

## Acanthoic Acid and other Constituents from the Stem of *Annona amazonica* (Annonaceae)

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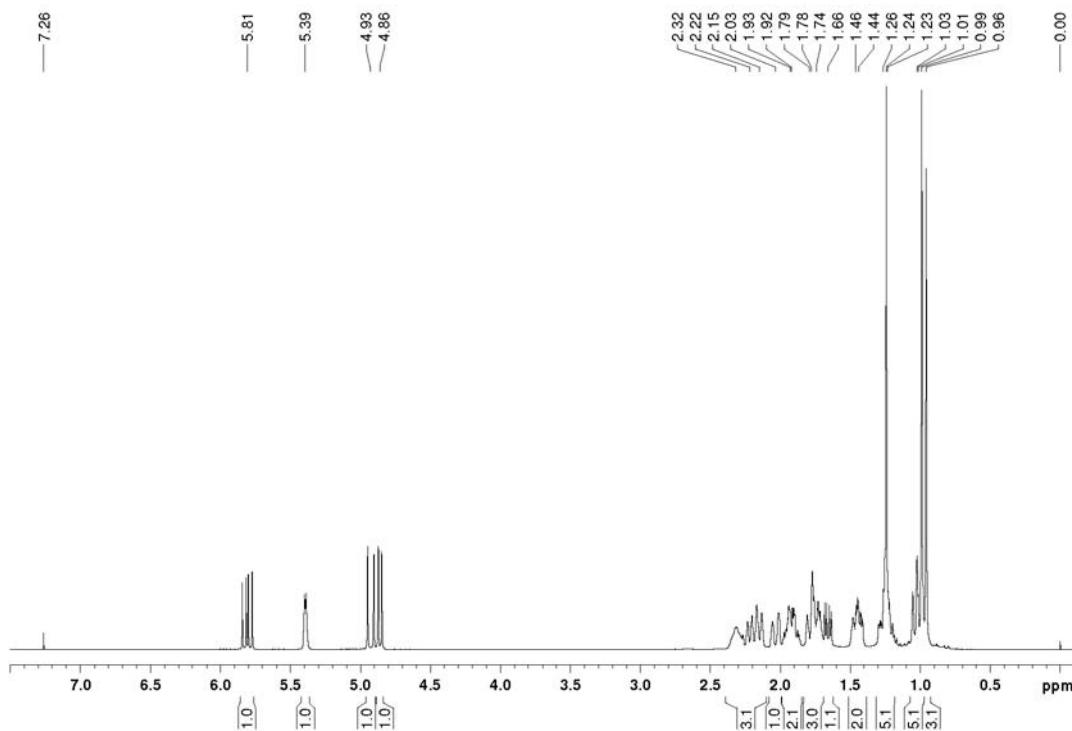
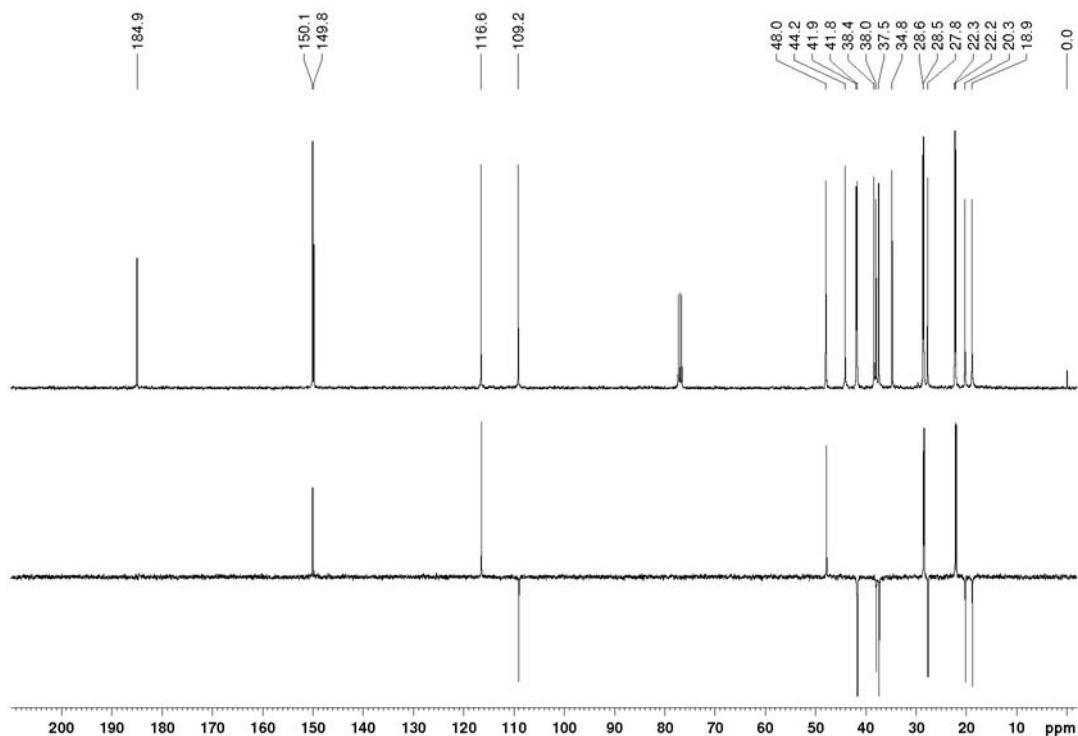
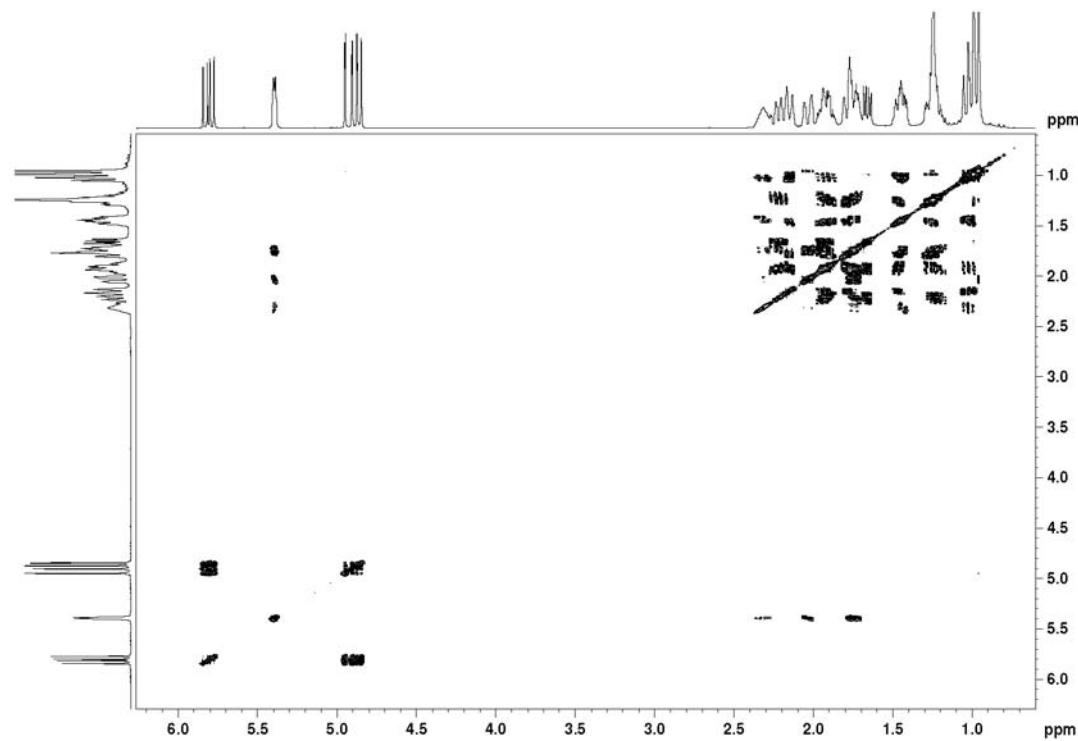


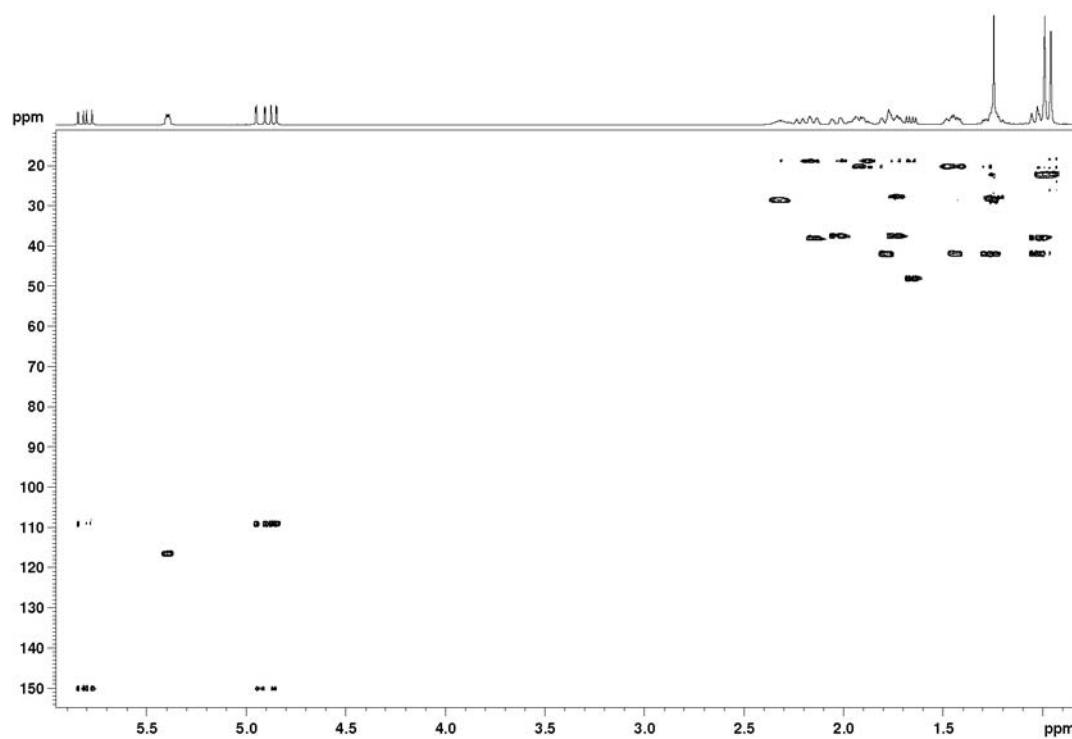
Figure S1. <sup>1</sup>H NMR spectrum of acanthoic acid in CDCl<sub>3</sub> at 400 MHz.



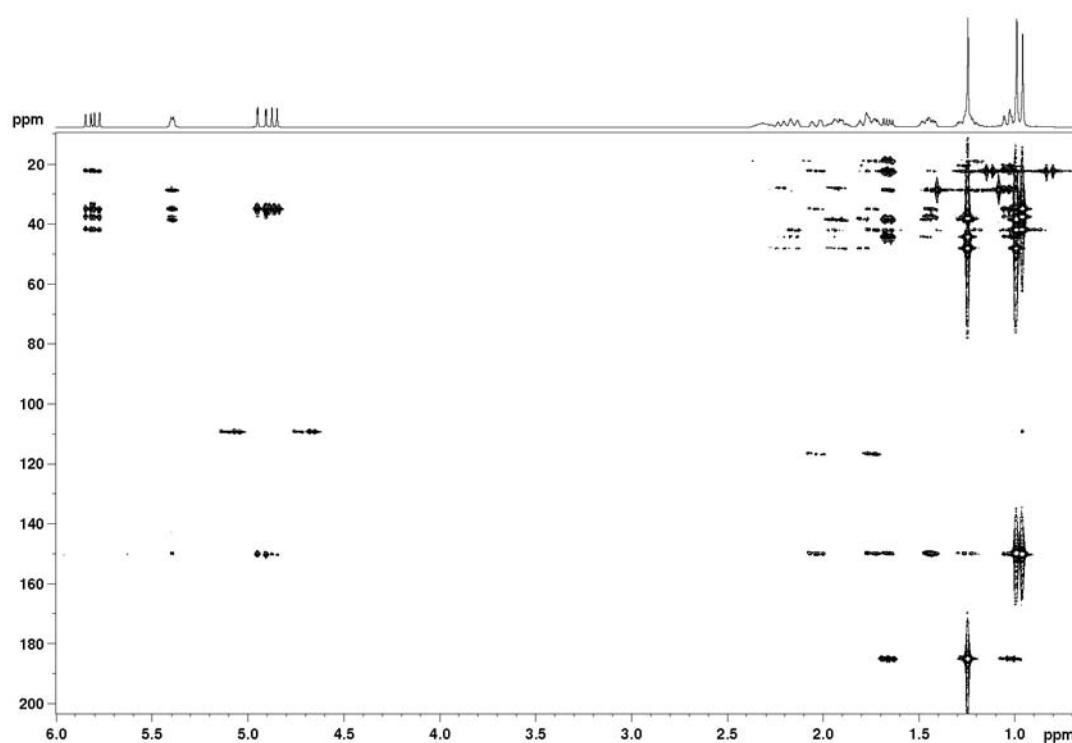
**Figure S2.**  $^{13}\text{C}\{\text{H}\}$  and DEPT 135 NMR spectra of acanthoic acid in  $\text{CDCl}_3$  at 100 MHz.



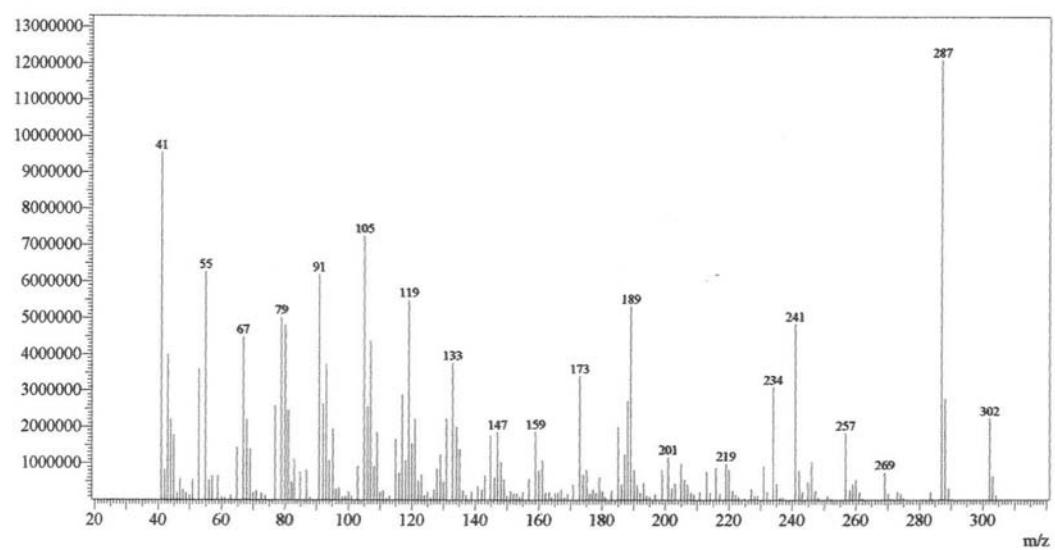
**Figure S3.**  $^1\text{H}$ - $^1\text{H}$  correlation map from the COSY NMR experiment on acanthoic acid in  $\text{CDCl}_3$  at 400 MHz.



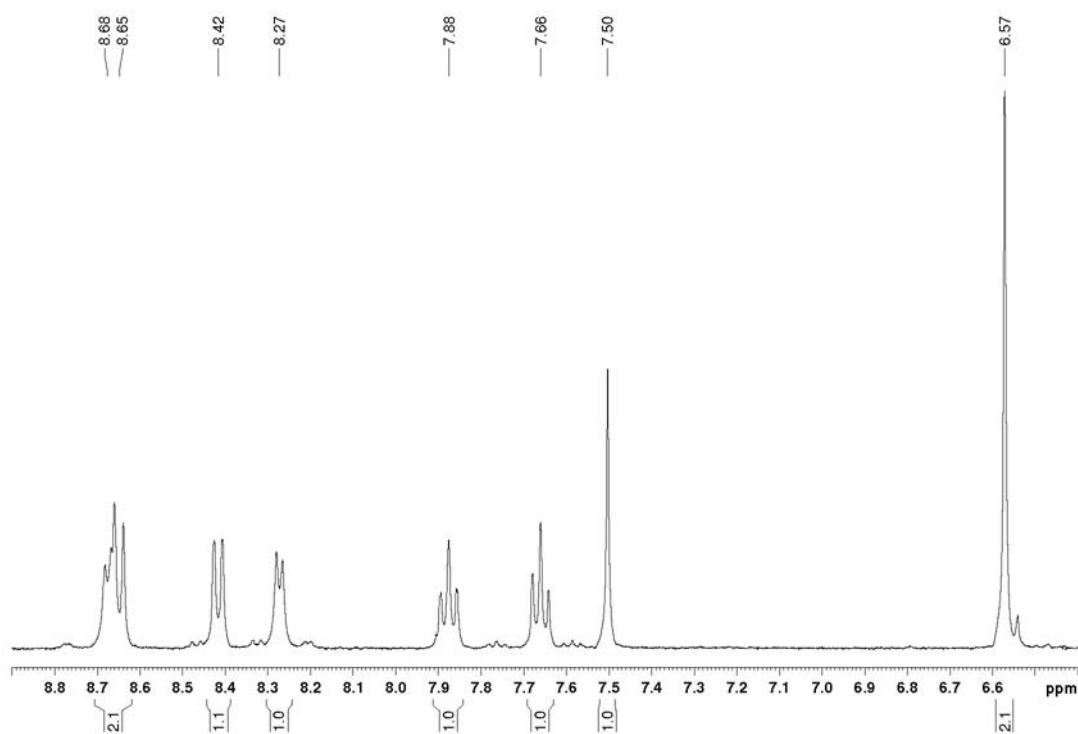
**Figure S4.** <sup>1</sup>H-<sup>13</sup>C one-bond correlation map from the HSQC NMR experiment on acanthoic acid in CDCl<sub>3</sub> at 400 and 100 MHz.



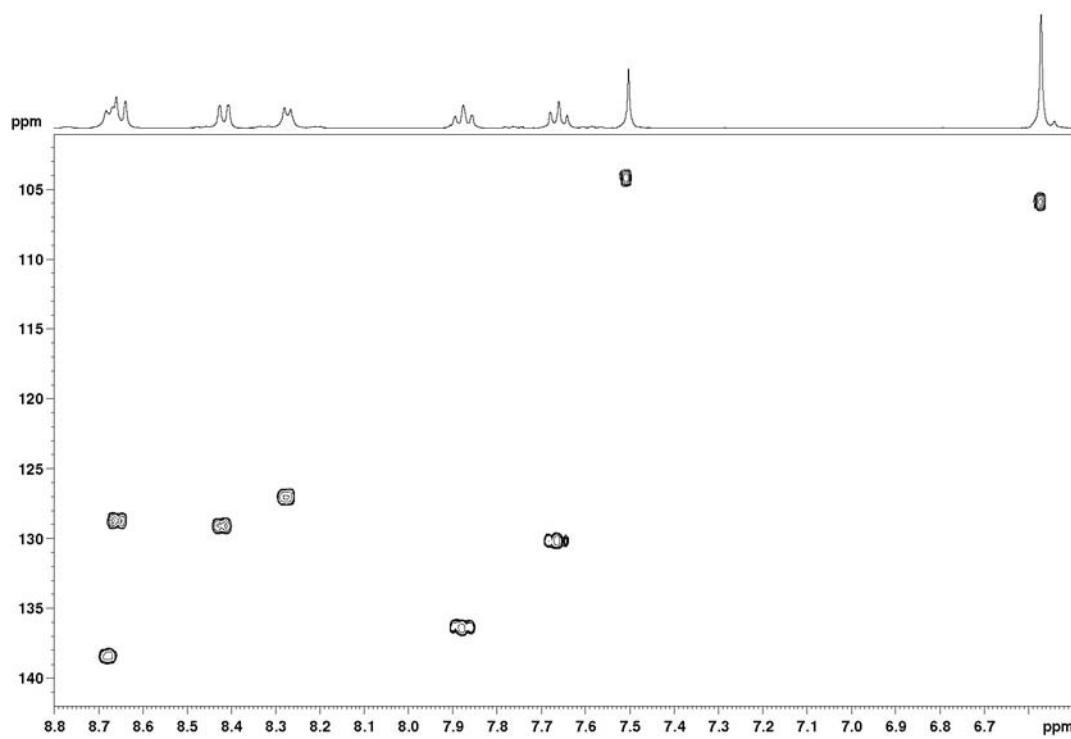
**Figure S5.** <sup>1</sup>H-<sup>13</sup>C long-range correlation map from the HMBC NMR experiment on acanthoic acid in CDCl<sub>3</sub> at 400 and 100 MHz.



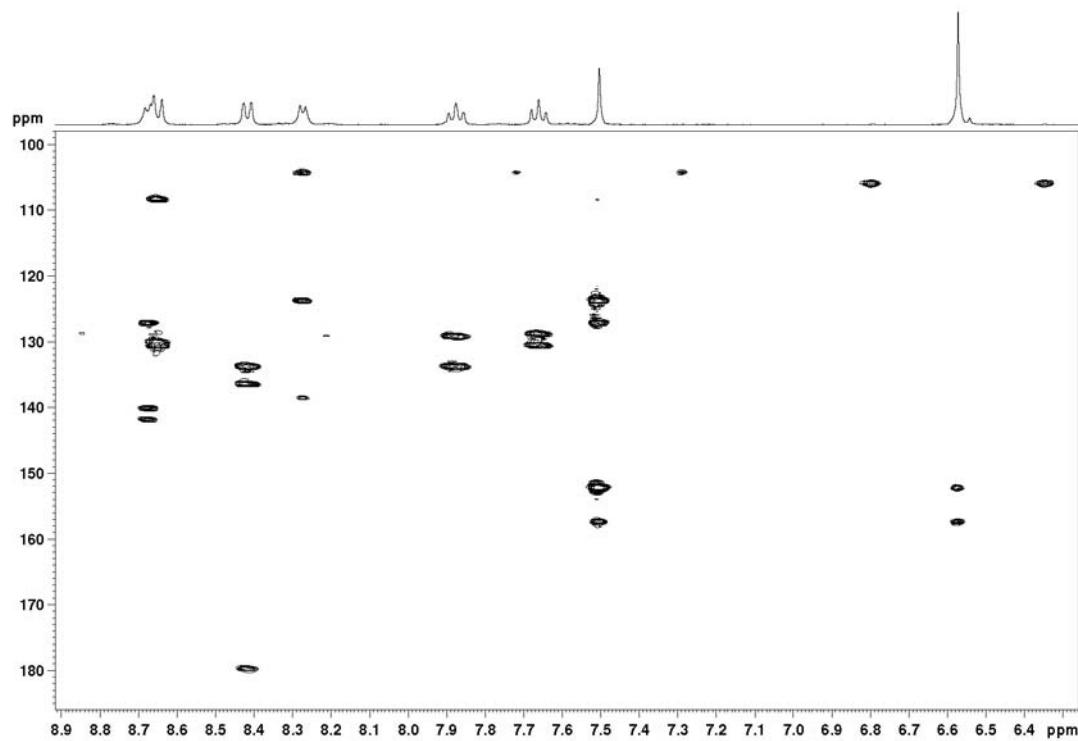
**Figure S6.** EI-MS of acanthoic acid.



**Figure S7.**  $^1\text{H}$  NMR spectrum of liriodenine in  $\text{MeOD}-d_4$  at 400 MHz.



**Figure S8.** <sup>1</sup>H-<sup>13</sup>C one-bond correlation map from the HSQC NMR experiment on liriodenine in MeOD-*d*<sub>4</sub> at 400 and 100 MHz.



**Figure S9.** <sup>1</sup>H-<sup>13</sup>C long-range correlation map from the HMBC NMR experiment on liriodenine in MeOD-*d*<sub>4</sub> at 400 and 100 MHz.

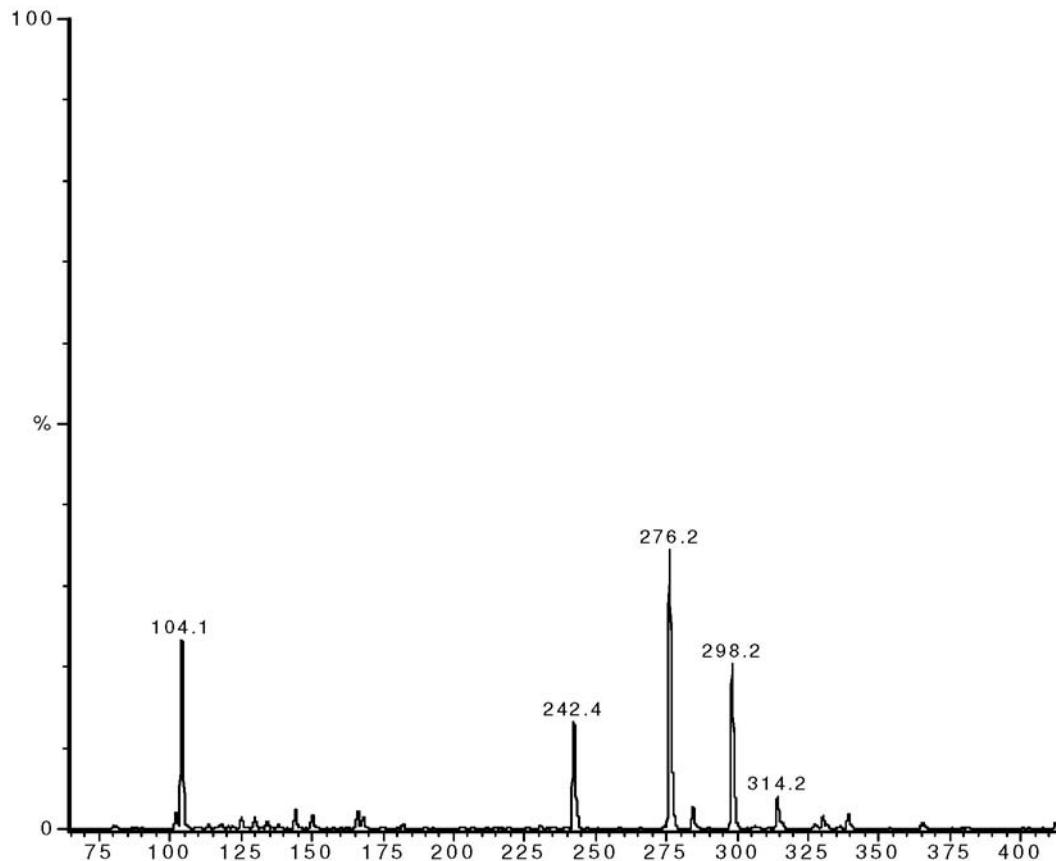


Figure S10. ESI-MS of liriodenine in MeOH, positive mode.

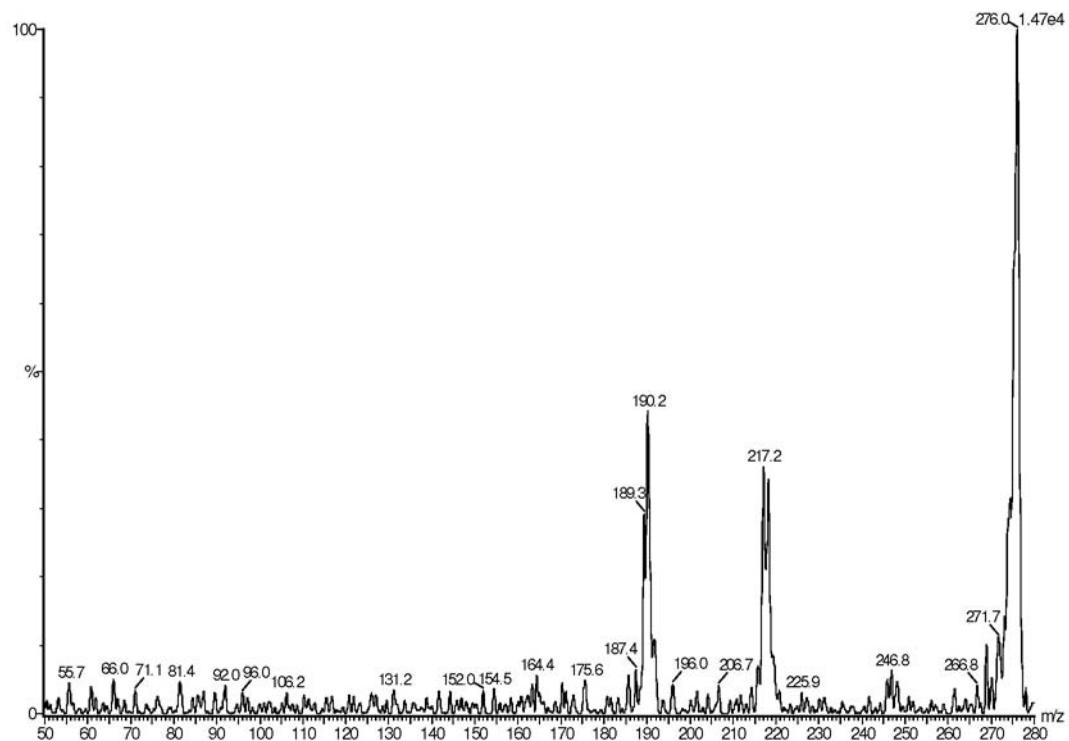
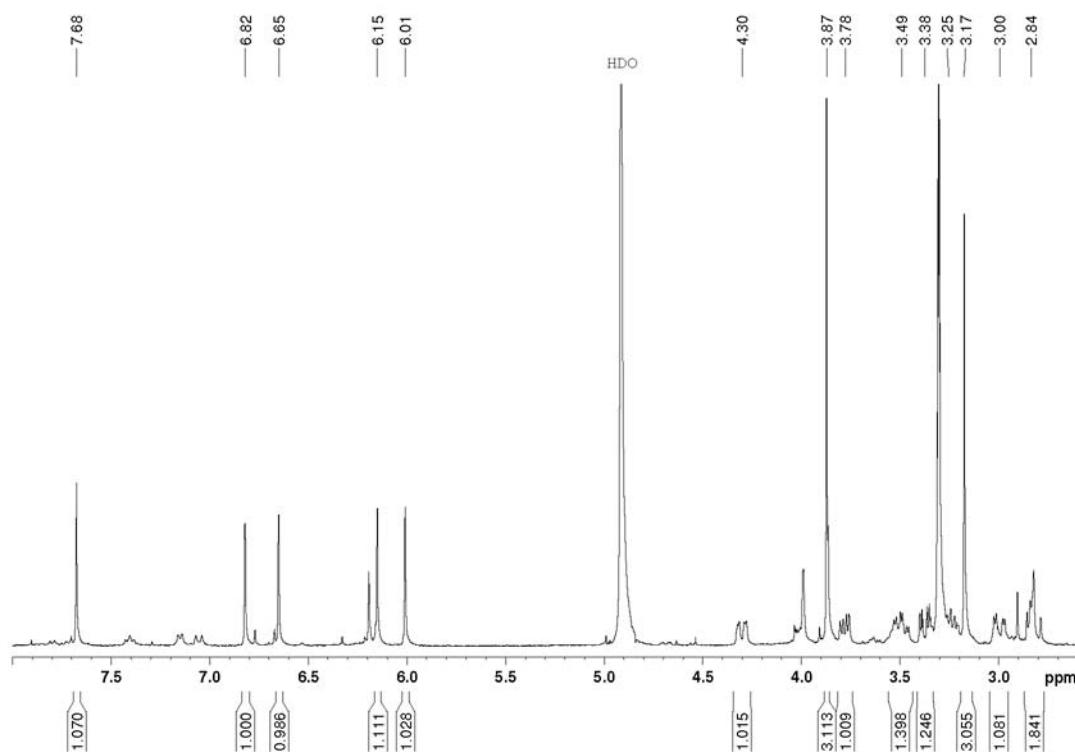
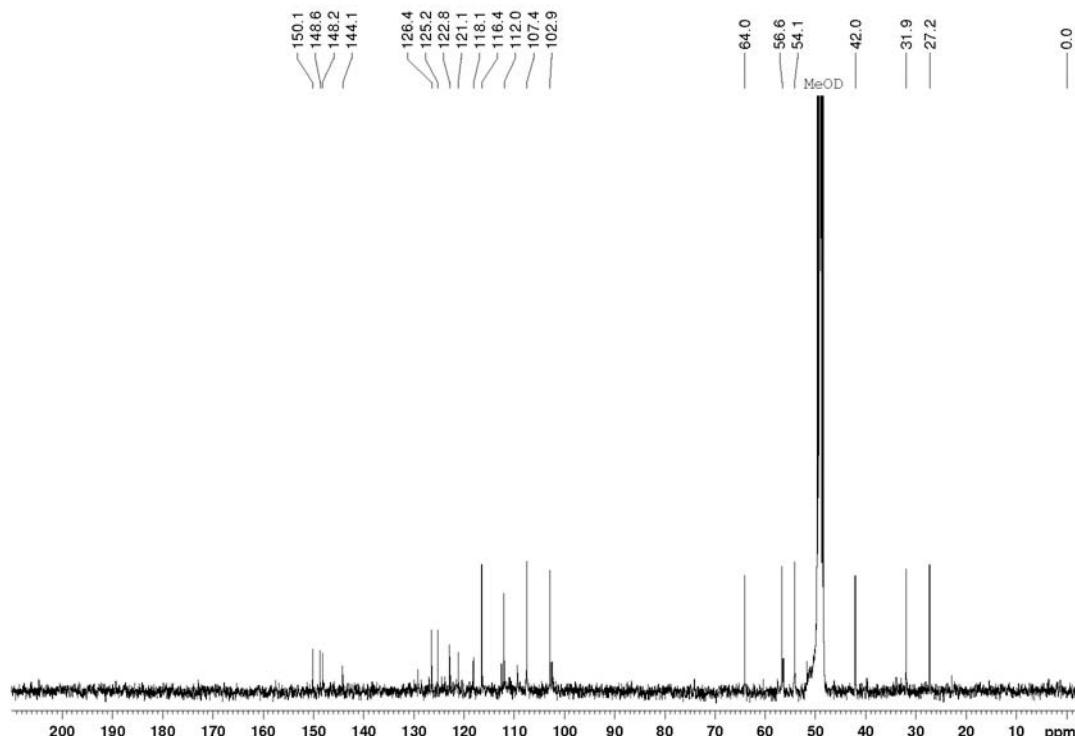


Figure S11. ESI-MS/MS of liriodenine in MeOH, positive mode at 50 eV.



**Figure S12.** <sup>1</sup>H NMR spectrum of cassythicine in <sup>4</sup>MeOD-d<sub>4</sub> at 400 MHz.



**Figure S13.** <sup>13</sup>C{<sup>1</sup>H} NMR spectrum of cassythicine in <sup>4</sup>MeOD-d<sub>4</sub> at 100 MHz.

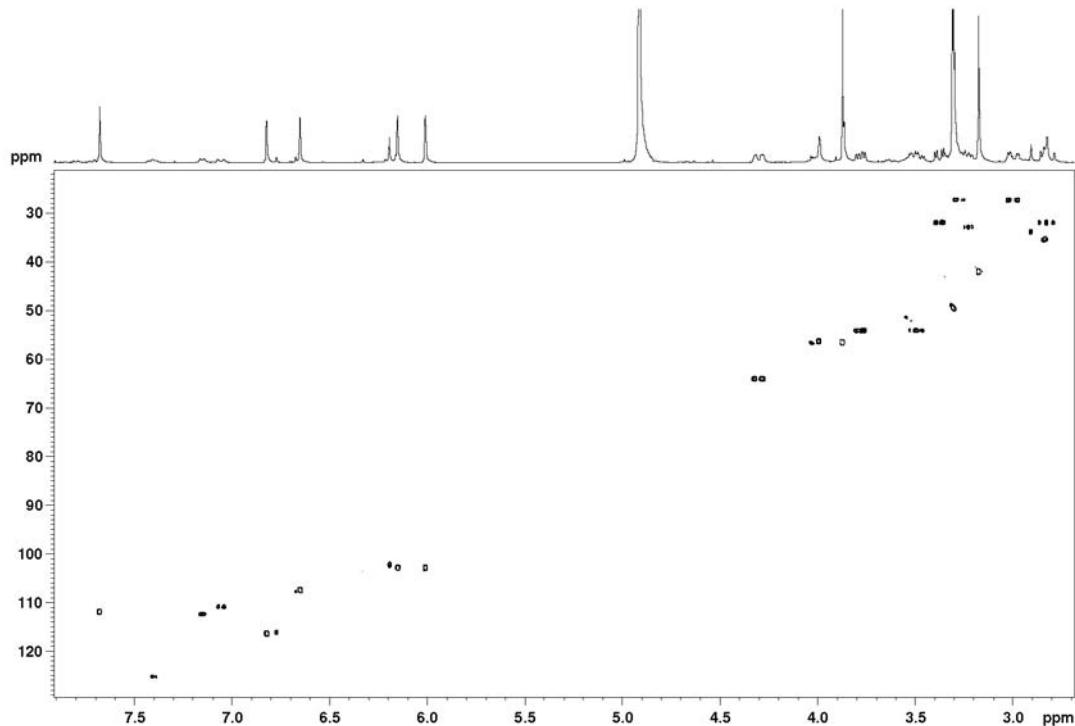


Figure S14.  $^1\text{H}$ - $^{13}\text{C}$  one-bond correlation map from the HSQC NMR experiment on cassythicine in  $\text{MeOD}-d_4$  at 400 and 100 MHz.

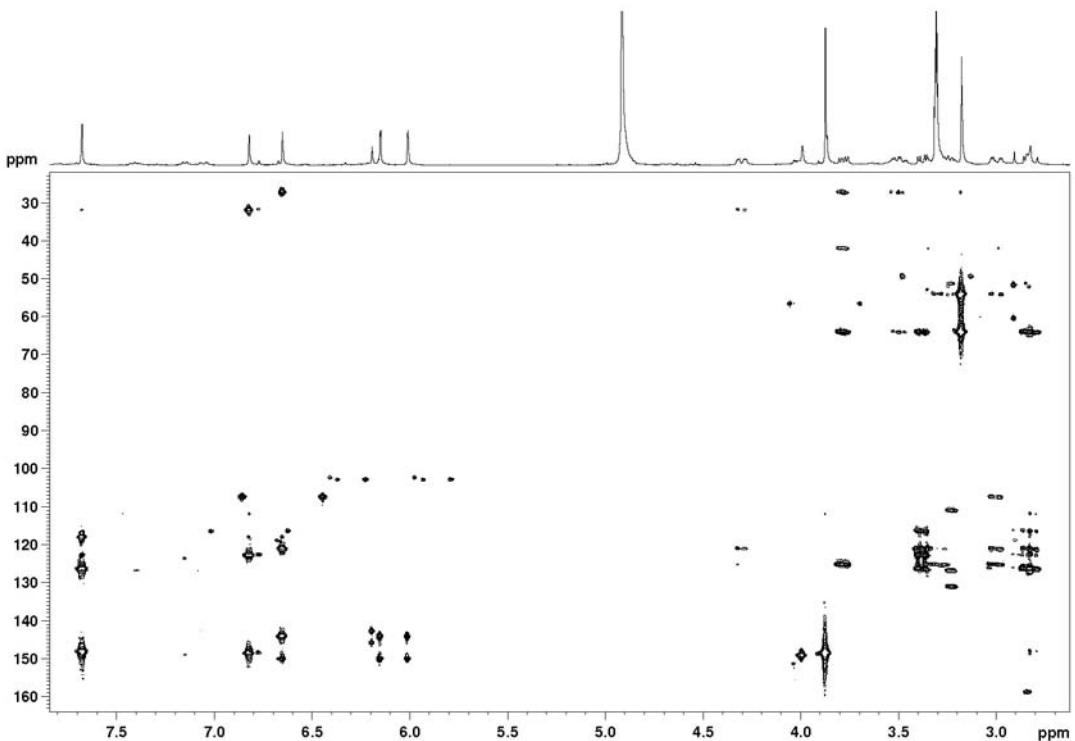
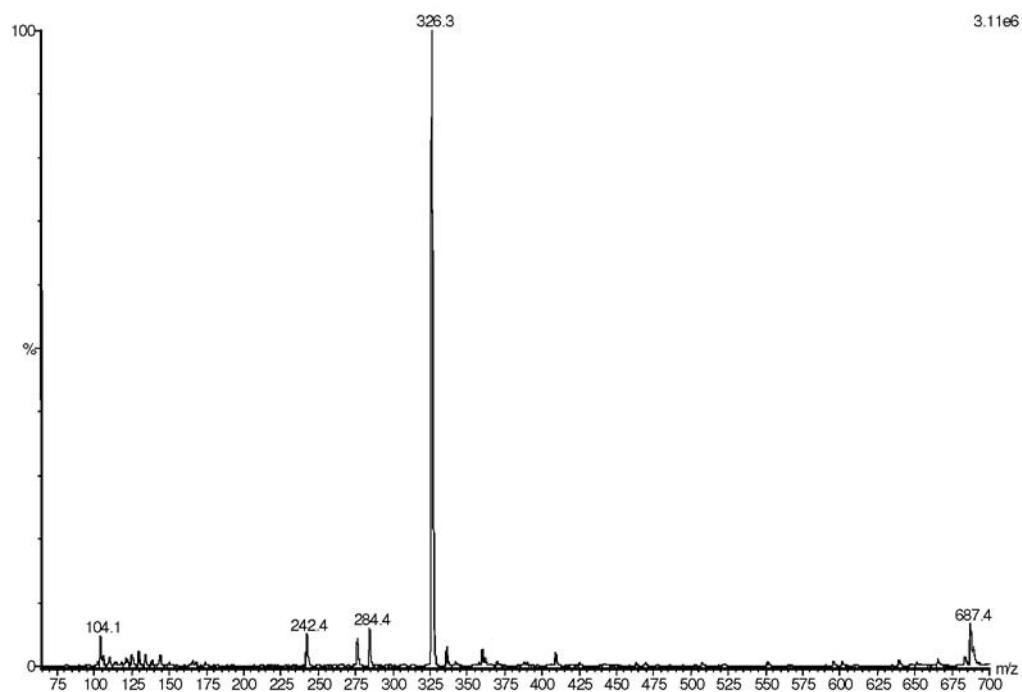
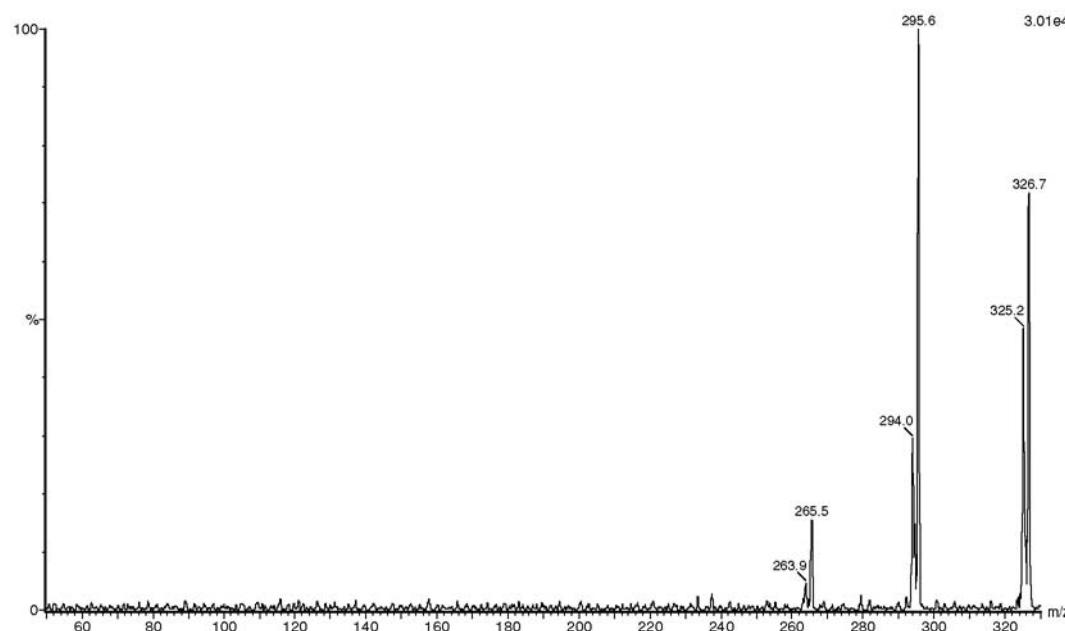


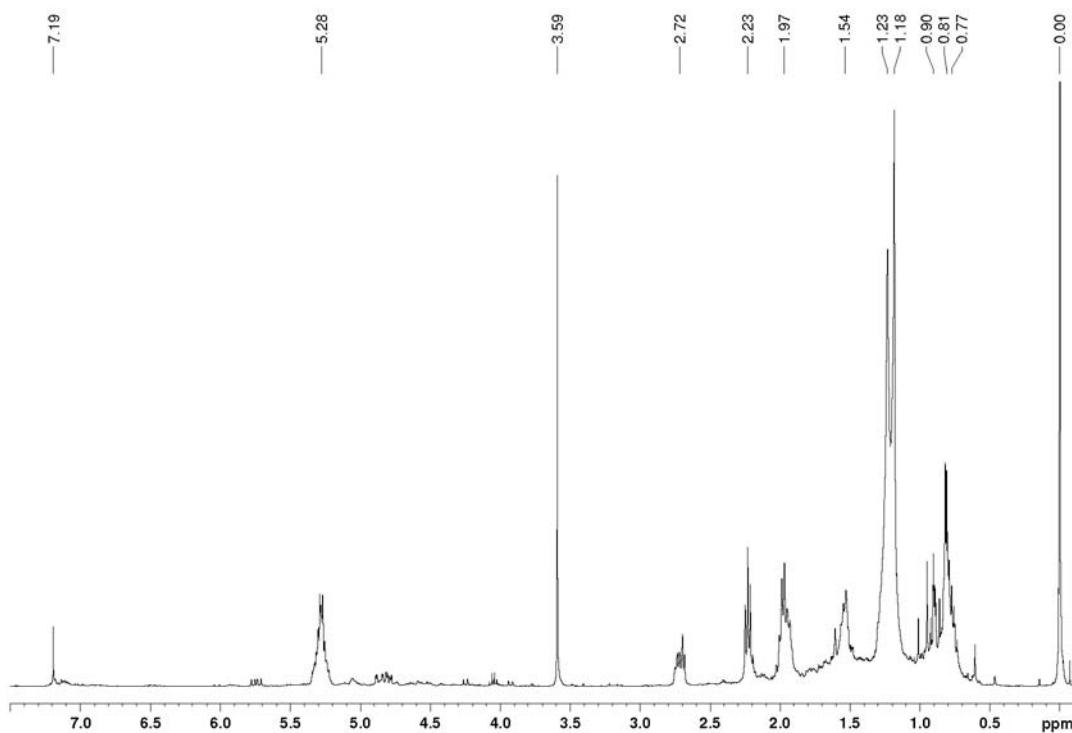
Figure S15.  $^1\text{H}$ - $^{13}\text{C}$  long-range correlation map from the HMBC NMR experiment on cassythicine in  $\text{MeOD}-d_4$  at 400 and 100 MHz.



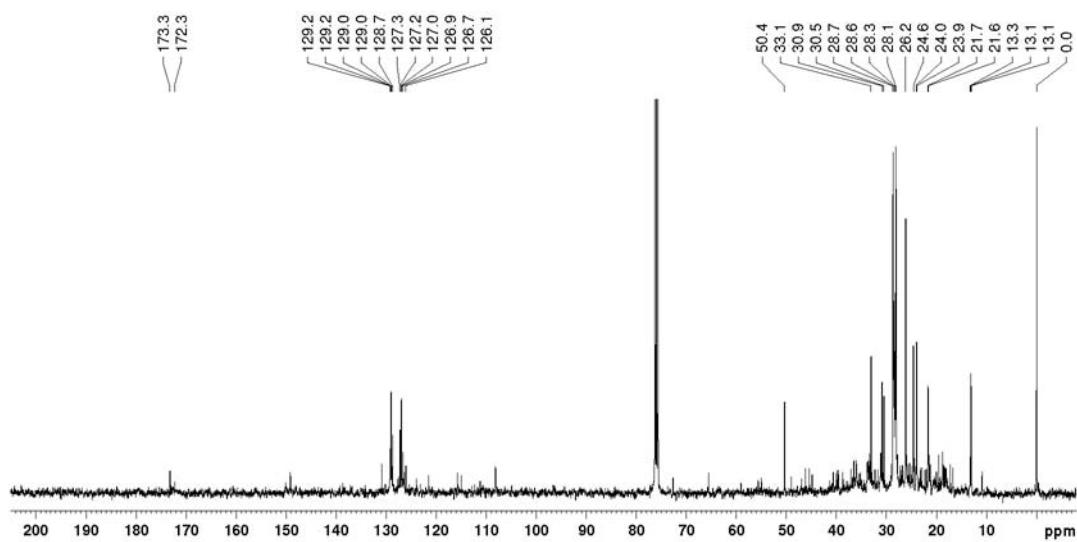
**Figure S16.** ESI-MS of cassythicine in MeOH, positive mode.



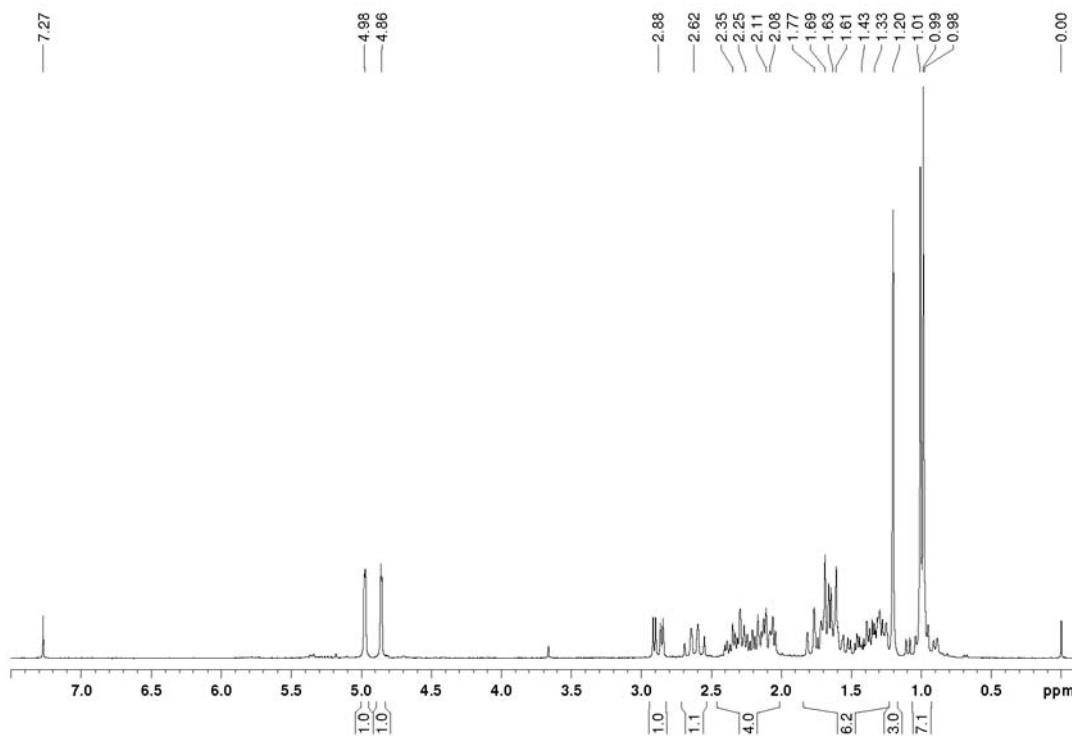
**Figure S17.** ESI-MS/MS of cassythicine in MeOH, positive mode at 50 eV.



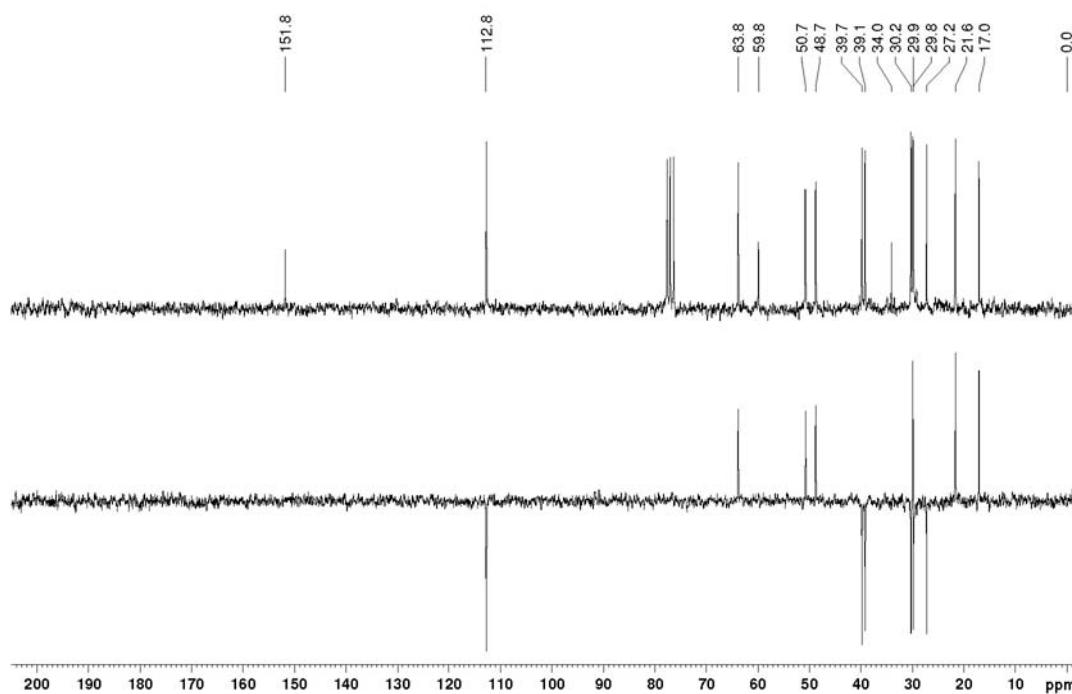
**Figure S18.**  $^1\text{H}$  NMR spectrum of the mixture of three methyl esters of the fatty acids, oleic, linoleic, and linolenic in  $\text{CDCl}_3$  at 400 MHz.



**Figure S19.**  $^{13}\text{C}\{\text{H}\}$  spectrum of the mixture of three methyl esters of the fatty acids, oleic, linoleic, and linolenic in  $\text{CDCl}_3$  at 100 MHz.



**Figure S20.**  $^1\text{H}$  NMR spectrum of caryophyllene oxide in  $\text{CDCl}_3$  at 200 MHz.



**Figure S21.**  $^{13}\text{C}$ { $^1\text{H}$ } and DEPT 135 NMR spectra of caryophyllene oxide in  $\text{CDCl}_3$  at 50 MHz.

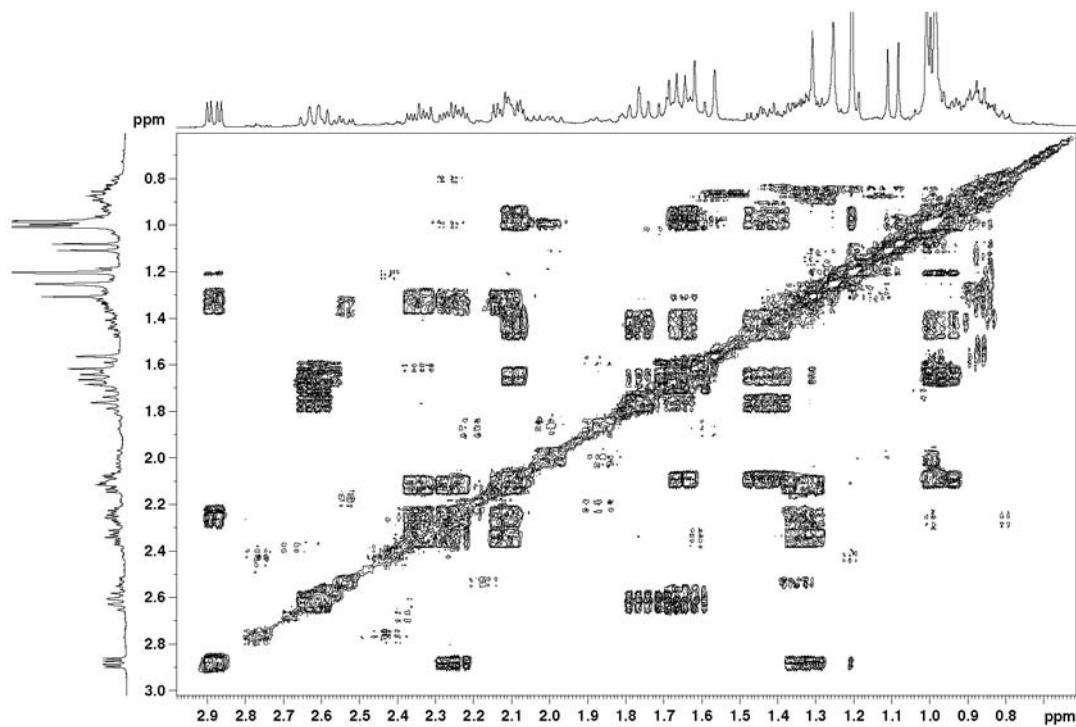


Figure S22. <sup>1</sup>H-<sup>1</sup>H correlation map from COSY NMR experiment of caryophyllene oxide in  $\text{CDCl}_3$  at 400 MHz.

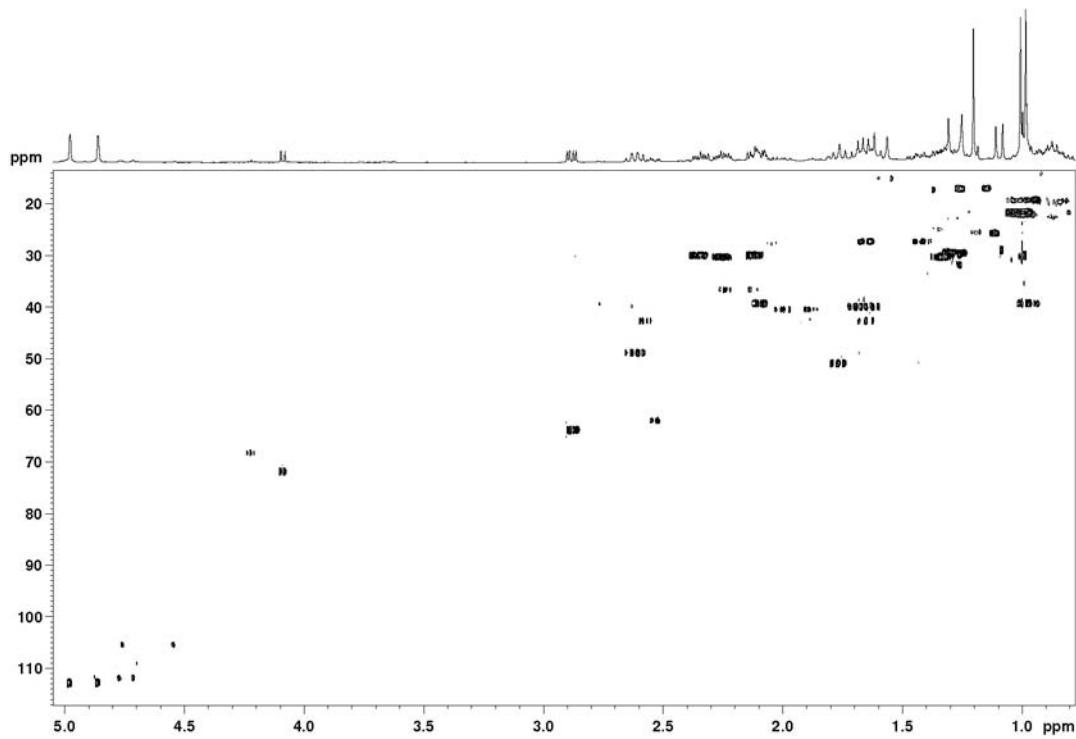
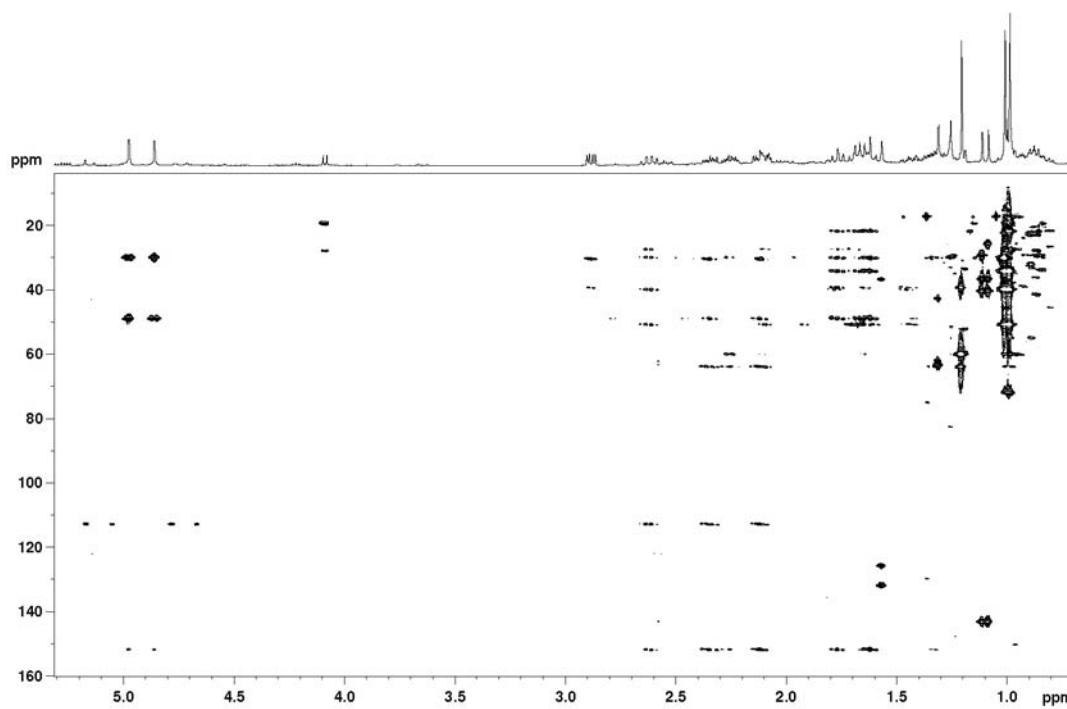
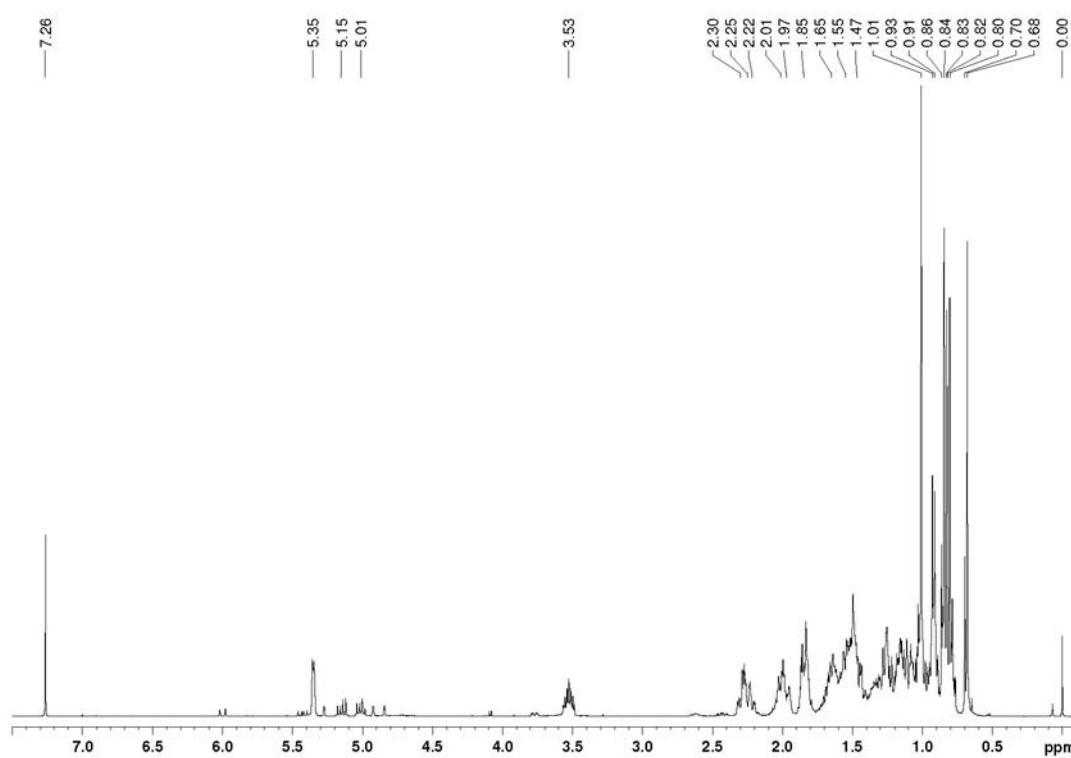


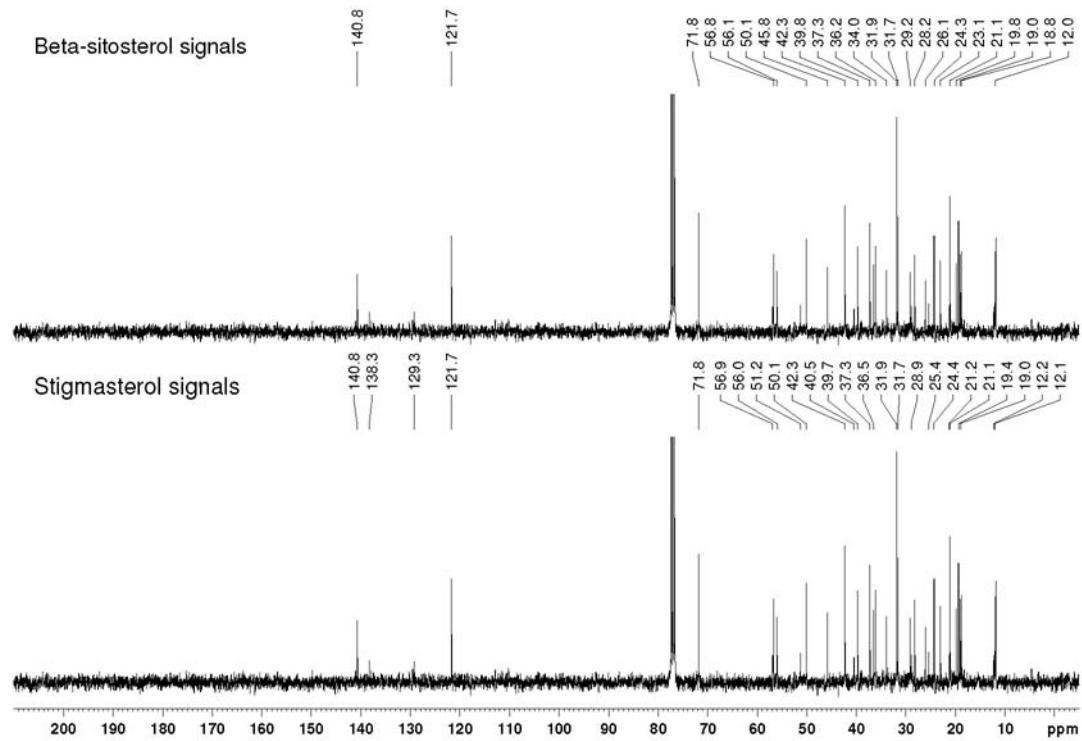
Figure S23. <sup>1</sup>H-<sup>13</sup>C one-bond correlation map from the HSQC NMR experiment on caryophyllene oxide in  $\text{CDCl}_3$  at 400 and 100 MHz.



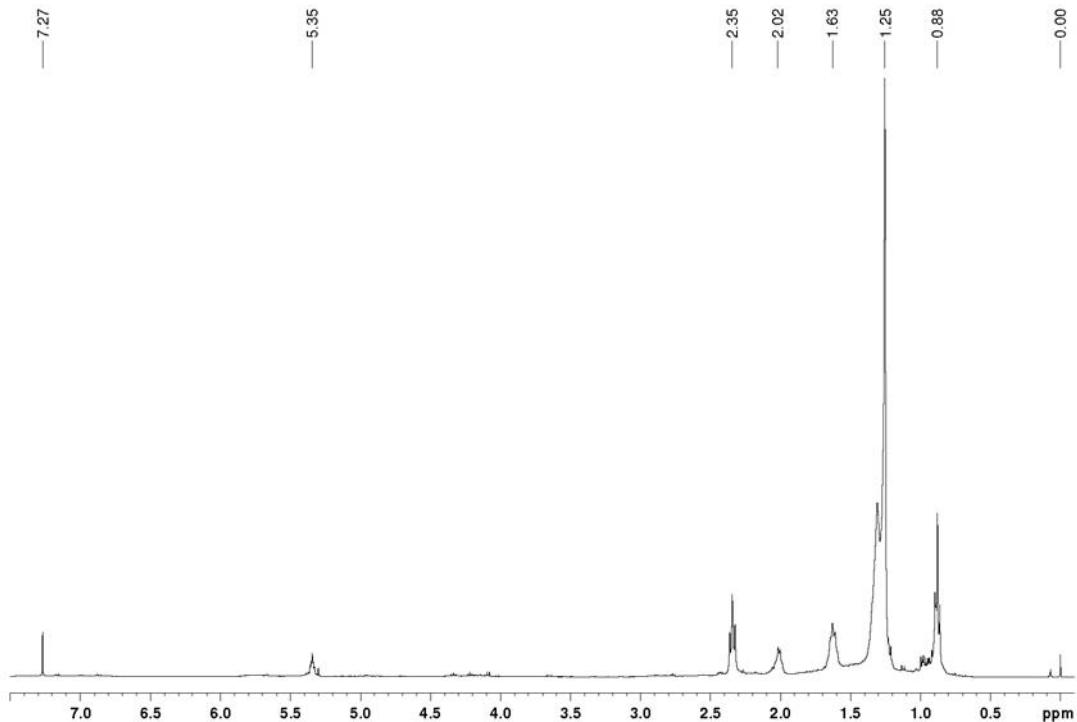
**Figure S24.** <sup>1</sup>H-<sup>13</sup>C long-range correlation map from the HMBC NMR experiment on caryophyllene oxide in CDCl<sub>3</sub> at 400 and 100 MHz.



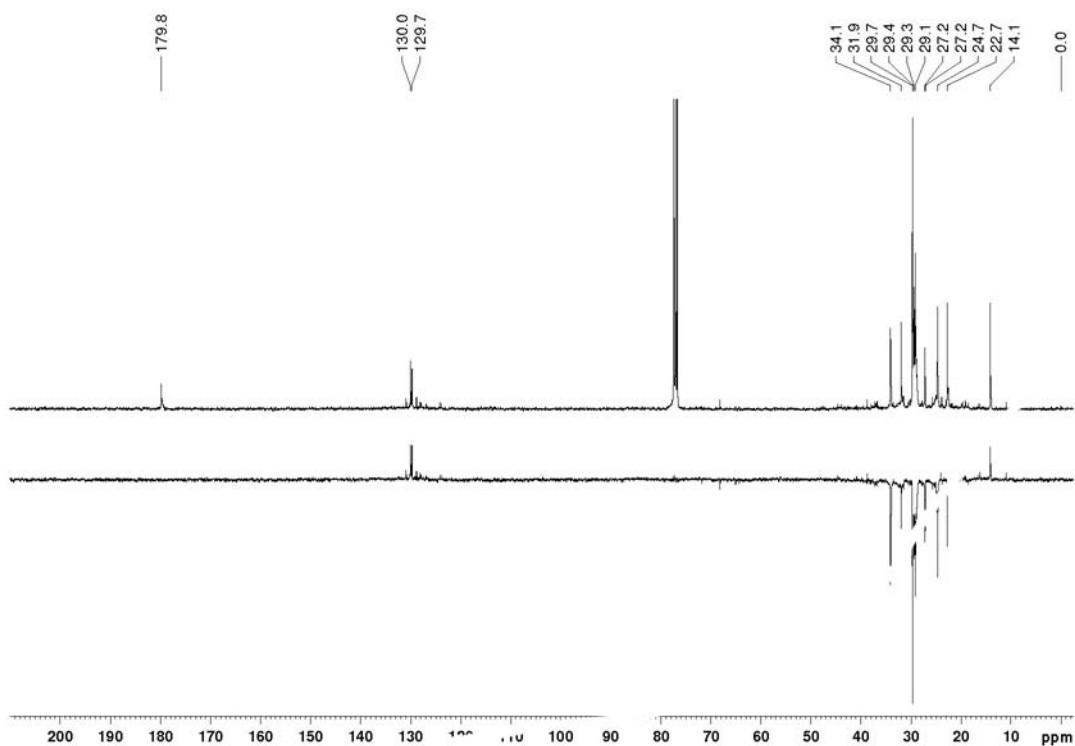
**Figure S25.** <sup>1</sup>H NMR spectrum of  $\beta$ -sitosterol and stigmasterol mixture in CDCl<sub>3</sub> at 400 MHz.



**Figure S26.**  $^{13}\text{C}\{^1\text{H}\}$  NMR spectrum of the  $\beta$ -sitosterol and stigmasterol mixture in  $\text{CDCl}_3$  at 100 MHz.



**Figure S27.**  $^1\text{H}$  NMR spectrum of oleic acid in  $\text{CDCl}_3$  at 400 MHz.



**Figure S28.**  $^{13}\text{C}\{^1\text{H}\}$  and DEPT 135 NMR spectra of oleic acid in  $\text{CDCl}_3$  at 100 MHz.