

## SUPPLEMENTARY MATERIAL

# Microwave-Assisted Semisynthesis and Leishmanicidal Activity of Some Phenolic Constituents from Lichens

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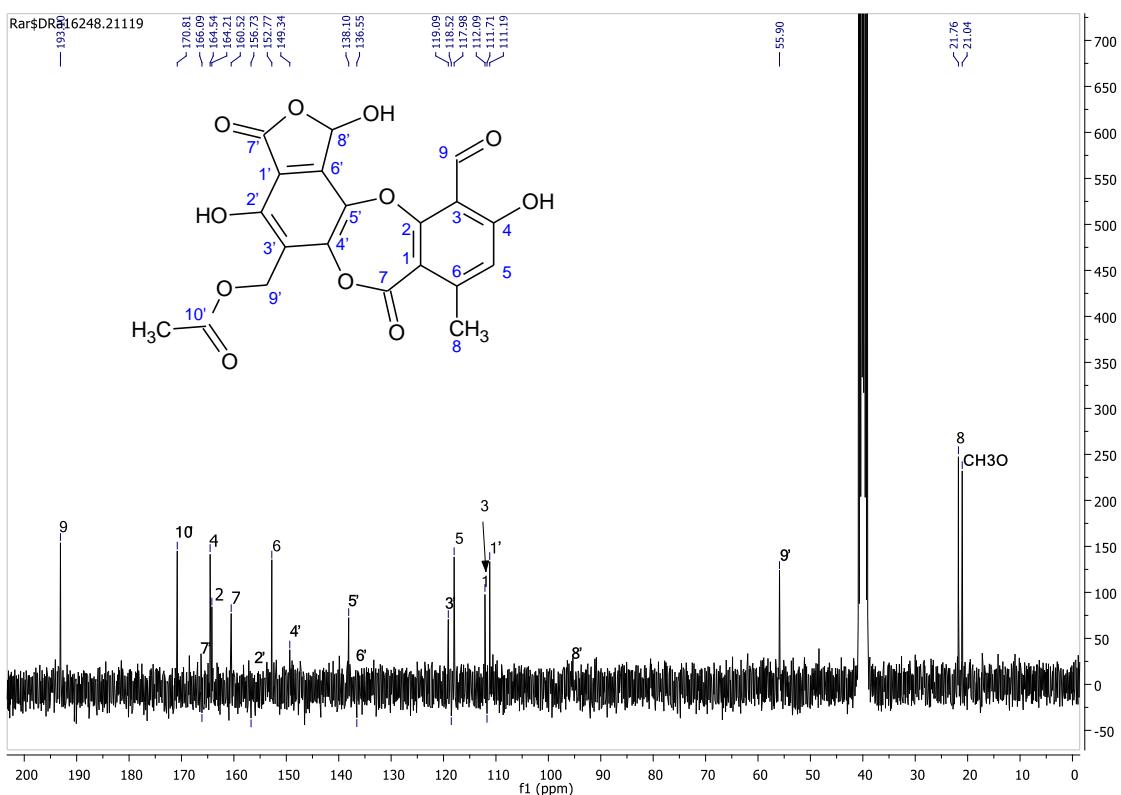
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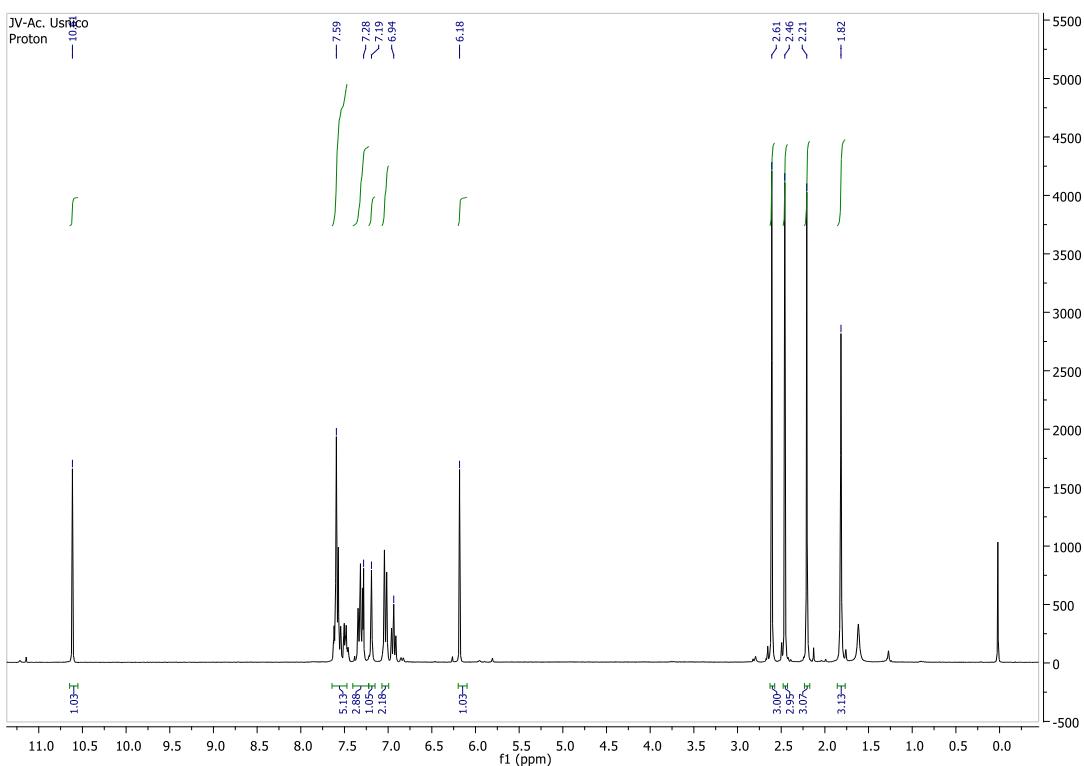
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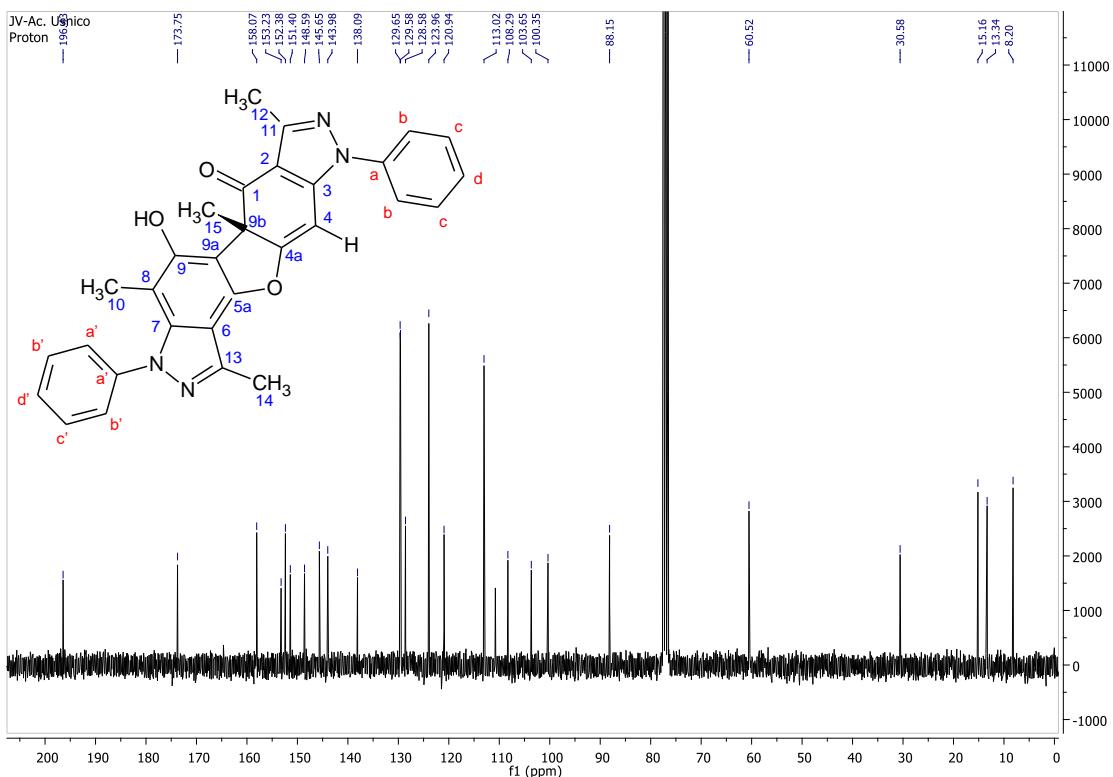
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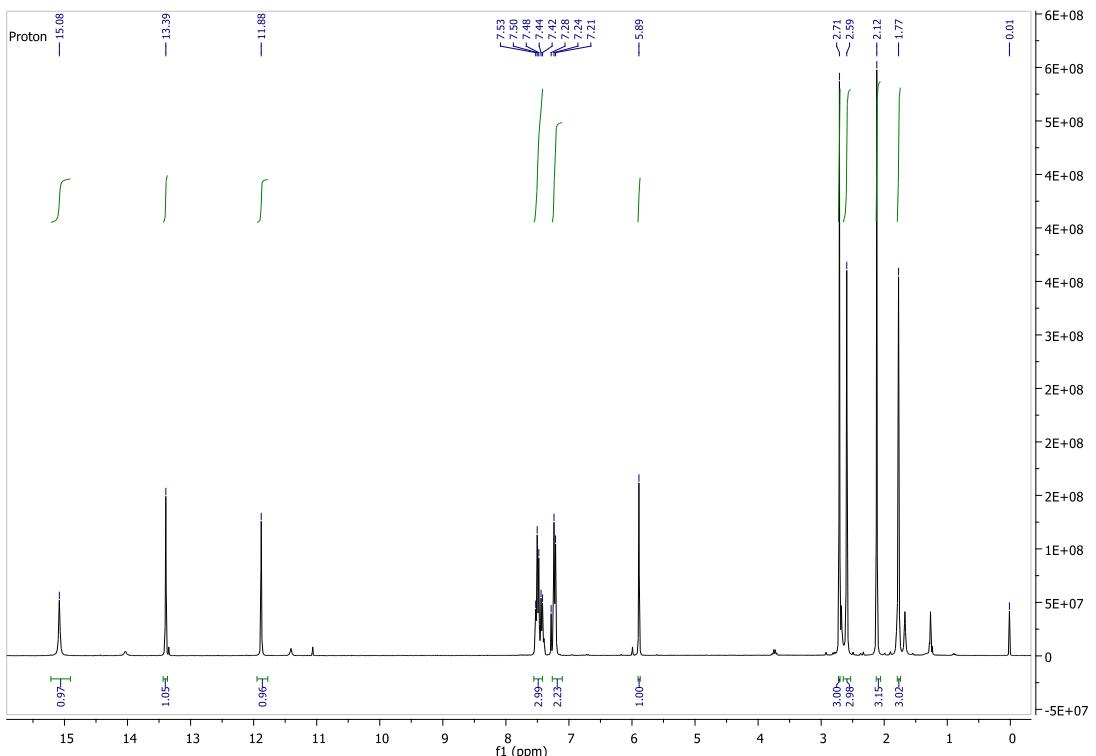
**Figure S1.**  $^{13}\text{C}$ -NMR (DMSO- $d_6$ , 75 MHz) spectrum of galbinic acid (**5**)



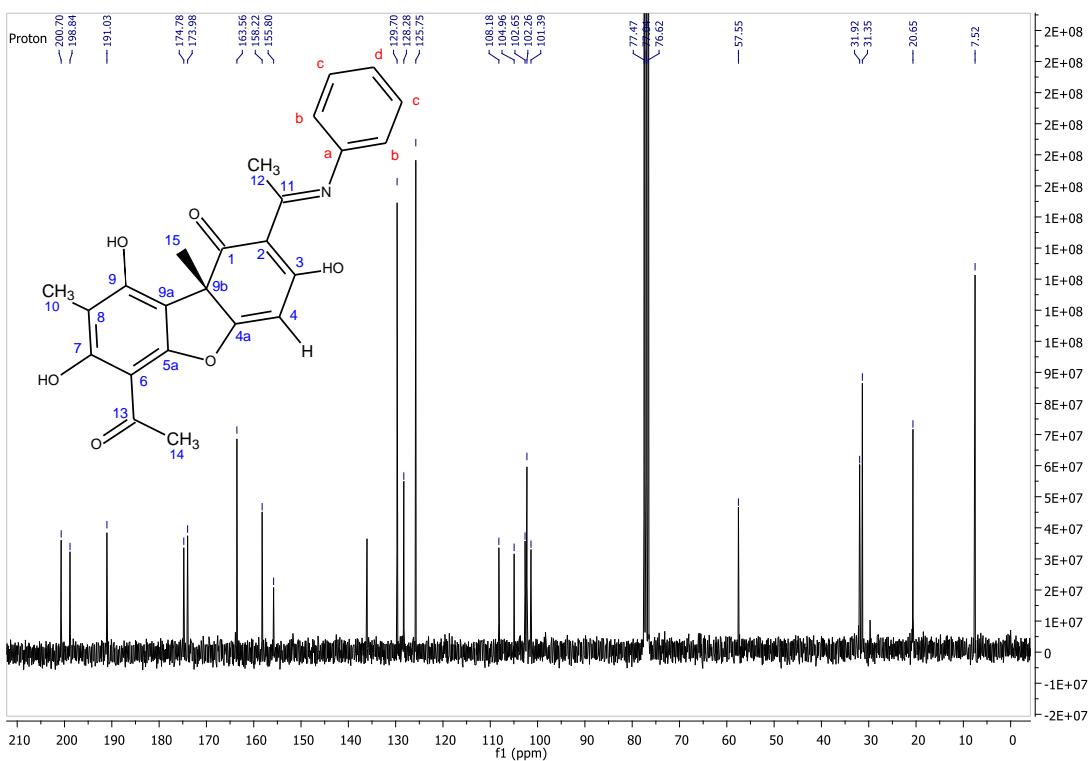
**Figure S2.**  $^1\text{H}$ -NMR ( $\text{CDCl}_3$ , 300 MHz) spectrum of compound (**7**)

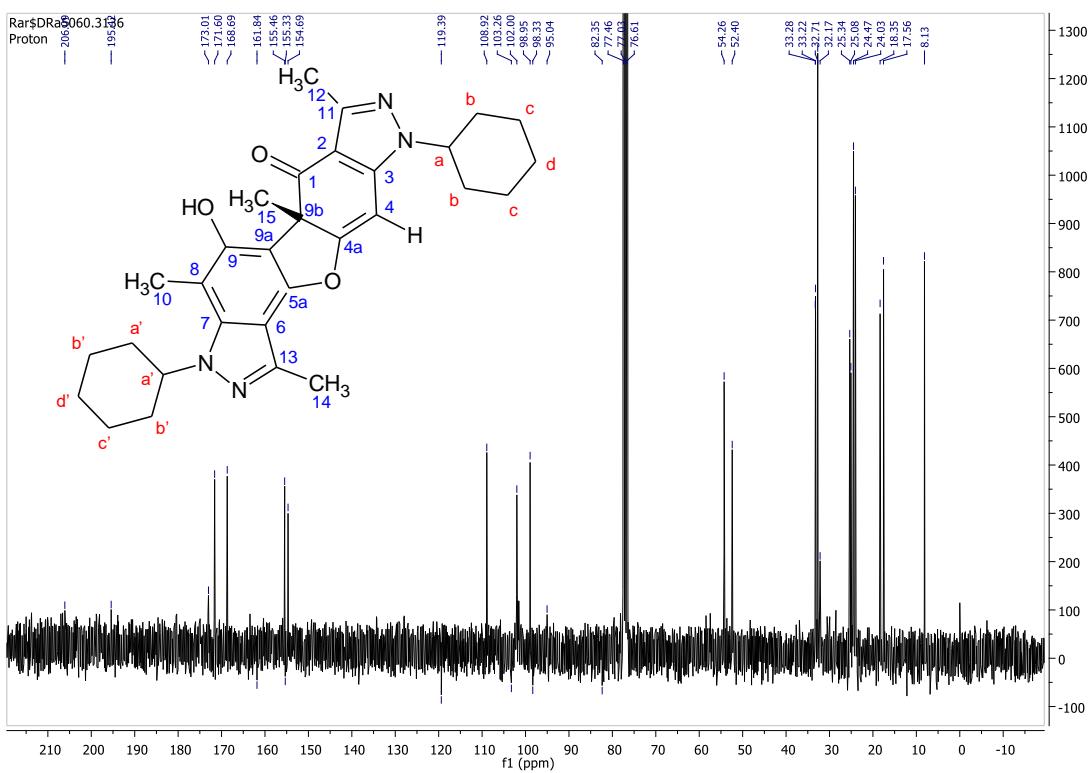


**Figure S3.** <sup>13</sup>C-NMR ( $\text{CDCl}_3$ , 75 MHz) spectrum of compound (7)

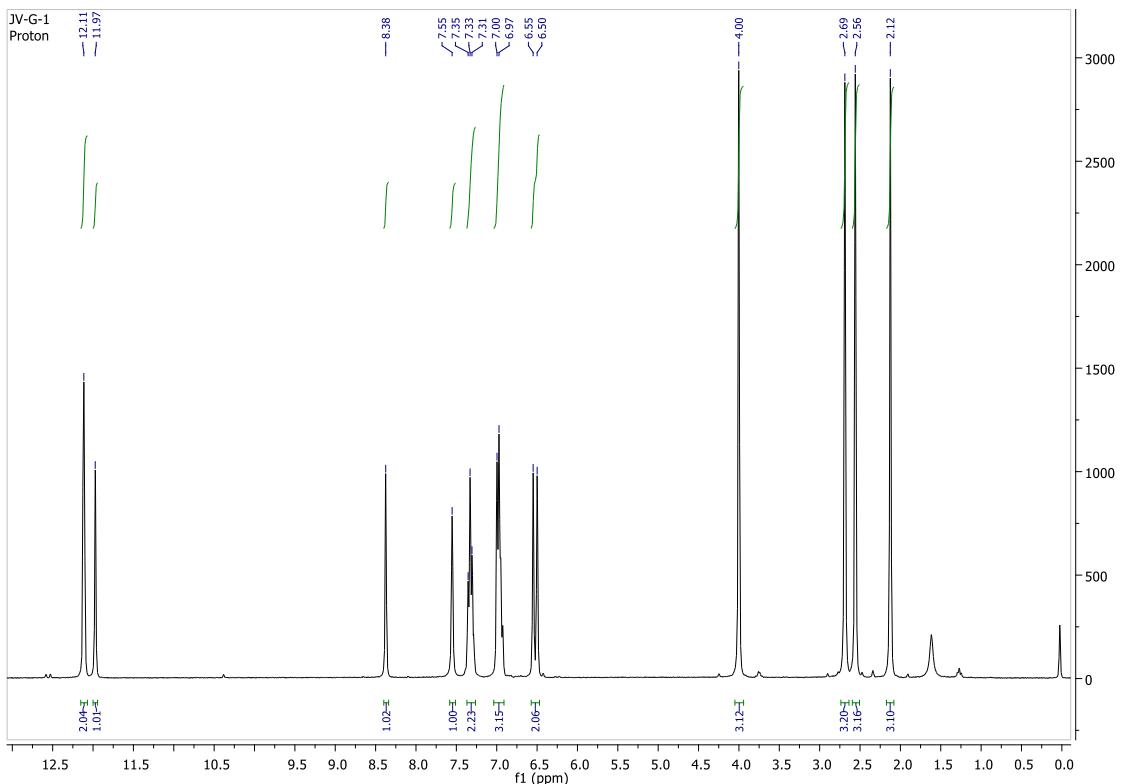


**Figure S4.** <sup>1</sup>H-NMR ( $\text{CDCl}_3$ , 300 MHz) spectrum of compound (8)

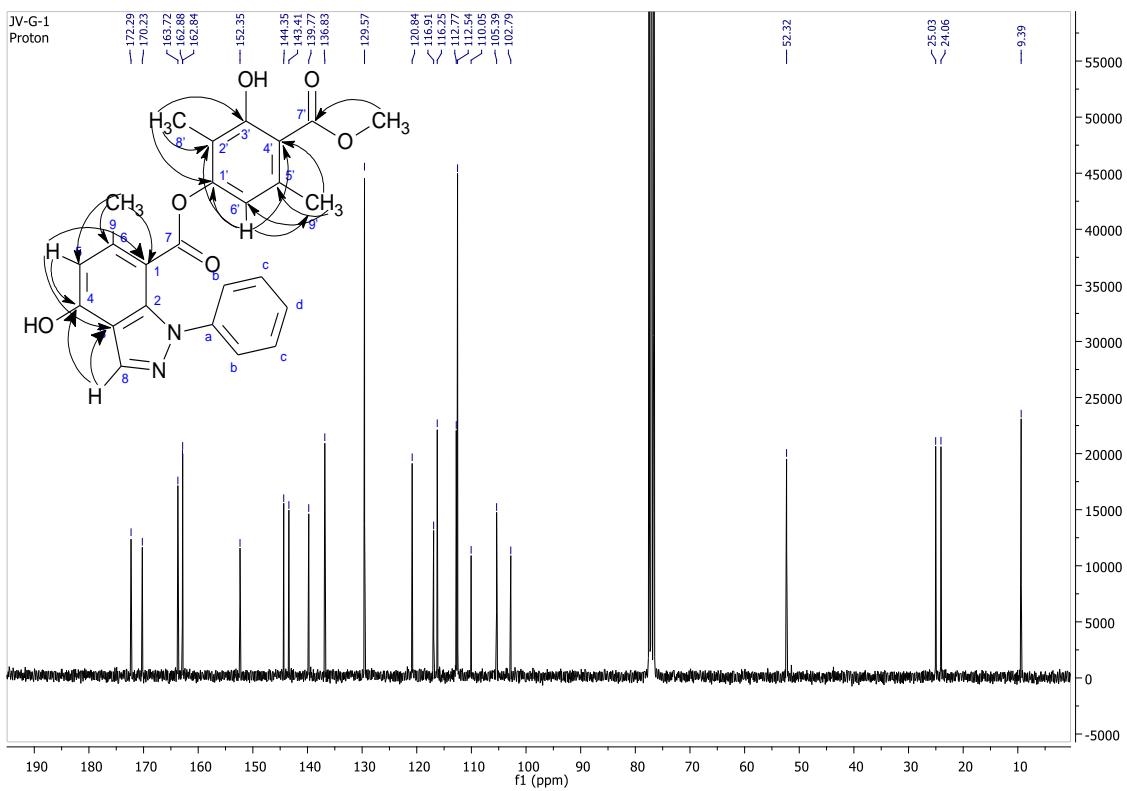




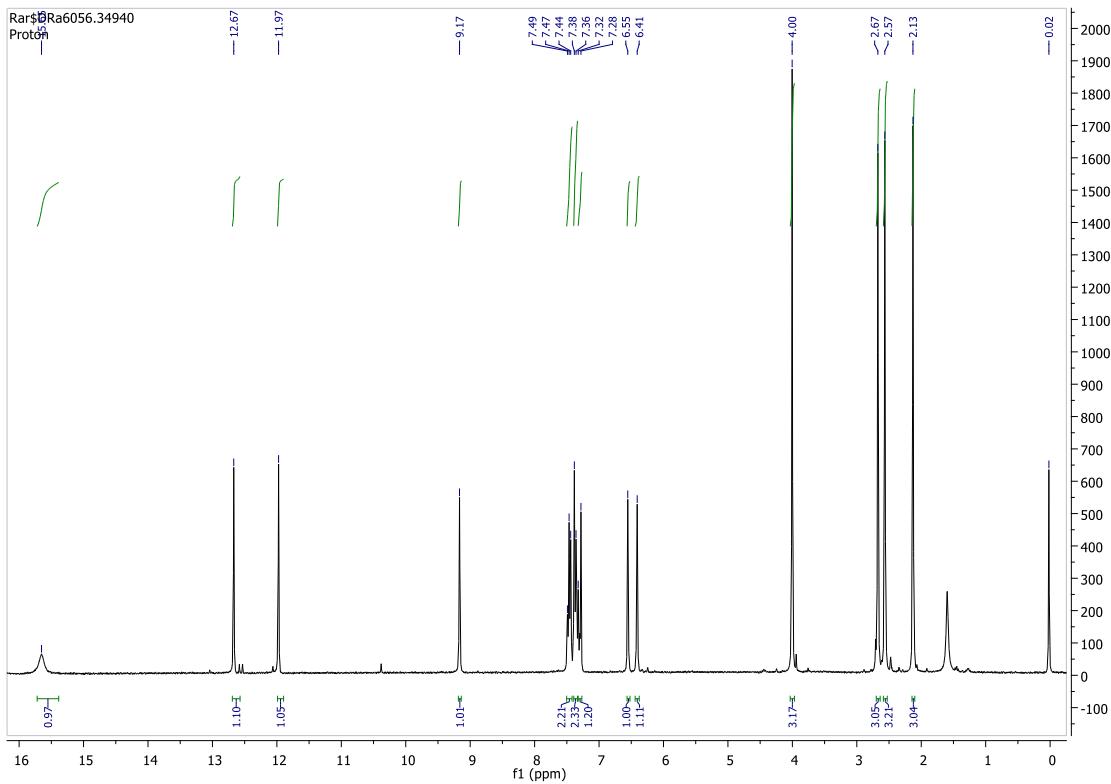
**Figure S7.**  $^{13}\text{C}$ -NMR ( $\text{CDCl}_3$ , 75 MHz) spectrum of compound (9)



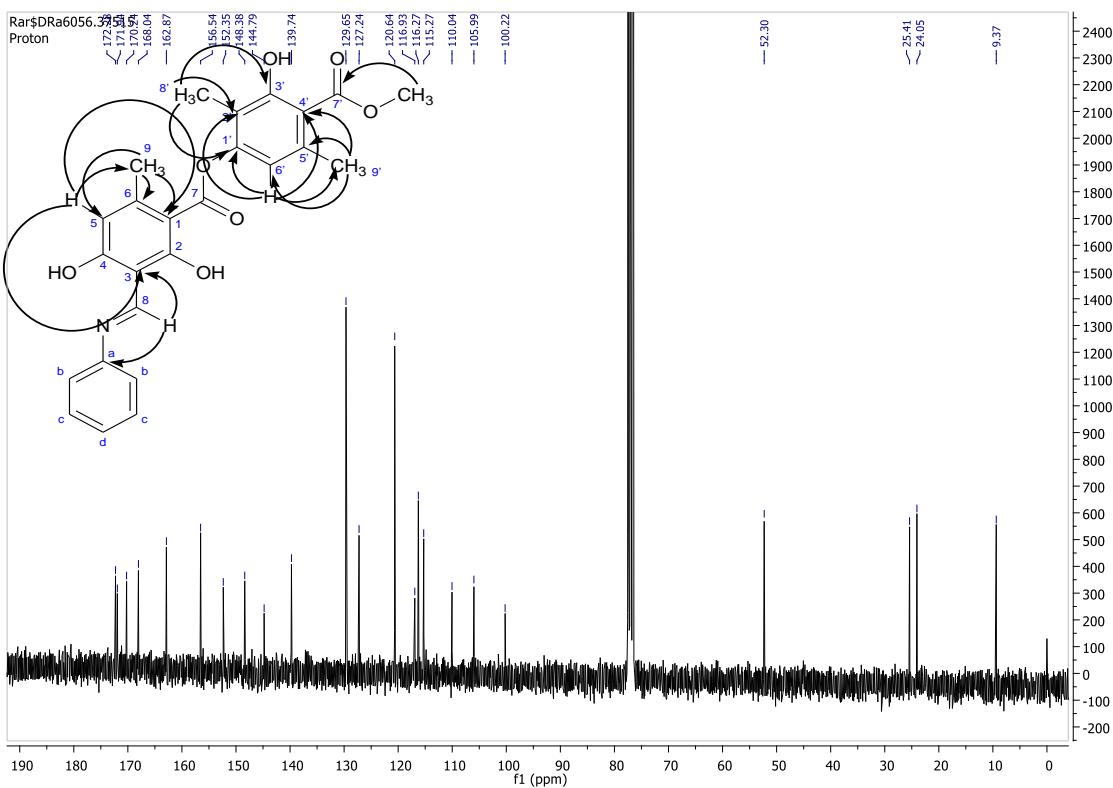
**Figure S8.**  $^1\text{H}$ -NMR ( $\text{CDCl}_3$ , 300 MHz) spectrum of compound (10)



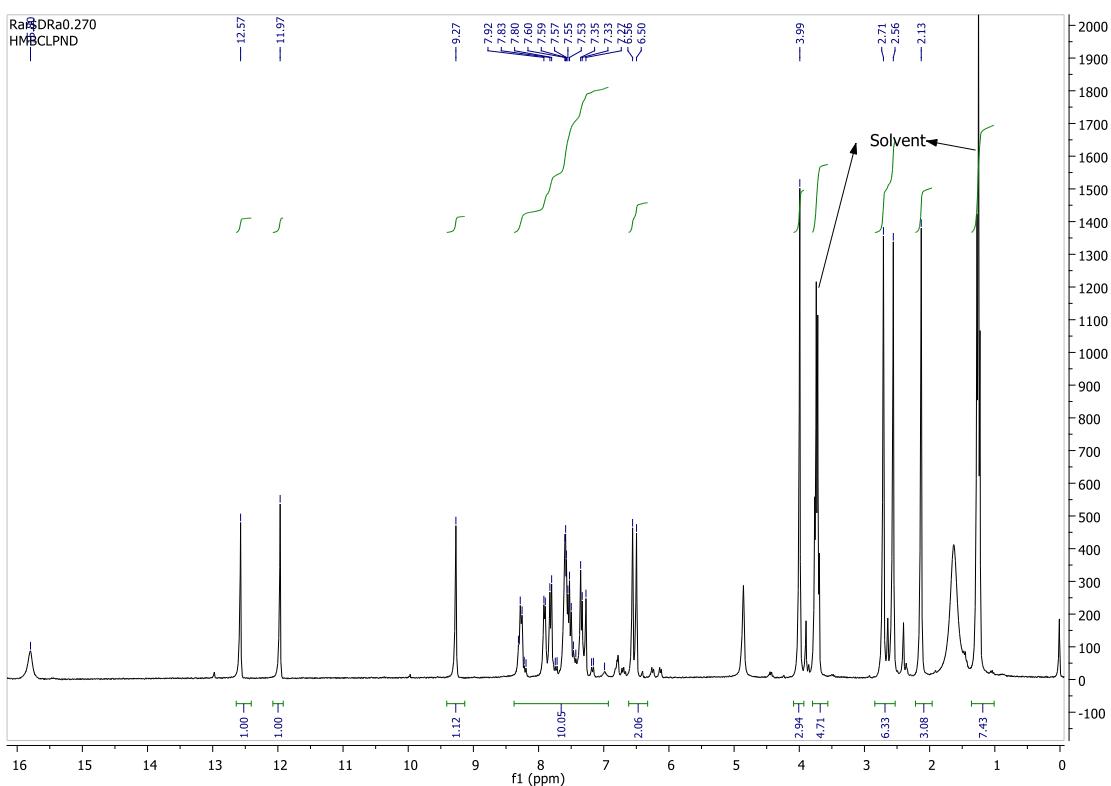
**Figure S9.** <sup>13</sup>C-NMR (CDCl<sub>3</sub>, 75 MHz) spectrum of compound (10)



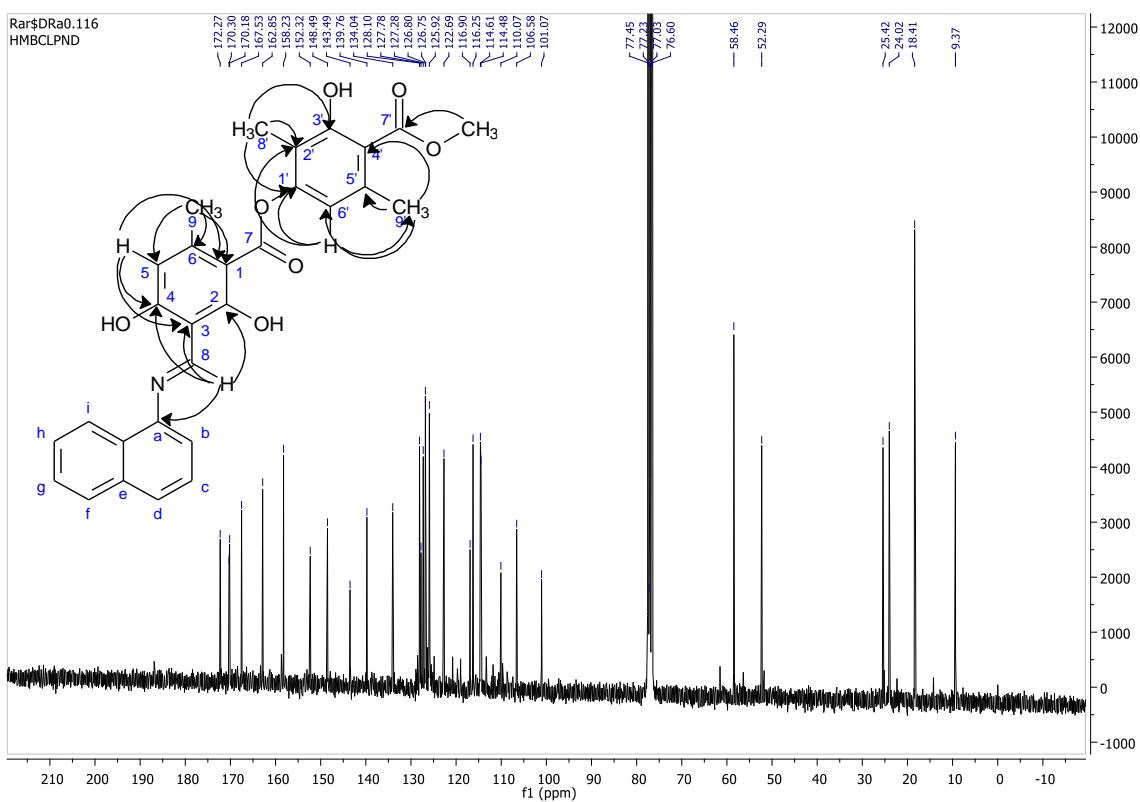
**Figure S10.** <sup>1</sup>H-NMR (CDCl<sub>3</sub>, 300 MHz) spectrum of compound (11)



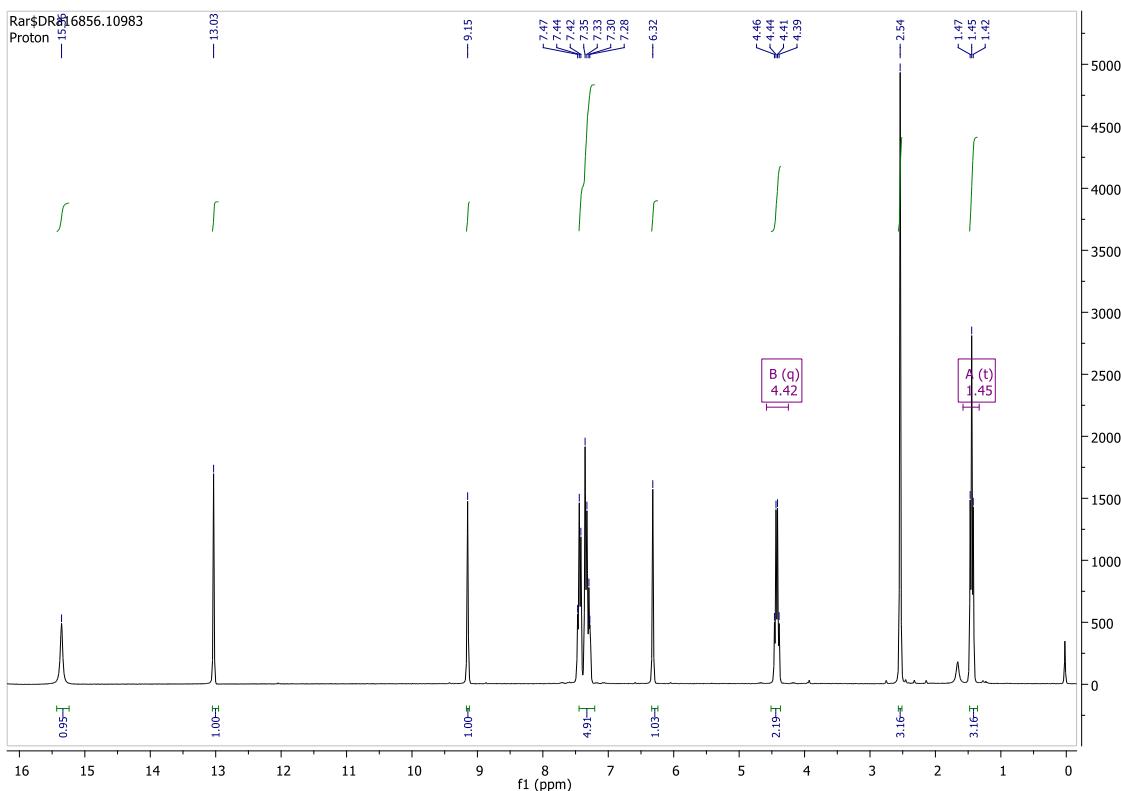
**Figure S11.**  $^{13}\text{C}$ -NMR ( $\text{CDCl}_3$ , 75 MHz) spectrum of compound (11)



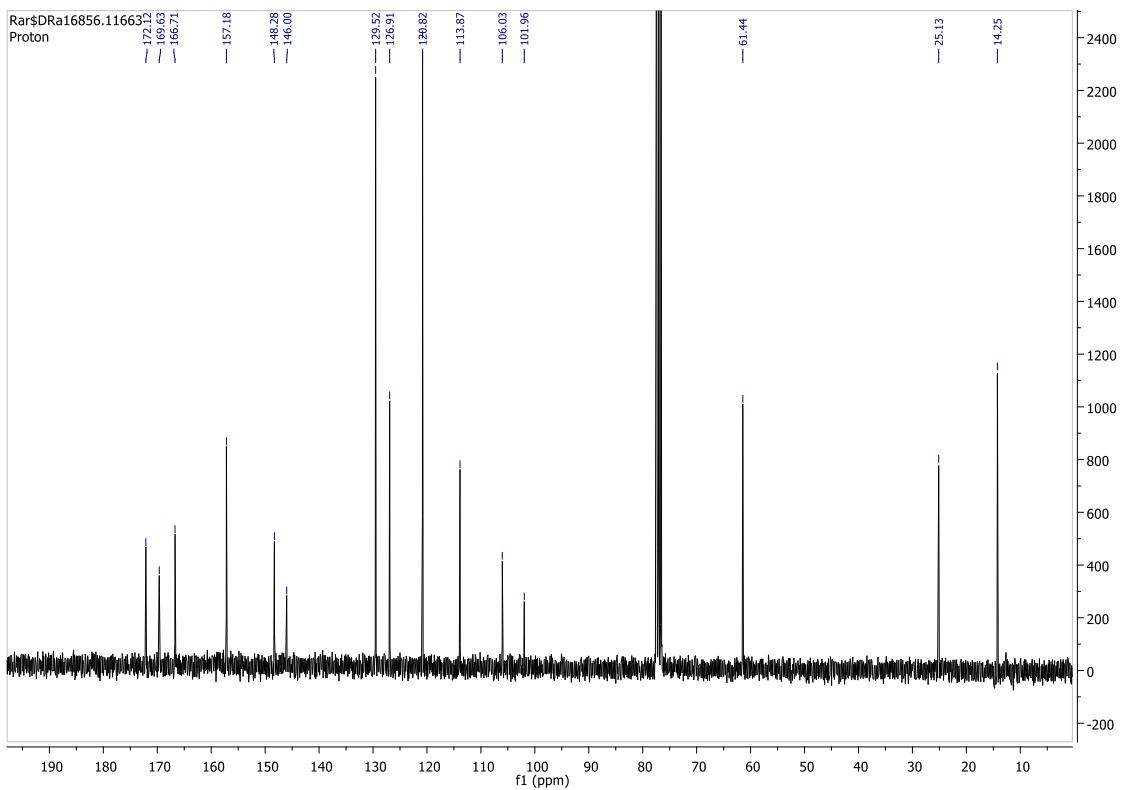
**Figure S12.**  $^1\text{H}$ -NMR ( $\text{CDCl}_3$ , 300 MHz) spectrum of compound (12)



**Figure S13.** <sup>13</sup>C-NMR (CDCl<sub>3</sub>, 75 MHz) spectrum of compound (12)



**Figure S14.** <sup>1</sup>H-NMR (CDCl<sub>3</sub>, 300 MHz) spectrum of compound (13)



**Figure S15.**  $^{13}\text{C}$ -NMR ( $\text{CDCl}_3$ , 75 MHz) spectrum of compound (13)