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จุฬาลงกรณ์มหาวิทยาลัย





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จุฬาลงกรณ์มหาวิทยาลัย

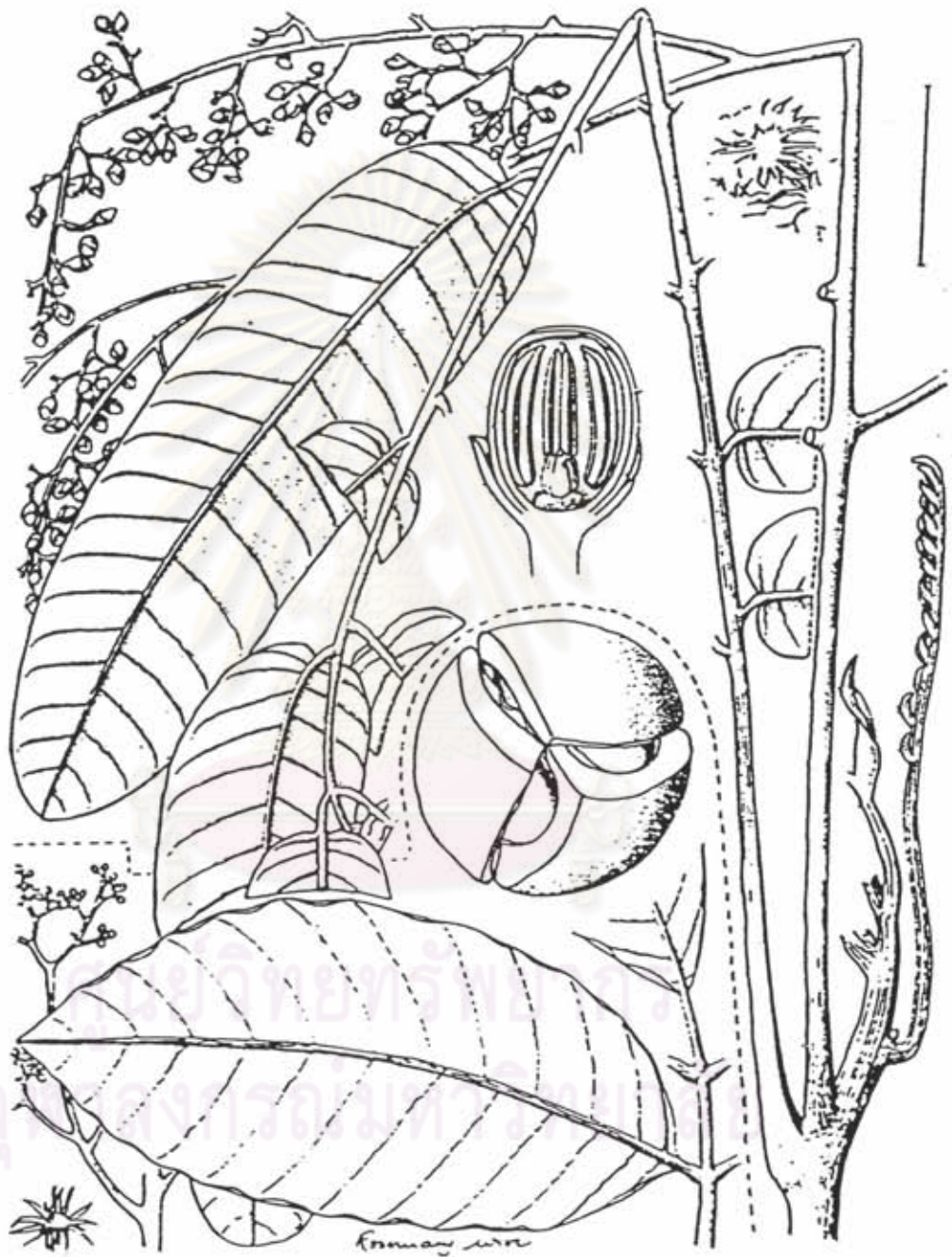


FIG. 2 *Aglaia* A (top) *A. rubiginosa* apex of twig with leaf and inflorescence (scale = 5 cm); half-flower (scale = 4 mm); stellate scale (scale = 3.5 mm). B (bottom) *A. sp. 2*: leaf apex, leaflet, part of inflorescence and fruit (scale = 5 cm); stellate scale (scale = 3 mm).

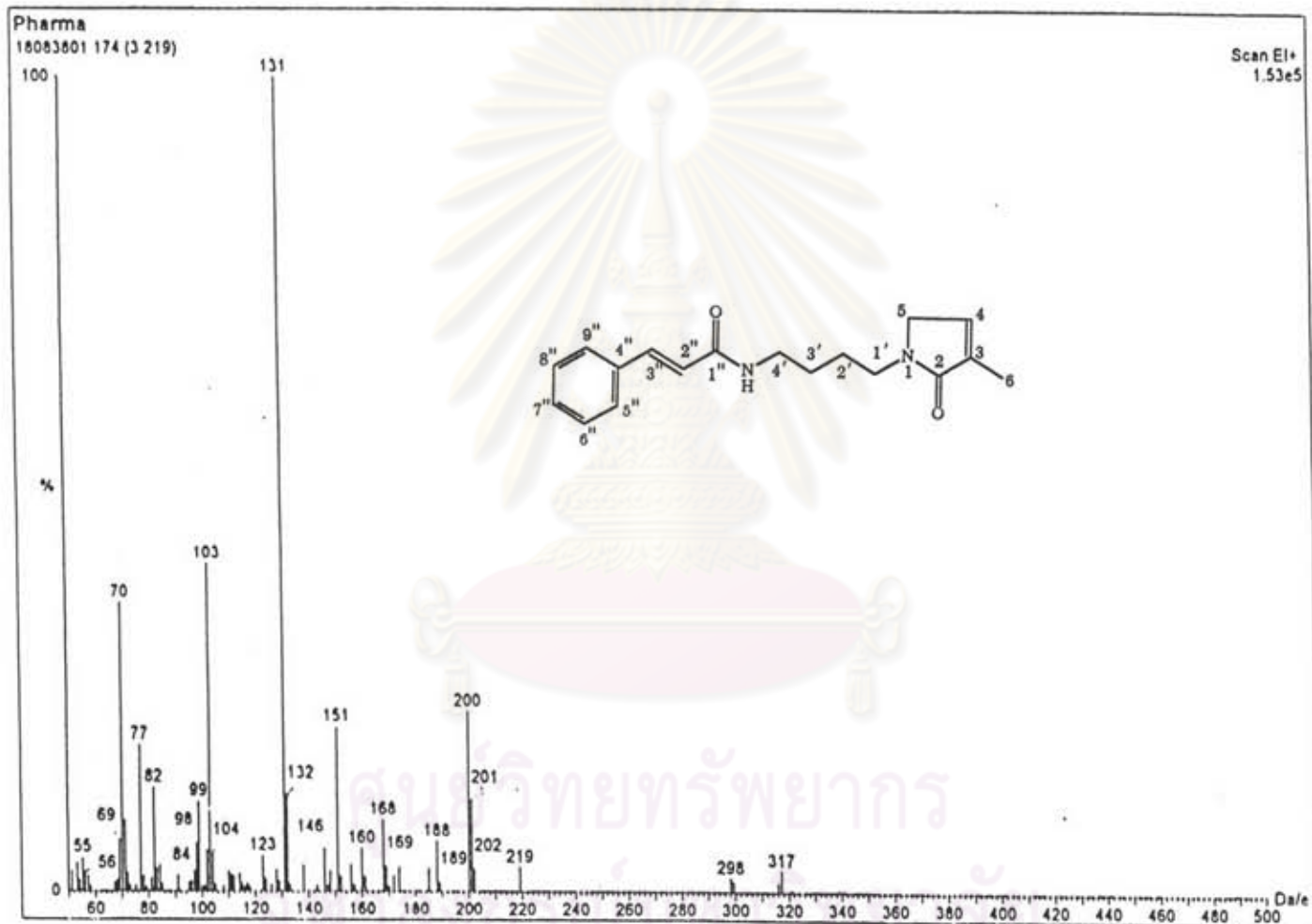
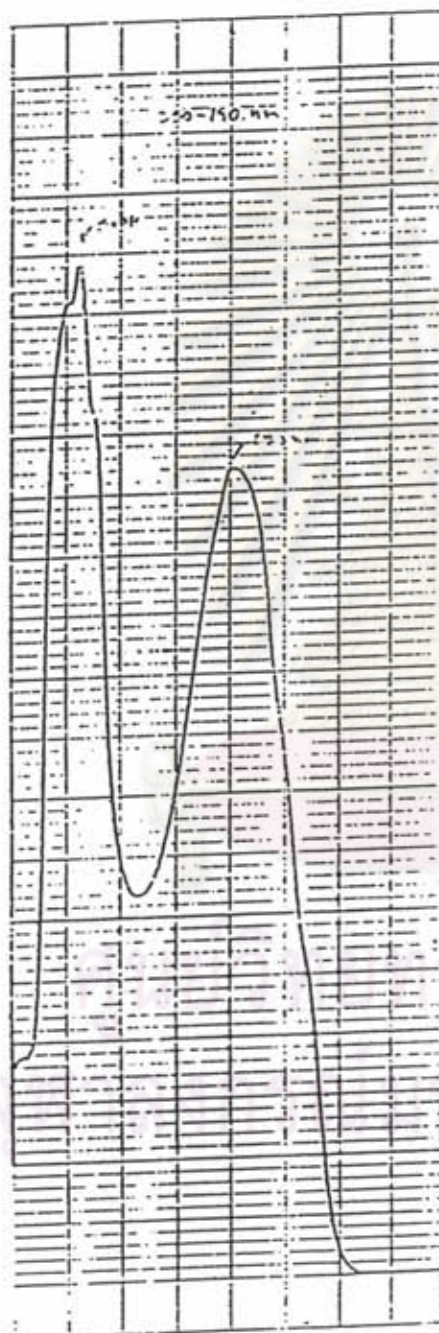


Fig.3 EIMS spectrum of NAT01





RESPONSE: 1sec  
 SLIT : 2.0nm  
 SCALE : 1.00  
 : 0.00  
 MODE : ABS  
 SCAN SPEED : 60nm/min  
 CHART FORMAT : 20nm/cm

275.0 nm	0.6706ABS
274.0 nm	0.6719ABS
*273.0 nm	0.6729ABS
272.0 nm	0.6727ABS
270.0 nm	0.6646ABS
275.0 nm	0.6701ABS
271.0 nm	0.6692ABS

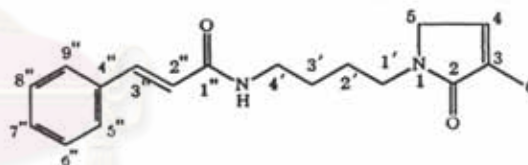


Fig.4 UV spectrum of NAT01(in methanol)

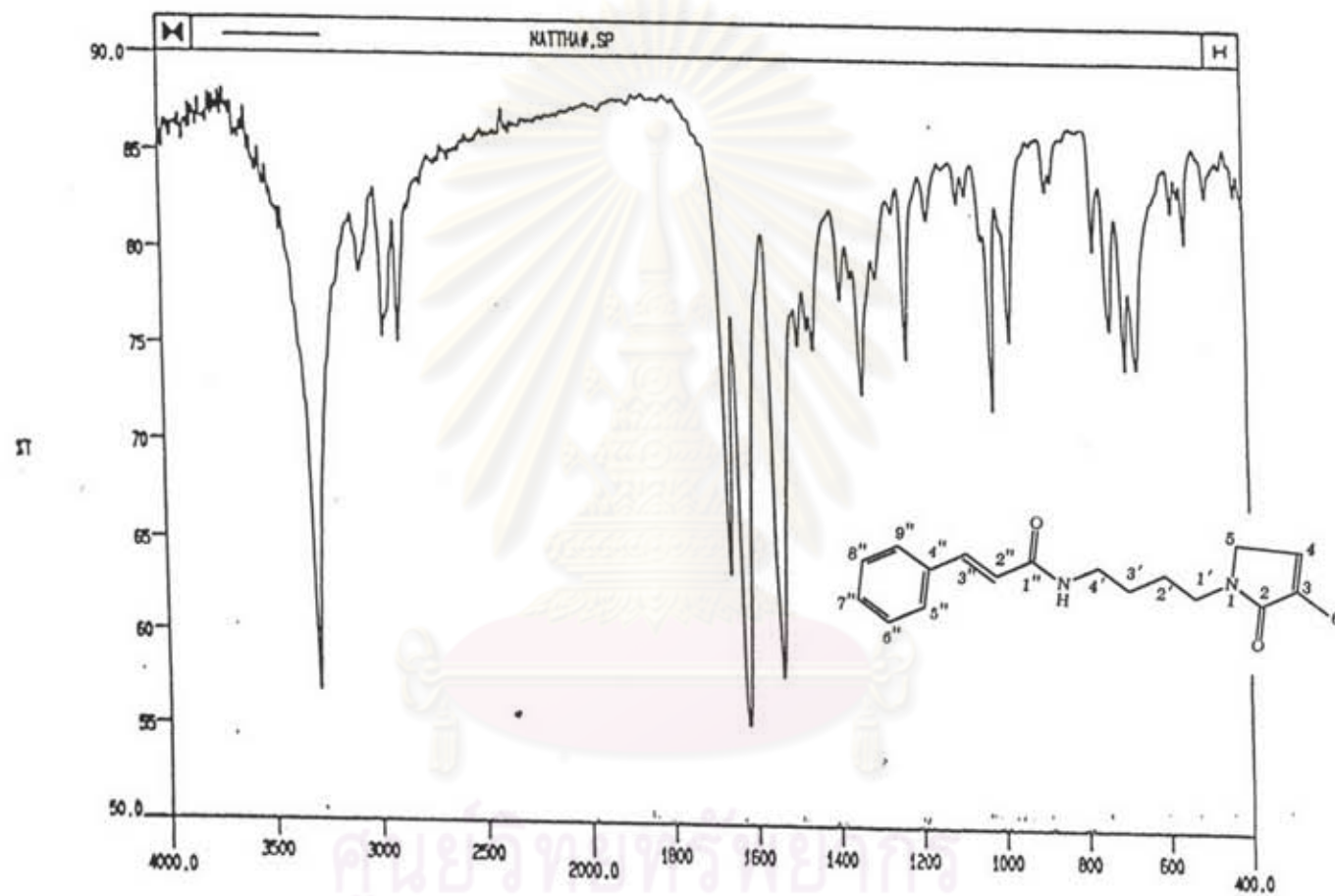


Fig.5 IR spectrum of NAT01(KBr disc)

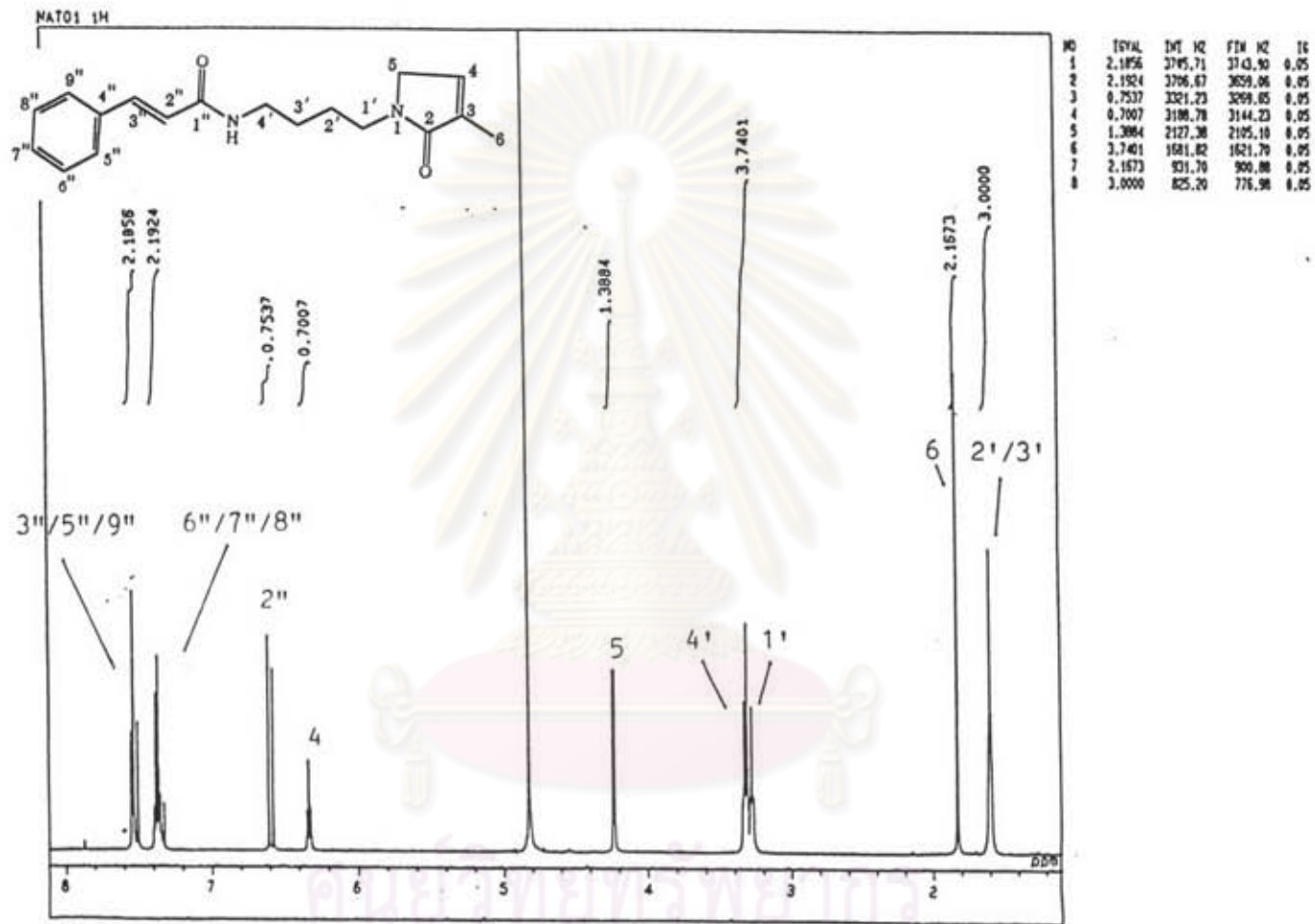


Fig.6 The 500 MHz  $^1\text{H}$  NMR spectrum of NAT01(in  $\text{CD}_3\text{OD}$ )



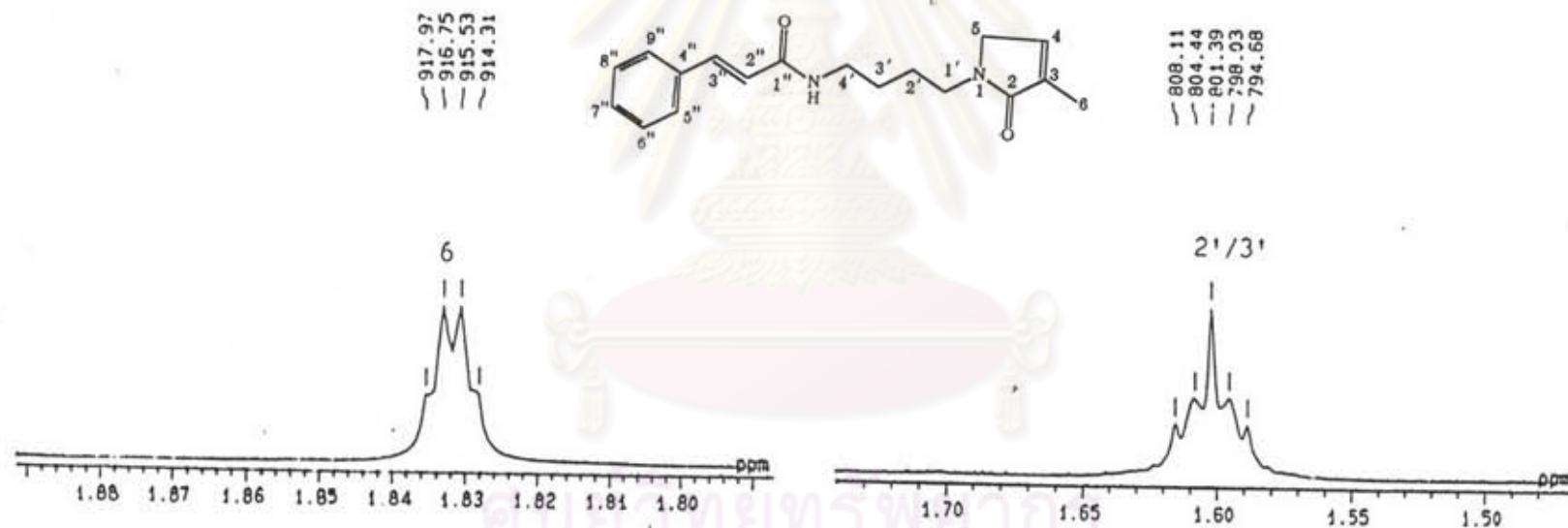


Fig.7 Expansions of the 500 MHz  $^1\text{H}$  NMR spectrum of NAT01(in  $\text{CD}_3\text{OD}$ )

NAT01 1H

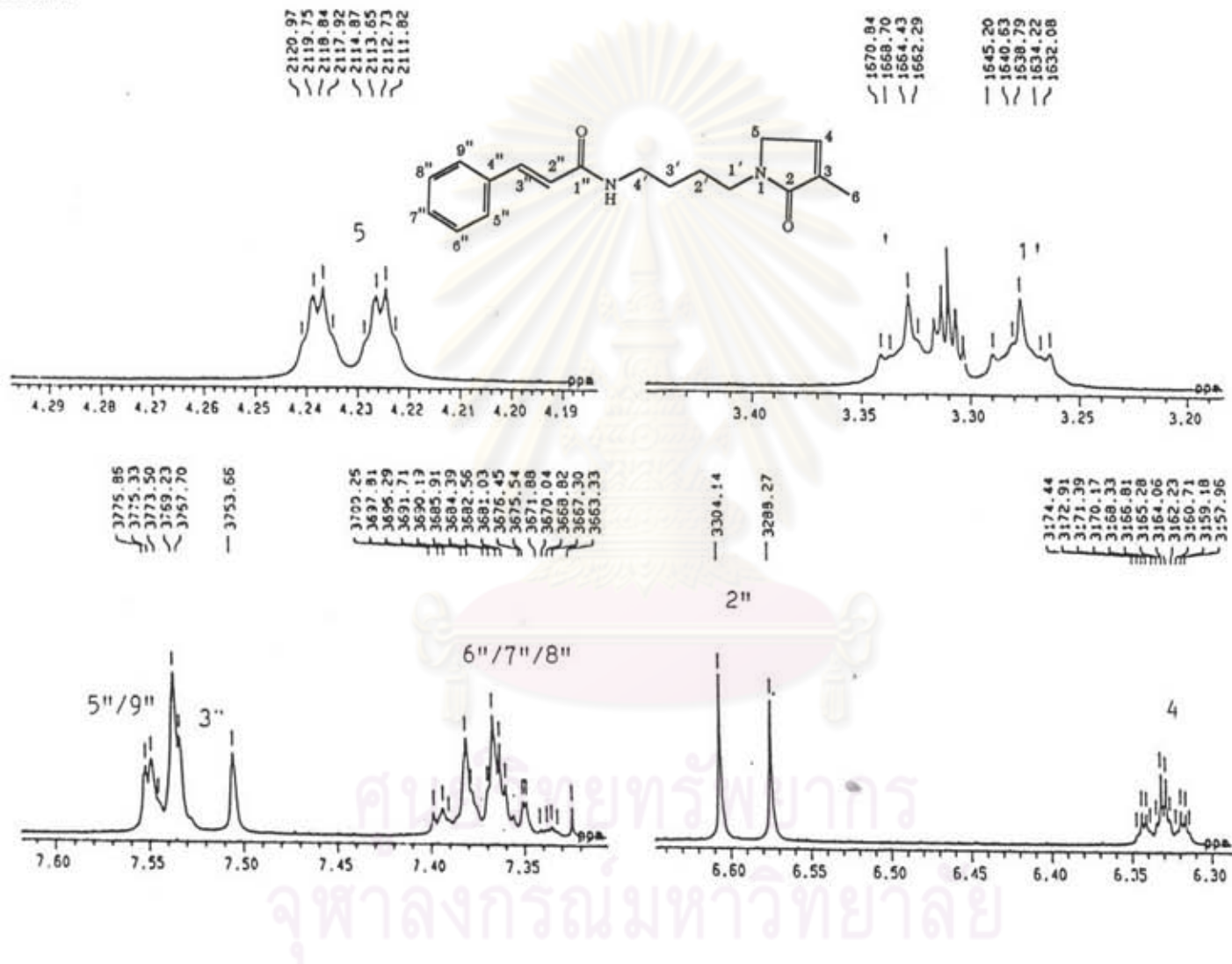
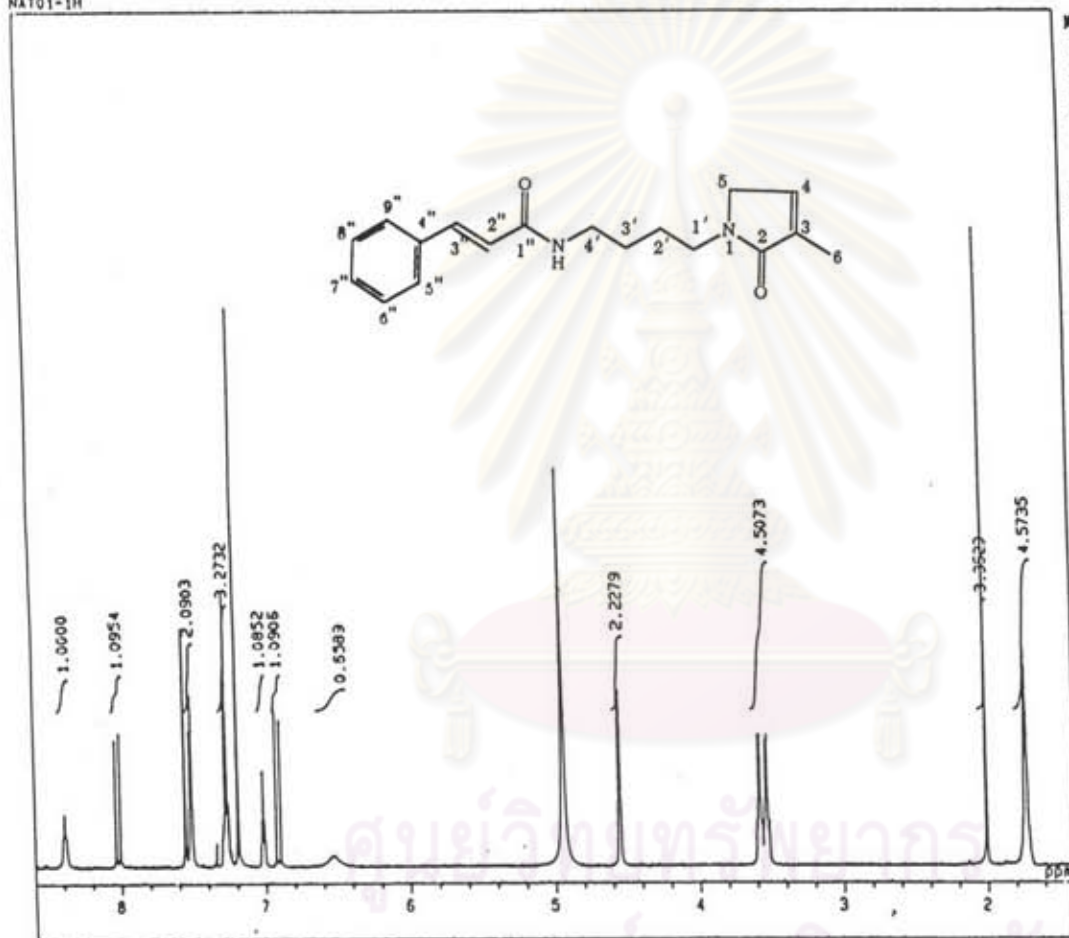


Fig.8 Expansions of the 500 MHz  $^1\text{H}$  NMR spectrum of NAT01(in  $\text{CD}_3\text{OD}$ )

NAT01-1H



NO	TECH	1H PPM	13C PPM	IC
1	1.0000	8.44	8.34	0.05
2	1.0954	8.06	7.97	0.05
3	2.0903	7.54	7.47	0.05
4	3.2732	7.32	7.22	0.05
5	1.0852	7.84	6.98	0.05
6	1.0906	6.94	6.87	0.05
7	0.5383	6.63	6.42	0.05
8	2.2279	4.59	4.50	0.05
9	4.5073	3.63	3.48	0.05
10	3.3523	2.05	1.97	0.05
11	4.5735	1.80	1.67	0.05

Fig.9 The 500 MHz <sup>1</sup>H NMR spectrum of NAT01(in C<sub>5</sub>D<sub>5</sub>N)



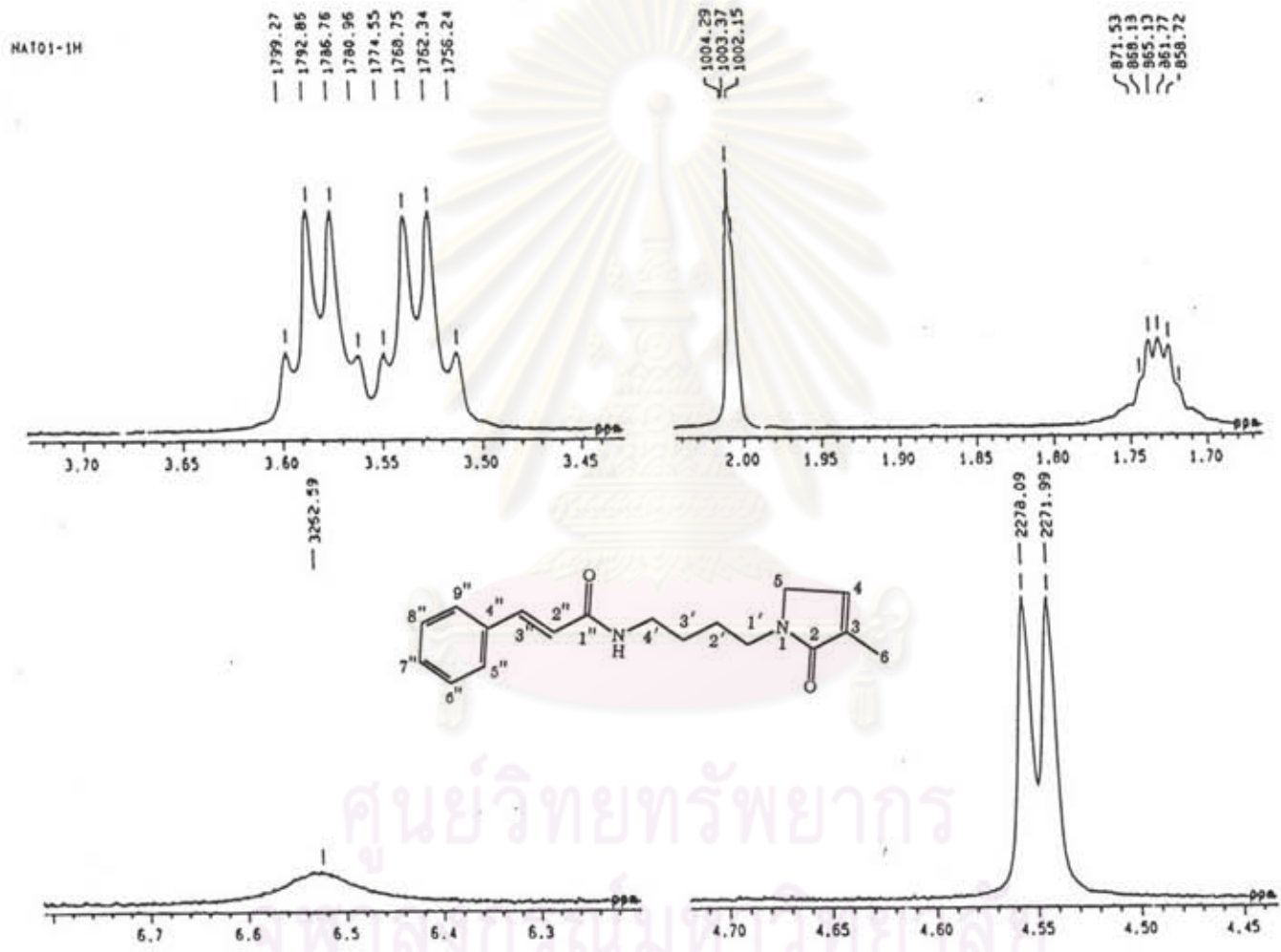


Fig.10 Expansions of the 500 MHz  $^1\text{H}$  NMR spectrum of NAT01(in  $\text{C}_5\text{D}_5\text{N}$ )

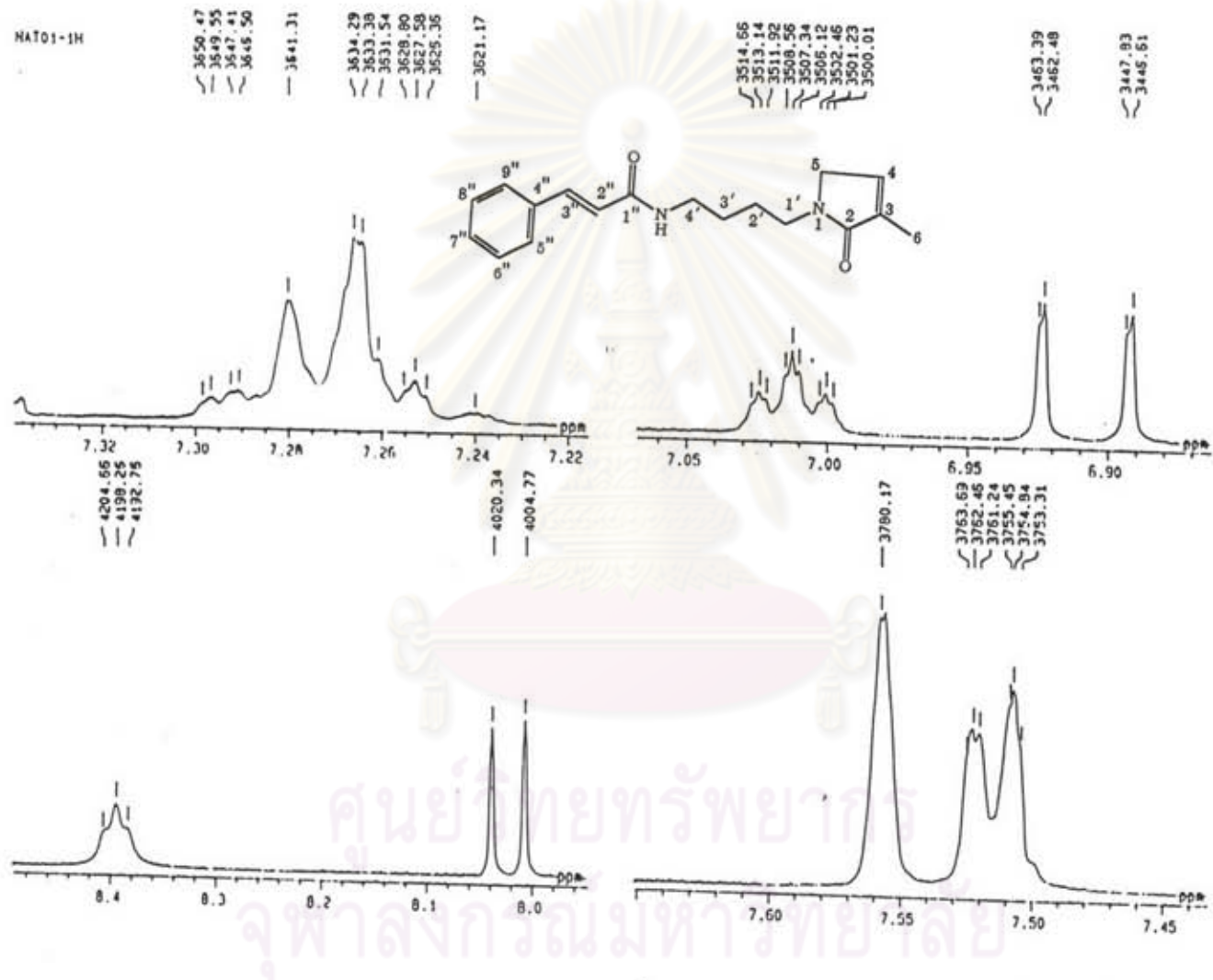


Fig.11 Expansions of the 500 MHz  $^1\text{H}$  NMR spectrum of NAT01 (in  $\text{C}_5\text{D}_5\text{N}$ )





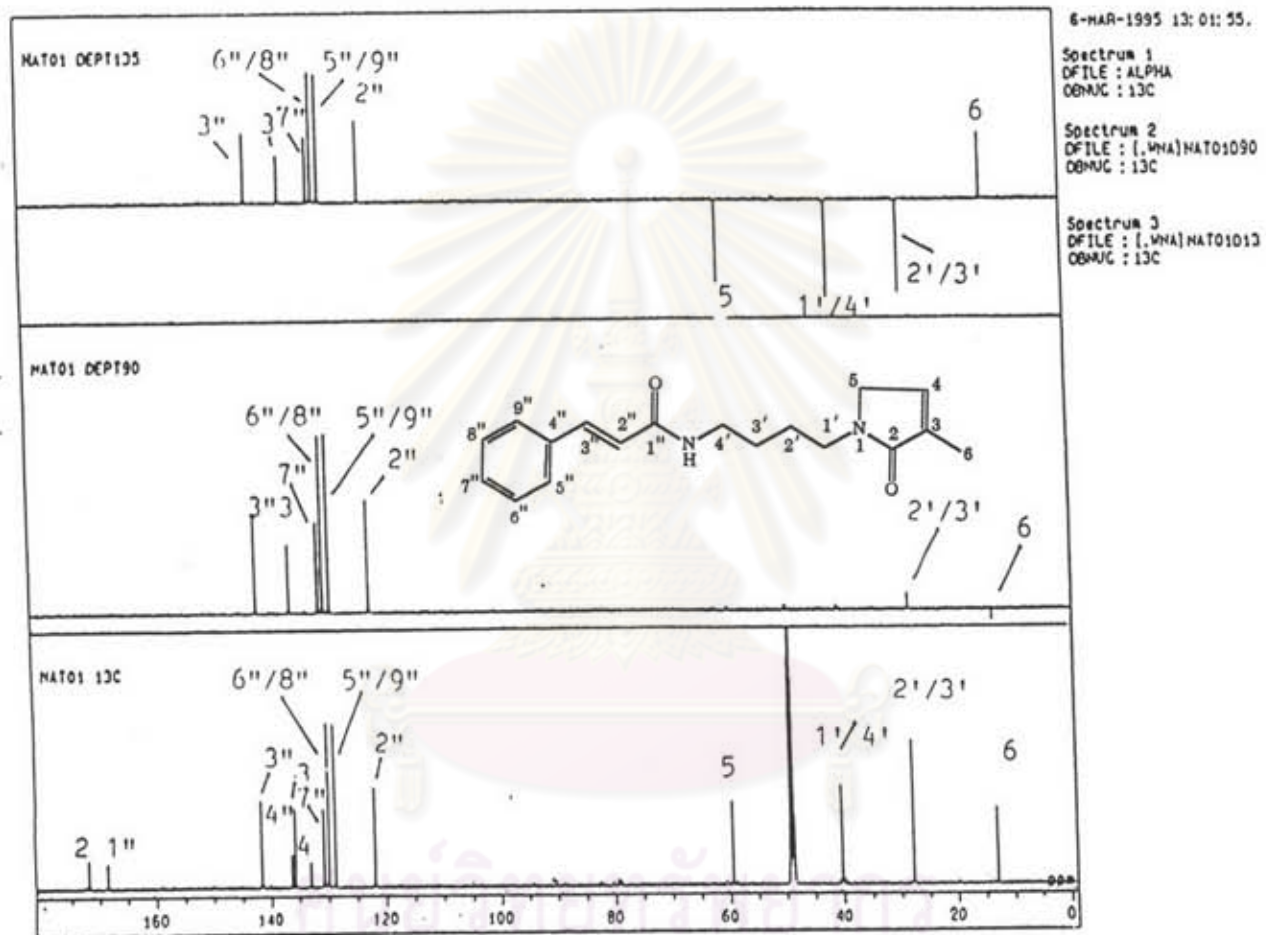


Fig.13 The 125 MHz  $^{13}\text{C}$ -DEPT NMR spectrum of NAT01(in  $\text{CD}_3\text{OD}$ )

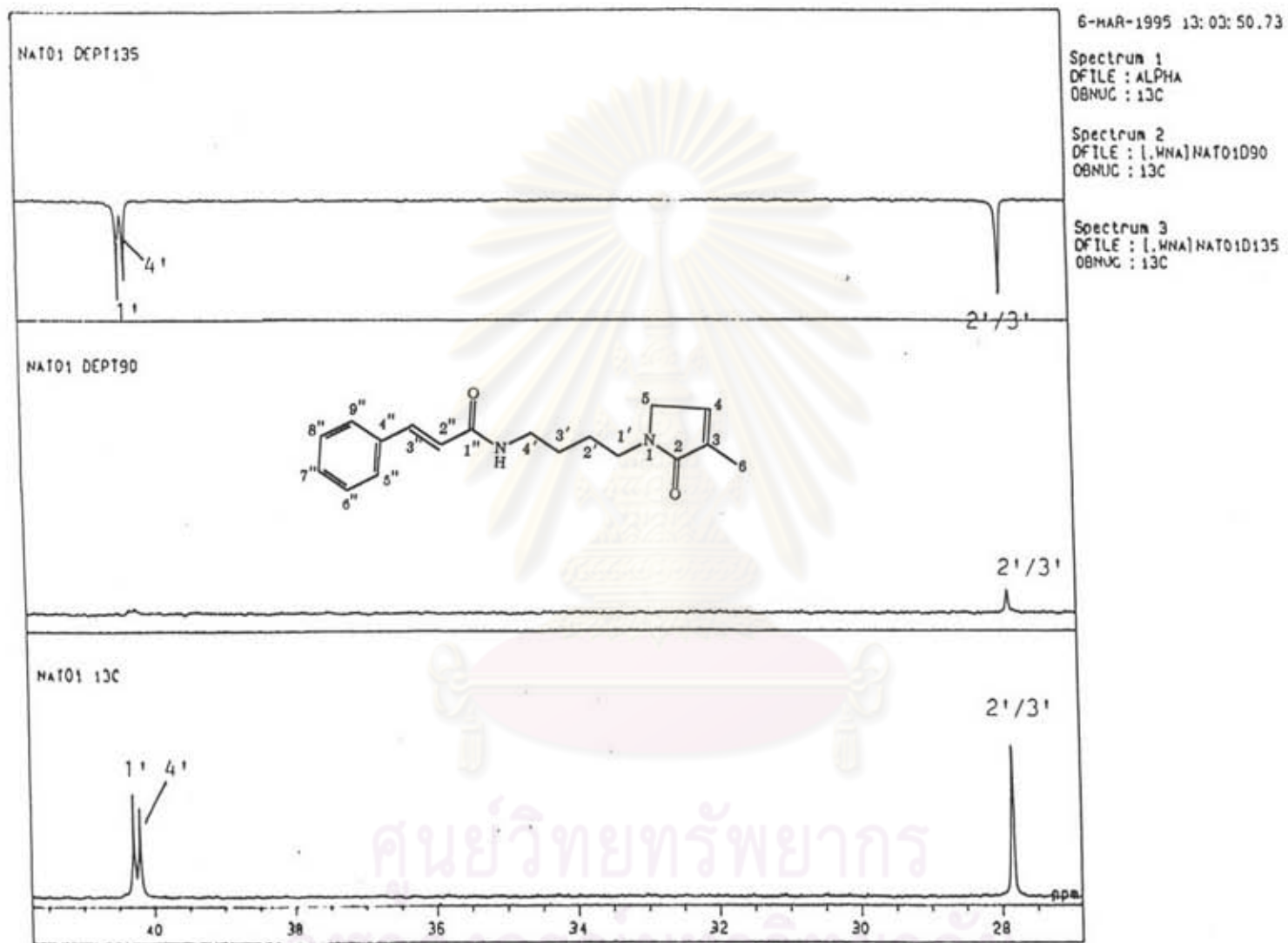
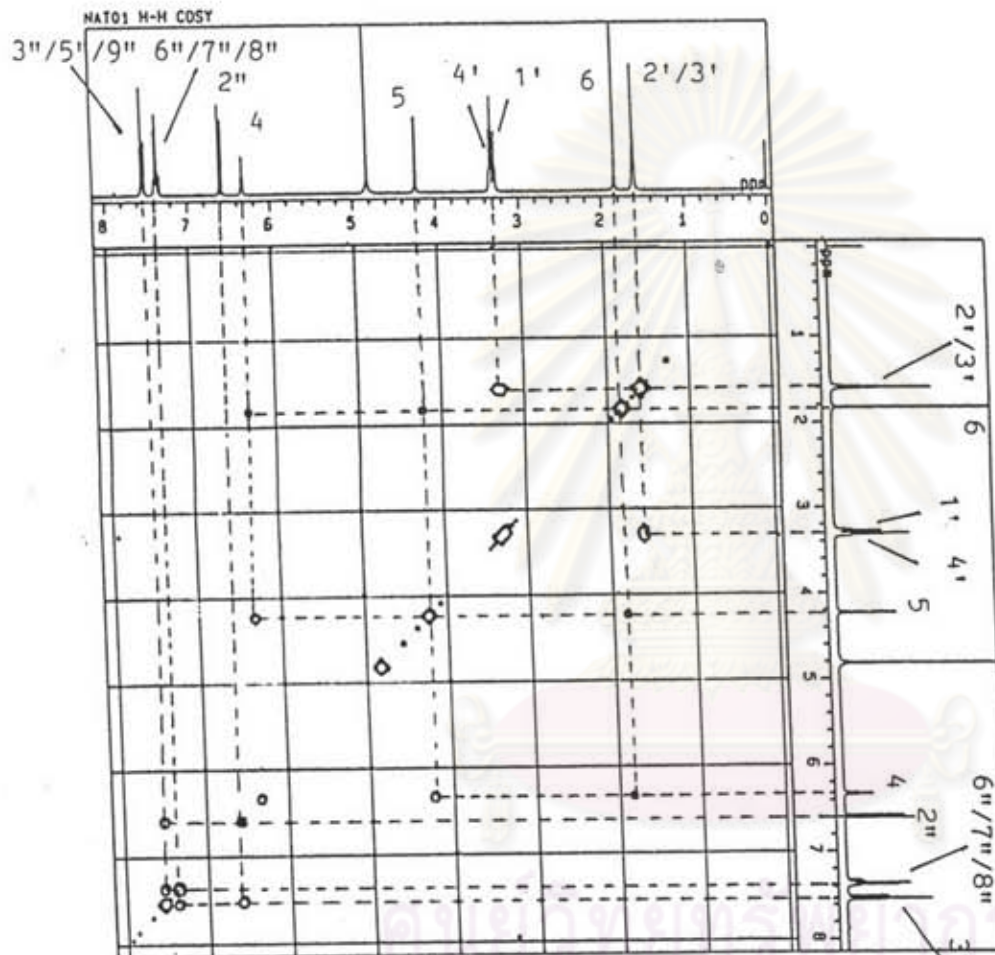


Fig.14 Expansion of the 125 MHz  $^{13}\text{C}$ -DEPT NMR spectrum of NAT01(in  $\text{CD}_3\text{OD}$ )



6-MAR-1995 13:27:05.54

DFILE : ALPHA  
SF FILE : [.MNA]NAT01COSY

CUMNT : NAT01 H-H COSY  
EXMOD : COSY  
IRMOD : NOM  
POINT : 512  
FREQU : 4110.15 Hz  
SCANS : 16  
DUMMY : 4  
ACQTM : 0.1246 sec  
PD : 1.5000 sec  
RGAIN : 18

CLFRQ : 4110.15 Hz  
CLPNT : 512  
TOSCM : 256  
CINMT : 10.00 usec  
CINTV : 243.30 usec

PM1 : 11.00 usec  
PM2 : 22.00 usec  
P11 : 1000.0000 msec  
P12 : 1.0000 msec

OBNUC : 1H  
OBFRQ : 500.00 MHz  
OBSSET : 161932.71 Hz

IRNUC : 1H  
IRFRQ : 500.00 MHz  
IRSET : 162410.00 Hz  
IRATN : 120  
IRRPW : 50.0 usec  
IRBP1 : 25  
IRBP2 : 6  
IRANS : 0

ADBIT : 16  
CTEMP : 29.4 c  
CSPED : 13 Hz  
SLVNT : CD300

RESOL : 8.03 Hz  
CLRSO : 8.03 Hz  
TLINE : 4  
THTOP : 15.0000  
THBTM : 2.0000  
operator

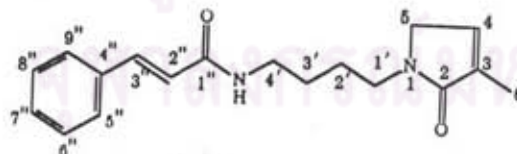


Fig.15 The 500 MHz  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of NAT01(in  $\text{CD}_3\text{OD}$ )



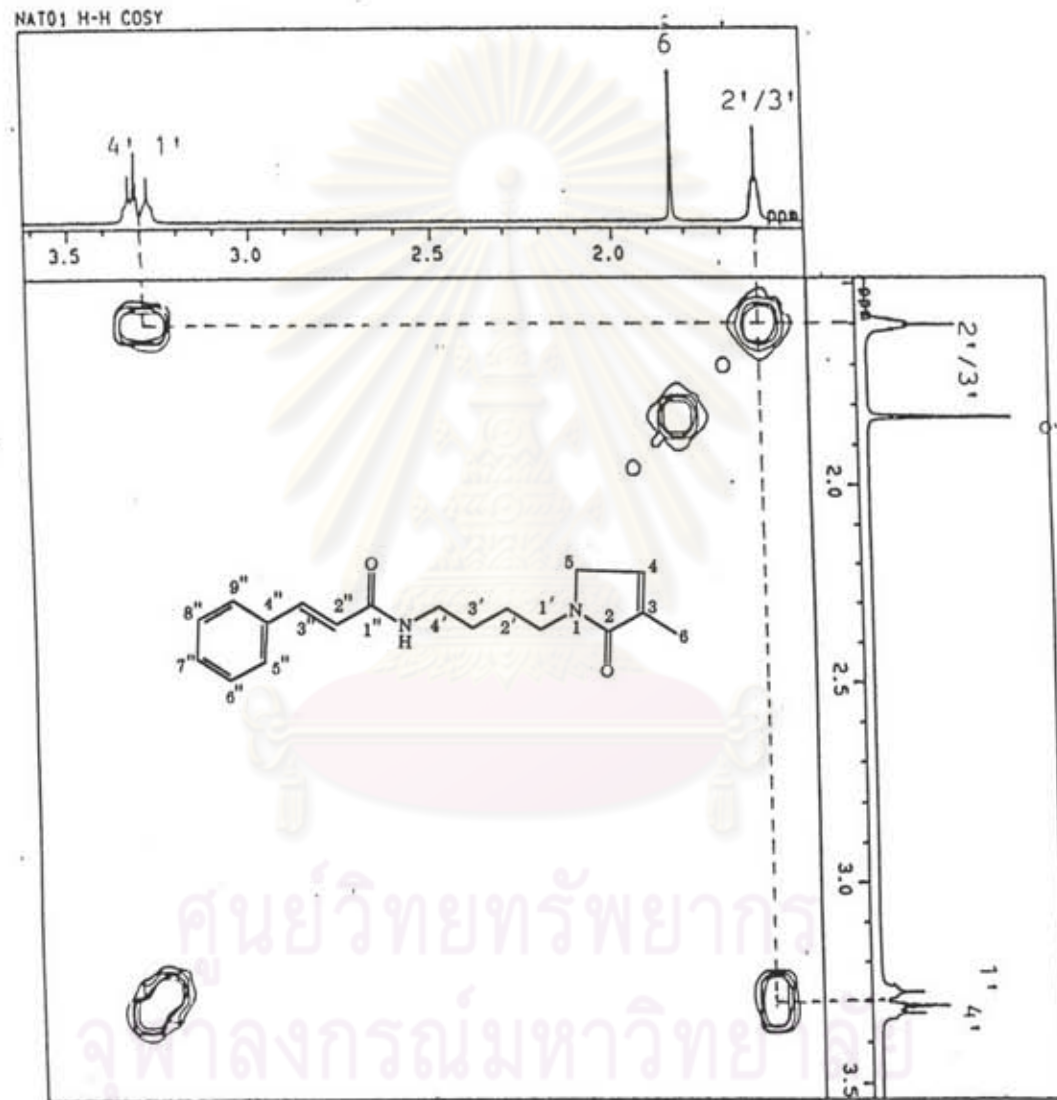
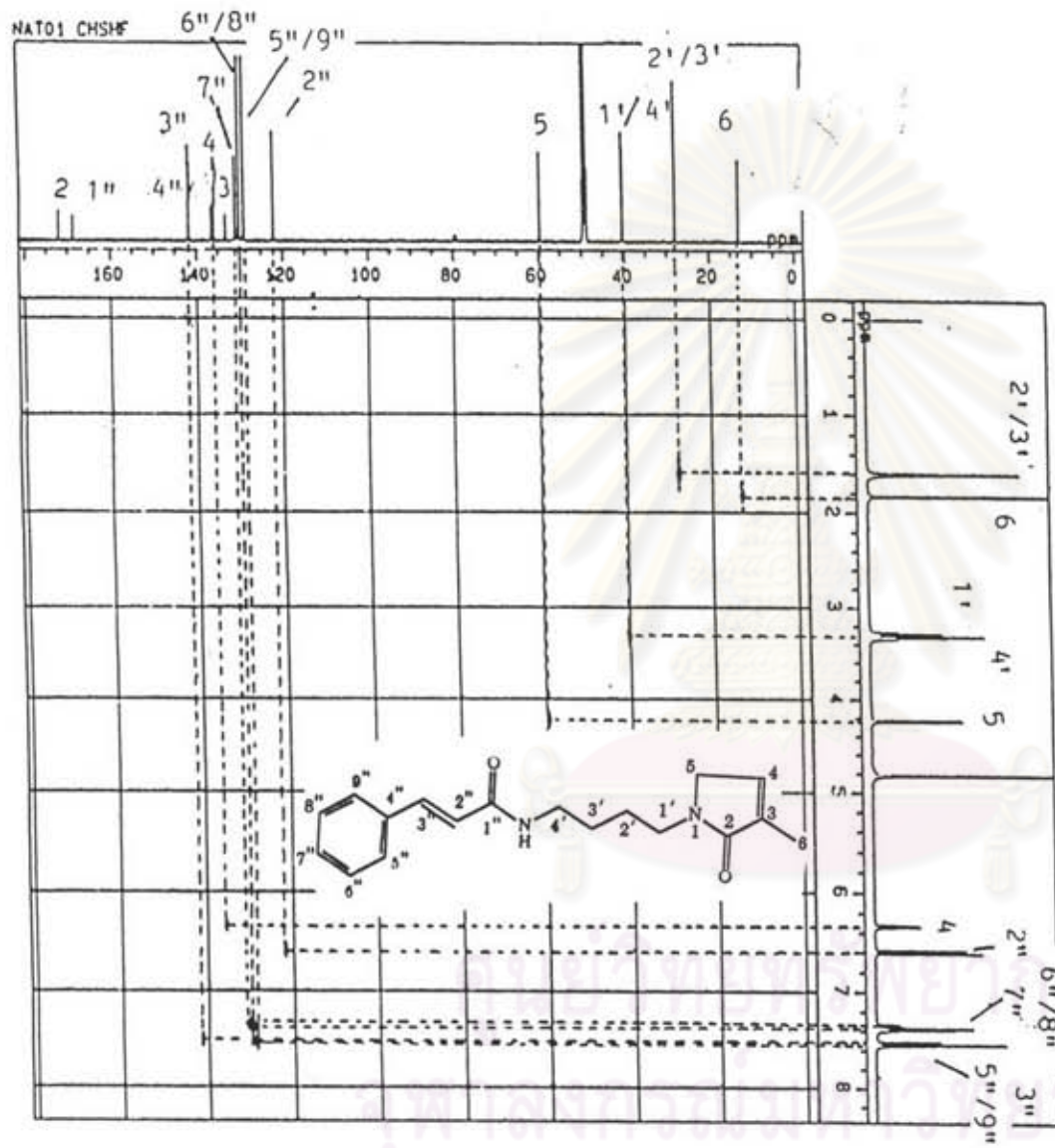


Fig.16 Expansions of the 500 MHz  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of NAT01(in  $\text{CD}_3\text{OD}$ )



6-MAR-1995 14:02:46.59

DFILE : ALPHA  
SFILE : (.MNA)NAT01CHSHF

COMNT : NAT01 CHSHF  
EXMUD : CHSHF  
IRMOD : IRLV2  
PUNIT : 1024  
FREQU : 23094.69 Hz  
SCANS : 64  
DUMMY : 4  
ACQTM : 0.0443 sec  
PD : 2.0000 sec  
RGAIN : 23

CLFRQ : 4288.16 Hz  
CLPNT : 1024  
TOSCN : 256  
CINT1 : 10.00 usec  
CINT2 : 116.60 usec

PW1 : 9.50 usec  
PW3 : 11.00 usec  
P11 : 1000.0000 msec  
P13 : 5.7260 msec  
JCNST : 145.00 Hz

OBNJC : 13C  
OHFRQ : 125.65 MHz  
OBSF : 126404.19 Hz

IRAJC : 1H  
IRAFQ : 500.00 MHz  
IRASET : 161952.24 Hz  
IRATN : 120  
IRAPW : 50.0 usec  
IRBP1 : 25  
IRBP2 : 6  
IRHNS : 0

AOBIT : 16  
CTEMP : 30.5 c  
CSPED : 13 Hz  
SLVNT : CD300

RESOL : 22.55 Hz  
CLASO : 4.19 Hz  
TLINE : 4  
THTOP : 25.0000  
THBTM : 14.0000  
operator

Fig.17 The 500 MHz  $^1\text{H}$ - $^{13}\text{C}$  CHSHF spectrum of NAT01(in  $\text{CD}_3\text{OD}$ )

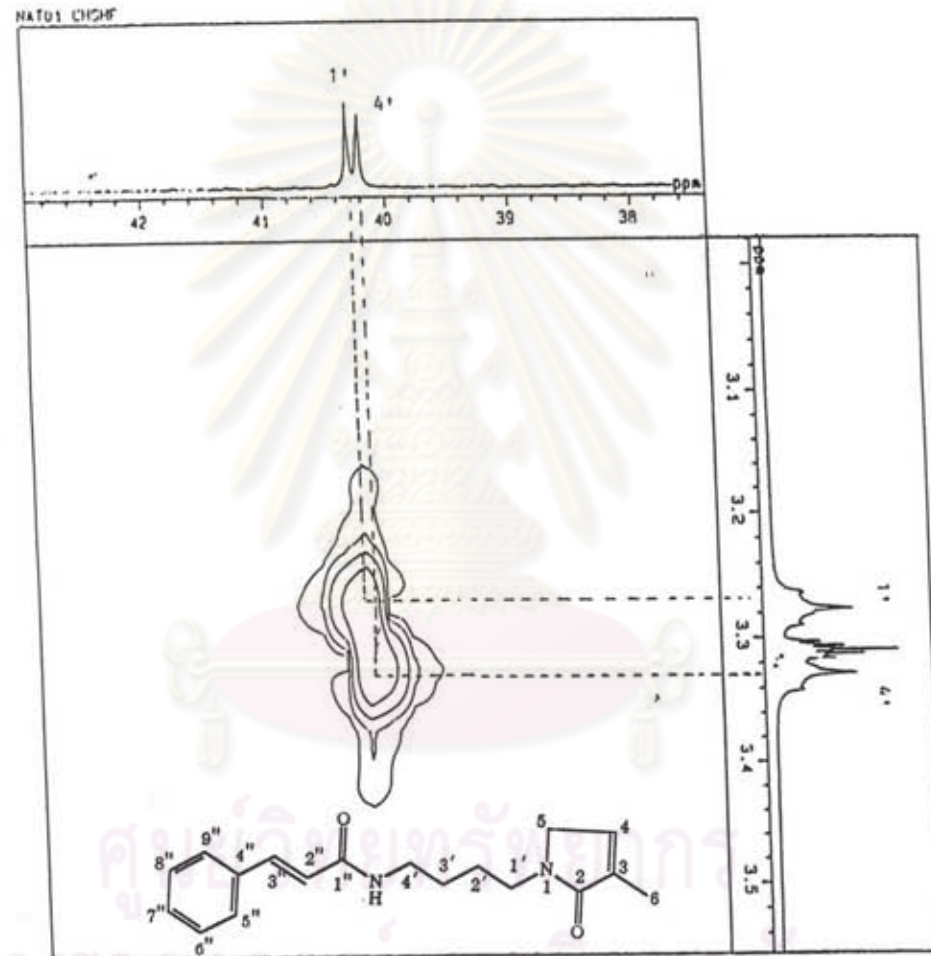


Fig.18 Expansion of the 500 MHz  $^1\text{H}$ - $^{13}\text{C}$  CHSHF spectrum of NAT01(in  $\text{CD}_3\text{OD}$ )





Fig.19 Expansion of the 500 MHz  $^1\text{H}$ - $^{13}\text{C}$  CHSHF spectrum of NAT01 (in  $\text{CD}_3\text{OD}$ )

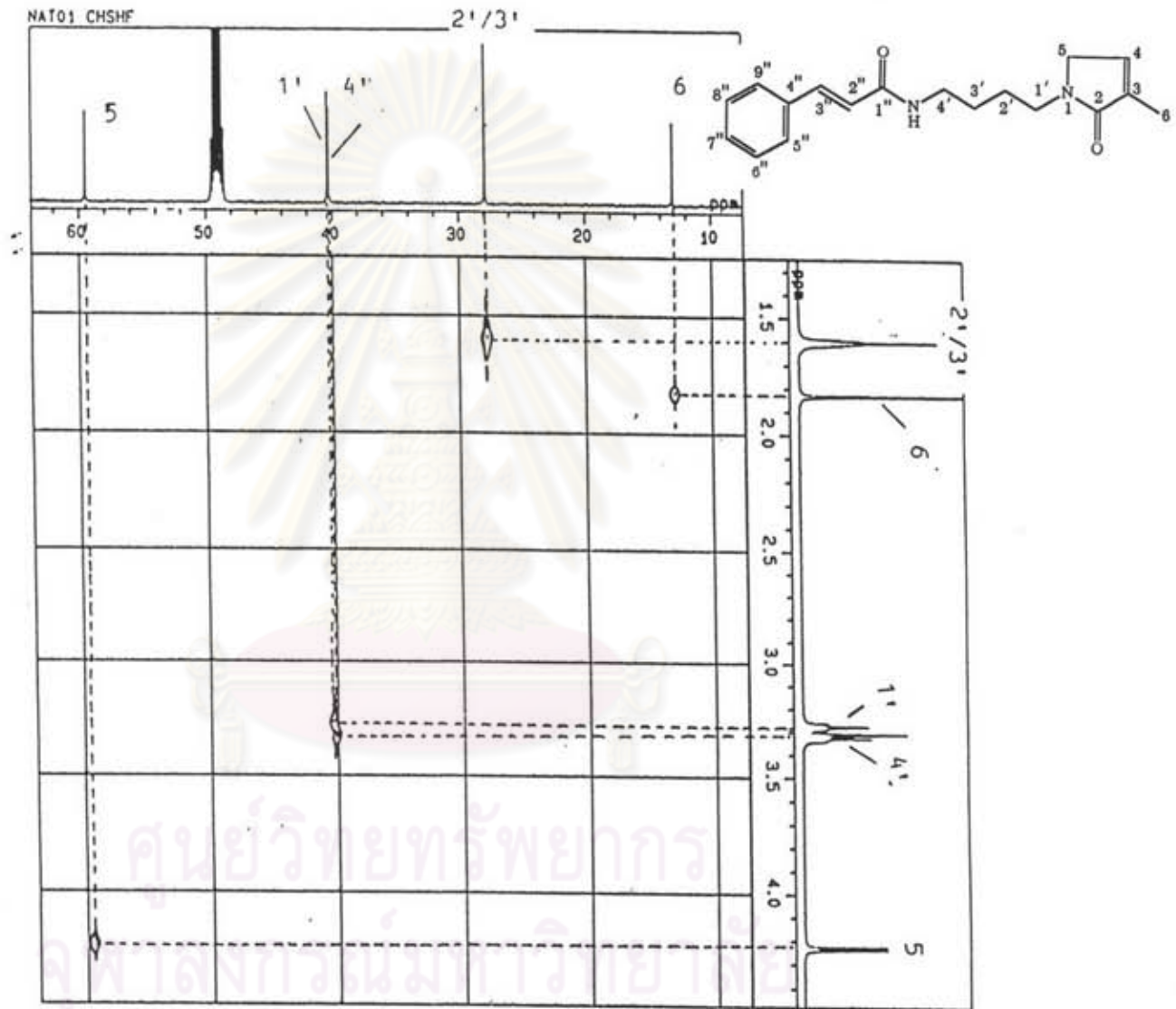


Fig.20 Expansion of the 500 MHz <sup>1</sup>H-<sup>13</sup>C CHSHF spectrum of NAT01(in CD<sub>3</sub>OD)

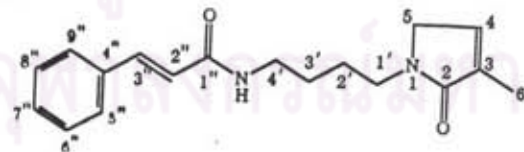
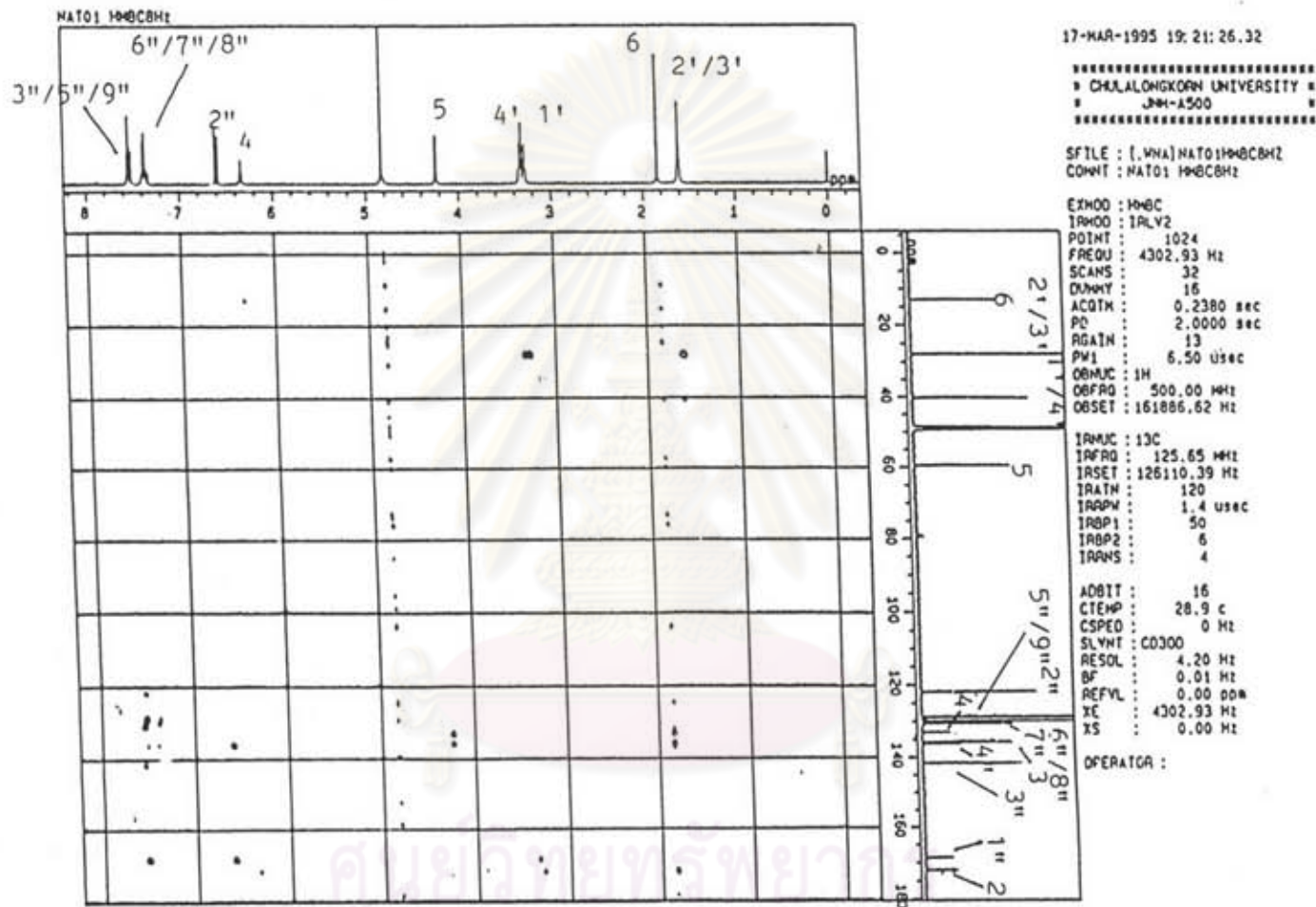


Fig.21 The 500 MHz  $^1\text{H}$ - $^{13}\text{C}$  HMBC spectrum of NAT01(in  $\text{C}'\text{D}_3\text{O}$ )



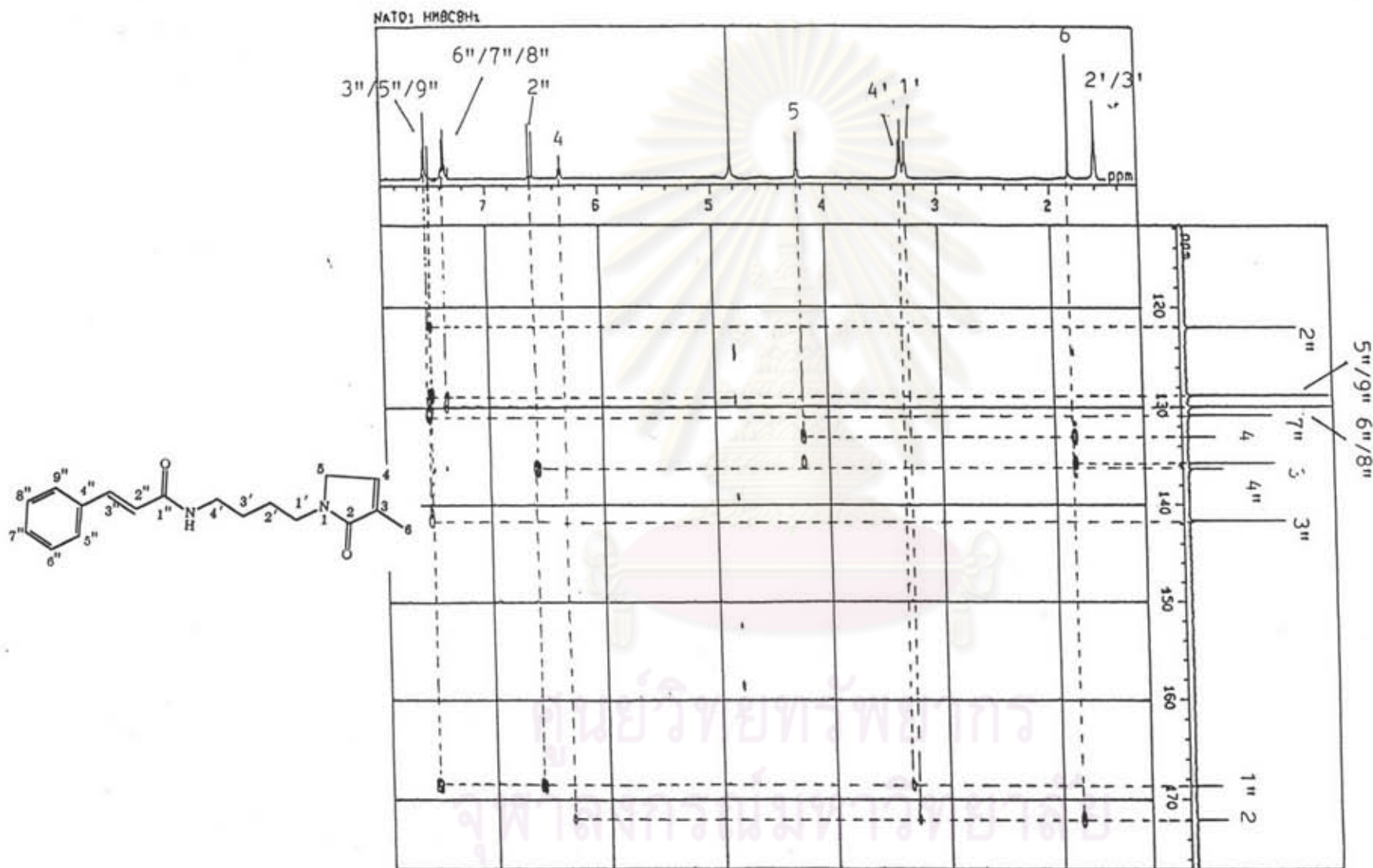


Fig.22 Expansions of the 500 MHz  $^1\text{H}$ - $^{13}\text{C}$  HMBC spectrum of NAT01(in  $\text{CD}_3\text{OD}$ )

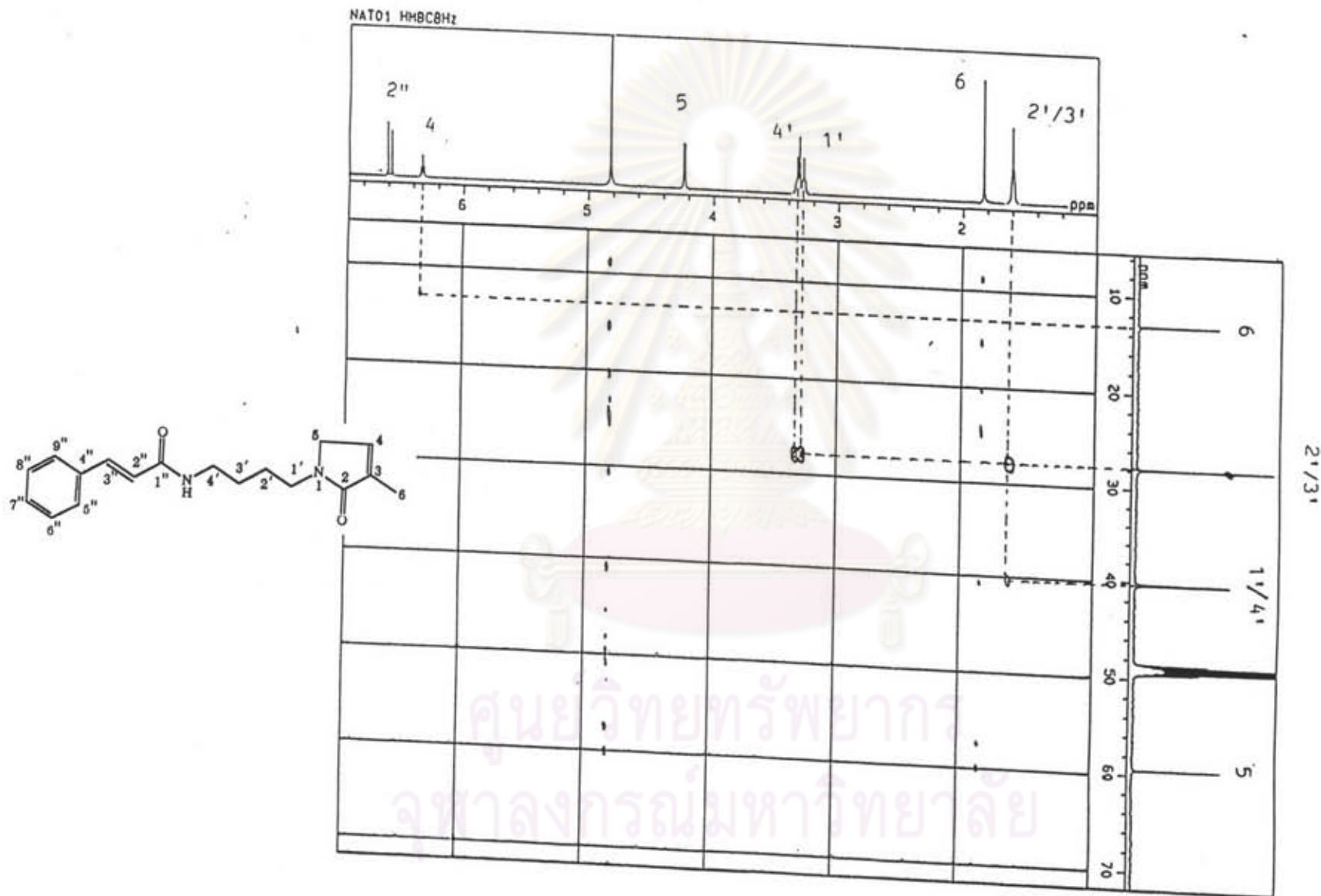


Fig.23 Expansions of the 500 MHz <sup>1</sup>H-<sup>13</sup>C HMBC spectrum of NAT01(in CD<sub>3</sub>OD)

## VITA

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