

SUPPLEMENTARY MATERIALS

Chemical constituents from the stems of *Machilus philippinensis* Merr. and the neuroprotective activity of cinnamophilin

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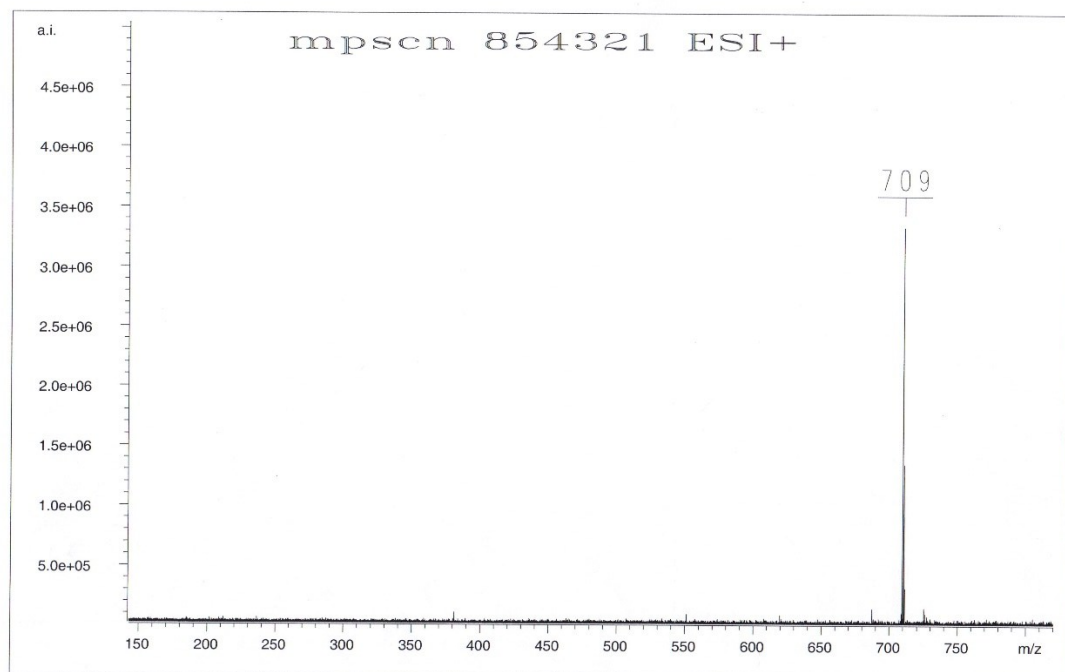
^f *Department of Pharmacy, College of Pharmacy and Health Care, Tajen University, Pingtung 907, Taiwan*

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Fig. S1. MS/HRMS spectra of **1**



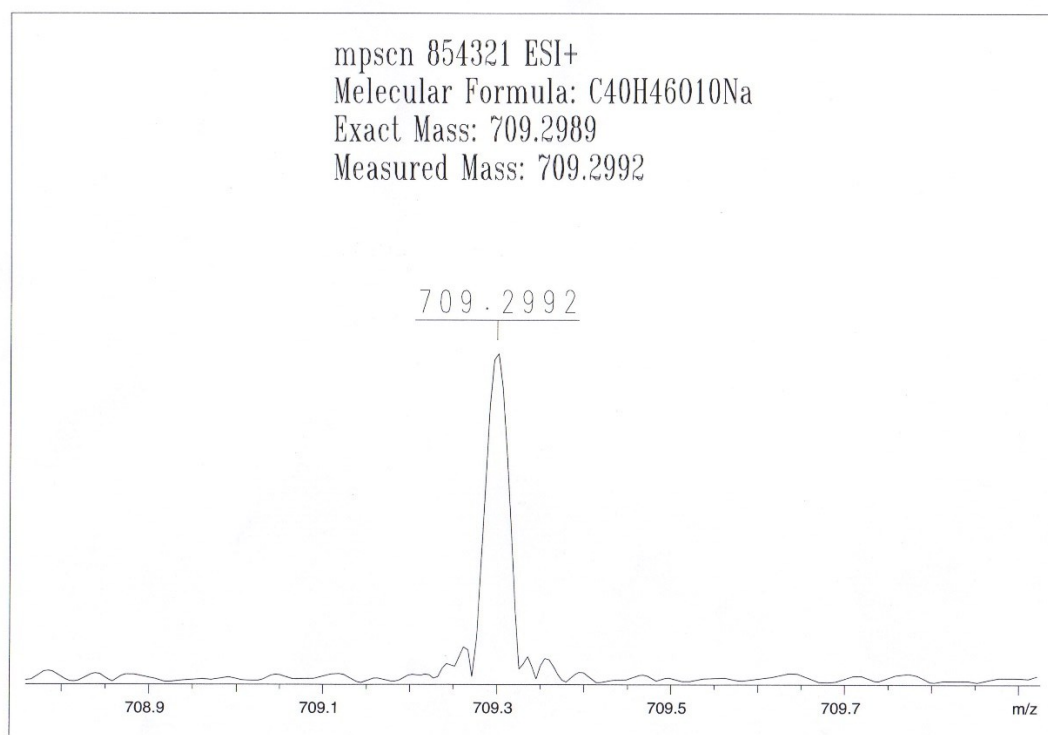


Fig. S2. UV spectrum of **1**

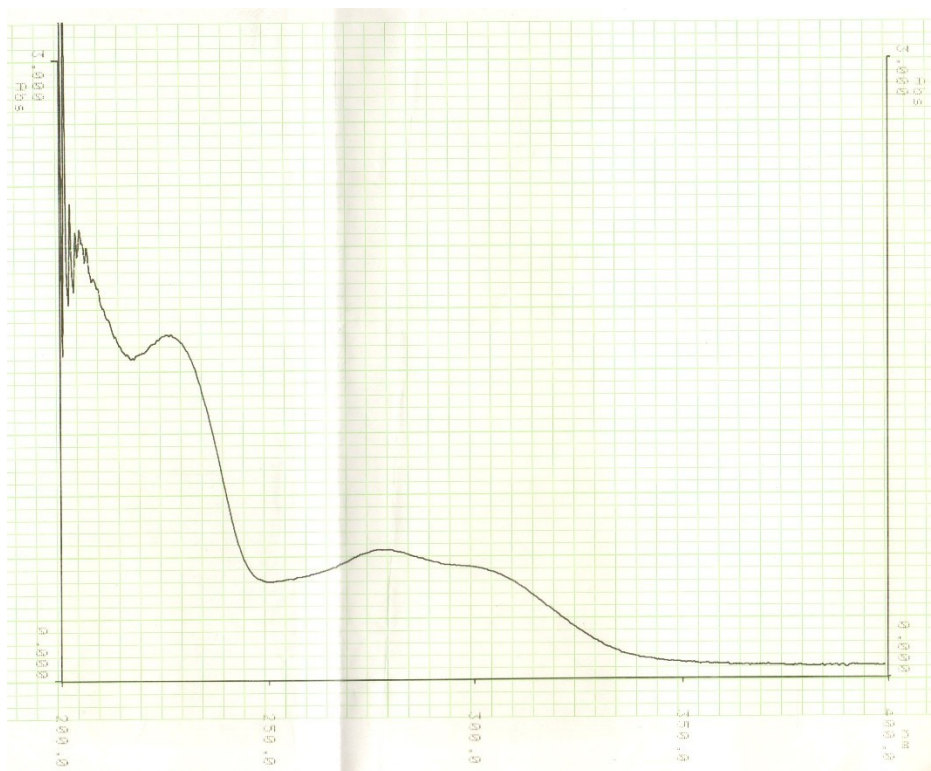


Fig. S3. IR spectrum of **1**

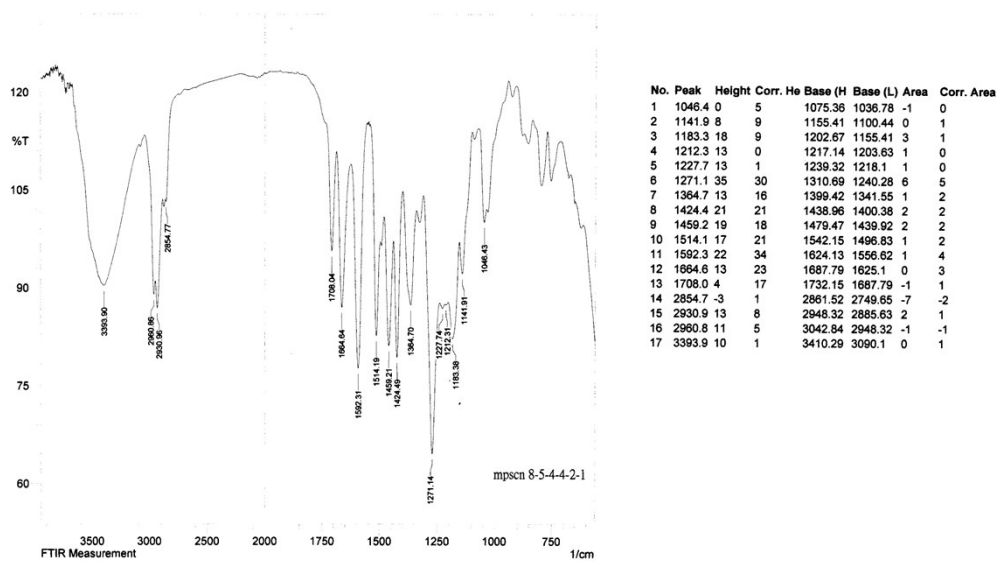


Fig. S4. ^1H NMR spectrum of **1**

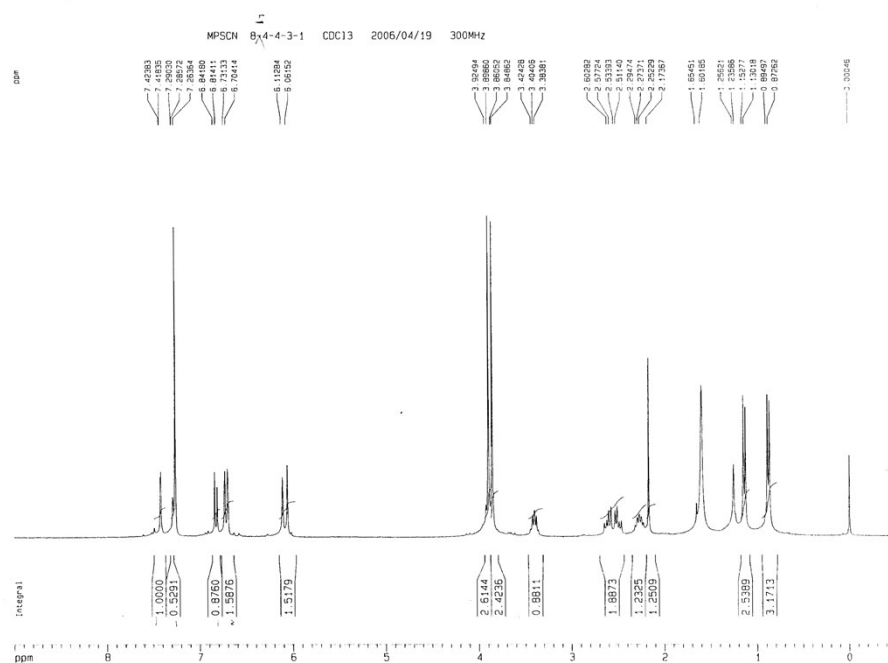


Fig. S5. ^1H NMR spectrum of **1** ($\text{CDCl}_3 + \text{D}_2\text{O}$)



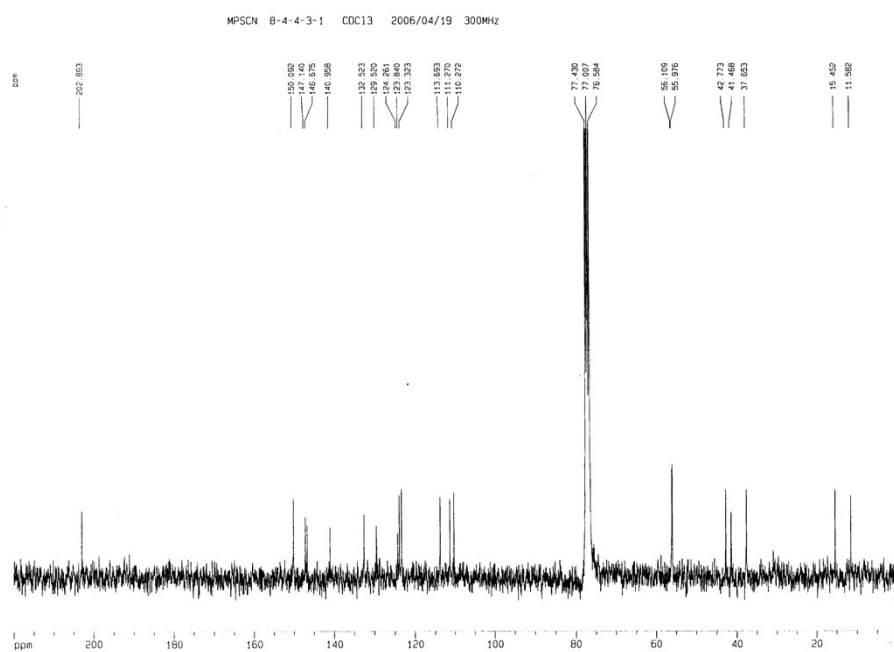


Fig. S7. COSY spectrum of **1**

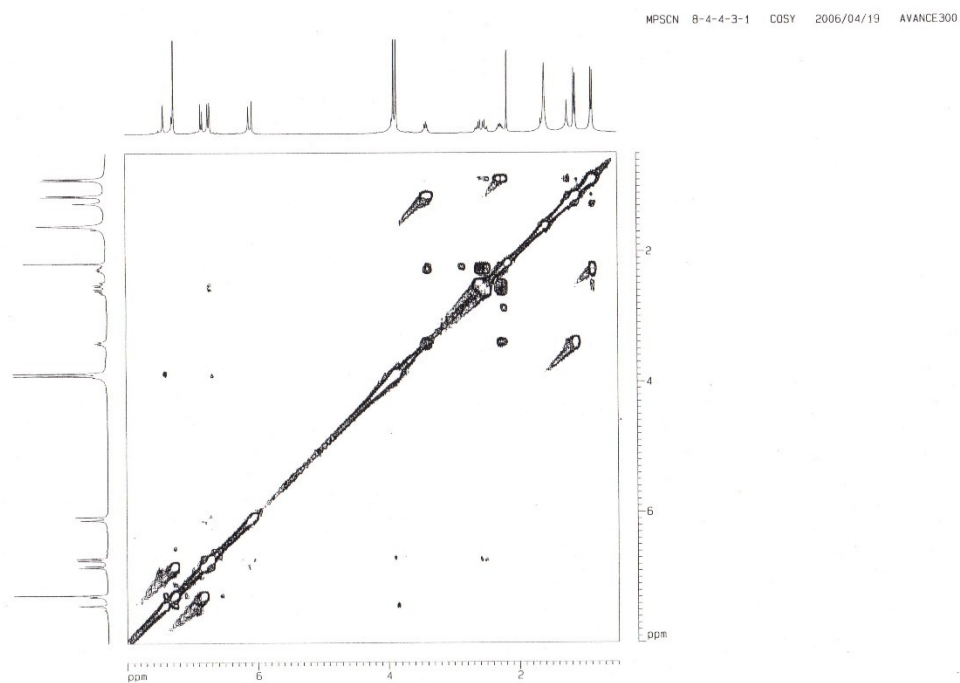


Fig. S8. HMQC spectrum of **1**

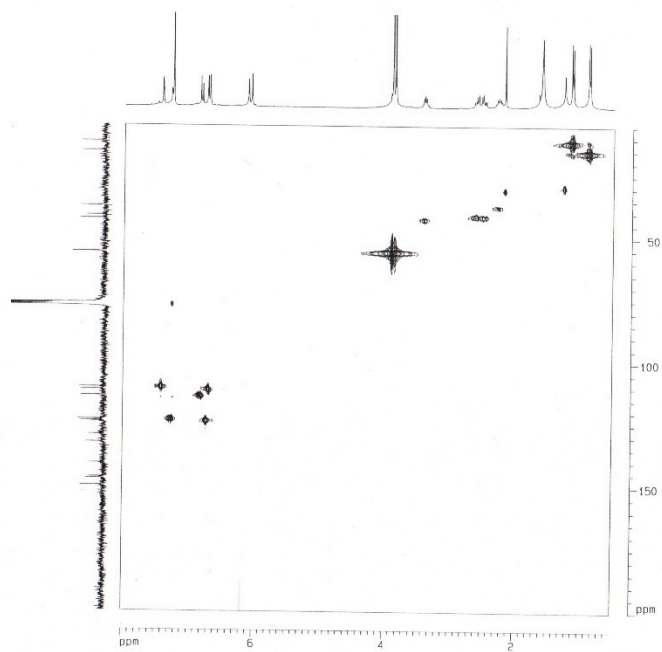


Fig. S9. HMBC spectrum of **1**

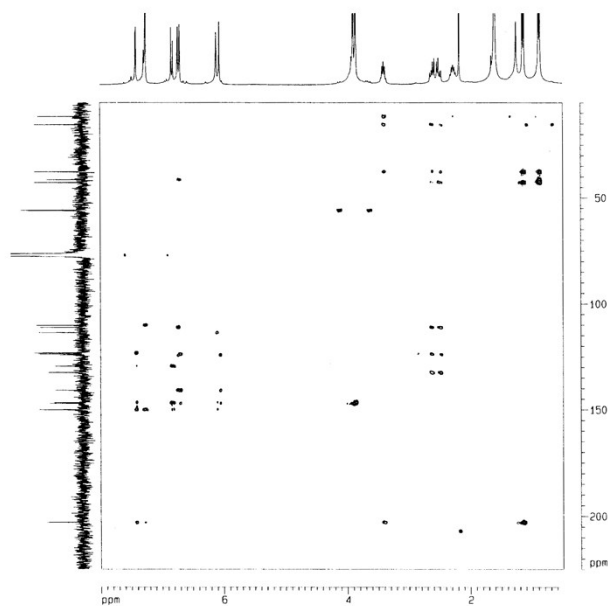


Fig. S10. NOESY spectrum of **1**

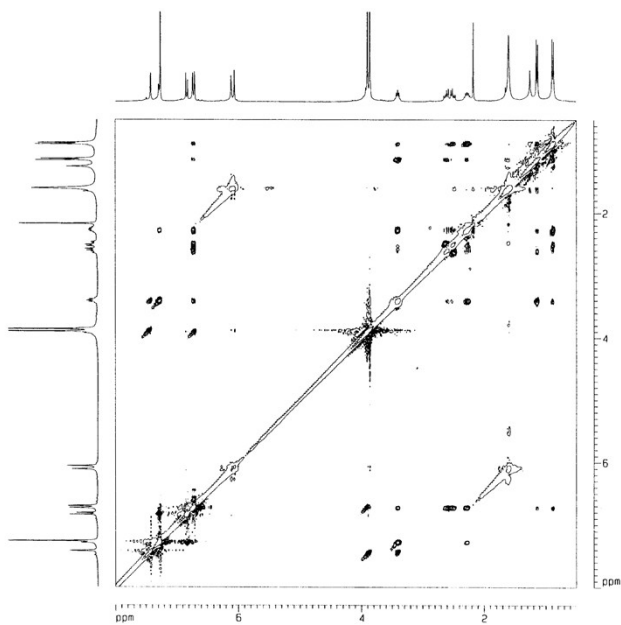


Fig. S11. CD spectra of **1**

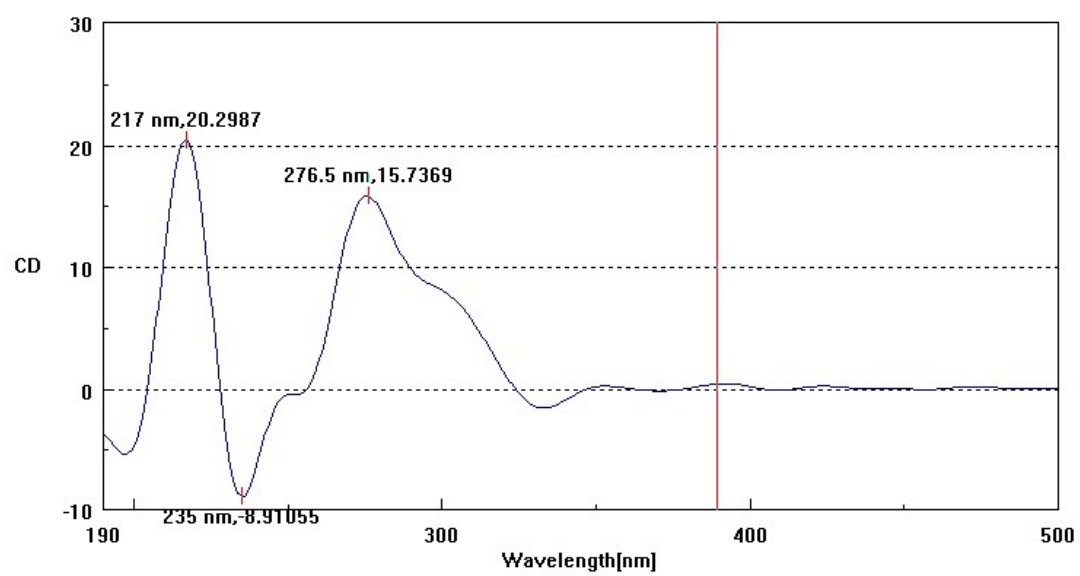
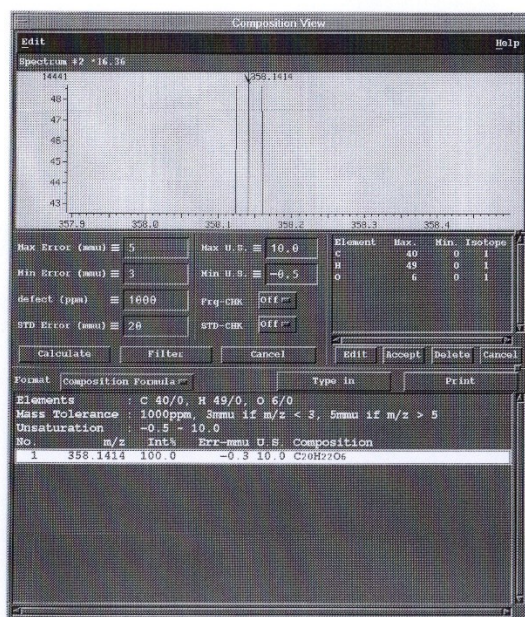
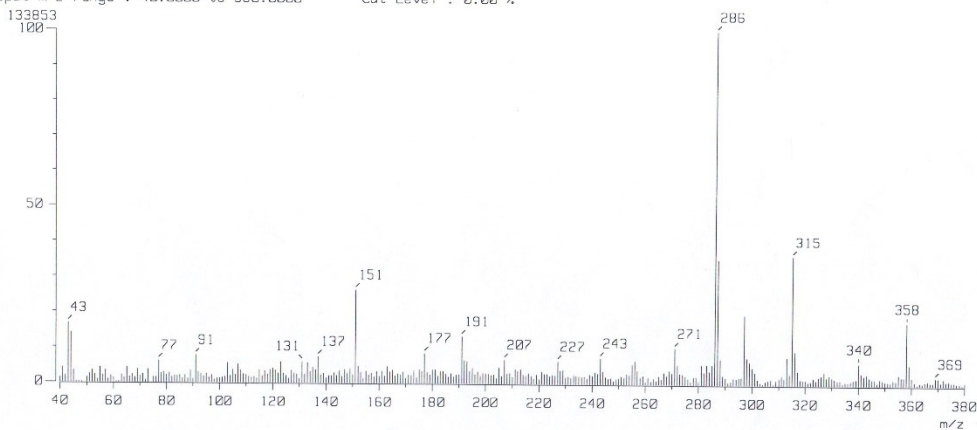


Fig. S12. MS/HRMS spectra of **2**

[Mass Spectrum]
 Date : 25-Oct-2006 16:12
 Sample: MPSCN 74523
 Note : -
 Inlet : Direct Ion Mode : EI+
 Spectrum Type : Normal Ion [MF-Linear]
 RT : 0.14 min Scan# : (7,11)
 BP : m/z 286.0000 Int. : 12.77
 Output m/z range : 40.0000 to 380.0000 Cut Level : 0.00 %



[Elemental Composition]

Data : 960210075
Sample: mpscn 74523

Date : 09-Mar-2007 17:08

Page: 1

Note : -

Inlet : Direct

Ion Mode : EI+

RT : 2.59 min

Scan#: 102

Elements : C 40/0, H 49/0, O 6/0

Mass Tolerance : 1000ppm, 3mmu if m/z < 3, 5mmu if m/z > 5

Unsaturation (U.S.) : -0.5 - 10.0

Observed m/z	Int%	Err [ppm / mmu]	U.S.	Composition
358.1414	100.0	-0.8 / -0.3	10.0	C 20 H 22 O 6

Fig. S13. UV spectrum of **2**

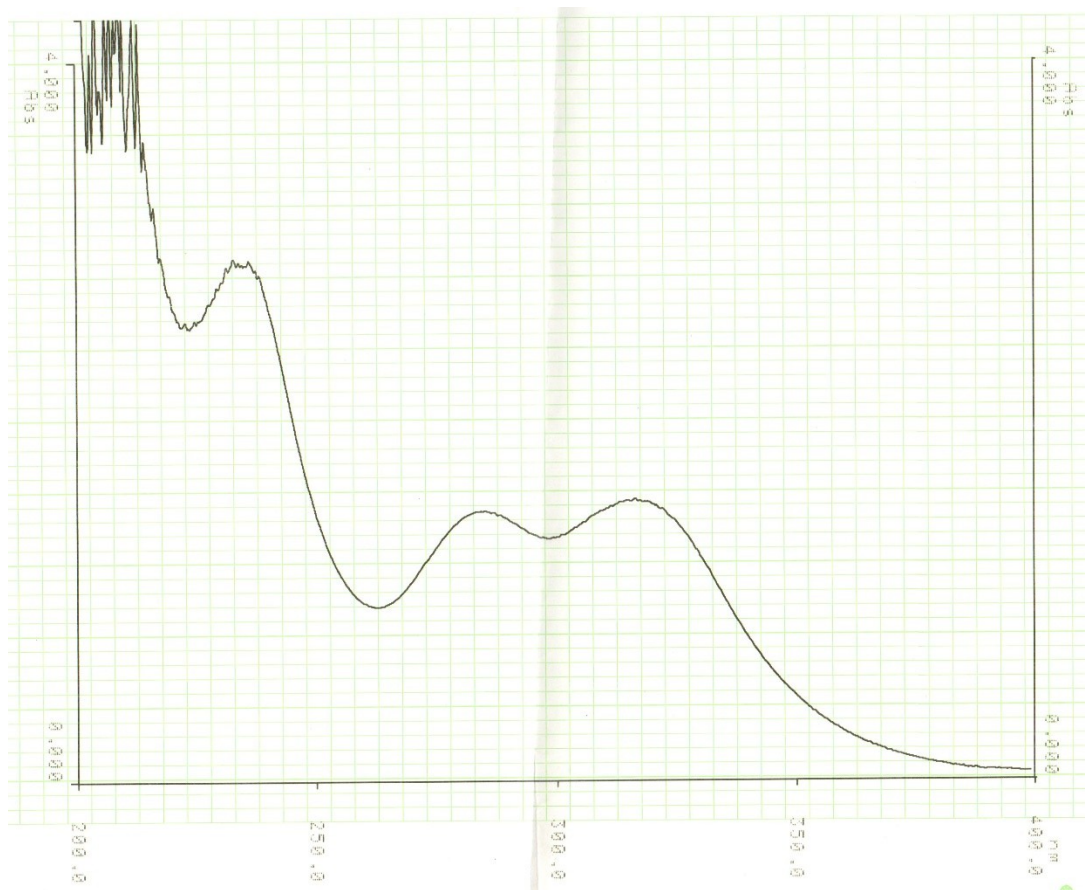


Fig. S14. IR spectrum of **2**

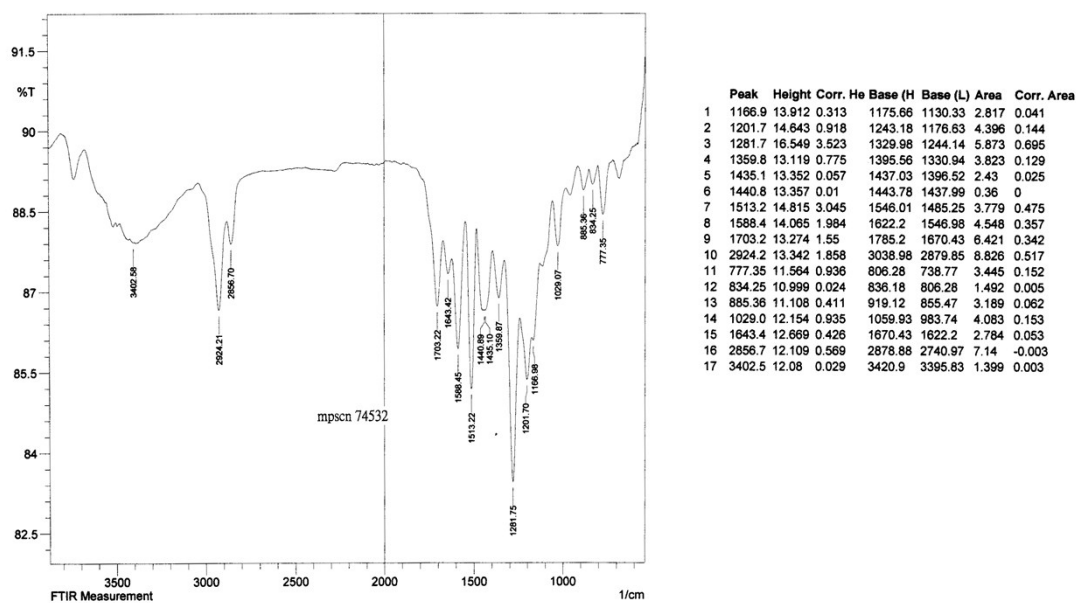


Fig. S15. ^1H NMR spectrum of **2**

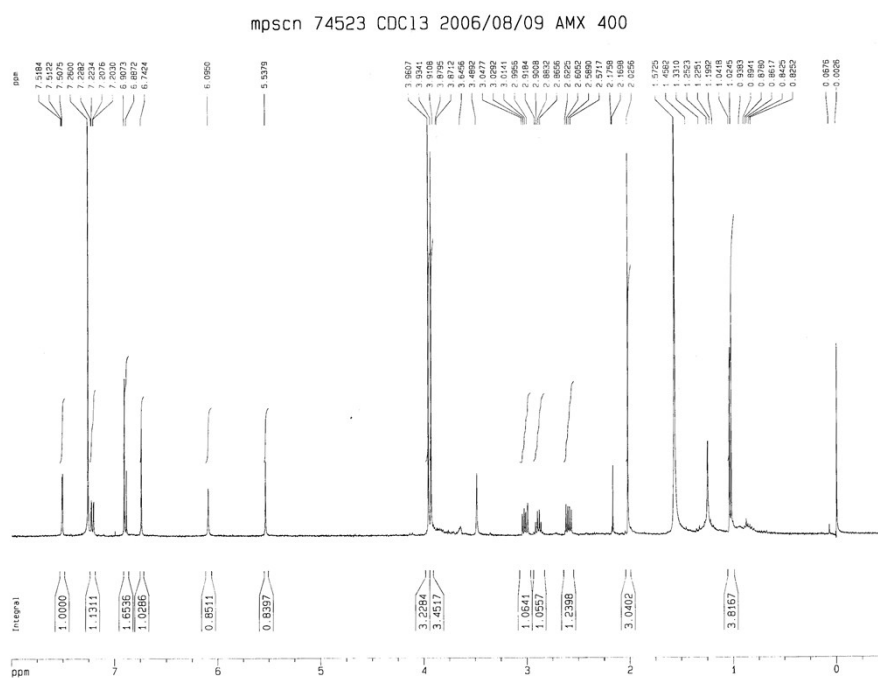


Fig. S16. ^{13}C NMR spectrum of **2**

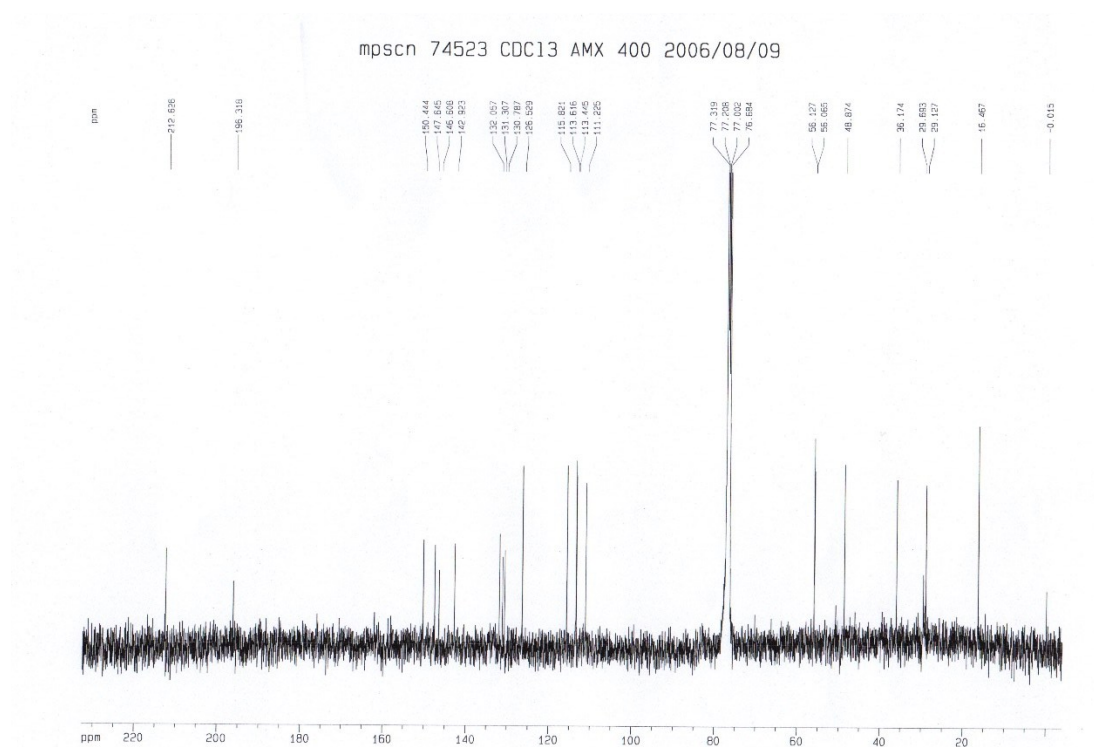


Fig. S17. COSY spectrum of **2**

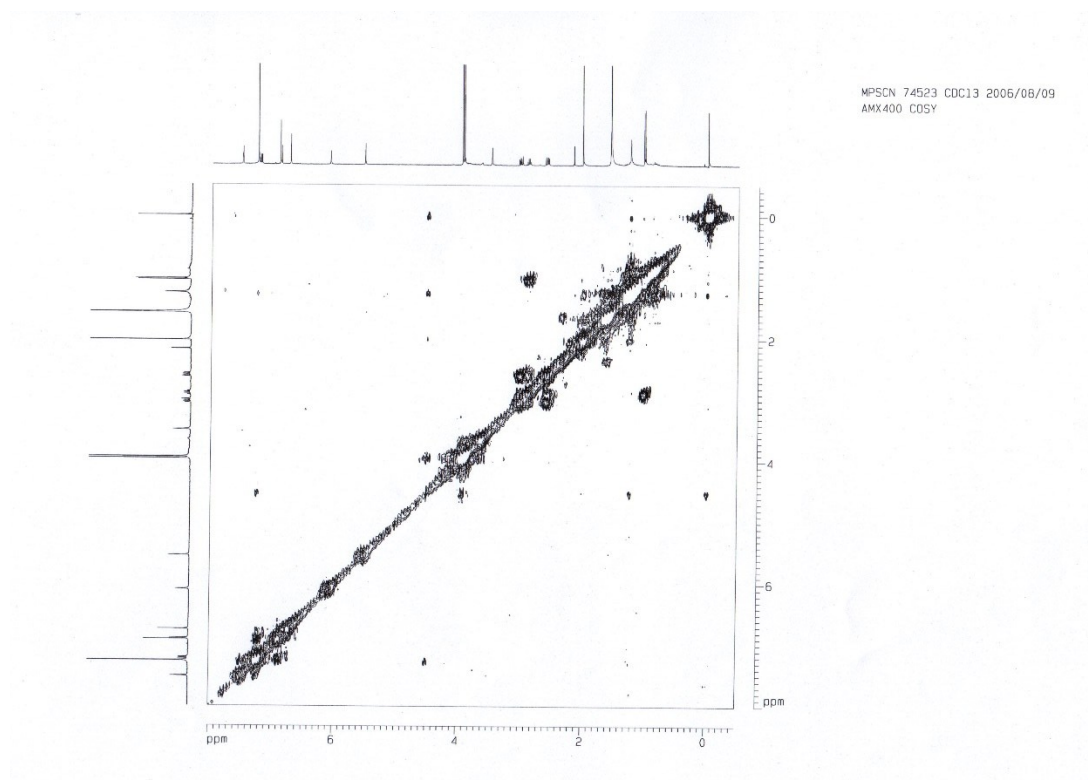


Fig. S18. HMQC spectrum of **2**

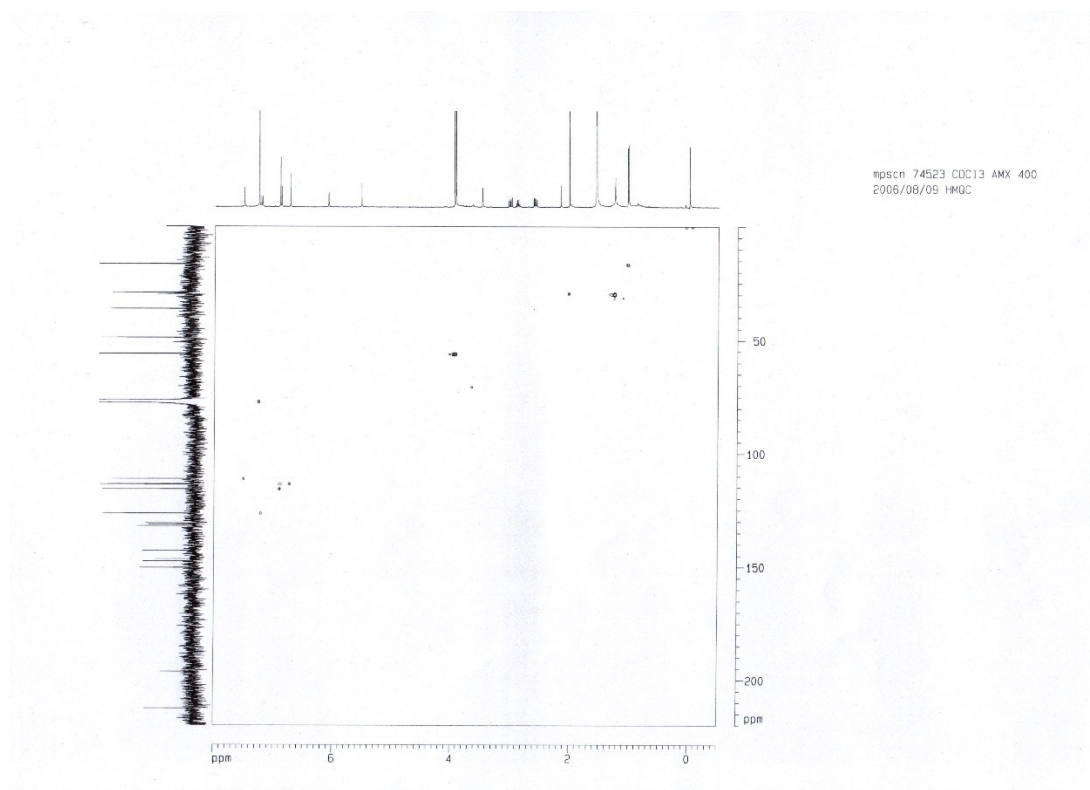


Fig. S19. HMBC spectrum of **2**

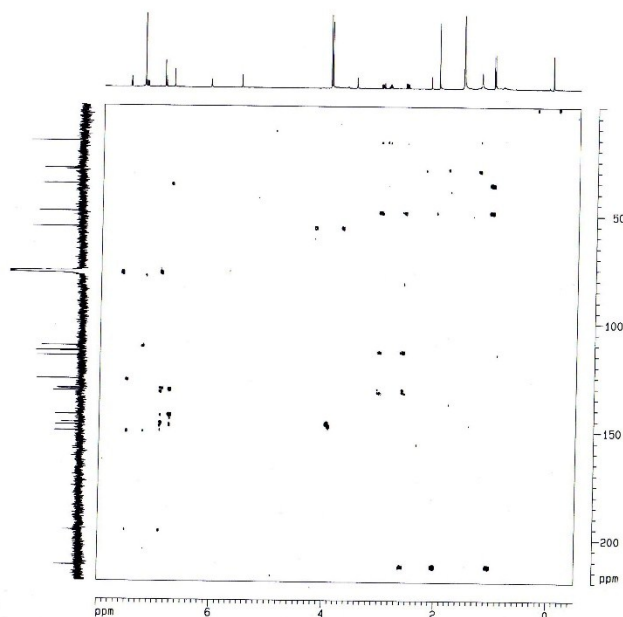


Fig. S20. NOESY spectrum of **2**

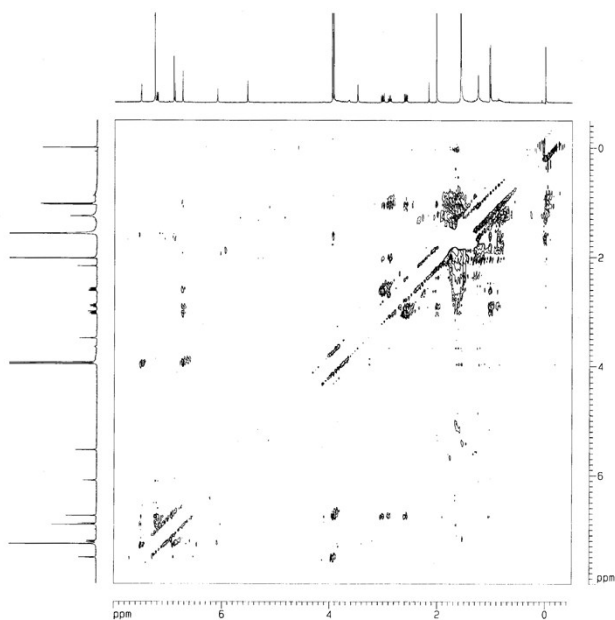
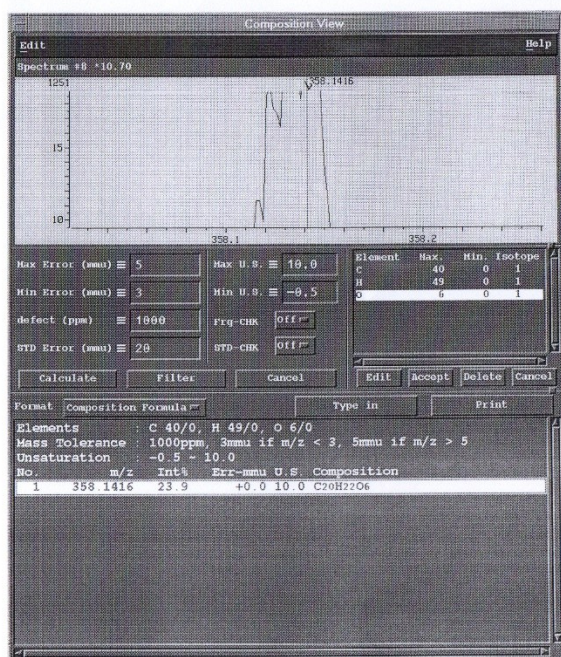
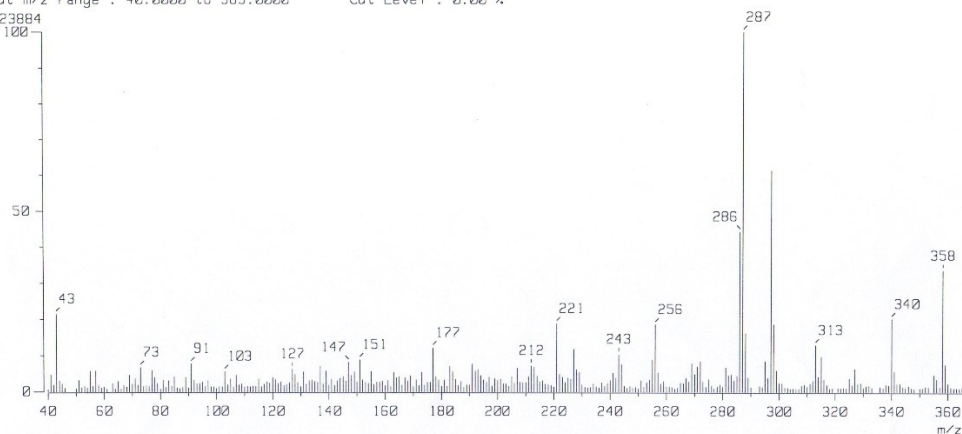


Fig. S21. MS/HRMS spectra of **3**

[Mass Spectrum]
 Date : 25-Oct-2006 16:03
 Sample: MPSCN 745522
 Note : -
 Inlet : Direct Ion Mode : EI+
 Spectrum Type : Normal Ion [MF-Linear]
 RT : 0.39 min Scan# : 24
 BP : m/z 287.0000 Int. : 21.35
 Output m/z range : 40.0000 to 365.0000 Cut Level : 0.00 %



[Elemental Composition]

Data : 960210073

Sample: mp SCN 745522

Note : -

Inlet : Direct

RT : 0.49 min

Elements : C 40/0, H 49/0, O 6/0

Mass Tolerance : 1000ppm, 3mmu if m/z < 3, 5mmu if m/z > 5

Unsaturation (U.S.) : -0.5 - 10.0

Date : 09-Mar-2007 16:57

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Ion Mode : EI+

Scan#: 20

Observed m/z	Int%	Err [ppm / mmu]	U.S. Composition
358.1416	23.9	+0.0 / +0.0	10.0 C 20 H 22 O 6

Fig. S22. UV spectrum of **3**

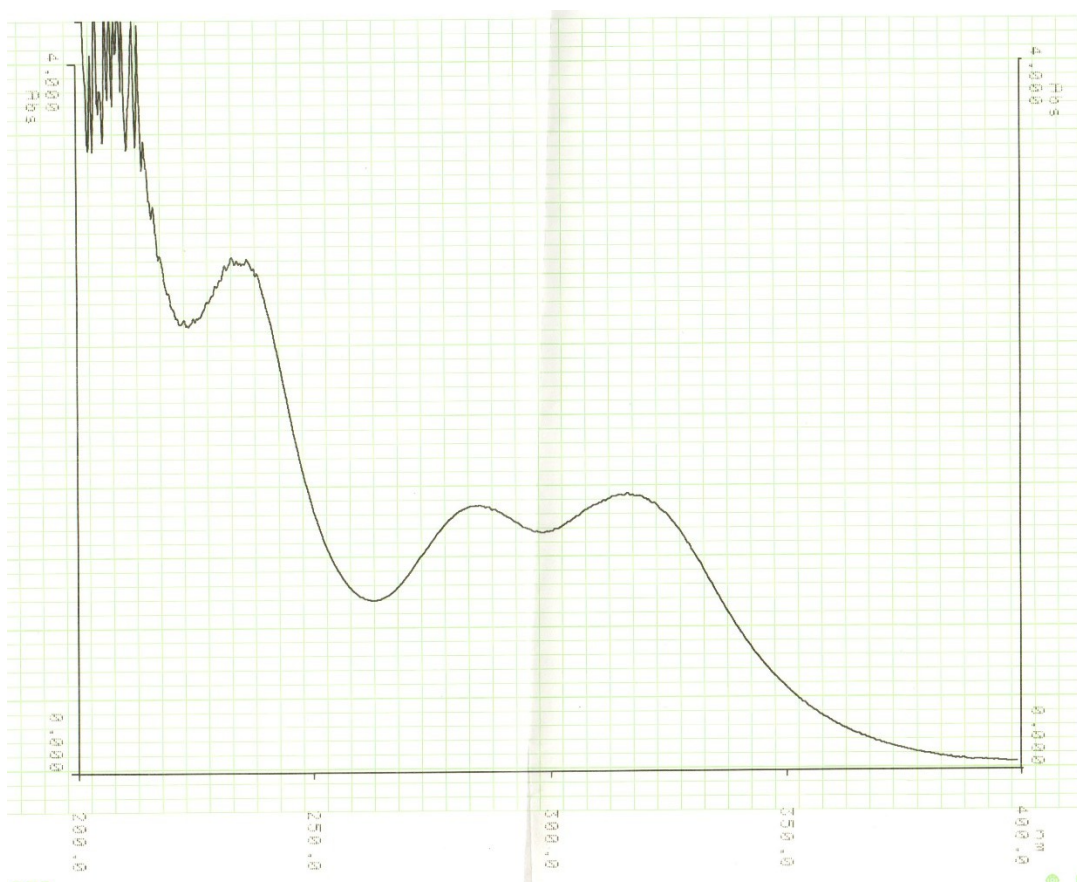


Fig. S23. IR spectrum of **3**

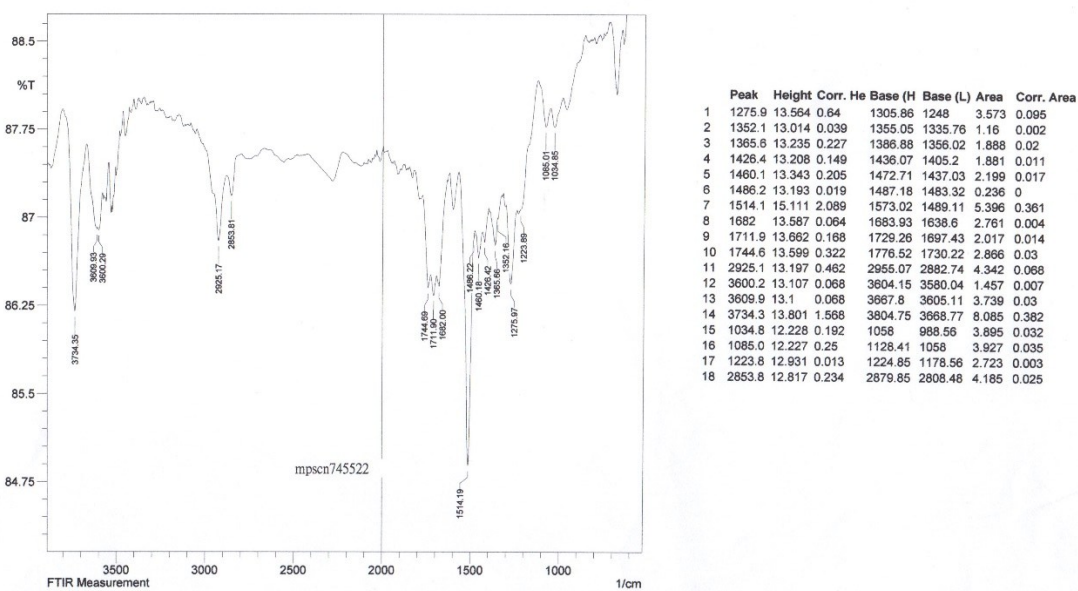


Fig. S24. ^1H NMR spectrum of **3**

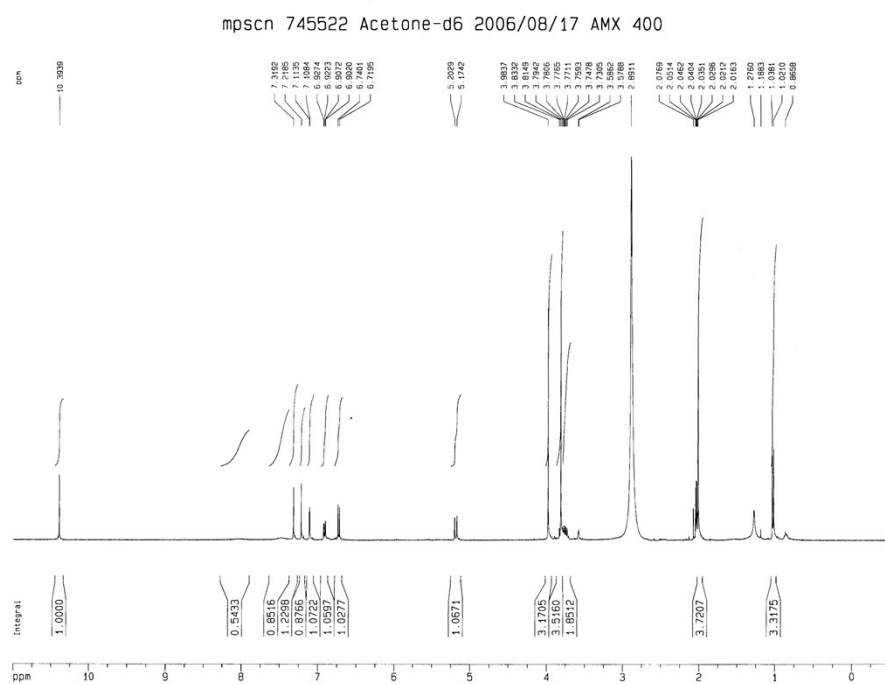


Fig. S25. ^{13}C NMR spectrum of **3**

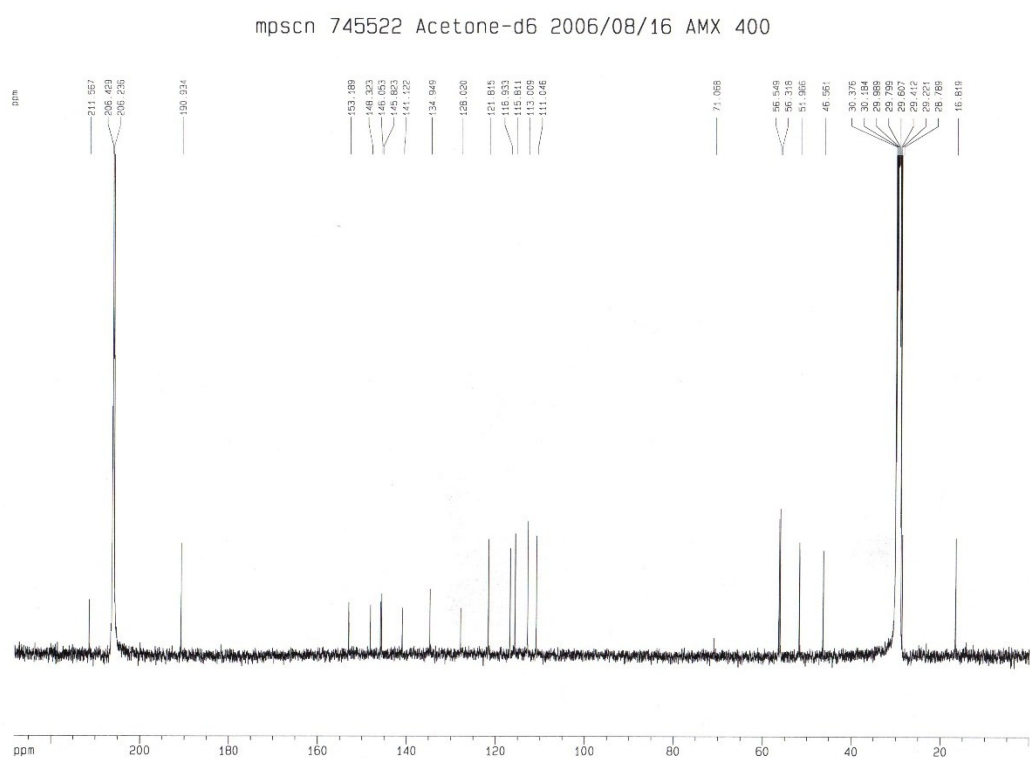


Fig. S26. COSY spectrum of **3**

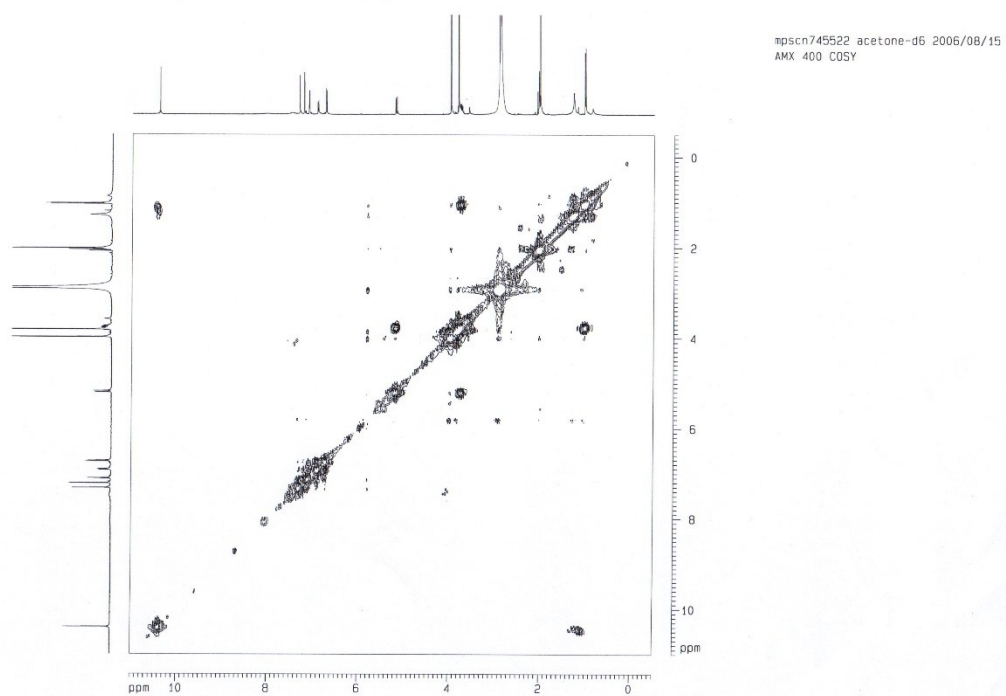


Fig. S27. HMQC spectrum of **3**

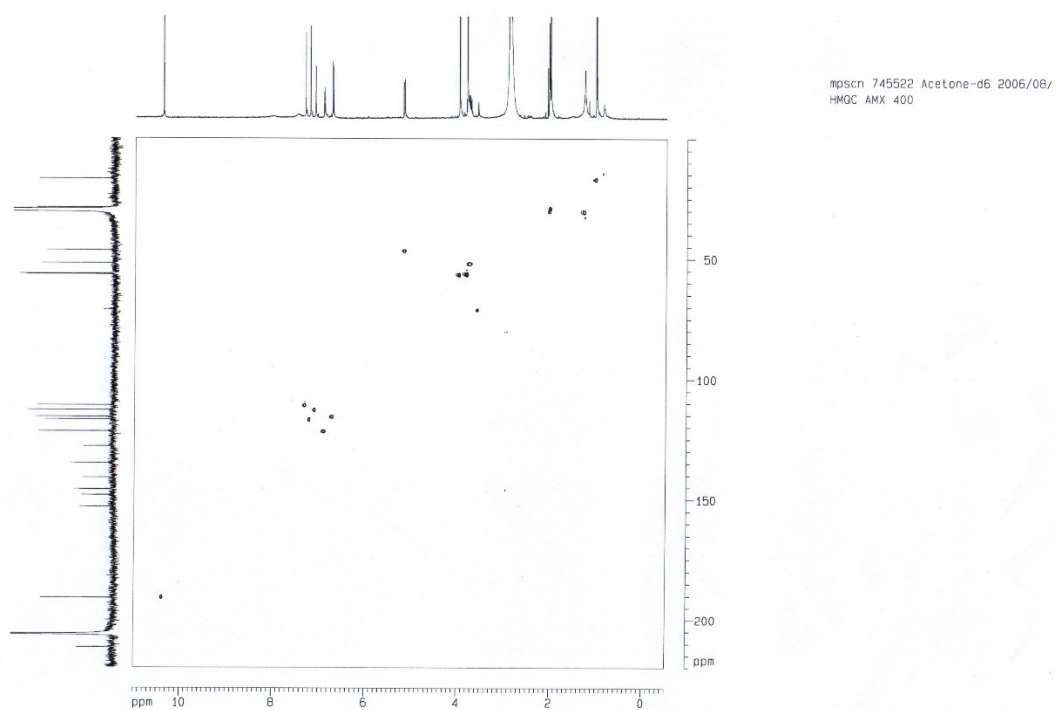


Fig. S28. HMBC spectrum of **3**

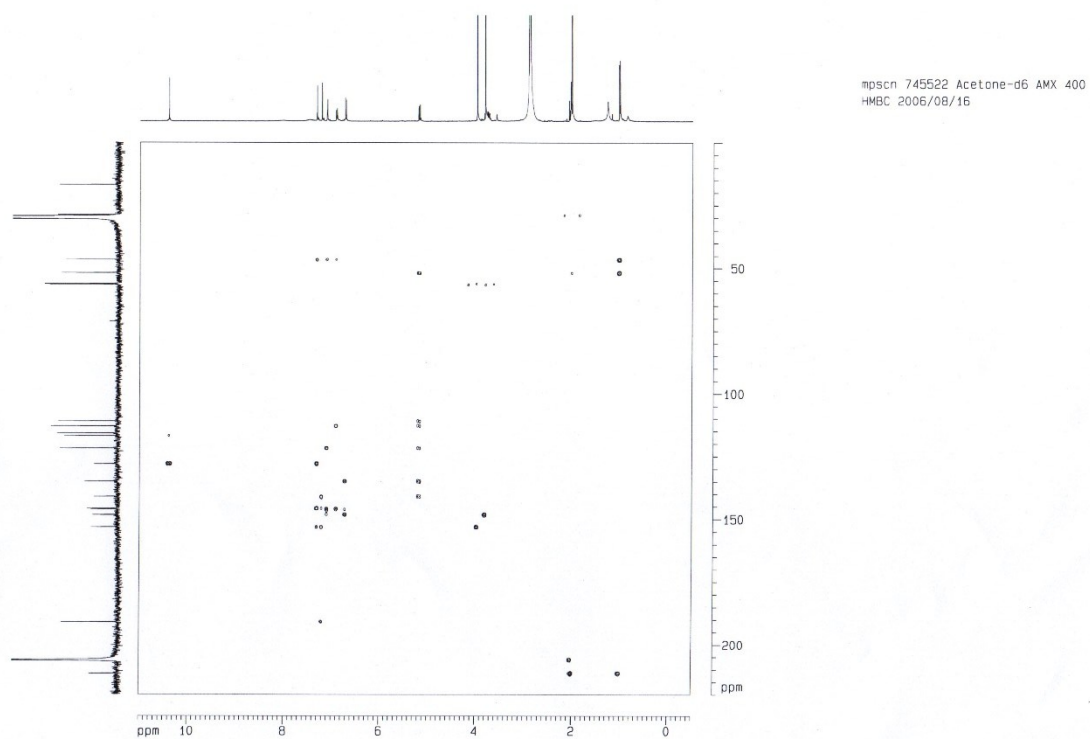


Fig. S29. NOESY spectrum of **3**

mpscn745522 Acetone-d6 AMX 400
NOESY 2005/08/16

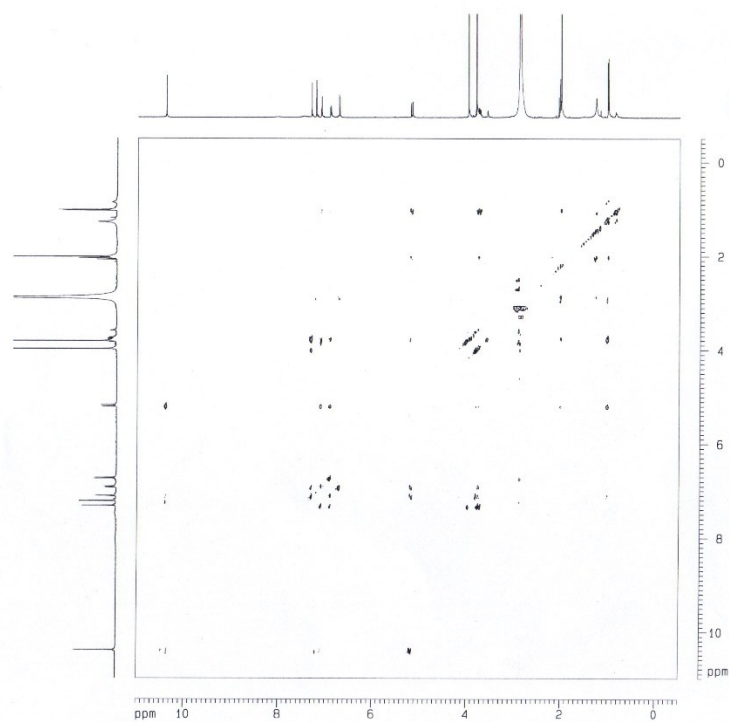
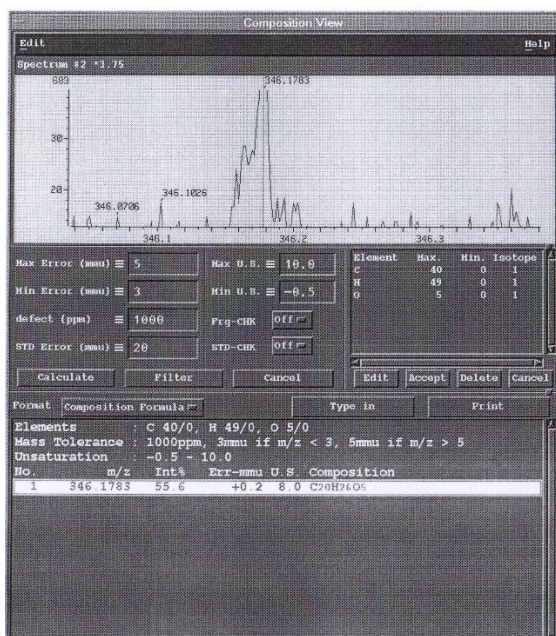
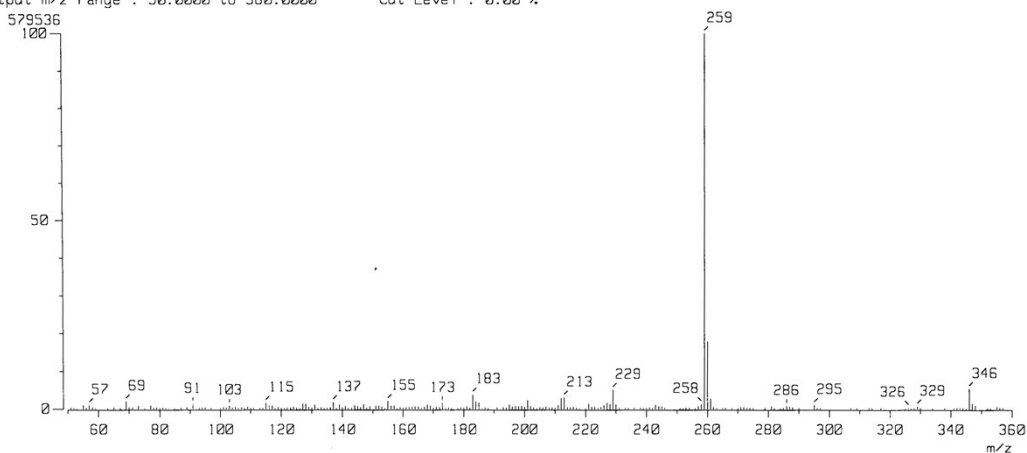


Fig. S30. MS/HRMS spectra of **4**

[Mass Spectrum]
 Data : 960115036 Date : 22-Jan-2007 15:36
 Sample: mpsb 10-3422223
 Note : -
 Inlet : Direct Ion Mode : EI+
 Spectrum Type : Normal Ion [MF-Linear]
 RT : 0.92 min Scan# : 56
 BP : m/z 259.0000 Int. : 55.27
 Output m/z range : 50.0000 to 350.0000 Cut Level : 0.00 %



[Elemental Composition]
 Data : 960210070 Date : 09-Mar-2007 16:46
 Sample: mpscn 10-3422223
 Note : -
 Inlet : Direct Ion Mode : EI+
 RT : 1.53 min Scan# : 66
 Elements : C 40/0, H 49/0, O 5/0
 Mass Tolerance : 1000ppm, 3mmu if m/z < 3, 5mmu if m/z > 5
 Unsaturation (U.S.) : -0.5 - 10.0

Observed m/z	Int%	Err[ppm / mmu]	U.S.	Composition
346.1783	55.6	+0.7 / +0.2	8.0	C 20 H 26 O 5

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Fig. S31. UV spectrum of 4

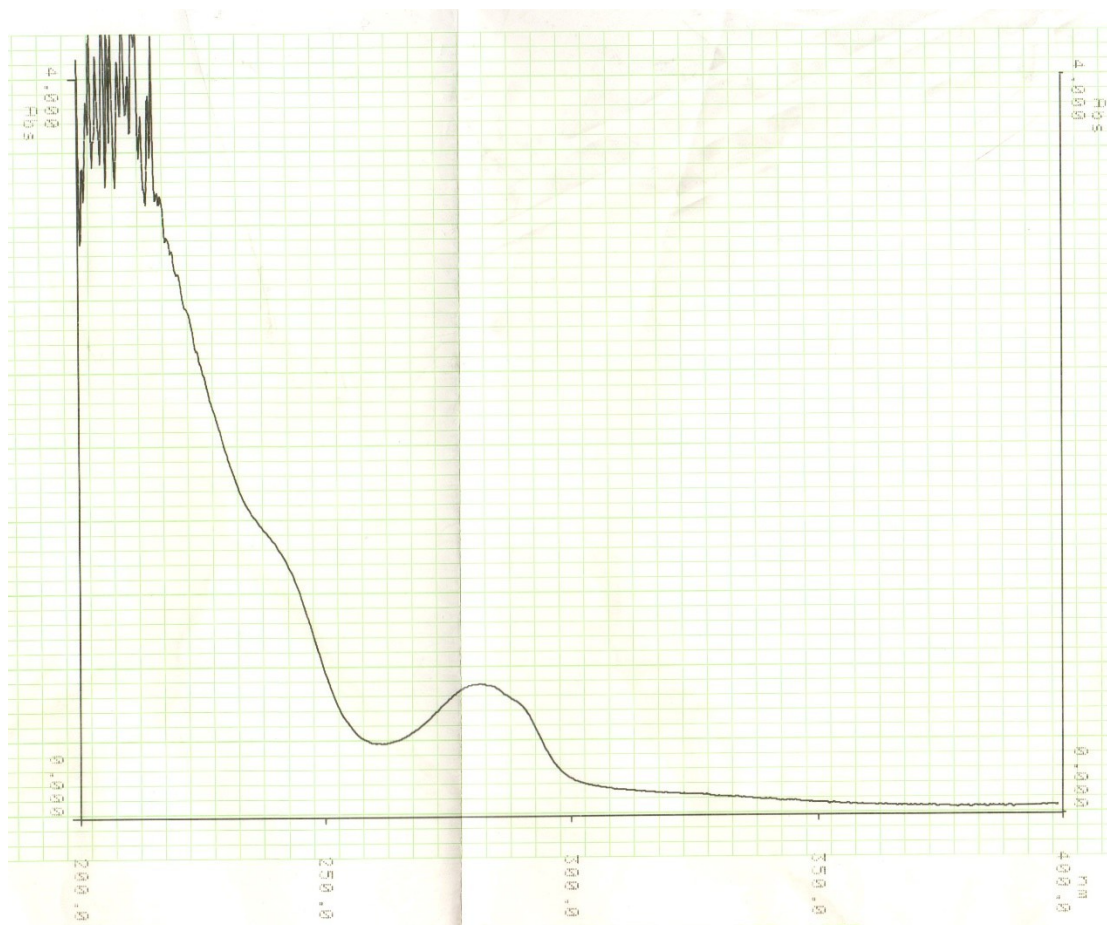


Fig. S32. IR spectrum of **4**

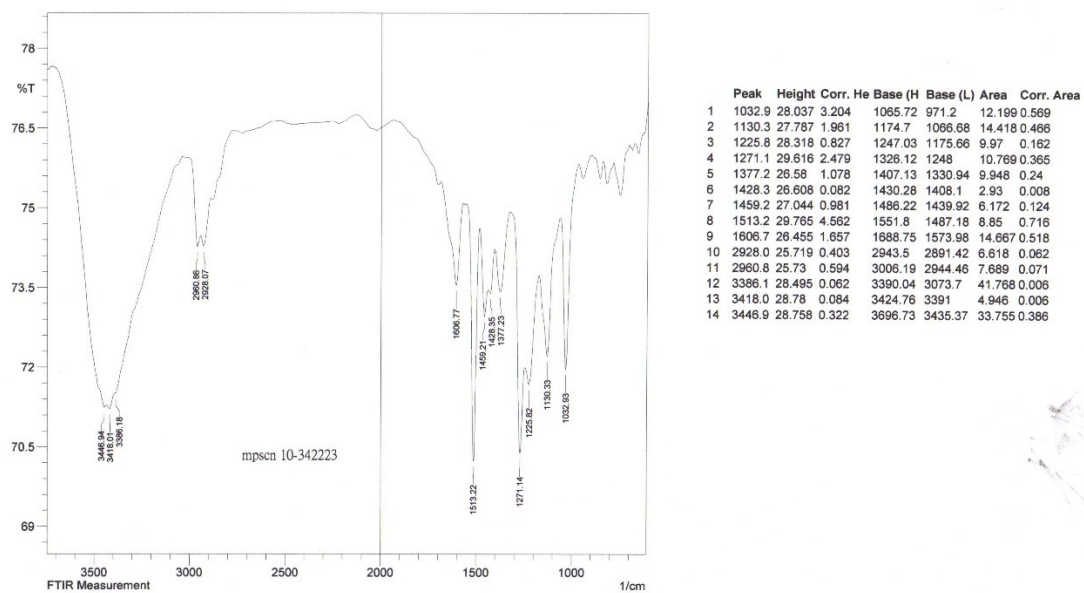


Fig. S33. ^1H NMR spectrum of **4**

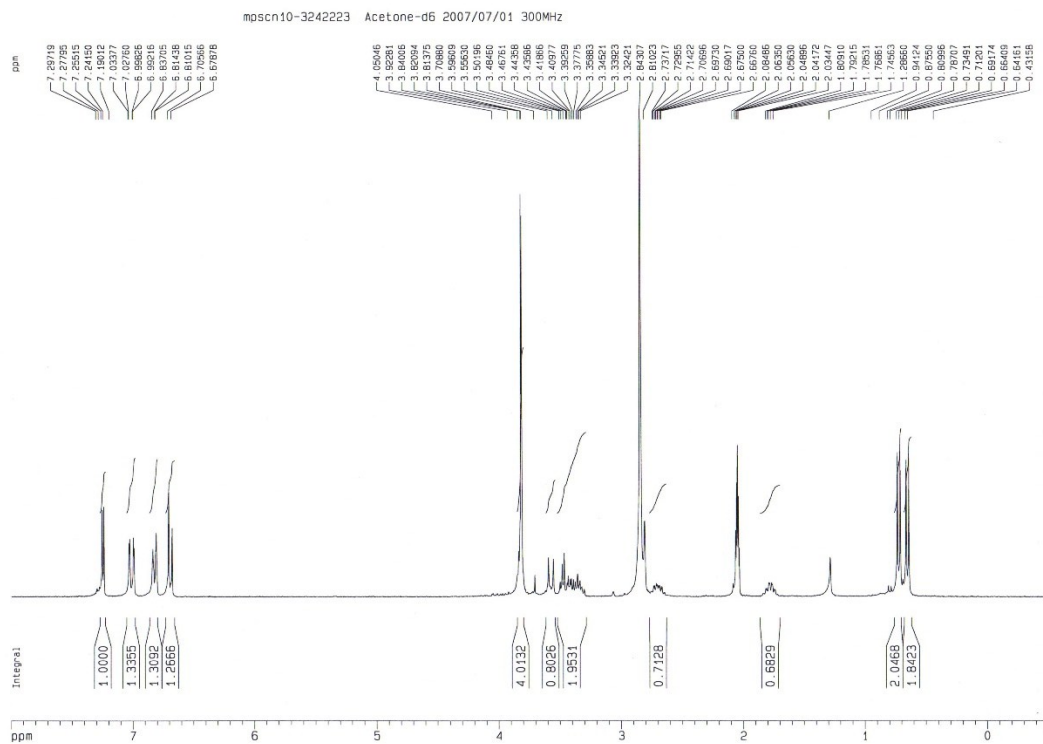


Fig. S34. ^{13}C NMR spectrum of **4**

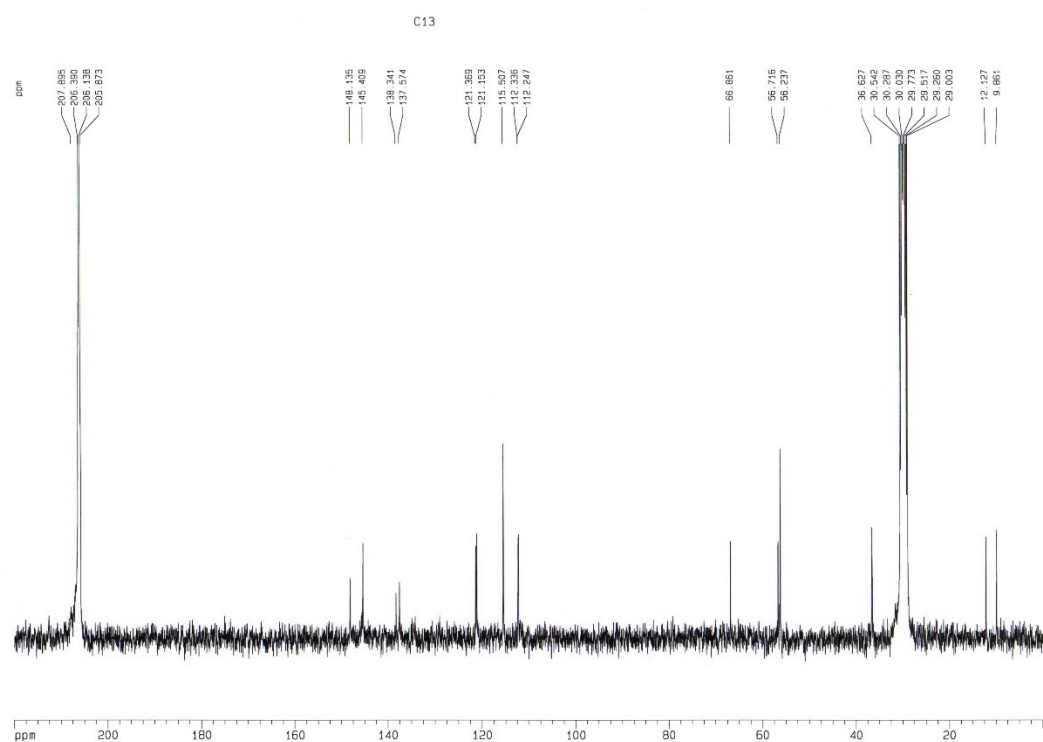


Fig. S35. COSY spectrum of **4**

mpscn10-3242223 300MHz
COSY 2007/07/01

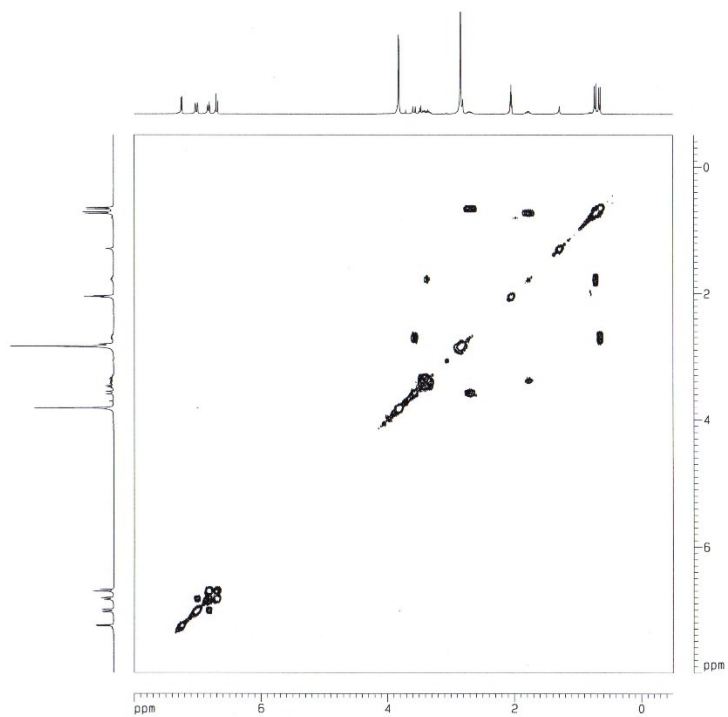


Fig. S36. HMQC spectrum of **4**

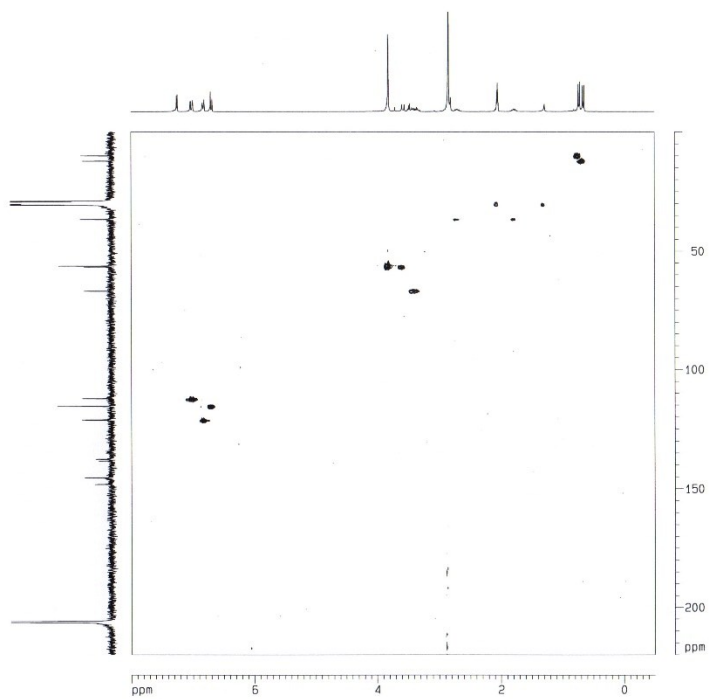


Fig. S37. HMBC spectrum of **4**

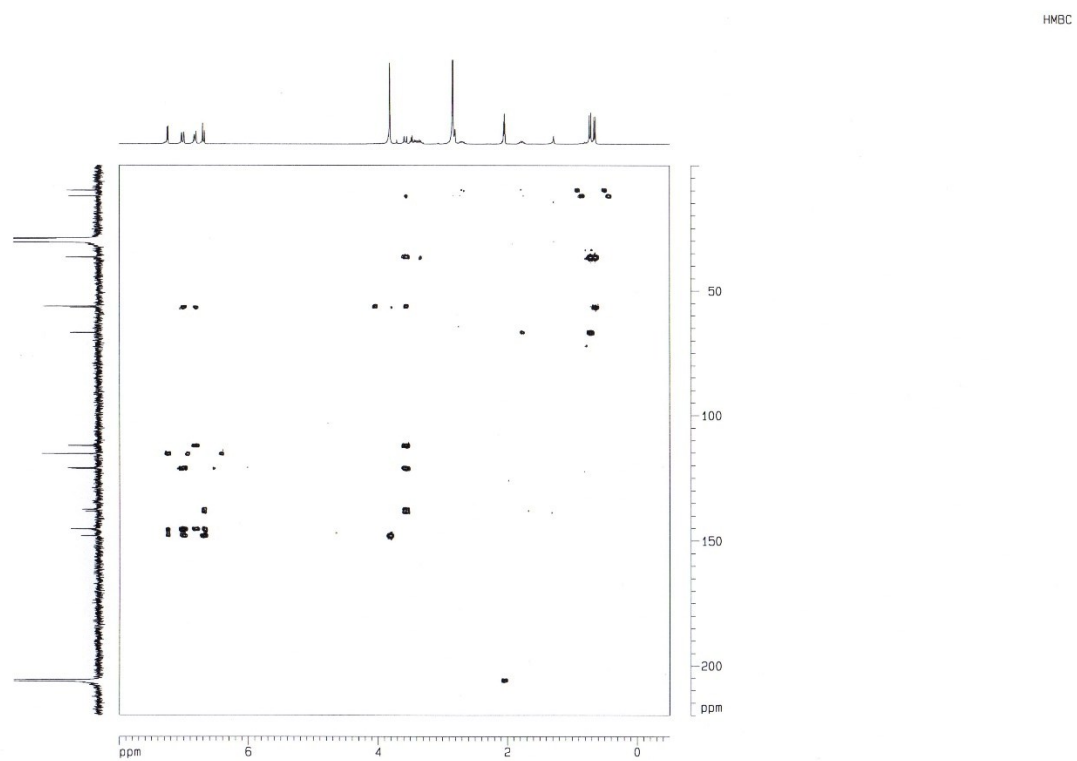


Fig. S38. NOESY spectrum of **4**

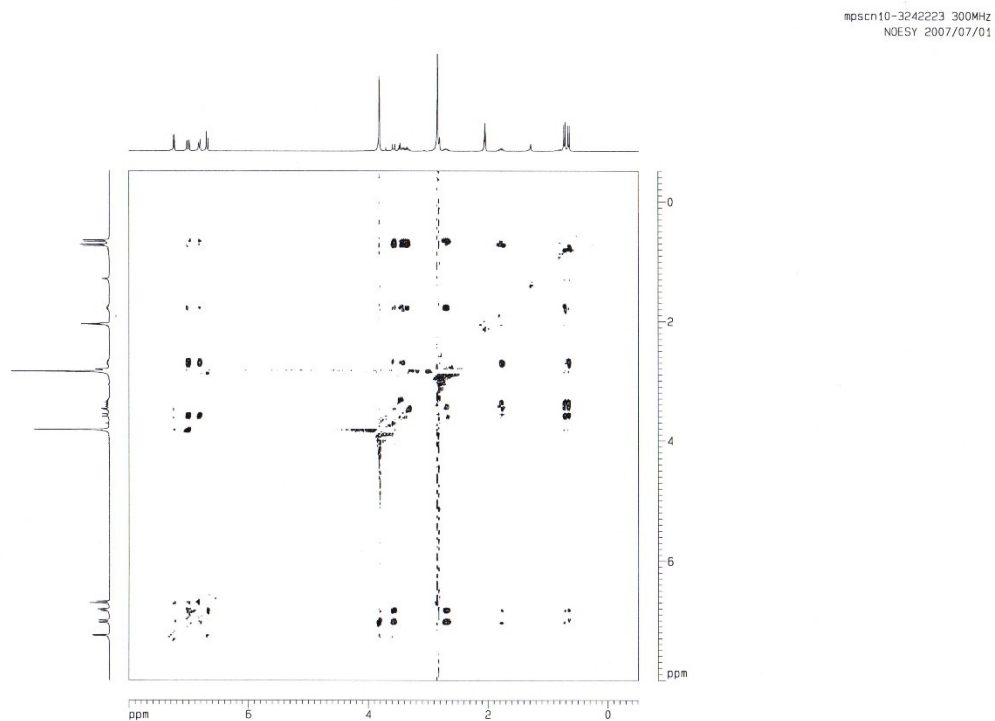
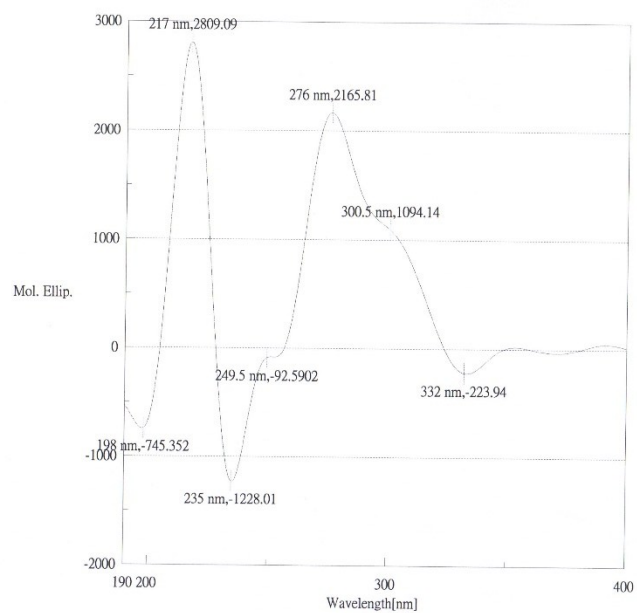


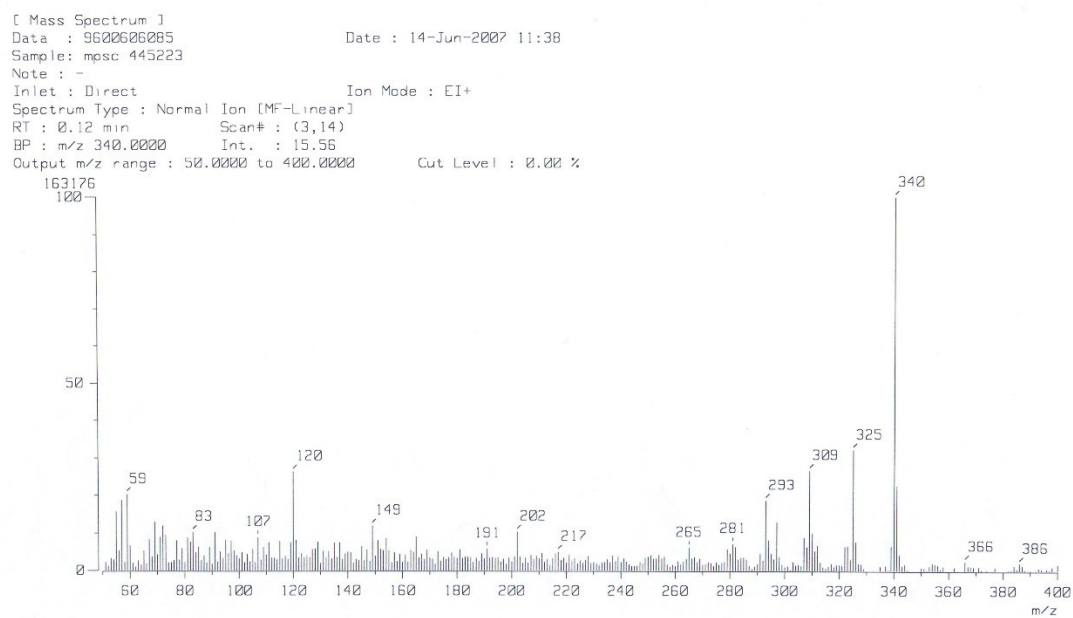
Fig. S39. CD spectra of **4**

mpscn10-3242223



File Name : noname13.jws
 Date : 2007/7/14 5:11 下午 [2006/9/7 8:34 下午]
 Sample : hcwc8632
 Cell Length : 1 cm
 Concentration : 0.0007256 M
 Solvent : MeOH
 Temperature : Room Temp.
 Operator :
 Organization :
 Comment :

Fig. S40. MS/HRMS spectra of **5**



mpsc 445223 ESI+
Molecular Formula: C₂₀H₂₀O₅Na
Exact Mass: 363.1208
Measured Mass: 363.1206

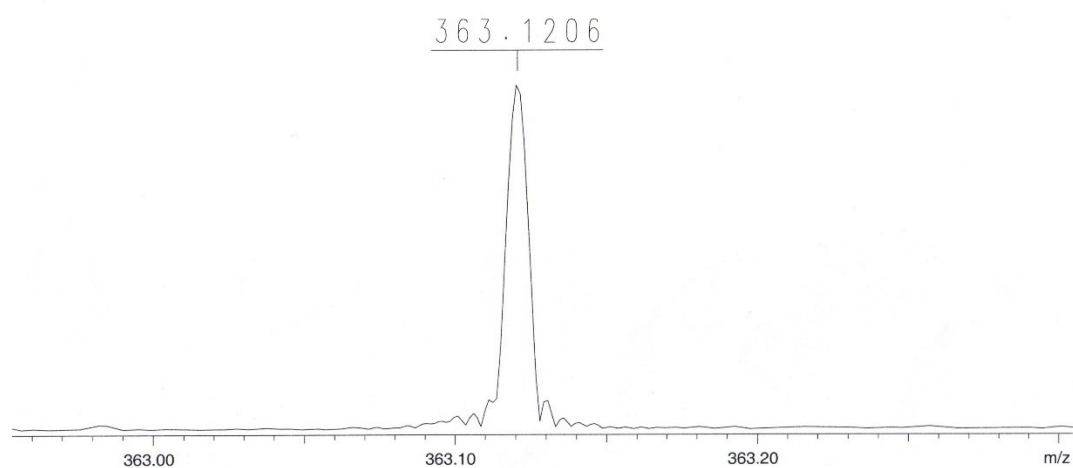


Fig. S41. UV spectrum of **5**

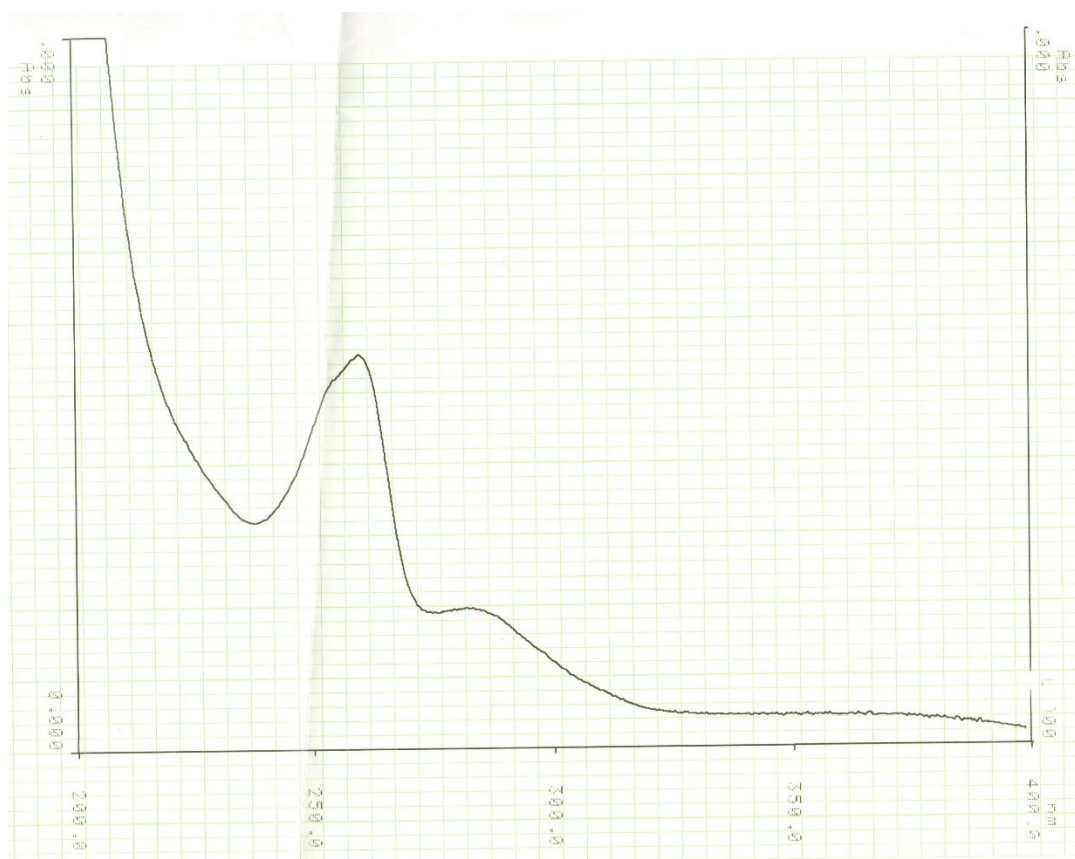


Fig. S42. IR spectrum of **5**

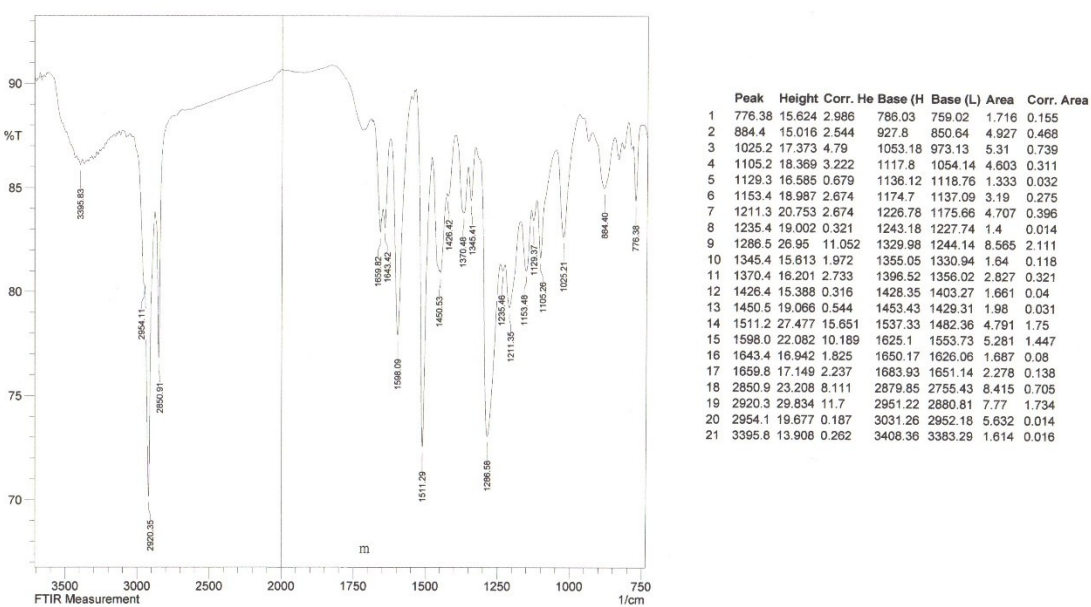


Fig. S43. ^1H NMR spectrum of **5**

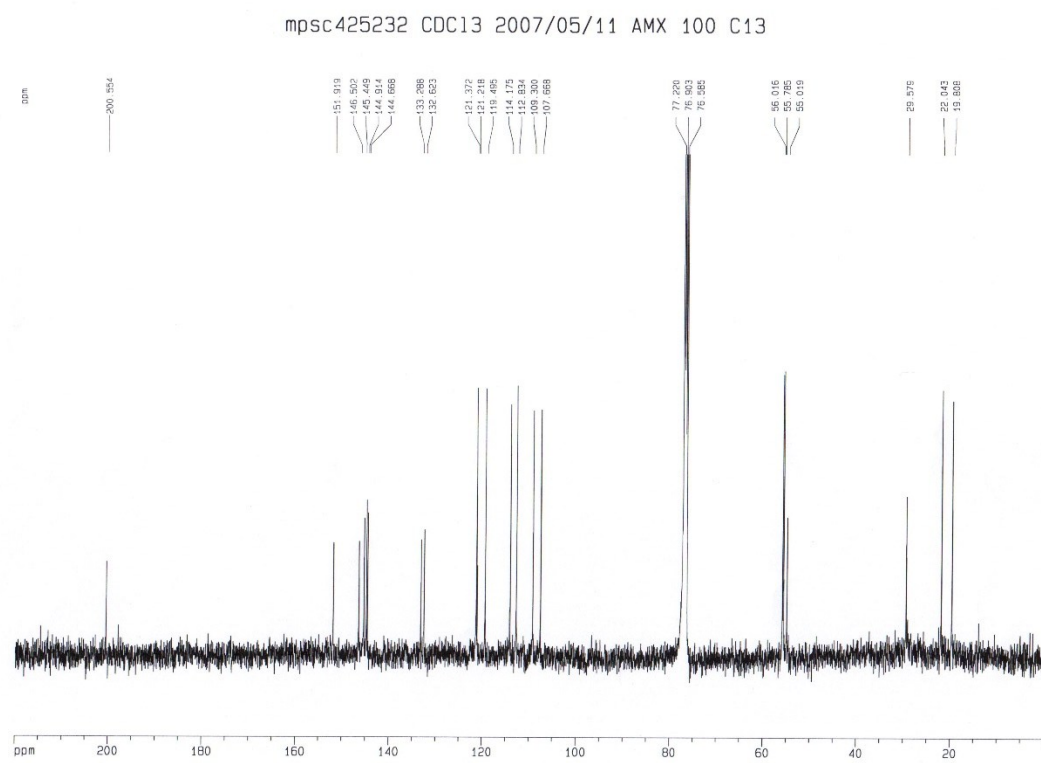


Fig. S45. COSY spectrum of **5**

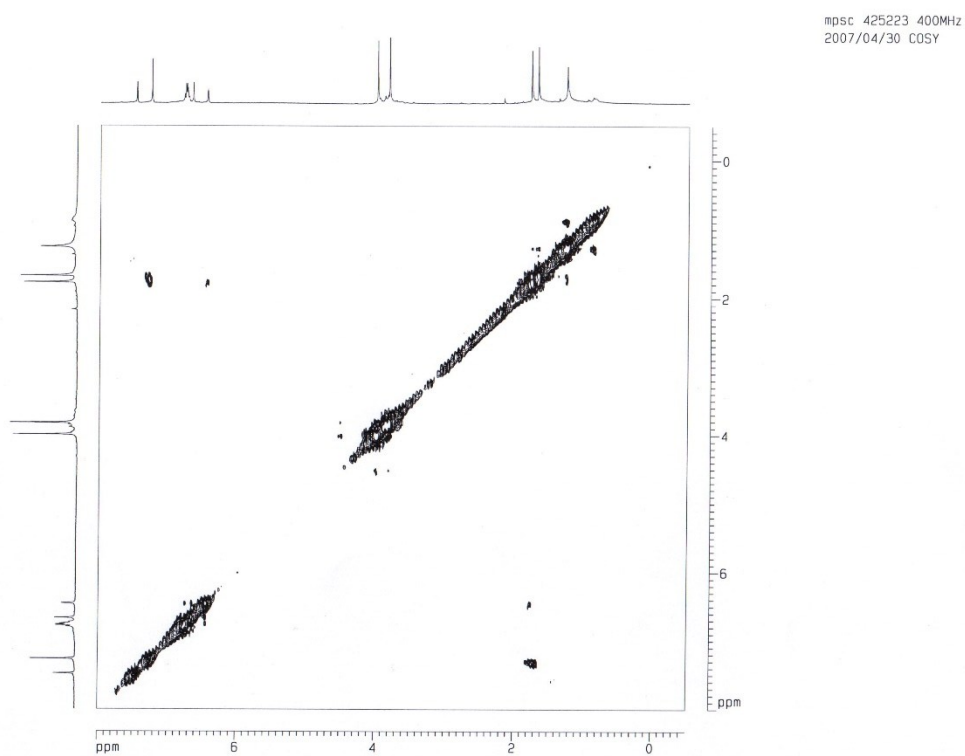


Fig. S46. HMQC spectrum of **5**

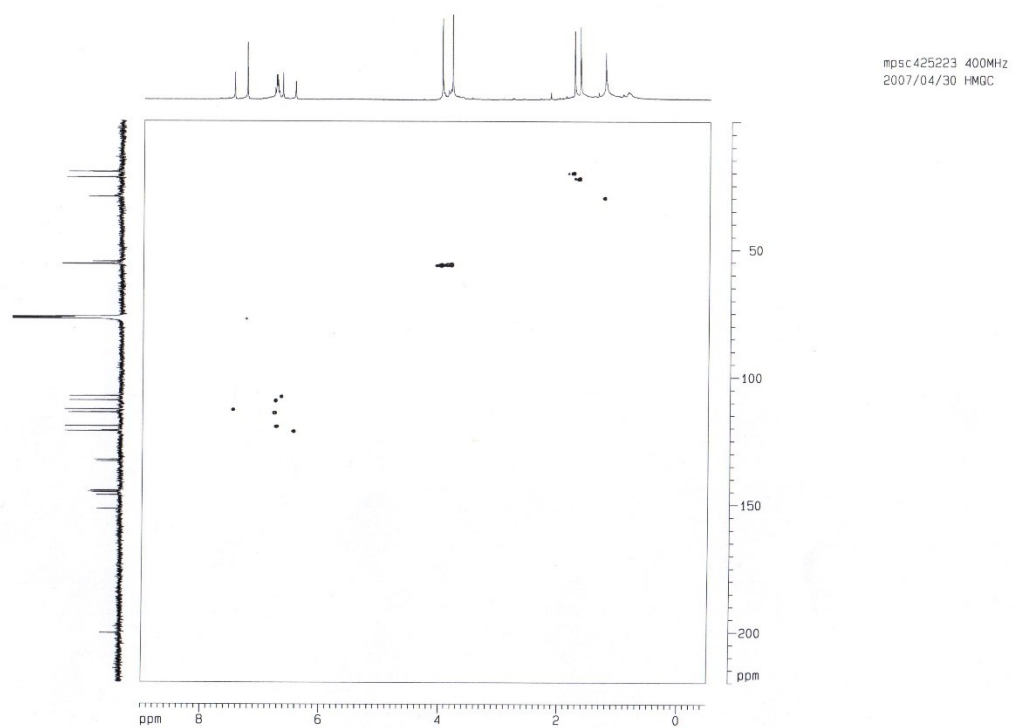


Fig. S47. HMBC spectrum of **5**

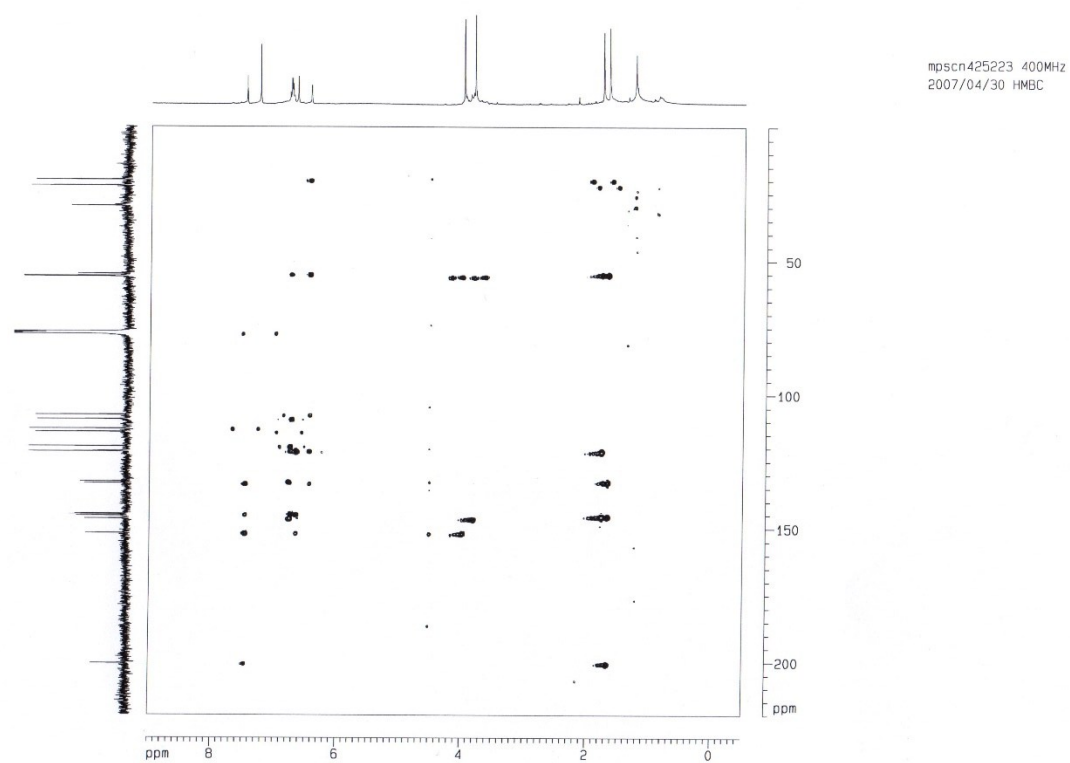


Fig. S48. NOESY spectrum of **5**

mpsc 425223 400MHz
2007/04/30 NDESY

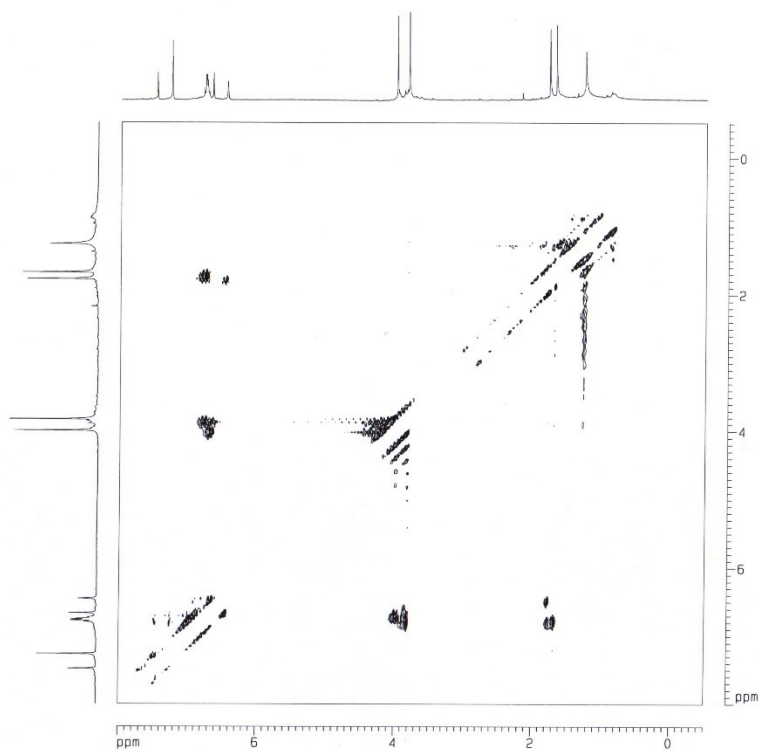


Fig. S49. HRMS spectrum of **6**

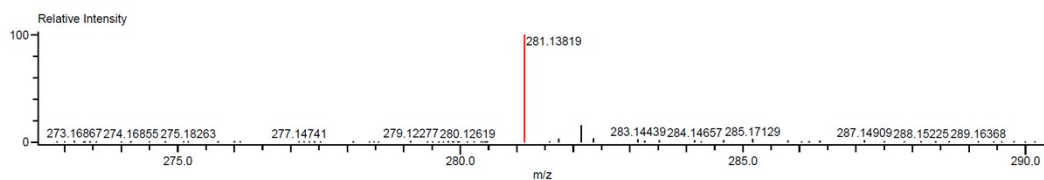
Data:Kuo_VL_05-Profile
Comment:
Description:
Ionization Mode:ESI-
History:Centroid[Peak Detect[Centroid,30,Area]]:Average(MS[1] 0.69..0.76)

Charge number:1
Element:¹²C:15 .. 15, ¹H:21 .. 21, ¹⁶O:5 .. 5

Tolerance:5.00[mDa]

Acquired:2019/1/23 下午 03:15:55
Operator:AccuTOF
m/z Calibration File:20181211-TFANa_ESI-_1000
Created:2019/1/23 下午 10:14:09
Created by:Edward

Unsaturation Number:-1.5 .. 20.0 (Fraction:Both)



Mass	Intensity	Calc. Mass	Mass Difference [mDa]	Mass Difference [ppm]	Possible Formula	Unsaturation Number
281.13819	3131846.17	281.13890	-0.71	-2.53	¹² C ₁₅ ¹ H ₂₁ ¹⁶ O ₅	5.5

Fig. S50. UV spectrum of **6**

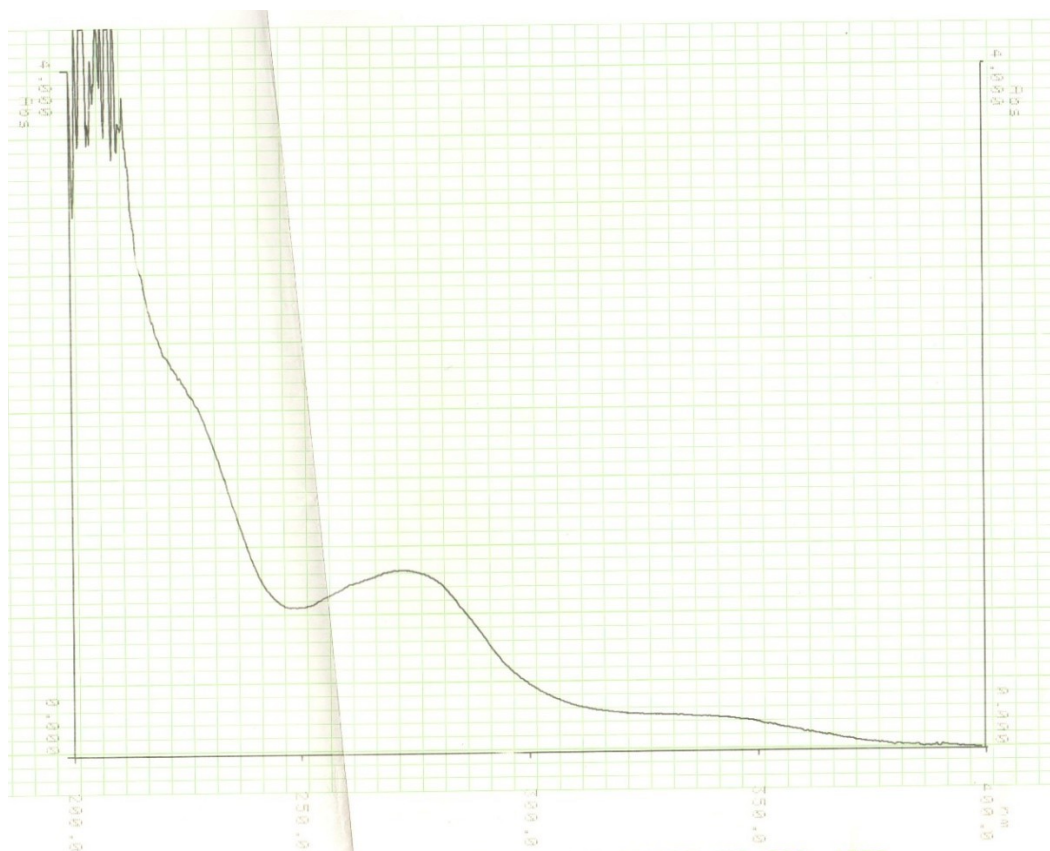


Fig. S51. IR spectrum of **6**

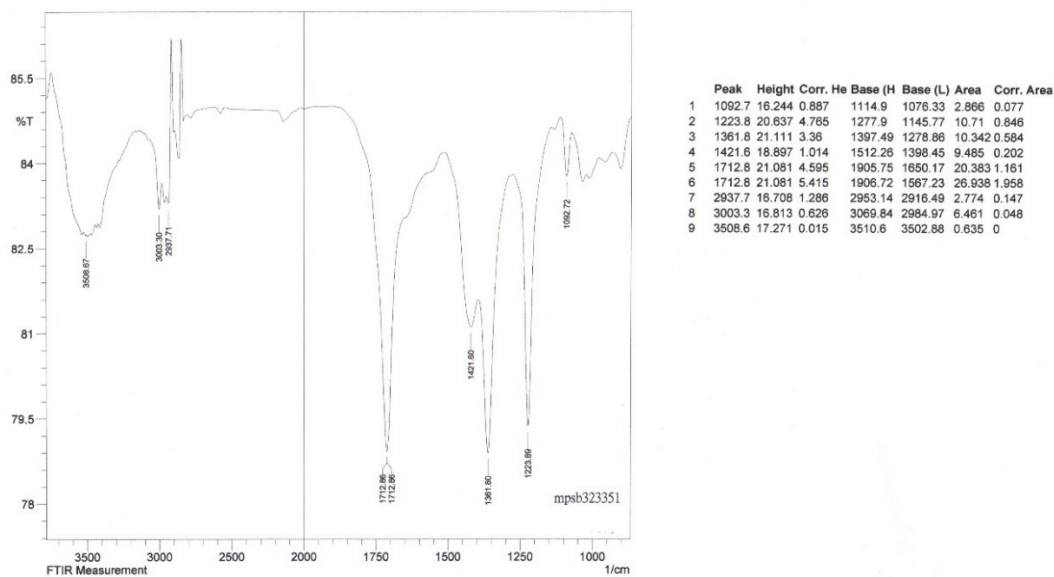


Fig. S52. ^1H NMR spectrum of **6**

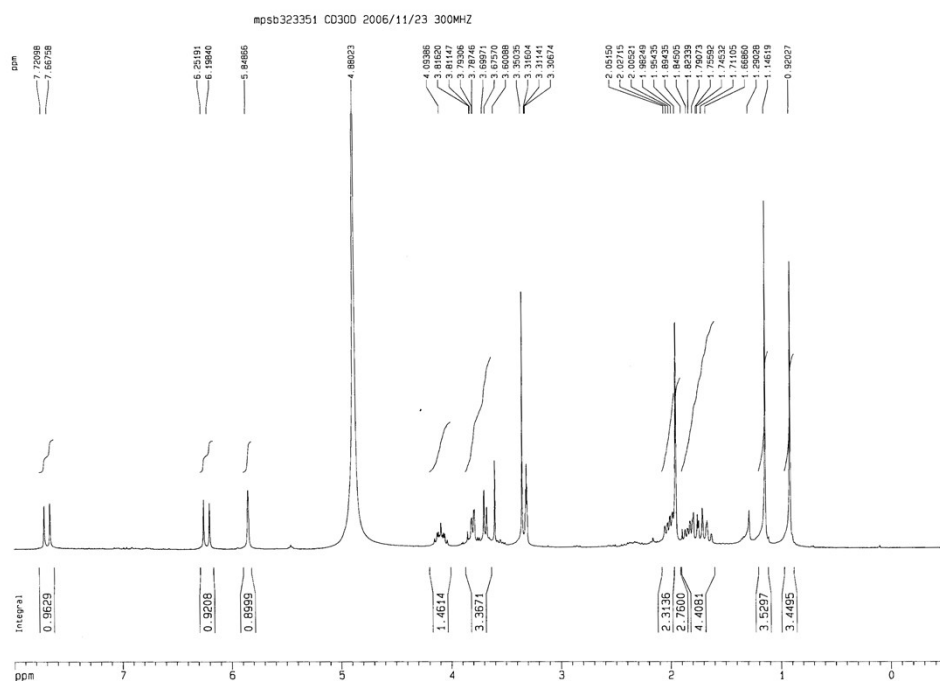


Fig. S53. ^{13}C NMR spectrum of **6**

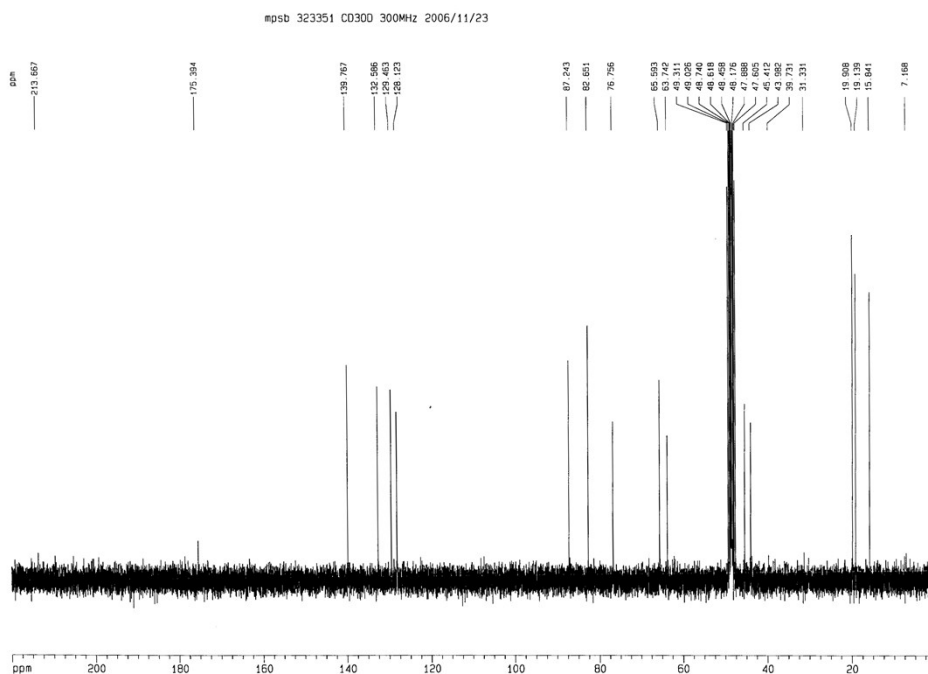


Fig. S54. COSY spectrum of **6**

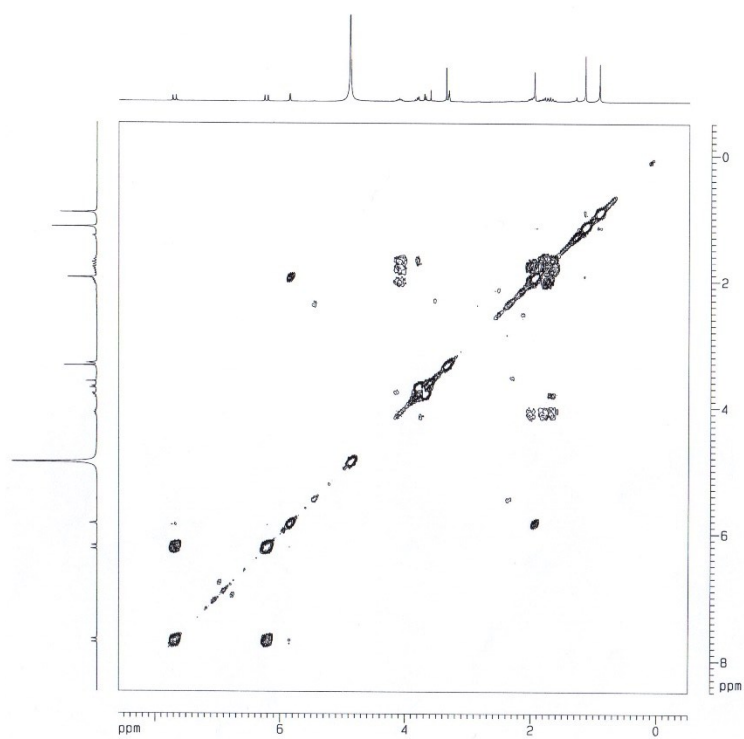


Fig. S55. HMQC spectrum of **6**

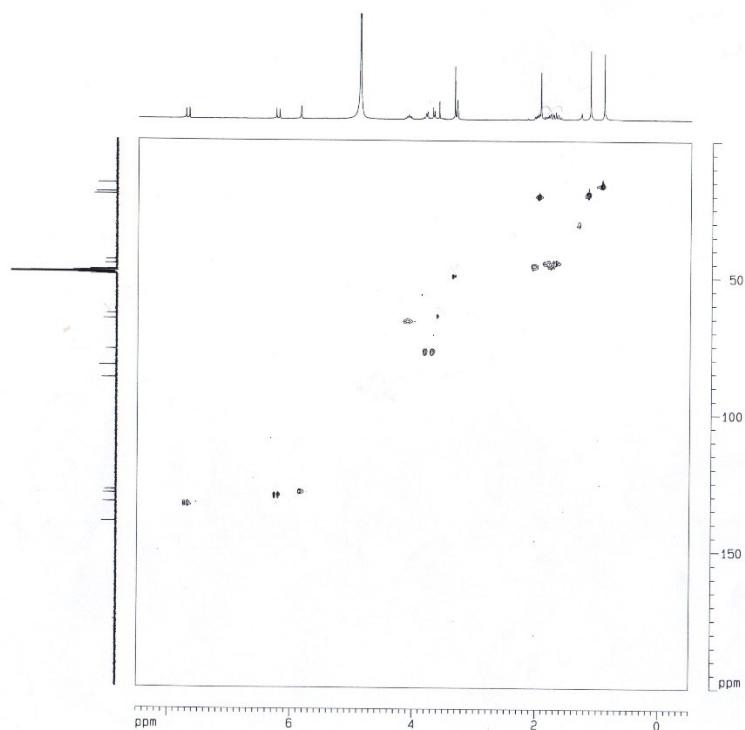


Fig. S56. HMBC spectrum of **6**

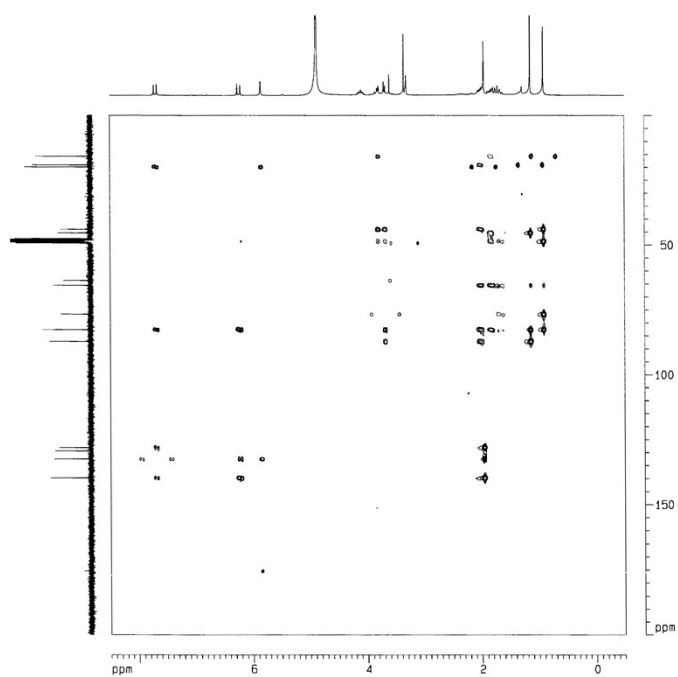


Fig. S57. NOESY spectrum of **6**

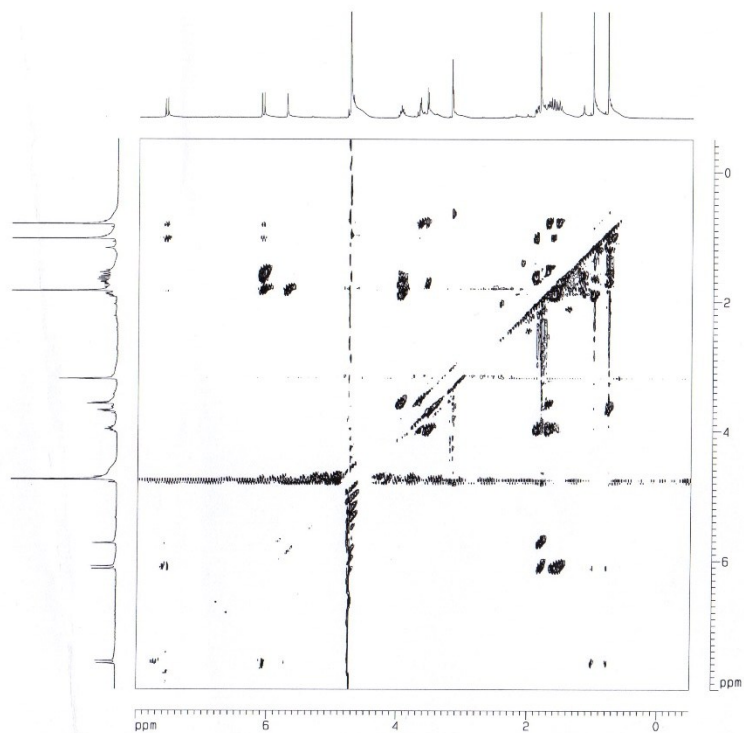


Fig. S58. ¹H NMR spectrum of **6** after acidification

mpsb 323351 after acidification CD3OD 2019/01/17 500MHz

