

# Synthesis and Evaluation of Trypanocidal Activity of Chromane-type Compounds and Acetophenones

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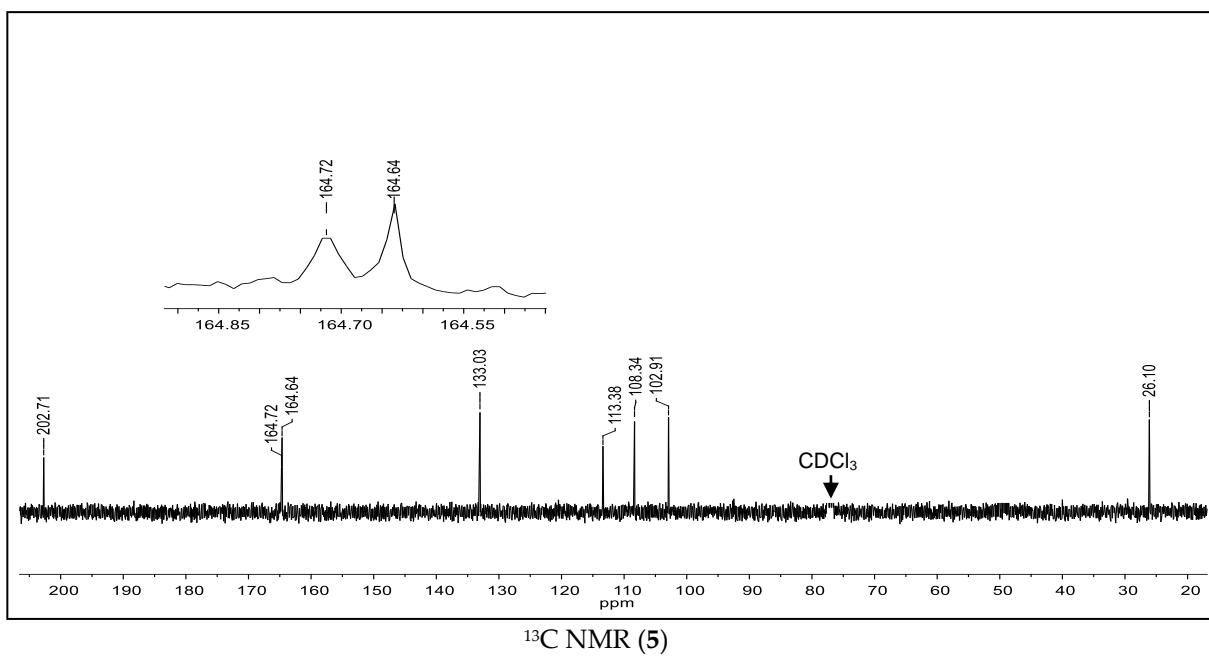
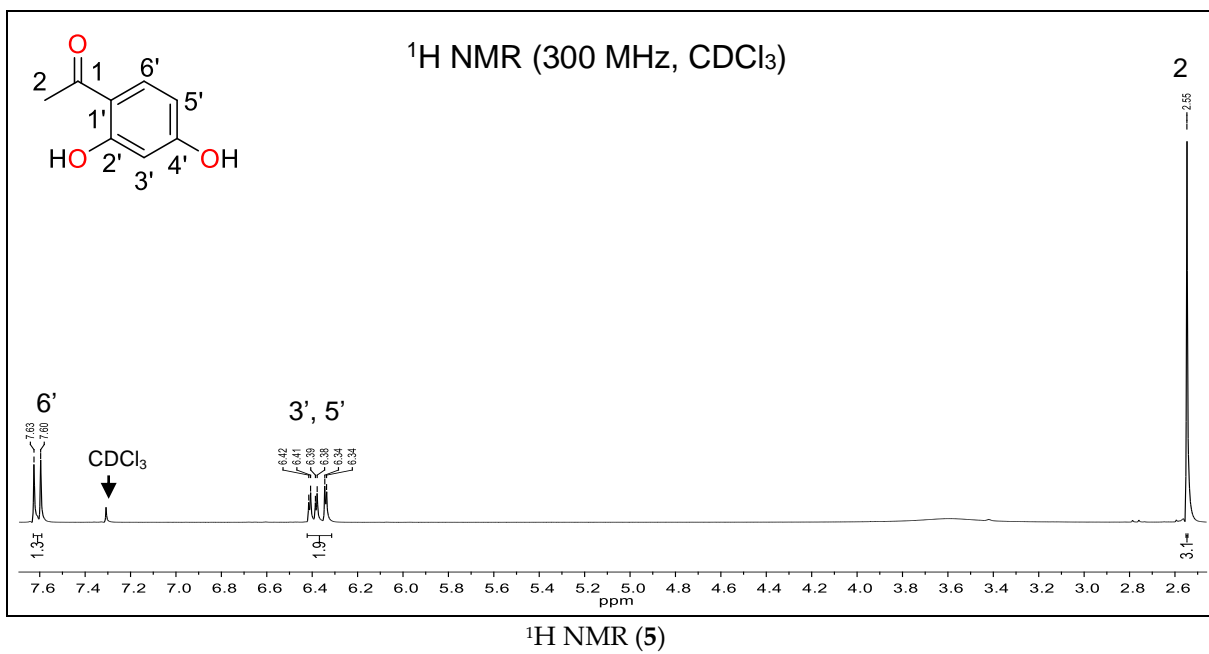
1. Grupo de Química Orgánica de Productos Naturales, QOPN, Instituto de Química, Facultad de Ciencias Exactas y Naturales, Universidad de Antioquia, Calle 70 No. 52-21, Medellín A. A 1226, Colombia.

2. PECET-Facultad de Medicina, Universidad de Antioquia, Calle 70 # 52-21, Medellín Colombia

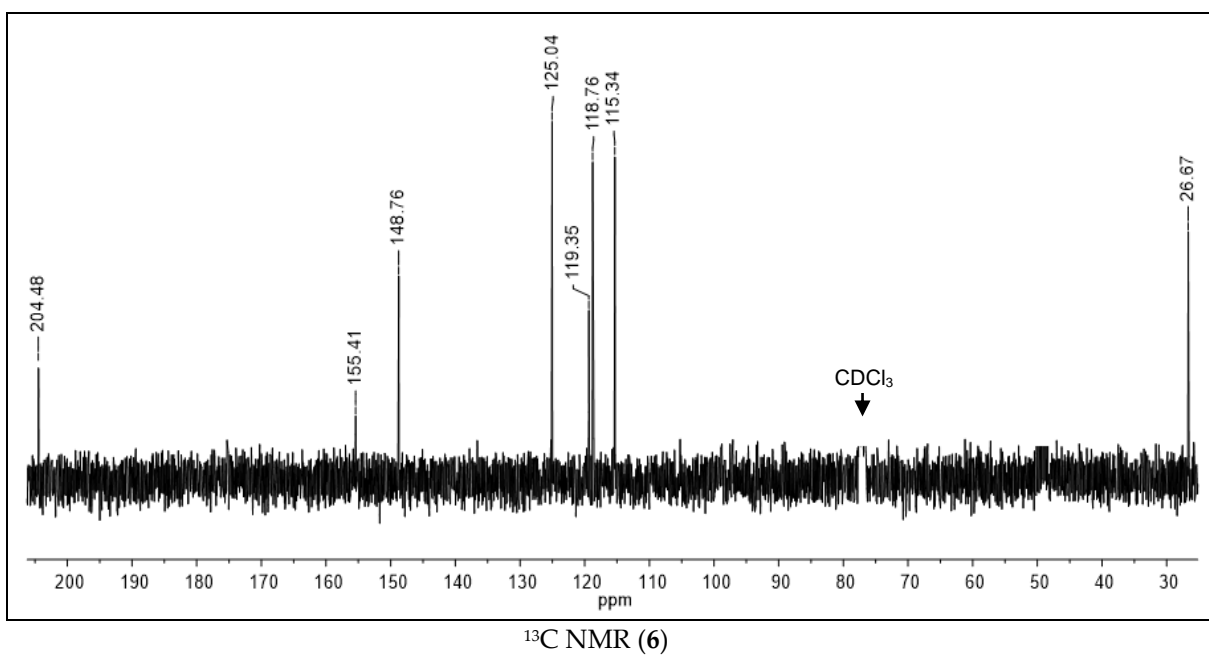
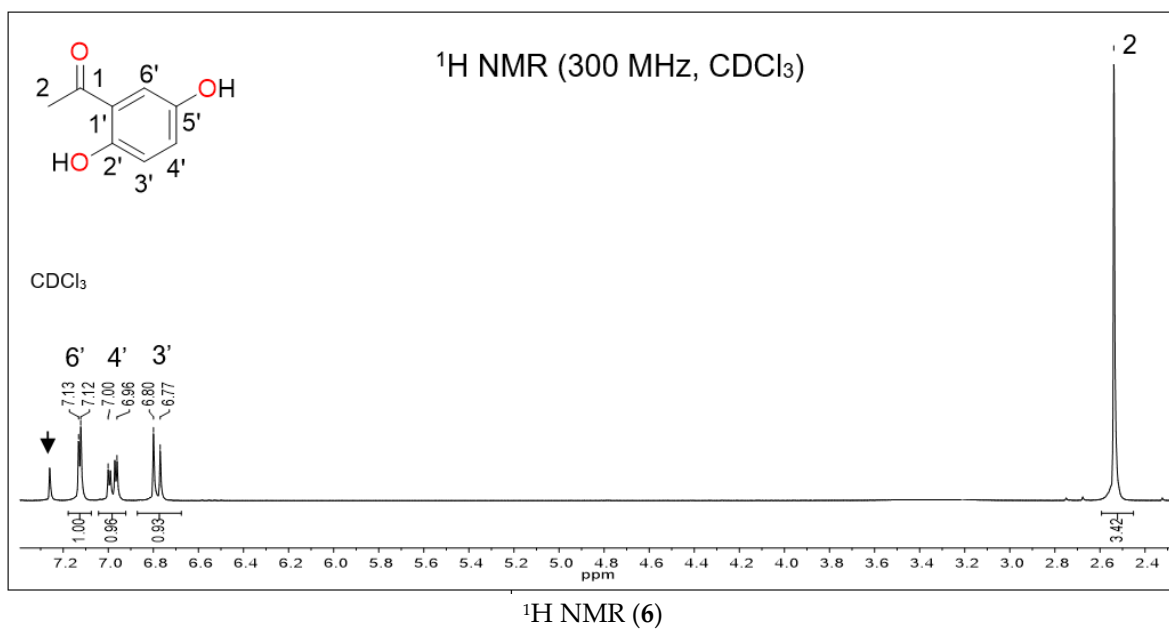
\*Correspondence: Wiston Quiñones, Grupo de Química Orgánica de Productos Naturales, QOPN, Instituto de Química, Facultad de Ciencias Exactas y Naturales, Universidad de Antioquia, Calle 70 No. 52-21, Medellín A. A 1226, Colombia

Email: [wiston.quinones@udea.edu.co](mailto:wiston.quinones@udea.edu.co)

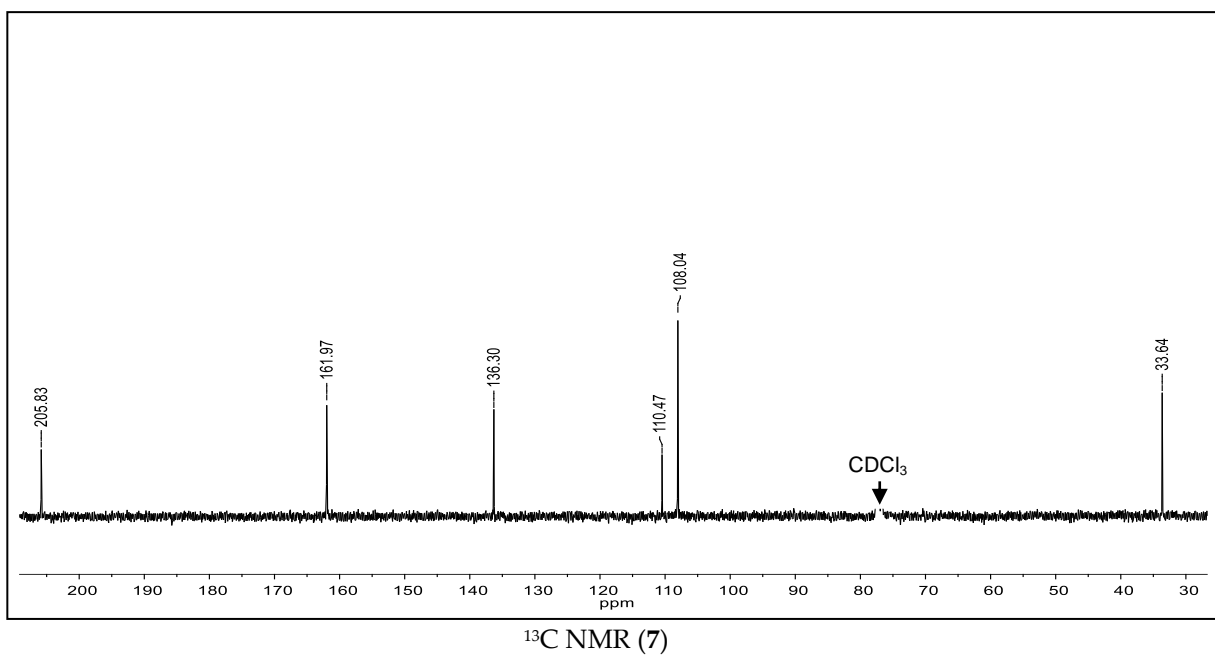
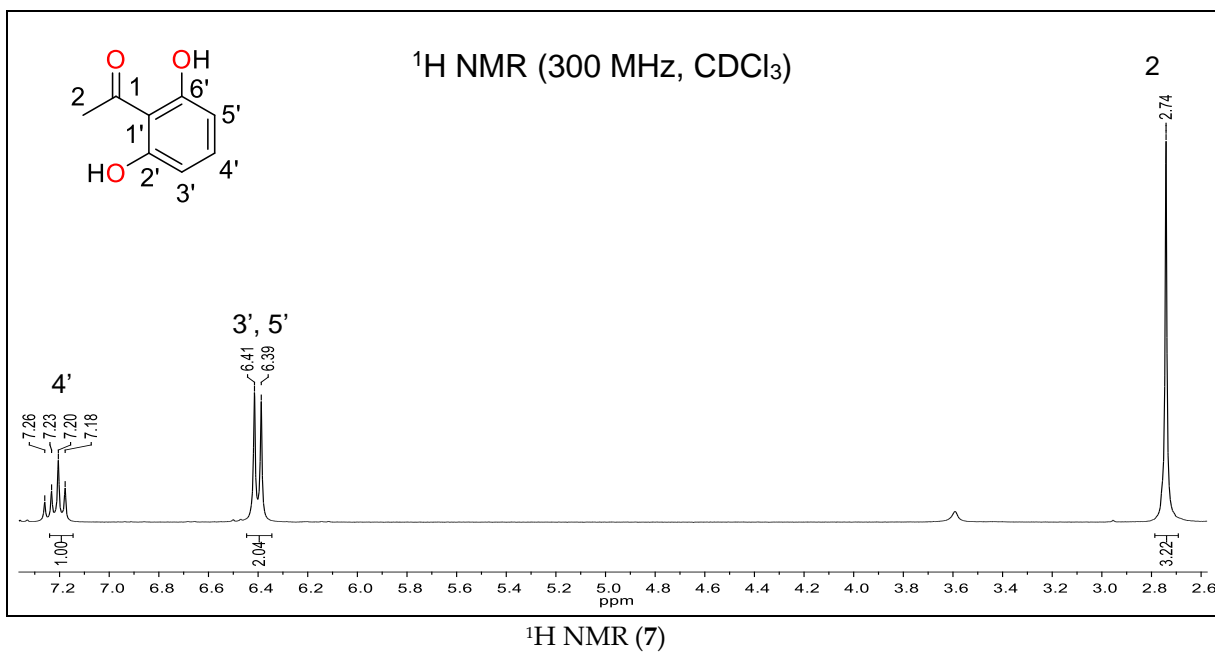
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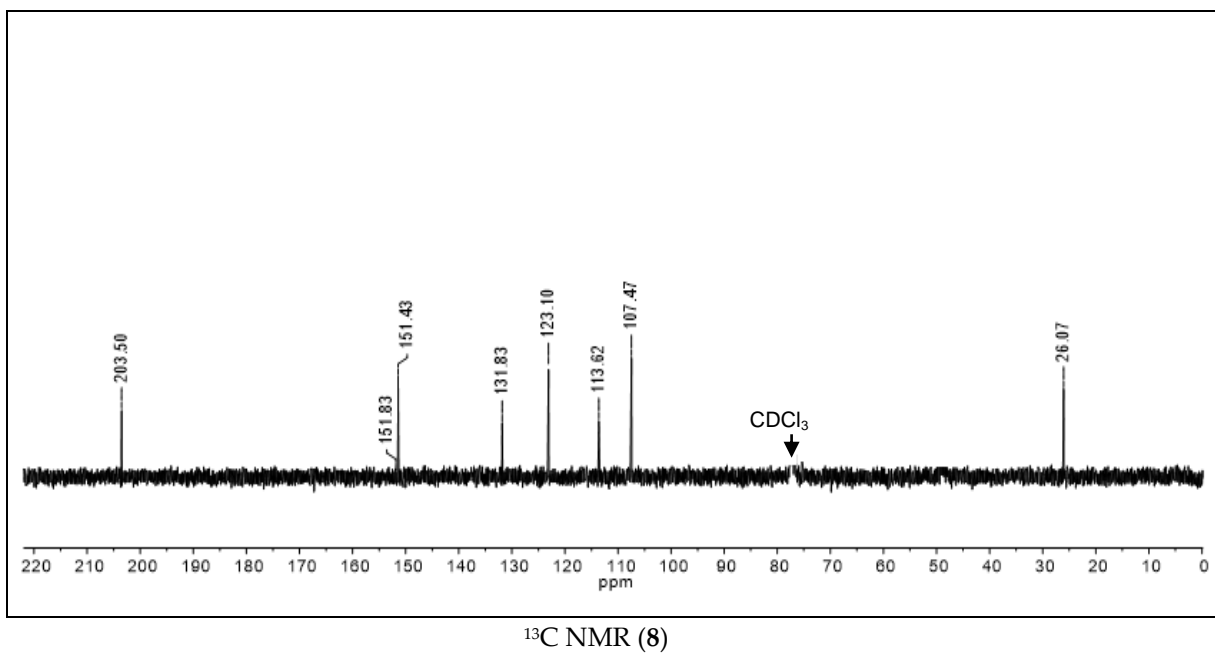
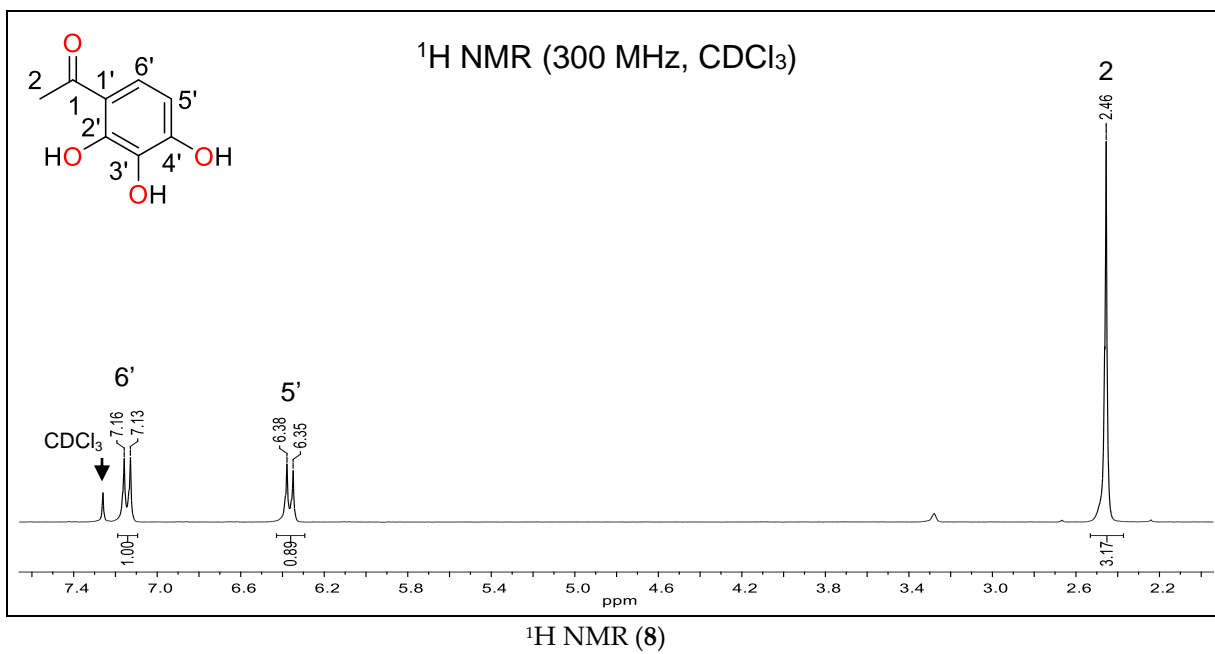
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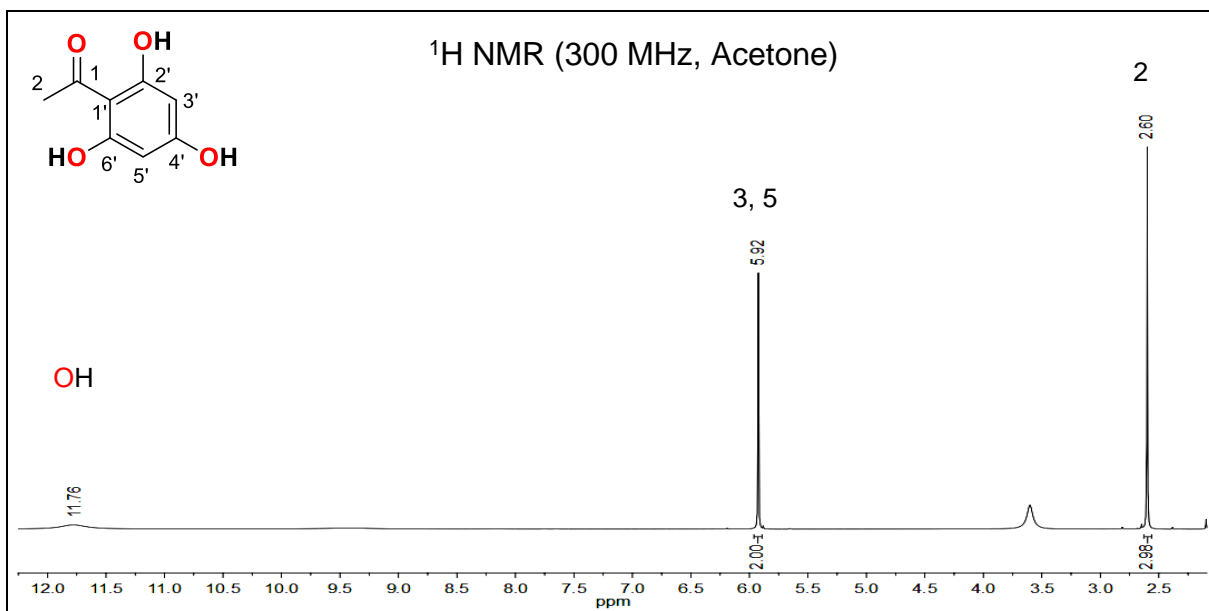
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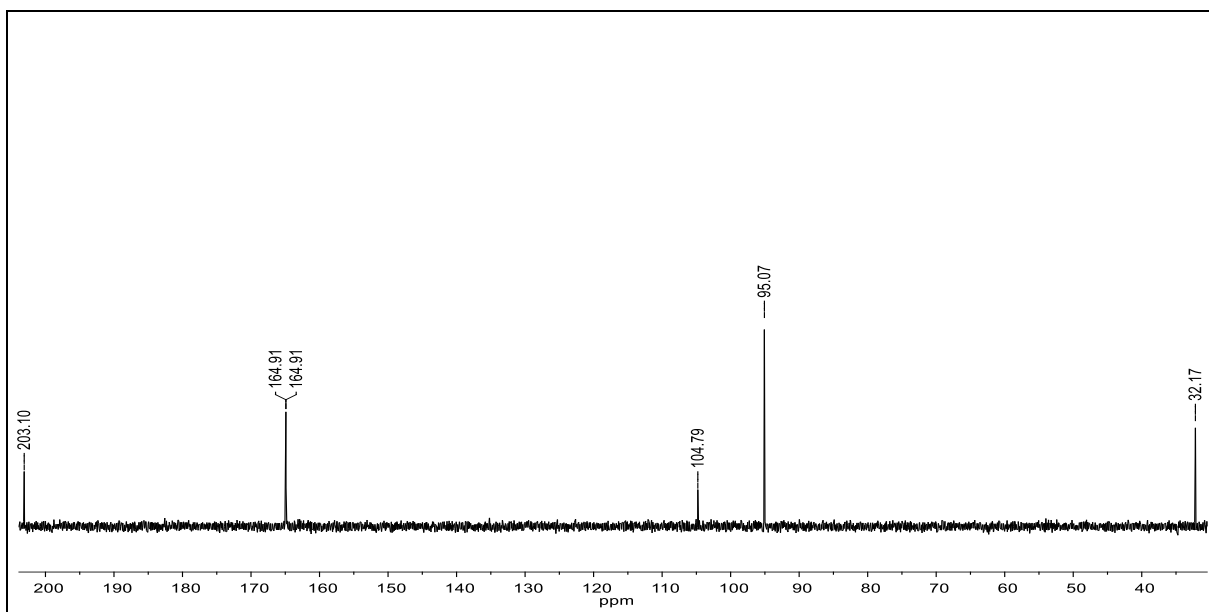
1-(2,3,4-Trihydroxyphenyl)ethan-1-one (8)



1-(2,4,6-Trihydroxyphenyl)ethan-1-one (9)

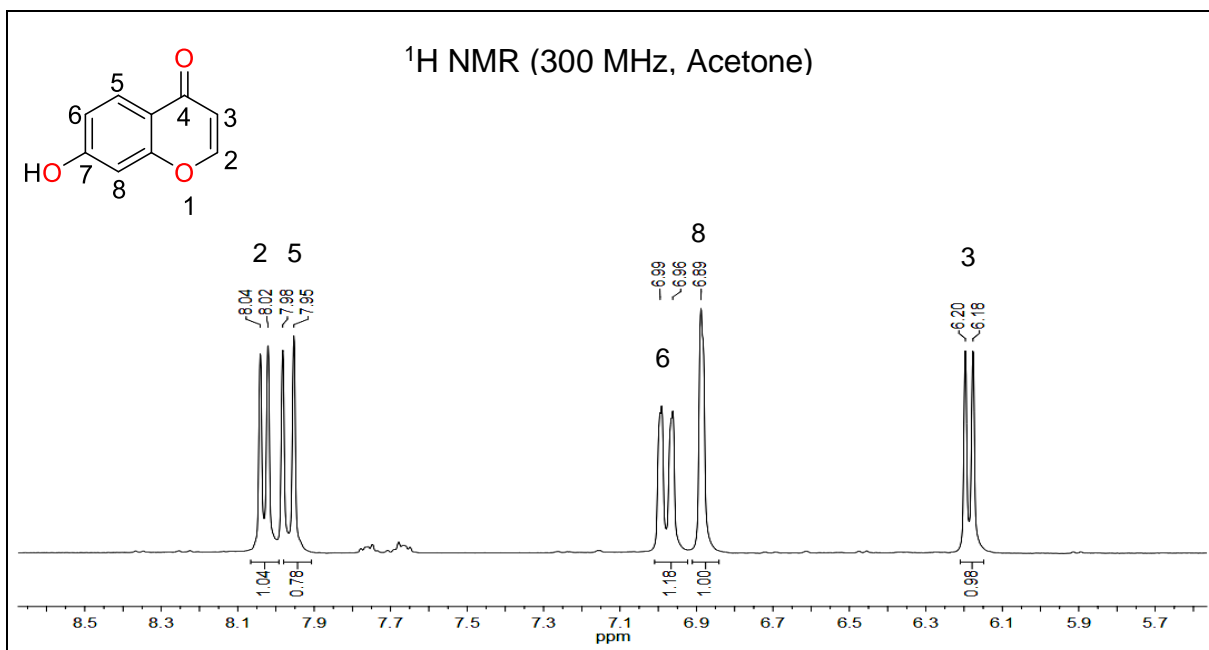


<sup>1</sup>H NMR (9)

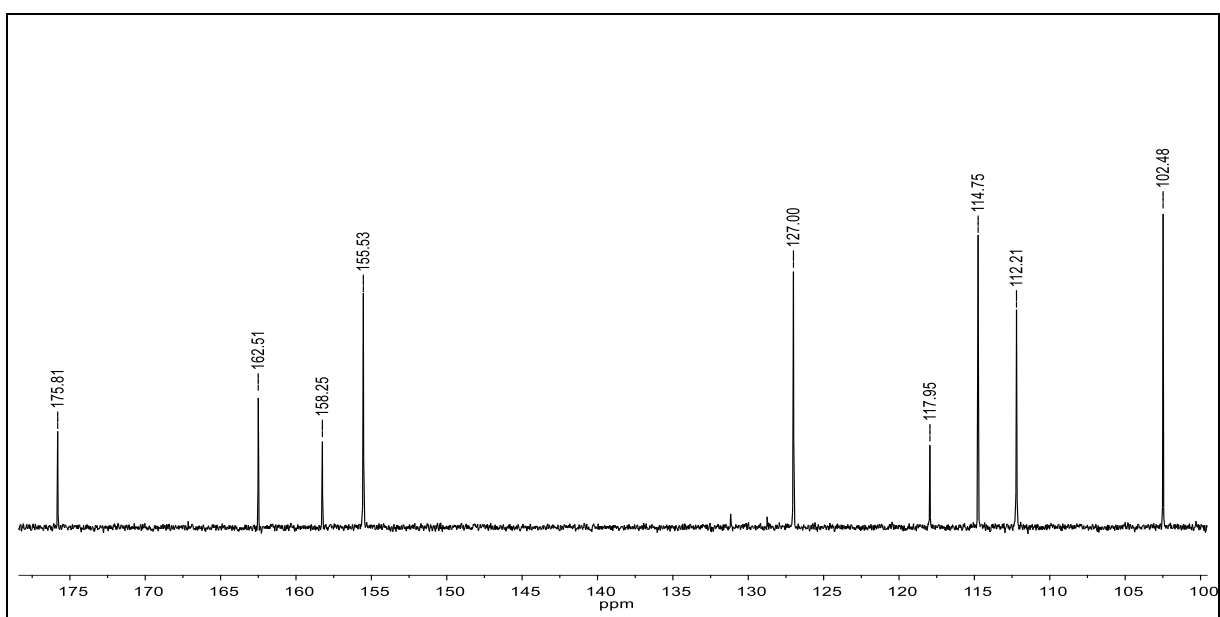


<sup>13</sup>C NMR (9)

7-Hydroxy-4H-chromen-4-one (10)

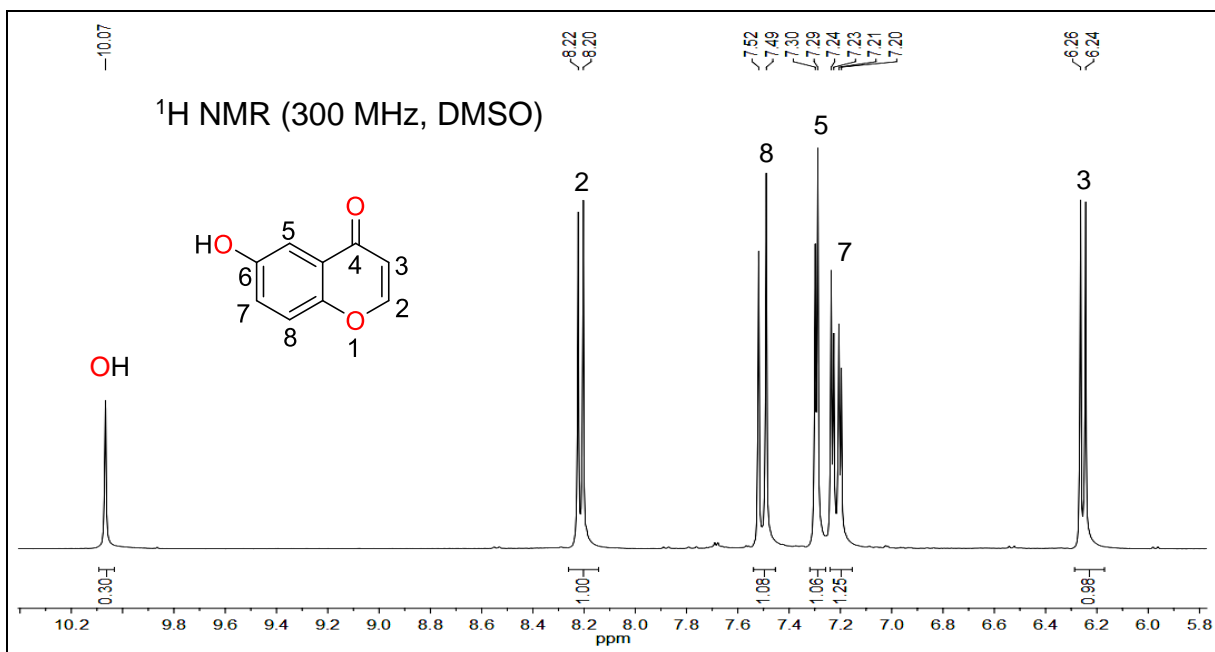


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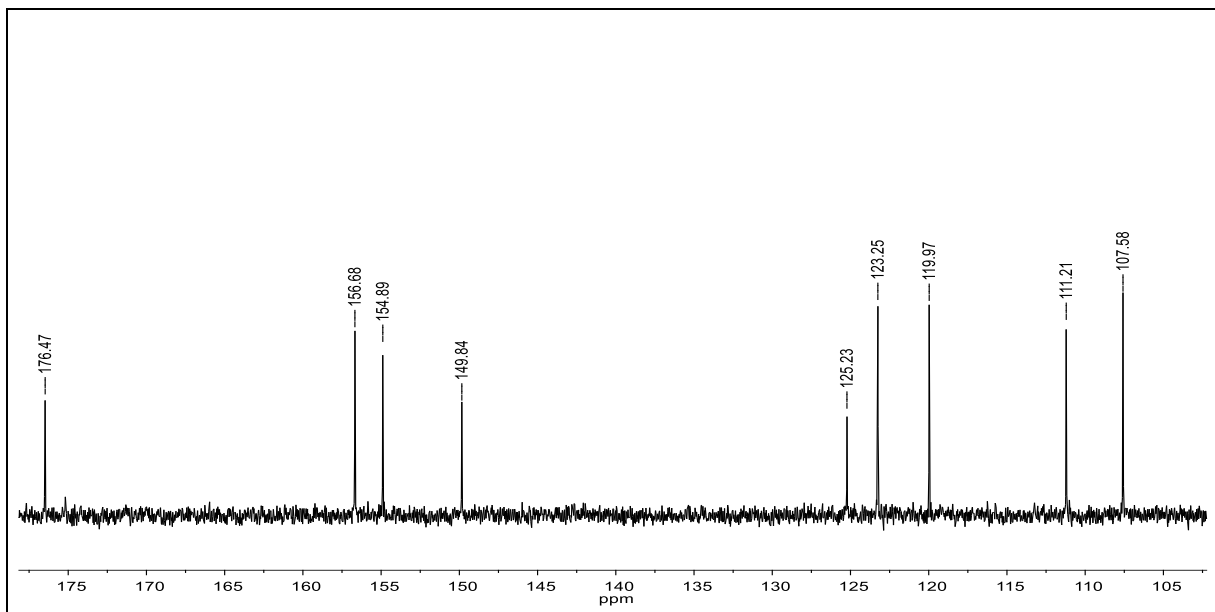


<sup>13</sup>C NMR (10)

6-Hydroxy-4H-chromen-4-one (11)



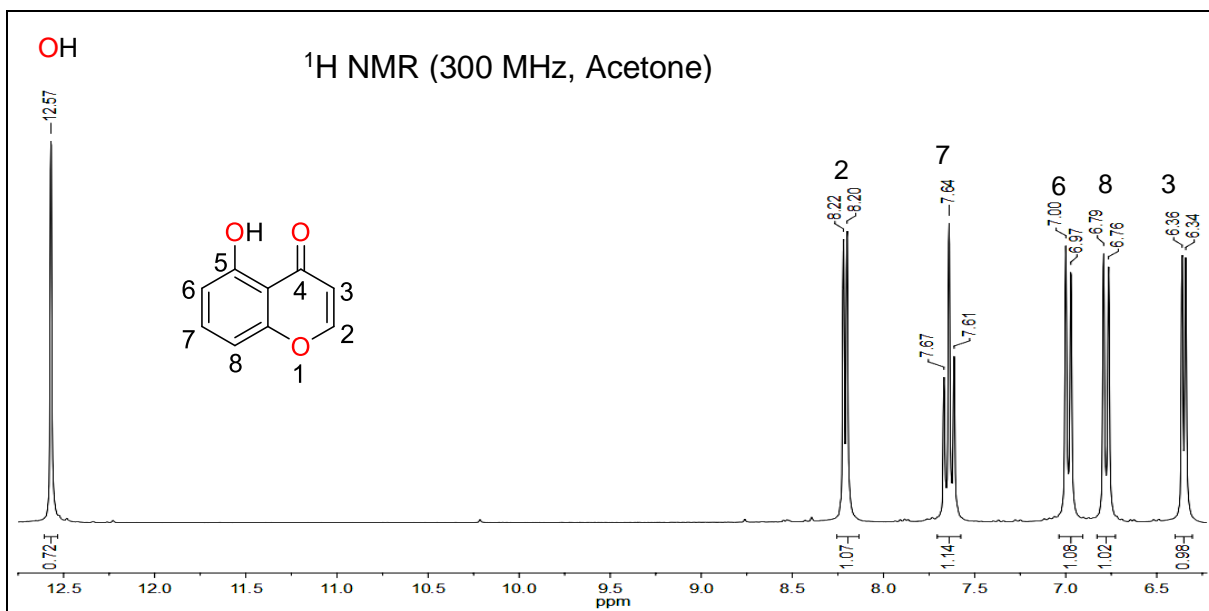
<sup>1</sup>H NMR (11)



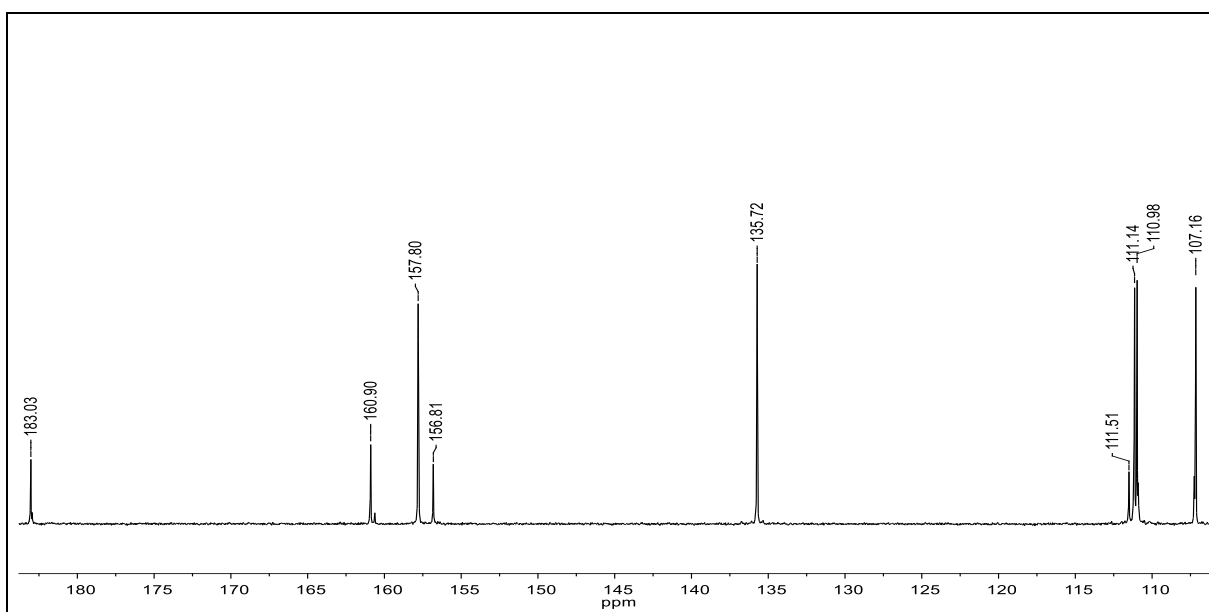
<sup>13</sup>C NMR (11)



5-Hydroxy-4H-chromen-4-one (**12**)

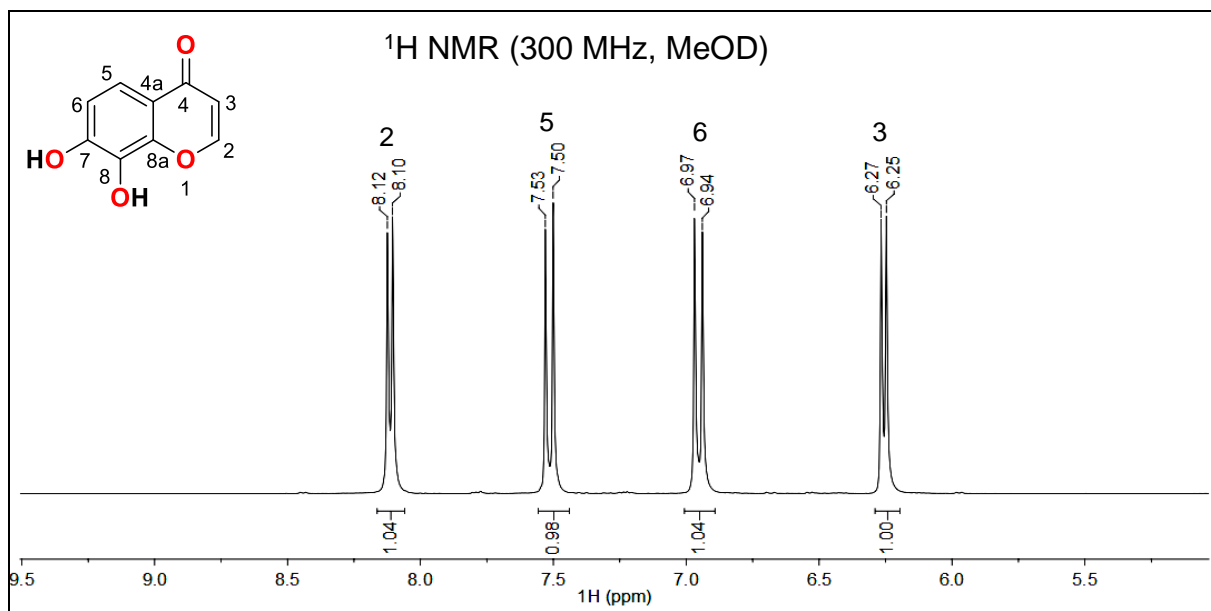


**<sup>1</sup>H NMR (**12**)**

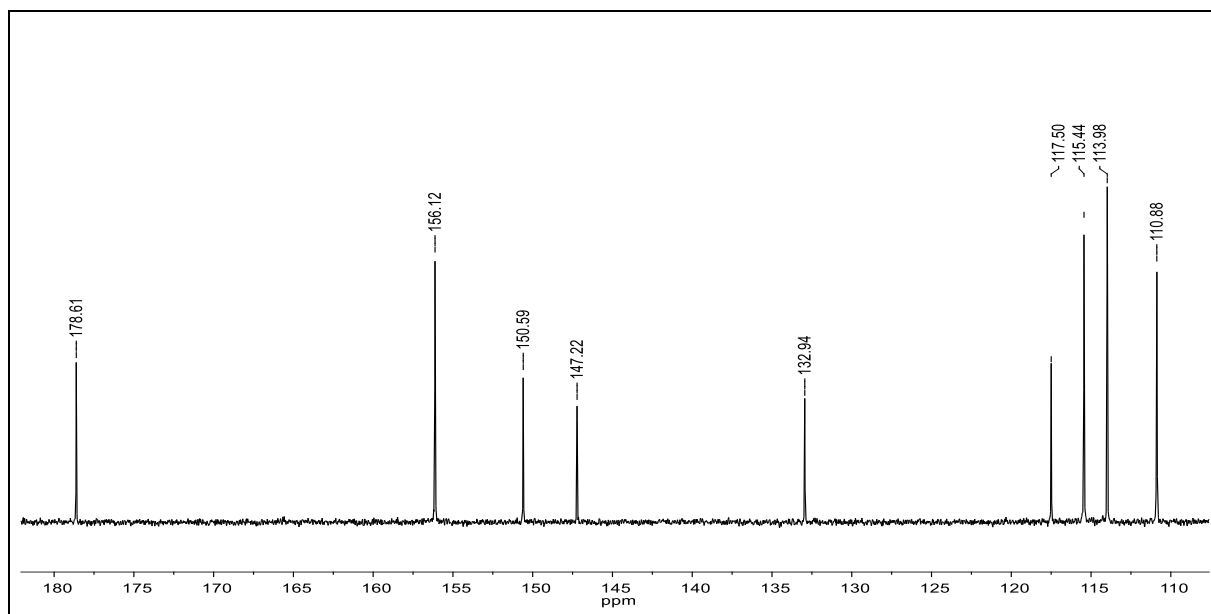


**<sup>13</sup>C NMR (**12**)**

7,8-Dihydroxy-4H-chromen-4-one (**13**)

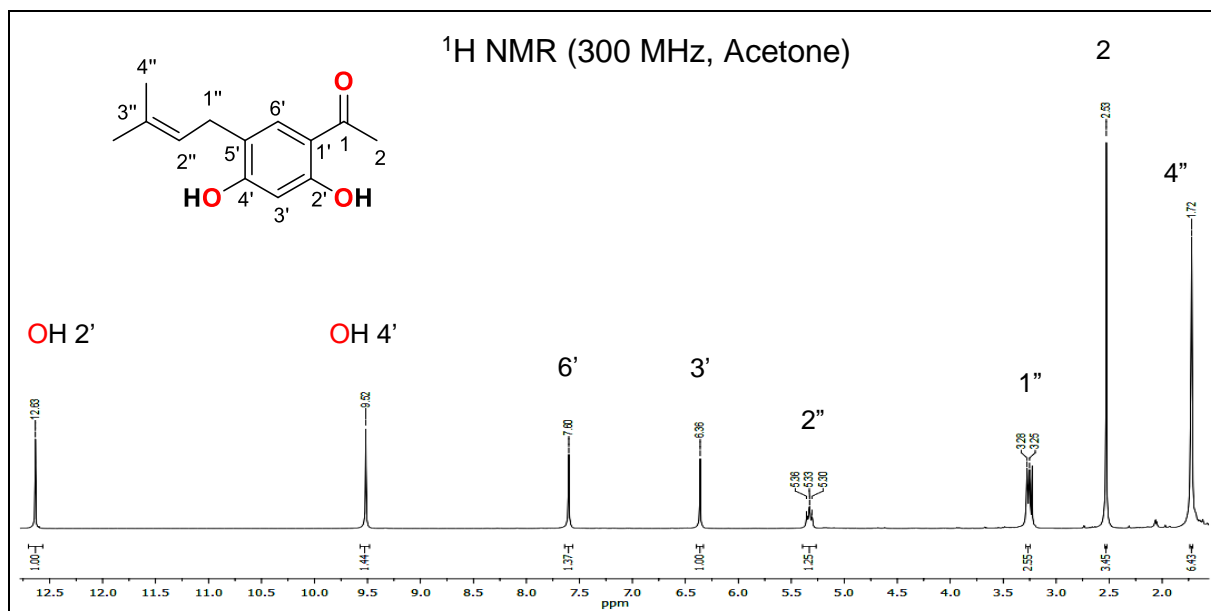


<sup>1</sup>H NMR (**13**)

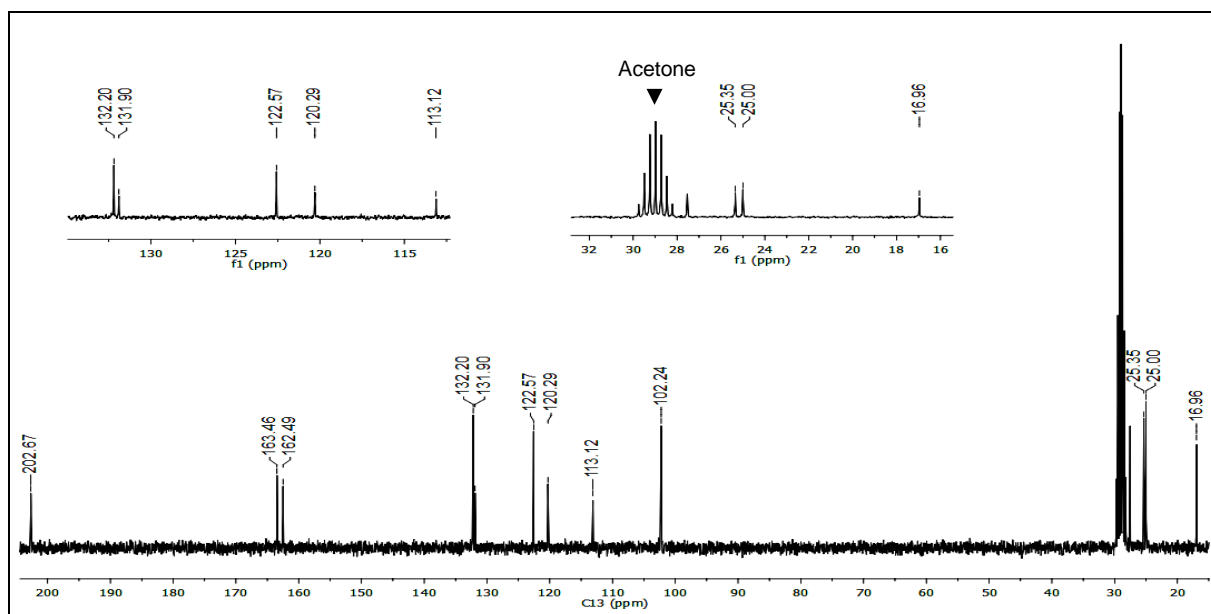


<sup>13</sup>C NMR (**13**)

1-(2,4-Dihydroxy-5-(3-methylbut-2-en-1-yl)phenyl)ethan-1-one (**14**)

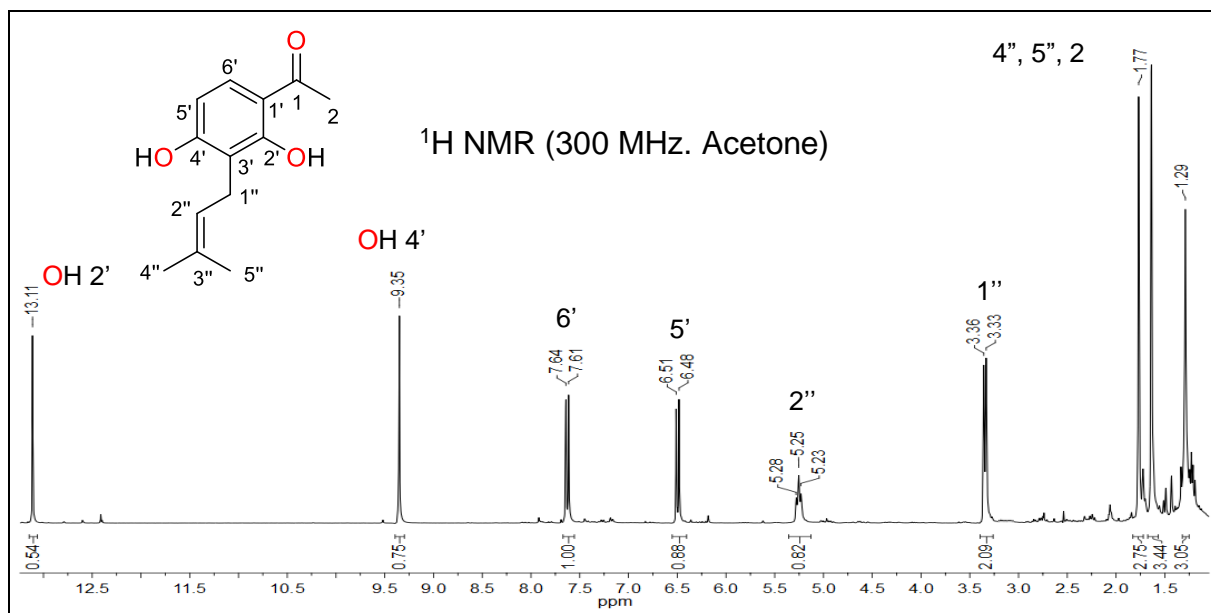


<sup>1</sup>H NMR (**14**)

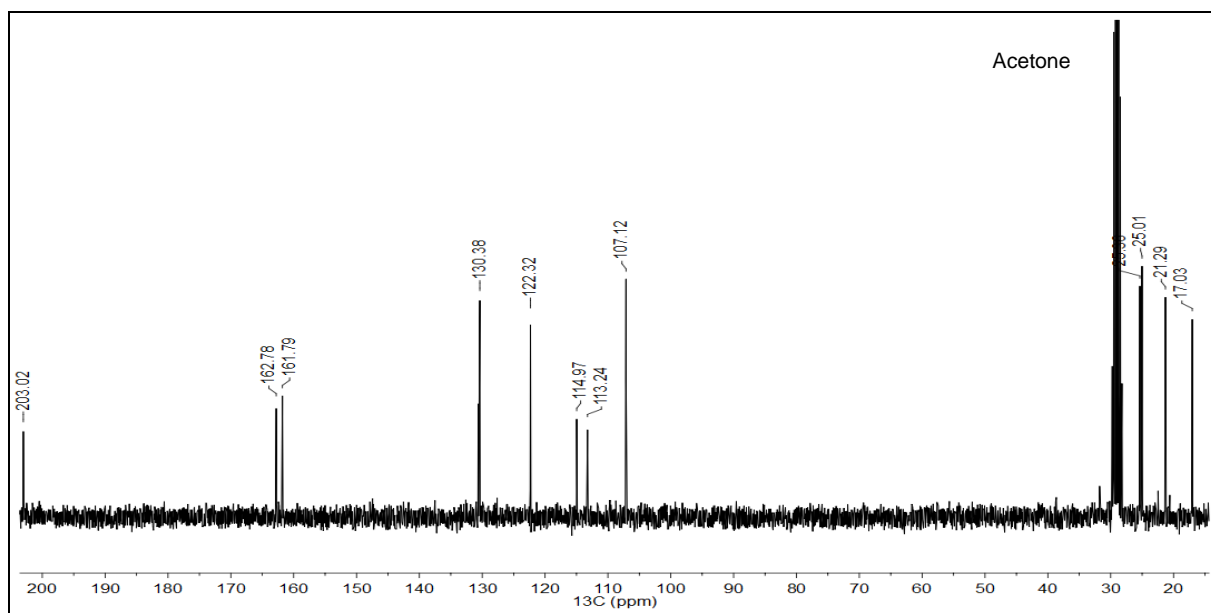


<sup>13</sup>C NMR (**14**)

1-(2,4-Dihydroxy-3-(3-methylbut-2-en-1-yl)phenyl)ethan-1-one (15)

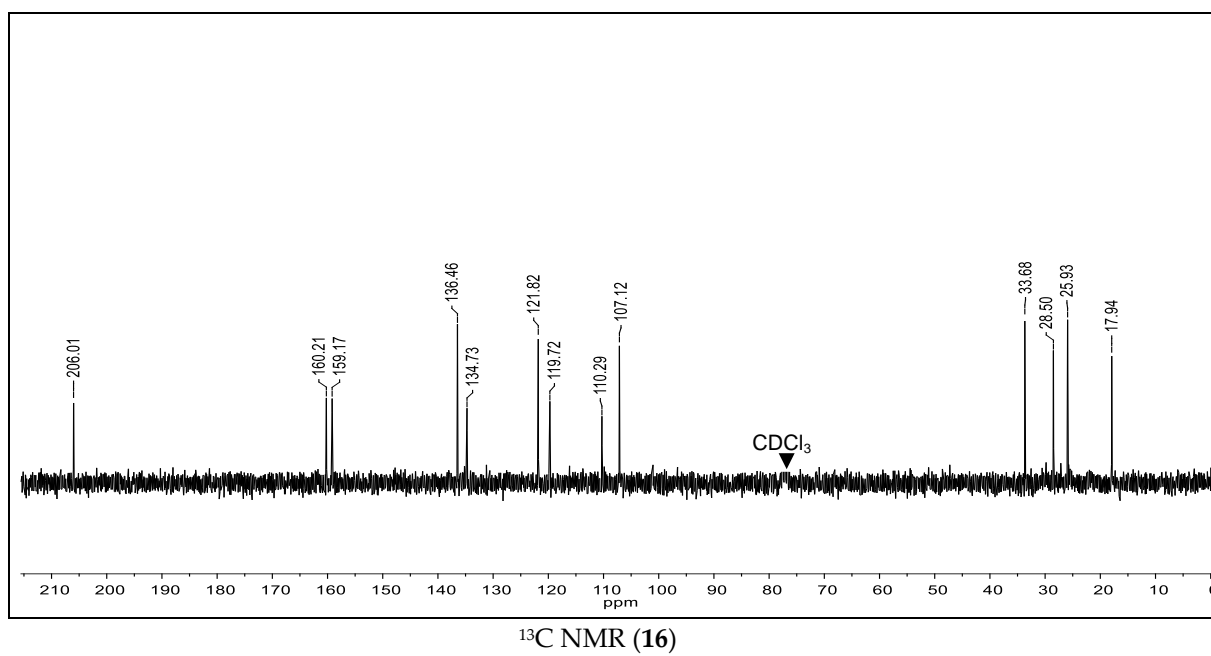
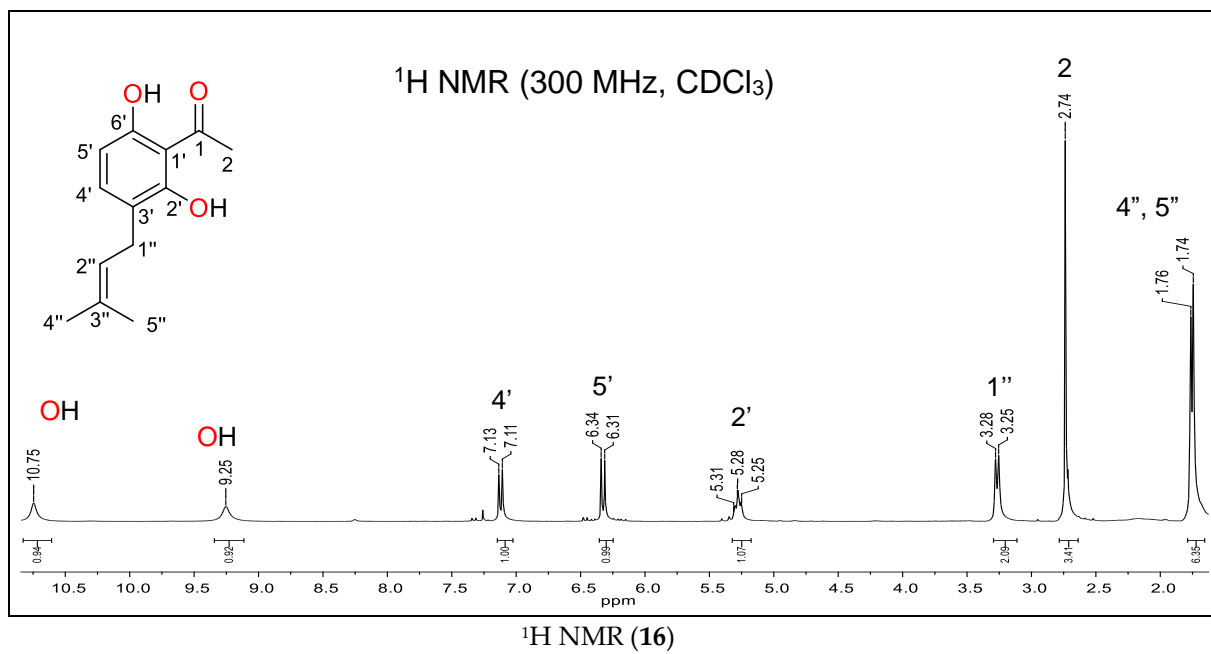


<sup>1</sup>H NMR (15)

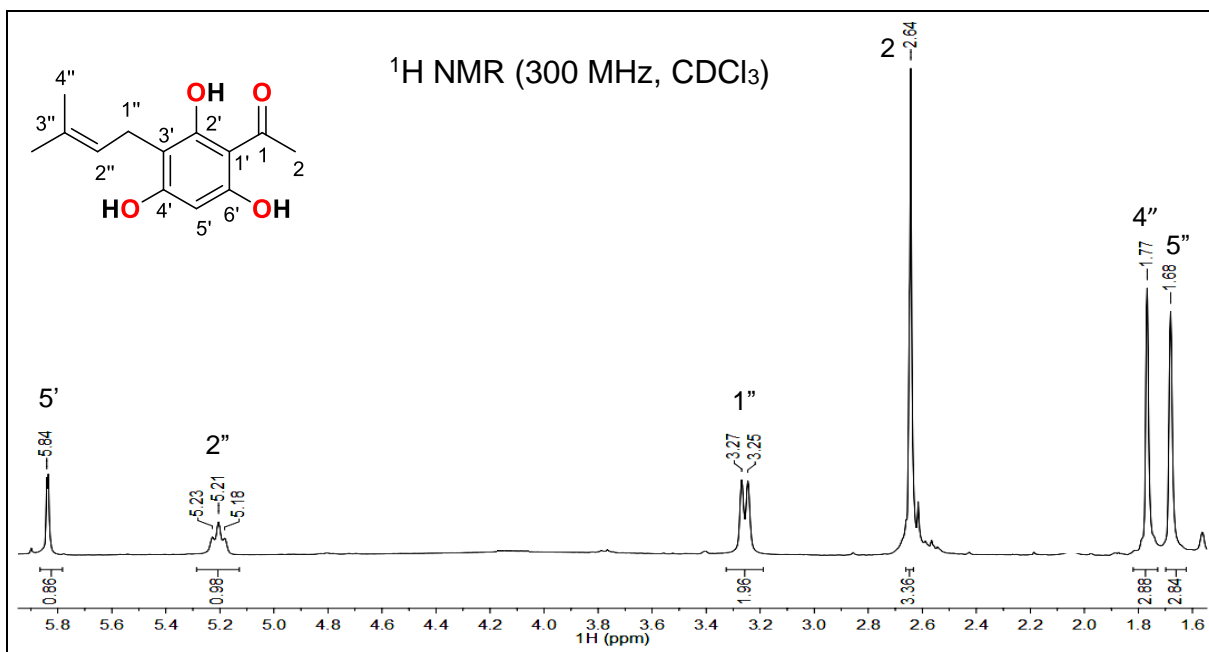


<sup>13</sup>C NMR (15)

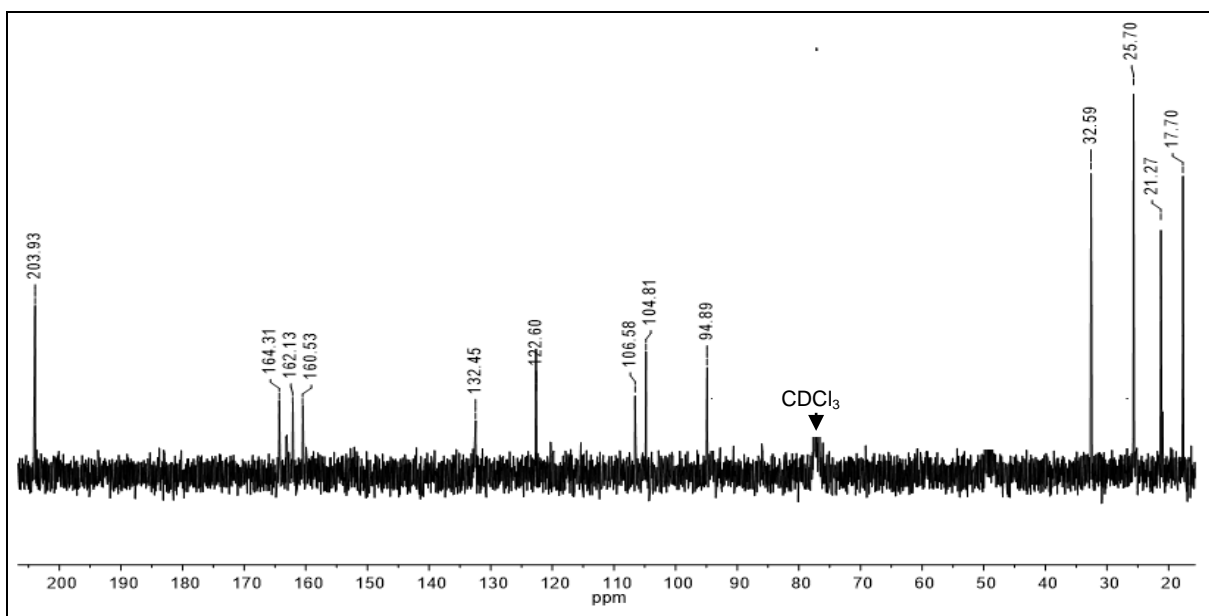
1-(2,6-Dihydroxy-3-(3-methylbut-2-en-1-yl)phenyl)ethan-1-one (**16**)



1-(2,4,6-Trihydroxy-3-(3-methylbut-2-en-1-yl)phenyl)ethan-1-one (17)

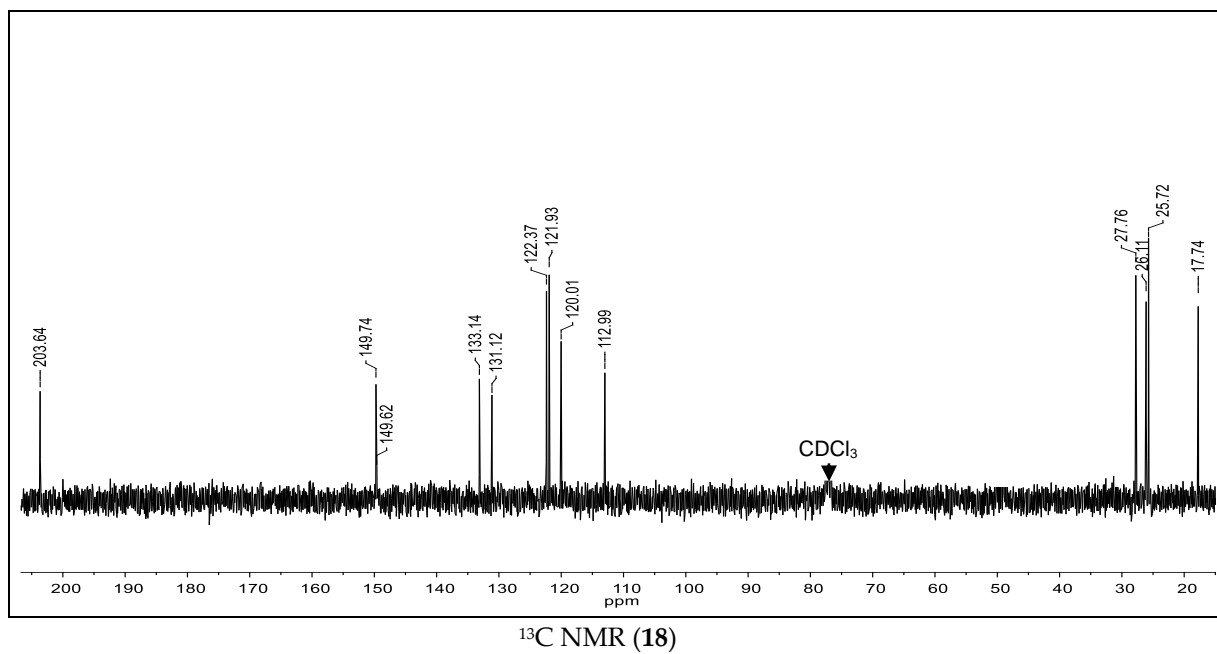
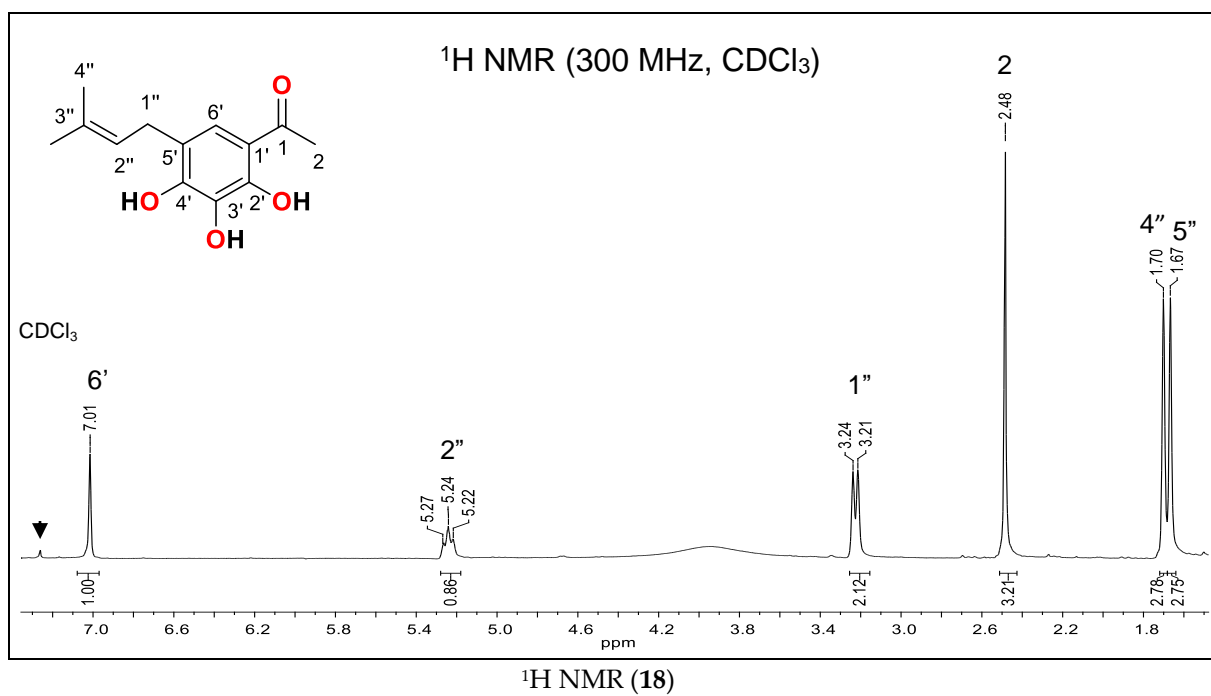


<sup>1</sup>H NMR (17)

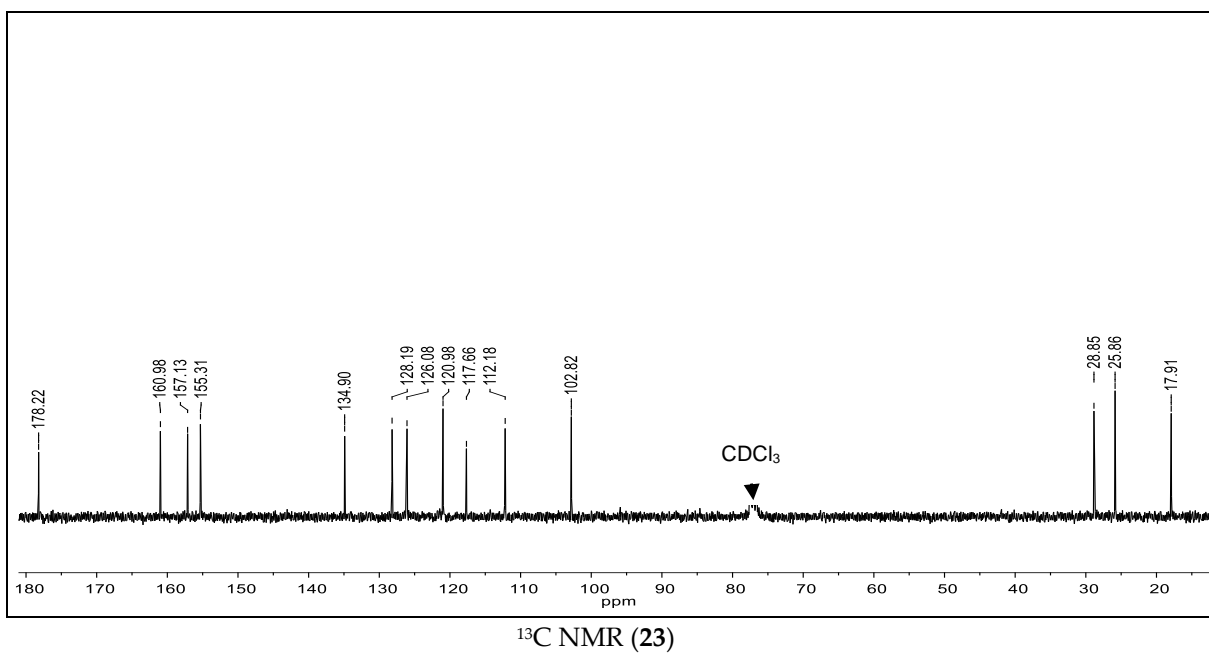
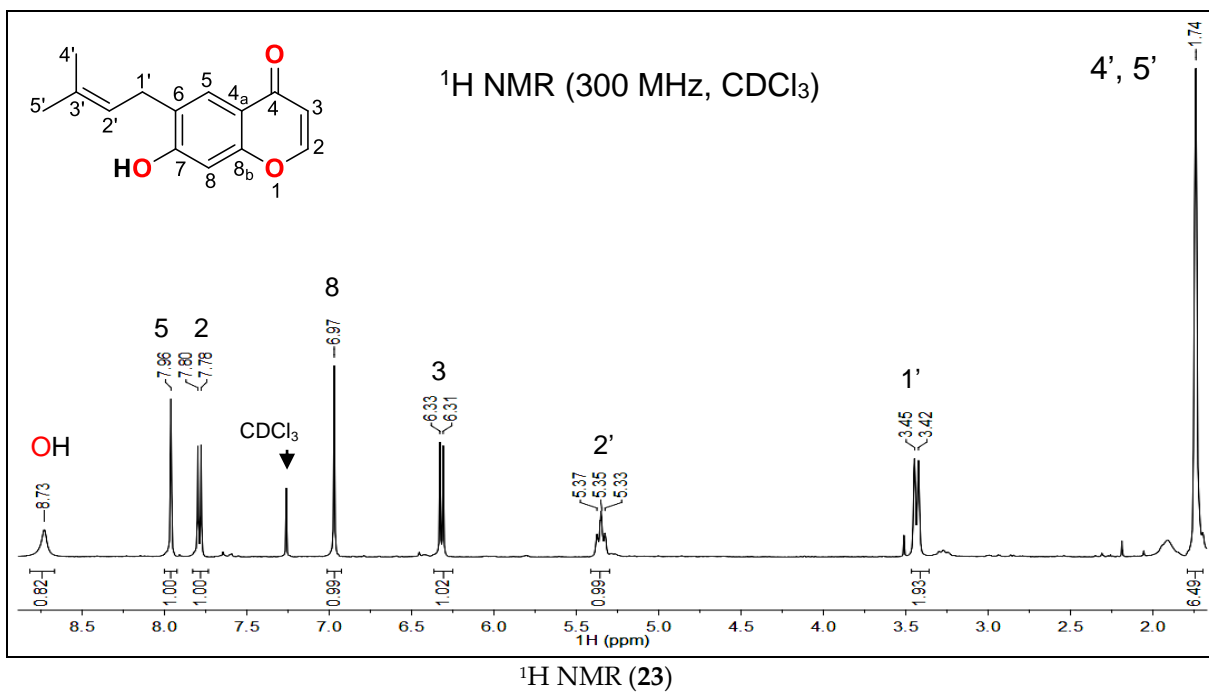


<sup>13</sup>C NMR (17)

1-(2,3,4-Trihydroxy-5-(3-methylbut-2-en-1-yl)phenyl)ethan-1-one (**18**)

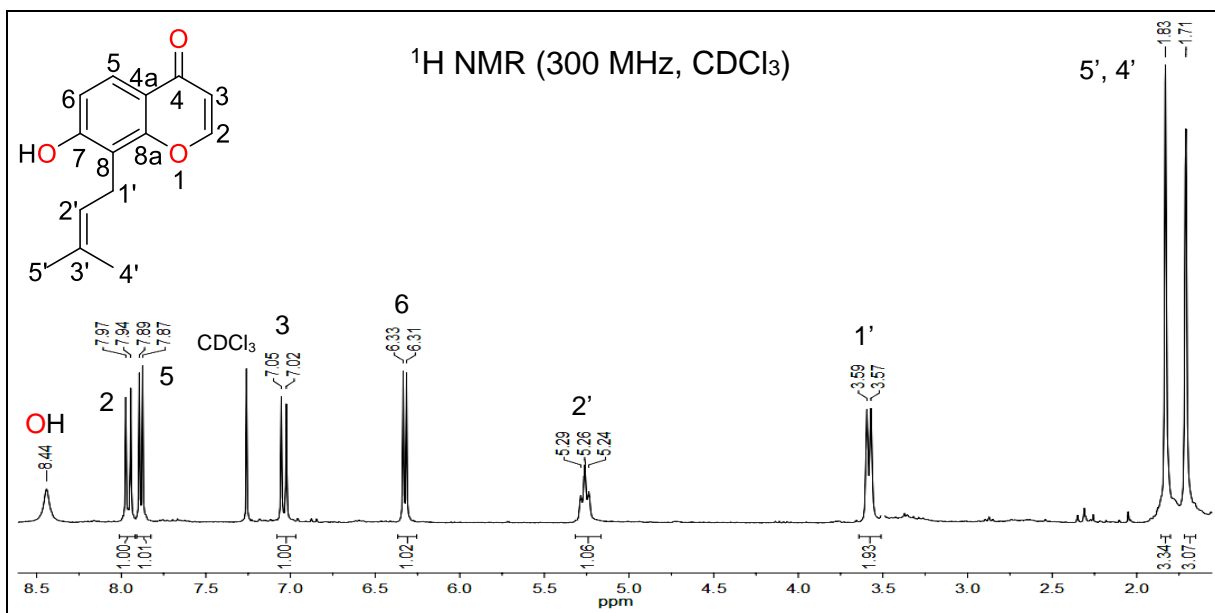


7-Hydroxy-6-(3-methylbut-2-en-1-yl)-4H-chromen-4-one (**23**)

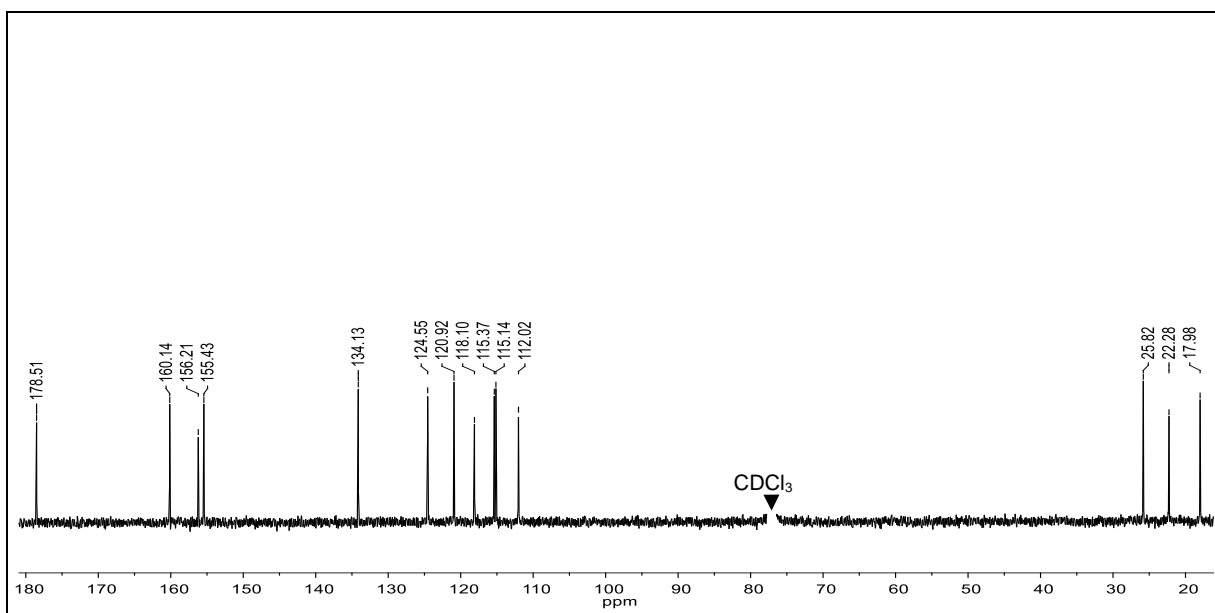




7-Hydroxy-8-(3-methylbut-2-en-1-yl)-4H-chromen-4-one (**24**)

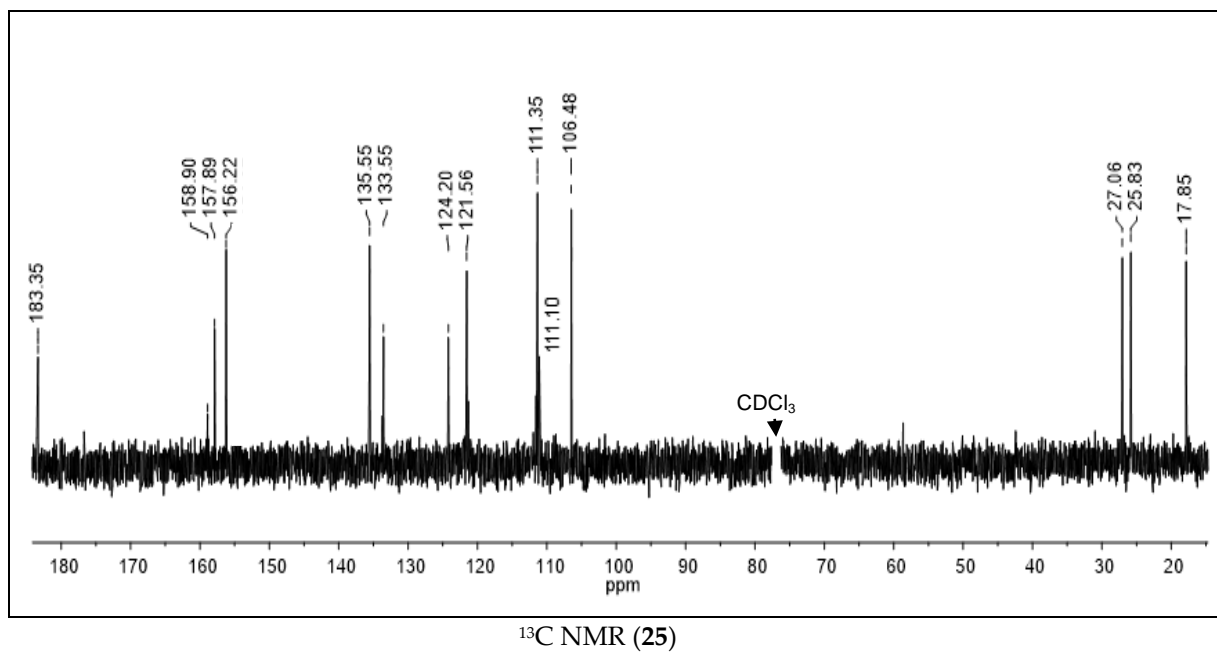
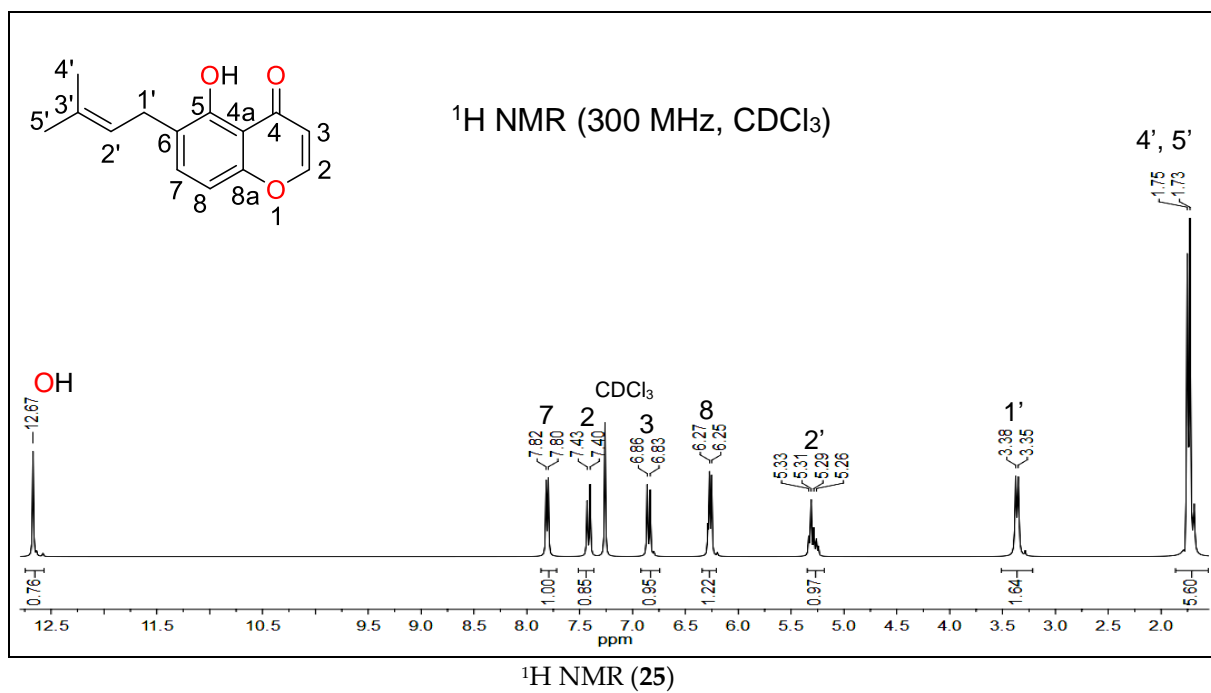


<sup>1</sup>H NMR (**24**)

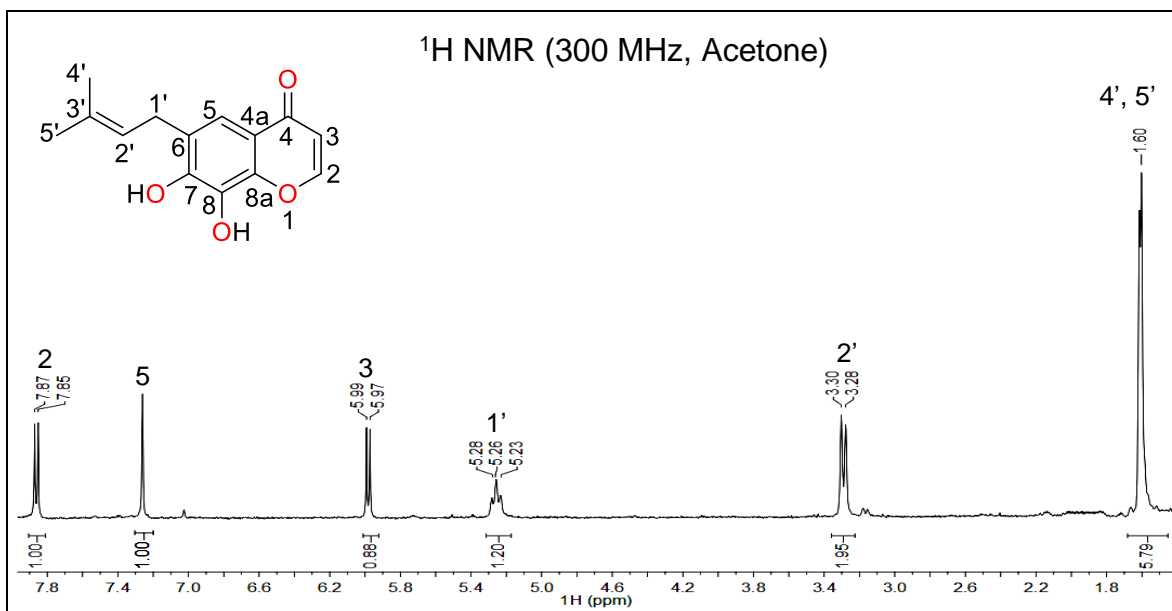


<sup>13</sup>C NMR (**24**)

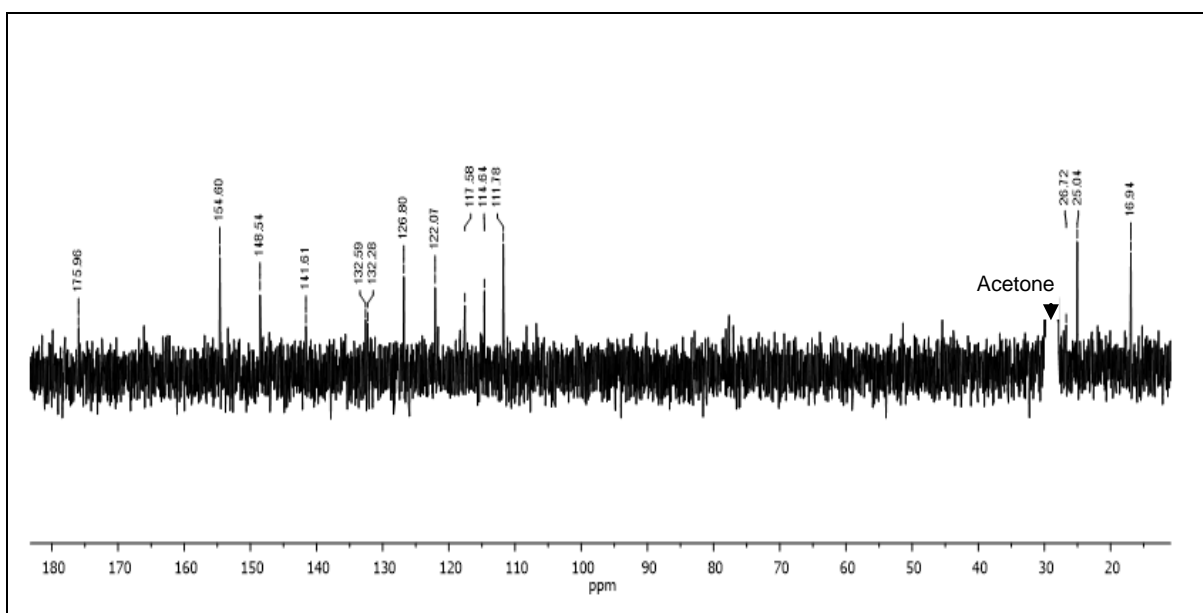
5-Hydroxy-6-(3-methylbut-2-en-1-yl)-4H-chromen-4-one (25)



7,8-Dihydroxy-6-(3-methylbut-2-en-1-yl)-4H-chromen-4-one (26)

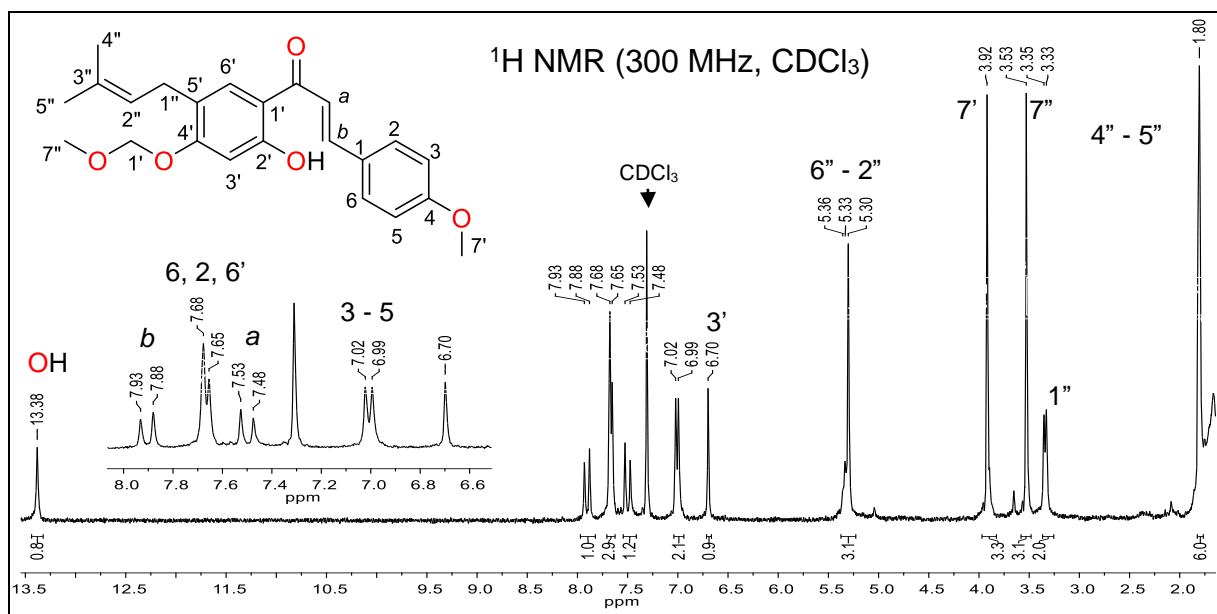


<sup>1</sup>H NMR (26)

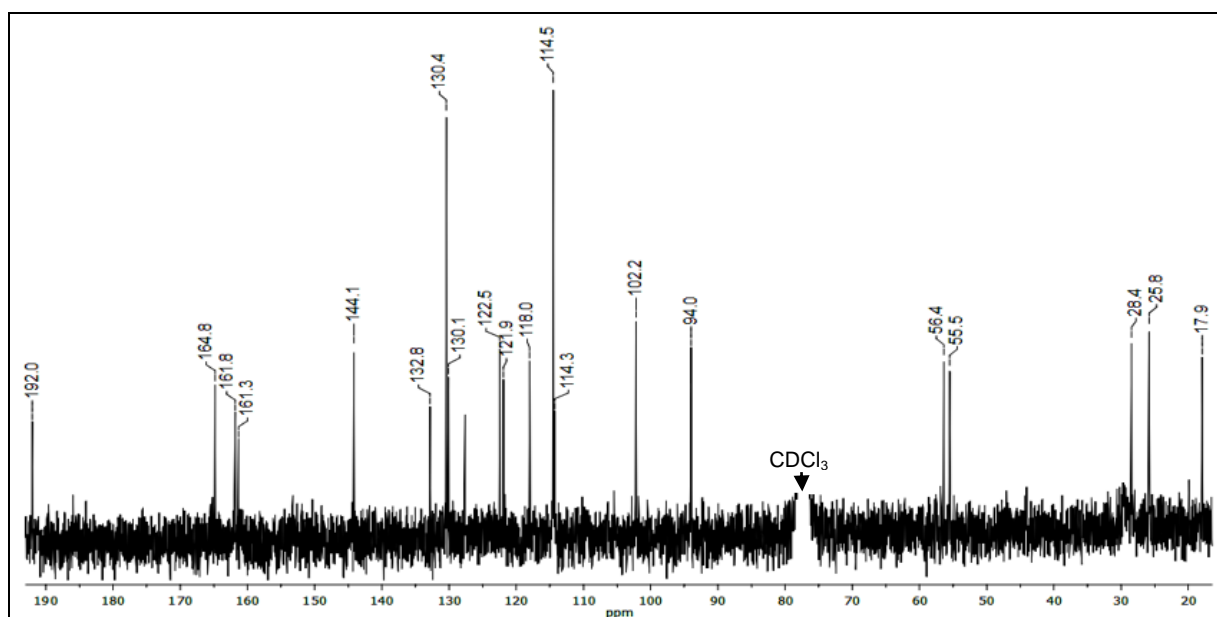


<sup>13</sup>C NMR (26)

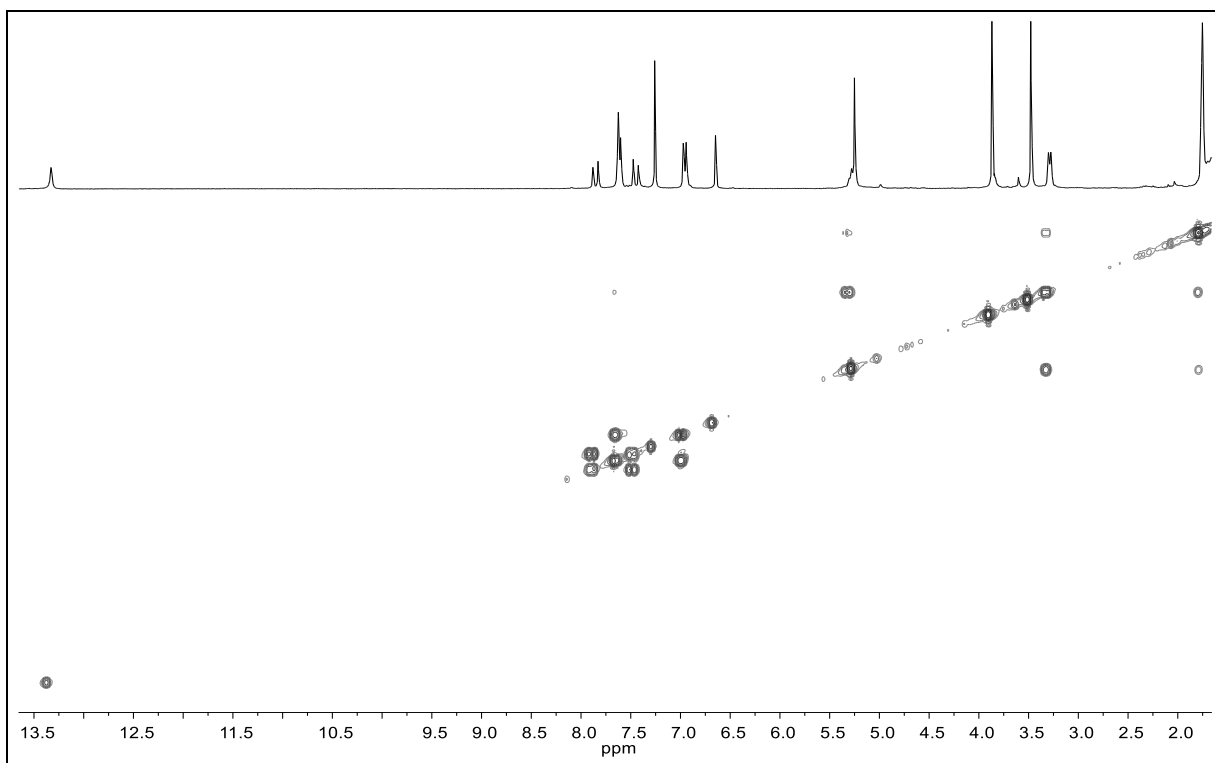
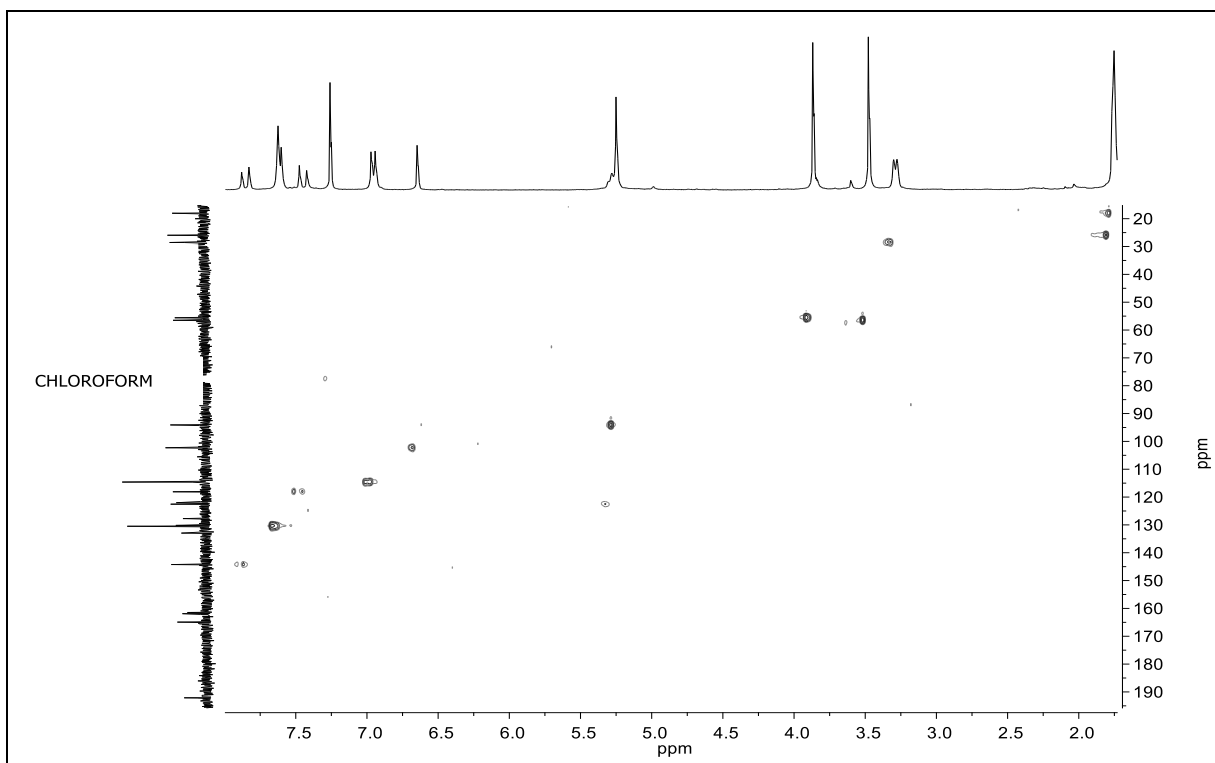
1-(2-Hydroxy-4-(methoxymethoxy)-5-(3-methylbut-2-en-1-yl)phenyl)-3-(4-methoxyphenyl)prop-2-en-1-one (27)



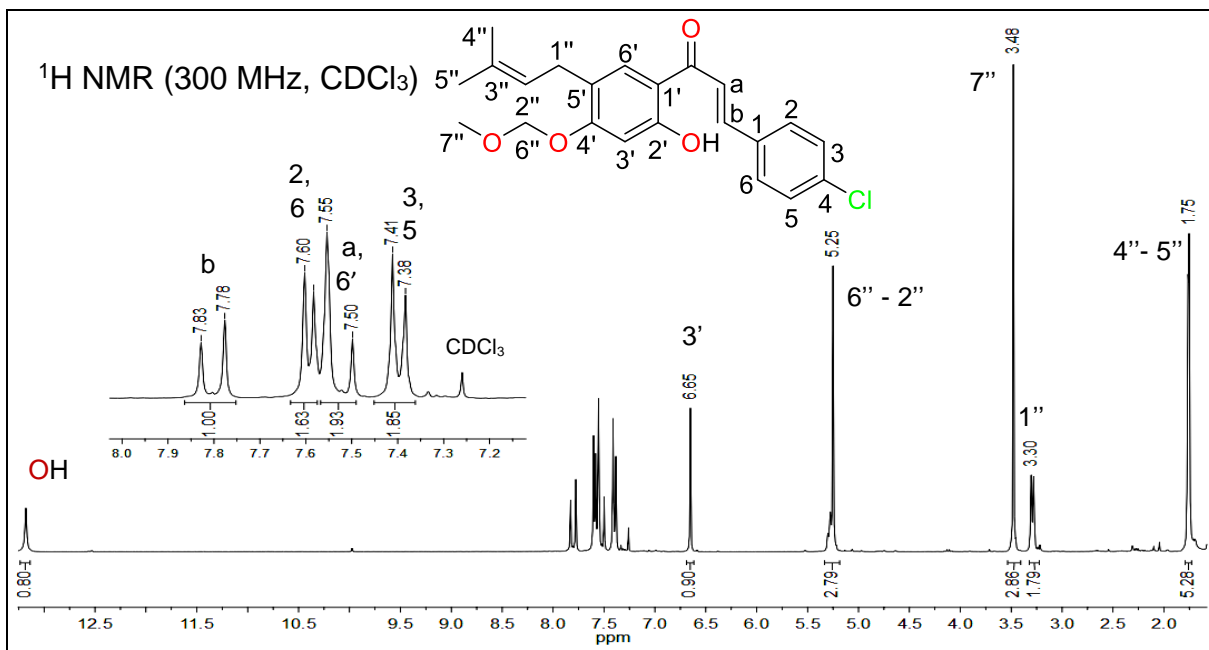
<sup>1</sup>H NMR de (27)



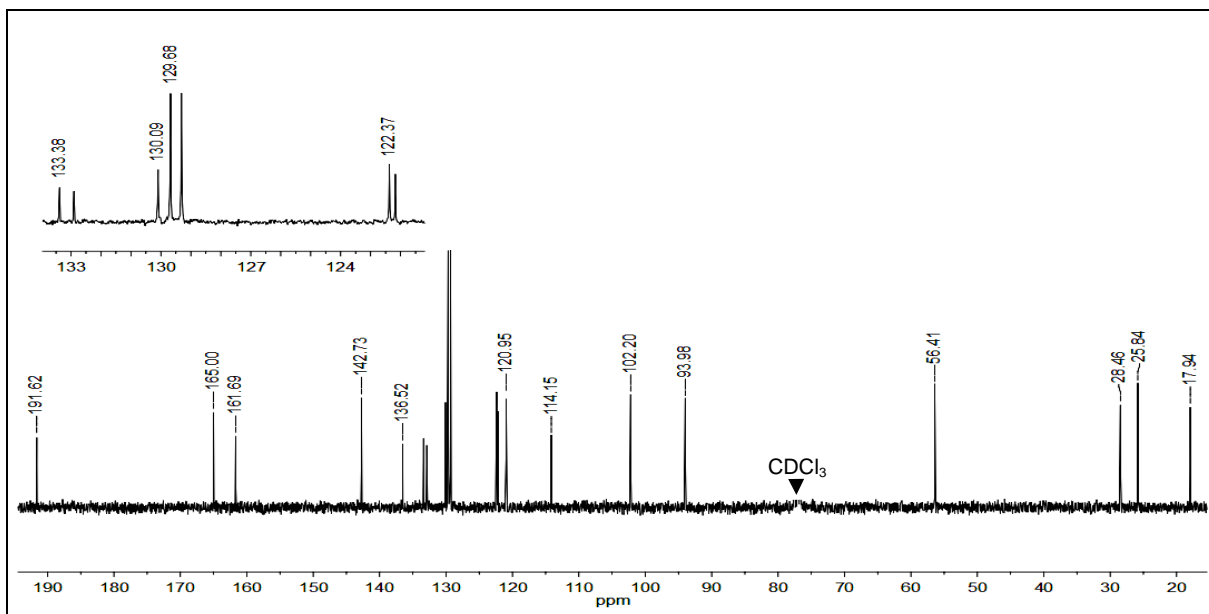
<sup>13</sup>C NMR (27)



3-(4-Chlorophenyl)-1-(2-hydroxy-4-(methoxymethoxy)-5-(3-methylbut-2-en-1-yl)phenyl)prop-2-en-1-one (28)

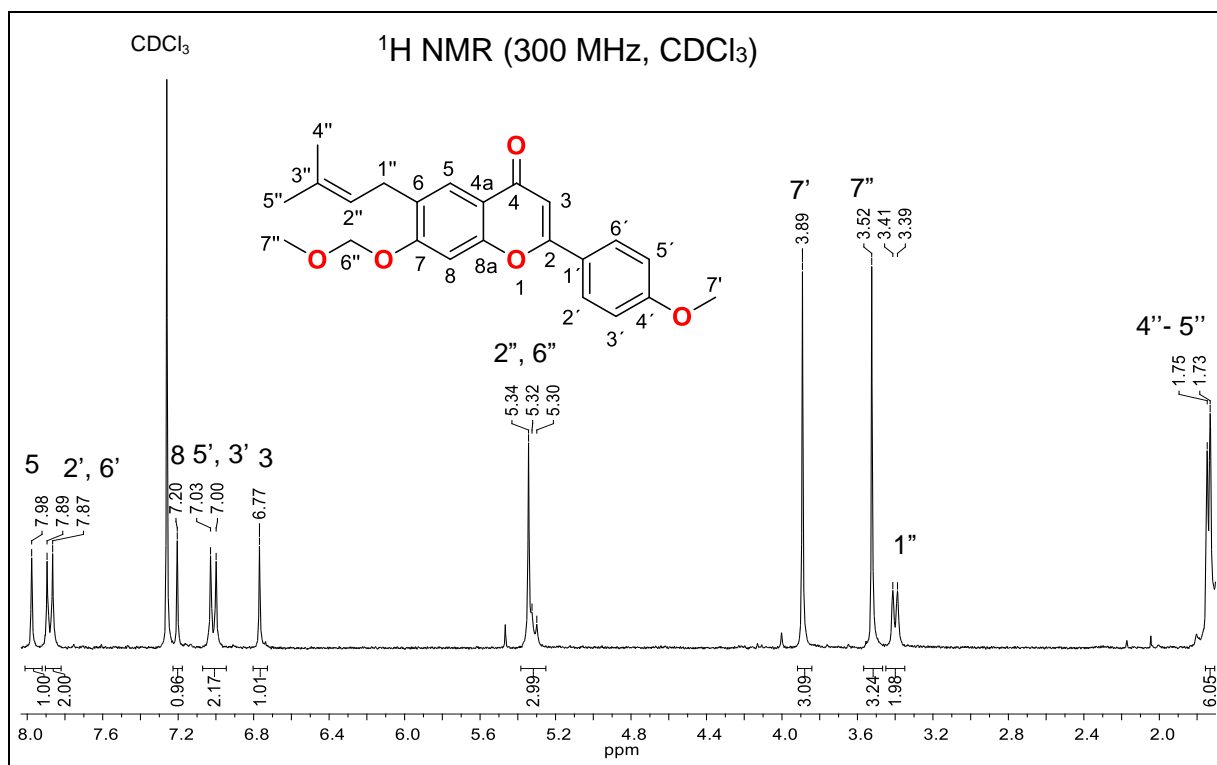


<sup>1</sup>H NMR (28)

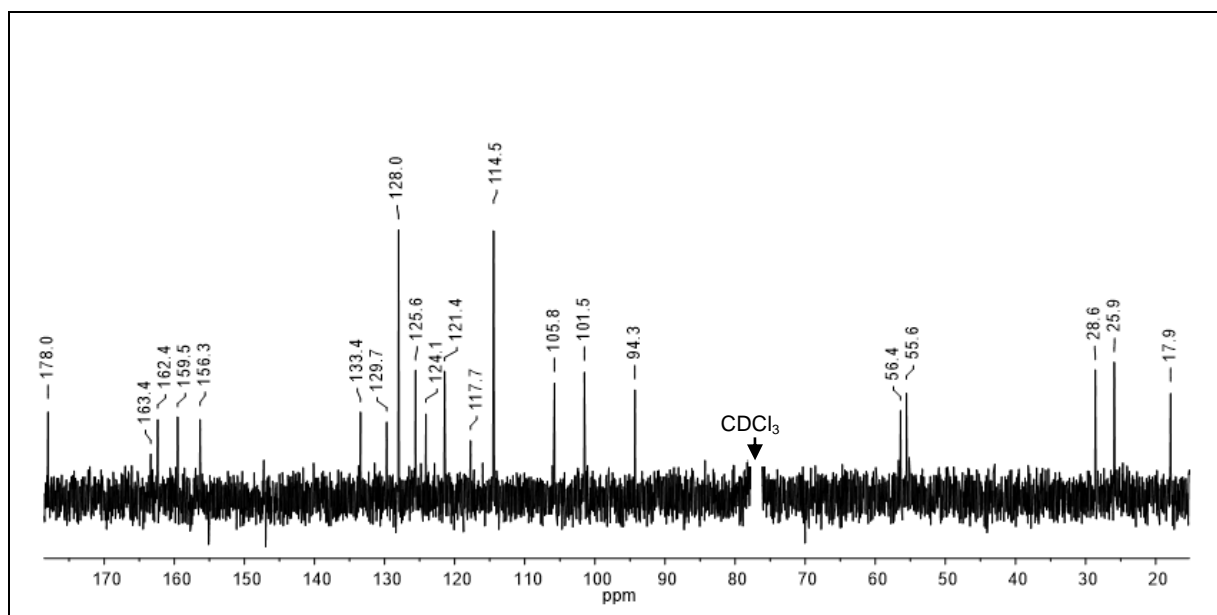


<sup>13</sup>C NMR (28)

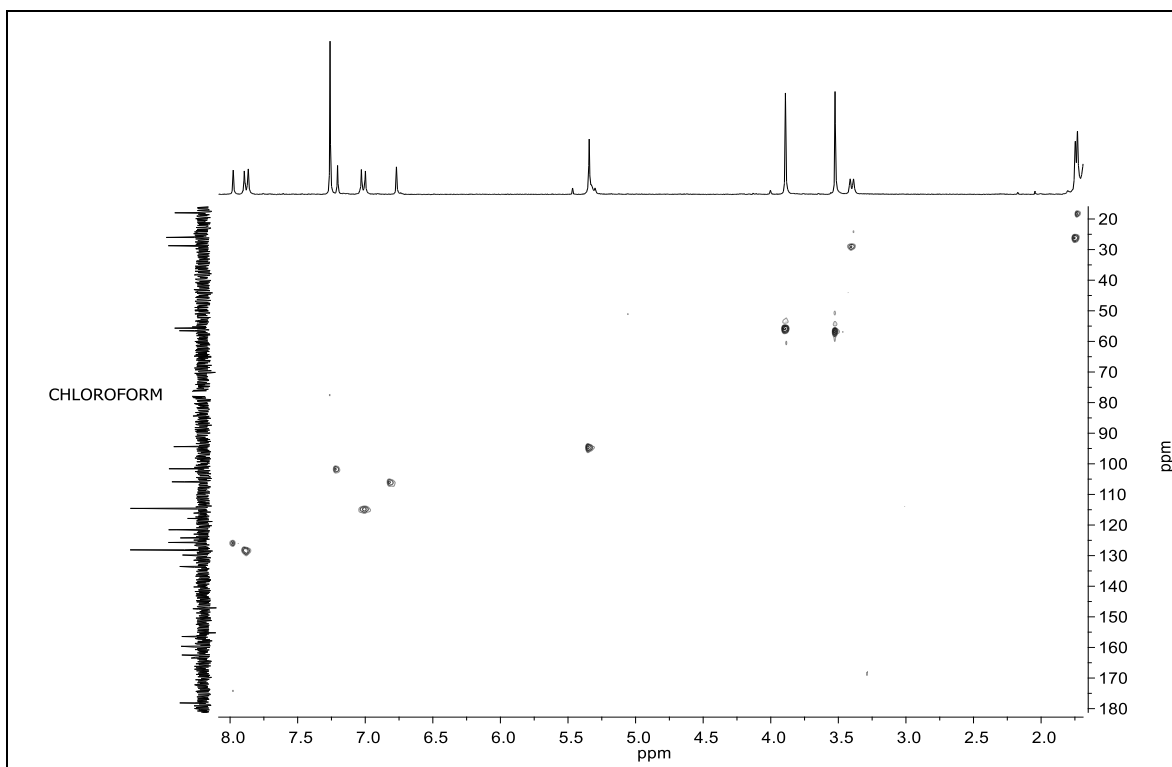
7-(methoxymethoxy)-2-(4-methoxyphenyl)-6-(3-methylbut-2-en-1-yl)-4H-chromen-4-one (29)



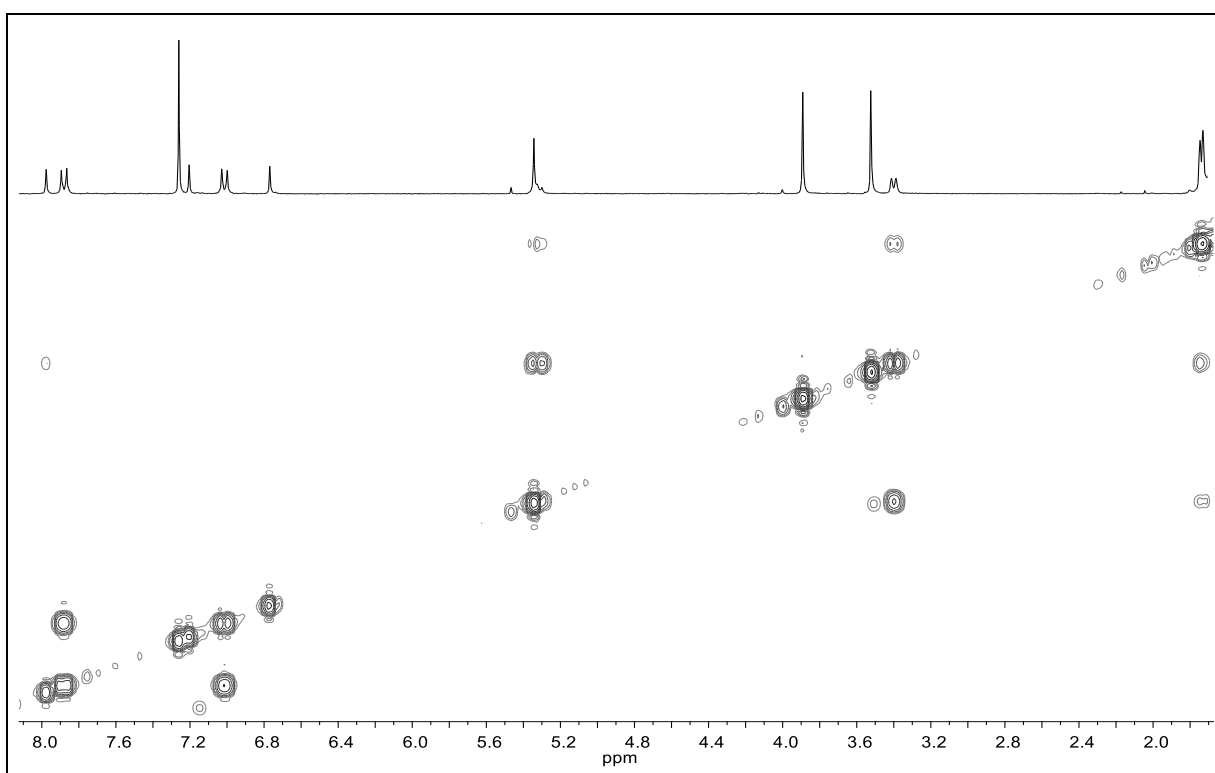
<sup>1</sup>H NMR (29)



<sup>13</sup>C NMR (29)

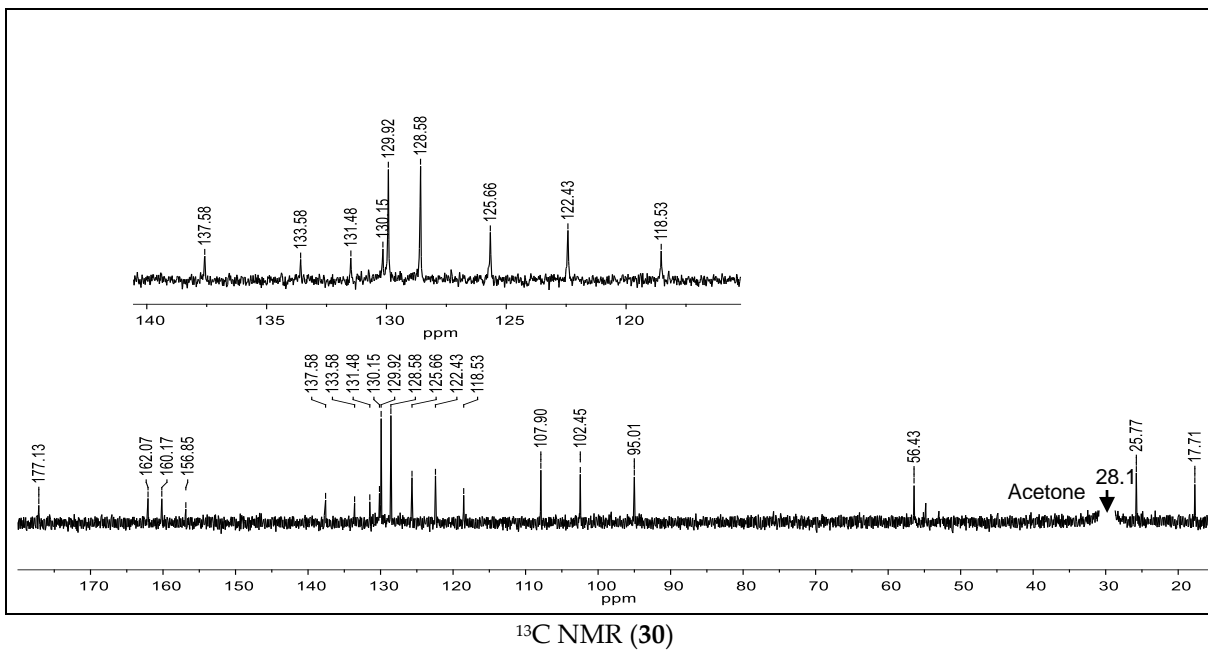
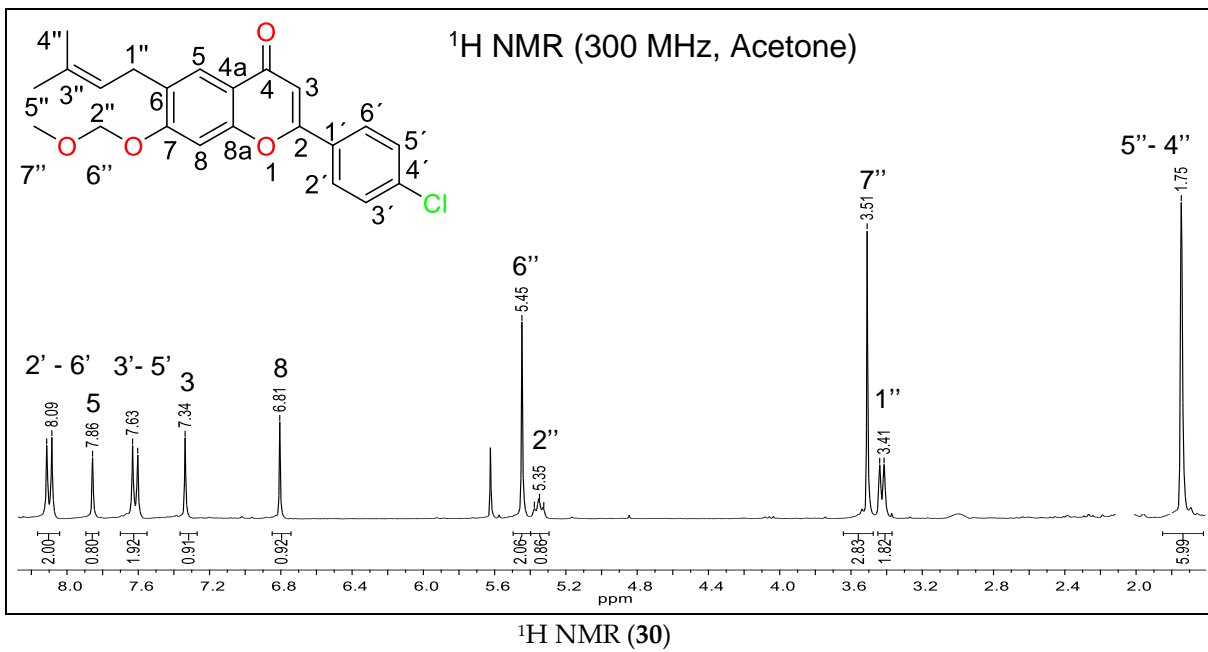


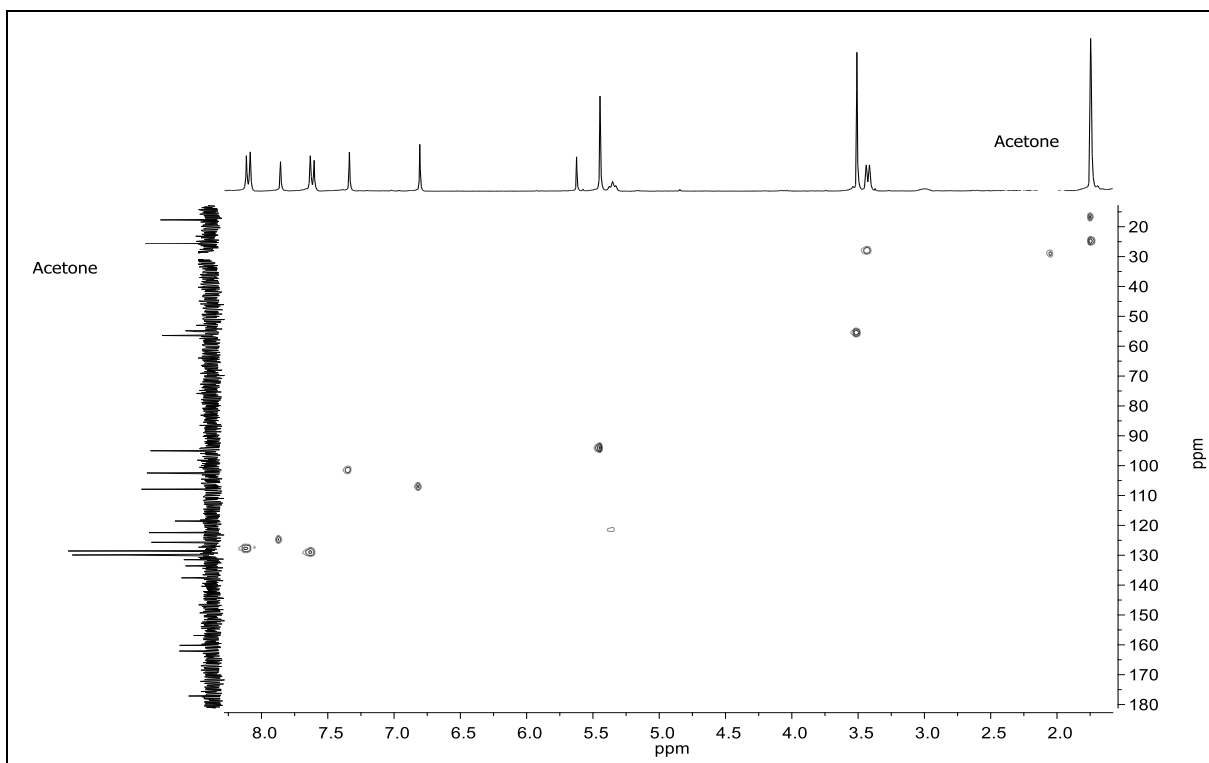
HMQC NMR (29)



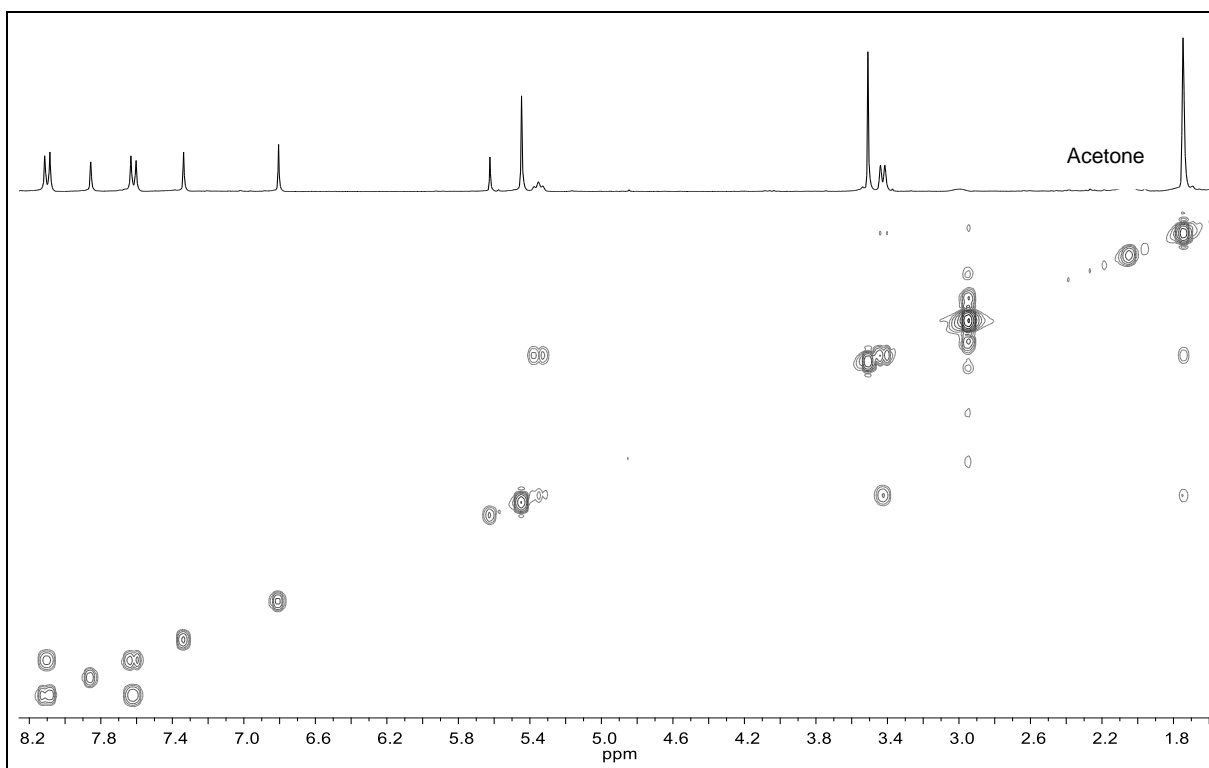
COSY NMR (29)



2-(4-chlorophenyl)-7-(methoxymethoxy)-6-(3-methylbut-2-en-1-yl)-4H-chromen-4-one (**30**)



HMQC NMR (30)



COSY NMR (30)