

## SUPPORTING INFORMATION

### Investigation of benzoyloximes as benzoylating reagents: Benzoyl-Oxyma as a chemoselective benzoylating reagent

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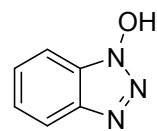
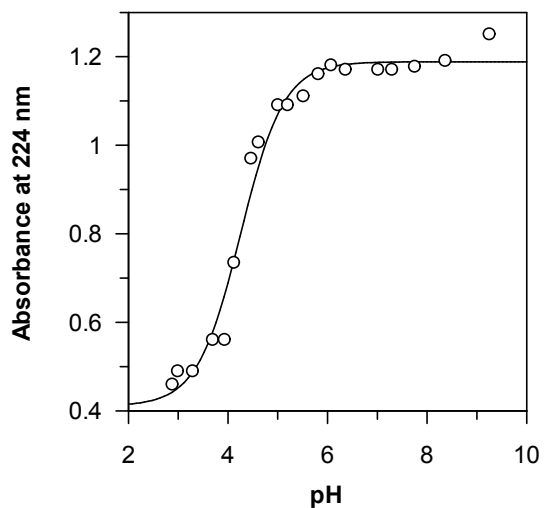
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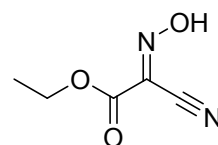
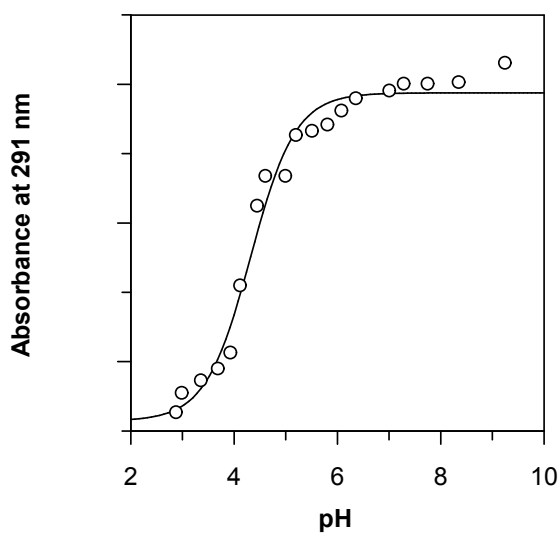
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## Spectrophotometric titrations



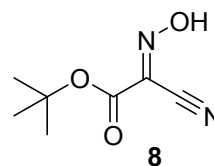
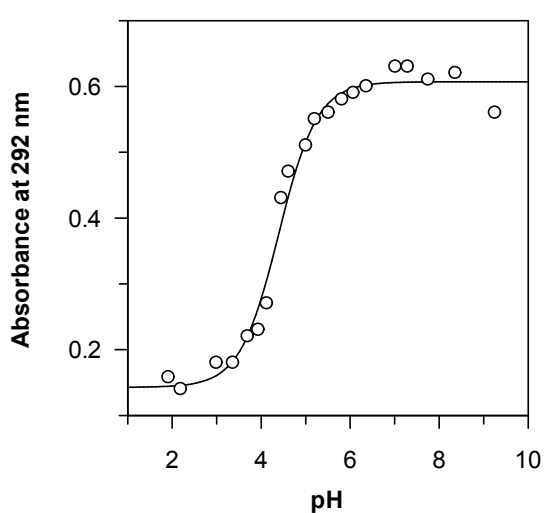
HOBt (1)

Parameter	Value	Std. Error
pKa	4.254	0.070
Limit1	0.411	0.029
Limit2	1.189	0.014



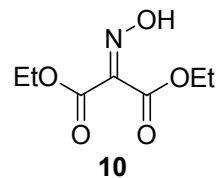
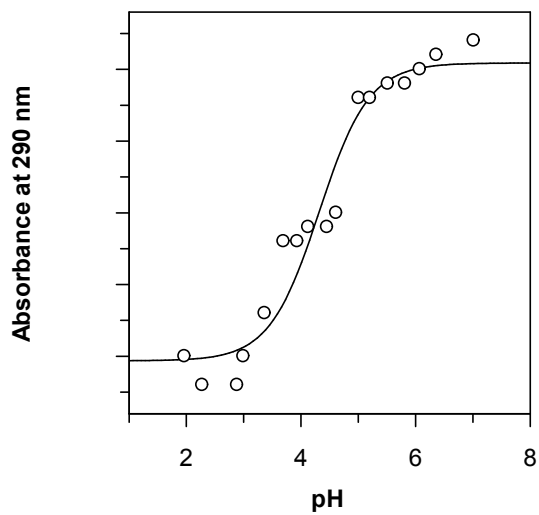
Oxyma (6)

Parameter	Value	Std. Error
pKa	4.320	0.072
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Limit2	0.588	0.009

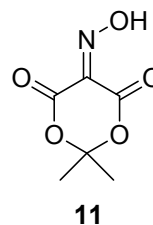
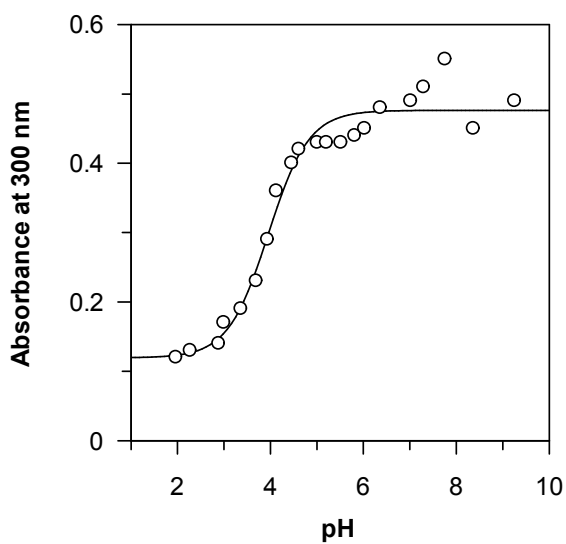


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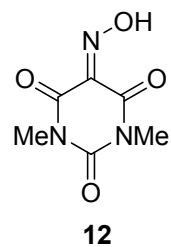
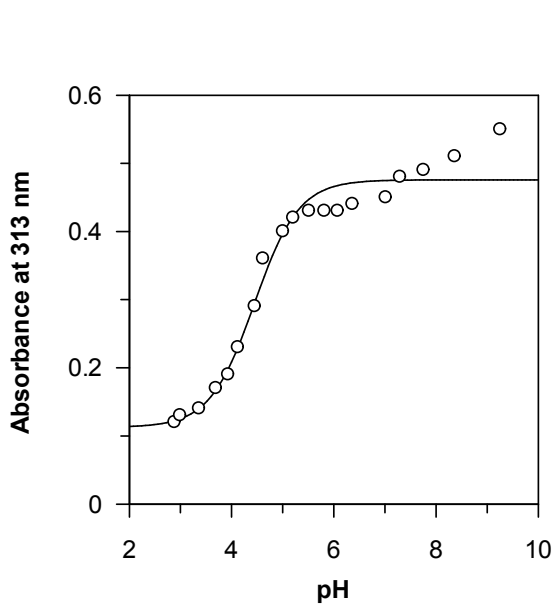
Parameter	Value	Std. Error
pKa	4.390	0.060
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Limit2	0.607	0.008



Parameter	Value	Std. Error
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Limit1	0.147	0.010
Limit2	0.354	0.009

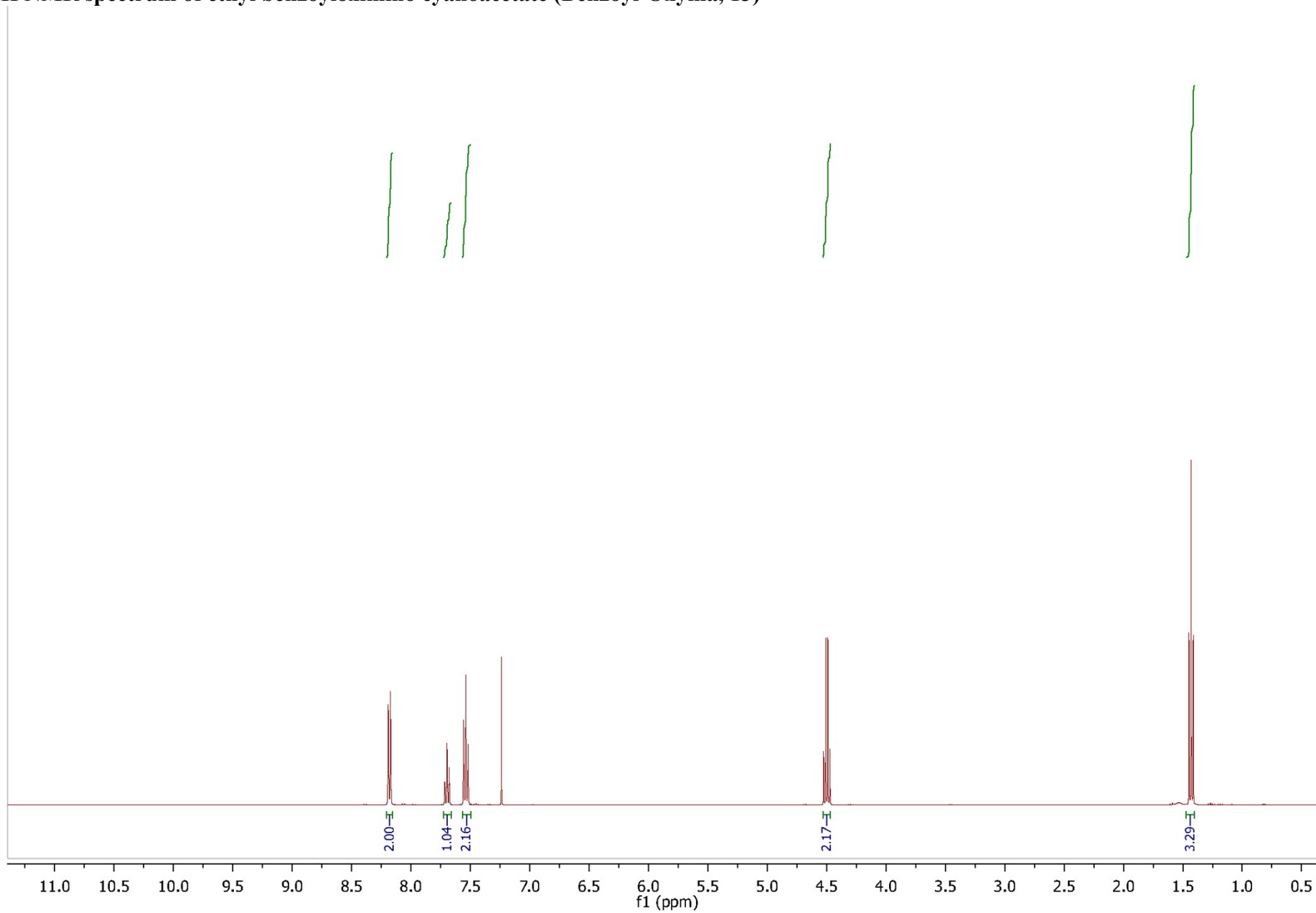


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Limit2	0.477	0.008

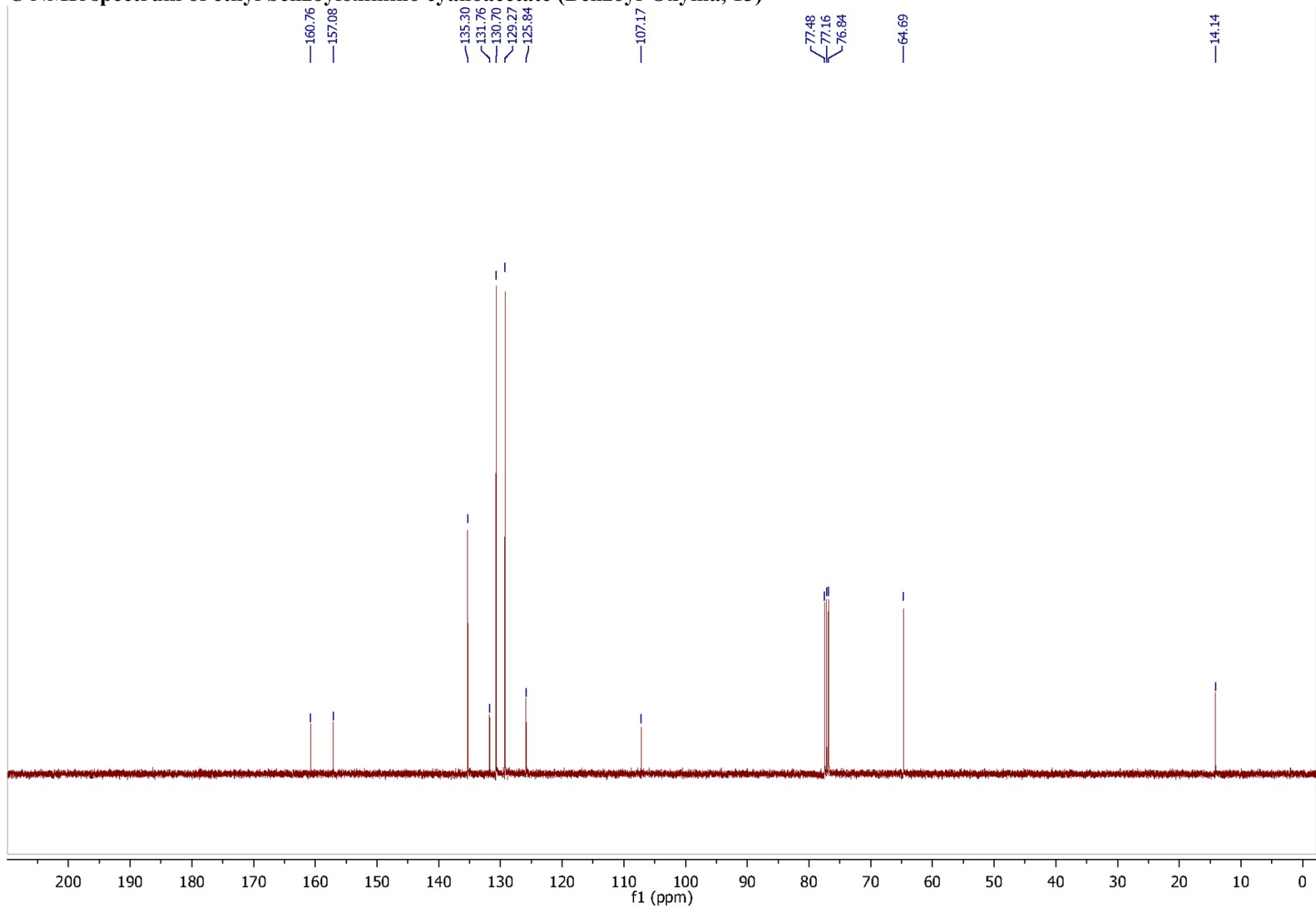


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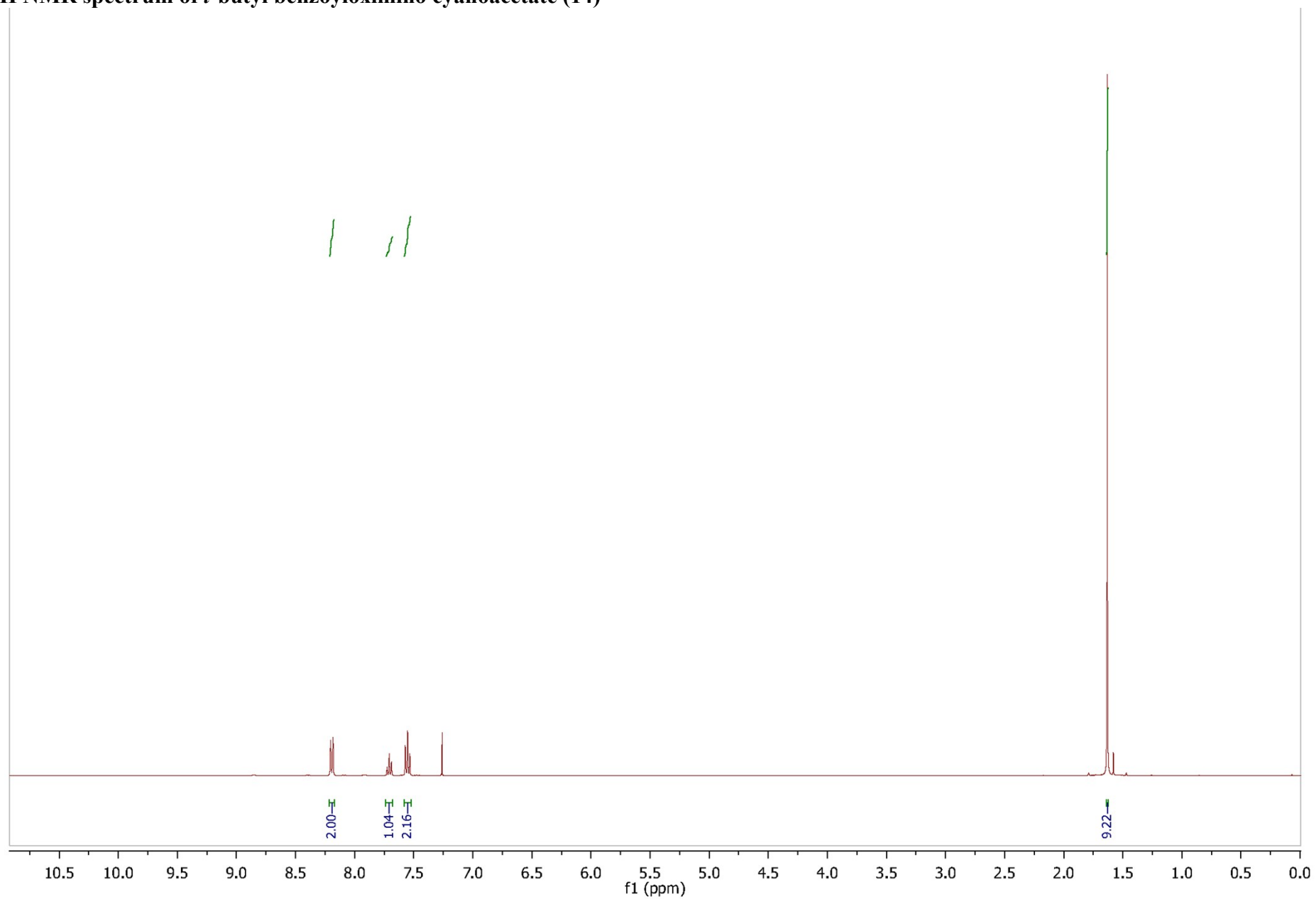
<sup>1</sup>H NMR spectrum of ethyl benzoyloximino cyanoacetate (Benzoyl-Oxyma, 13)



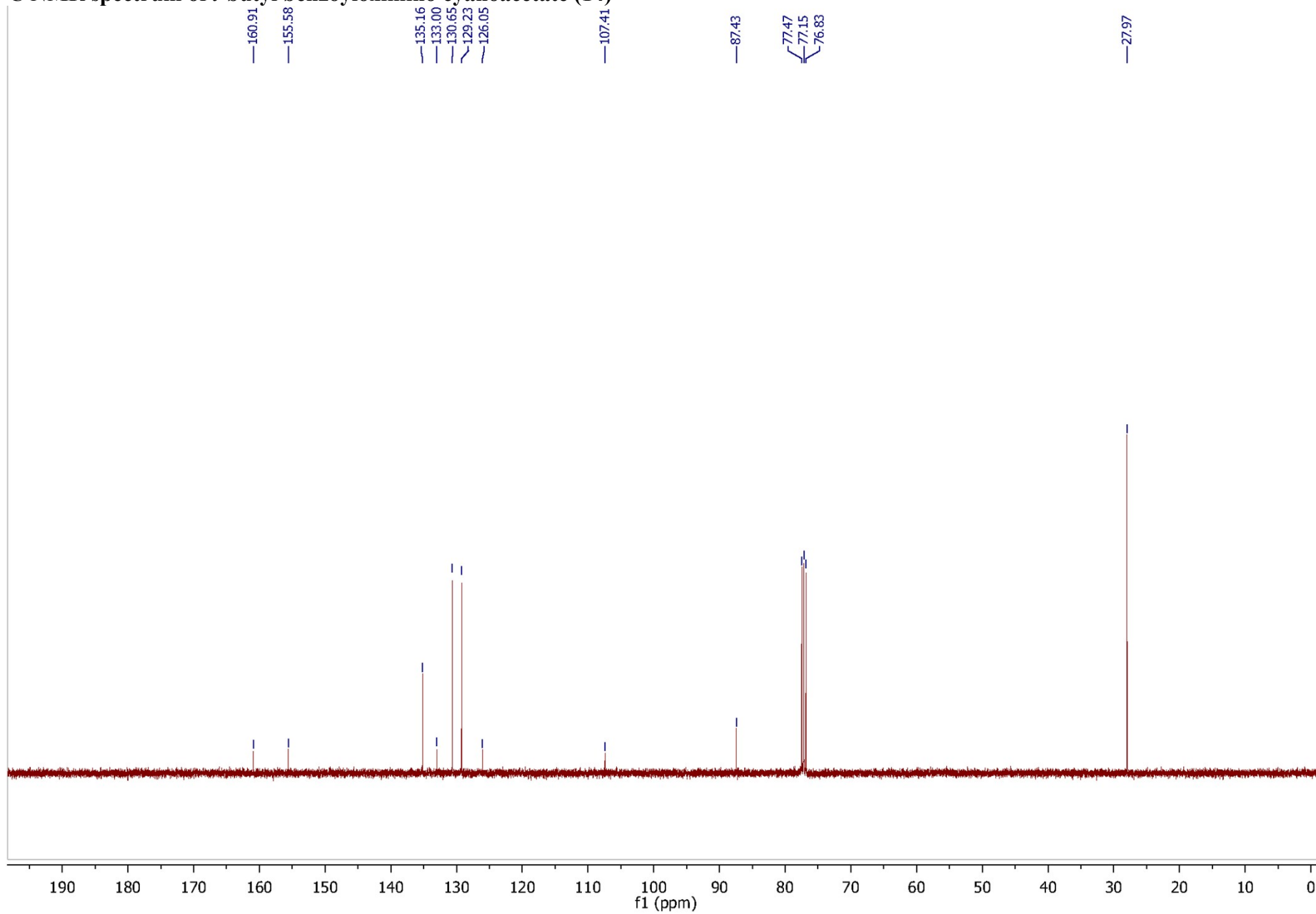
<sup>13</sup>C NMR spectrum of ethyl benzoyloximino cyanoacetate (Benzoyl-Oxyma, 13)



<sup>1</sup>H NMR spectrum of *t*-butyl benzoyloximino cyanoacetate (14)

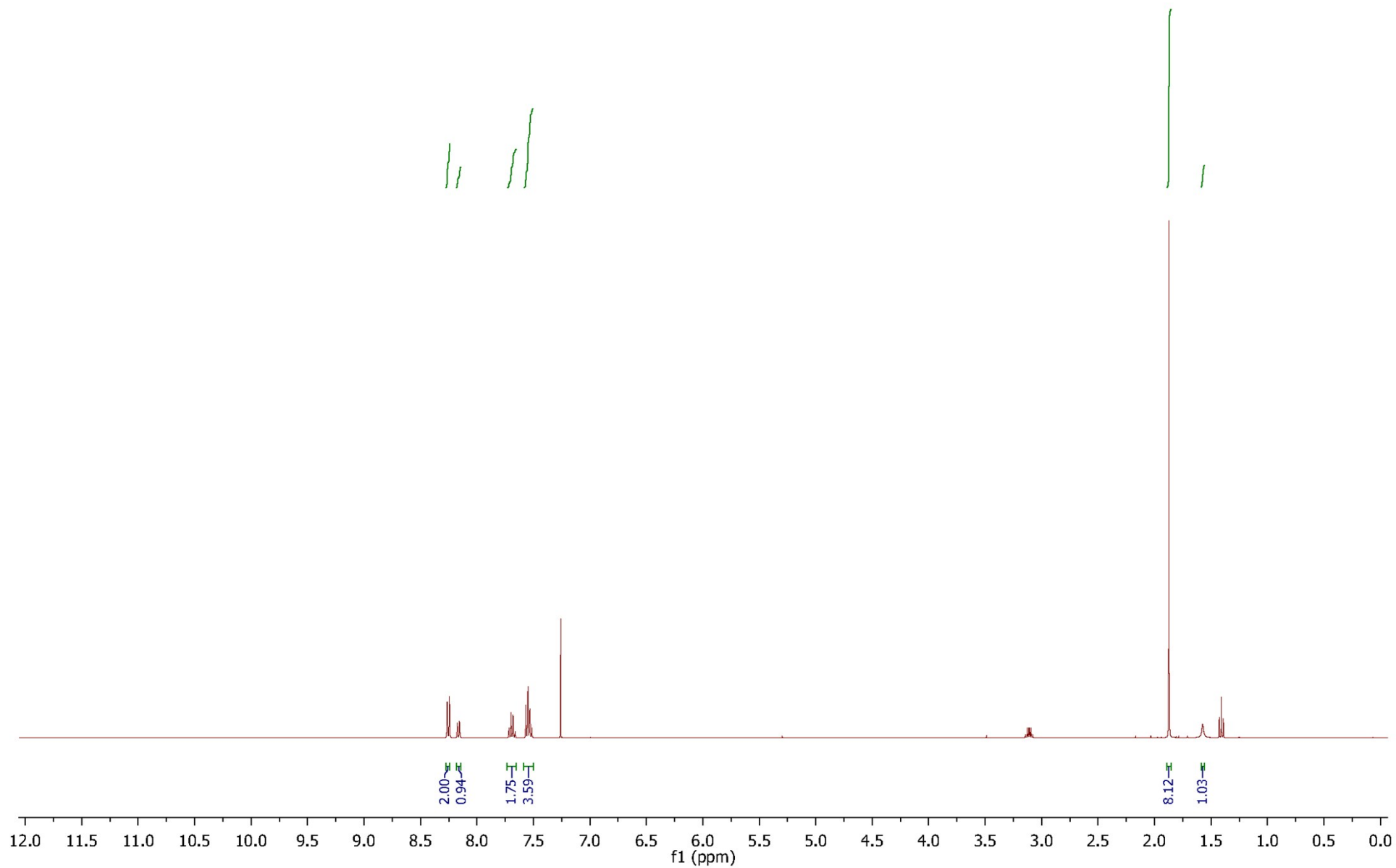


**<sup>13</sup>C NMR spectrum of *t*-butyl benzoyloximino cyanoacetate (14)**

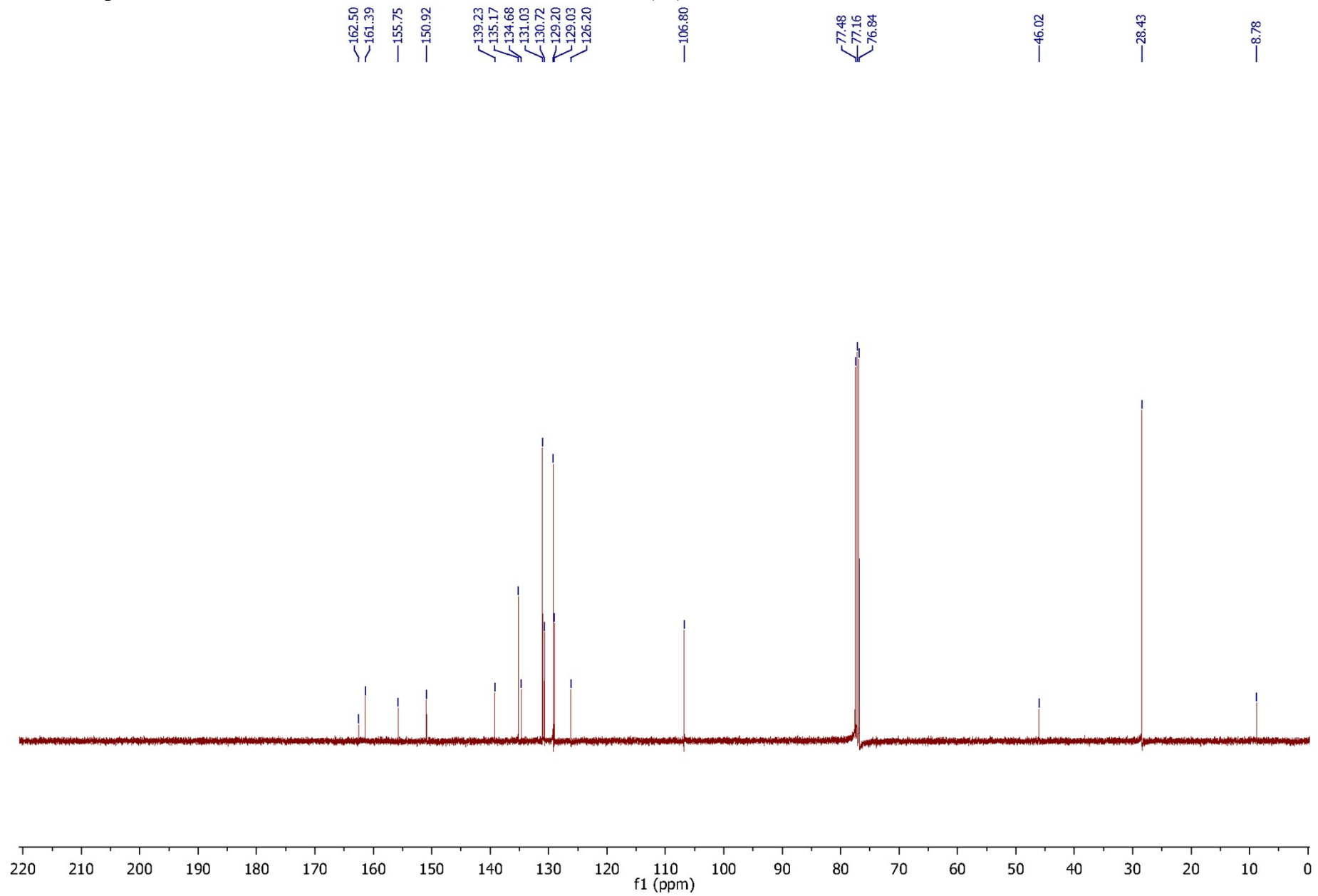




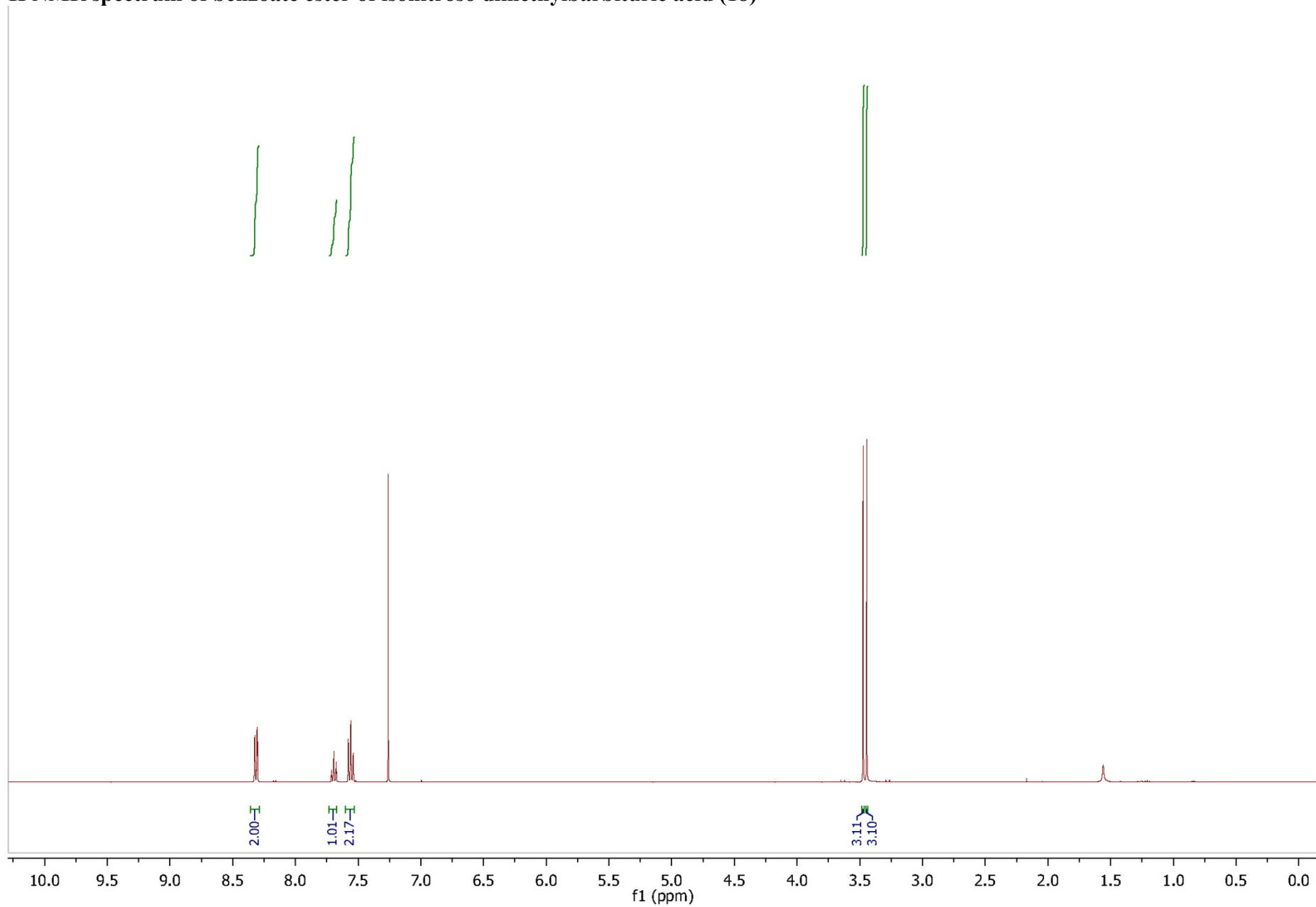
<sup>1</sup>H NMR spectrum of benzoate ester of isonitroso Meldrum's acid (17)



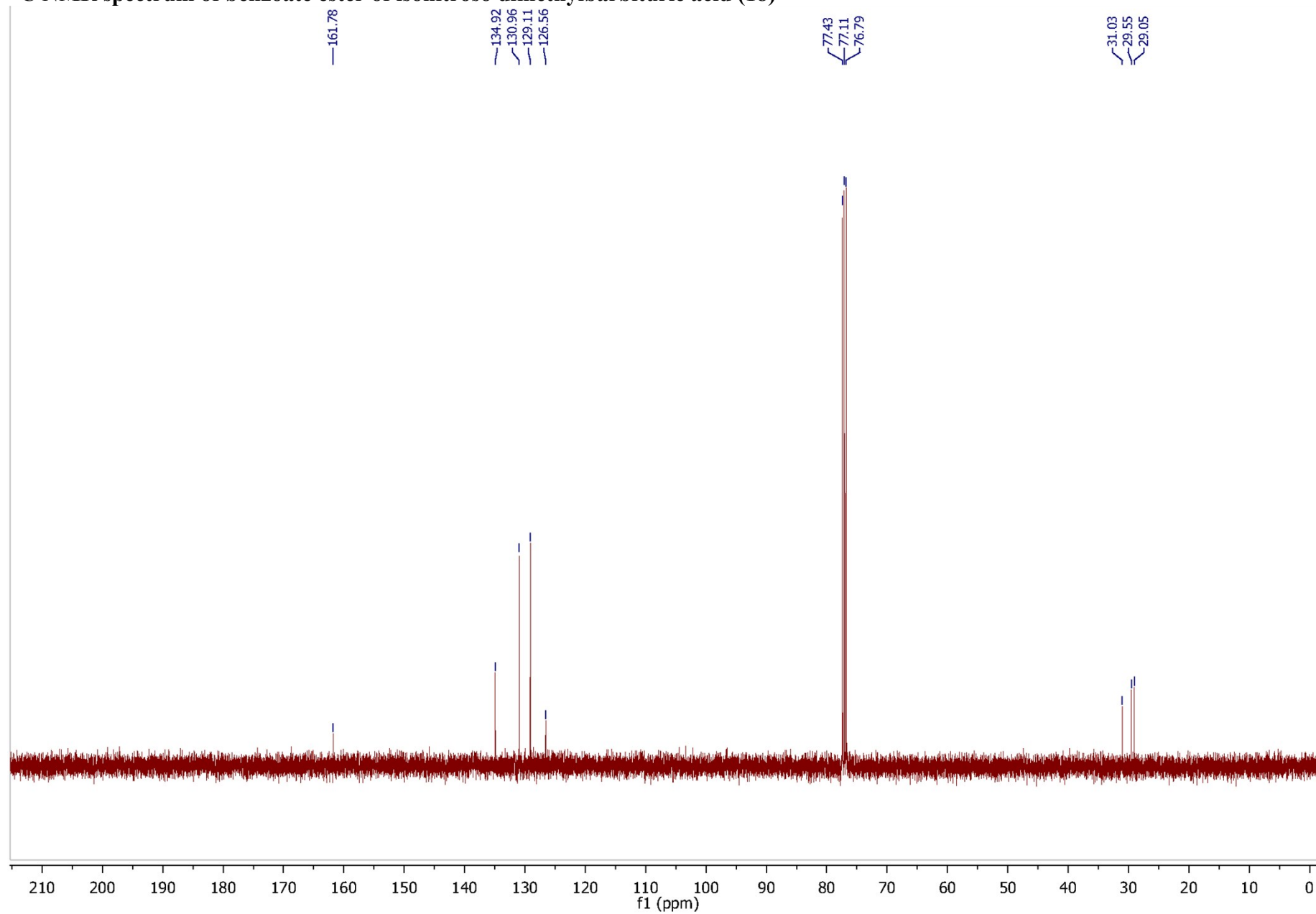
**<sup>13</sup>C NMR spectrum of benzoate ester of isonitroso Meldrum's acid (17)**



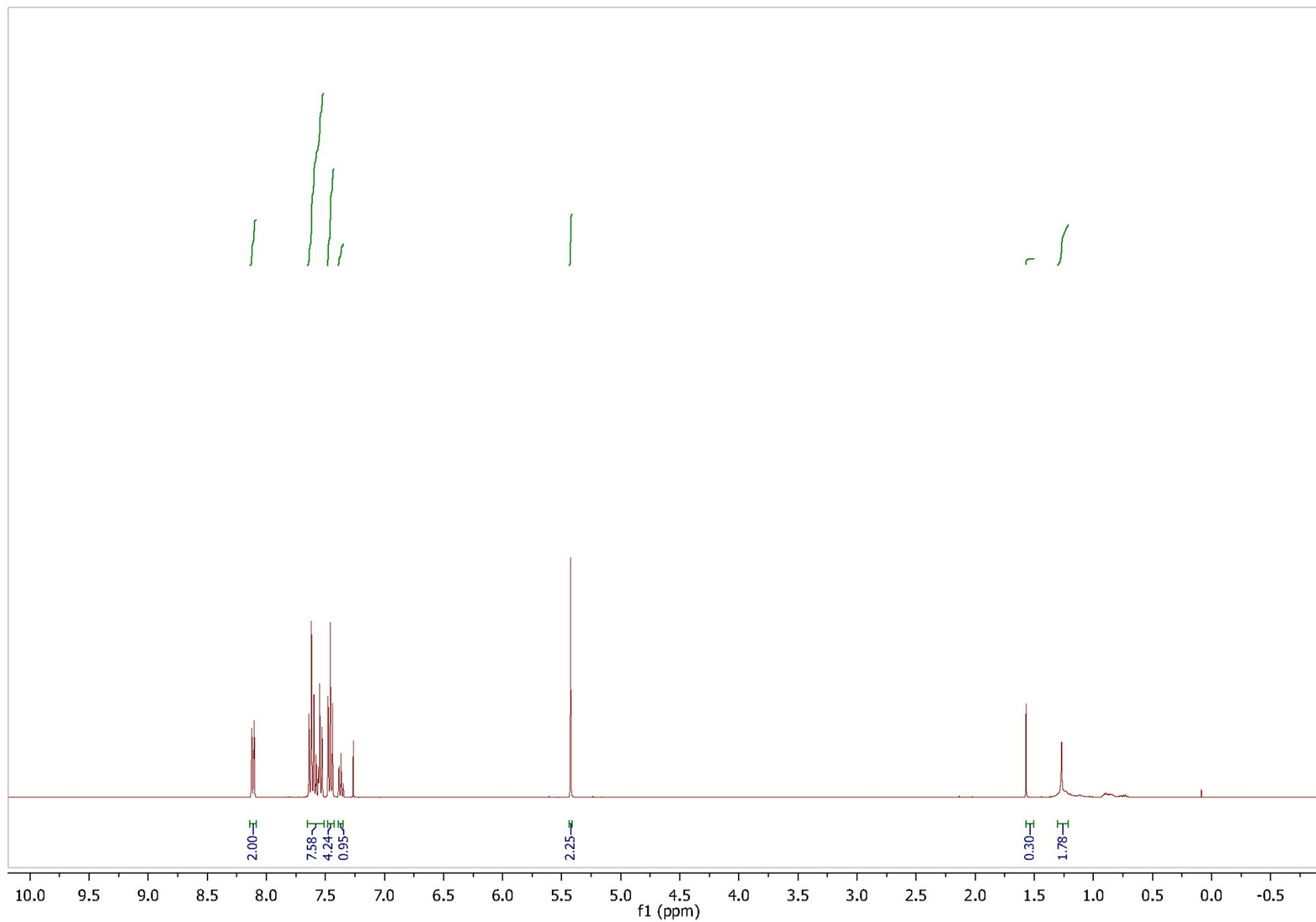
<sup>1</sup>H NMR spectrum of benzoate ester of isonitroso dimethylbarbituric acid (18)



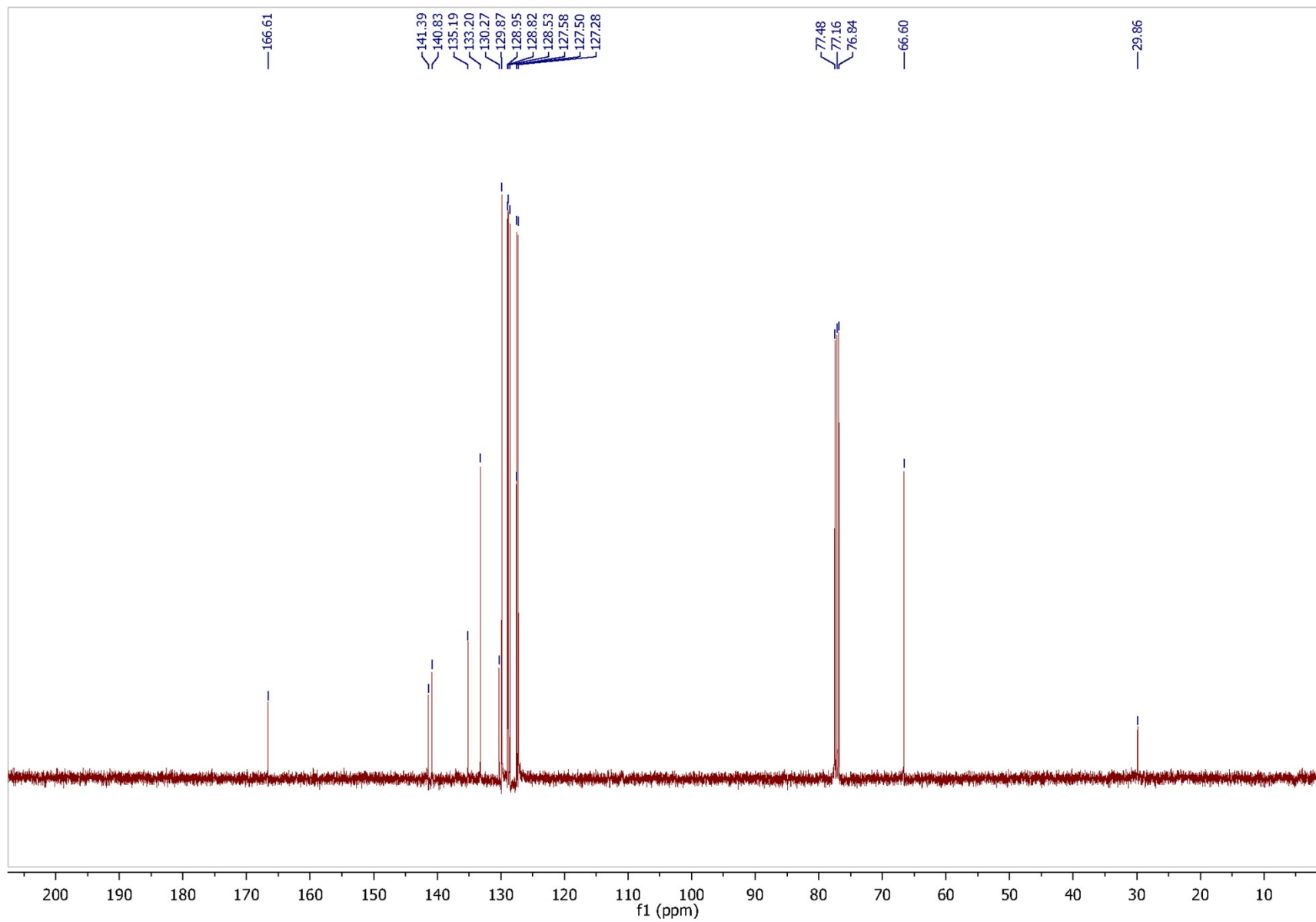
**$^{13}\text{C}$  NMR spectrum of benzoate ester of isonitroso dimethylbarbituric acid (18)**



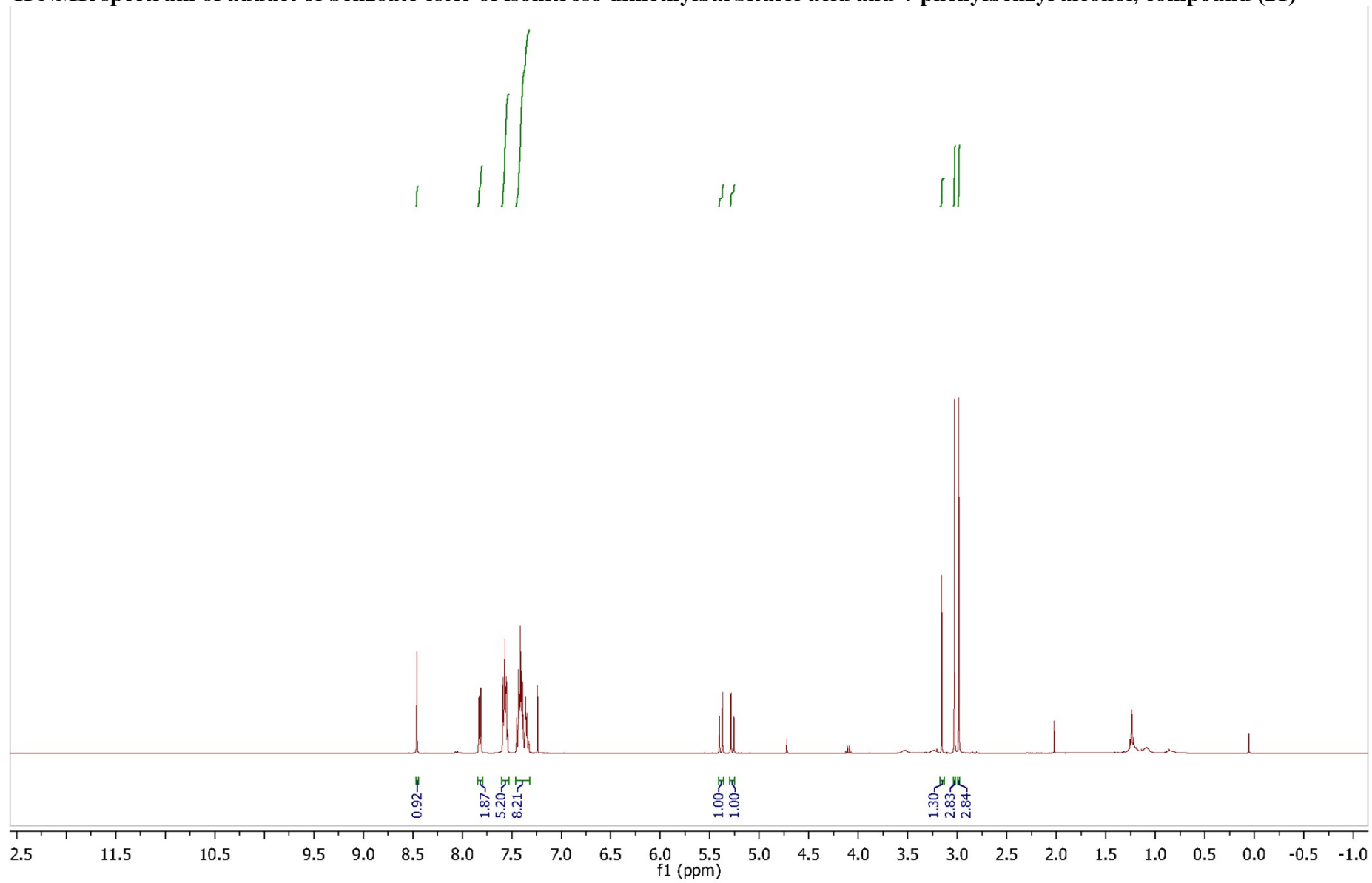
<sup>1</sup>H NMR spectrum of 4-phenylbenzyl benzoate (20)



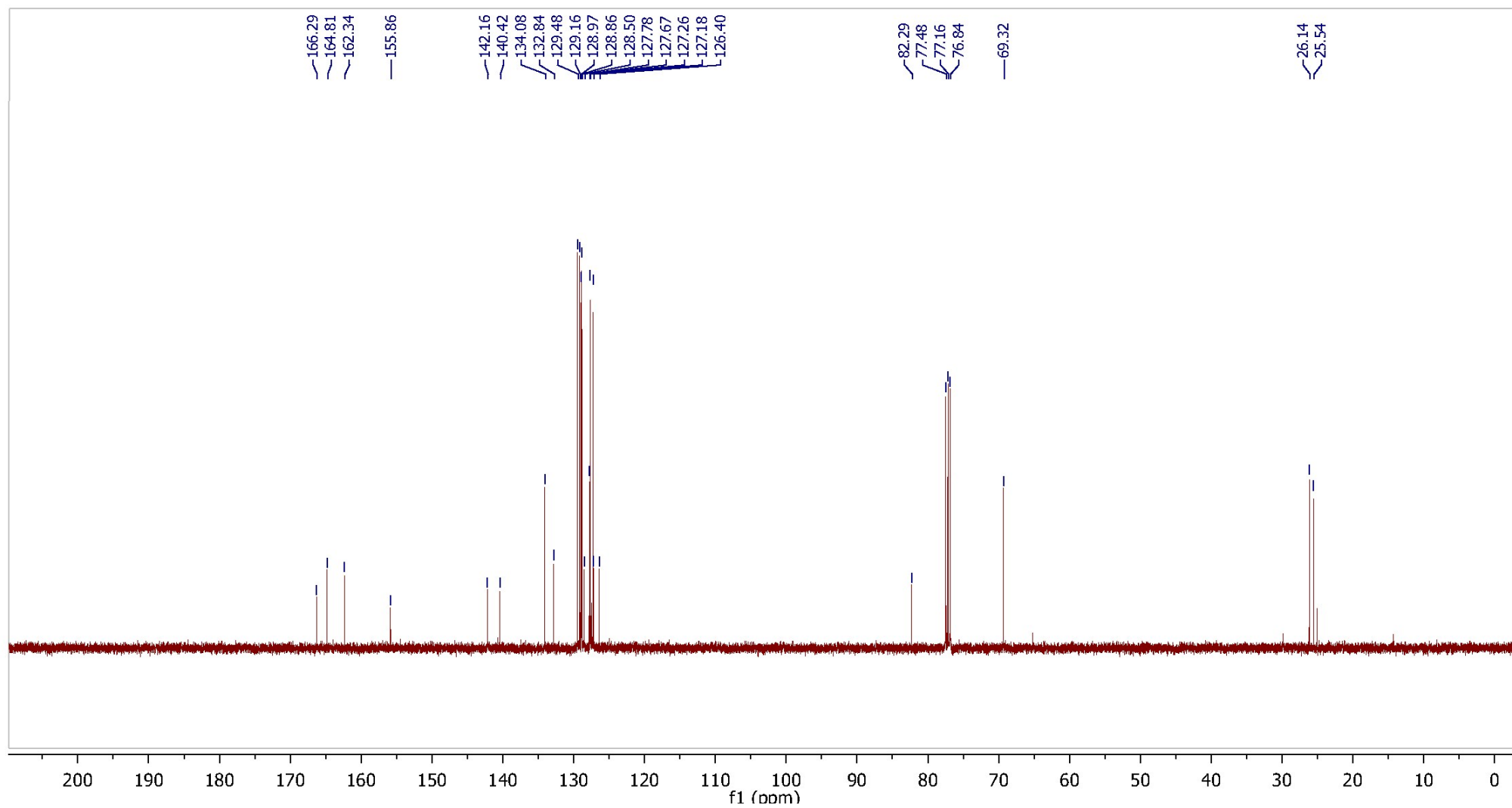
**<sup>13</sup>C NMR spectrum of 4-phenylbenzyl benzoate (20)**



<sup>1</sup>H NMR spectrum of adduct of benzoate ester of isonitroso dimethylbarbituric acid and 4-phenylbenzyl alcohol, compound (21)

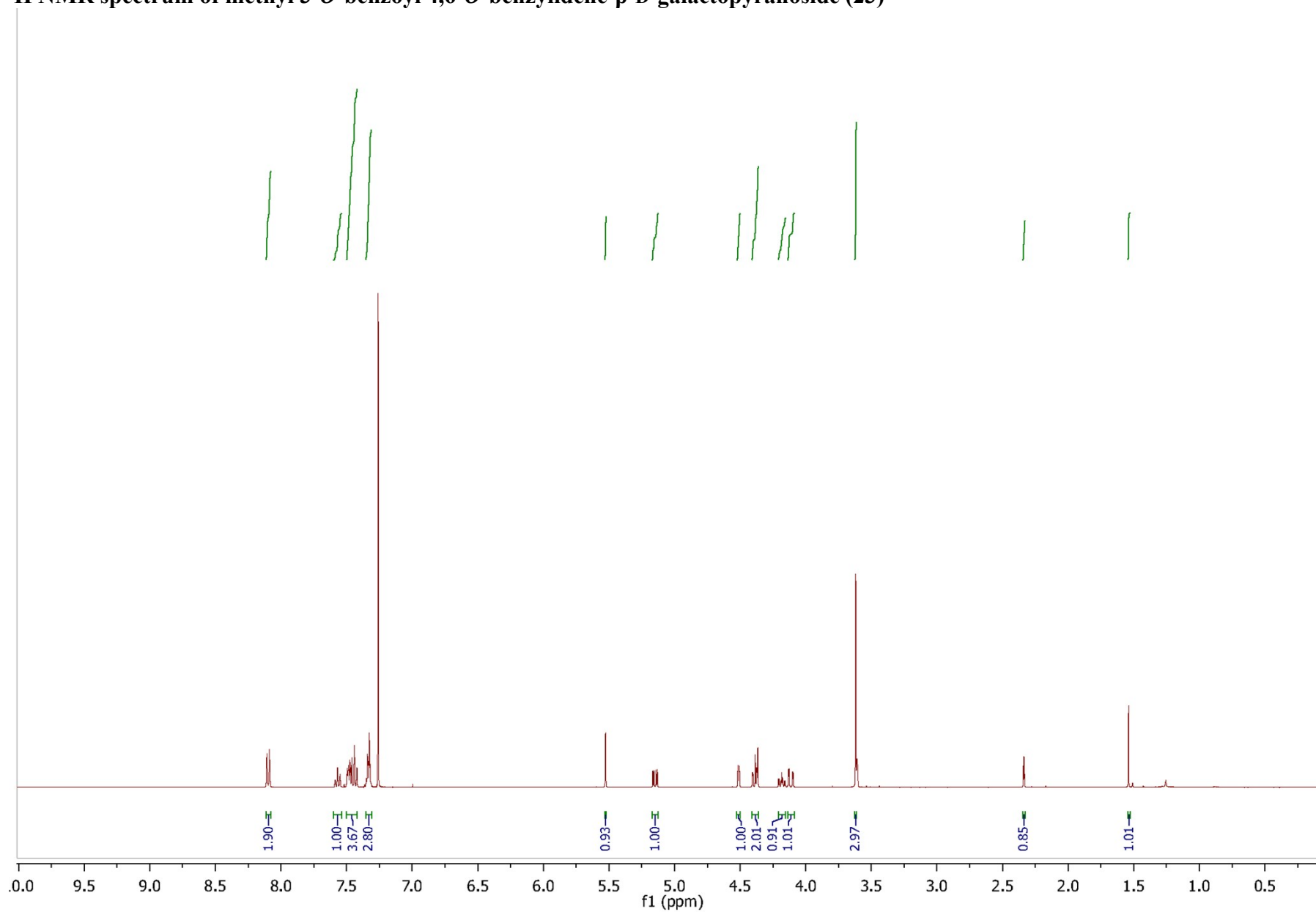


**$^{13}\text{C}$  NMR spectrum of adduct of benzoate ester of isonitroso dimethylbarbituric acid and 4-phenylbenzyl alcohol, compound (21)**

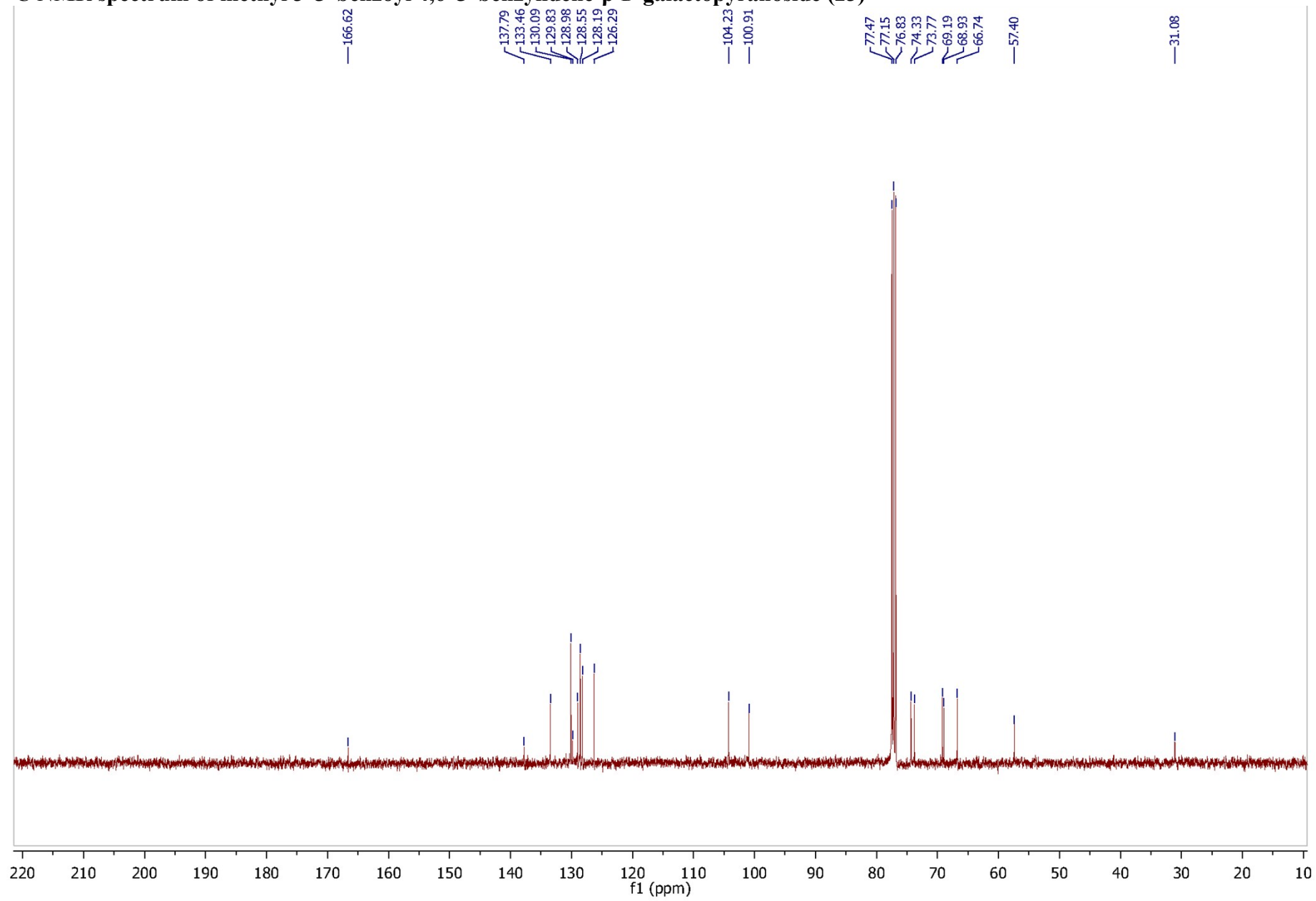




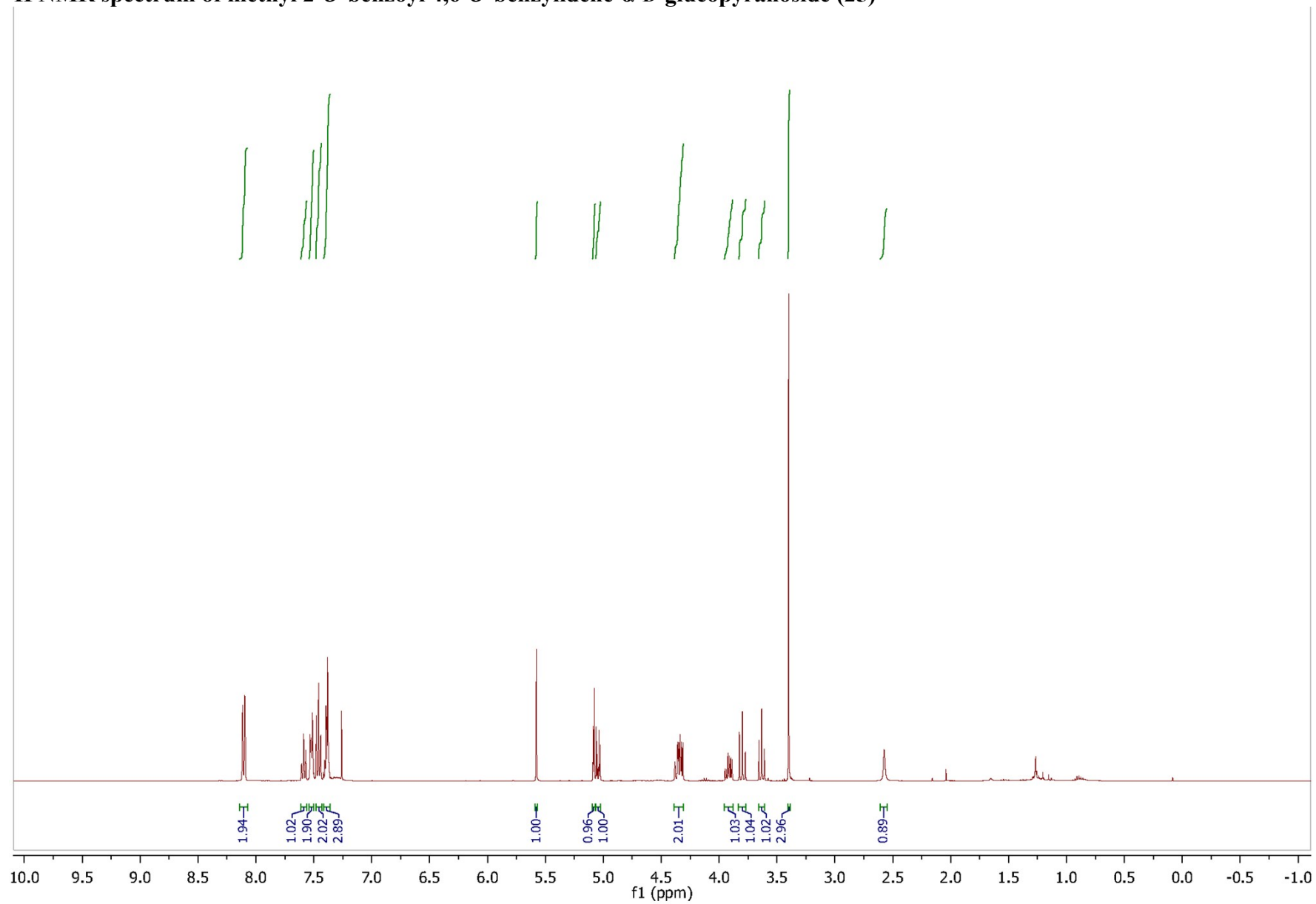
<sup>1</sup>H NMR spectrum of methyl 3-*O*-benzoyl 4,6-*O*-benzylidene-β-D-galactopyranoside (23)



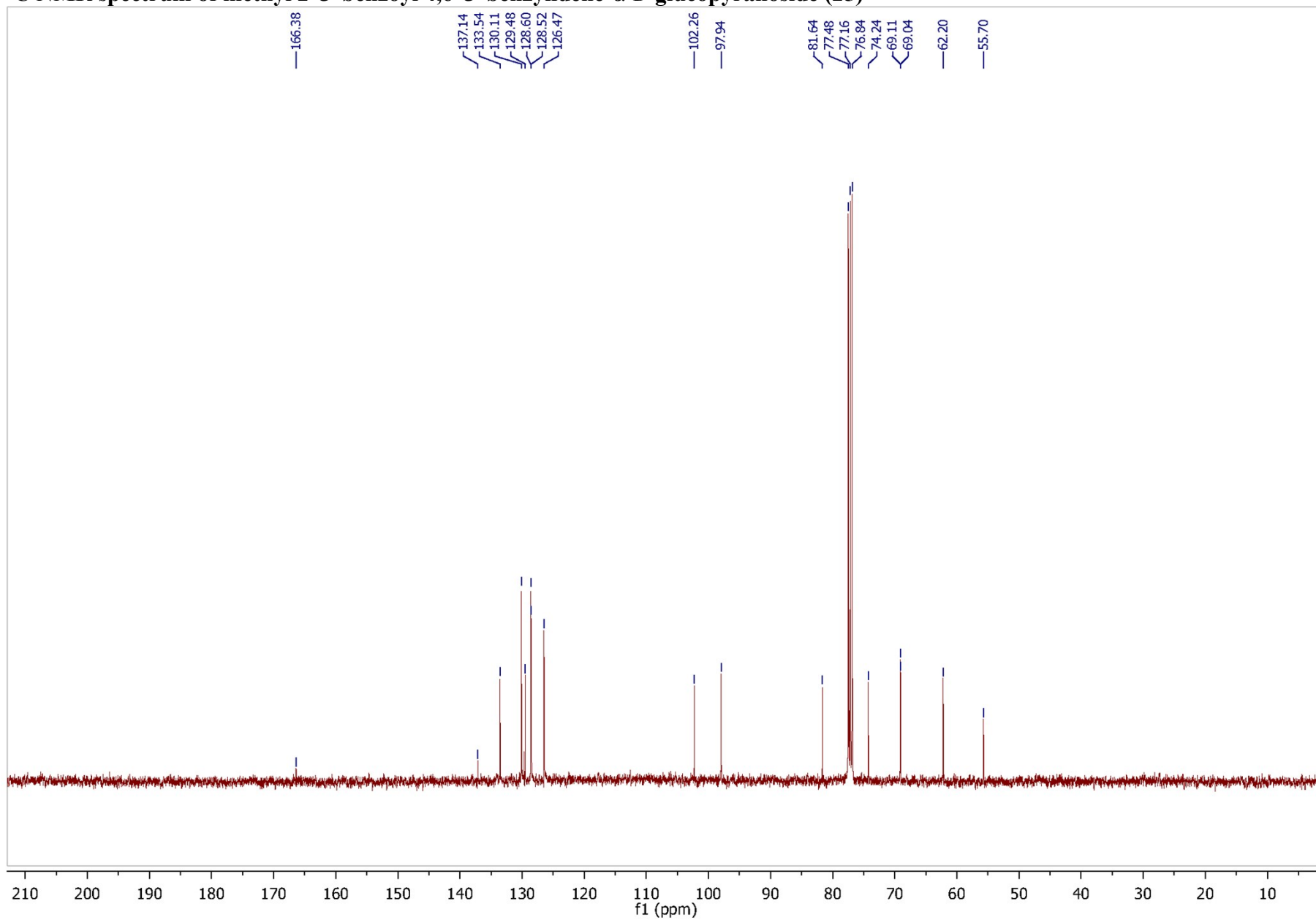
<sup>13</sup>C NMR spectrum of methyl 3-*O*-benzoyl 4,6-*O*-benzylidene-β-D-galactopyranoside (23)



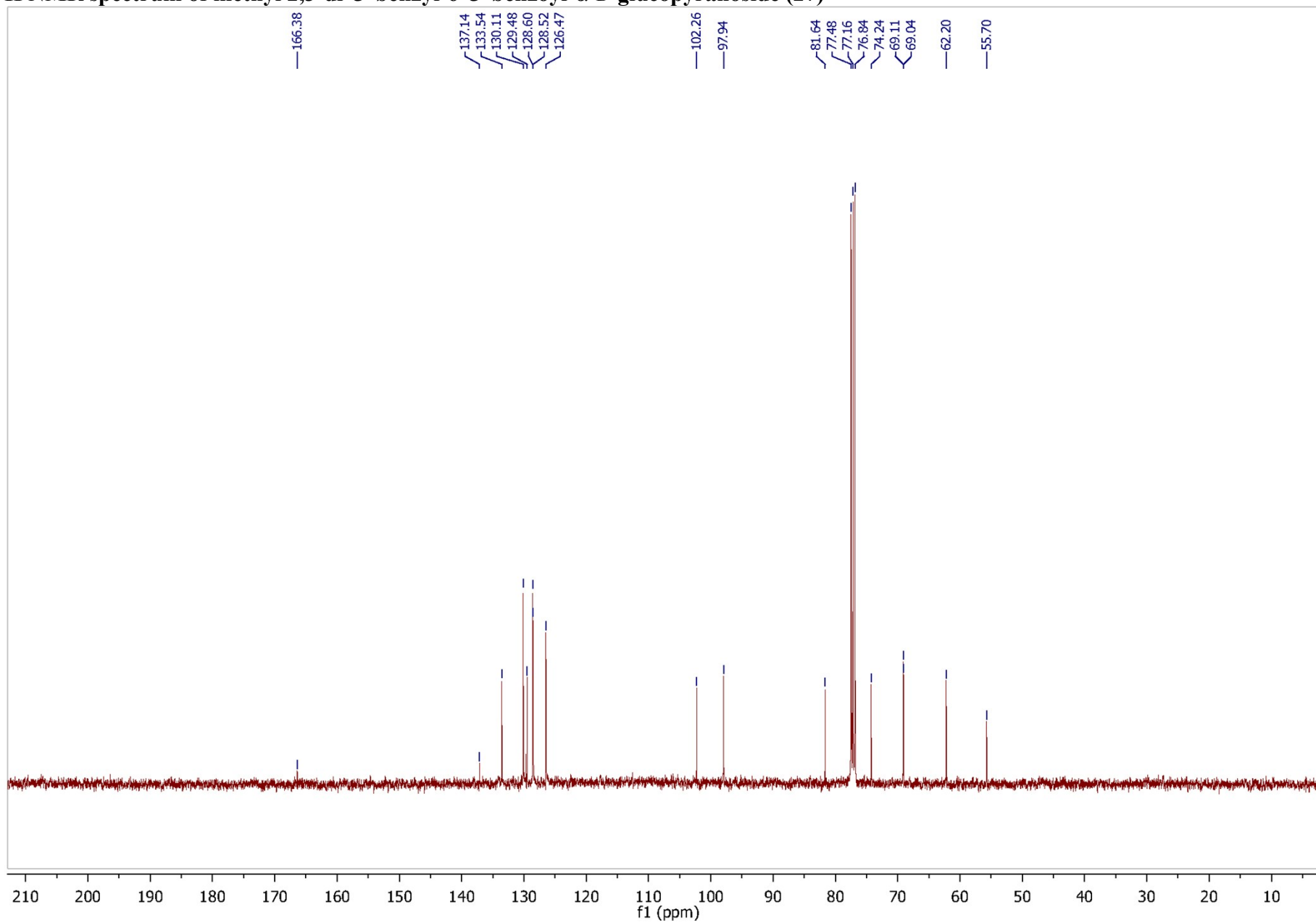
<sup>1</sup>H NMR spectrum of methyl 2-*O*-benzoyl 4,6-*O*-benzylidene- $\alpha$ -D-glucopyranoside (25)



**<sup>13</sup>C NMR spectrum of methyl 2-*O*-benzoyl 4,6-*O*-benzylidene- $\alpha$ -D-glucopyranoside (25)**



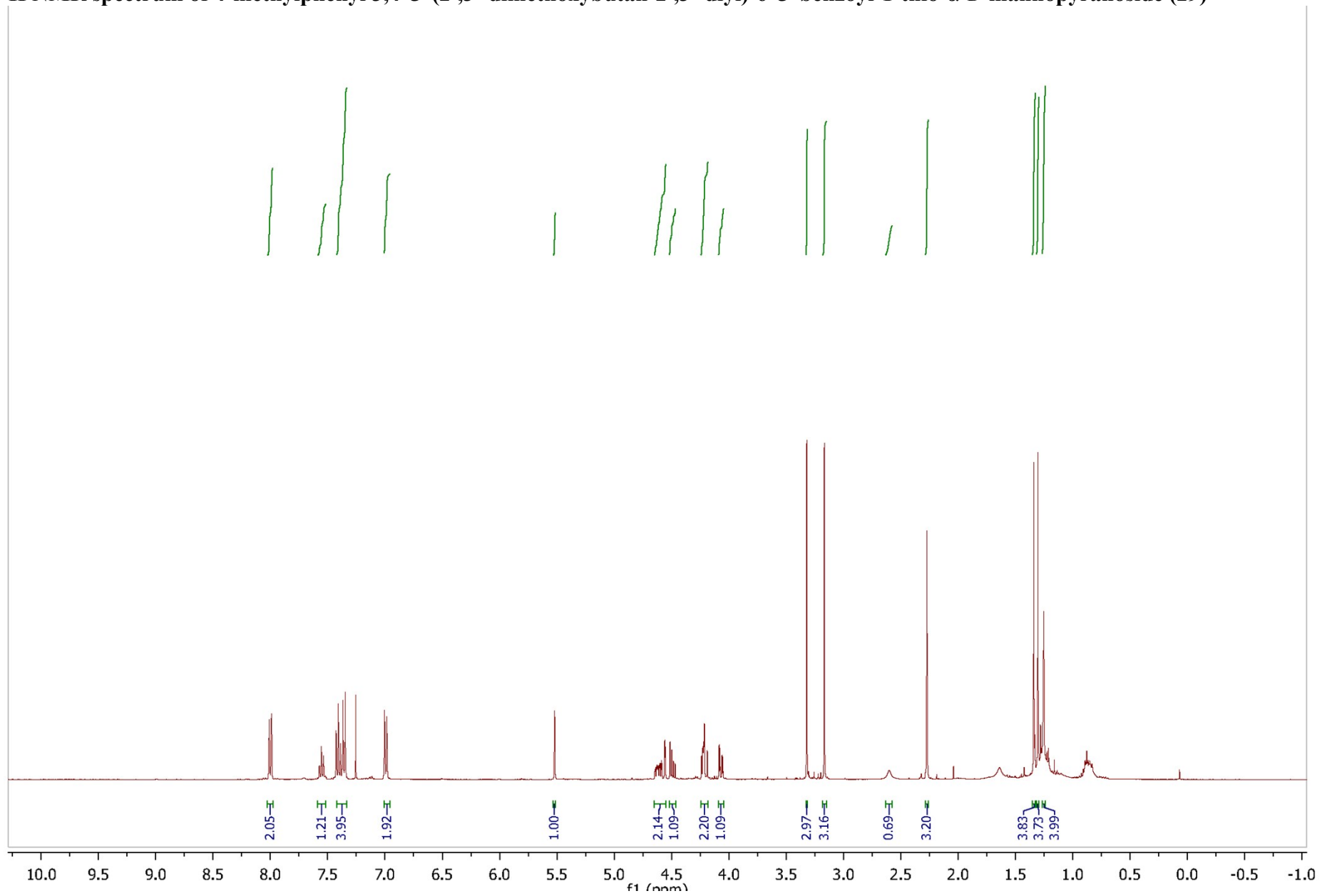
<sup>1</sup>H NMR spectrum of methyl 2,3-di-O-benzyl-6-O-benzoyl- $\alpha$ -D-glucopyranoside (27)



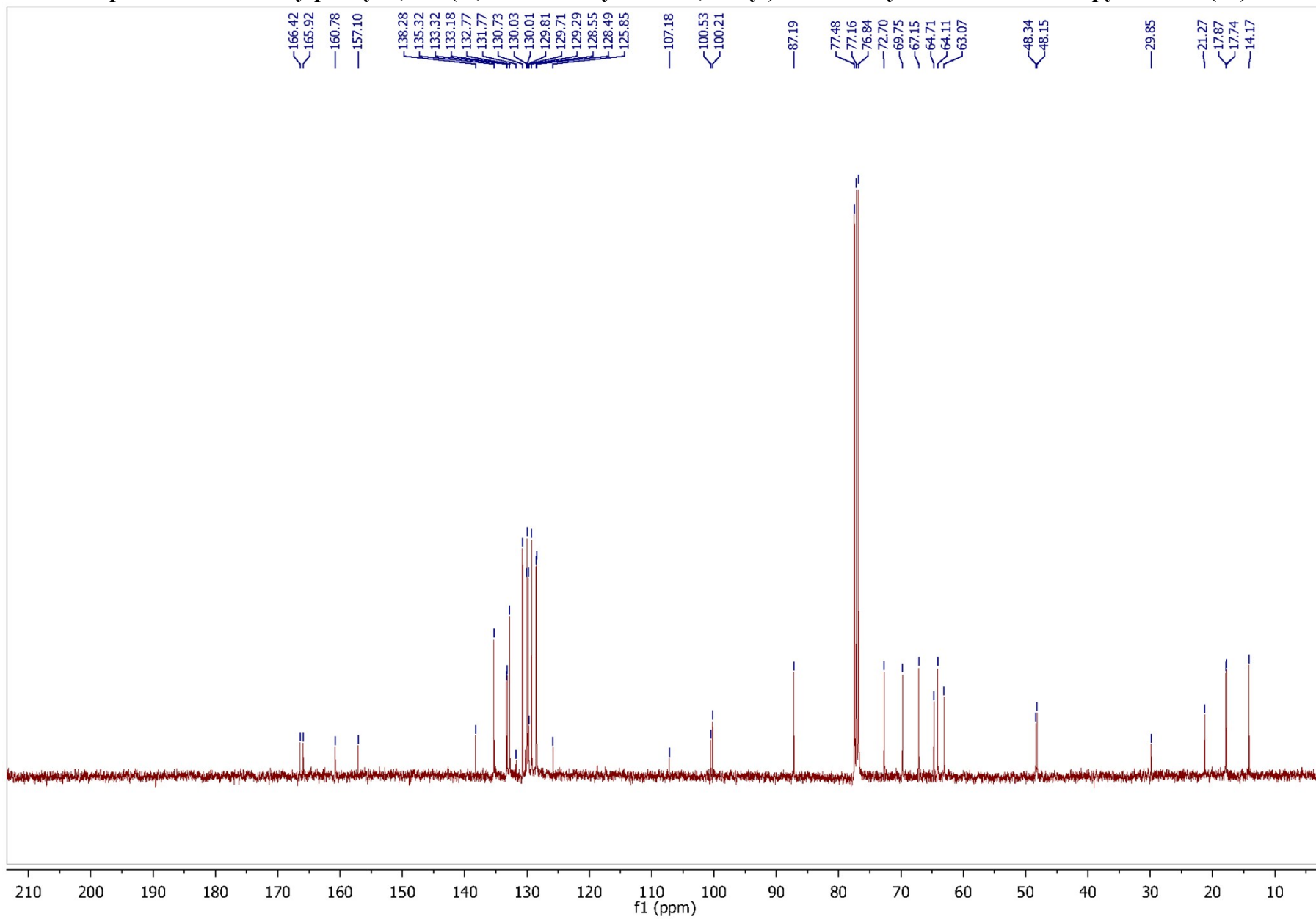
**$^{13}\text{C}$  NMR spectrum of methyl 2,3-di-*O*-benzyl-6-*O*-benzoyl- $\alpha$ -D-glucopyranoside (27)**



<sup>1</sup>H NMR spectrum of 4-methylphenyl 3,4-*O*-(2',3'-dimethoxybutan-2',3'-diyl)-6-*O*-benzoyl-1-thio- $\alpha$ -D-mannopyranoside (29)

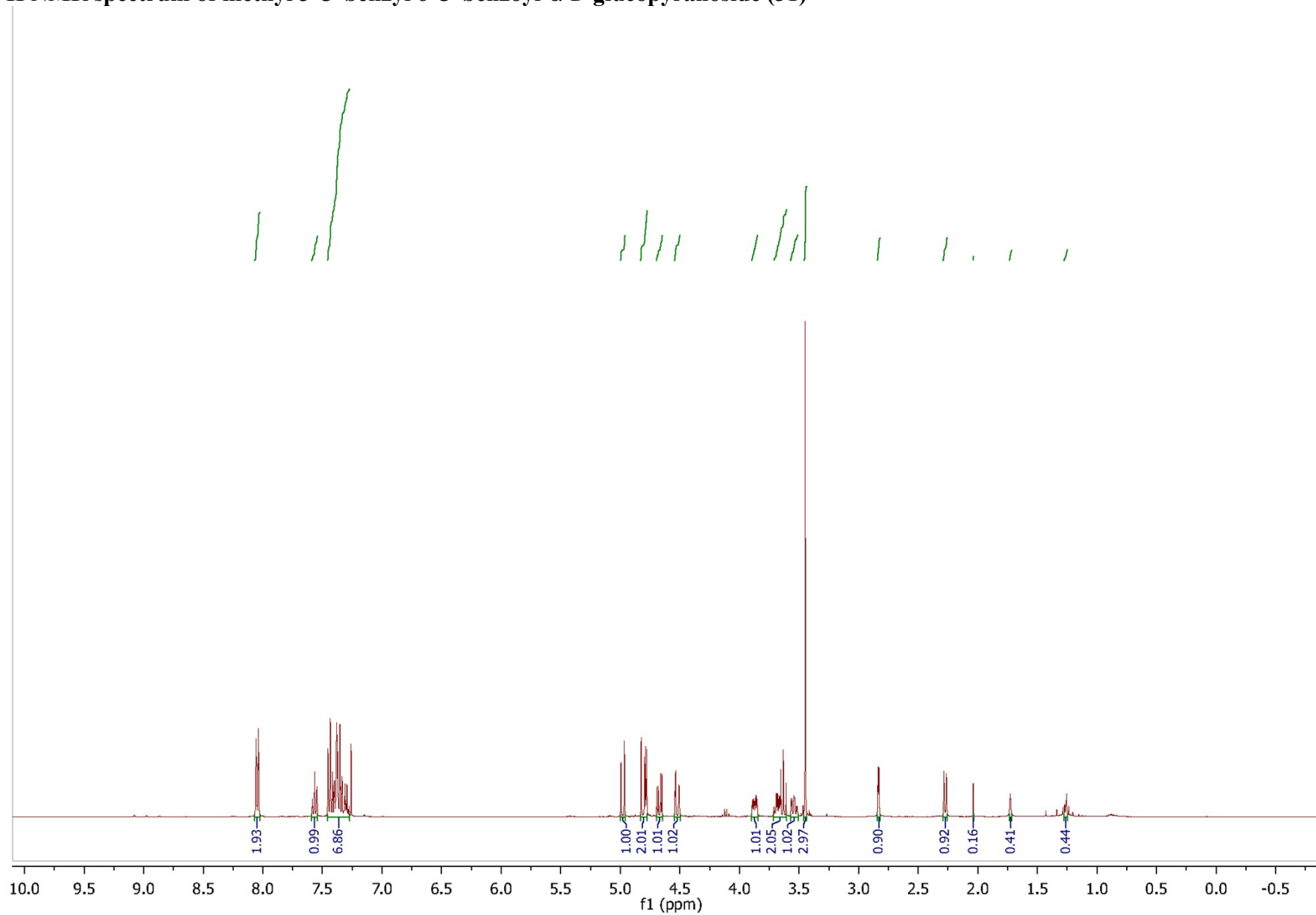


<sup>13</sup>C NMR spectrum of 4-methylphenyl 3,4-*O*-(2',3'-dimethoxybutan-2',3'-diyl)-6-*O*-benzoyl-1-thio- $\alpha$ -D-mannopyranoside (29)

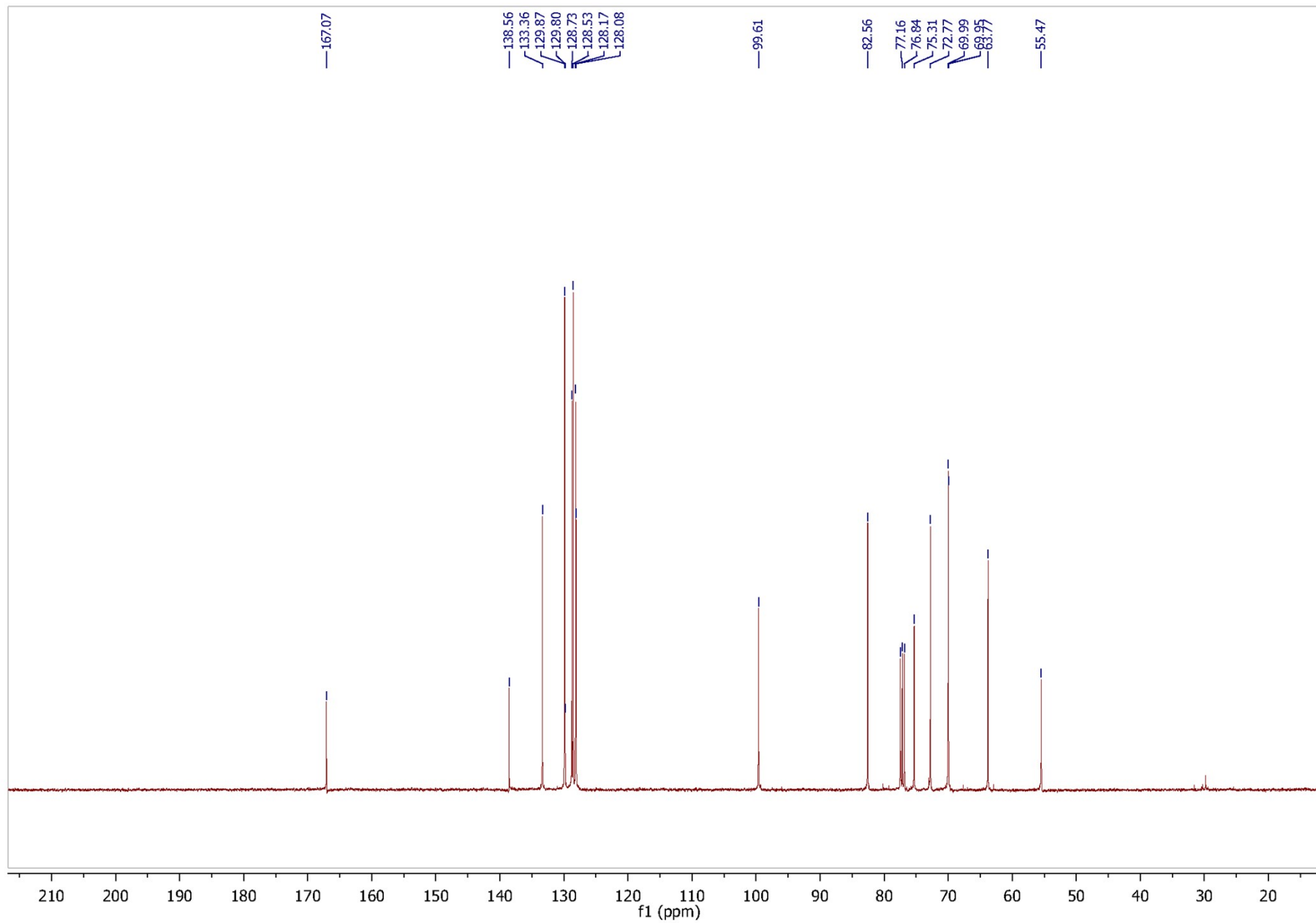




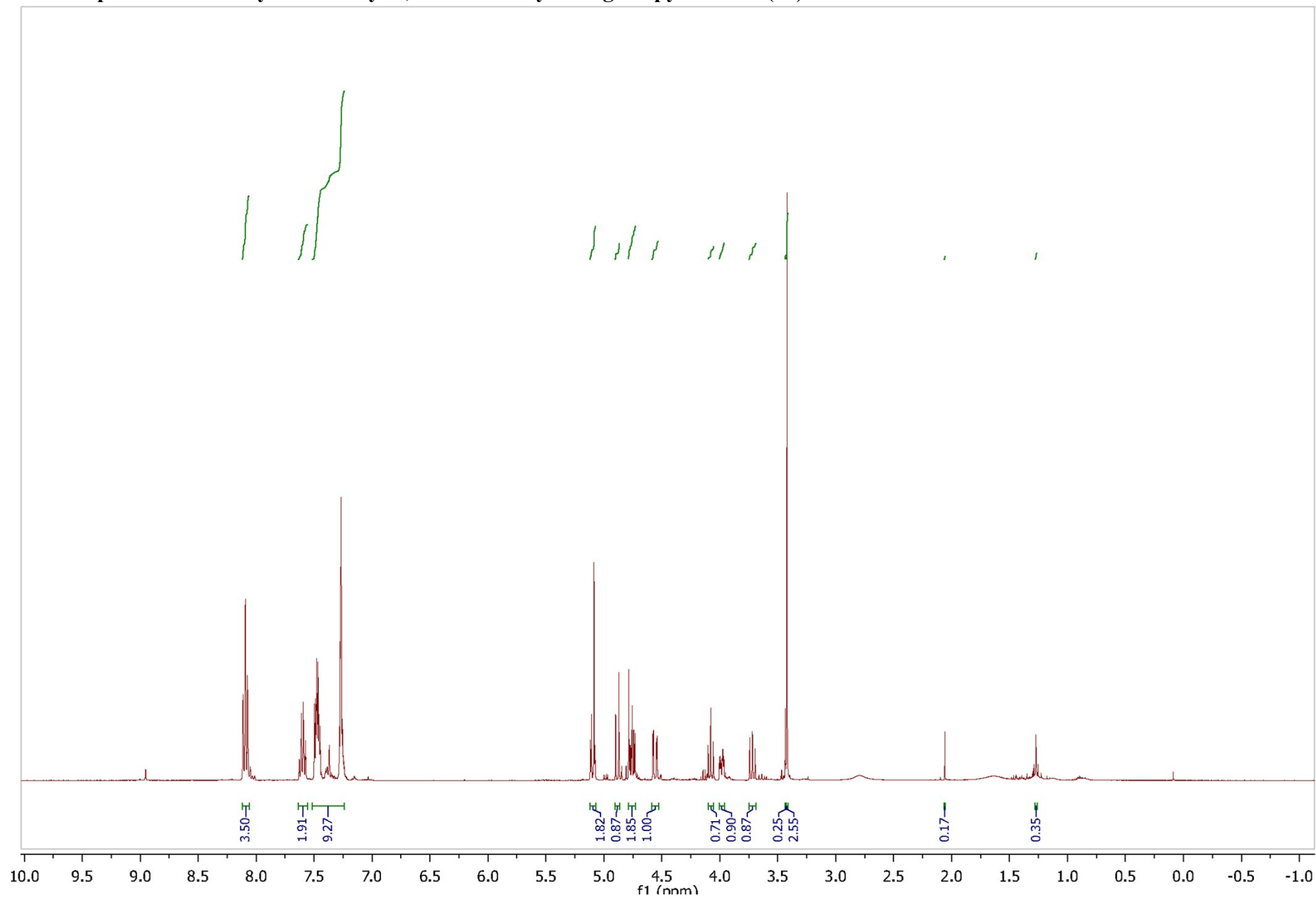
<sup>1</sup>H NMR spectrum of methyl 3-O-benzyl 6-O-benzoyl- $\alpha$ -D-glucopyranoside (31)



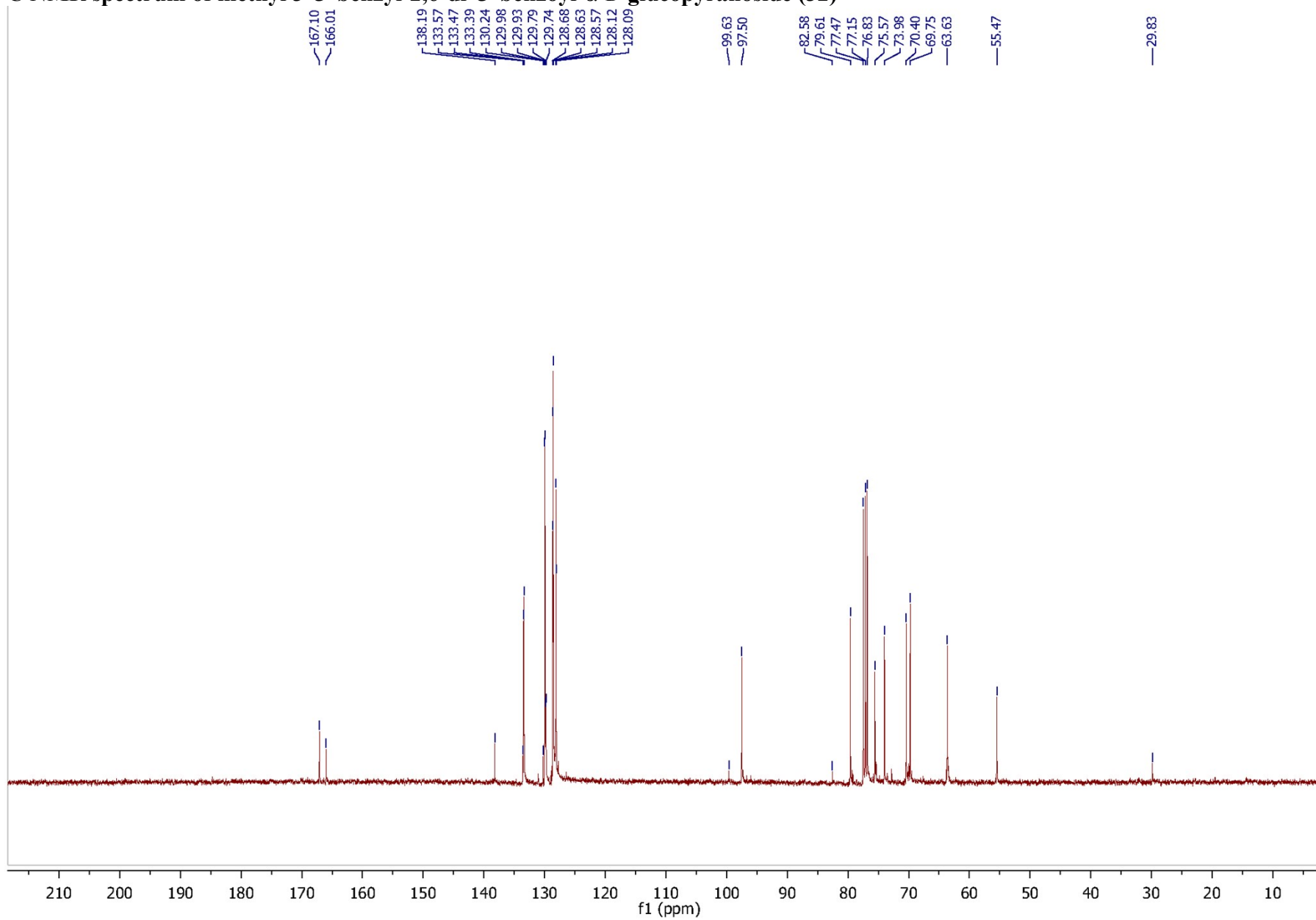
<sup>13</sup>C NMR spectrum of methyl 3-*O*-benzyl 6-*O*-benzoyl- $\alpha$ -D-glucopyranoside (31)



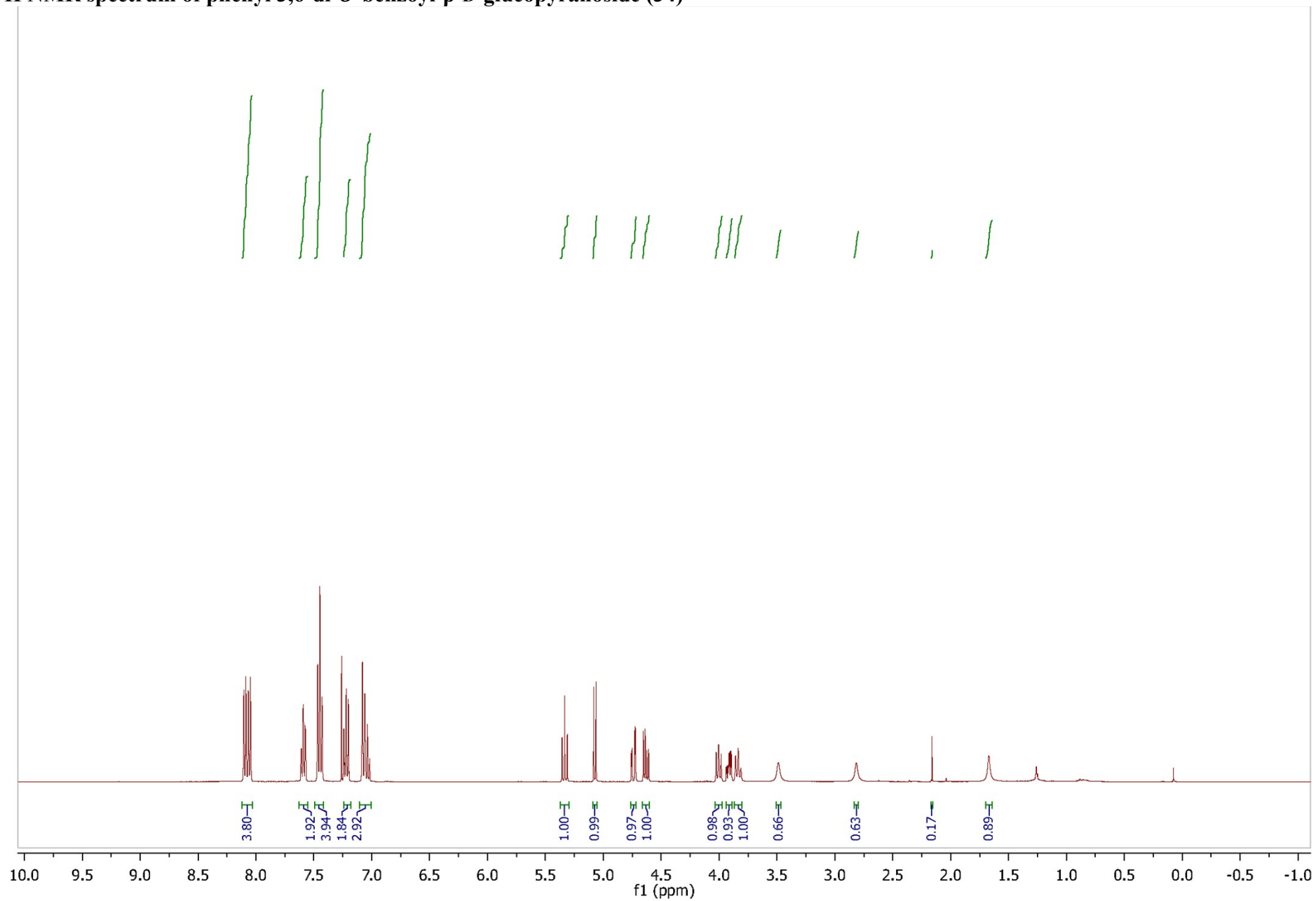
<sup>1</sup>H NMR spectrum of methyl 3-*O*-benzyl-2,6-di-*O*-benzoyl- $\alpha$ -D-glucopyranoside (32)



<sup>13</sup>C NMR spectrum of methyl 3-*O*-benzyl-2,6-di-*O*-benzoyl- $\alpha$ -D-glucopyranoside (32)



<sup>1</sup>H NMR spectrum of phenyl 3,6-di-O-benzoyl-β-D-glucopyranoside (34)



**<sup>13</sup>C NMR spectrum of phenyl 3,6-di-*O*-benzoyl-β-D-glucopyranoside (34)**

