

## Supporting information

# Benzyl Derivatives with in Vitro Binding Affinity for Human Opioid Receptors and Cannabinoid Receptors from the Fungus *Eurotium repens*

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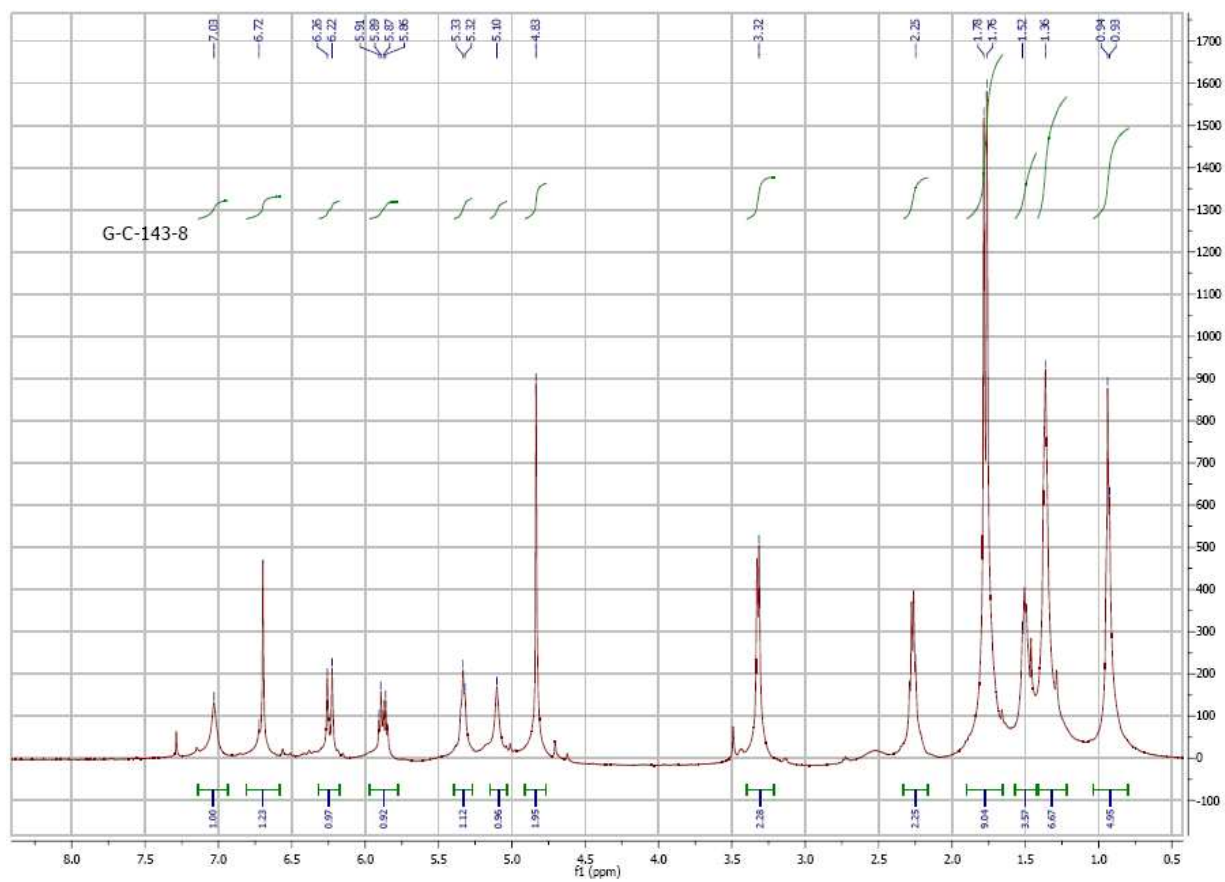
<sup>⊥</sup> Lincoln University.

<sup>||</sup> Mercer University.

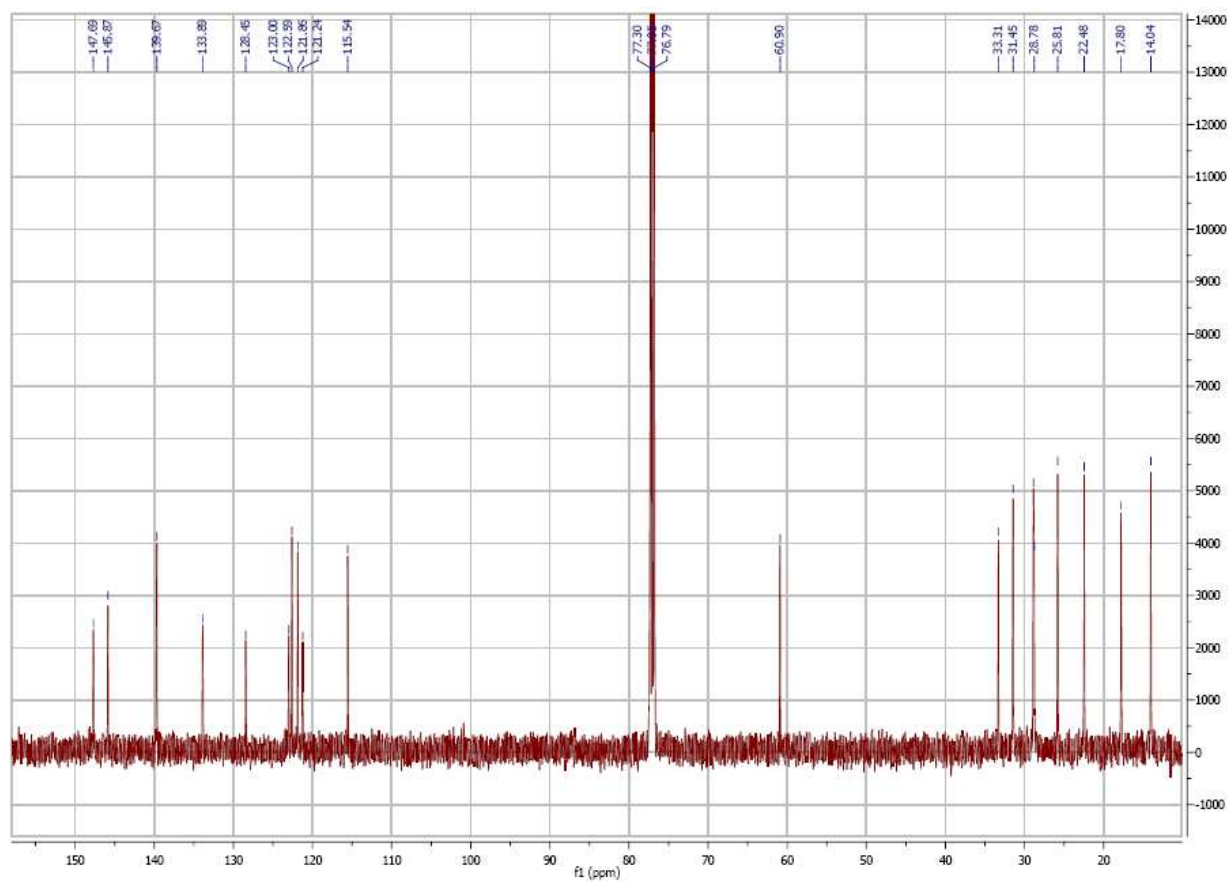
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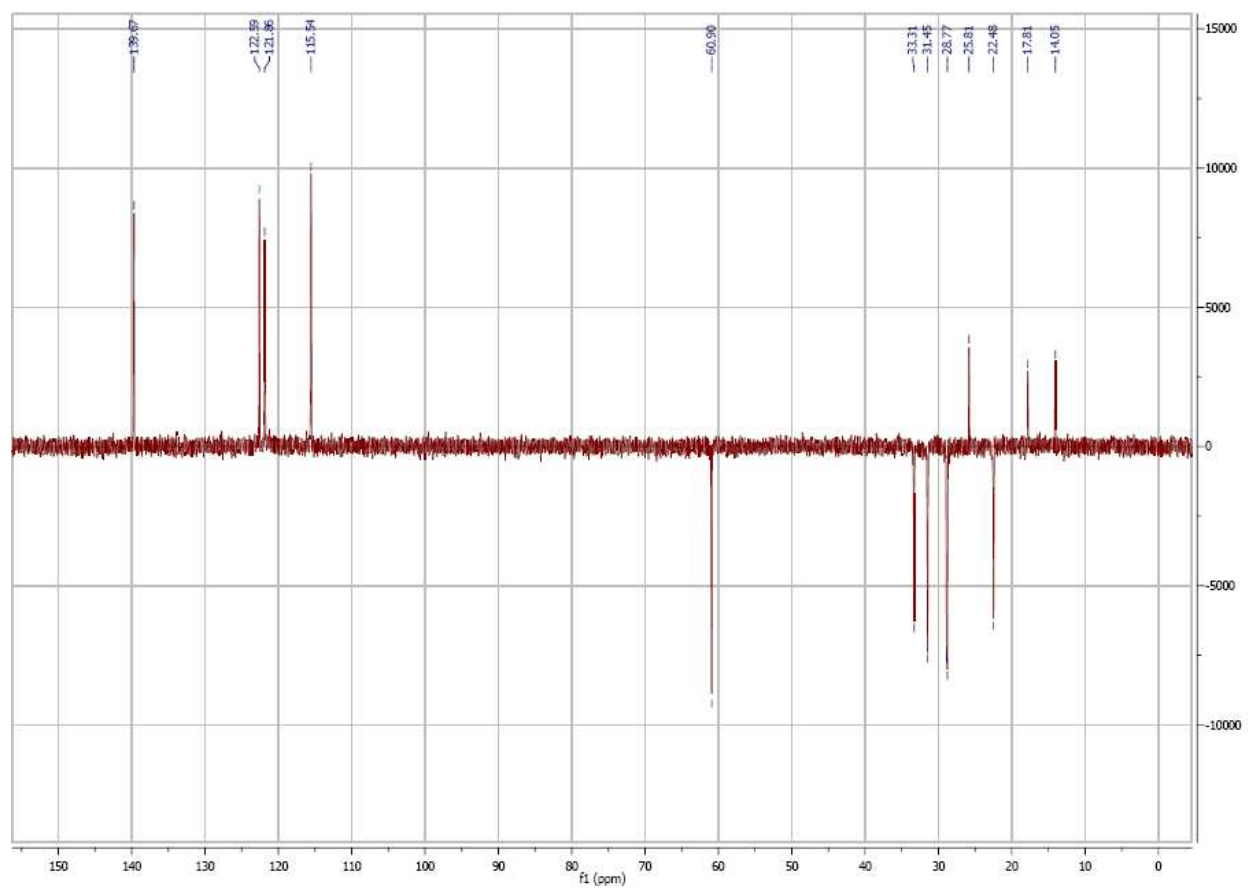
**Figure 1.**  $^1\text{H}$  NMR Spectrum of Repenol A (**1**) in  $\text{CDCl}_3-d_3$  (500 MHz).



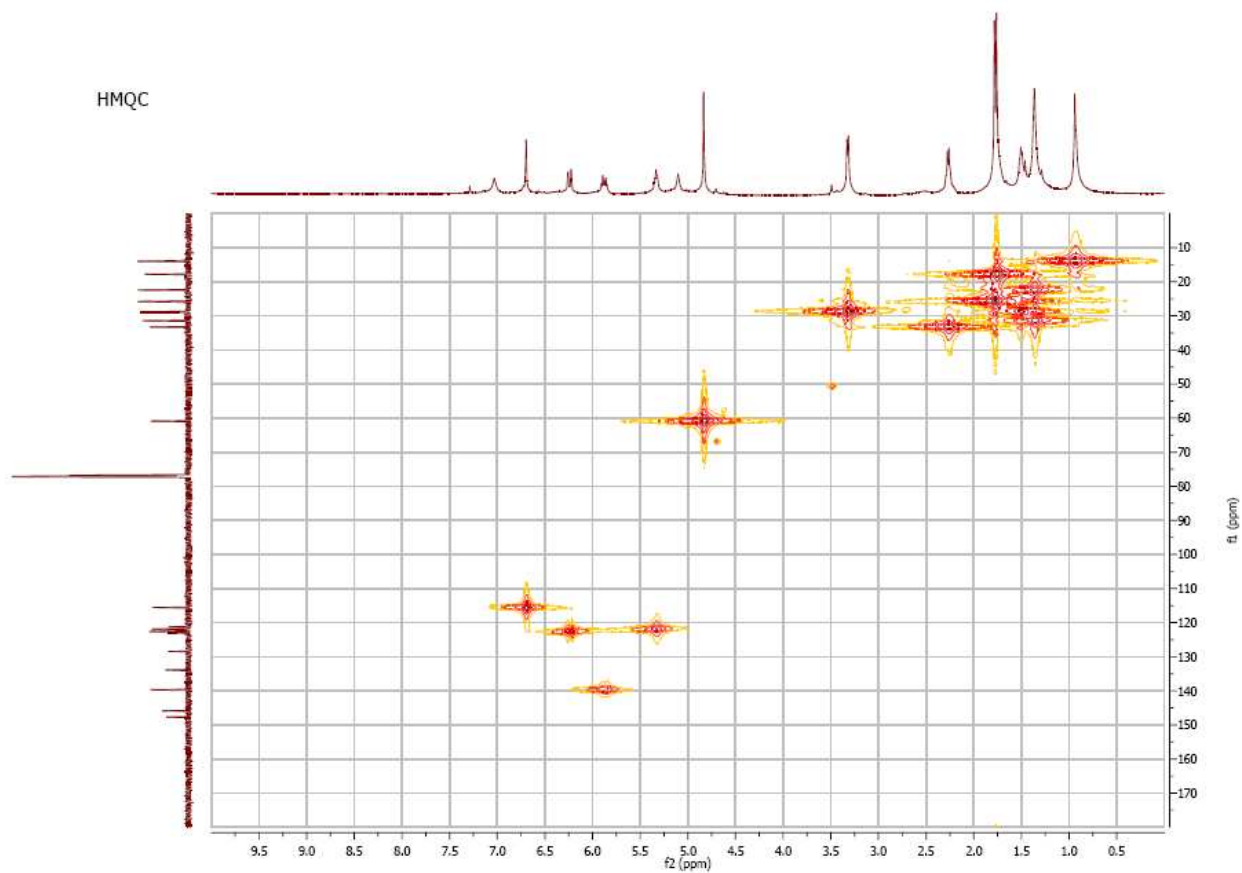
**Figure 2.**  $^{13}\text{C}$  NMR Spectrum of Repenol A (1) in  $\text{CDCl}_3-d_3$  (125 MHz).



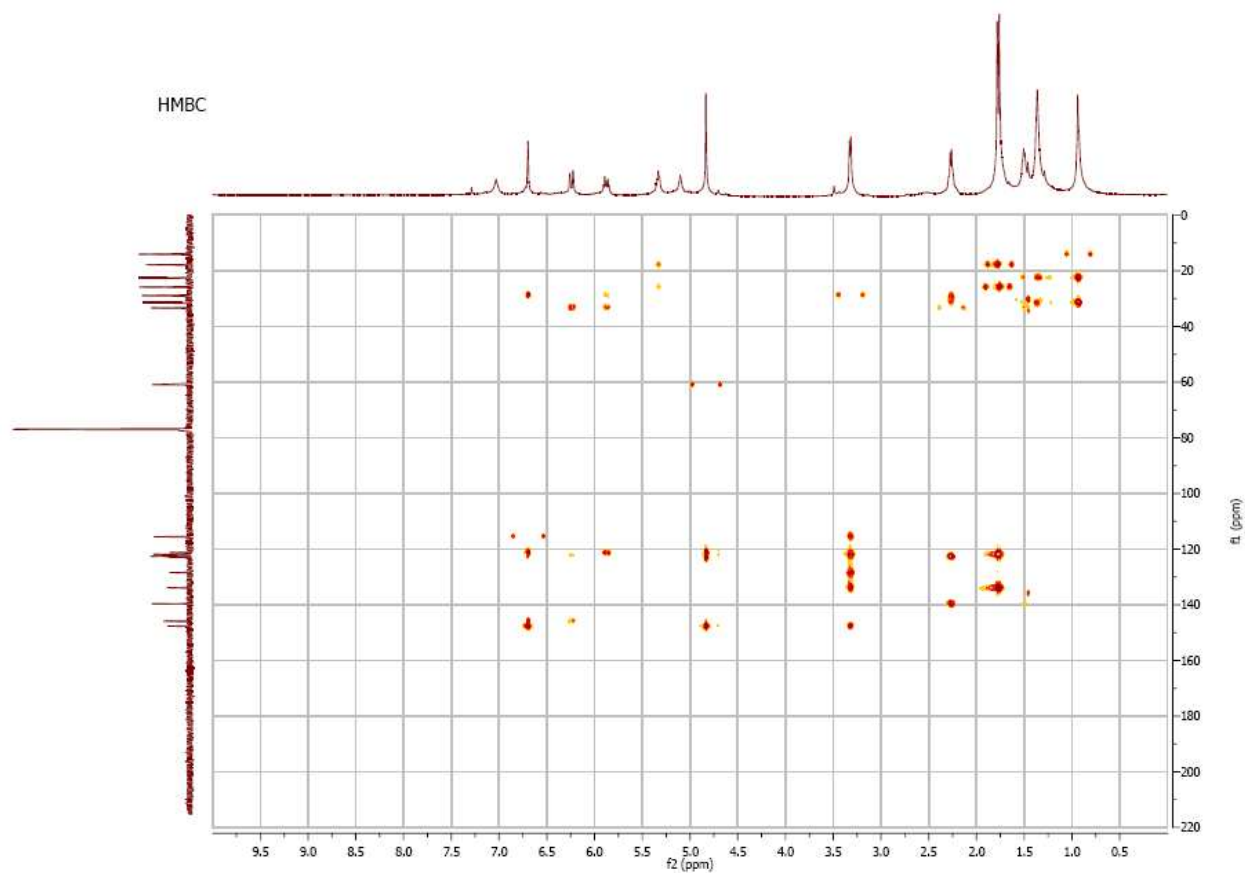
**Figure 3.** DEPT 135° Spectrum of Repenol A (**1**) in  $\text{CDCl}_3-d_3$  (125 MHz).



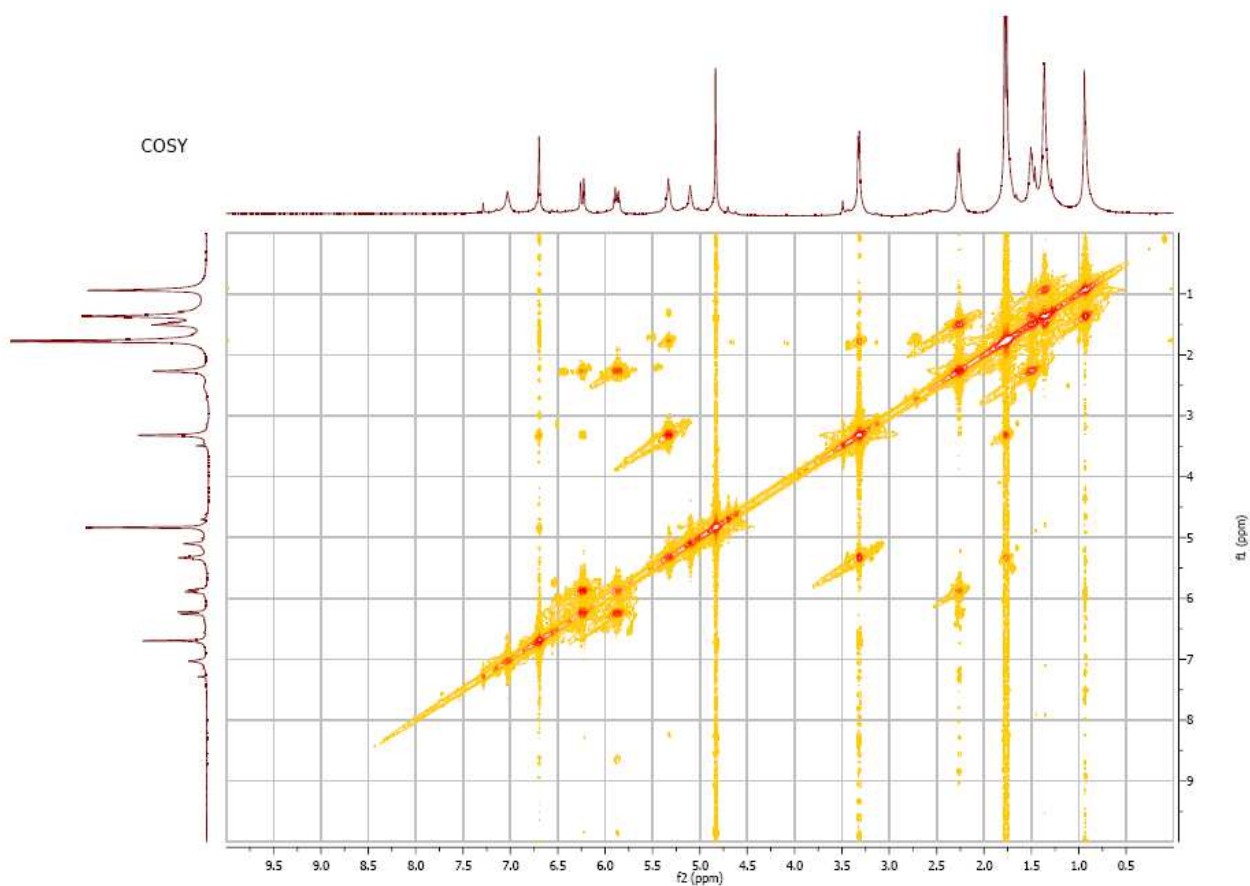
**Figure 4.** HMQC Spectrum of Repenol A (**1**) in CDCl<sub>3</sub>-d<sub>3</sub> (500 MHz).



**Figure 5.** HMBC Spectrum of Repenol A (**1**) in  $\text{CDCl}_3-d_3$  (500 MHz).

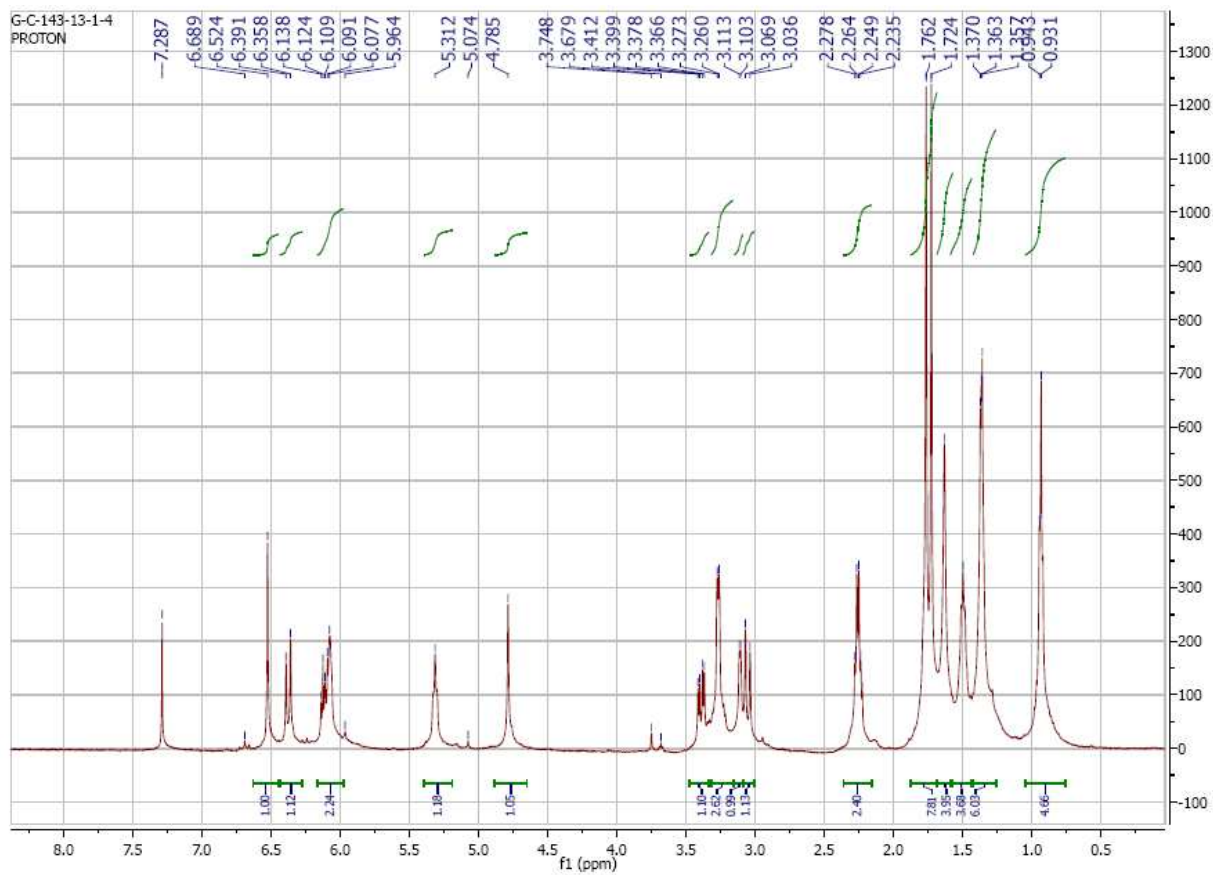


**Figure 6.** COSY Spectrum of Repenol A (**1**) in  $\text{CDCl}_3-d_3$  (500 MHz).

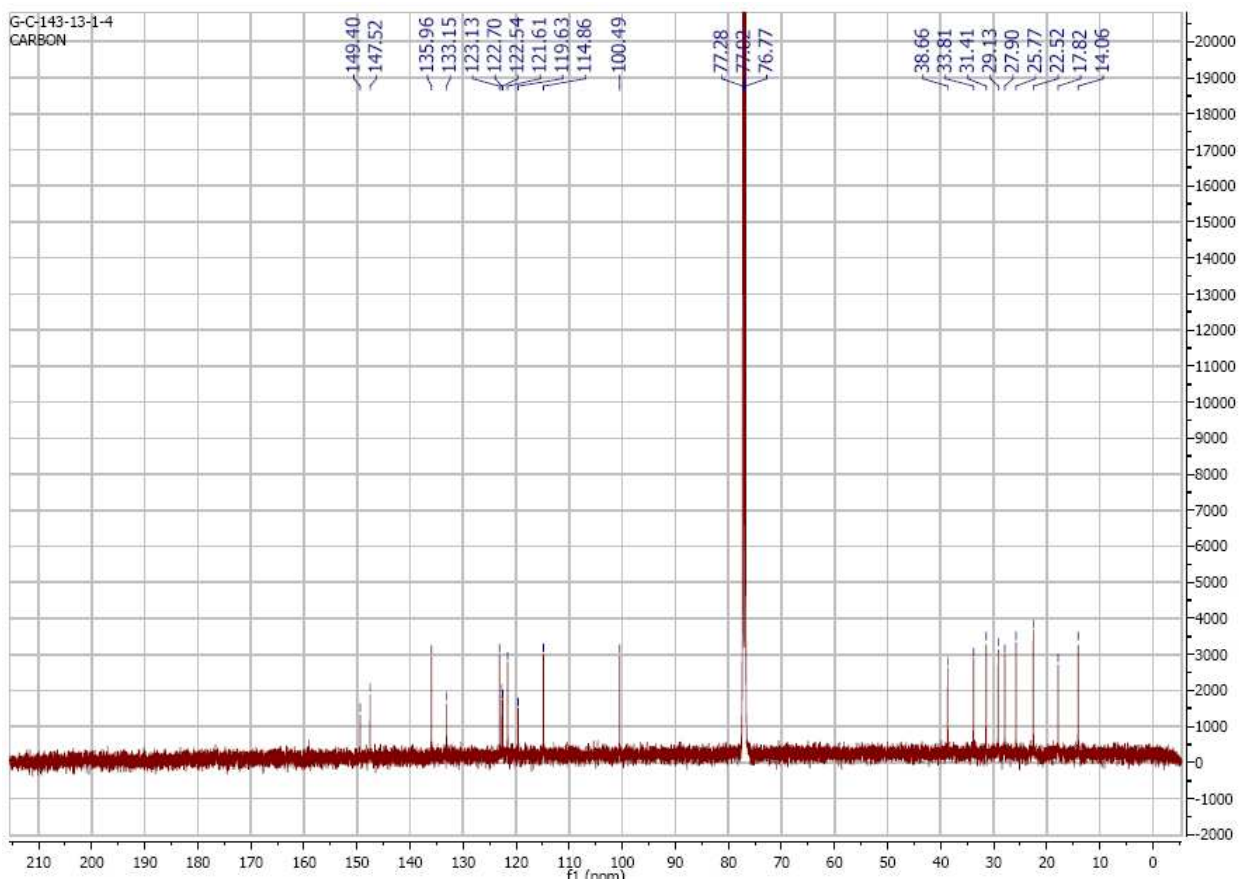




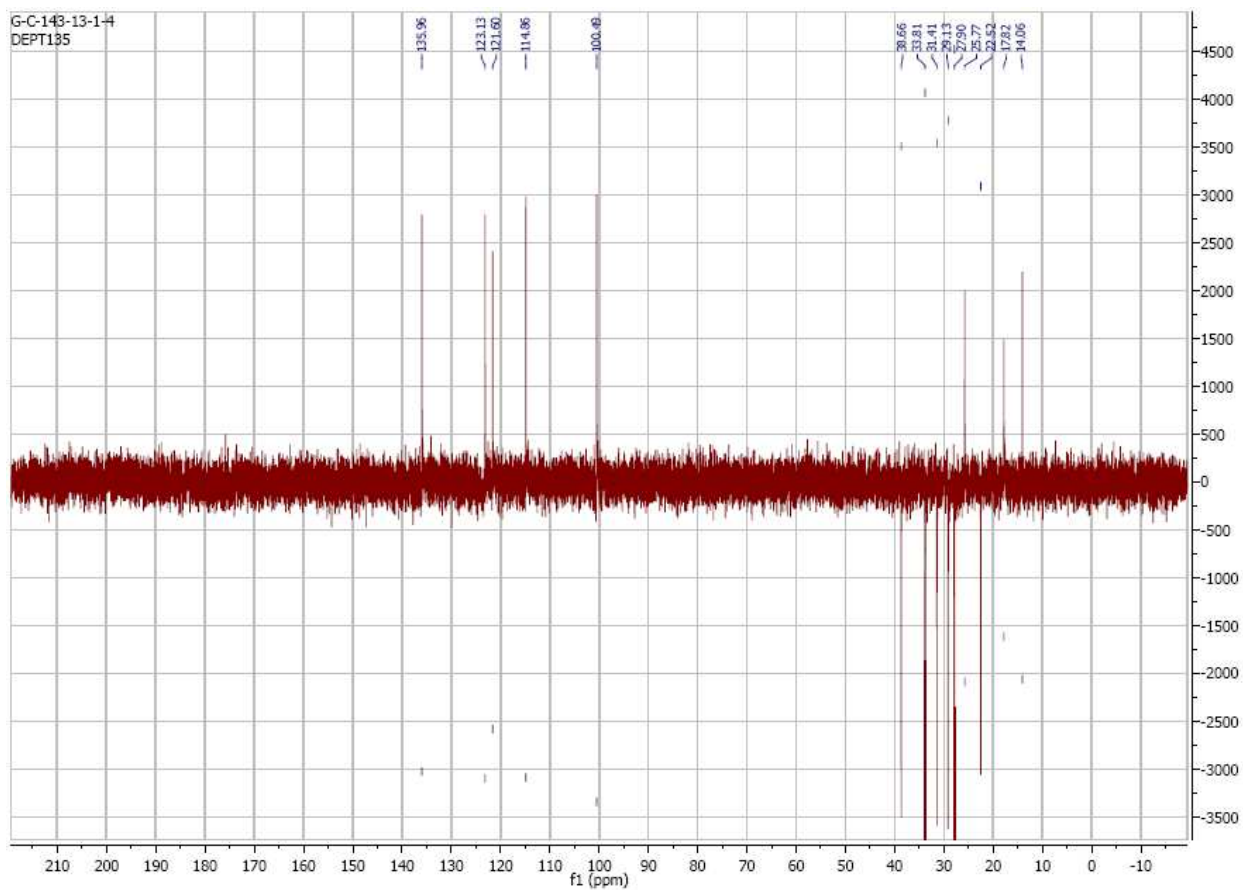
**Figure 7.**  $^1\text{H-NMR}$  Spectrum of Repenol B (**2**) in  $\text{CDCl}_3-d_3$  (500 MHz).



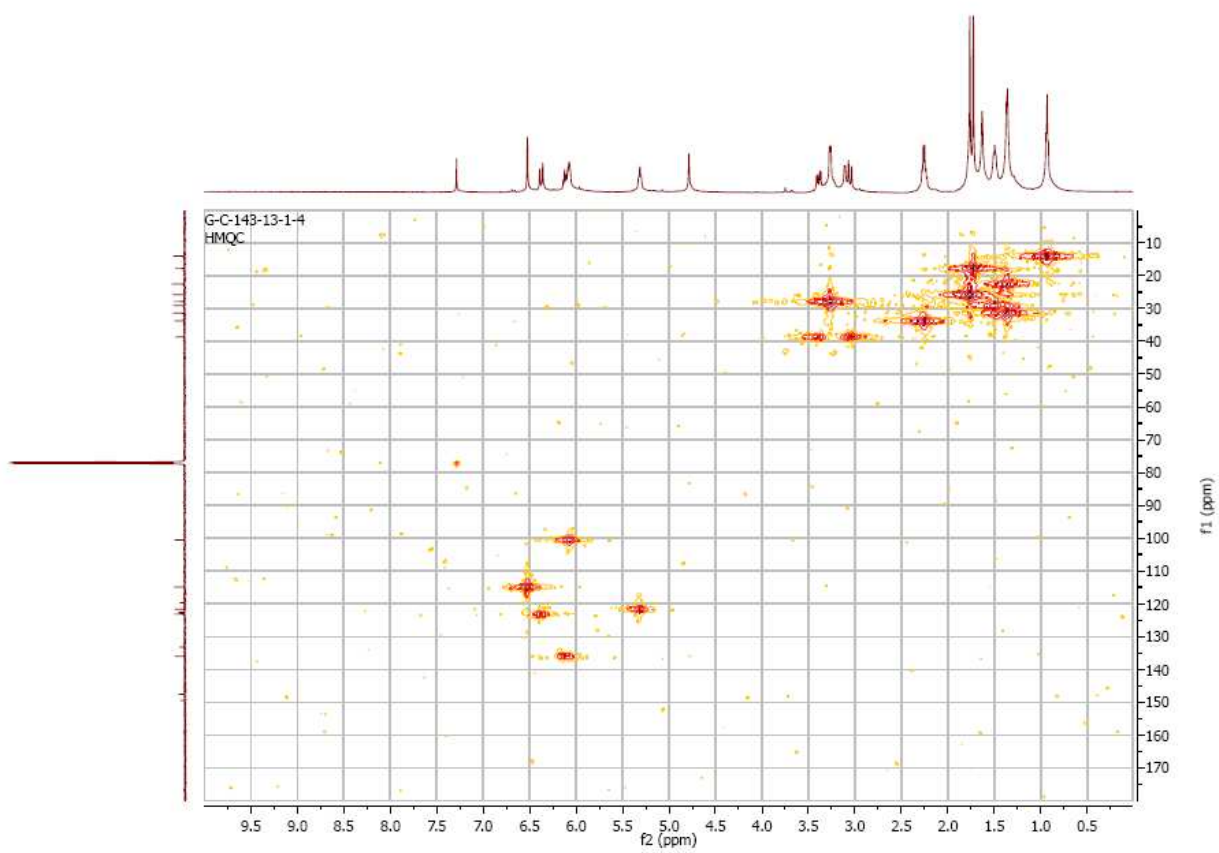
**Figure 8.**  $^{13}\text{C}$ -NMR Spectrum of Repeol B (**2**) in  $\text{CDCl}_3-d_3$  (125 MHz).



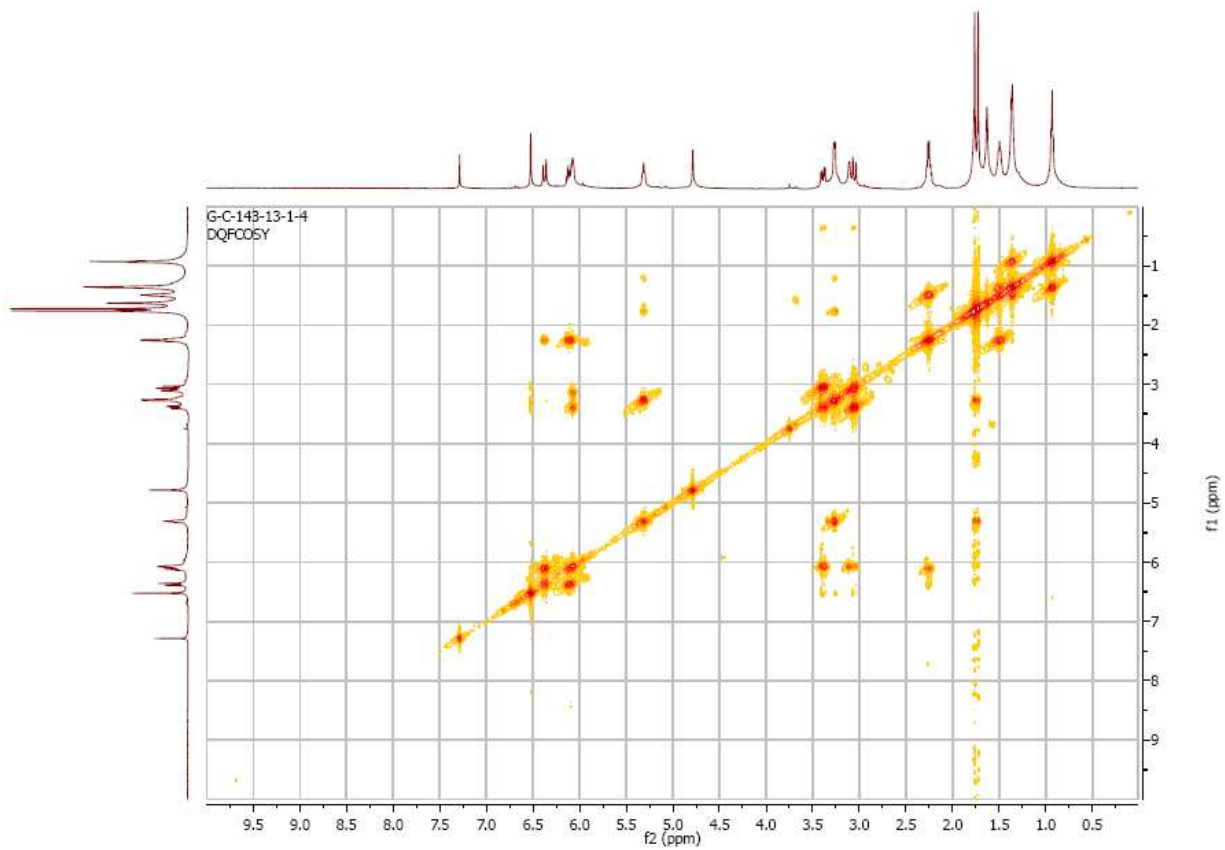
**Figure 9.** DEPT 135° Spectrum of Repeol B (2) in CDCl<sub>3</sub>-d<sub>3</sub> (125 MHz).



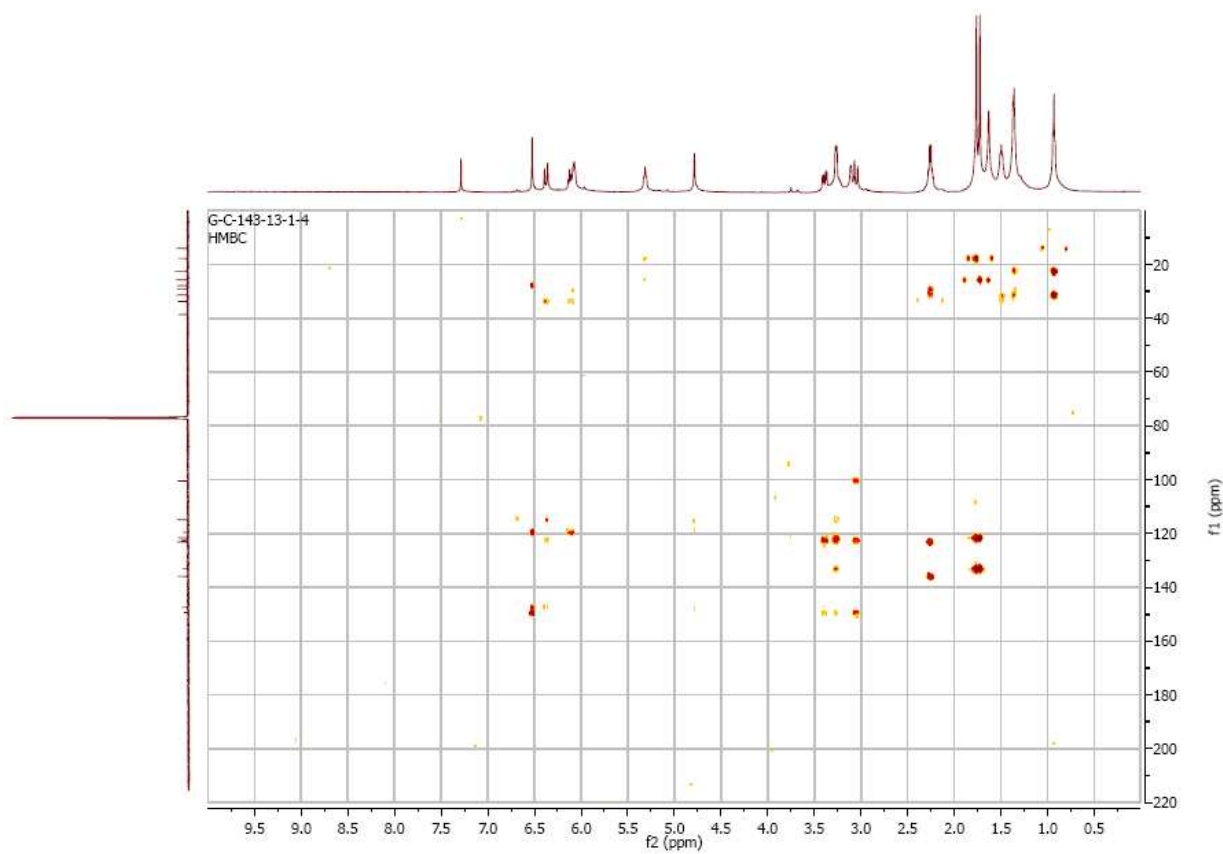
**Figure 10.** HMQC Spectrum of Repenol B (**2**) in  $\text{CDCl}_3-d_3$  (500 MHz).



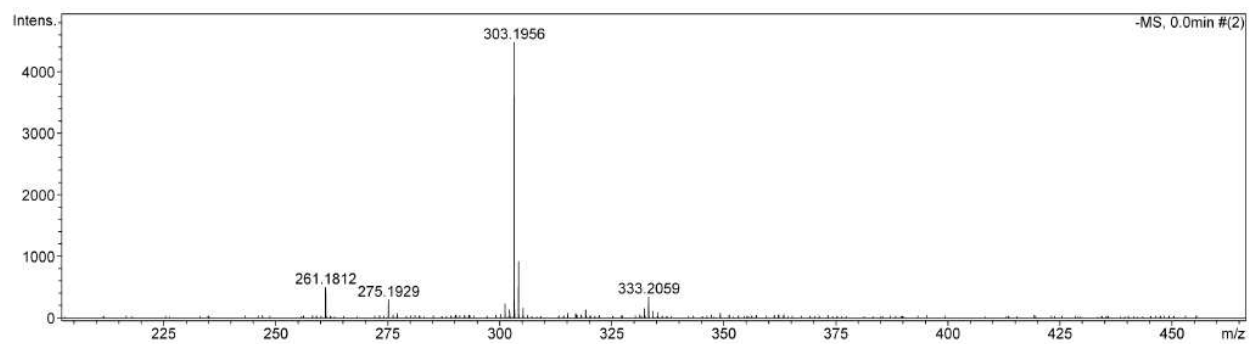
**Figure 11.** COSY Spectrum of Repenol B (**2**) in  $\text{CDCl}_3-d_3$  (500 MHz).



**Figure 12.** HMBC Spectrum of Repenol B (**2**) in CDCl<sub>3</sub>-d<sub>3</sub> (500 MHz).



**Figure 13.** High resolution ESI-MS result of Repeol A (1) .



**Figure 14.** High resolution ESI-MS result of Repeol B (2).

