

# Supplementary Materials

## Formation of Tetrahydrofurano-, Aryltetralin, and Butyrolactone Norlignans through the Epoxidation of 9-Norlignans

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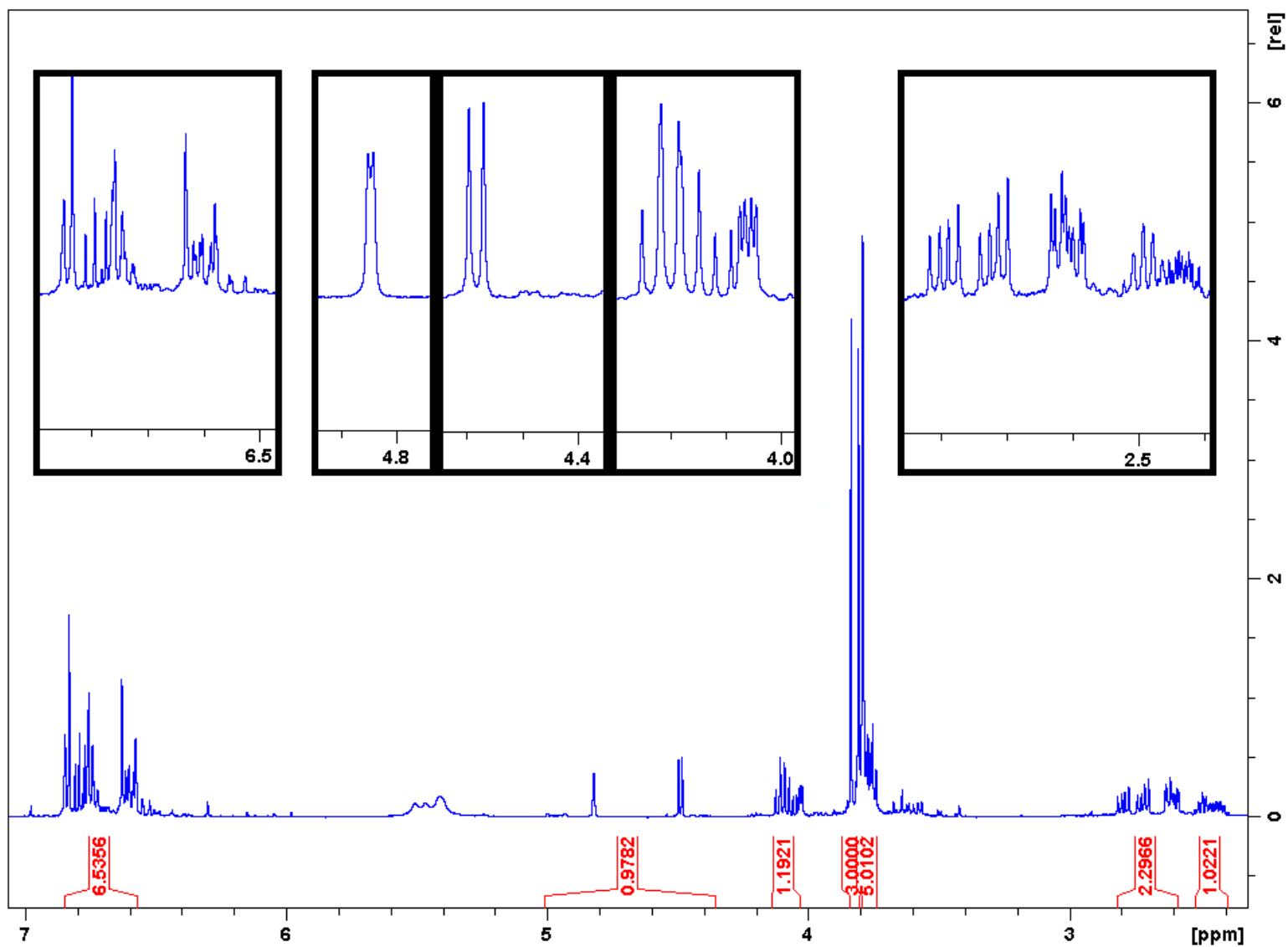
<sup>3</sup> Institut Universitaire de Technologie Paul Sabatier, Département de Chimie, Av. G. Pompidou, CS20258, F-81104 Castres, France

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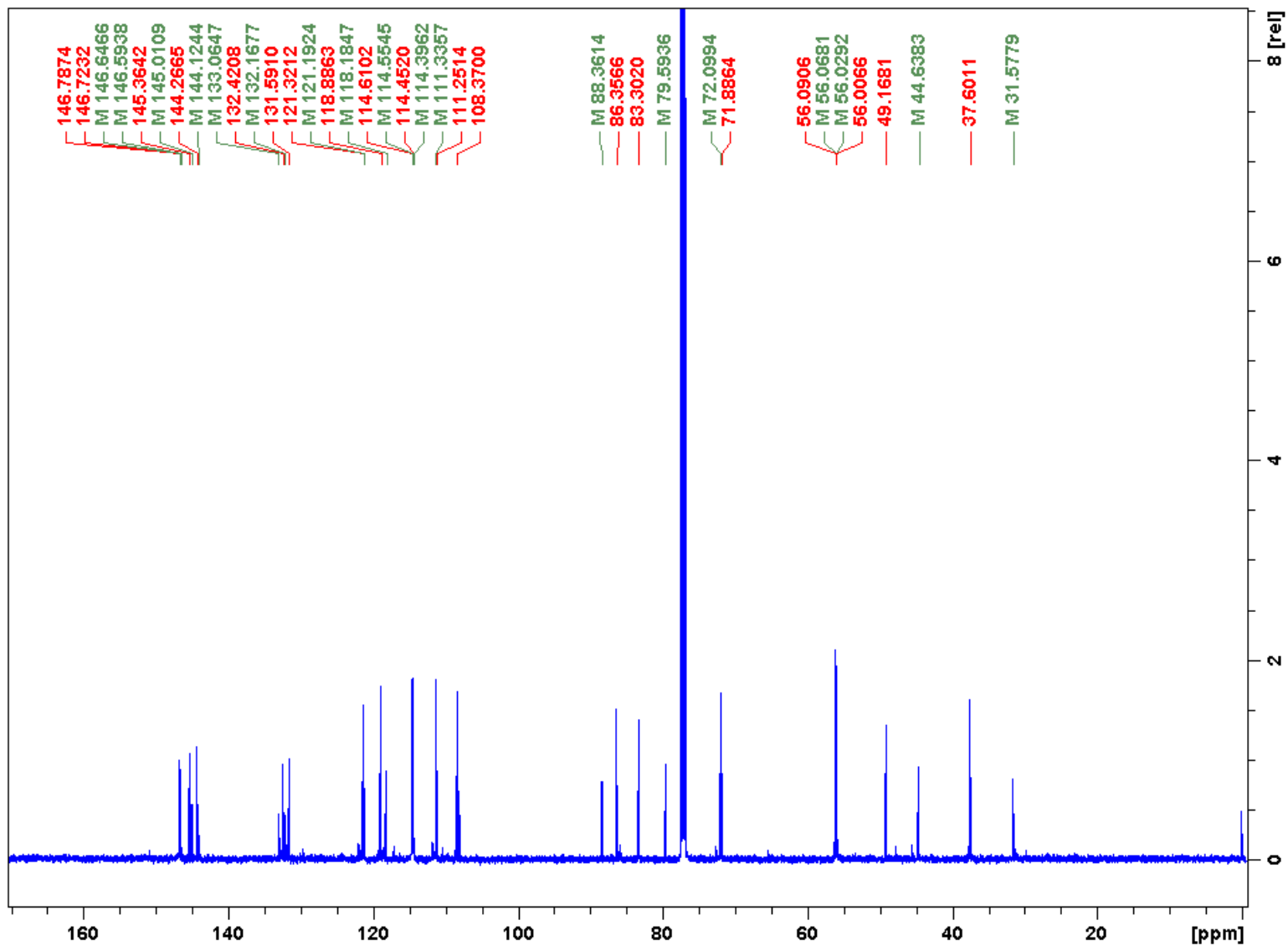
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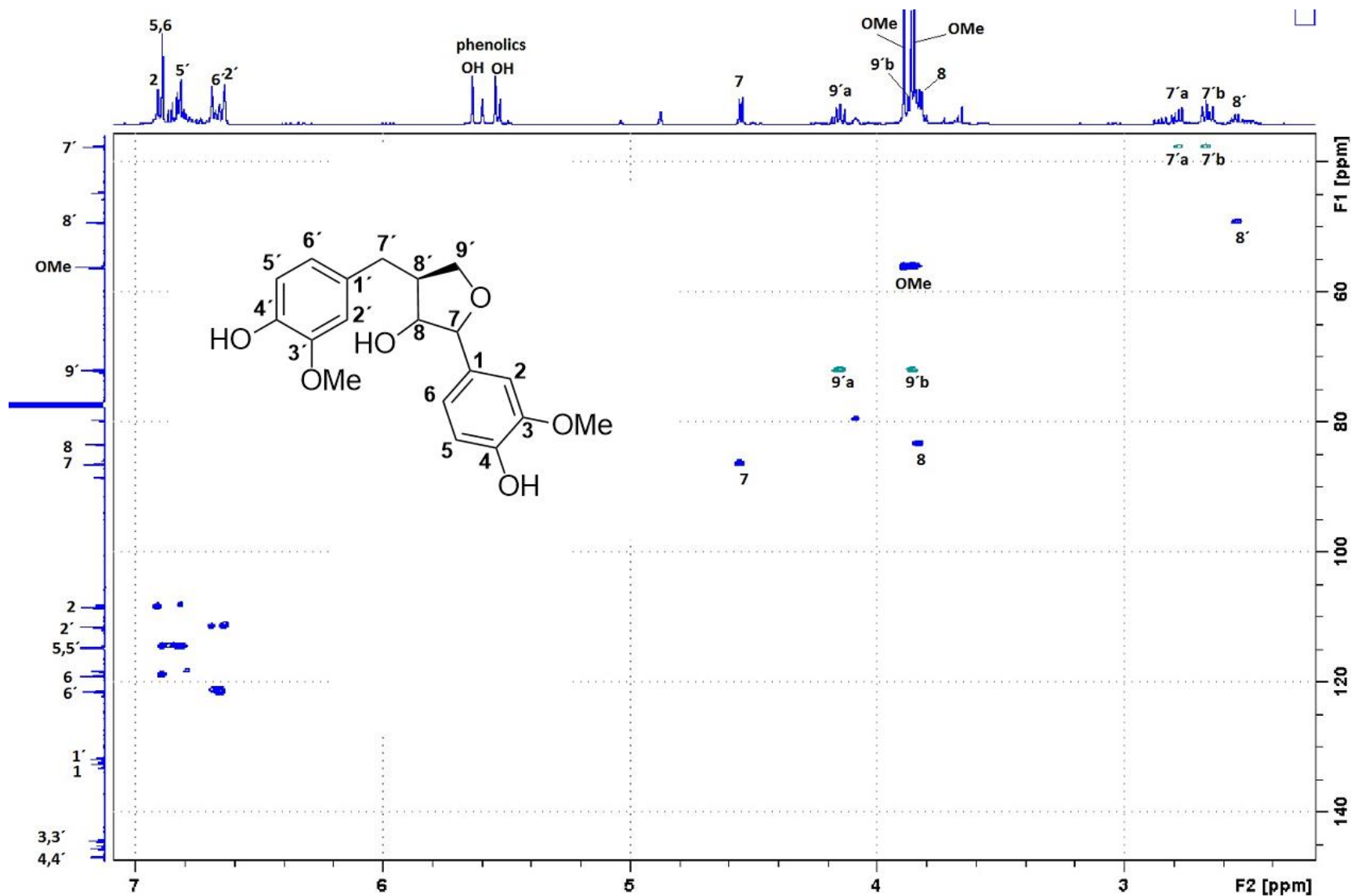
**$^1\text{H}$  NMR ( $\text{CDCl}_3$ ) of two diastereomers of 1A (traces seen of two other diastereomers)**



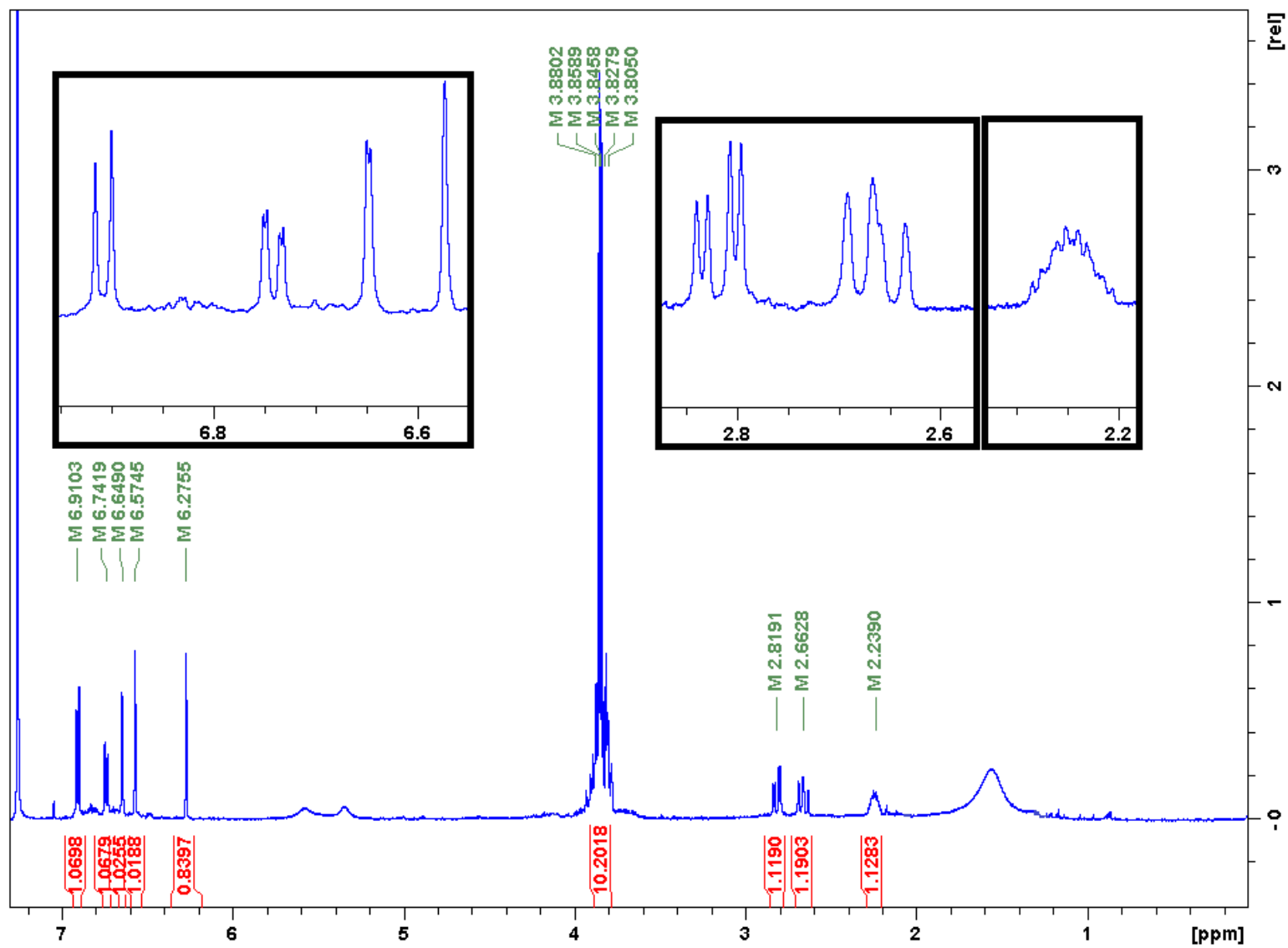
# $^{13}\text{C}$ NMR ( $\text{CDCl}_3$ ) of two diastereomers of 1A



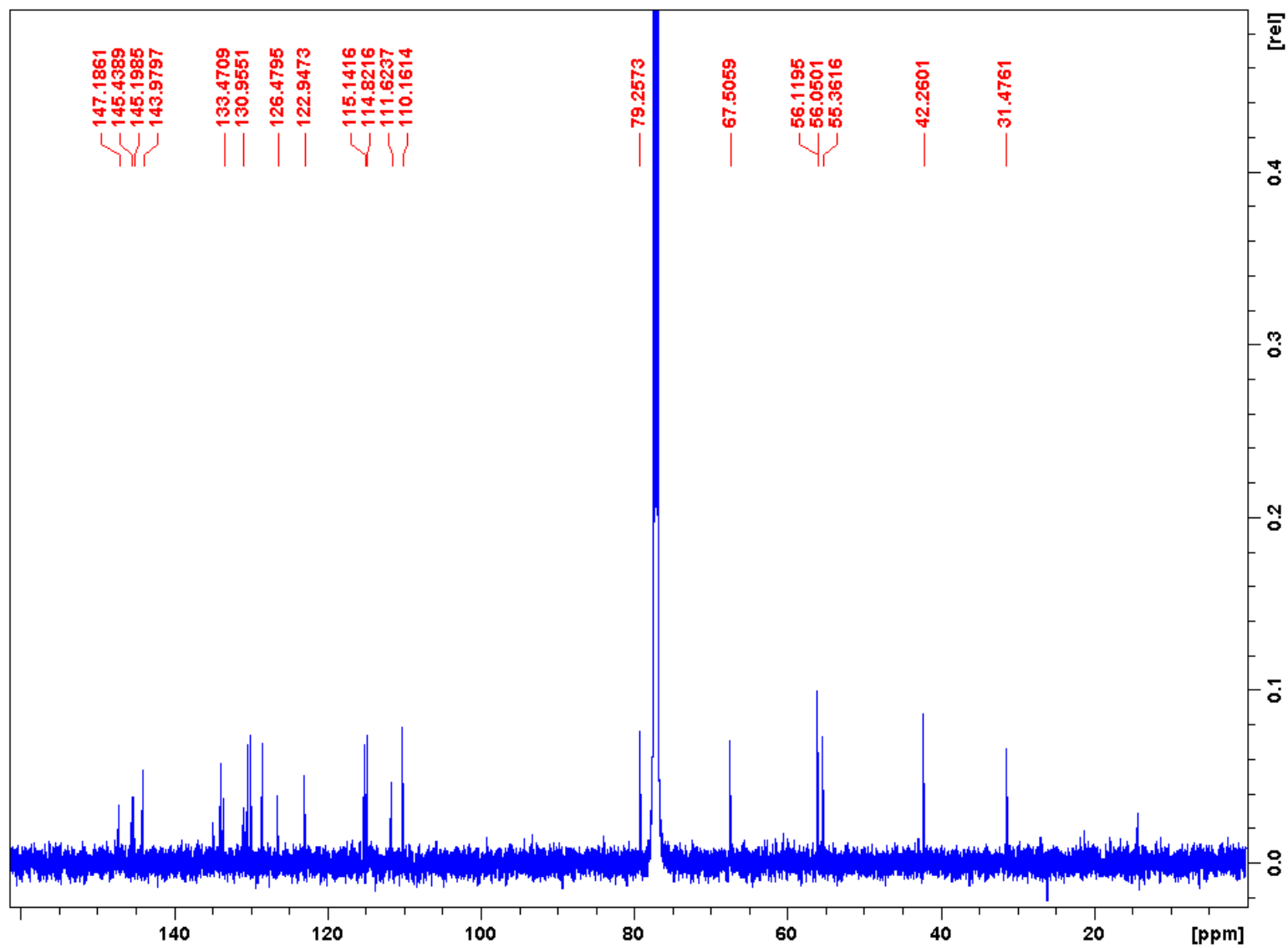
# HSQC (CDCl<sub>3</sub>) of diastereomeric mixture of 1A (signals solved for the major isomer)



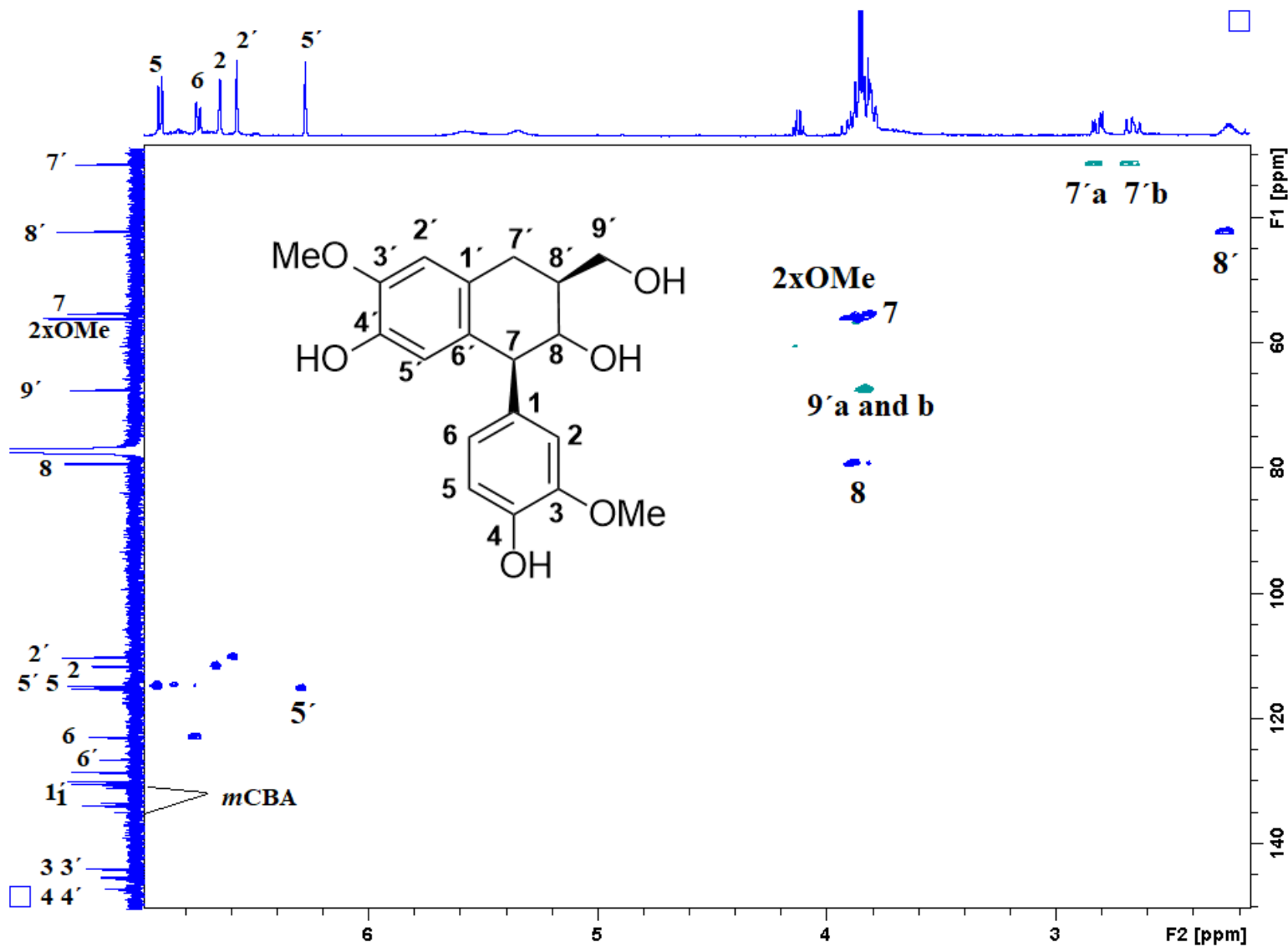
# $^1\text{H}$ NMR ( $\text{CDCl}_3$ ) of 1B



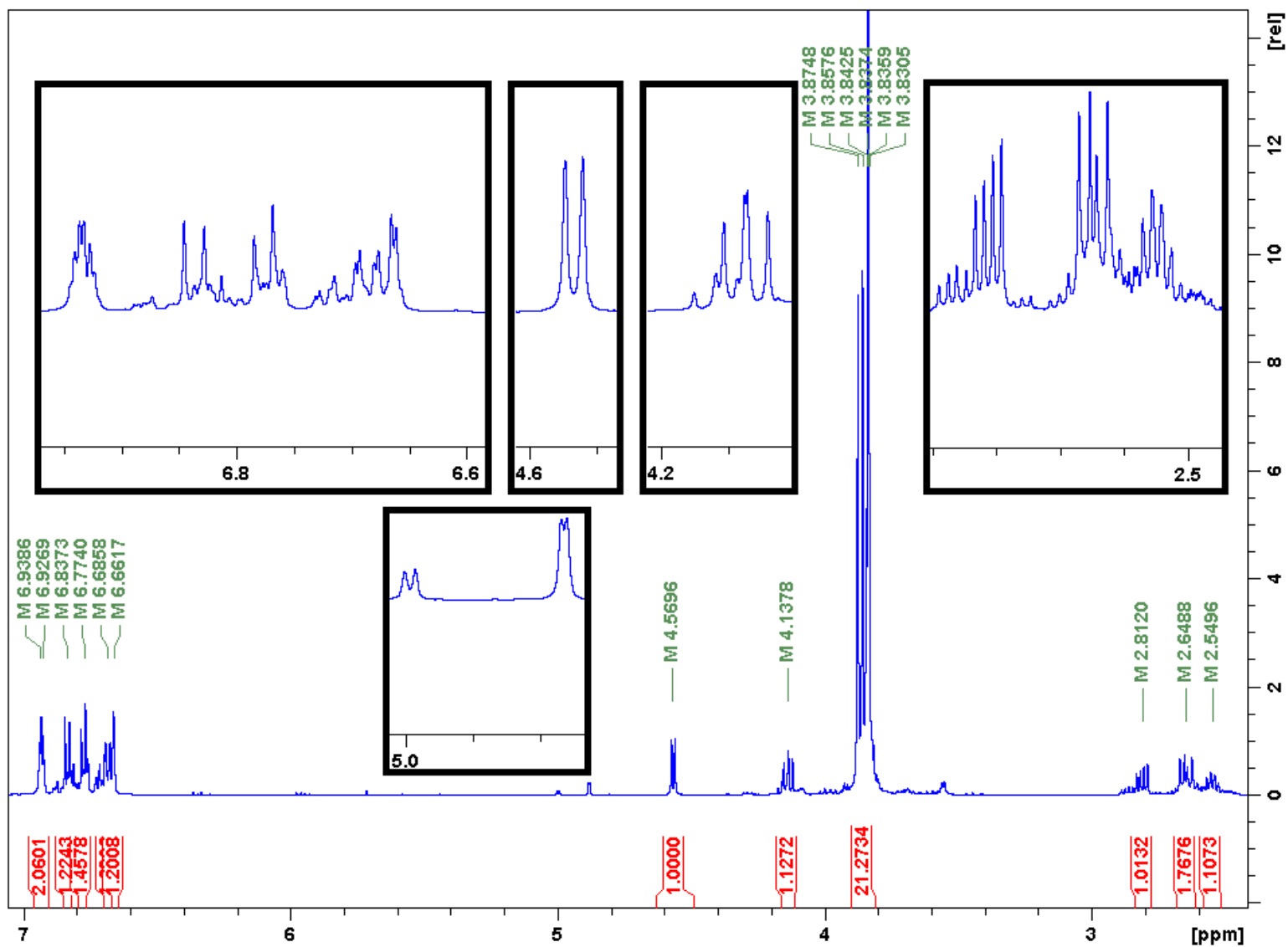
# $^{13}\text{C}$ NMR ( $\text{CDCl}_3$ ) of 1B



# HSQC (CDCl<sub>3</sub>) of 1B

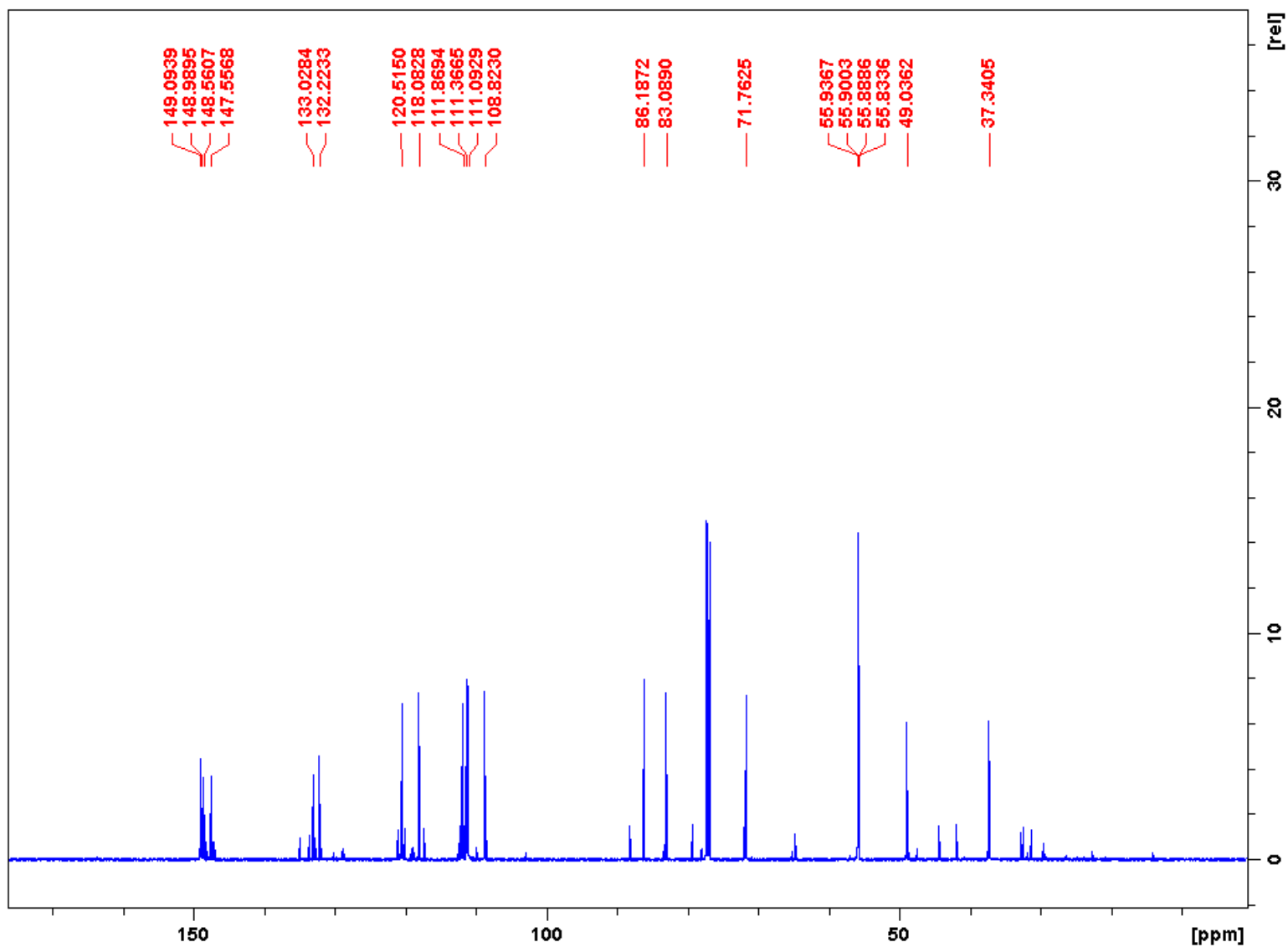


**$^1\text{H}$  NMR ( $\text{CDCl}_3$ ) of major diastereomer of 2A (traces of 2 other diastereomers seen)**

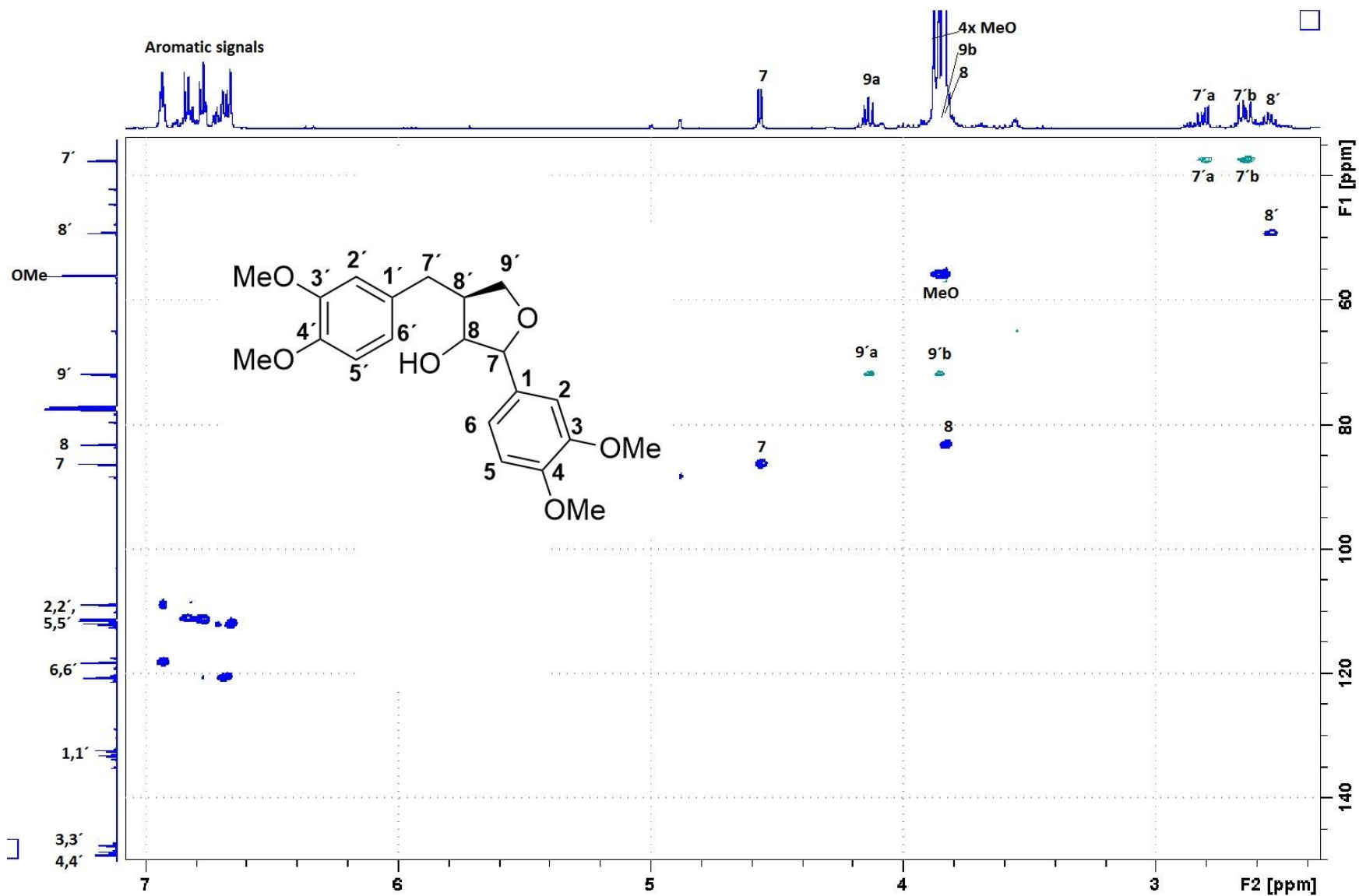




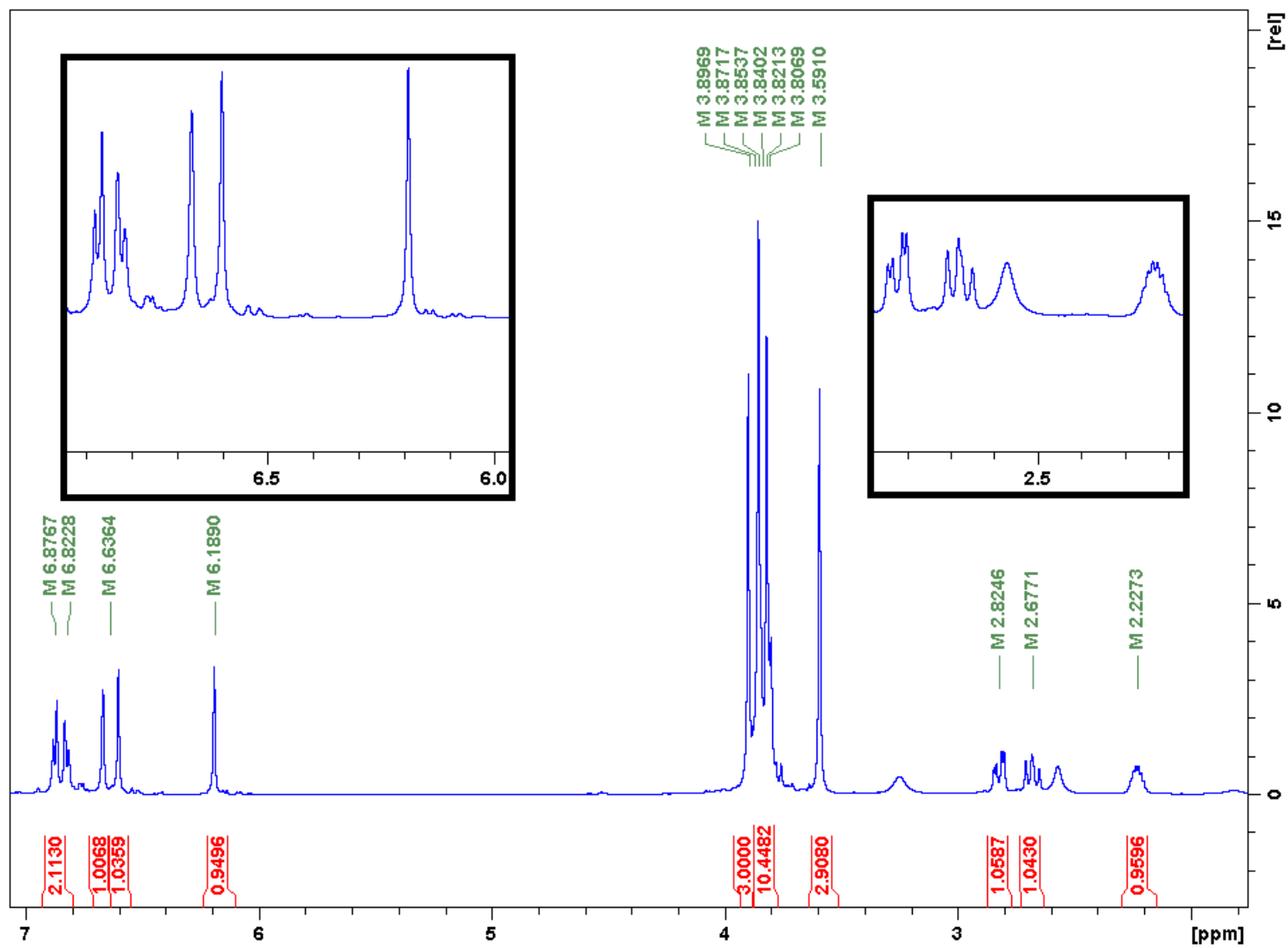
**$^{13}\text{C}$  NMR ( $\text{CDCl}_3$ ) of major diastereomer of 2A (traces of 2 other diastereomers seen)**



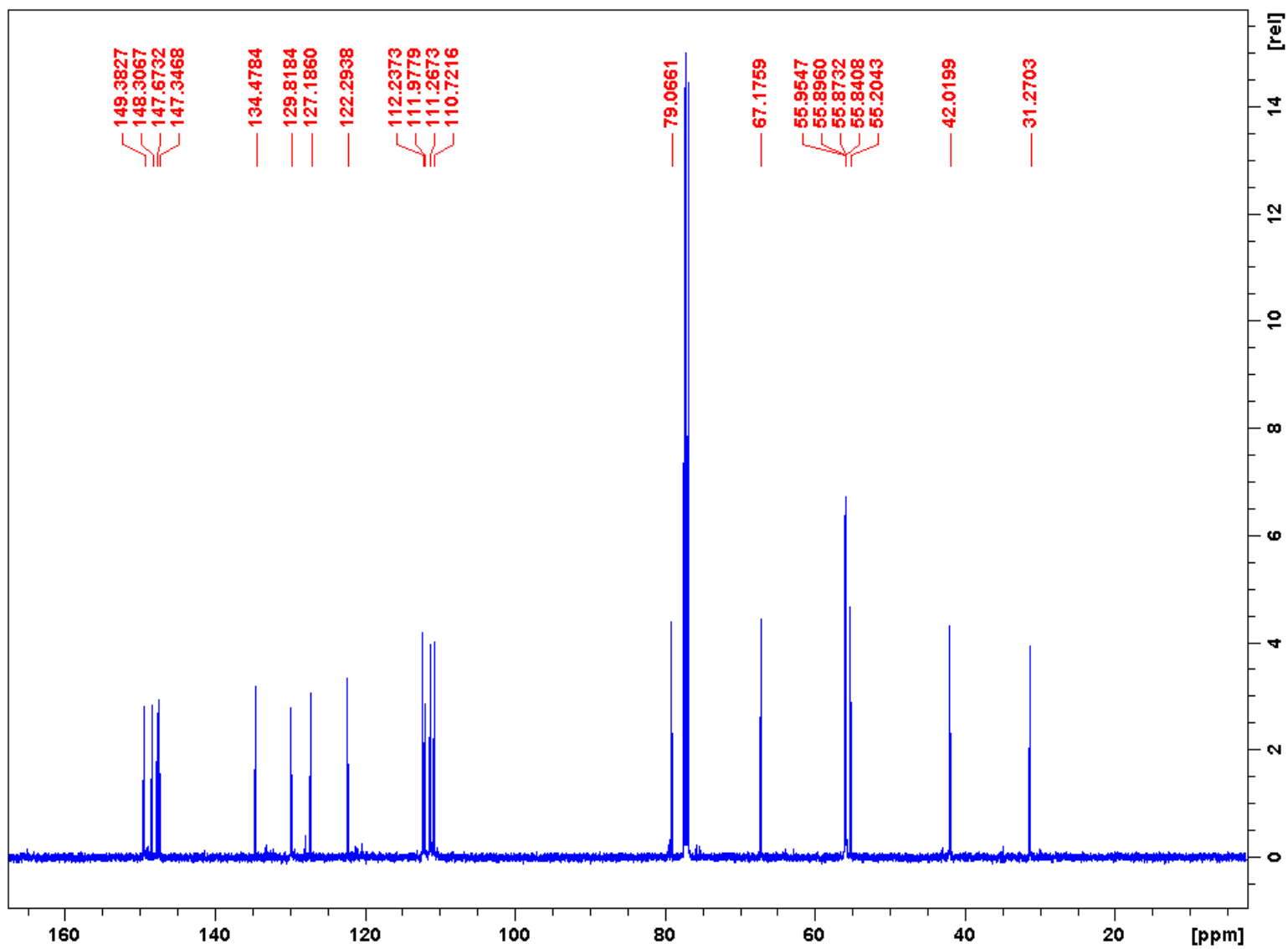
# HSQC (CDCl<sub>3</sub>) of 2A



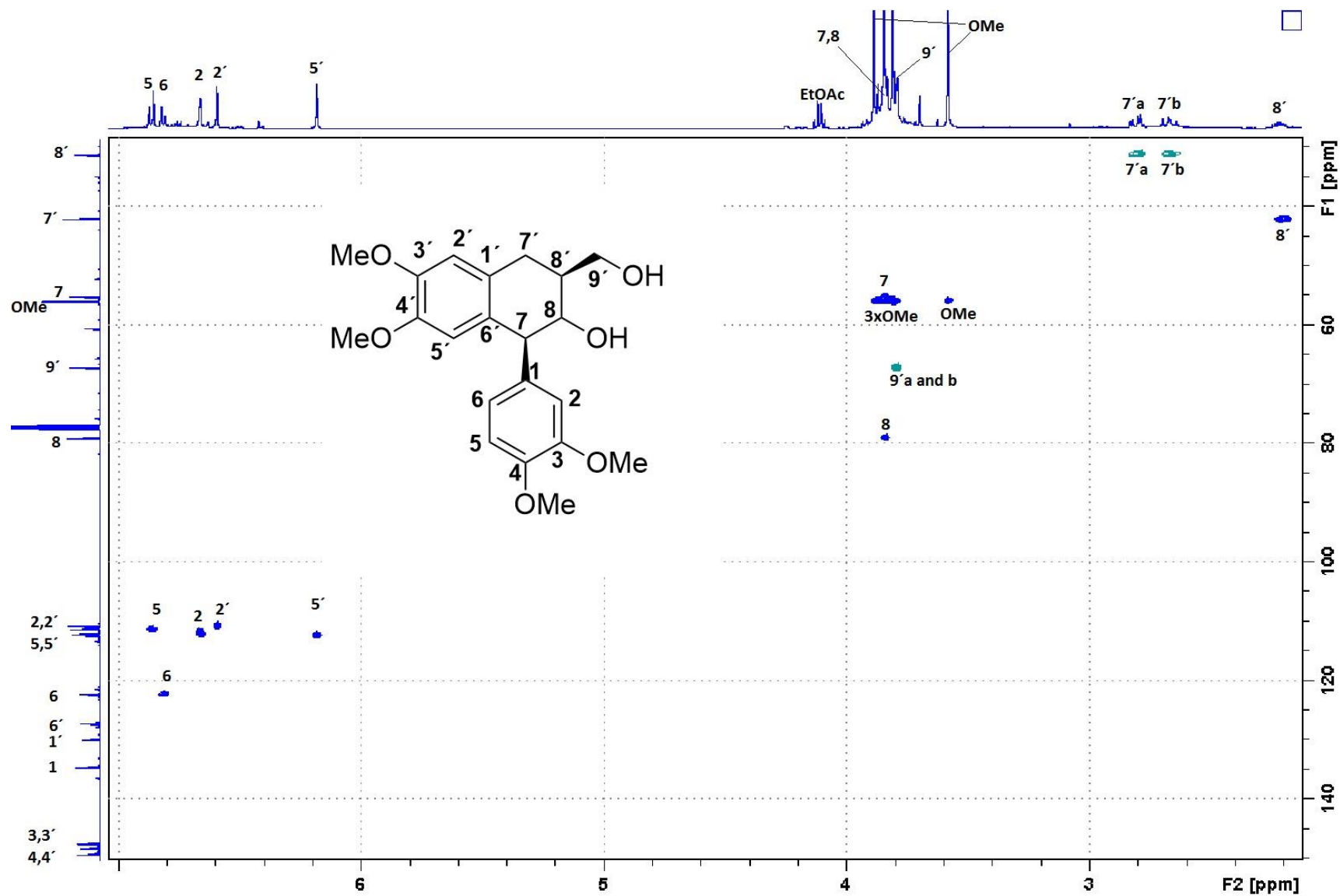
# $^1\text{H}$ NMR ( $\text{CDCl}_3$ ) of 2B



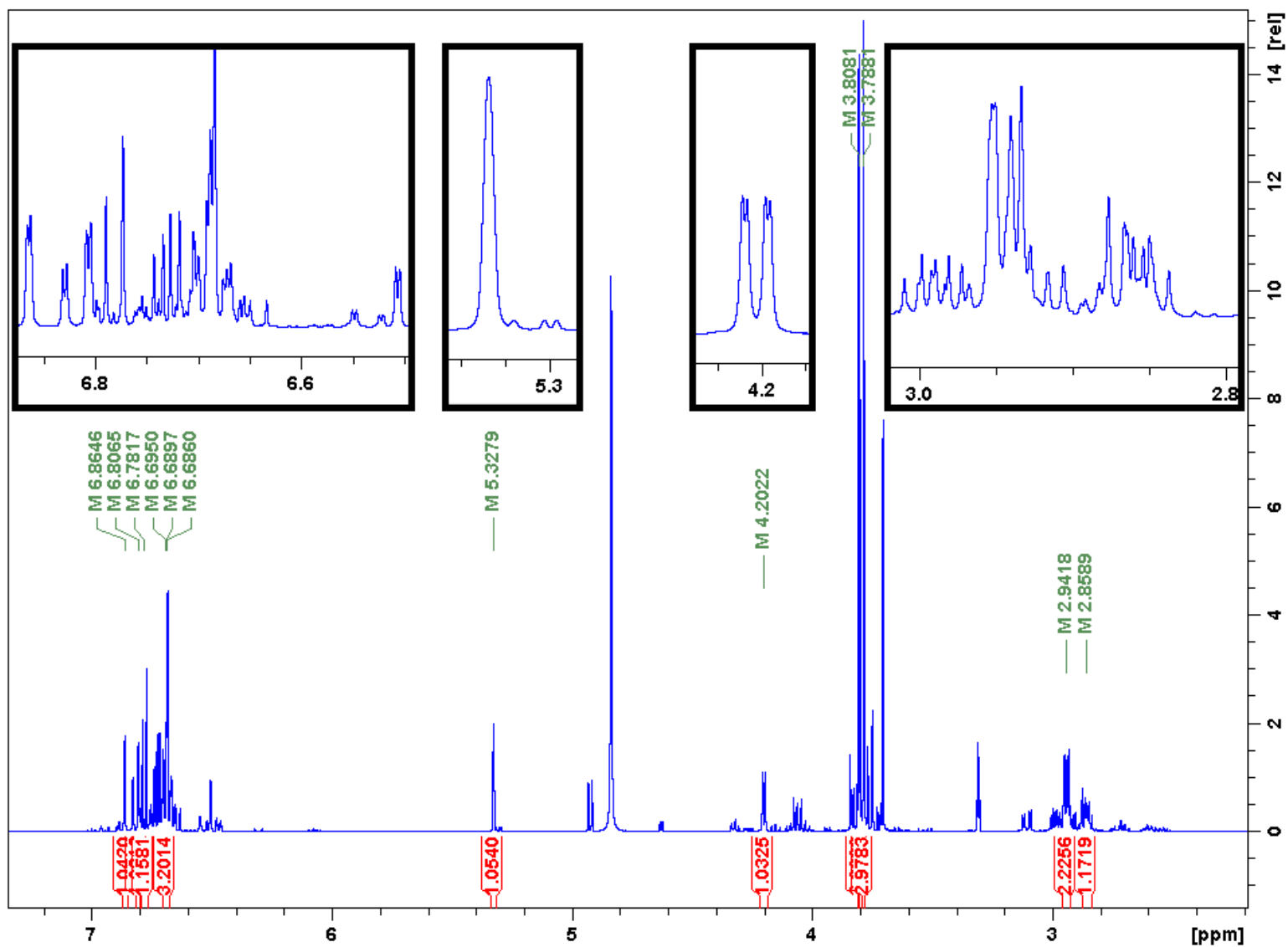
# <sup>13</sup>C NMR (CDCl<sub>3</sub>) of 2B



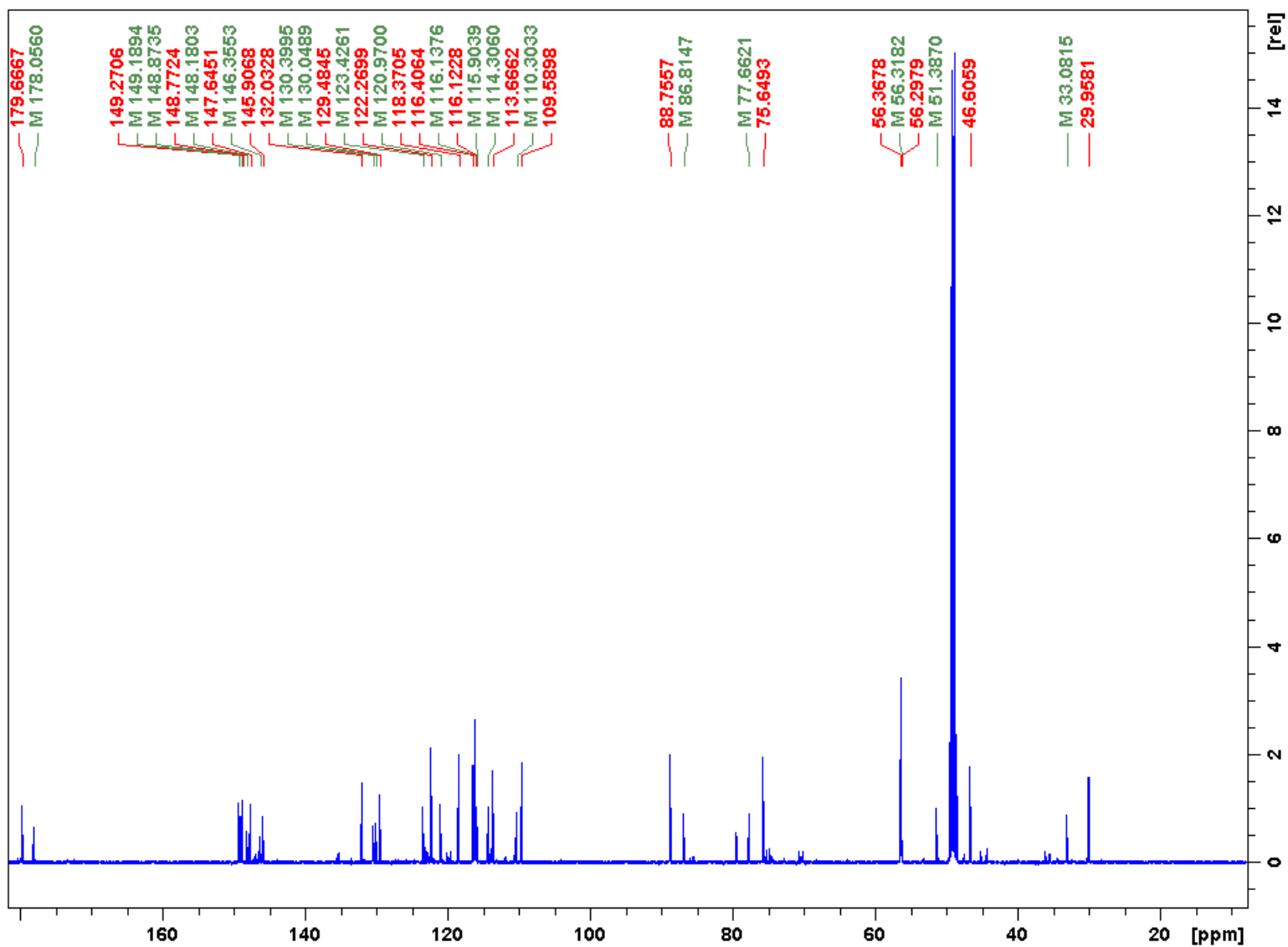
# HSQC (CDCl<sub>3</sub>) of 2B



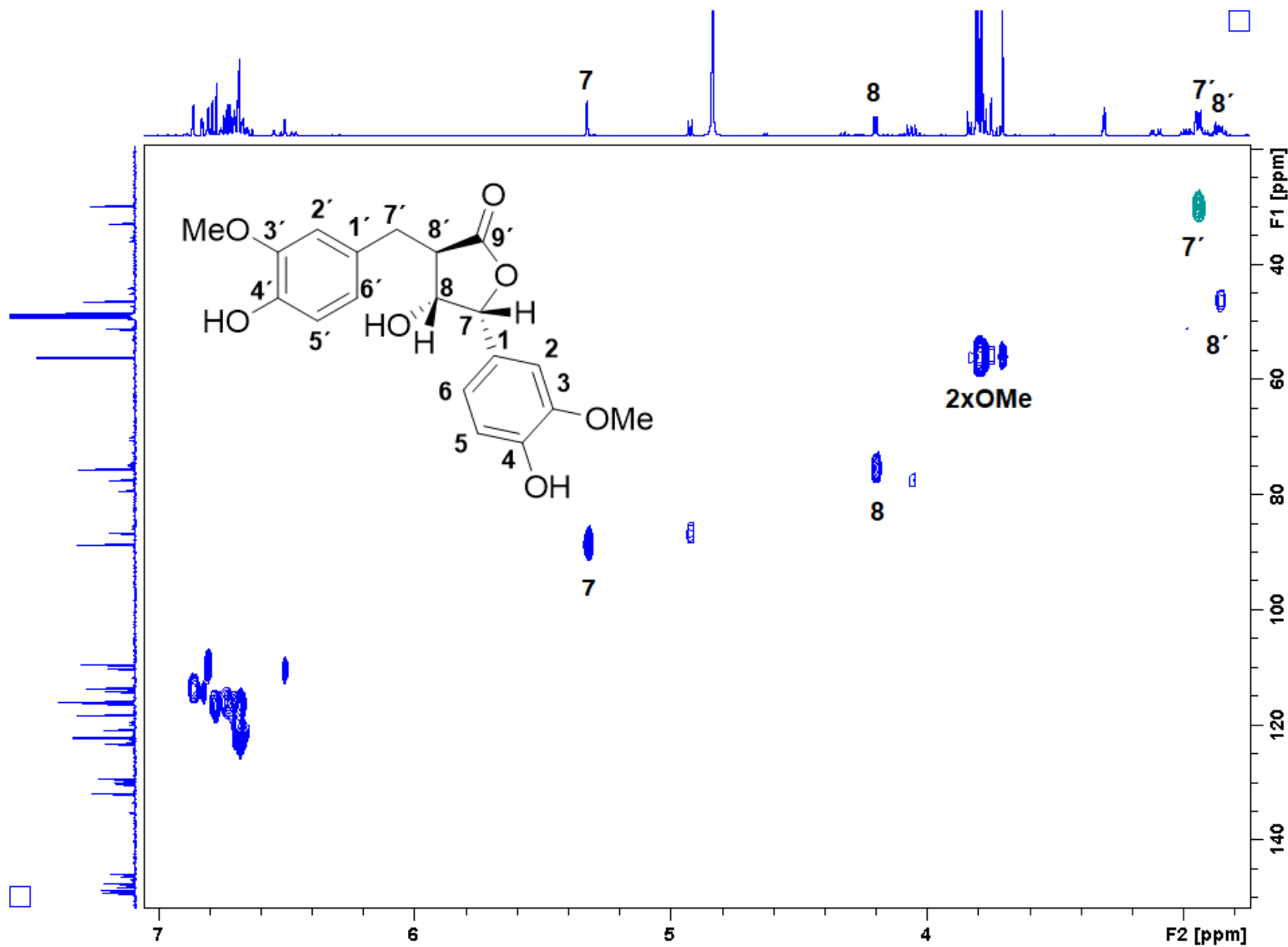
**<sup>1</sup>H NMR (MeOD) of isomer 1 of 3A (isomer 3 + traces of isomers 2 and 4 also seen)**



$^{13}\text{C}$  NMR (MeOD) of **isomer 1** and **isomer 3** of 3A (traces of isomers 2 and 4 also seen)

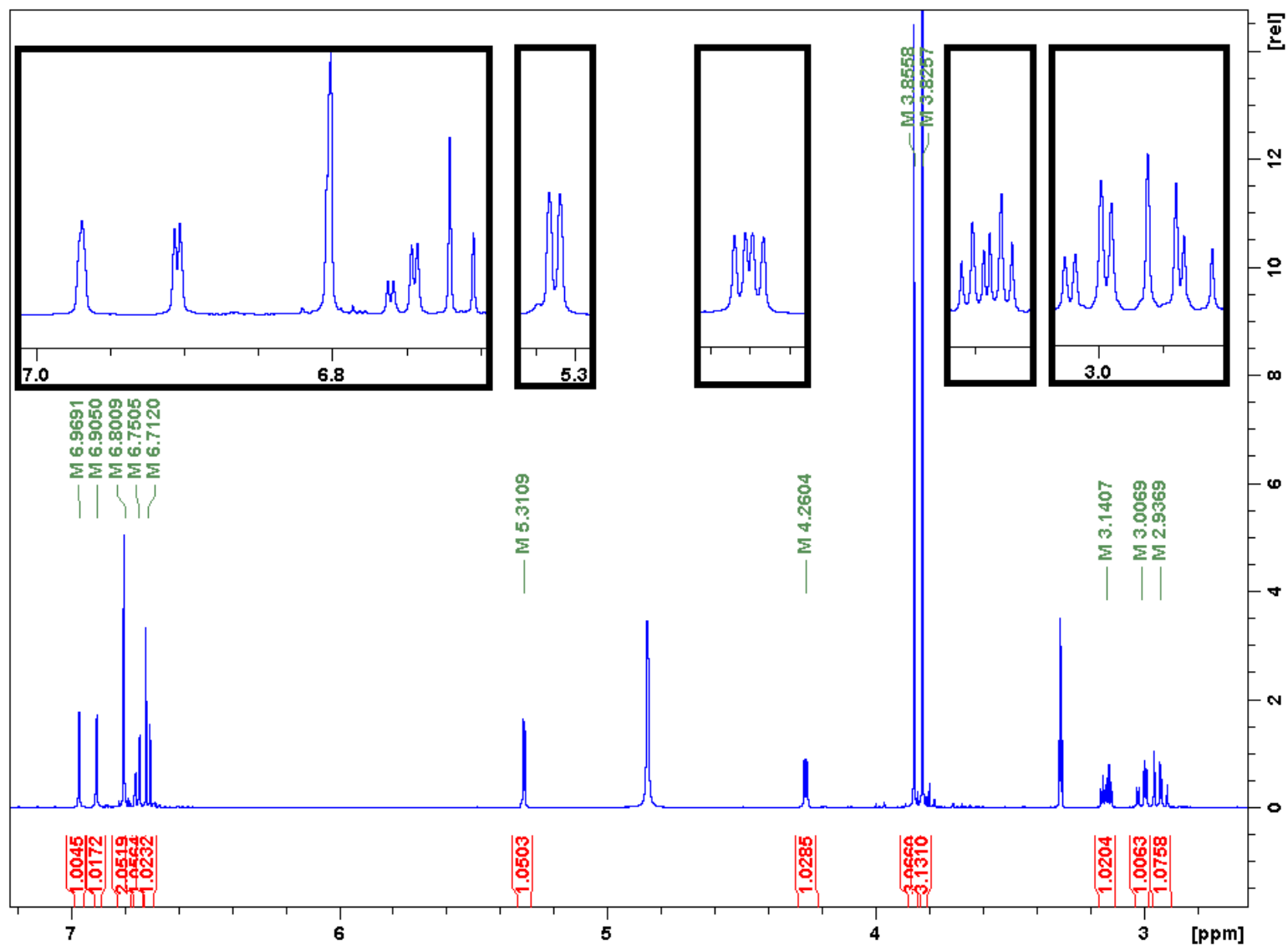


# HSQC of isomer 1 of 3A (isomer 3 + traces of isomers 2 and 4 also seen)

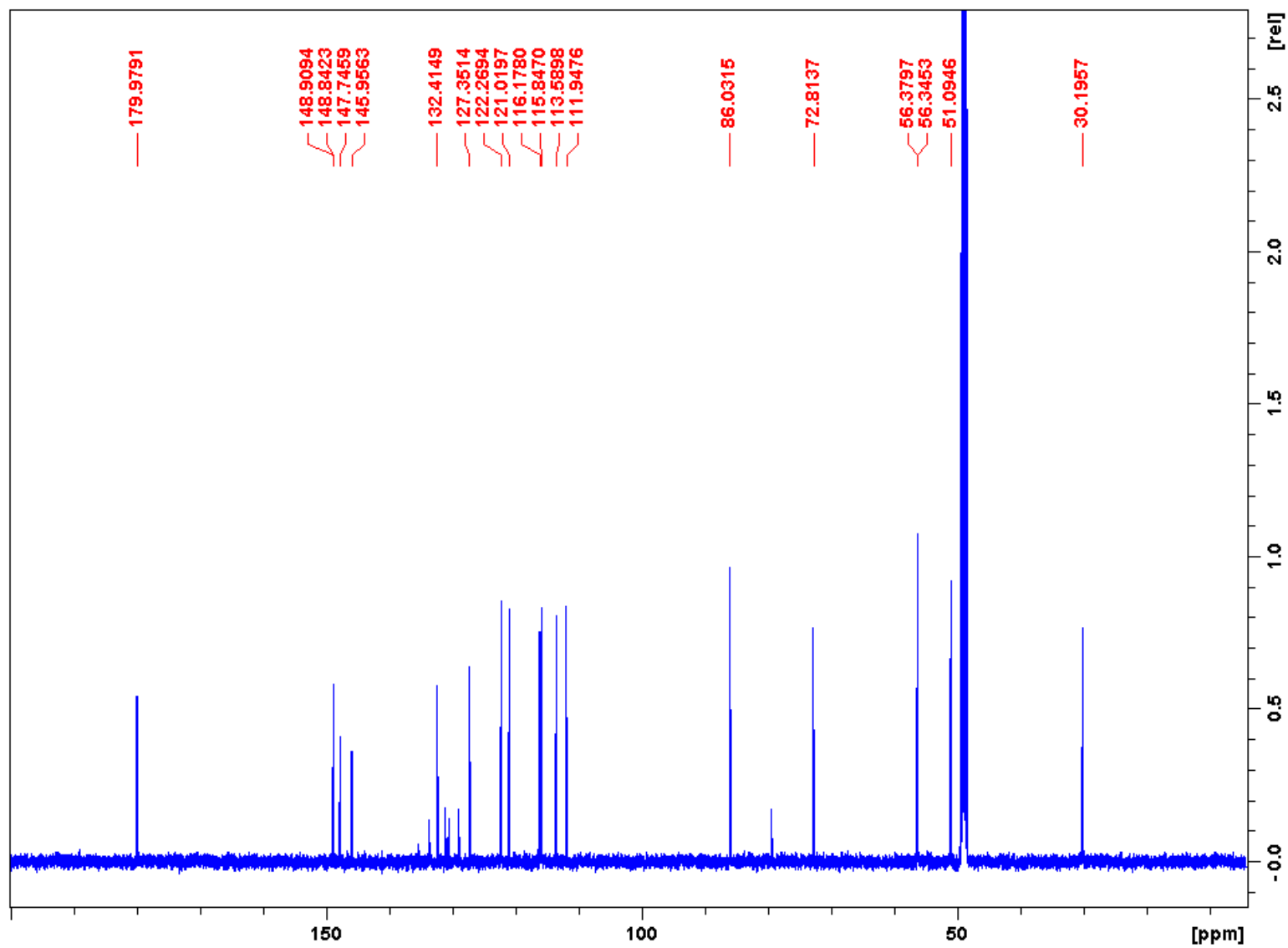




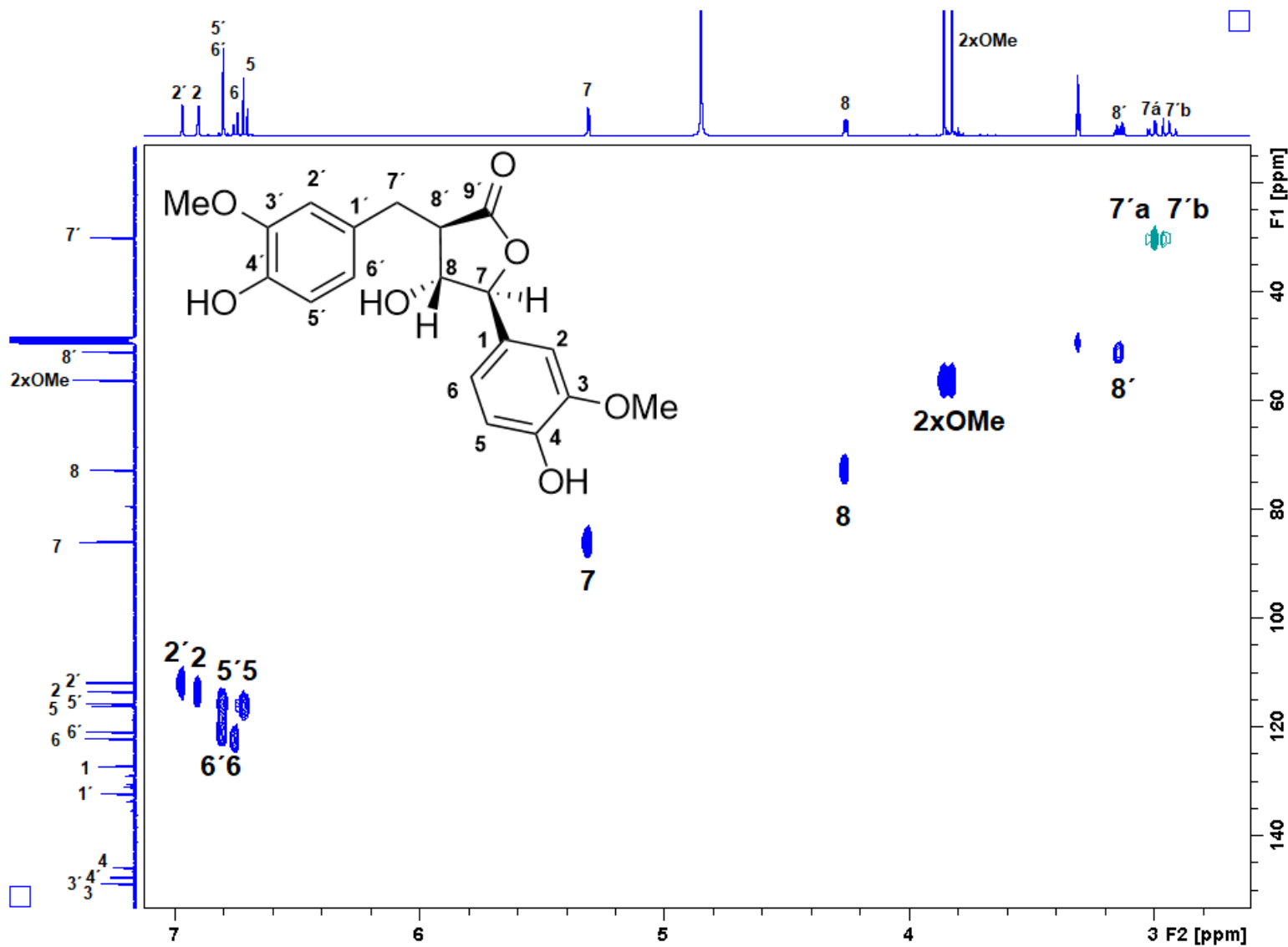
# <sup>1</sup>H NMR (MeOD) of isomer 2 of 3A



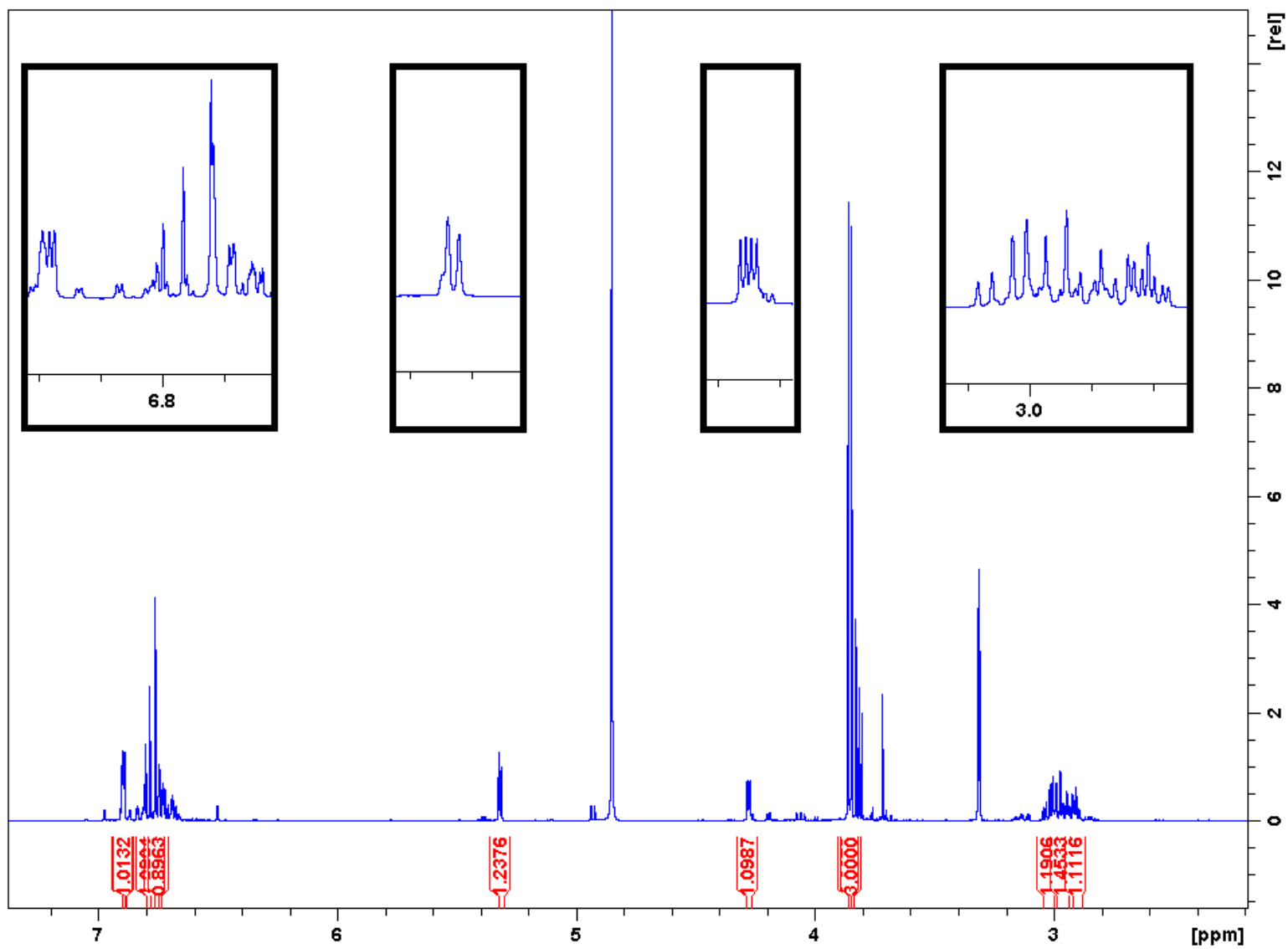
# <sup>13</sup>C NMR (MeOD) of isomer 2 of 3A



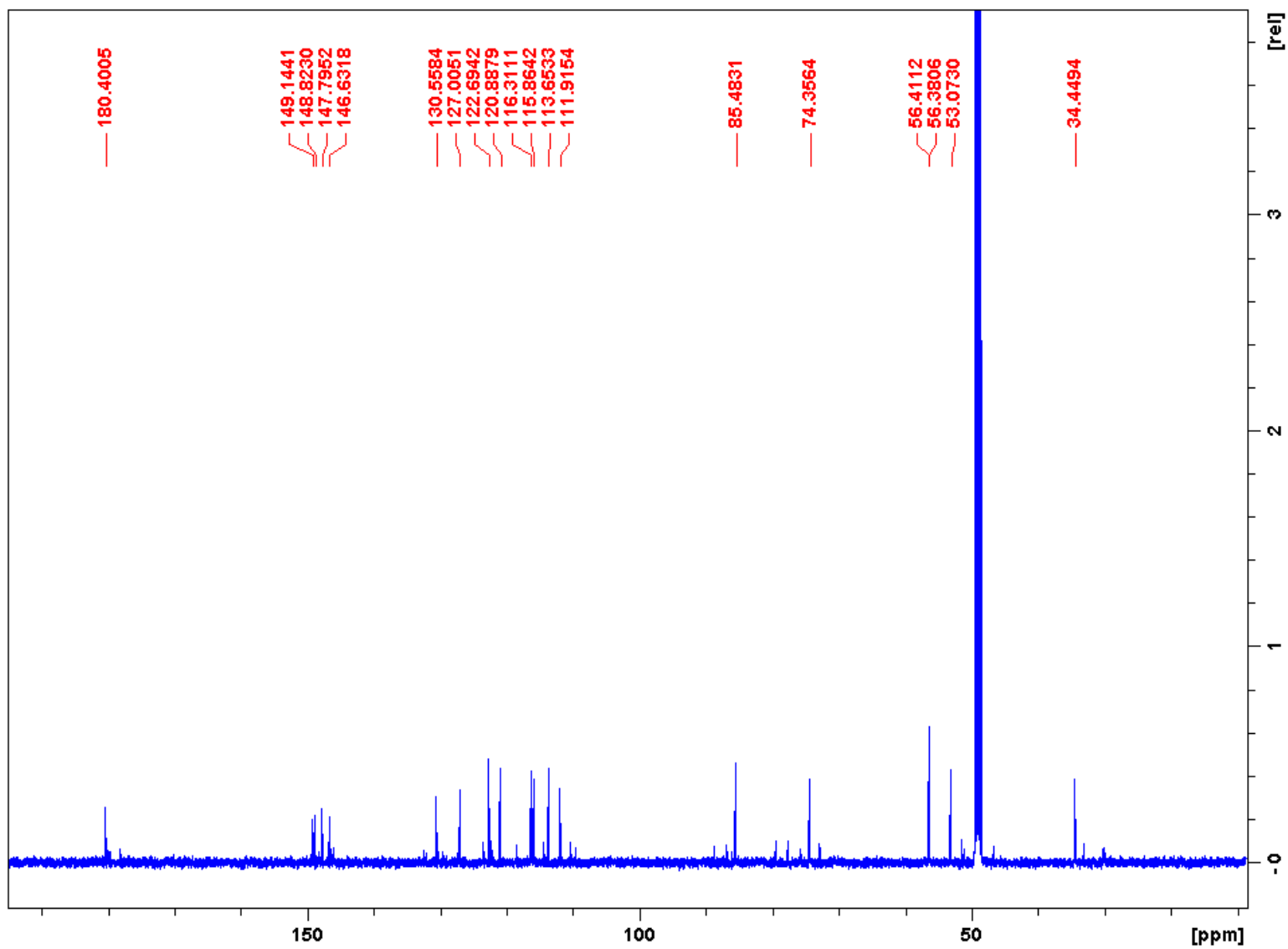
# HSQC (MeOD) of isomer 2 of 3A



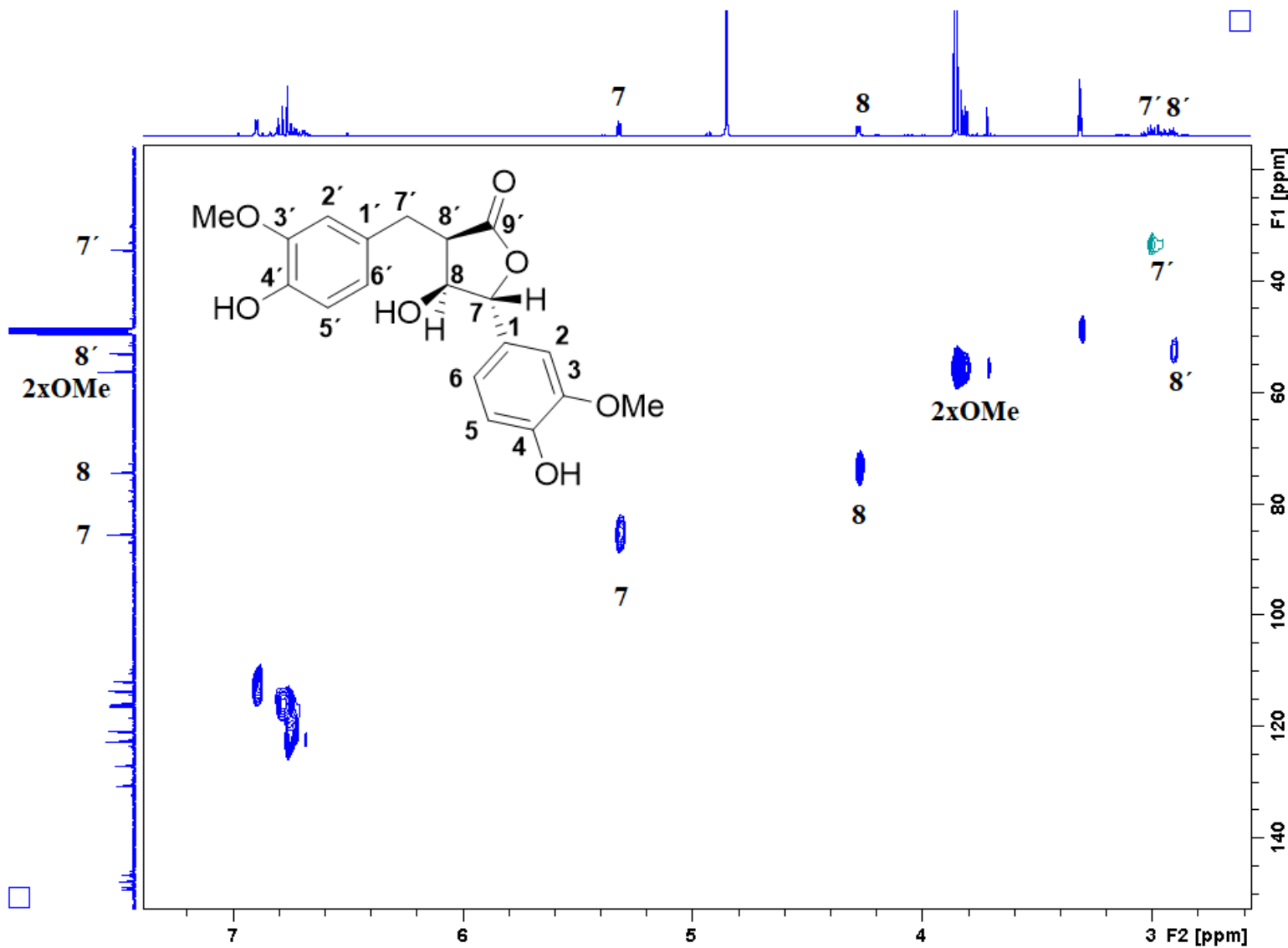
# <sup>1</sup>H NMR (MeOD) of isomer 4 of 3A (traces of other isomers)



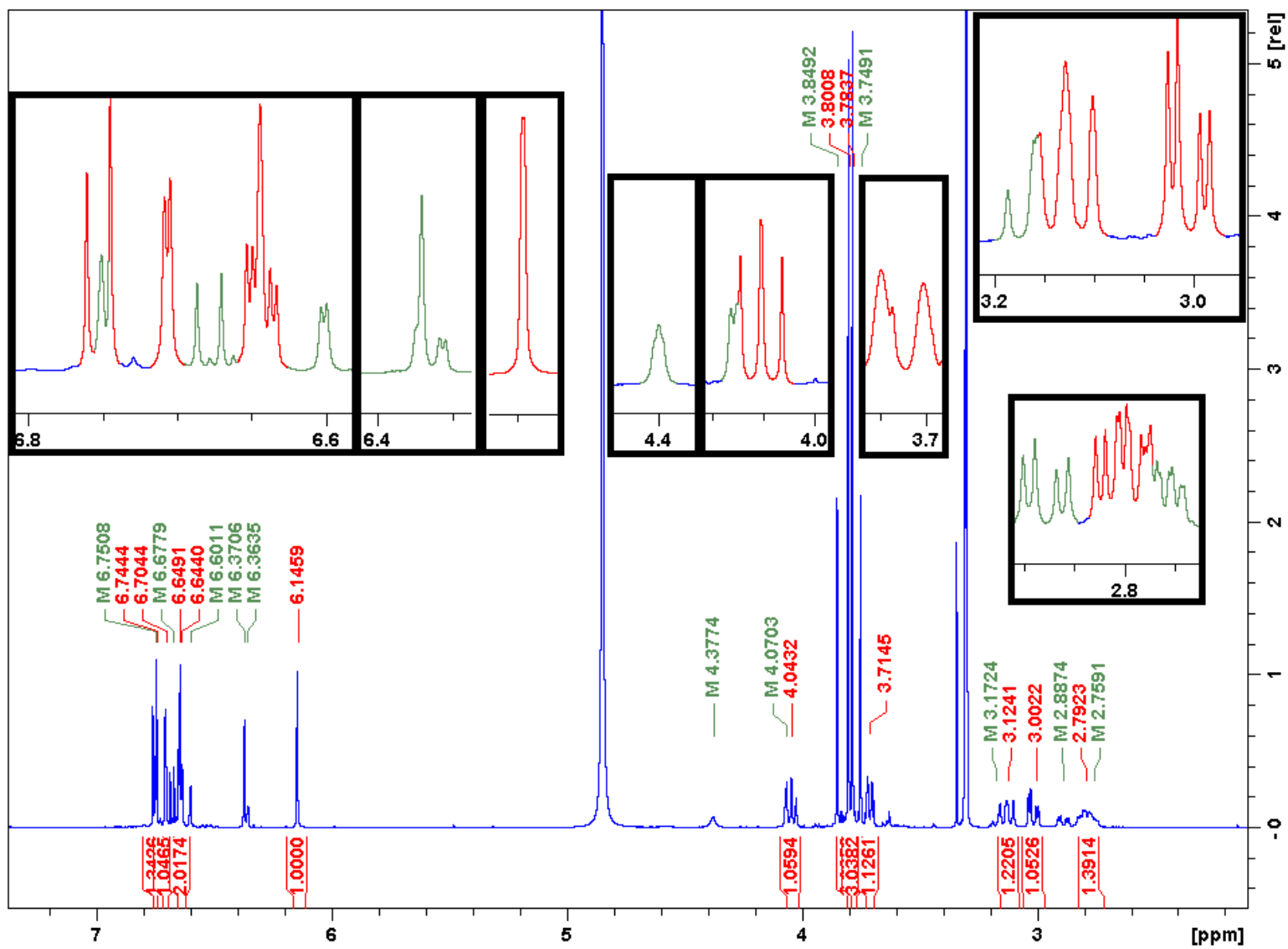
# <sup>13</sup>C NMR (MeOD) of isomer 4 of 3A (traces of other isomers)



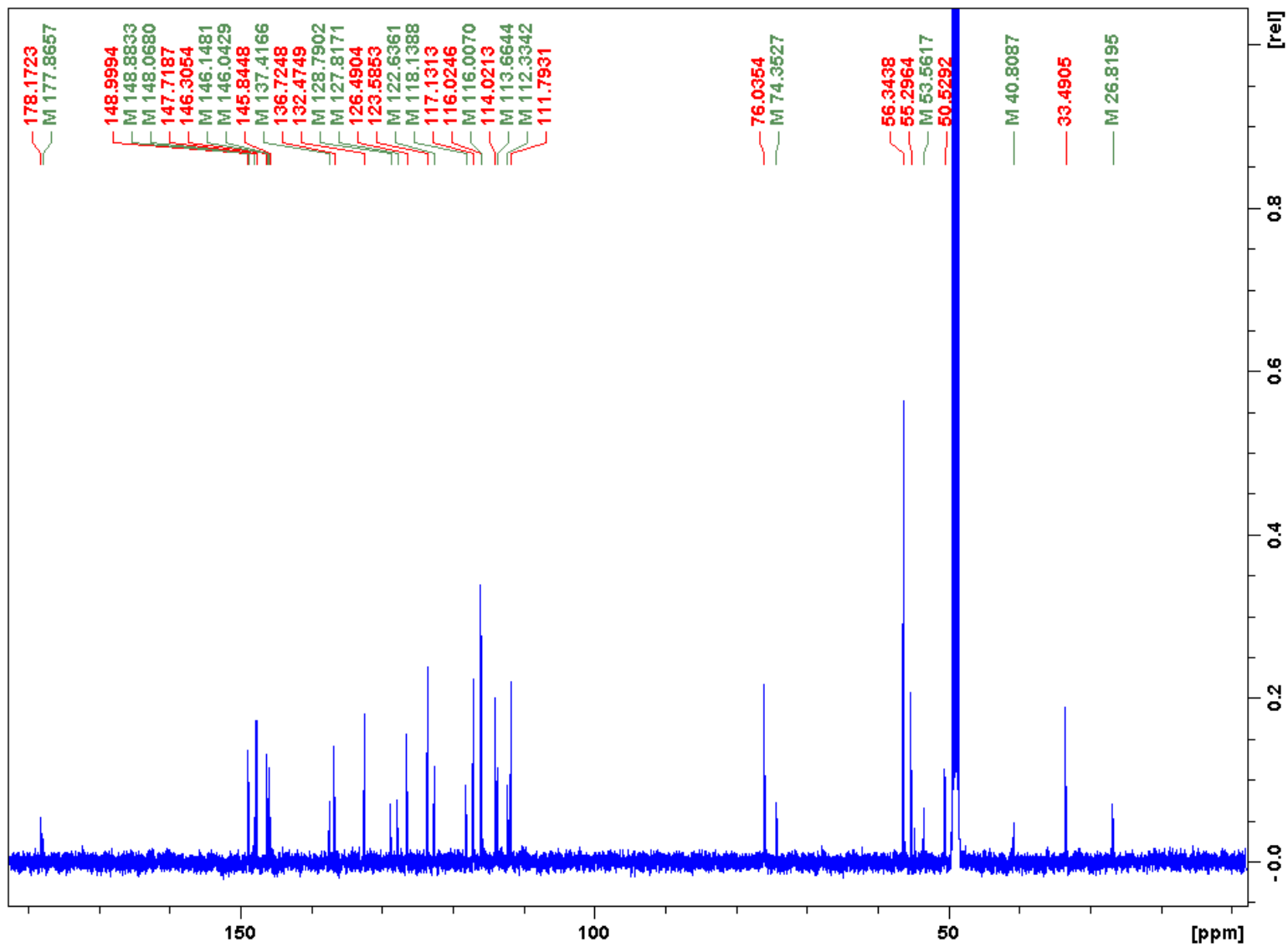
# HSQC of isomer 4 of 3A (traces of other isomers)



<sup>1</sup>H NMR (MeOD) of **isomer 1** and **isomer 2** of 3B

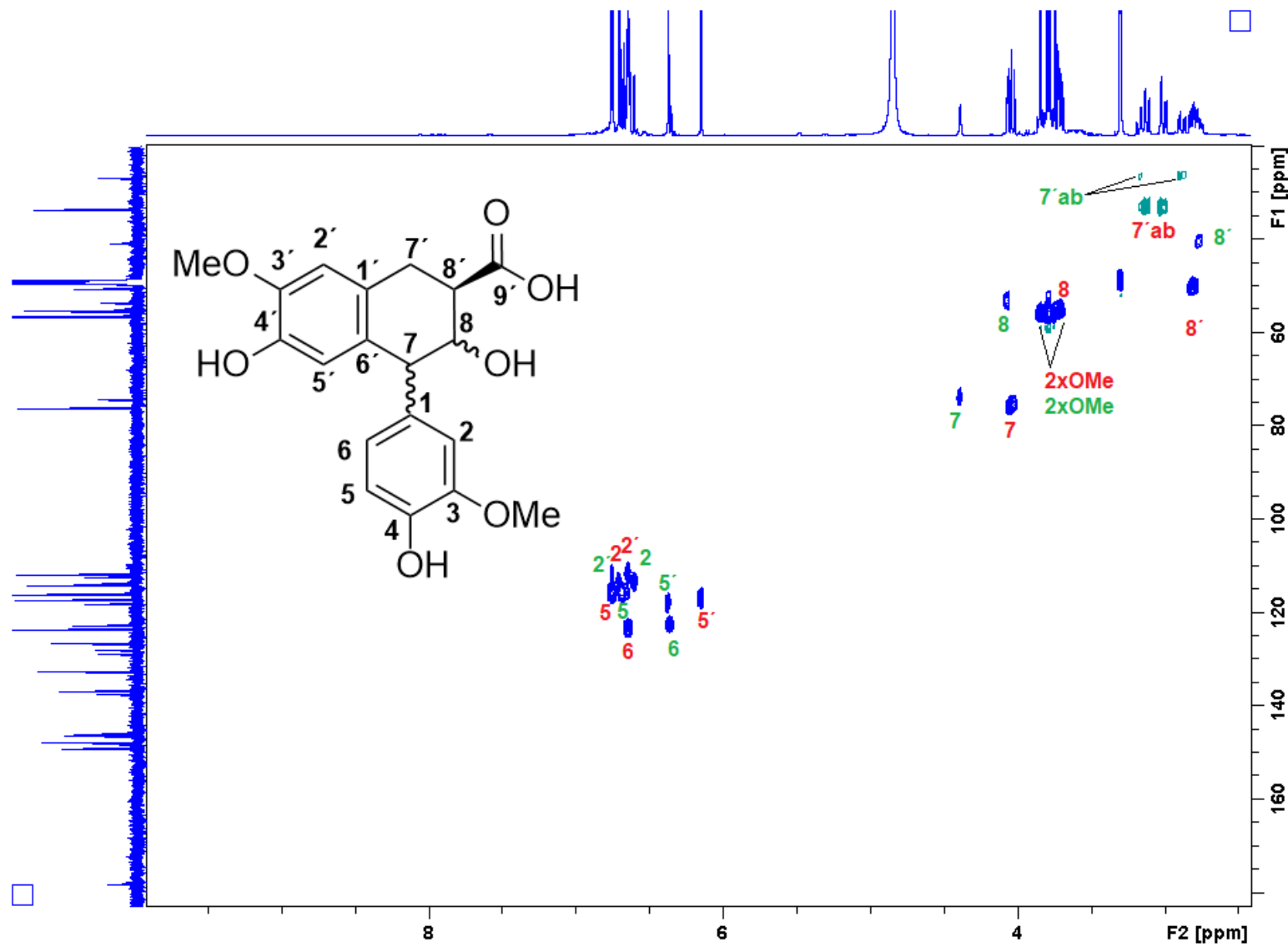


<sup>13</sup>C NMR (MeOD) of **isomer 1** and **isomer 2** of 3B

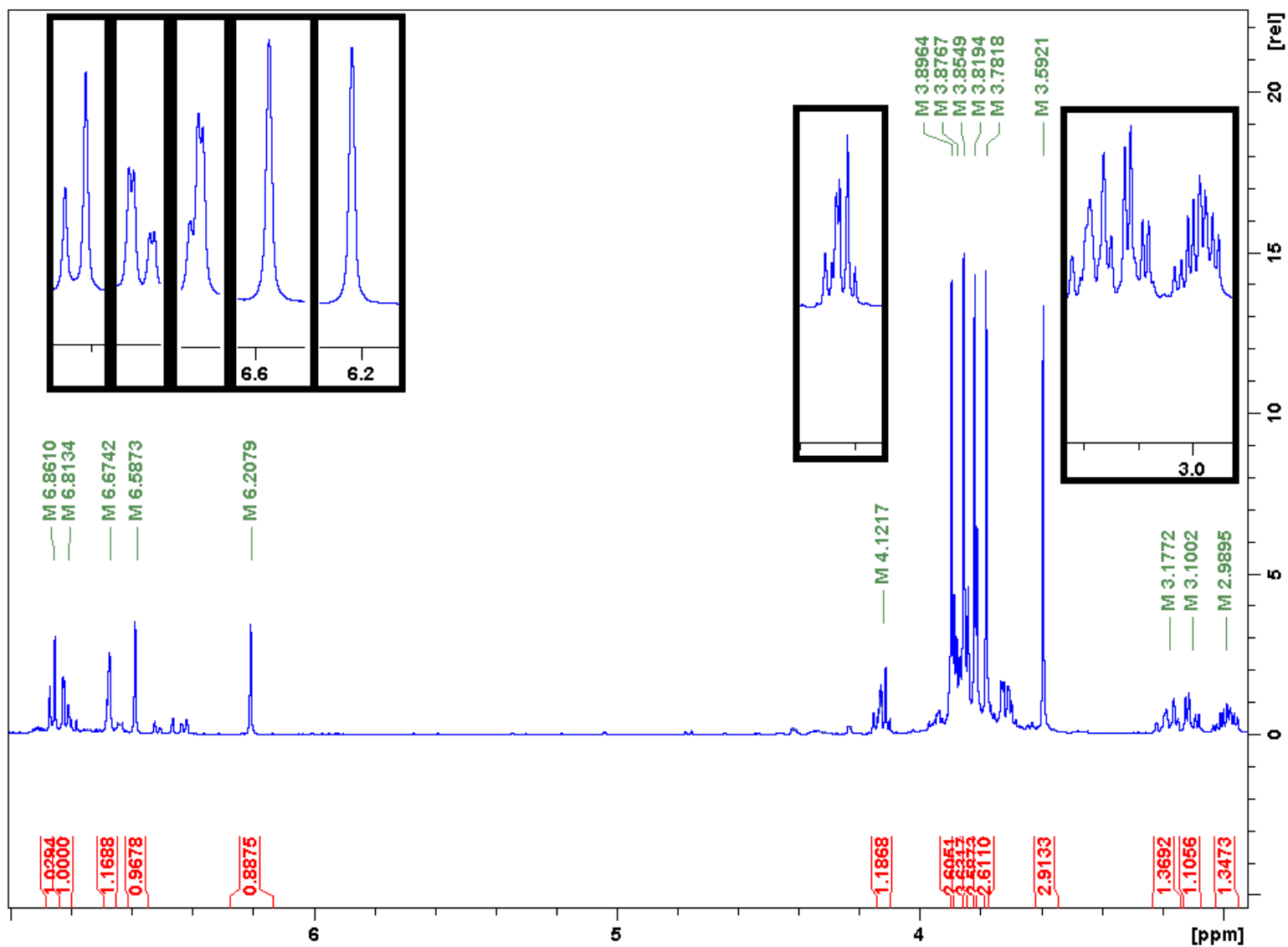




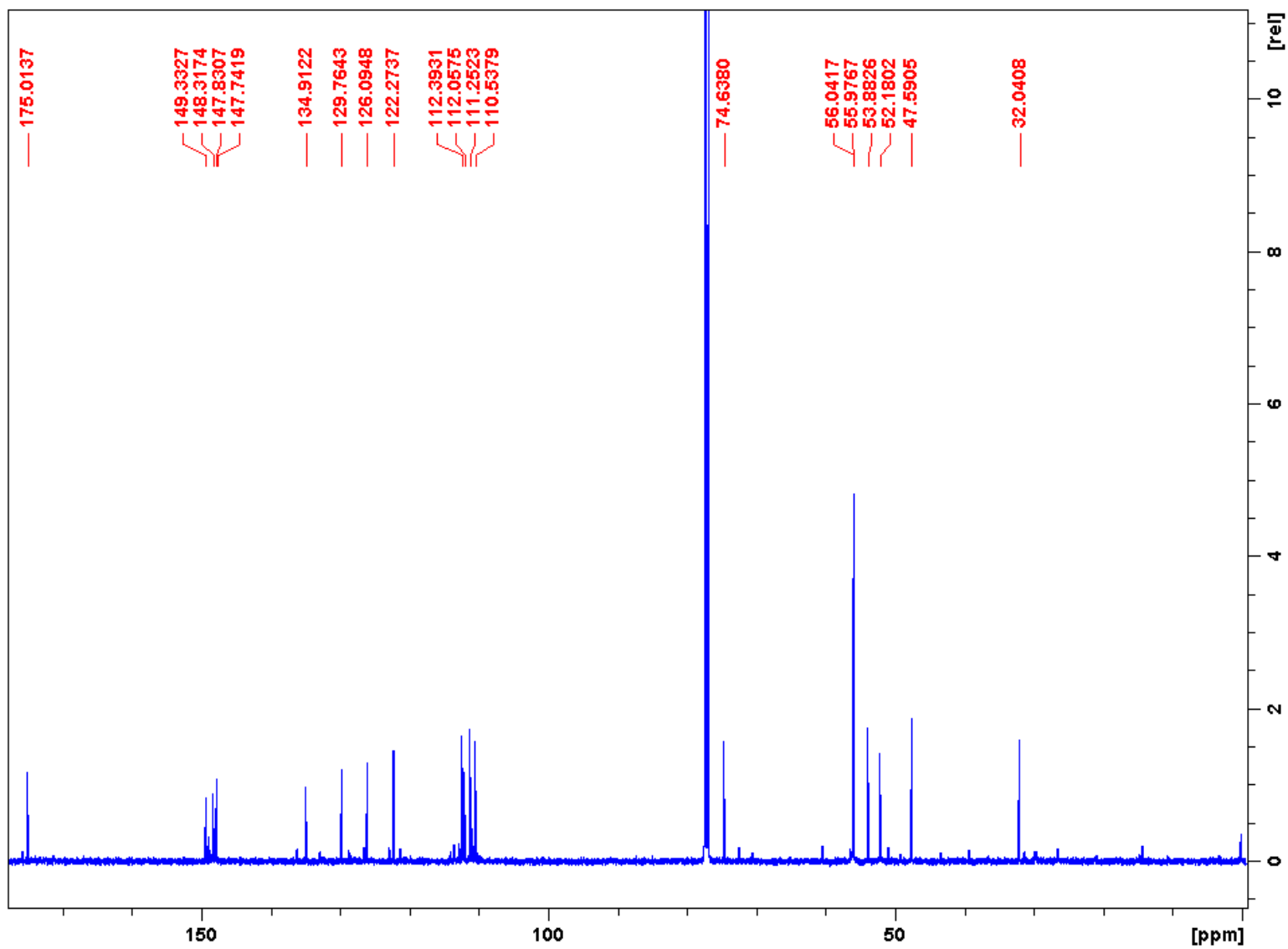
# HSQC (MeOD) of **isomer 1** and **isomer 2 3B**



# $^1\text{H}$ NMR ( $\text{CDCl}_3$ ) of 4B (traces of other diastereomers seen)



**$^{13}\text{C}$  NMR ( $\text{CDCl}_3$ ) of 4B (traces of other diastereomers seen)**



# HSQC (CDCl<sub>3</sub>) of 4B

