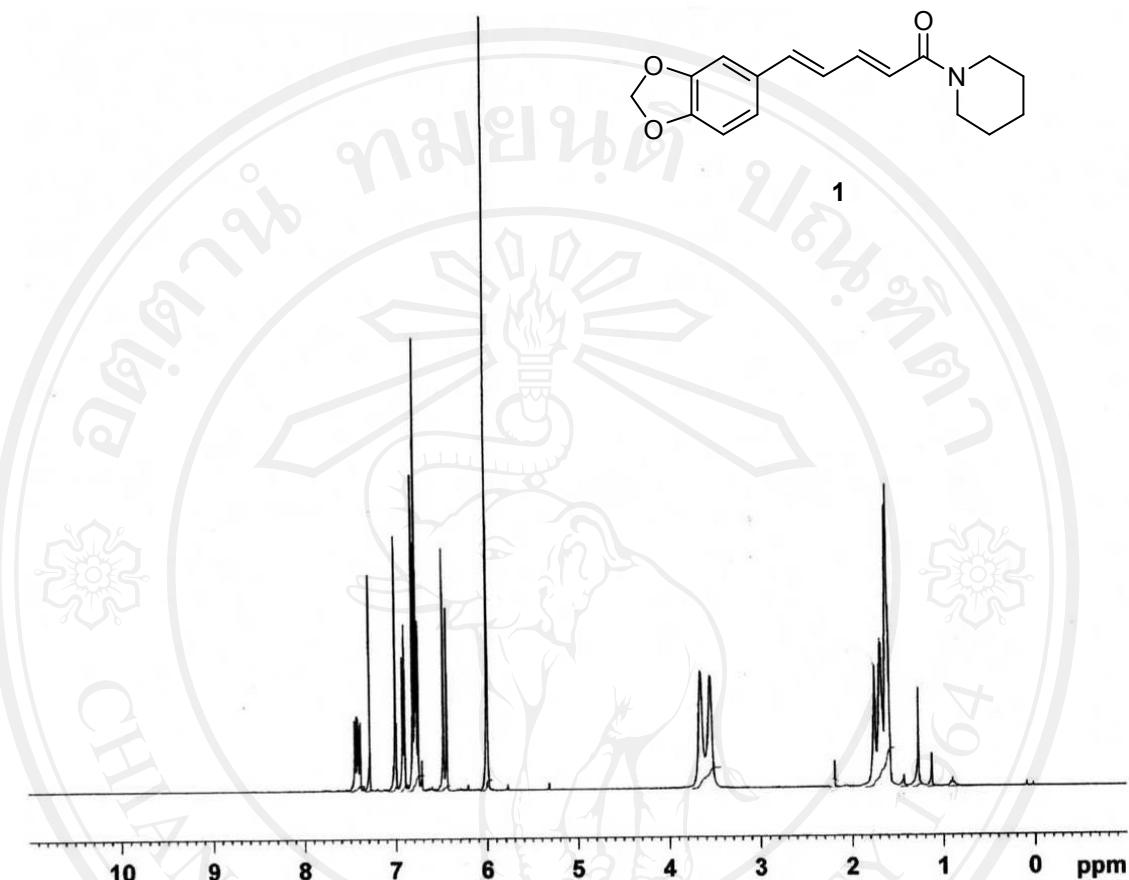


APPENDIX

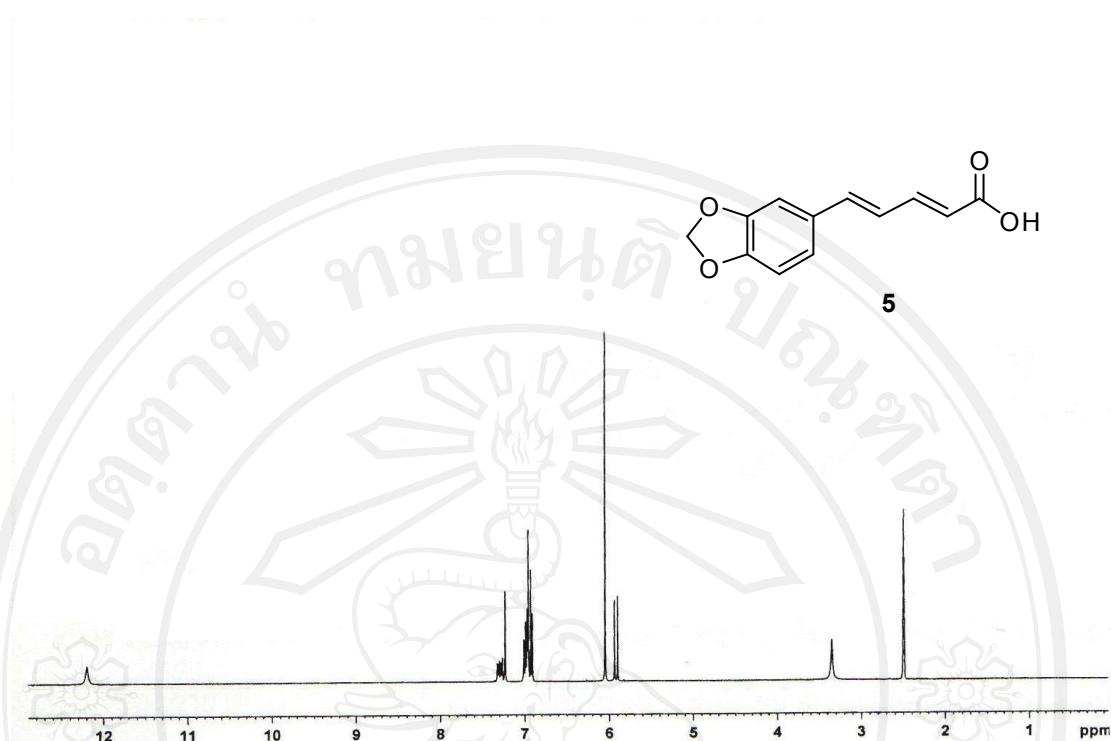
^1H NMR (400 MHz) and ^{13}C NMR (100 MHz)

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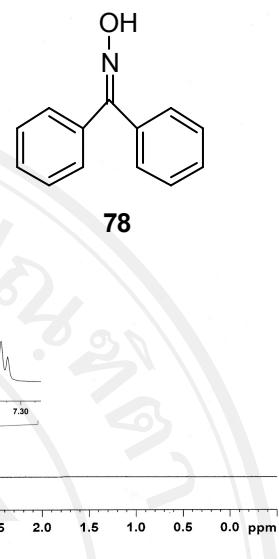
Appendix 1 ^1H NMR spectrum of compound **1** in CDCl_3

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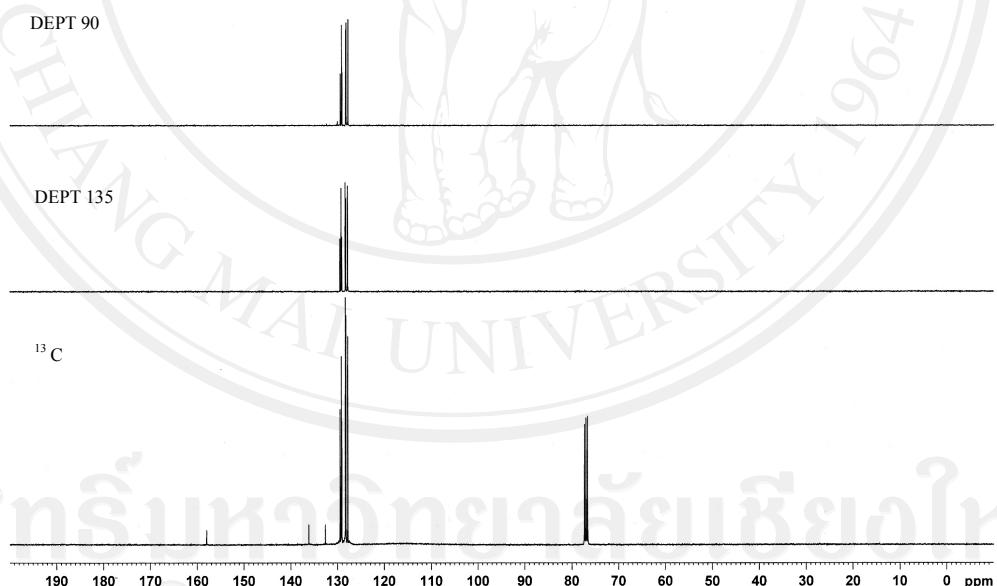


Appendix 2 ^1H NMR spectrum of compound **5** in CDCl_3

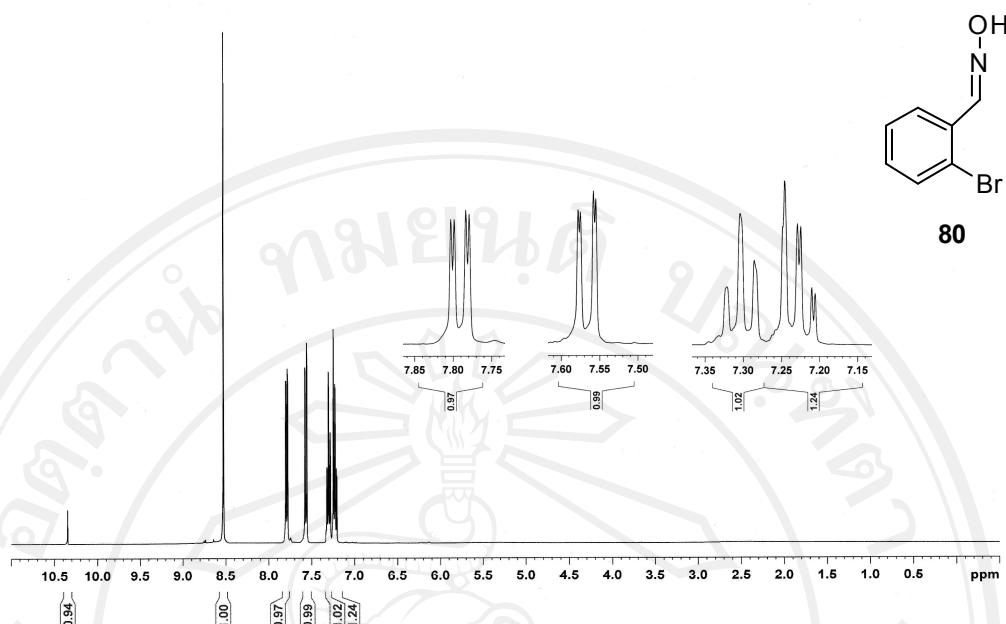
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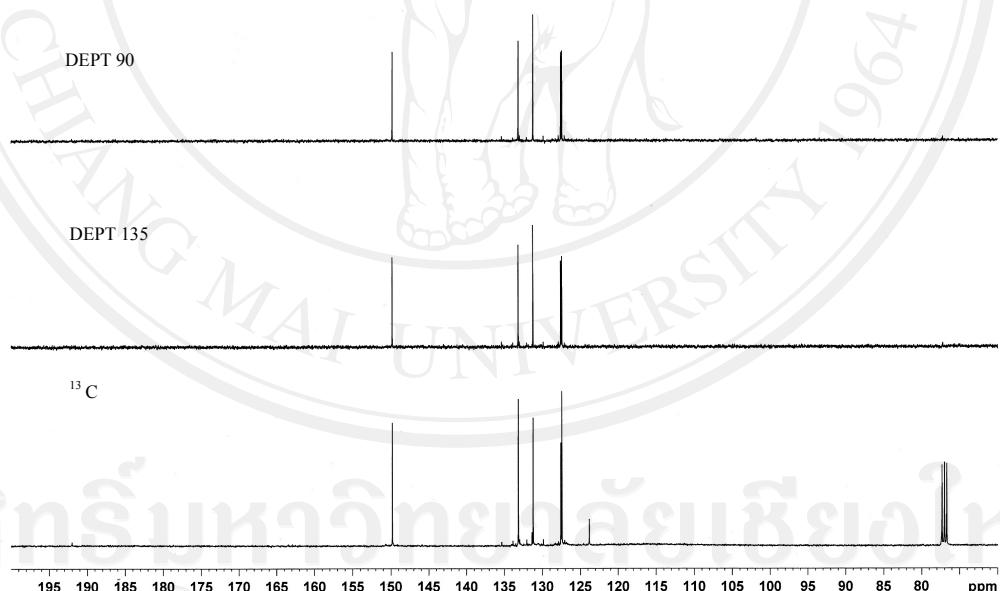
Appendix 3 ^1H NMR spectrum of compound 78 in CDCl_3



Appendix 4 ^{13}C NMR spectrum of compound 78 in CDCl_3

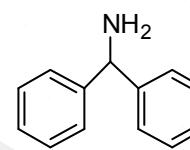
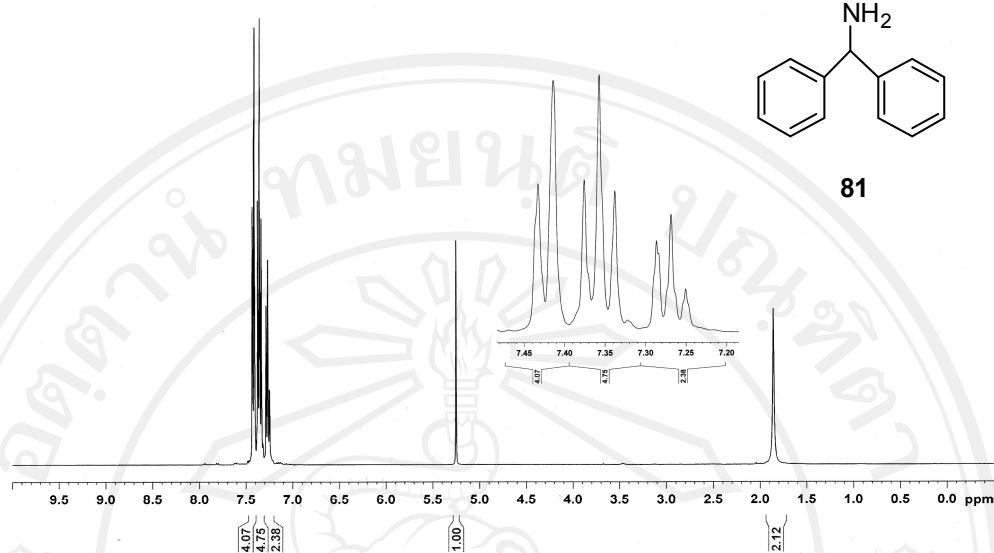


Appendix 5 ^1H NMR spectrum of compound **80** in CDCl_3

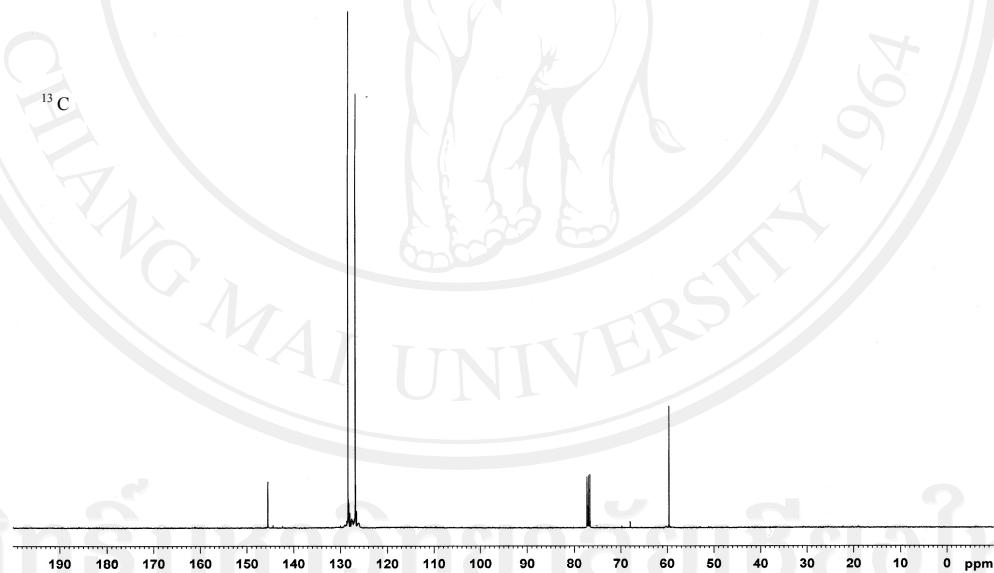


Appendix 6 ^{13}C NMR spectrum of compound **80** in CDCl_3

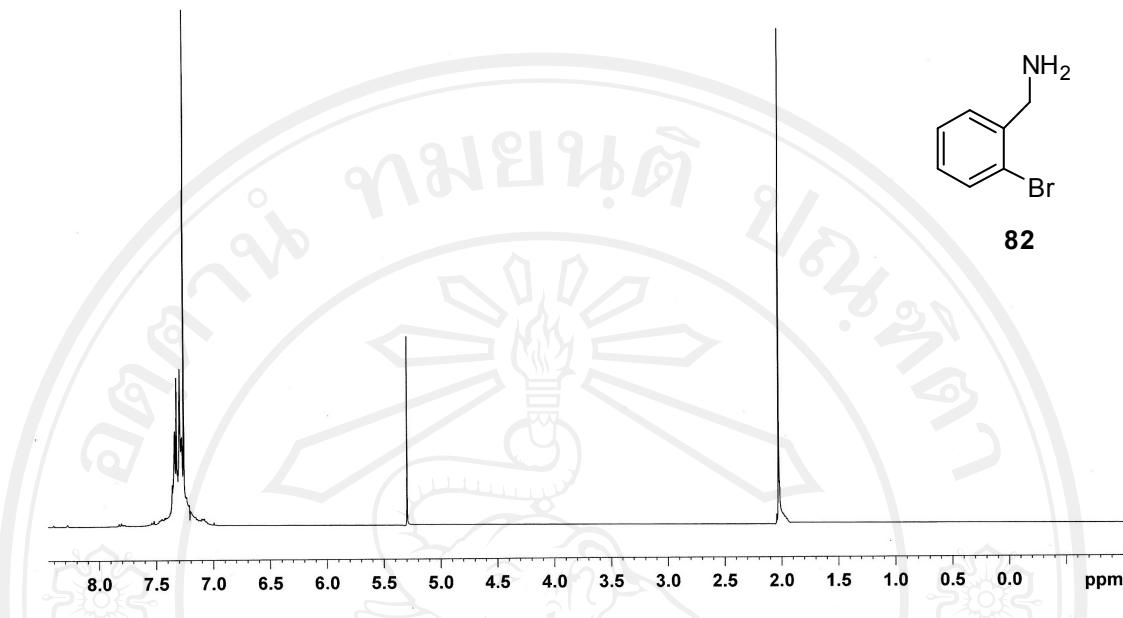
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**81**

Appendix 7 ^1H NMR spectrum of compound 81 in CDCl_3

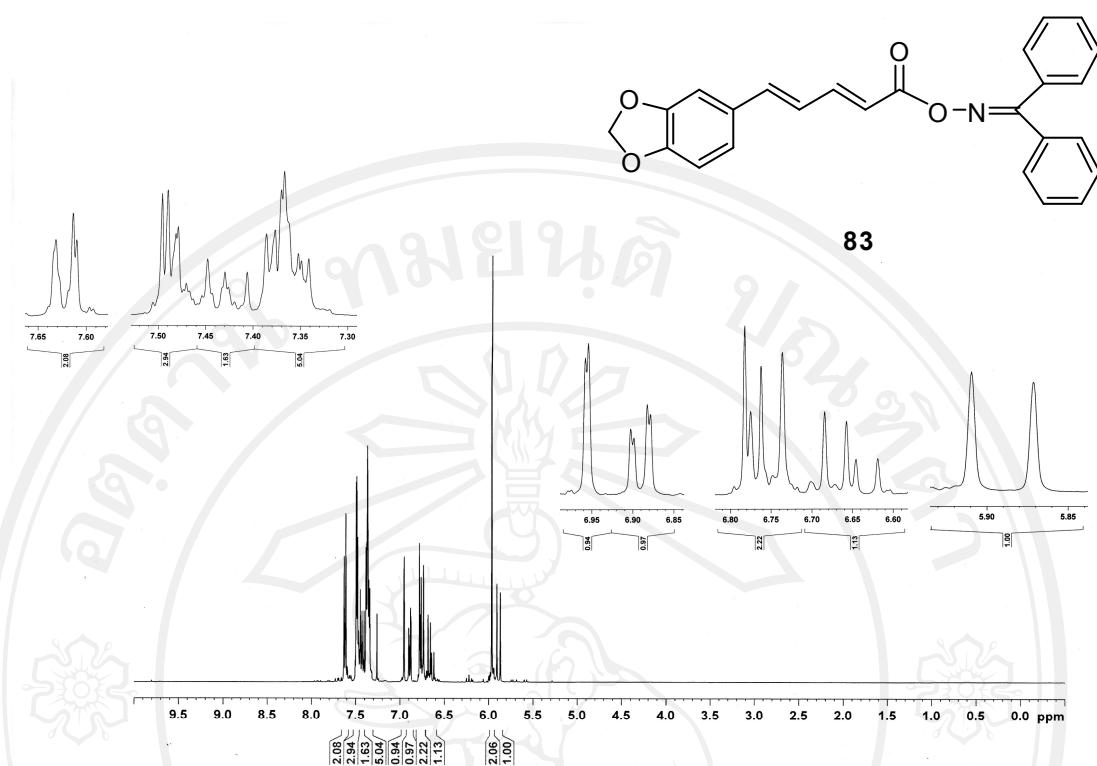


Appendix 8 ^{13}C NMR spectrum of compound 81 in CDCl_3

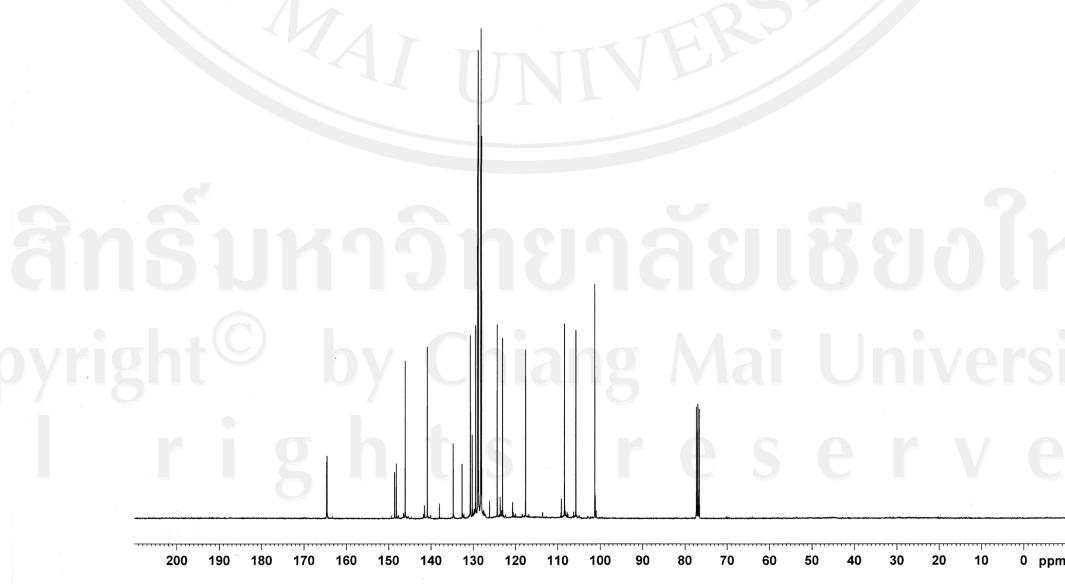


Appendix 9 ¹H NMR spectrum of compound 82 in CDCl₃

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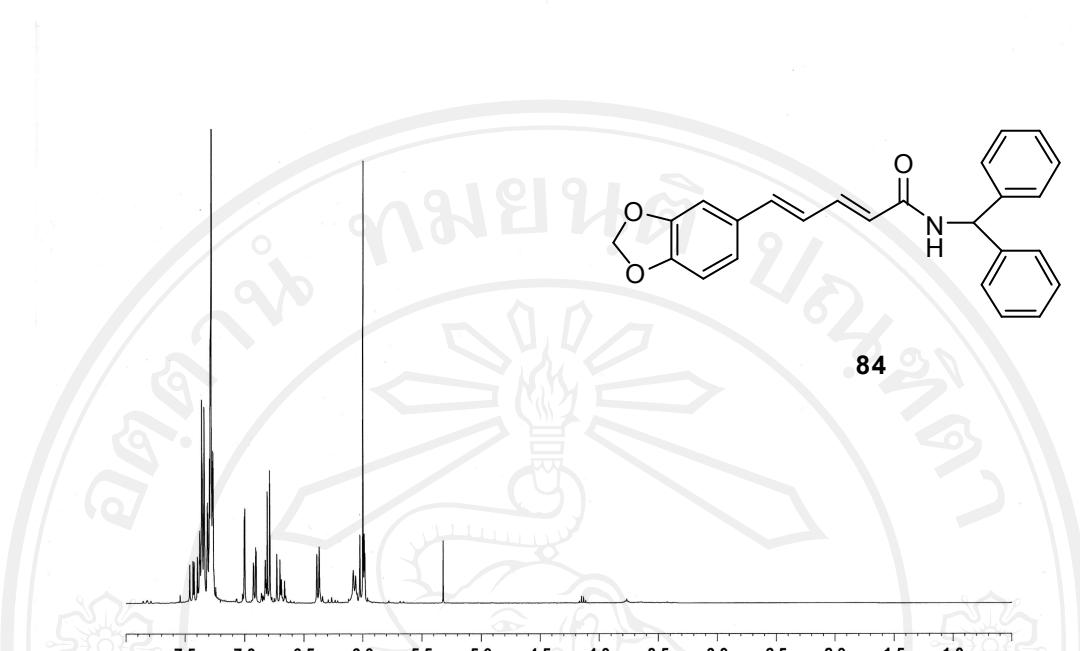


Appendix 10 ^1H NMR spectrum of compound **83** in CDCl_3

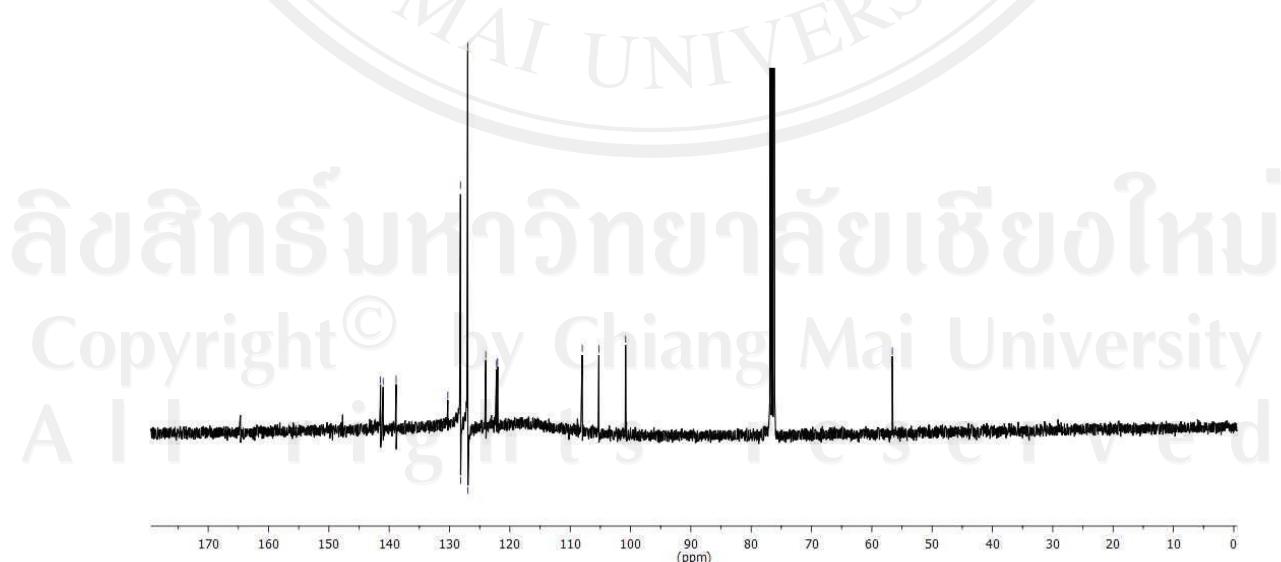


Appendix 11 ^{13}C NMR spectrum of compound **83** in CDCl_3

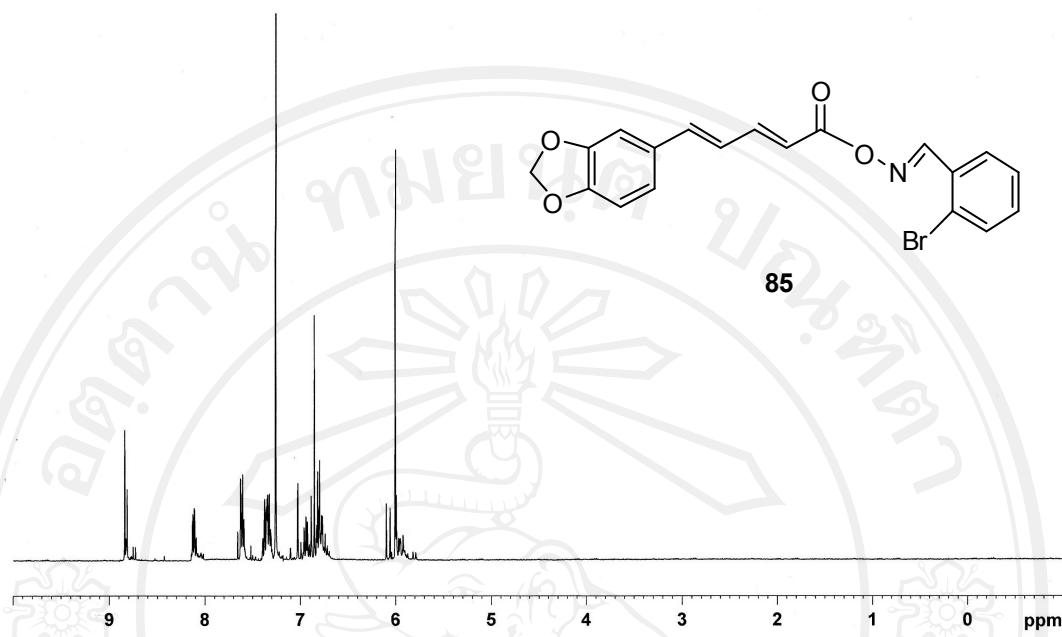
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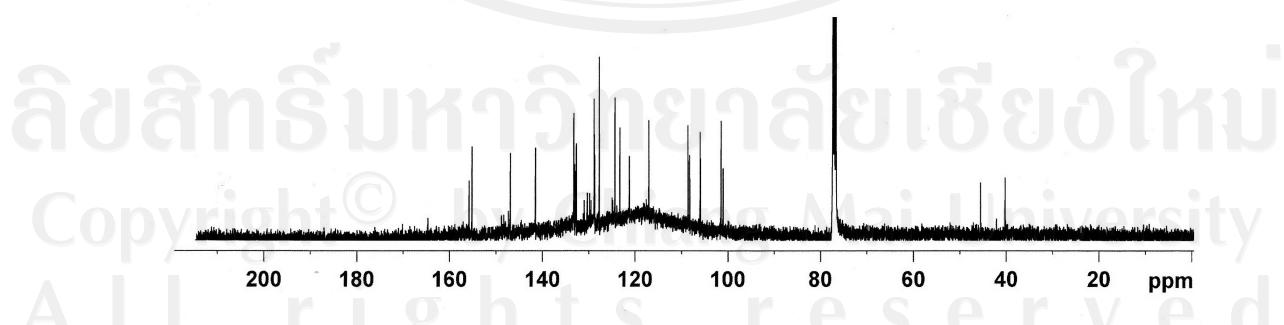
Appendix 12 ^1H NMR spectrum of compound **84** in CDCl_3



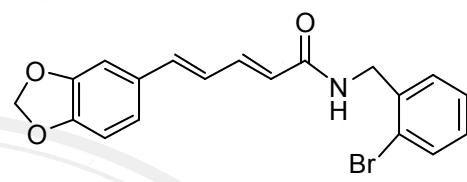
Appendix 13 ^{13}C NMR spectrum of compound **84** in CDCl_3



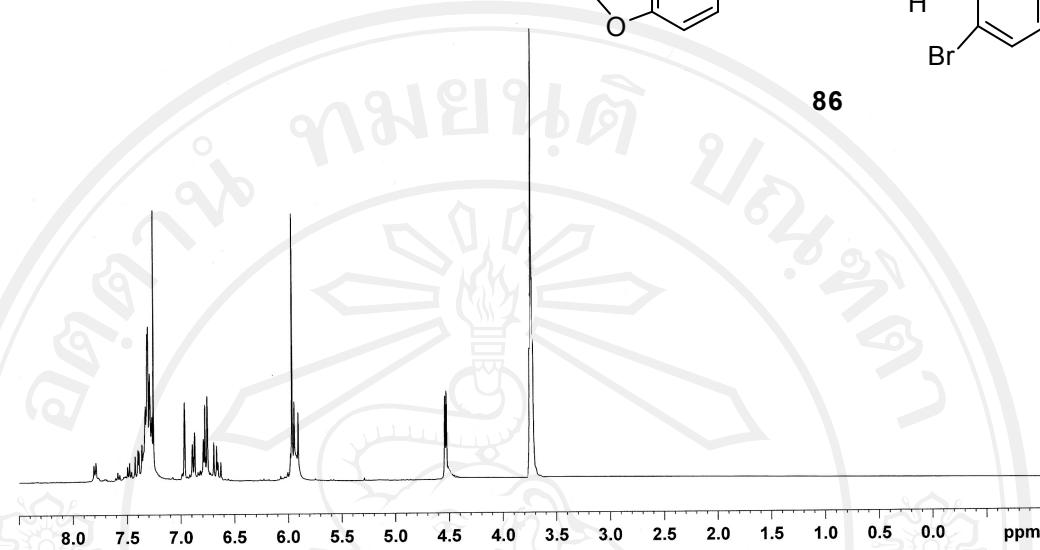
Appendix 14 ¹H NMR spectrum of compound **85** in CDCl₃



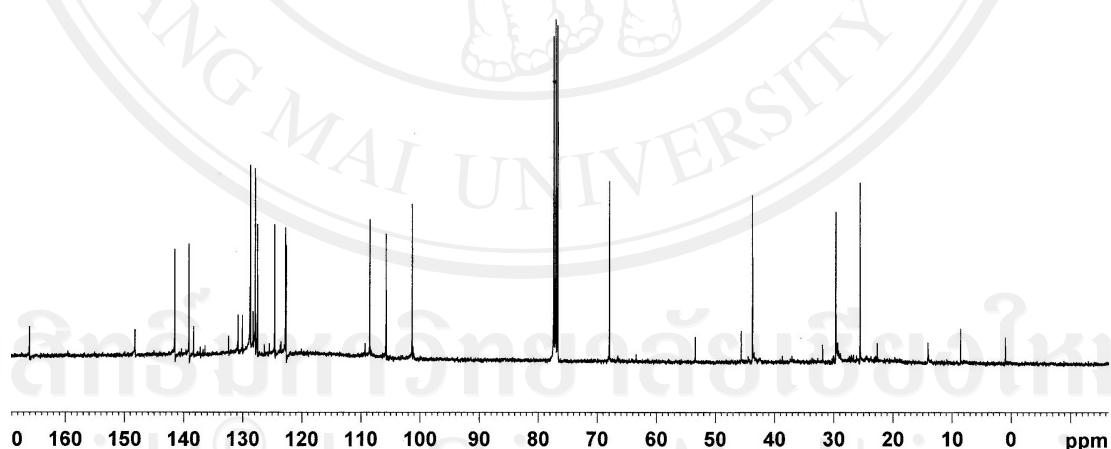
Appendix 15 ¹³C NMR spectrum of compound **85** in CDCl₃



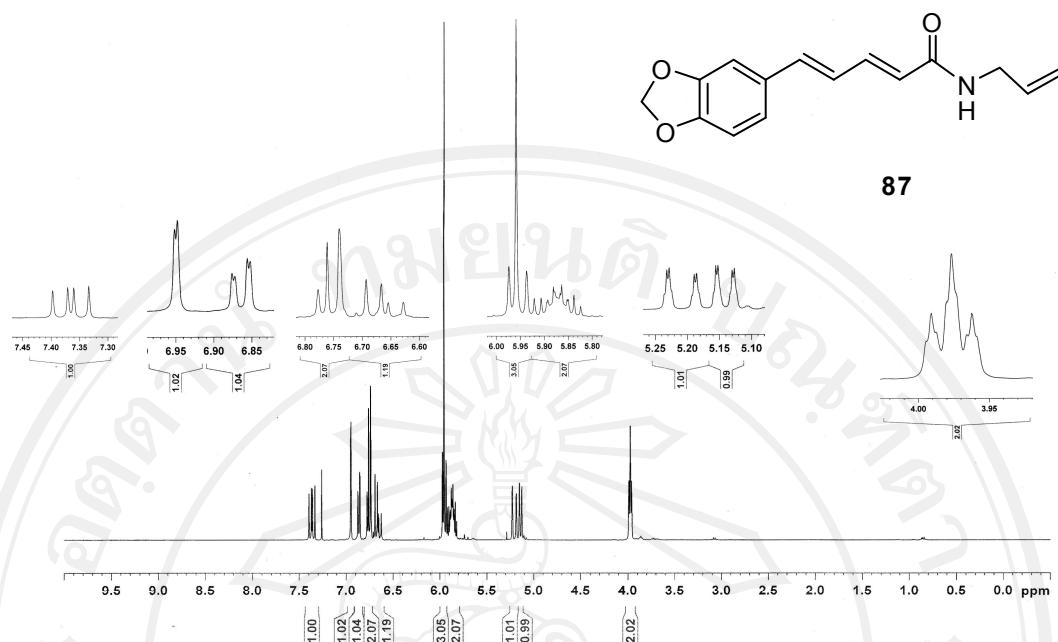
86



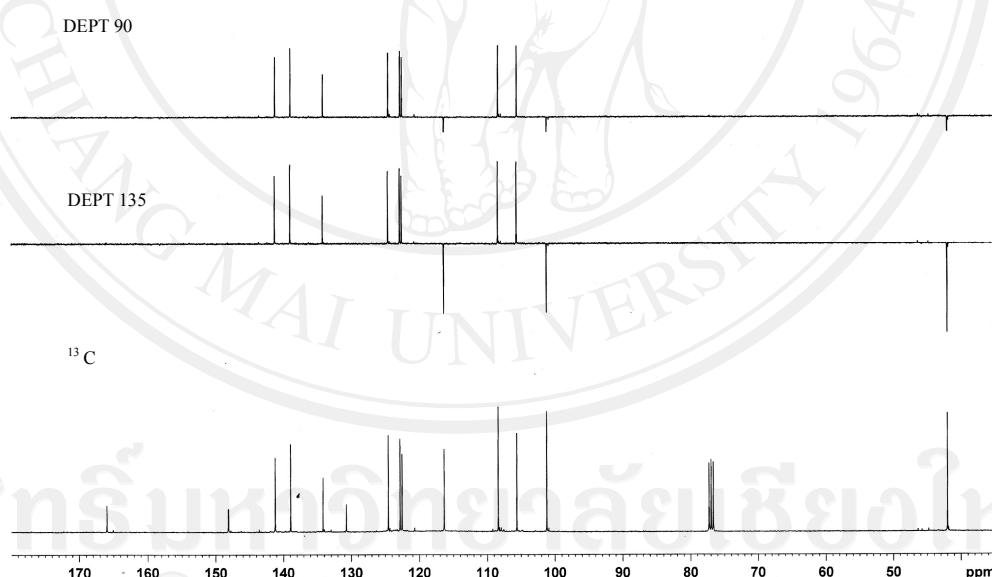
Appendix 16 ¹H NMR spectrum of compound **86** in CDCl₃



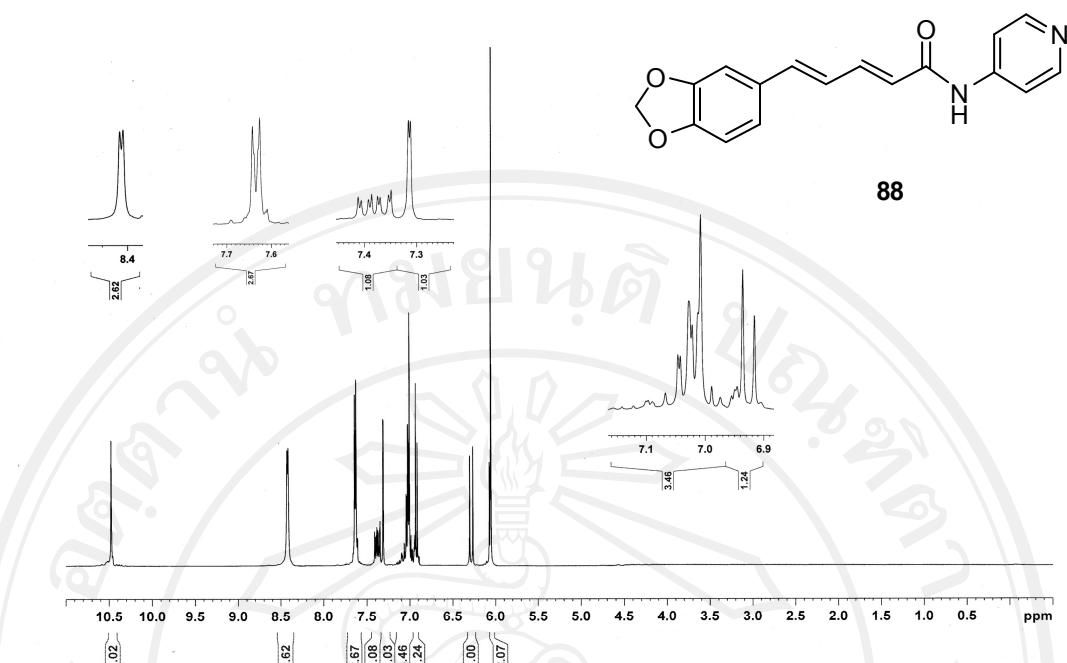
Appendix 17 ¹³C NMR spectrum of compound **86** in CDCl₃



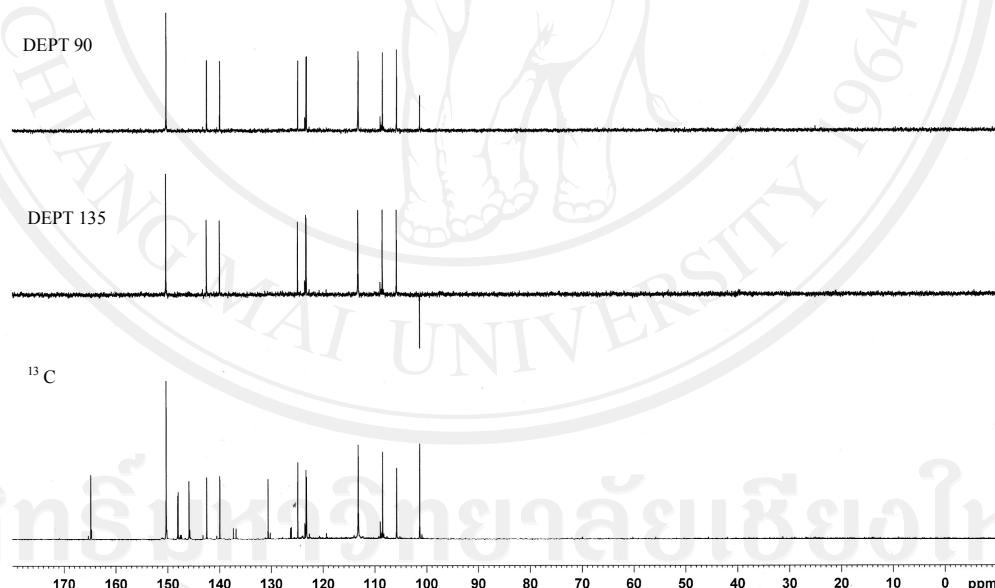
Appendix 18 ¹H NMR spectrum of compound **87** in CDCl₃



Appendix 19 ¹³C NMR spectrum of compound **87** in CDCl₃



Appendix 20 ^1H NMR spectrum of compound **88** in DMSO-d_6



Appendix 21 ^{13}C NMR spectrum of compound **88** in DMSO-d_6

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“Synthesis of the novel piperine analogues”, Pure and Applied Chemistry
International Conference 2010 at Ubon Ratchathani University 21-23 January 2010.

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