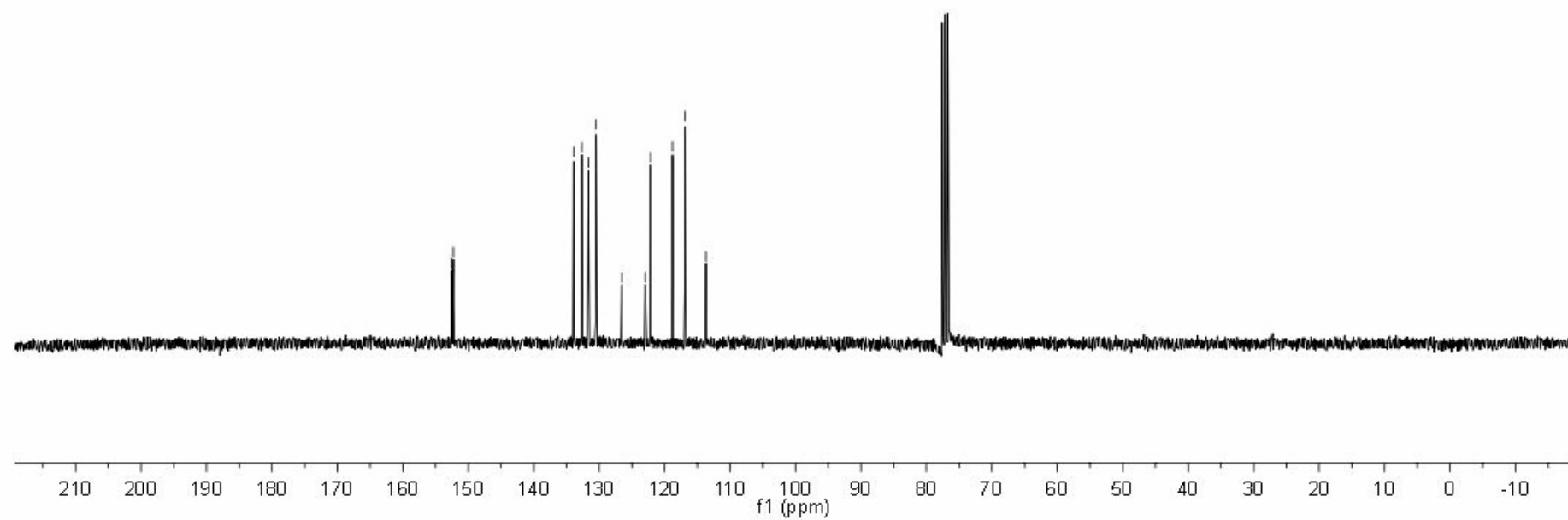
^1H NMR (CDCl_3 , 300 MHz) of **3ia**



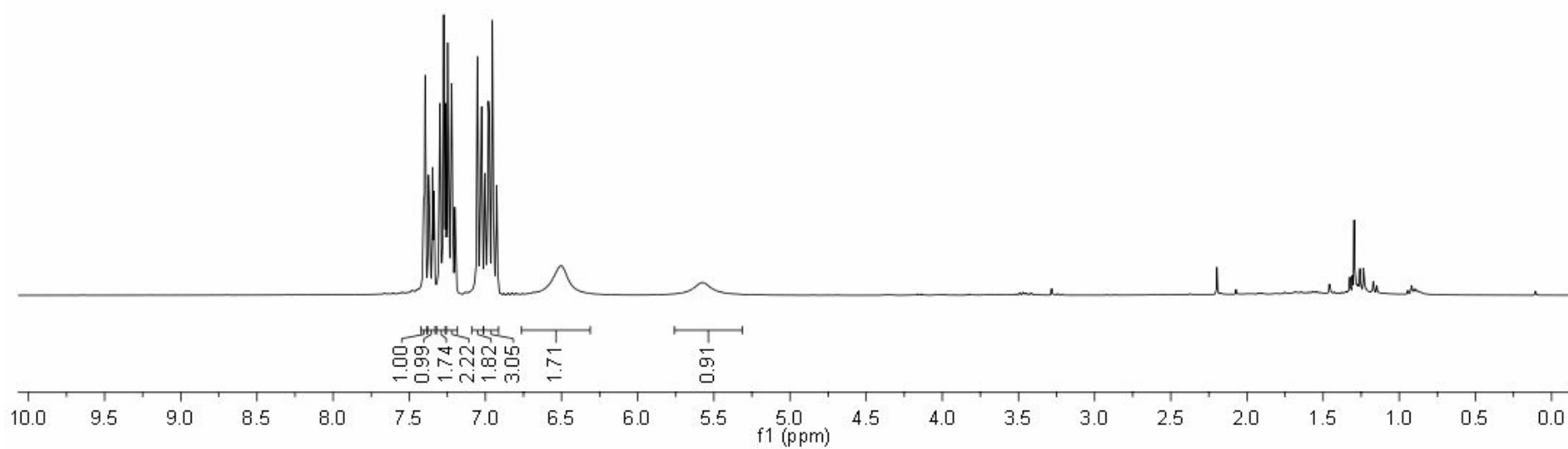
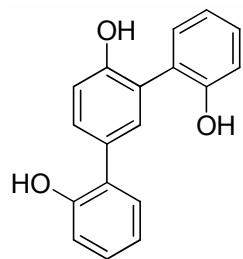
^{13}C NMR (CDCl_3 , 75 MHz) of **3ia**



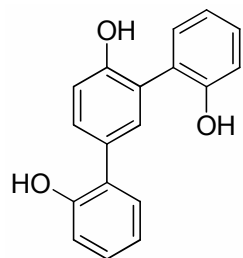
152.6
152.3
133.9
132.7
131.6
130.5
126.5
123.0
122.1
118.8
116.9
113.7



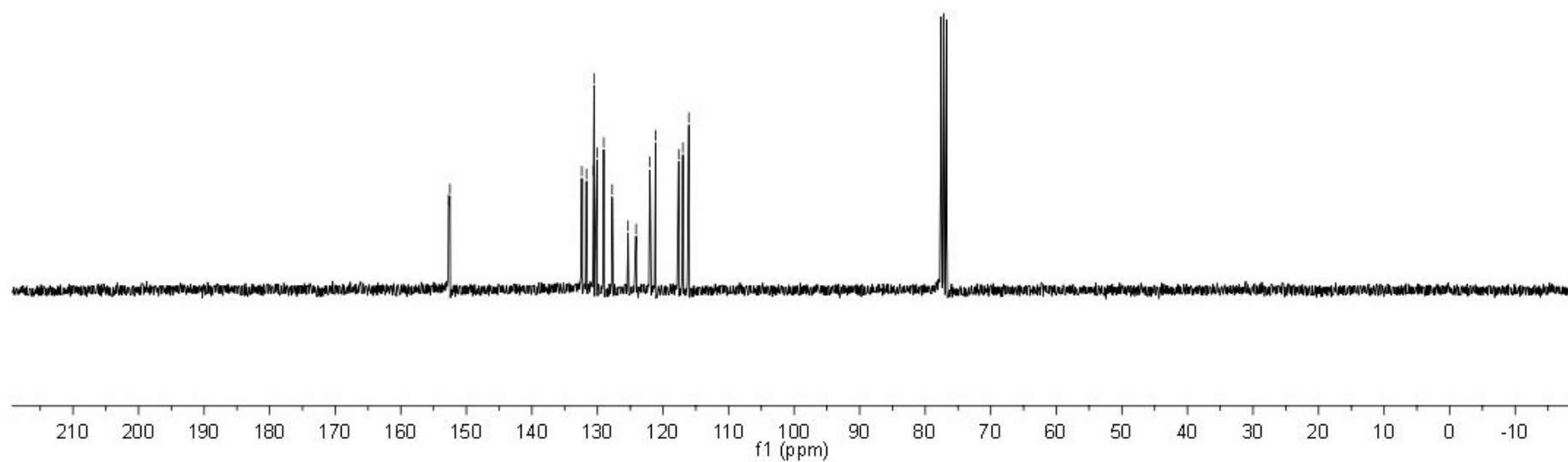
^1H NMR (CDCl_3 , 300 MHz) of **3ia'**



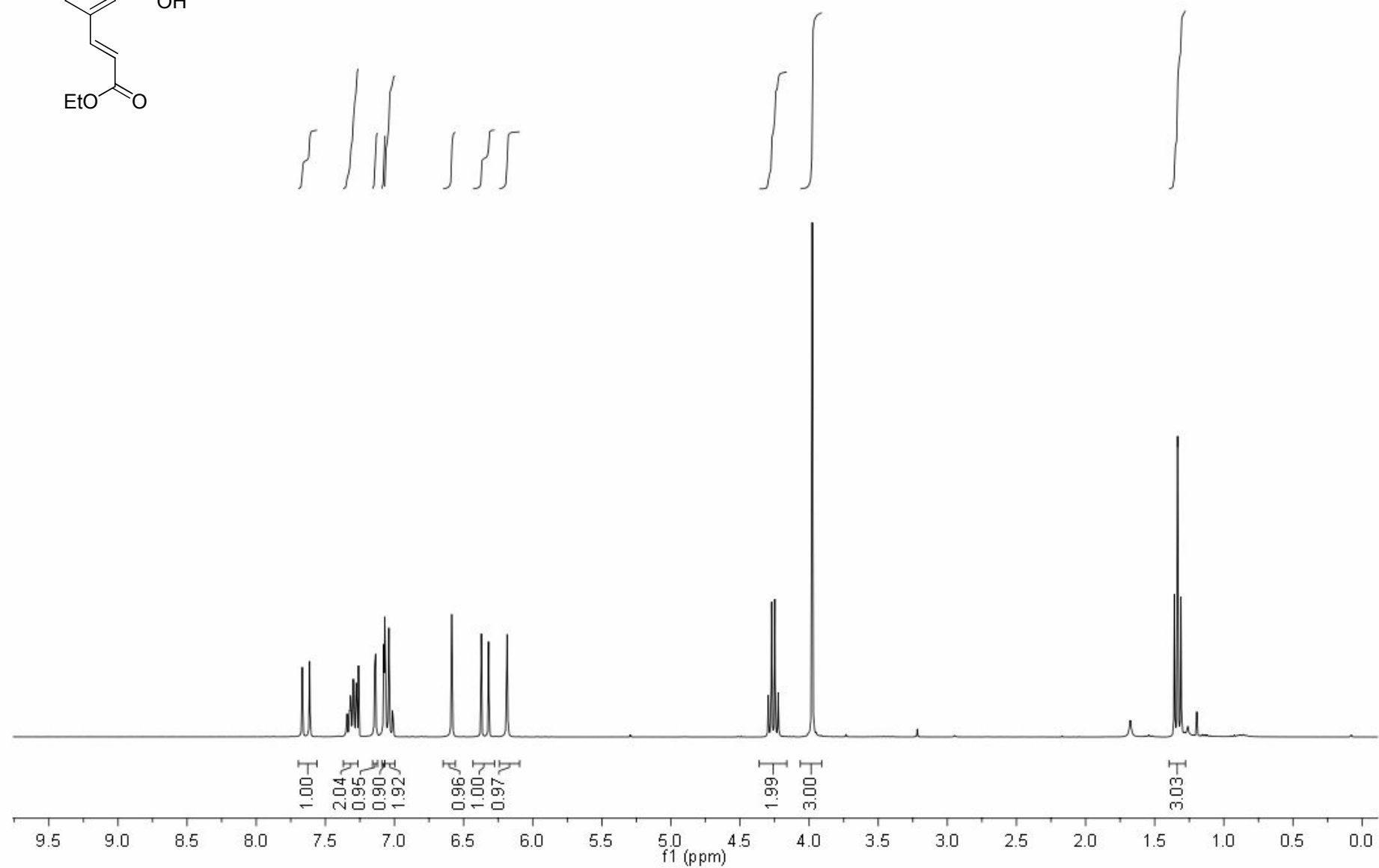
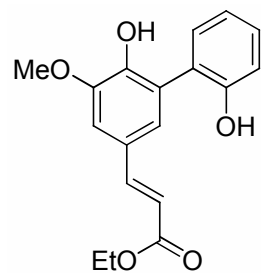
^{13}C NMR (CDCl_3 , 75 MHz) of **3ia'**



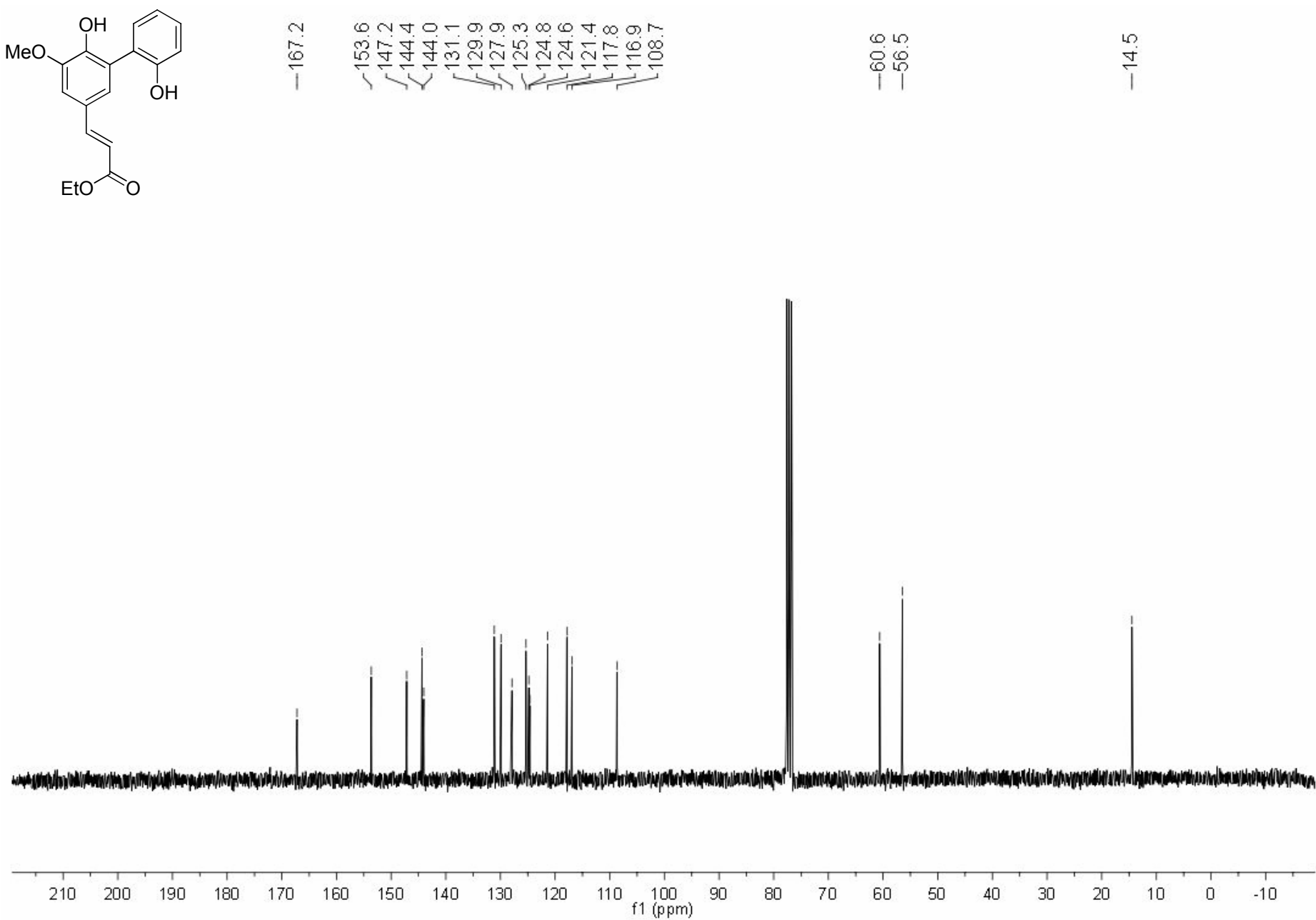
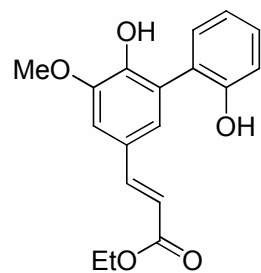
152.7
152.6
152.5
132.4
131.7
130.6
130.5
130.1
129.0
127.8
125.3
124.1
122.0
121.1
117.6
117.0
116.1



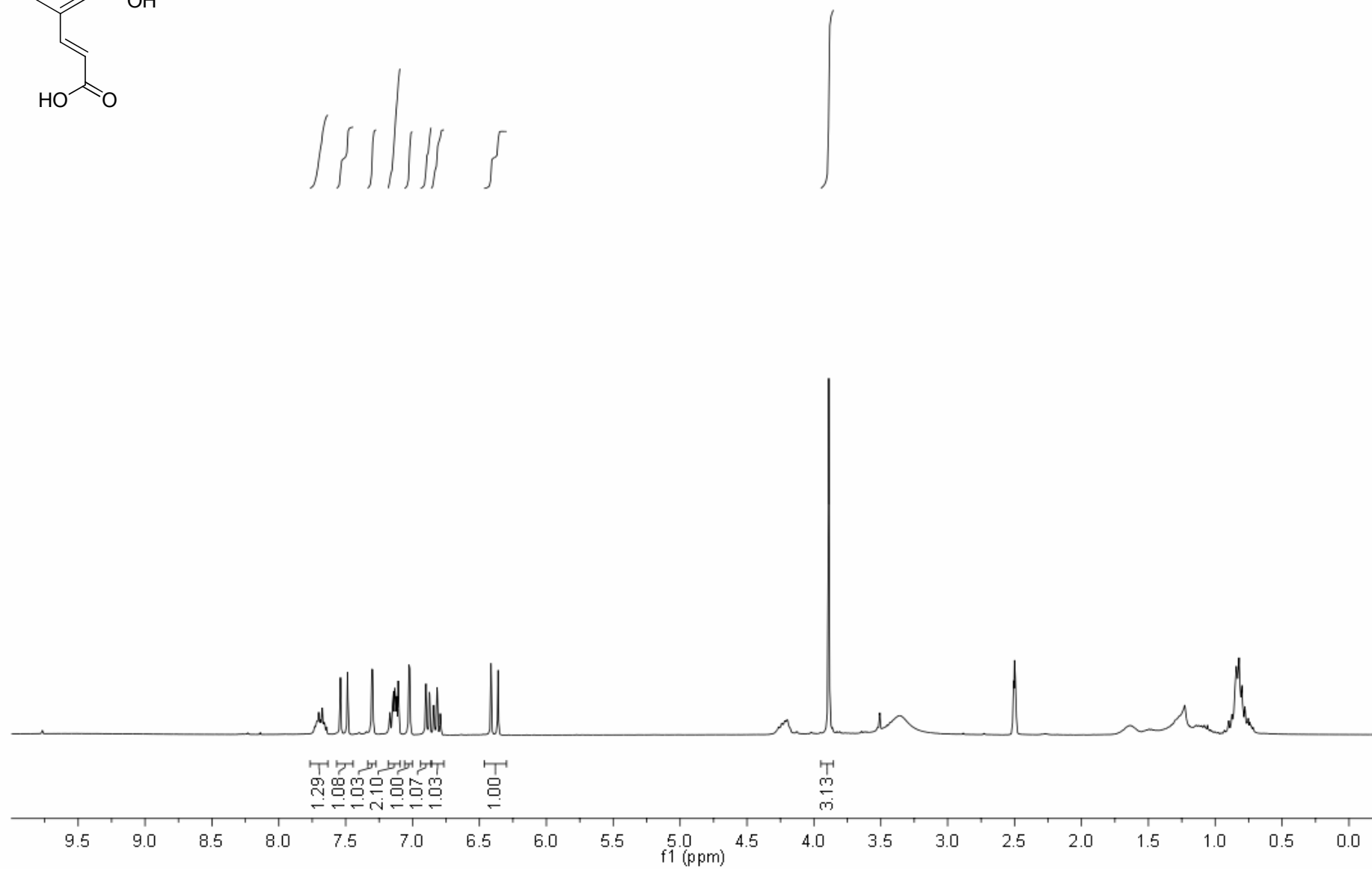
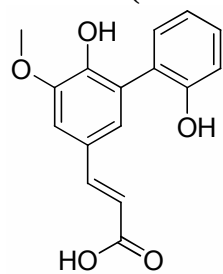
^1H NMR (CDCl_3 , 300 MHz) of **3ja**



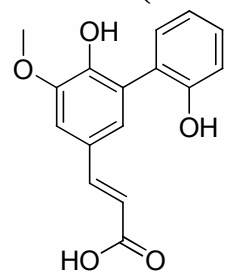
^{13}C NMR (CDCl_3 , 75 MHz) of **3ja**



^1H NMR (DMSO- d_6 , 300 MHz) of **3ka**

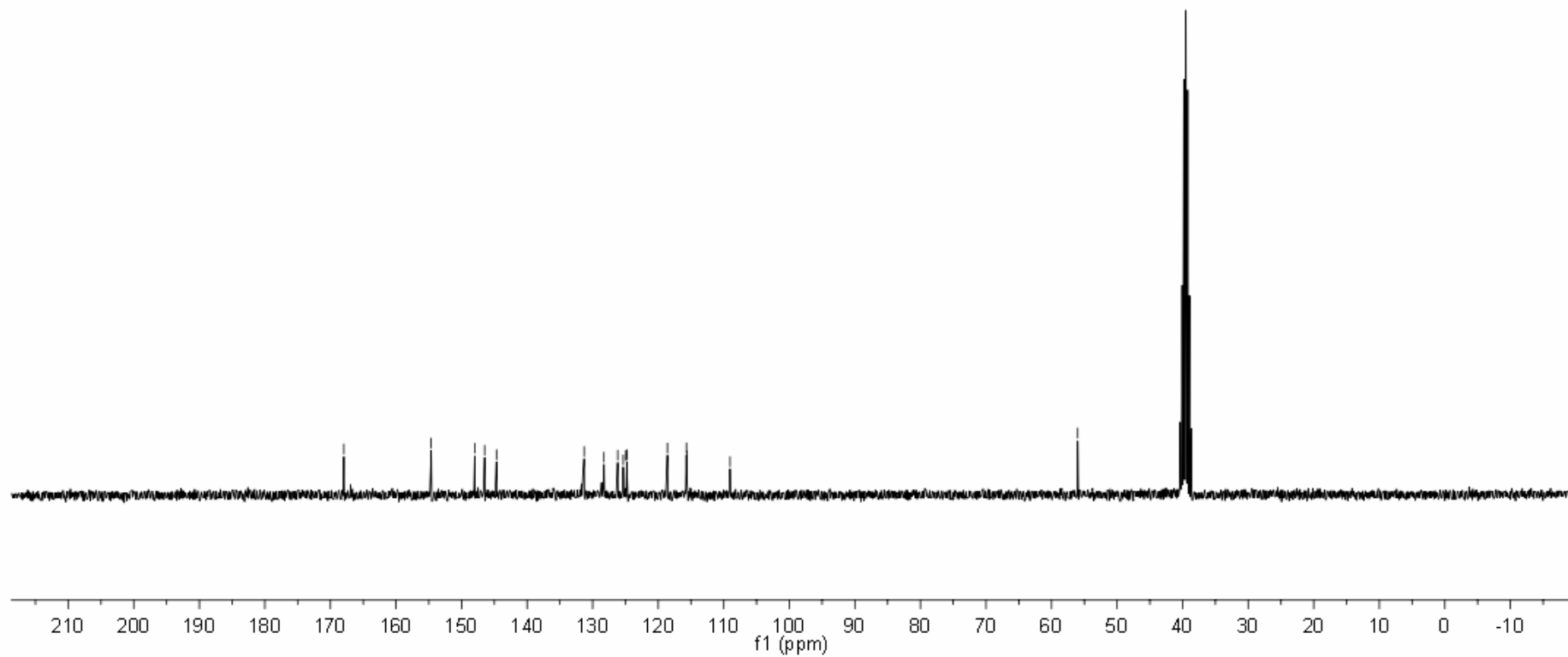


^{13}C NMR (DMSO- d_6 , 75 MHz) of **3ka**

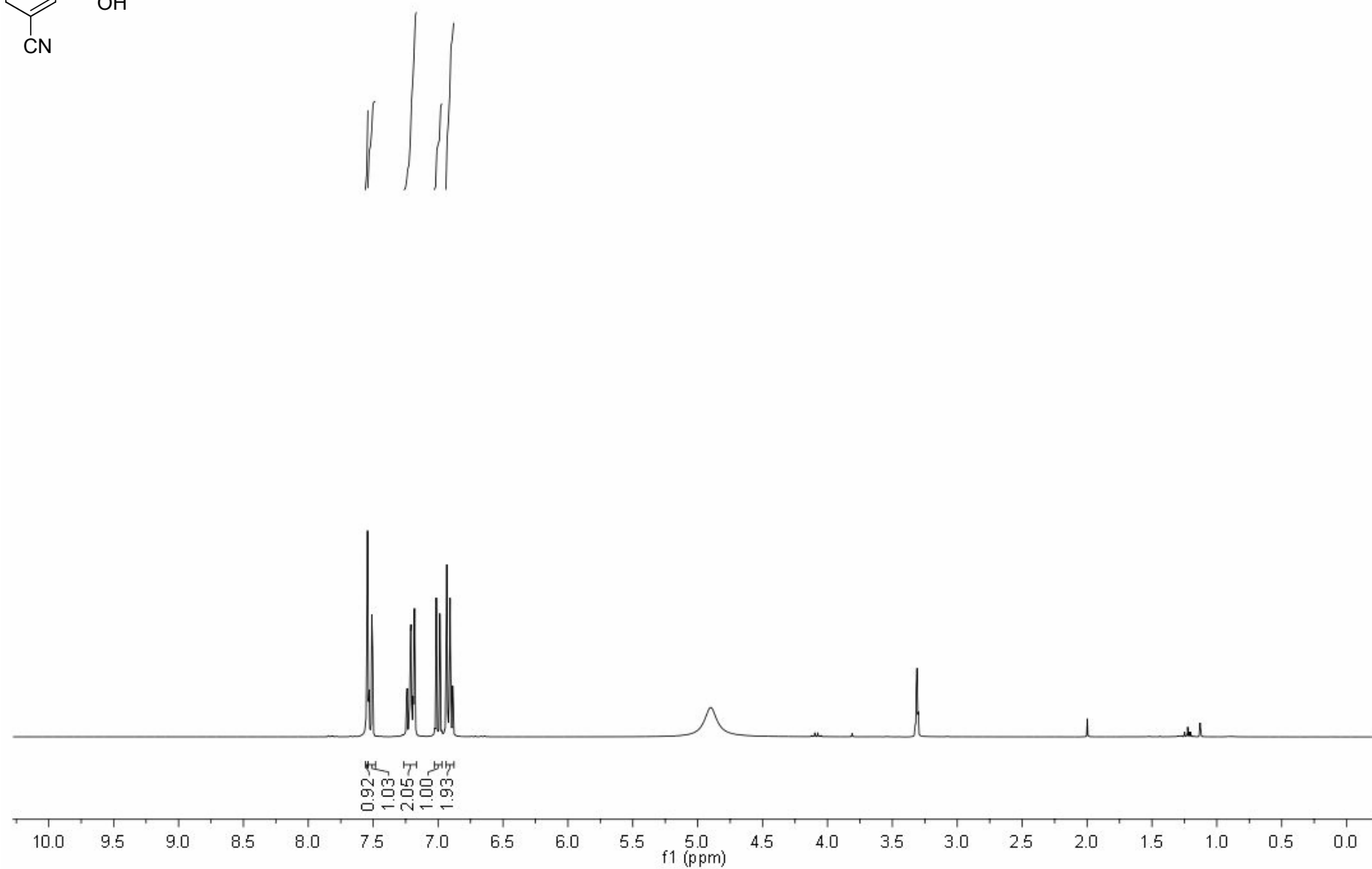
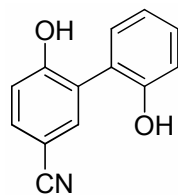


168.0
154.6
148.0
146.5
144.7
131.3
128.3
126.2
125.3
124.9
124.8
118.6
115.7
115.6
109.0

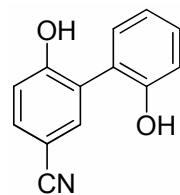
56.0



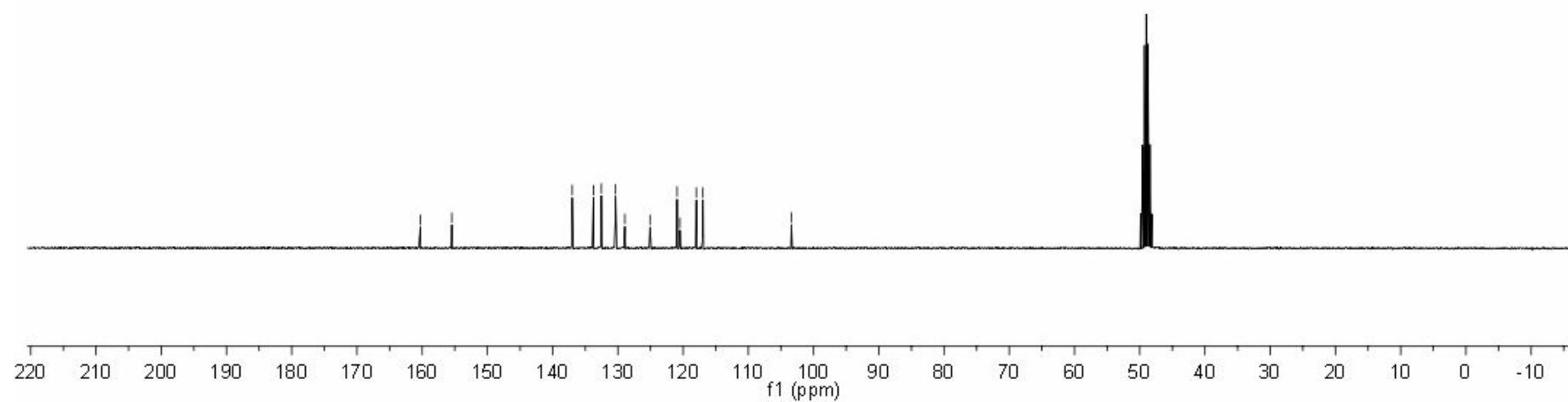
^1H NMR (methanol- d_4 , 300 MHz) of **3la**



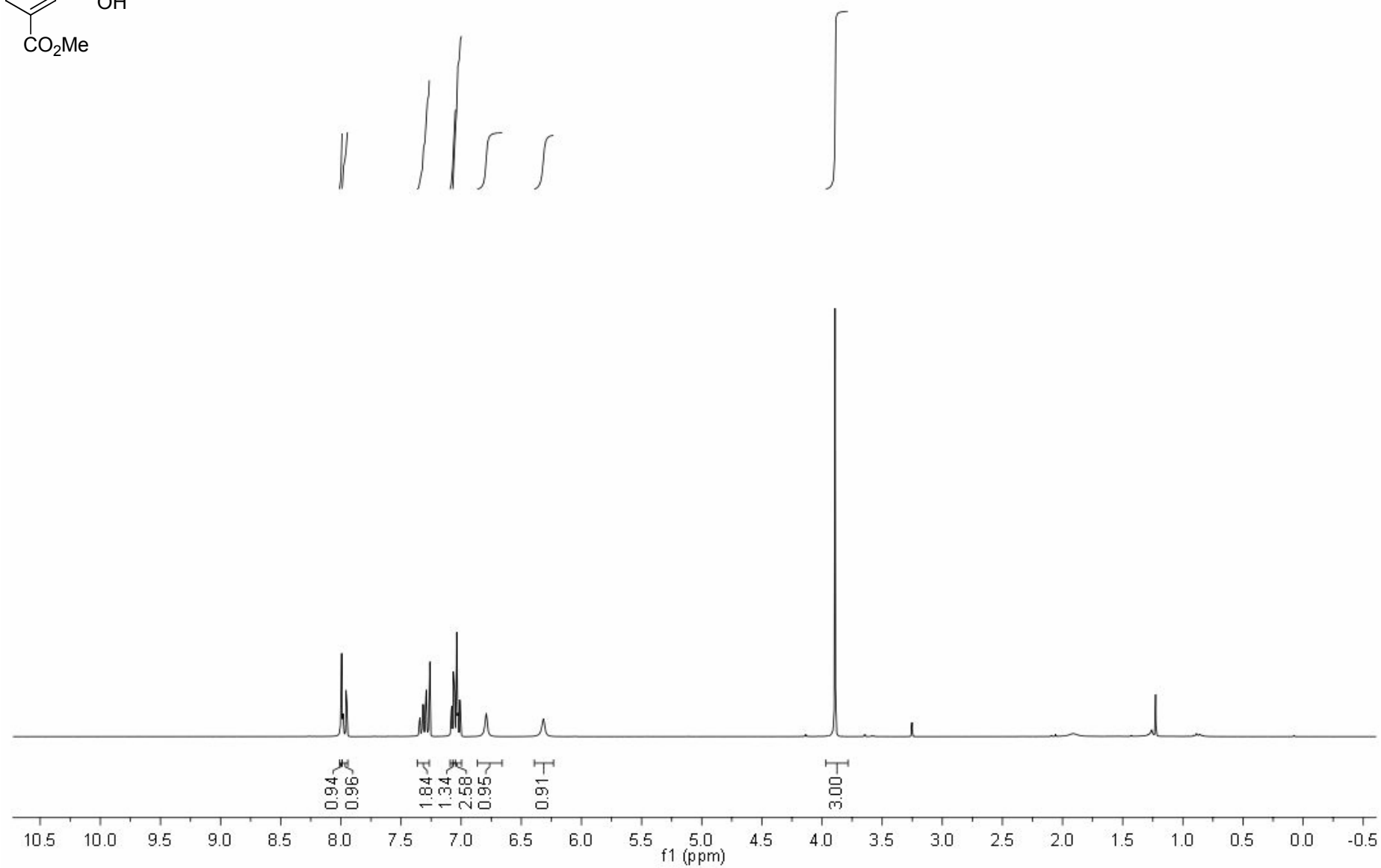
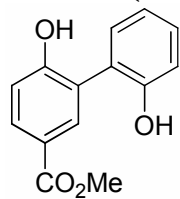
^{13}C NMR (methanol- d_4 , 75 MHz) of **3la**



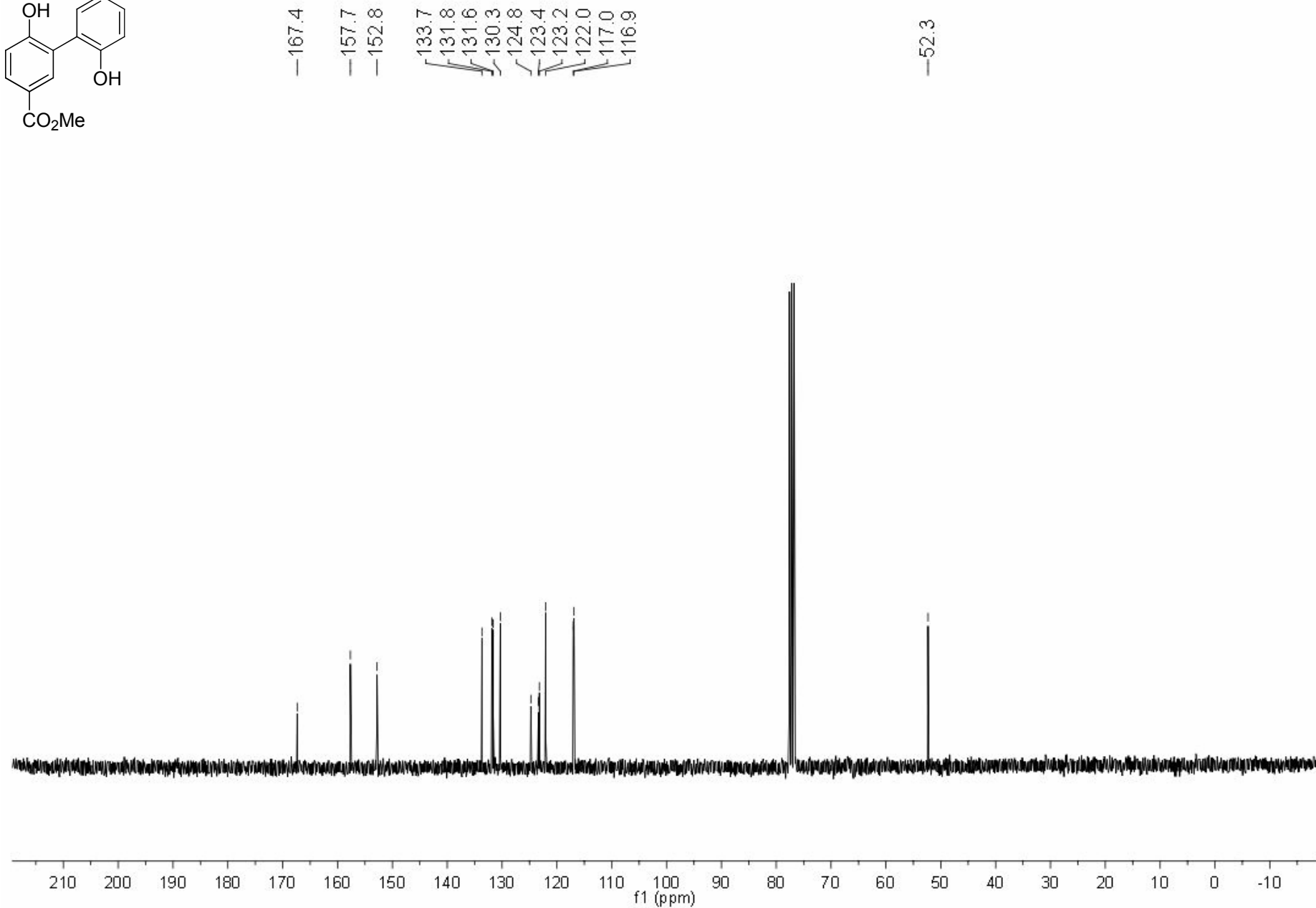
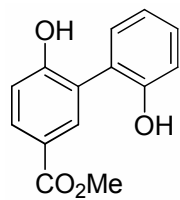
—160.28
—155.46
137.00
133.74
132.53
130.36
128.93
125.07
120.92
120.48
117.97
116.96
—103.37



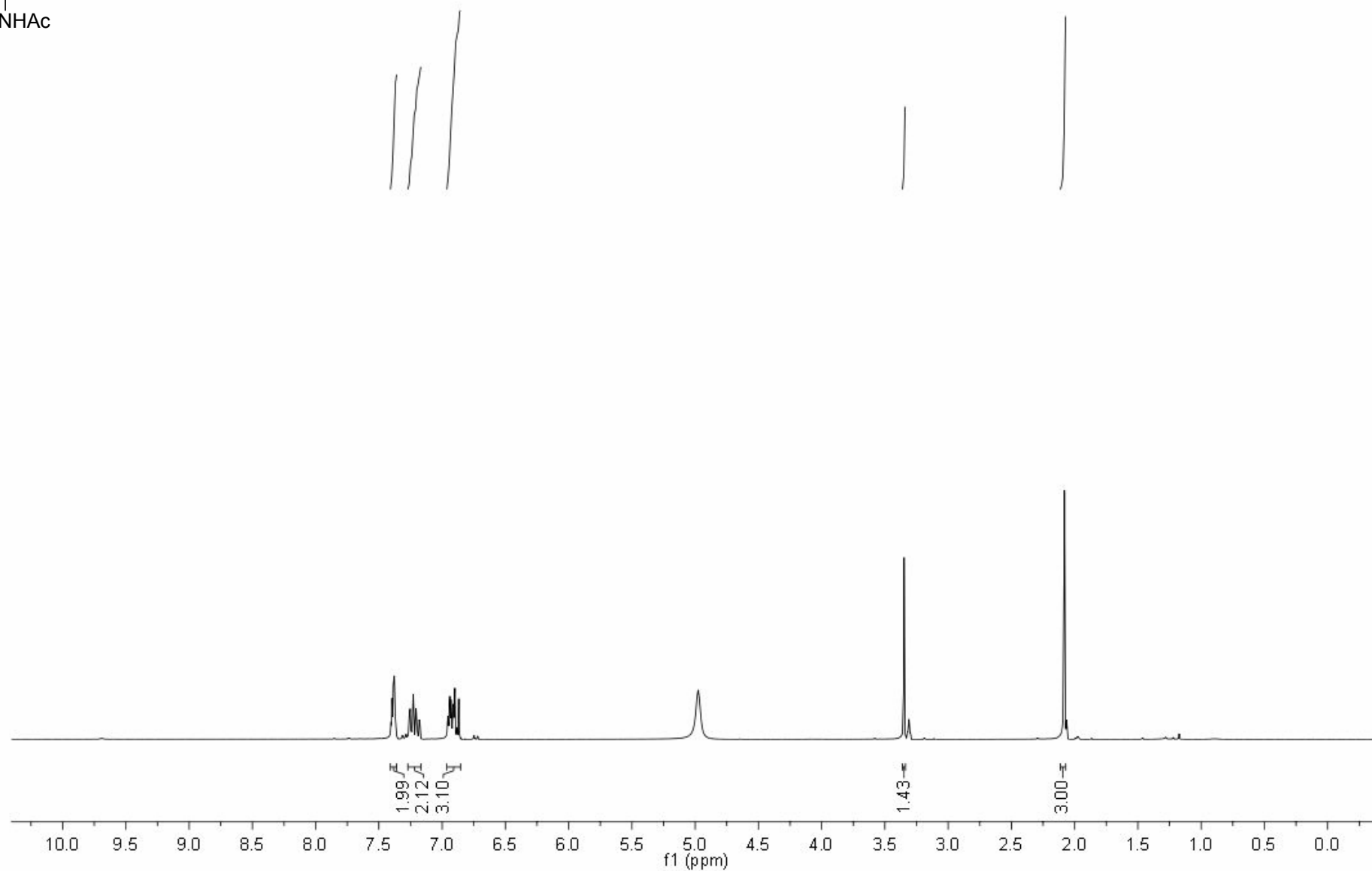
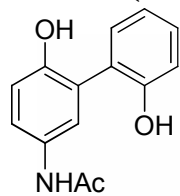
^1H NMR (CDCl_3 , 300 MHz) of **3ma**



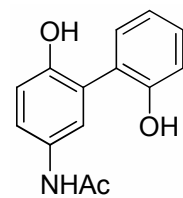
^{13}C NMR (CDCl_3 , 75 MHz) of **3ma**



^1H NMR (methanol- d_4 , 300 MHz) of **3na**



^{13}C NMR (methanol- d_4 , 75 MHz) of **3na**



171.5
155.0
152.0
132.6
132.3
129.9
127.8
127.2
125.3
122.5
121.4
117.4
117.3
23.5

