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APPENDIX

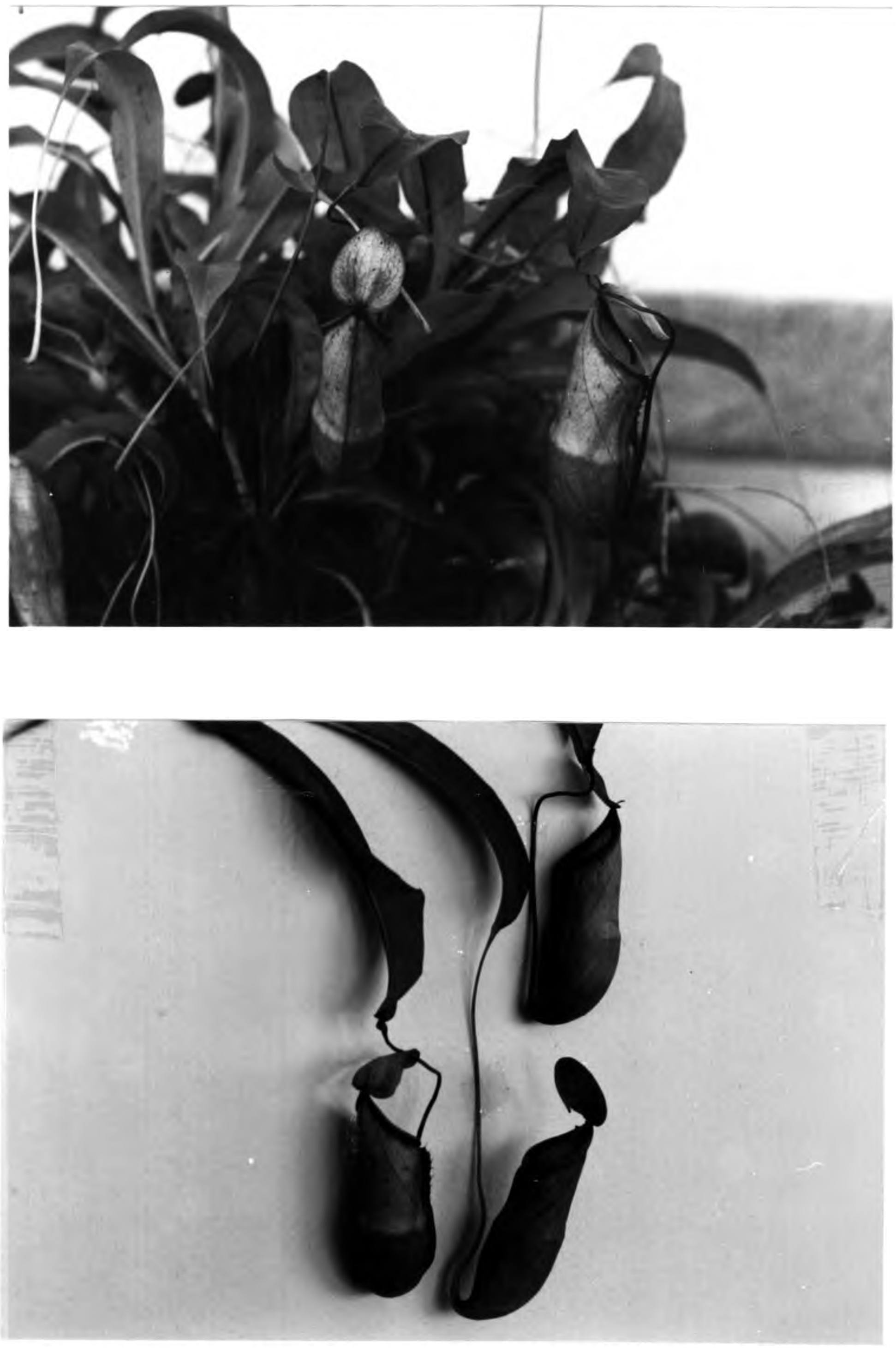


Figure 11 *Nepenthes thorelii* Lec.

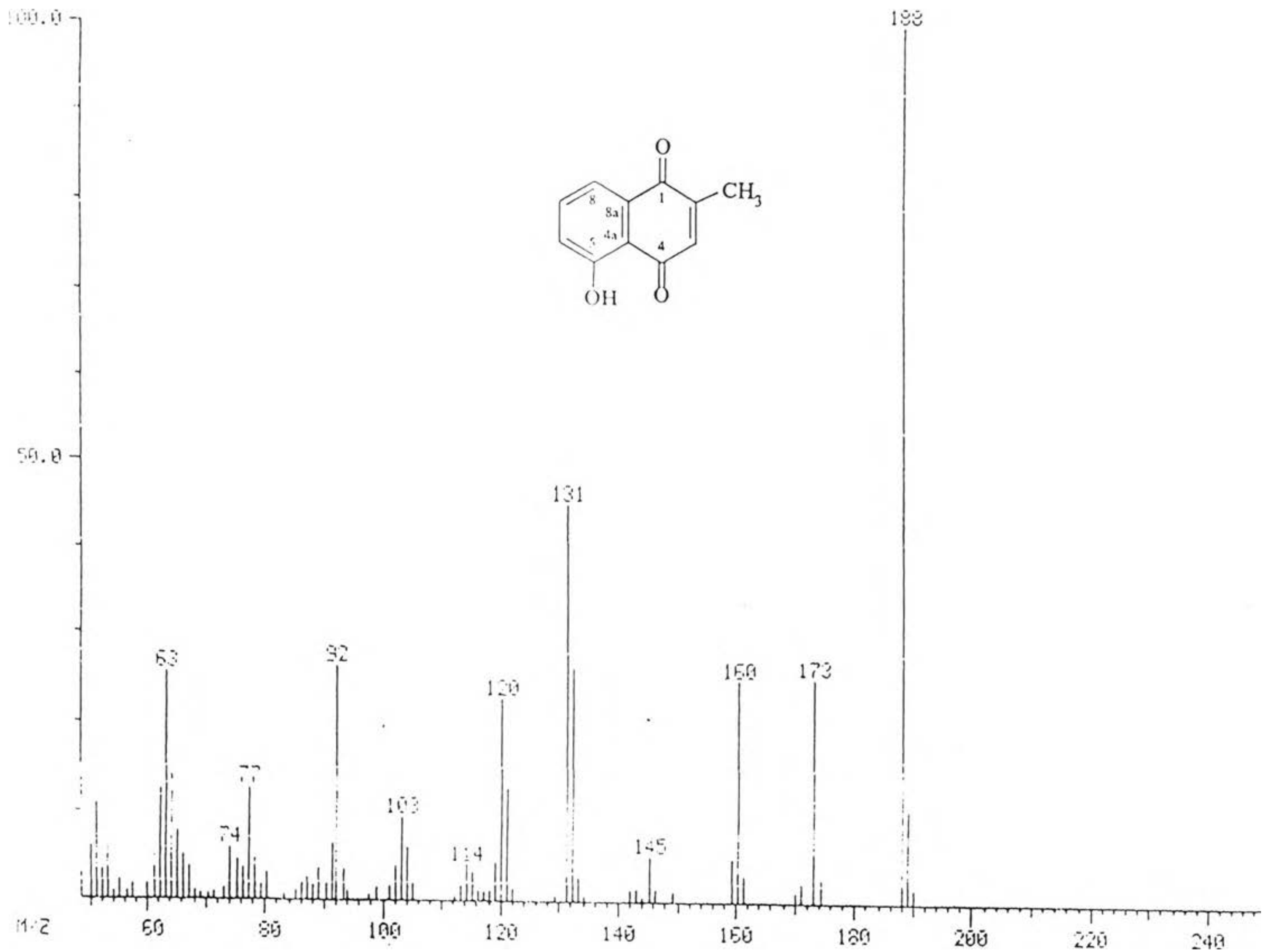


Figure 12 The EI mass spectrum of compound **18**

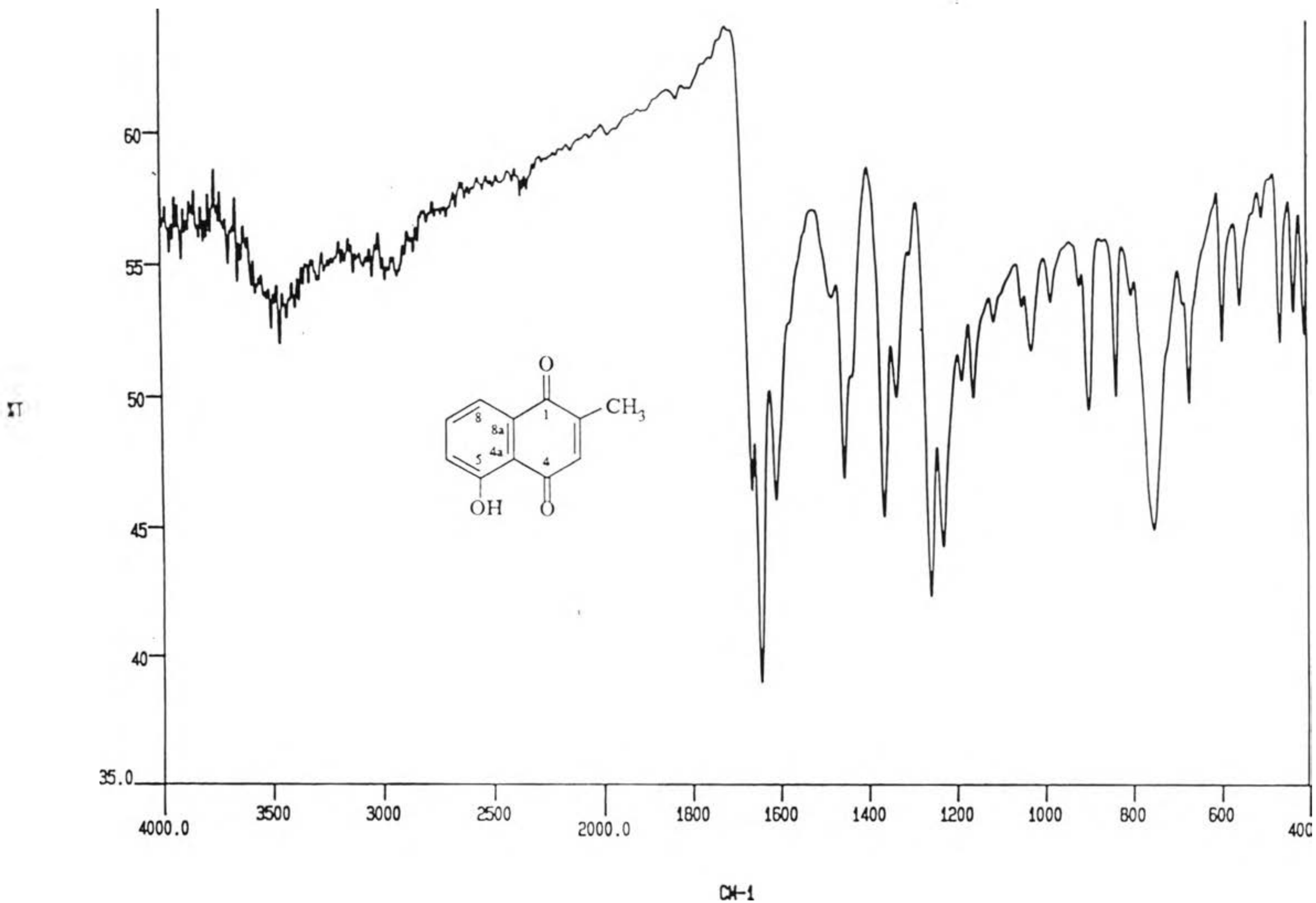


Figure 13 The IR spectrum of compound **18** (in KBr disc)

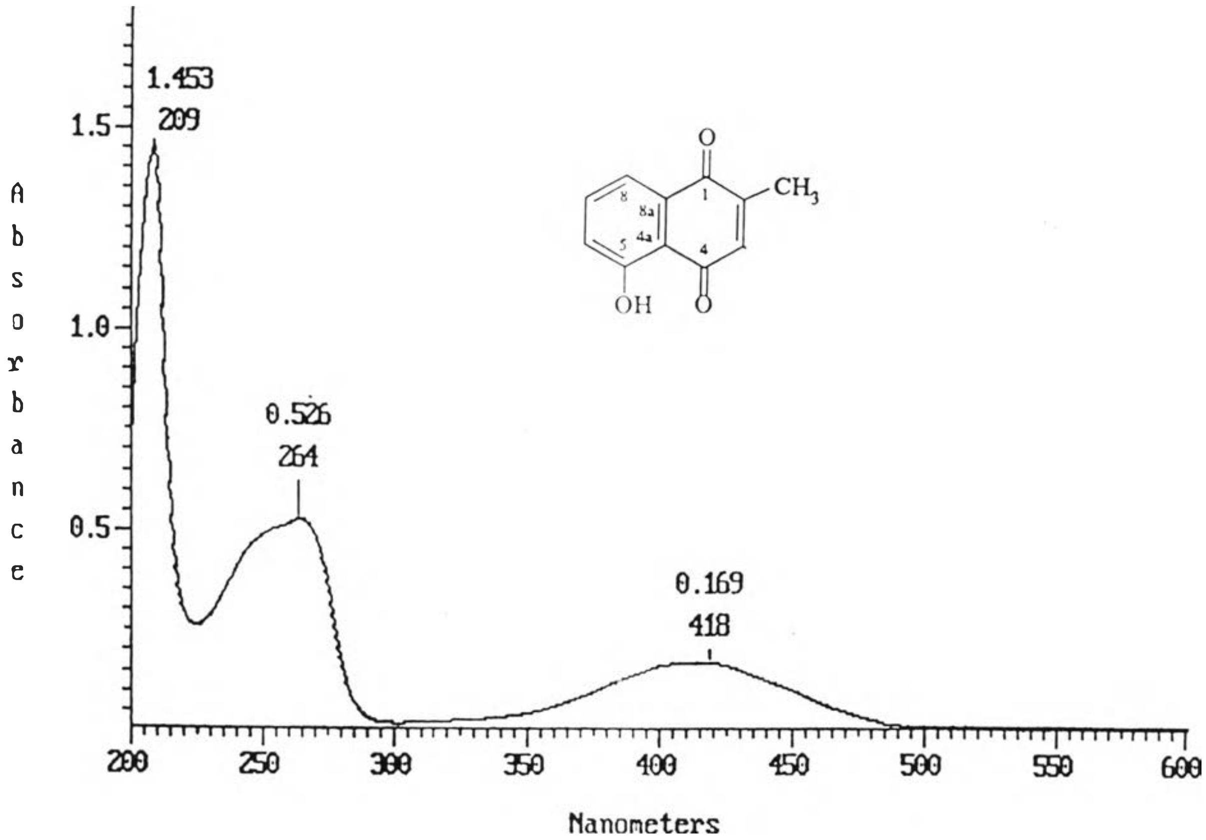


Figure 14 The UV spectrum of compound 18 (in MeOH)

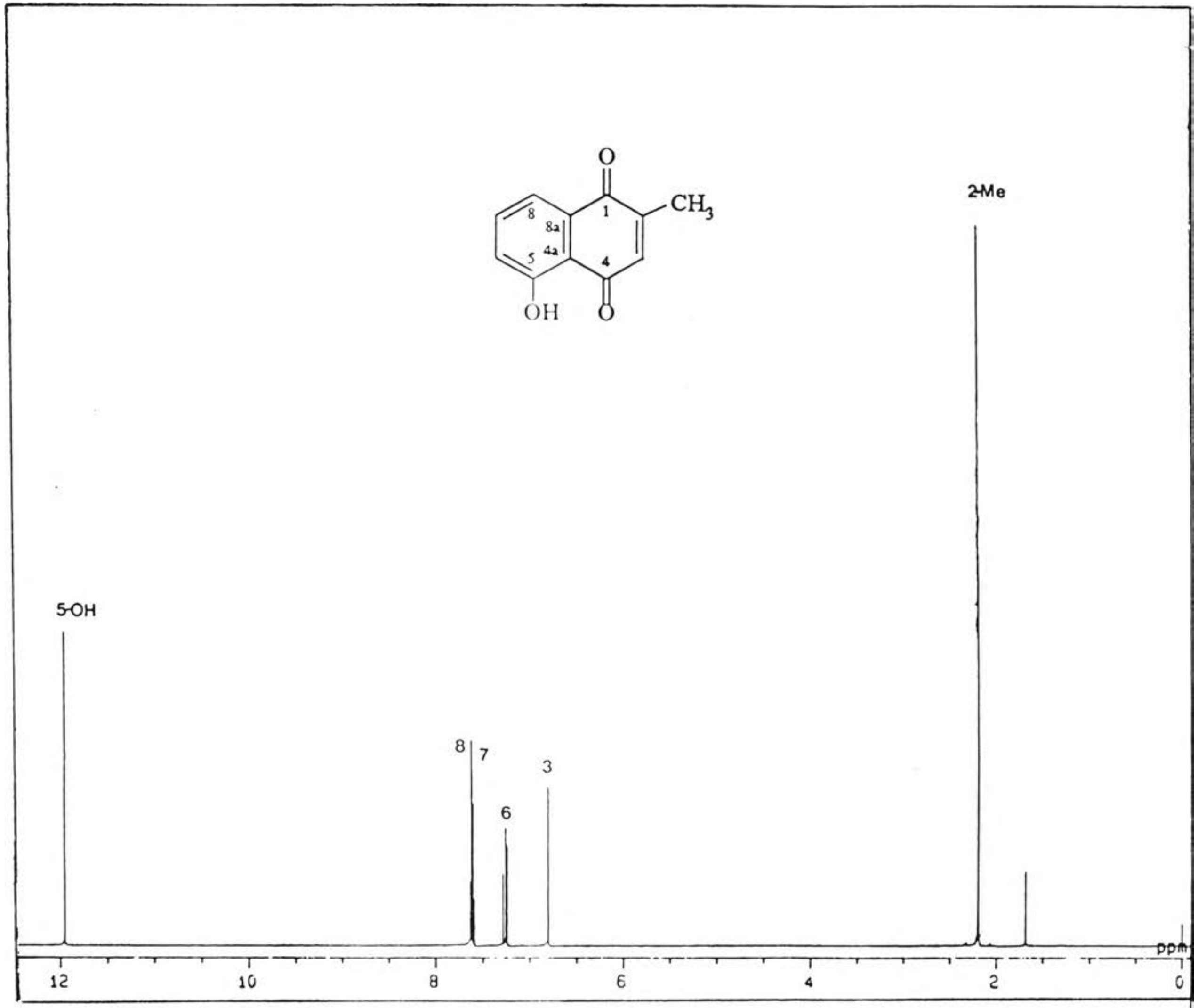


Figure 15 The ^{1}H NMR (500 MHz) spectrum of compound **18** (in $CDCl_3$)

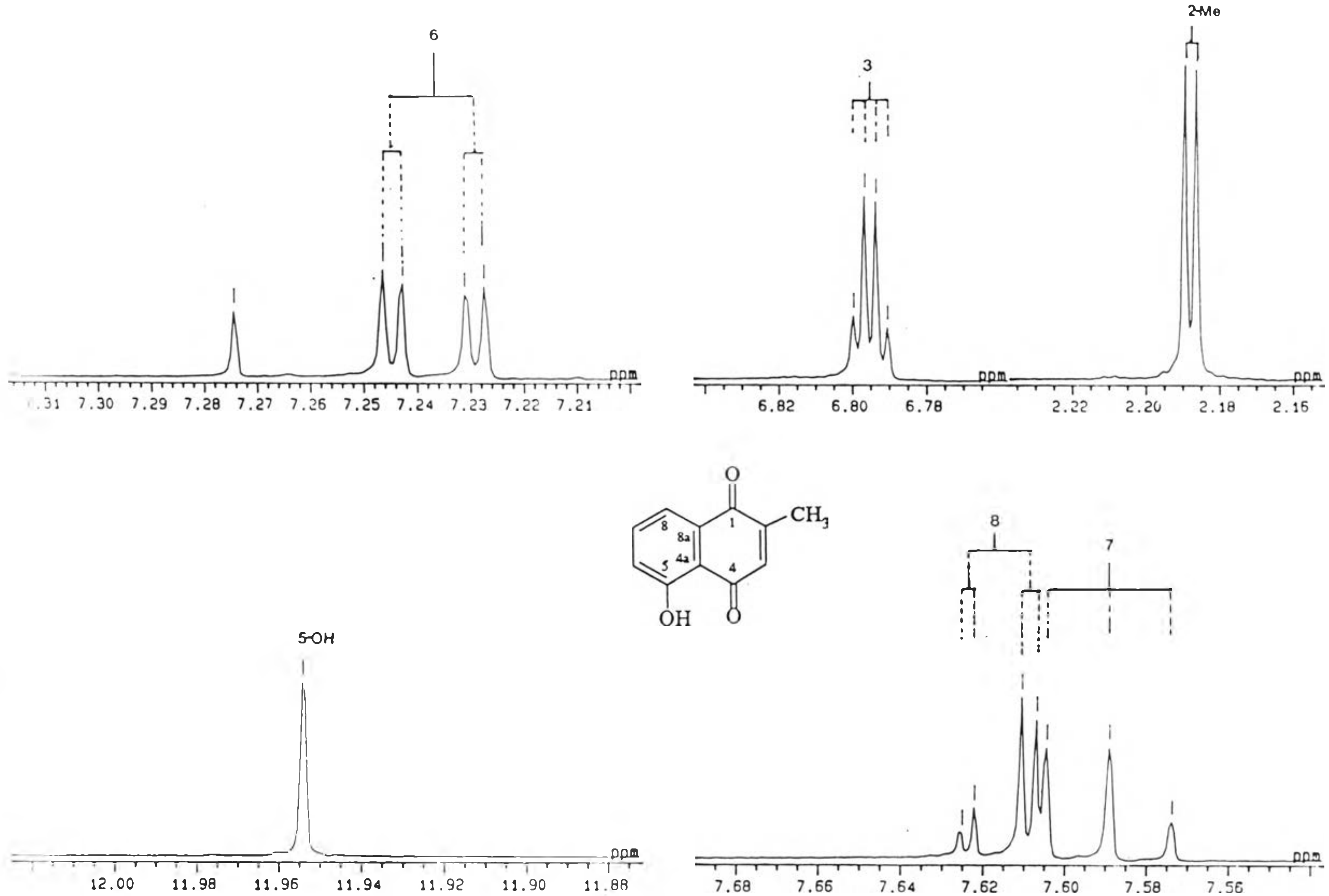


Figure 16 Expansion of the ^{1}H NMR (500 MHz) spectrum of compound **18**

(in $CDCl_3$) : δ_H 2.15-11.96

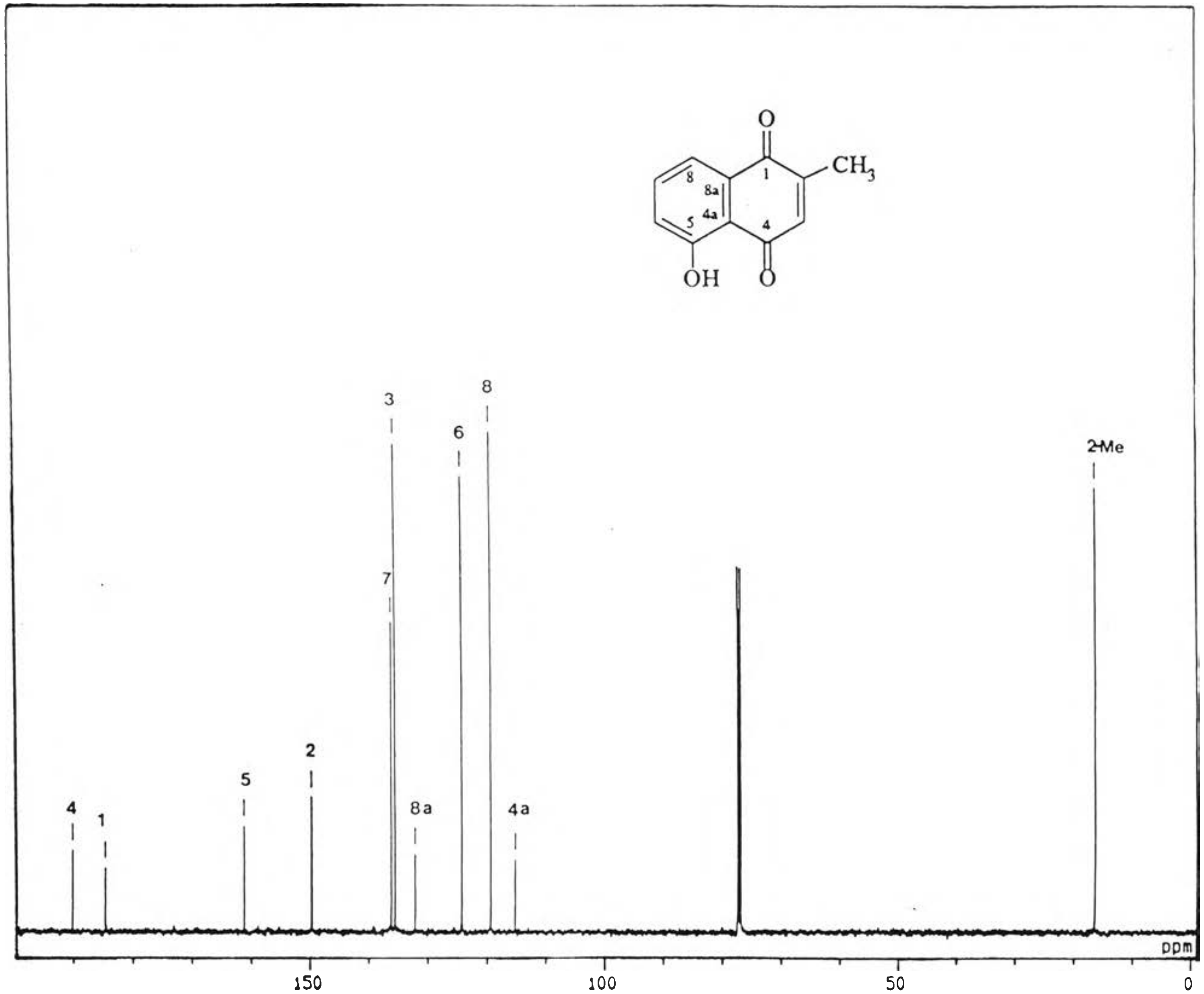


Figure 17 The ^{13}C NMR (125 MHz) spectrum of compound **18** (in $CDCl_3$)

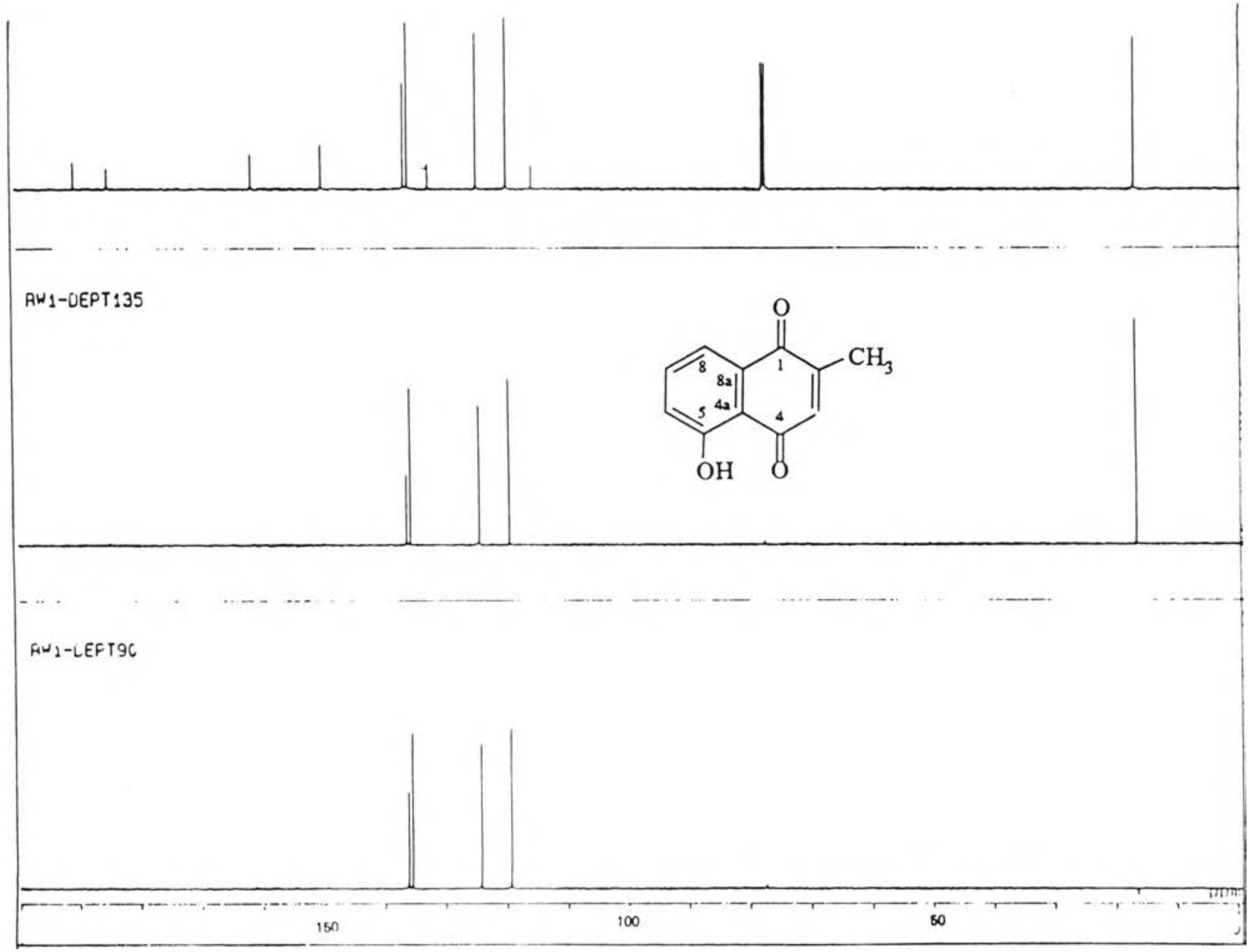
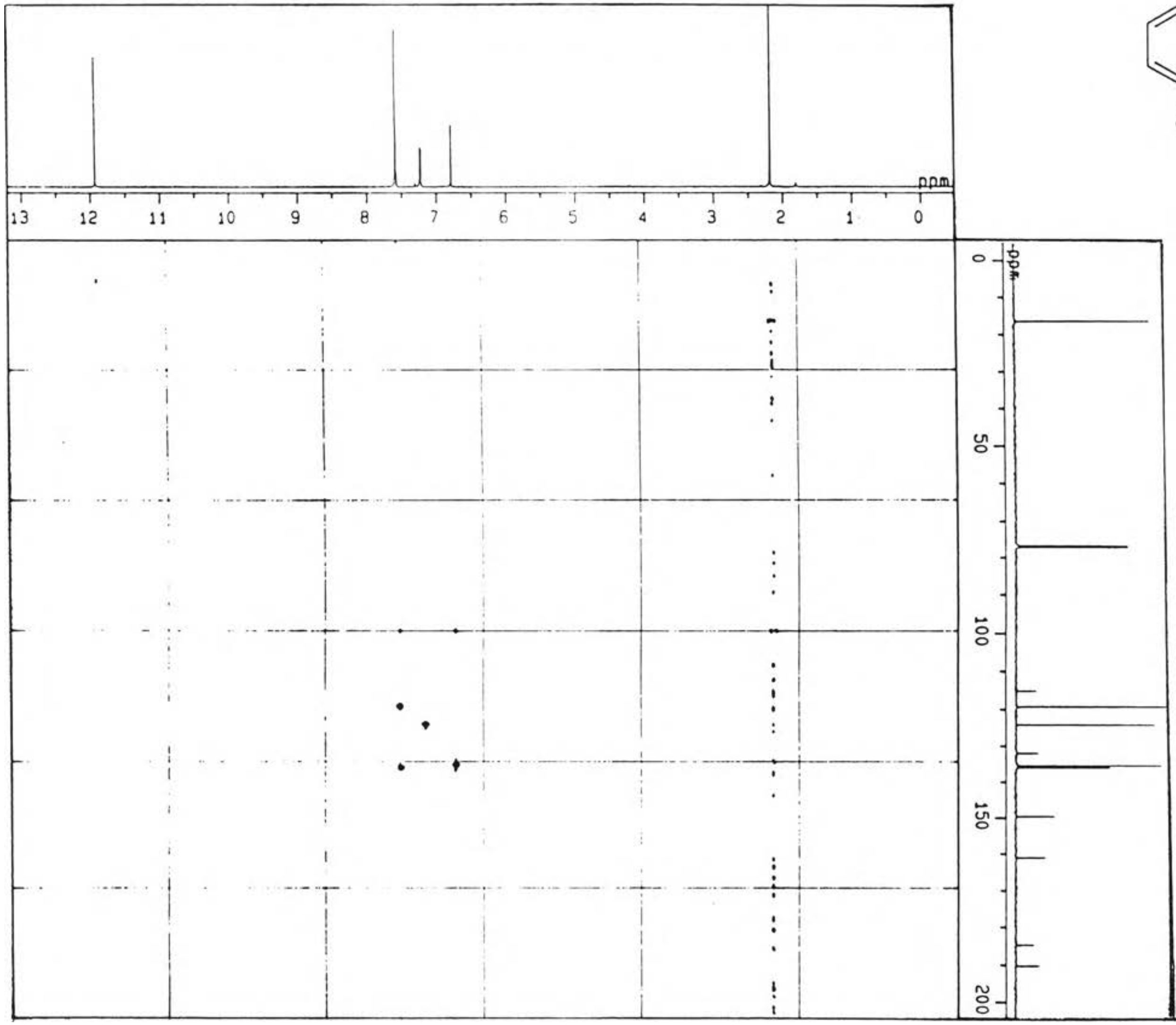


Figure 18 The DEPT (125 MHz) spectrum of compound **18** (in $CDCl_3$)



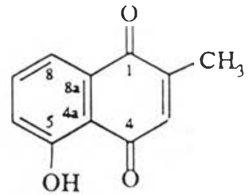


Figure 19 The HMQC spectrum of compound **18** (in $CDCl_3$)

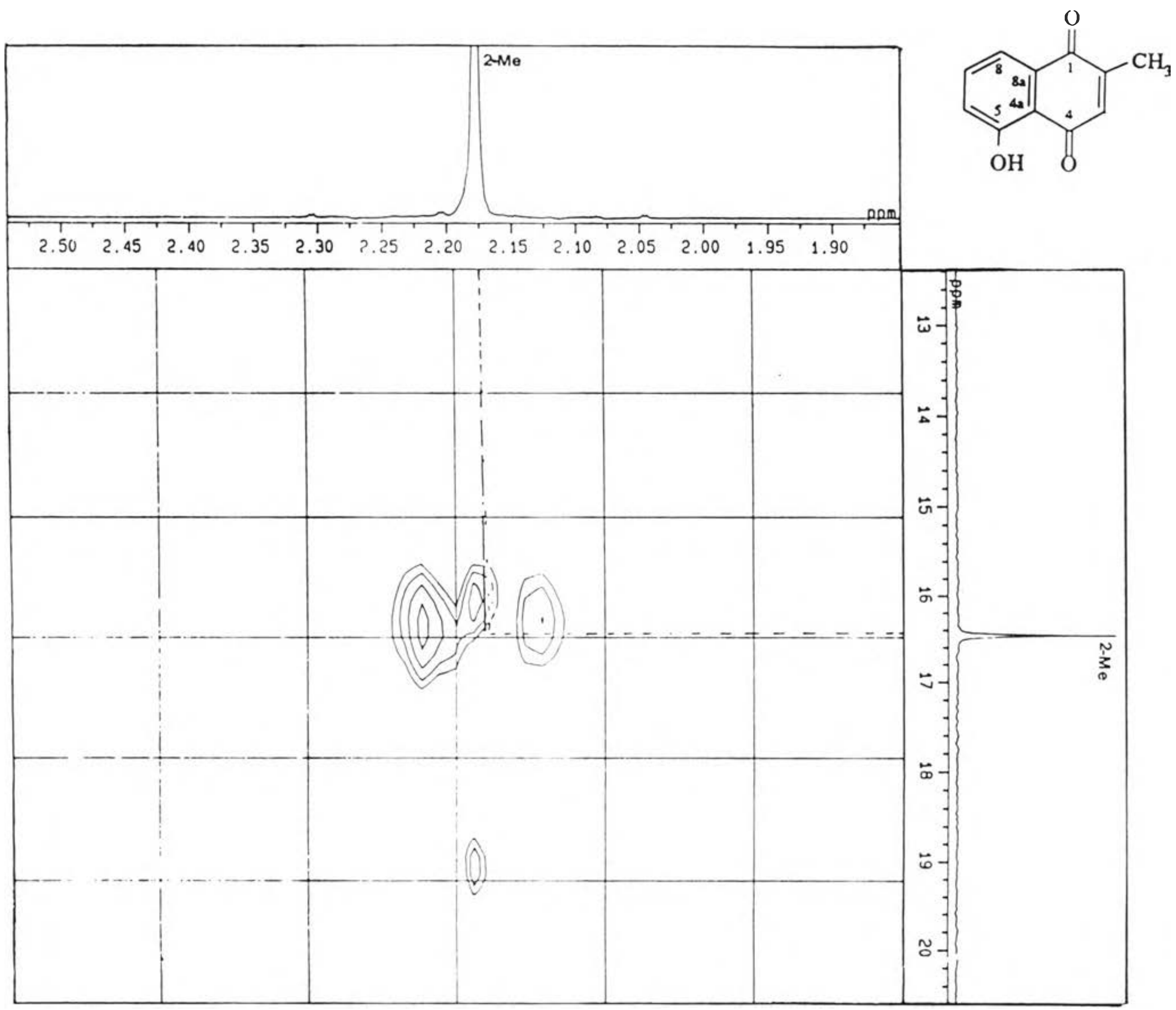
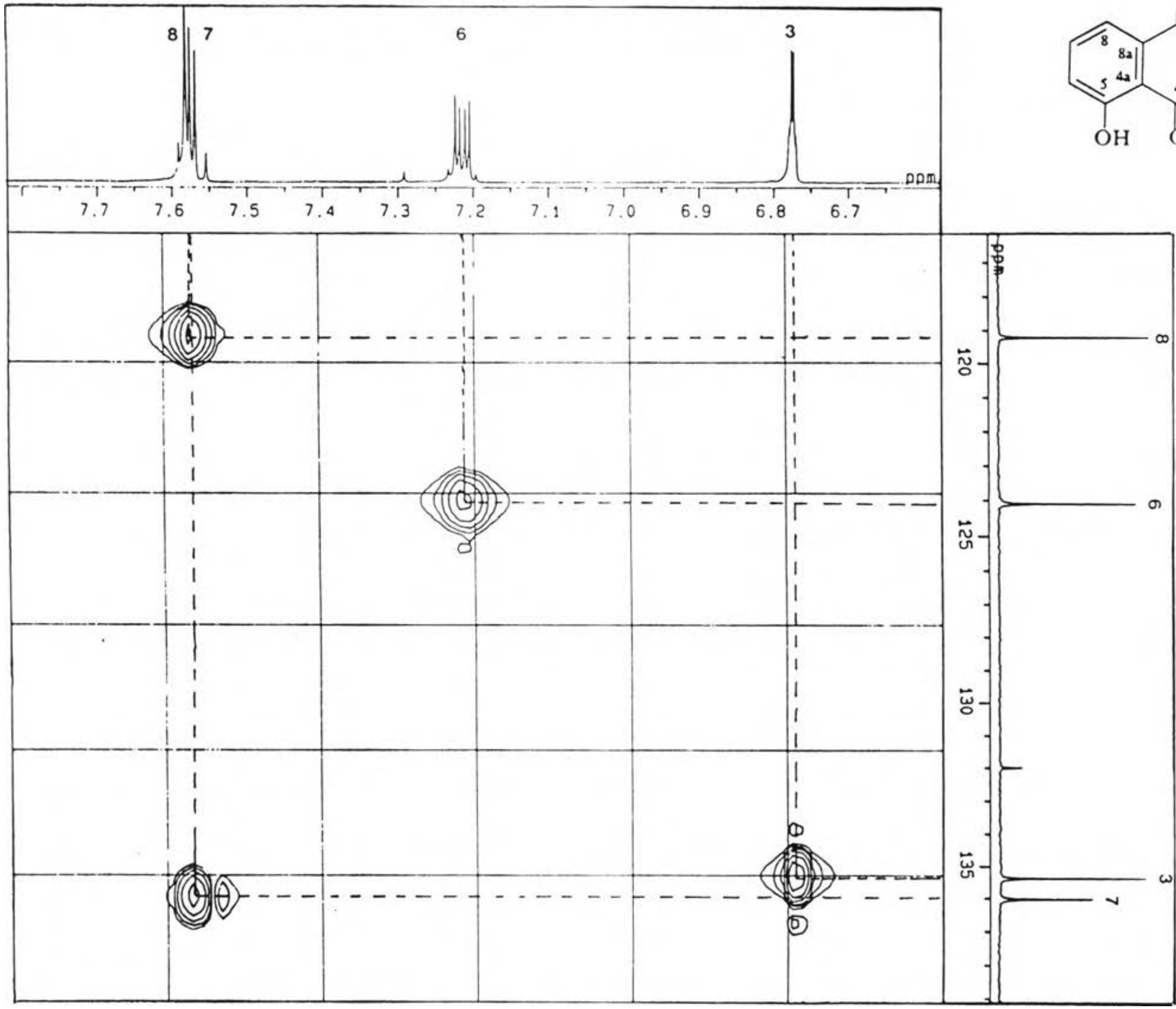


Figure 20 Expansion of the HMQC spectrum of compound **18** (in $CDCl_3$) :

δ_H 1.90-2.50 ; δ_C 13.00-20.00 ppm



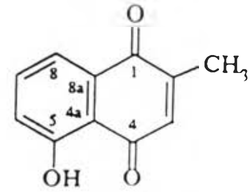


Figure 21 Expansion of the HMQC spectrum of compound **18** (in $CDCl_3$) :

δ_H 6.70-7.70 ; δ_C 123.00-139.00 ppm

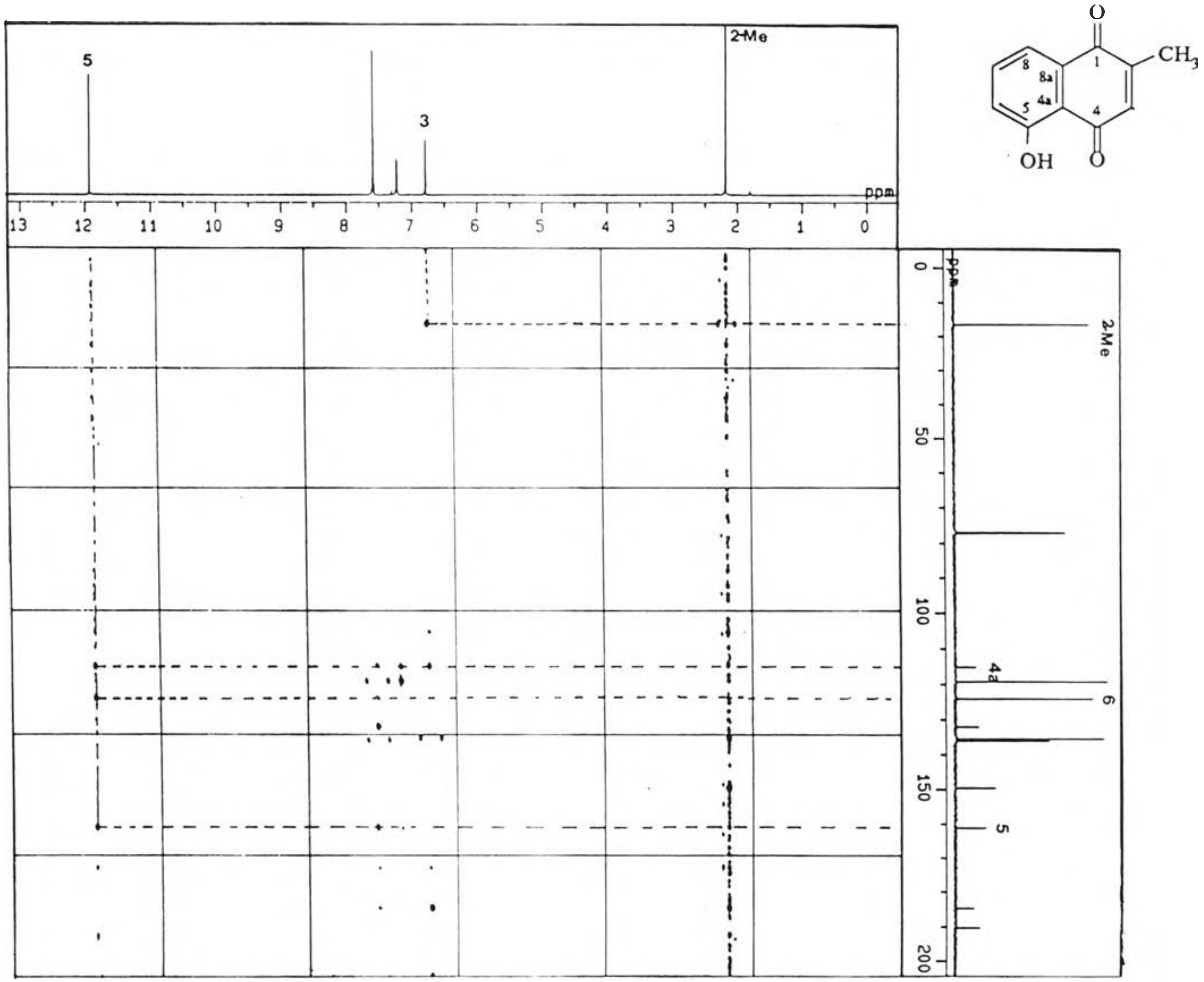


Figure 22 The HMBC spectrum of compound **18** (in $CDCl_3$)

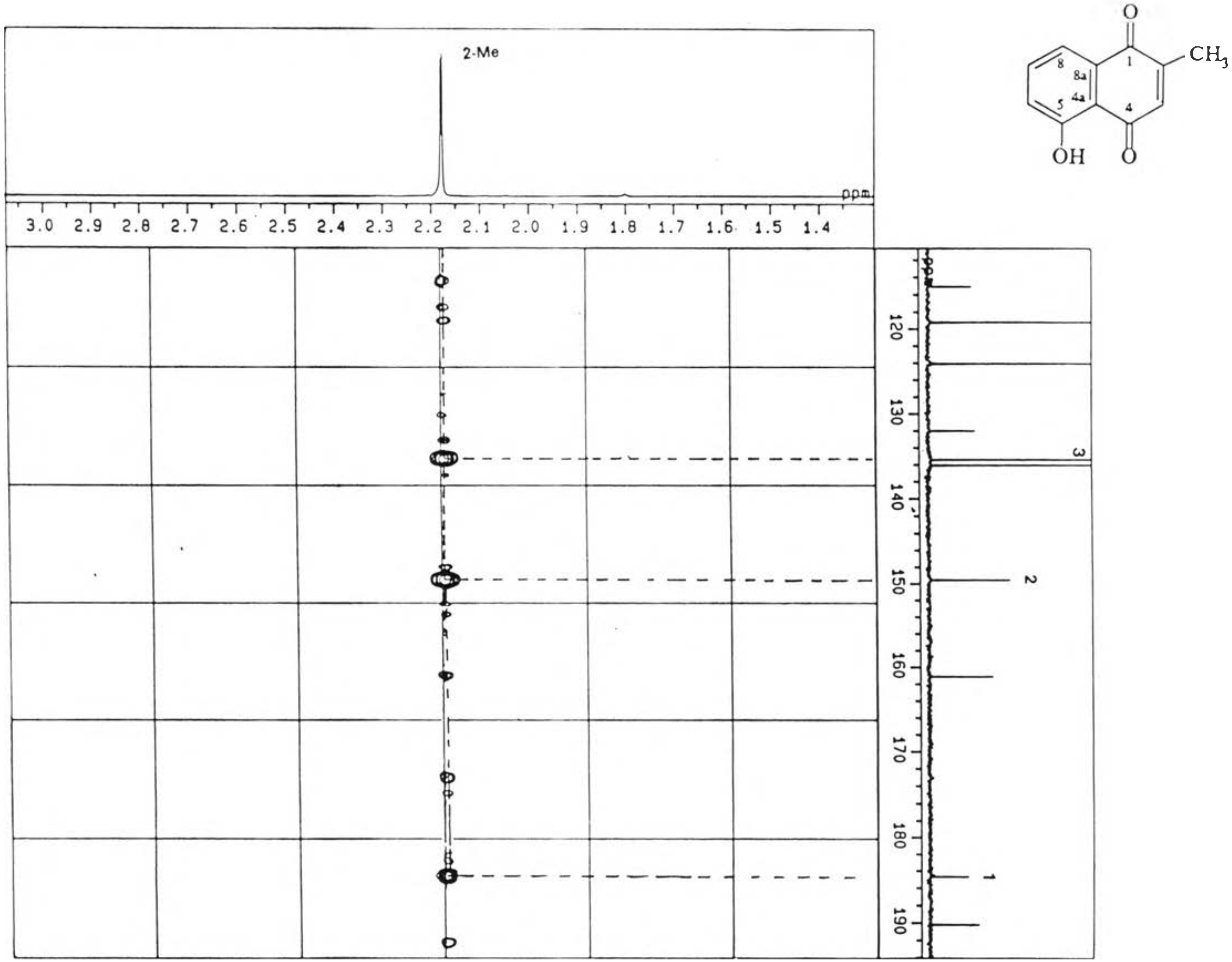


Figure 23 Expansion of the HMBC spectrum of compound **18** (in $CDCl_3$) :

δ_H 1.40-3.00 ; δ_C 116.00-191.00 ppm

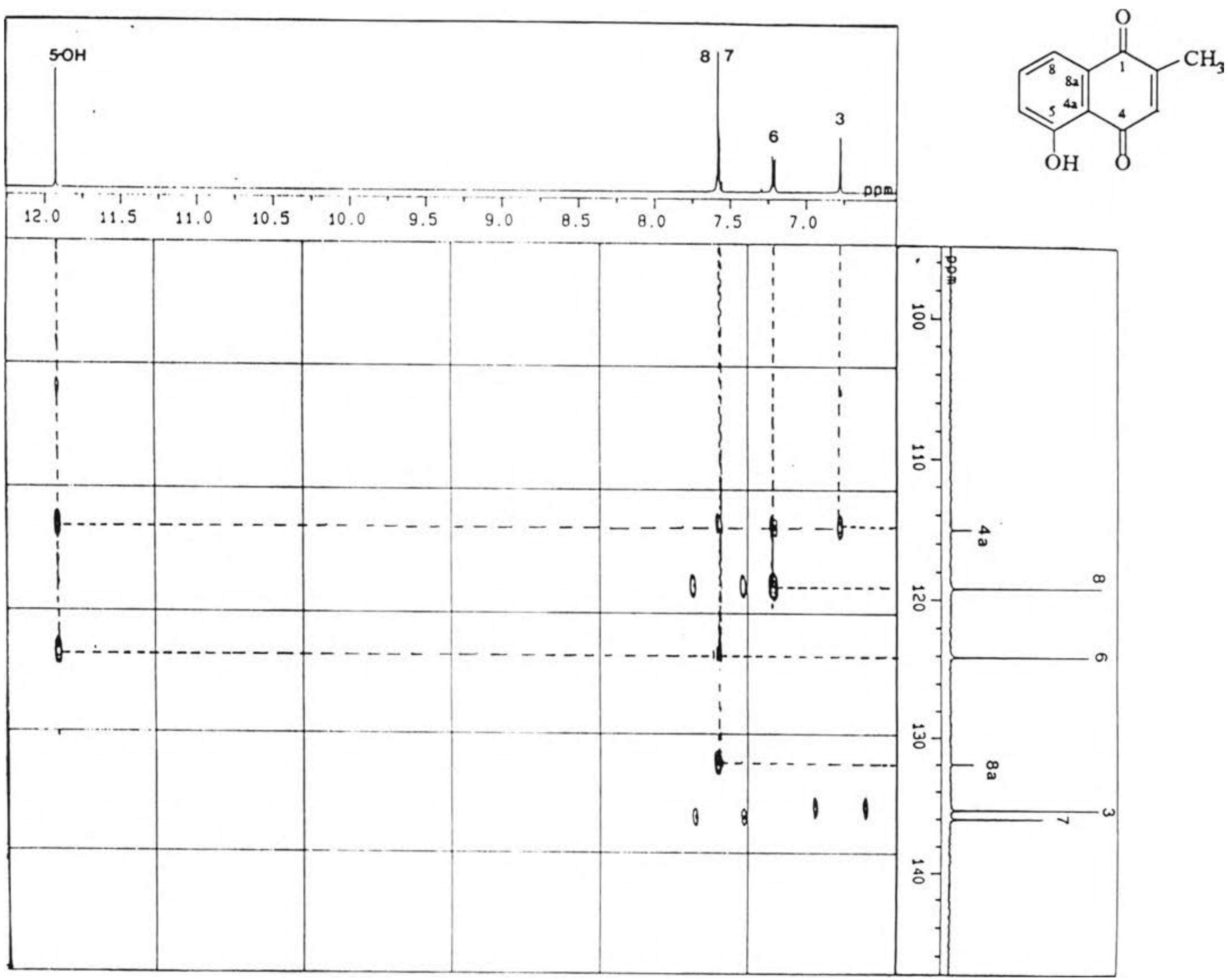


Figure 24 Expansion of the HMBC spectrum of compound **18** (in $CDCl_3$) :

δ_H 6.50-12.00 ; δ_C 98.00-143.00 ppm

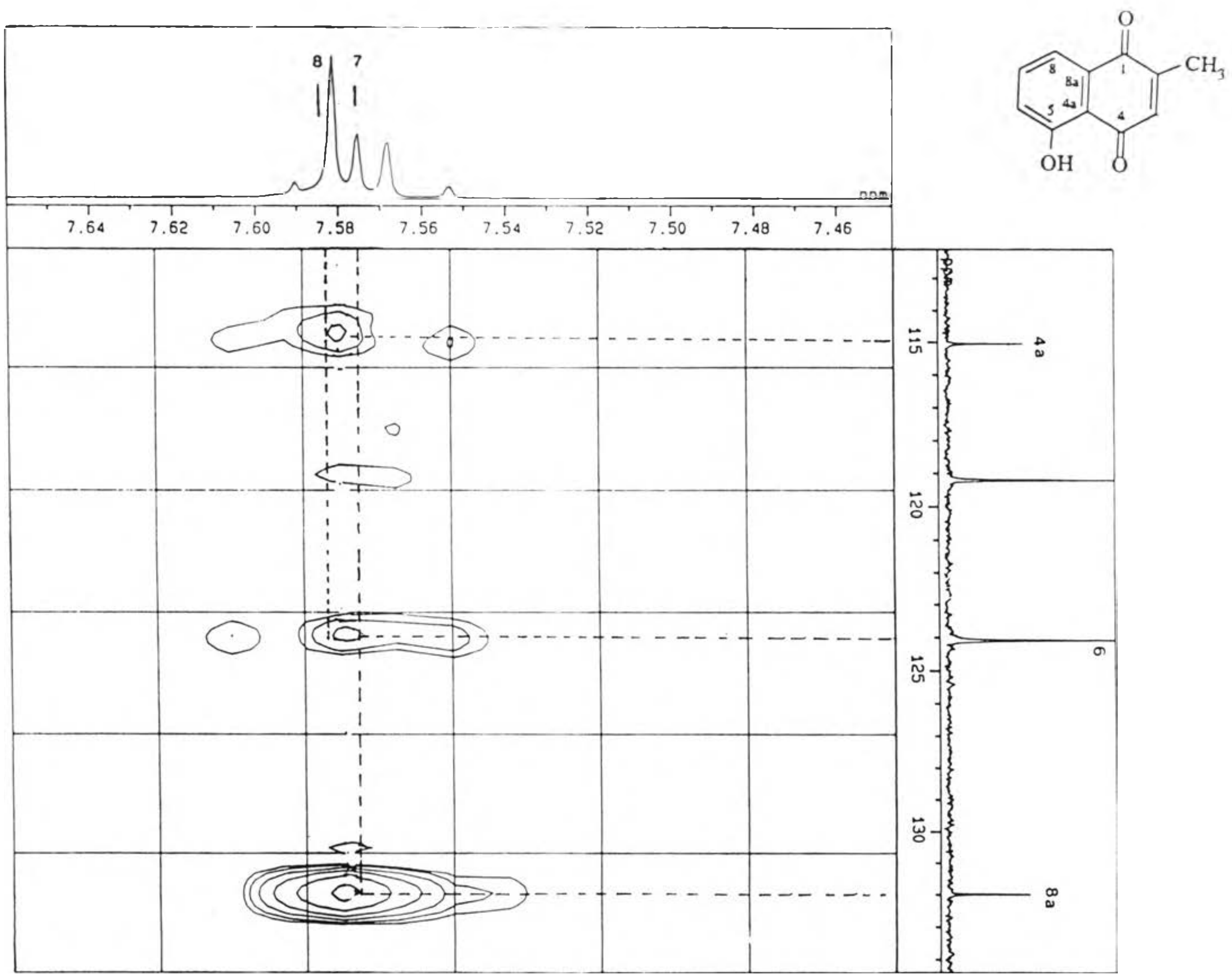


Figure 25 Expansion of the HMBC spectrum of compound **18** (in $CDCl_3$) :

δ_H 7.46-7.64 ; δ_C 113.00-134.00 ppm

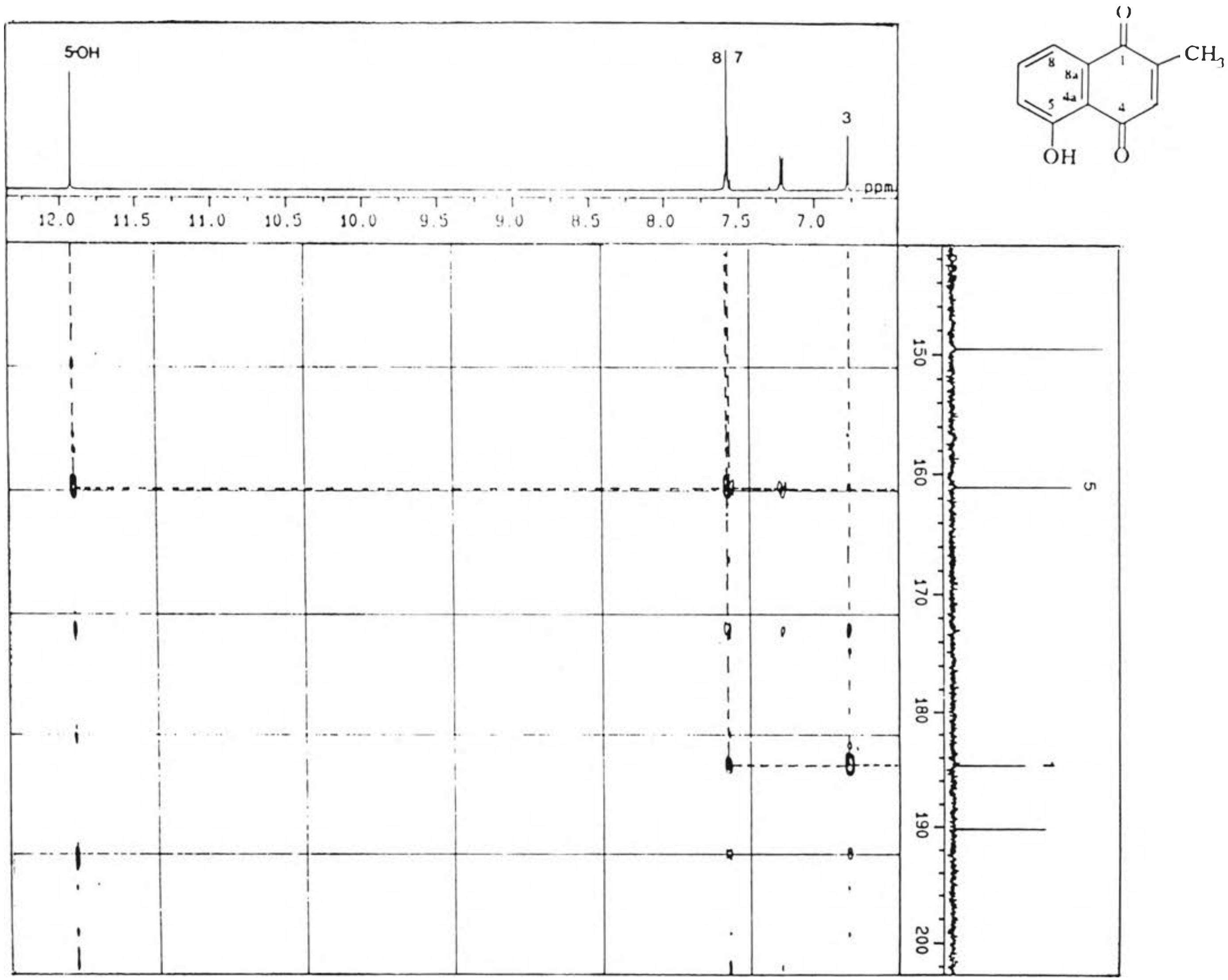


Figure 26 Expansion of the HMBC spectrum of compound 18 (in $CDCl_3$) :

δ_H 6.90-12.10 ; δ_C 146.00-201.00 ppm

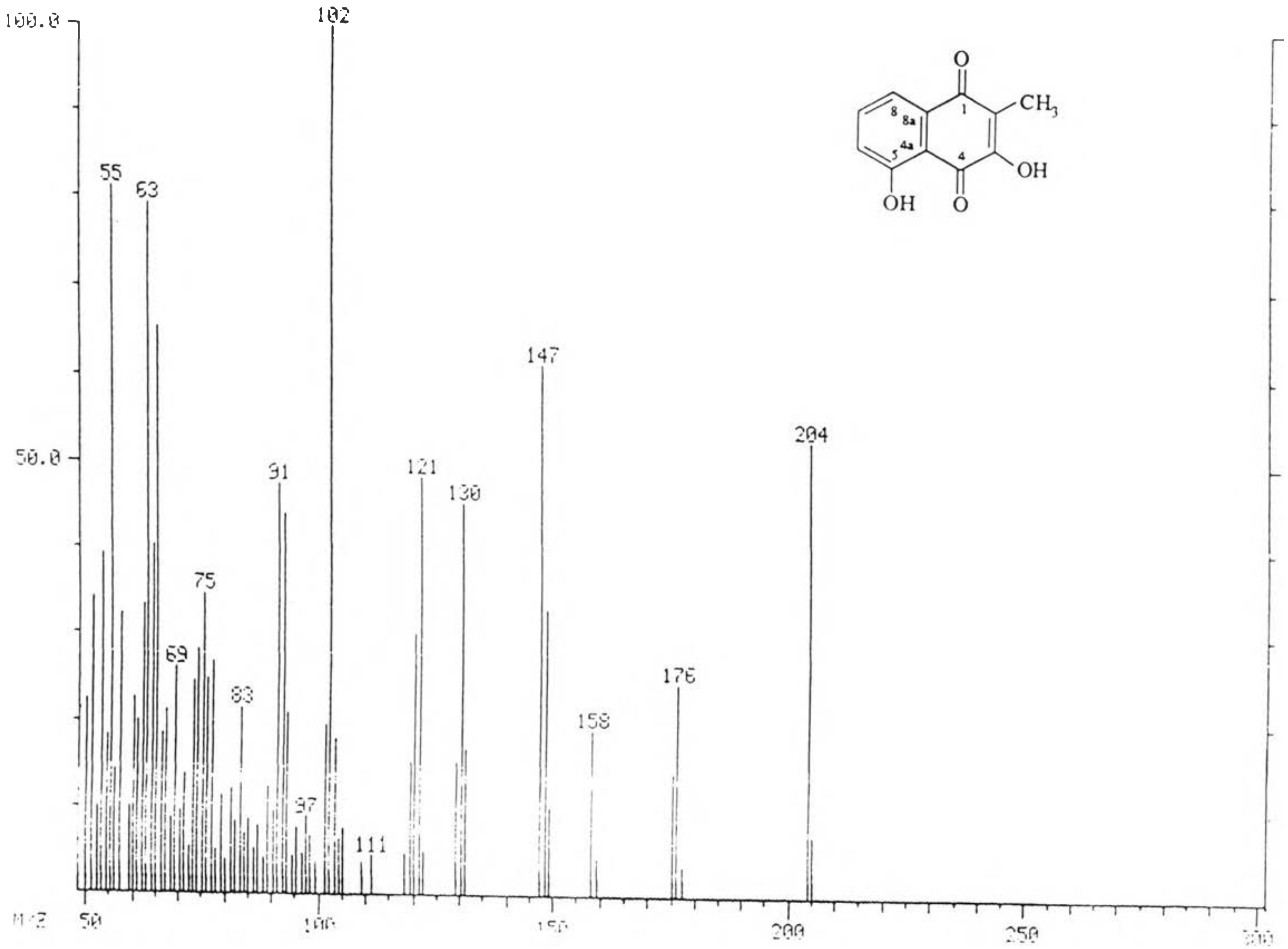


Figure 27 The EI mass spectrum of compound **19**

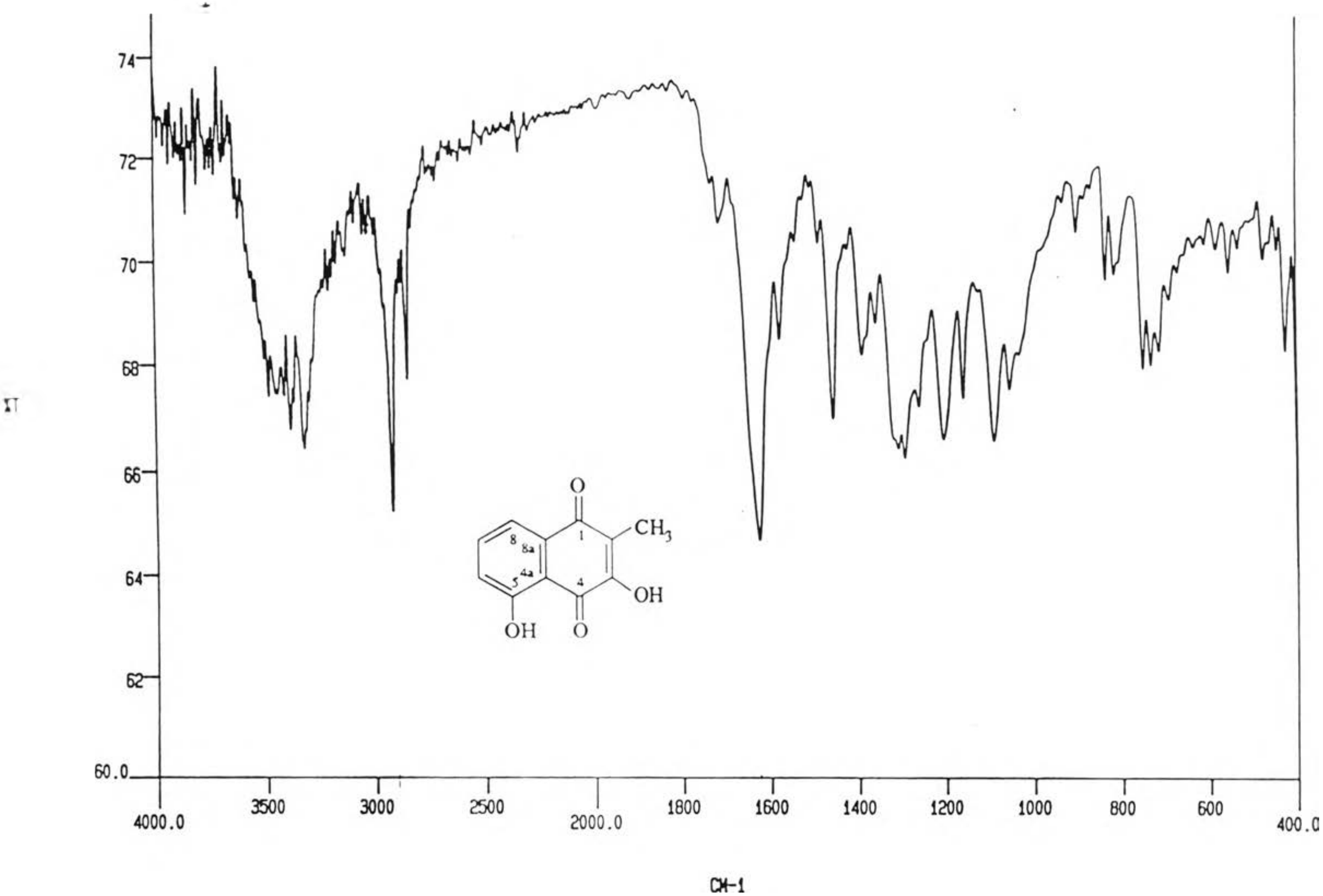


Figure 28 The IR spectrum of compound 19 (in KBr disc)

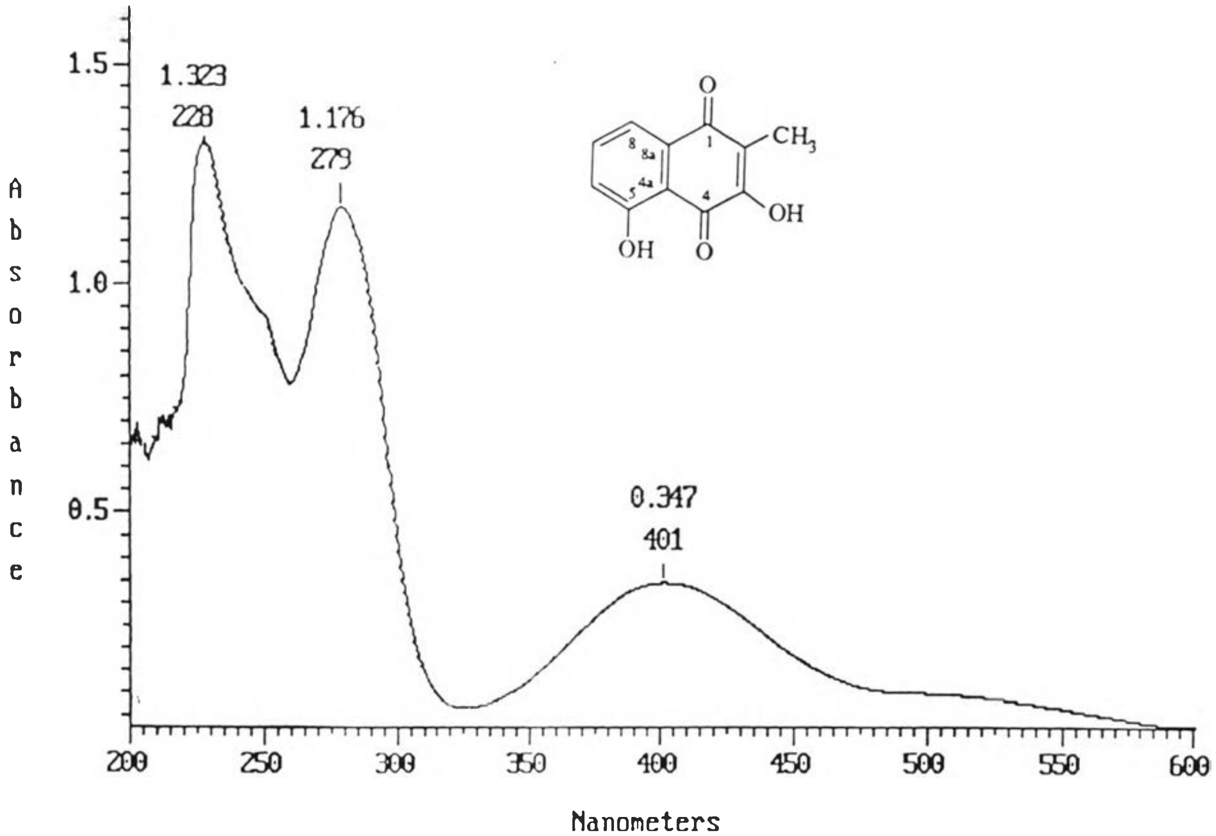
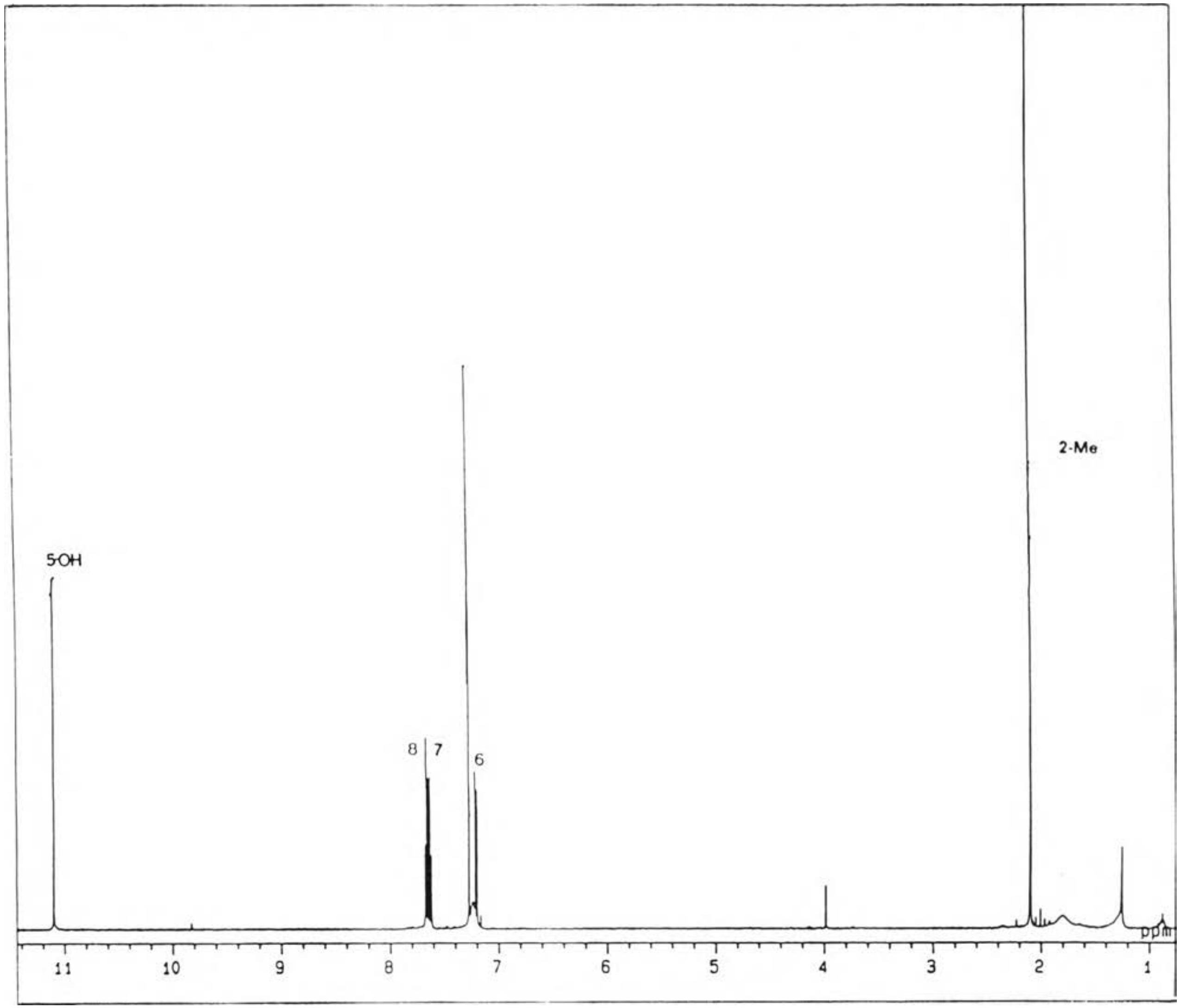


Figure 29 The UV spectrum of compound **19** (in MeOH)



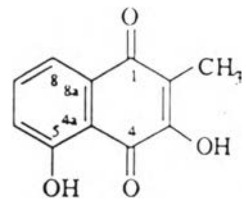


Figure 30 The ^{1}H NMR (500 MHz) spectrum of compound **19** (in $CDCl_3$)

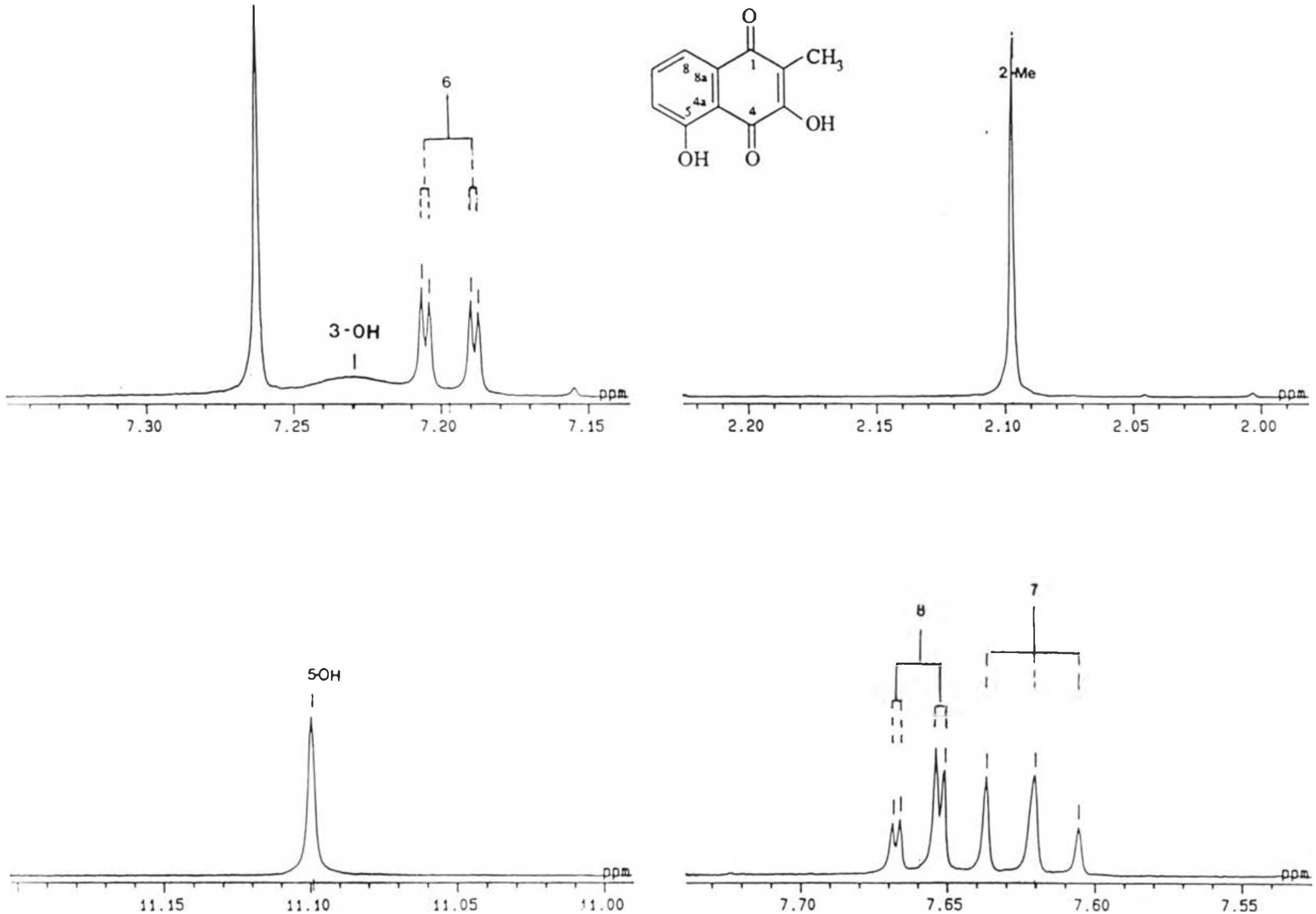


Figure 31 Expansion of the ^{1}H NMR (500 MHz) spectrum of compound **19** (in $CDCl_3$) : δ_H 2.00-11.15 ppm

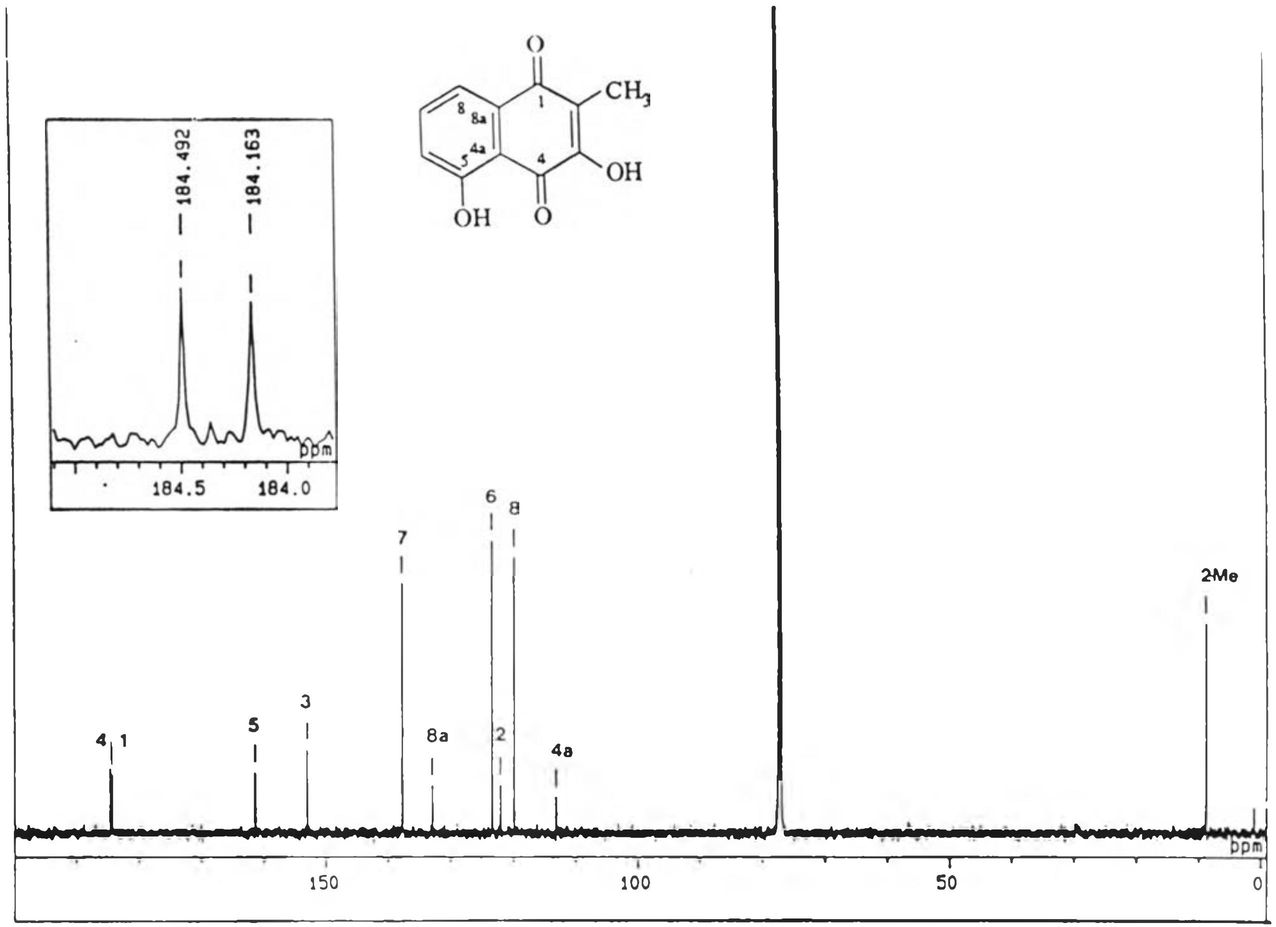


Figure 32 The ^{13}C NMR (125 MHz) of compound **19** (in $CDCl_3$)

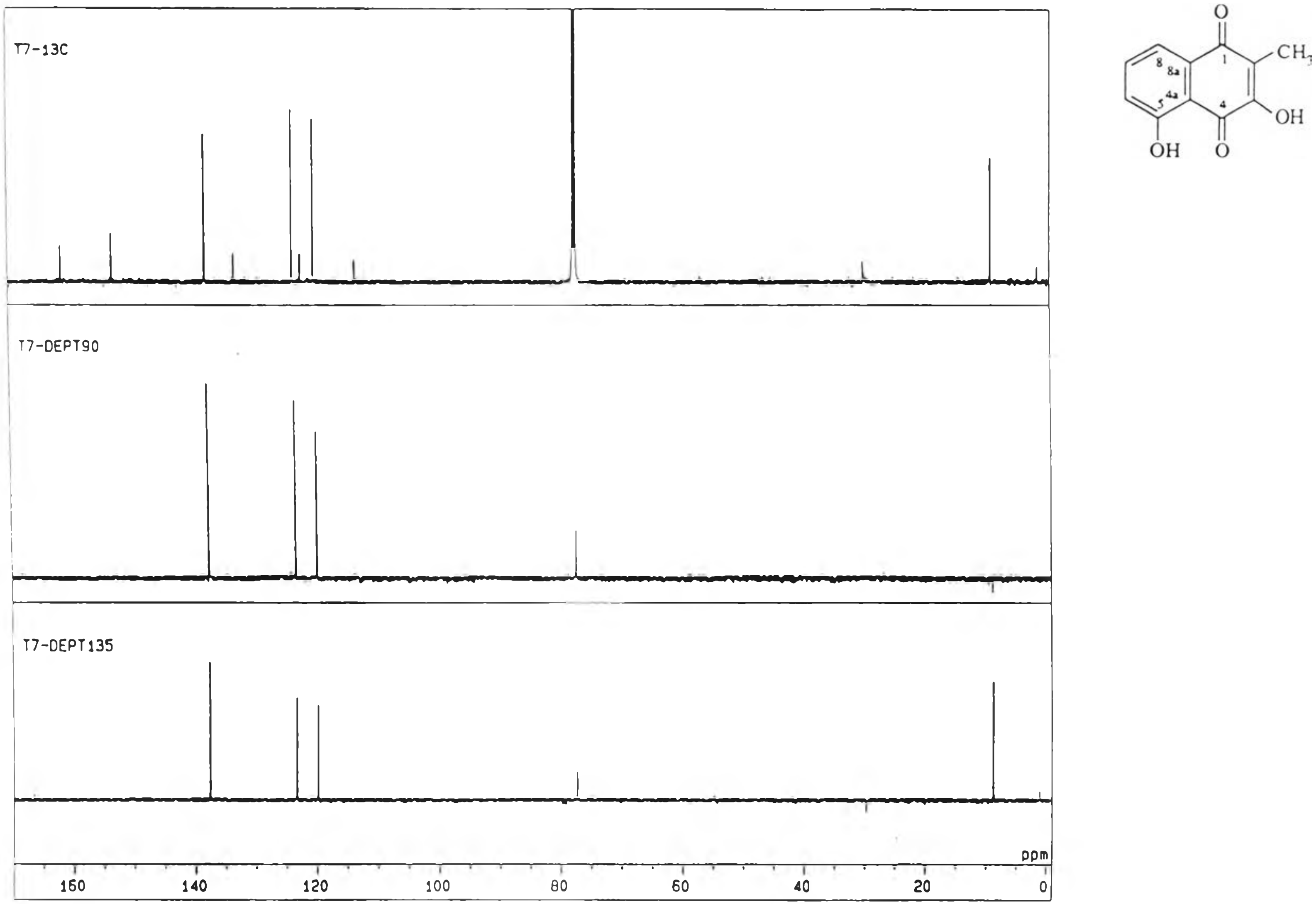


Figure 33 The DEPT (125 MHz) spectrum of compound 19 (in $CDCl_3$)

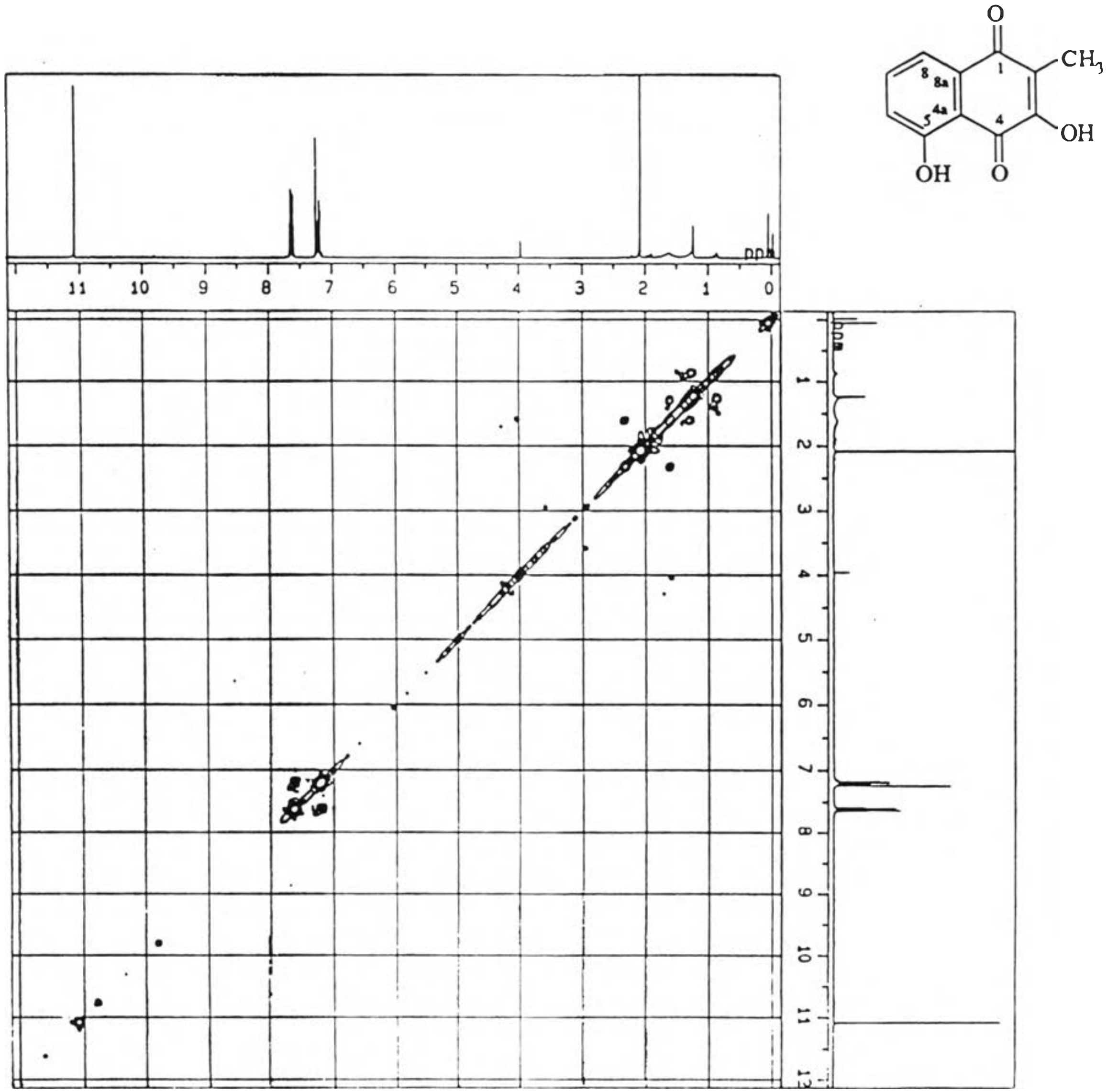


Figure 34 The ^{1}H-^{1}H COSY (500 MHz) spectrum of compound 19 (in $CDCl_3$)

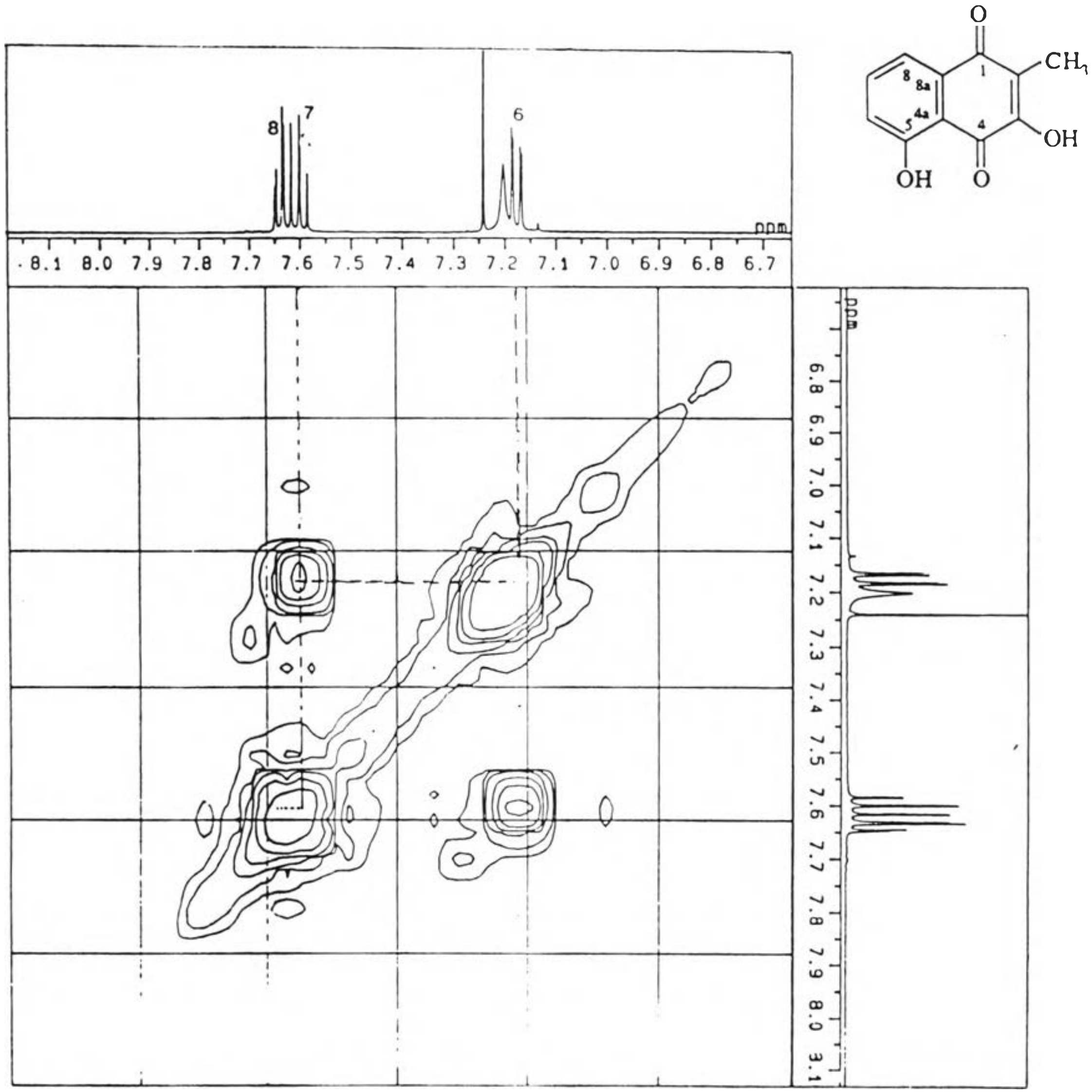


Figure 35 Expansion of the ^{1}H-^{1}H COSY (500 MHz) spectrum of compound **19** (in $CDCl_3$) : δ_H 6.70-8.10 ppm

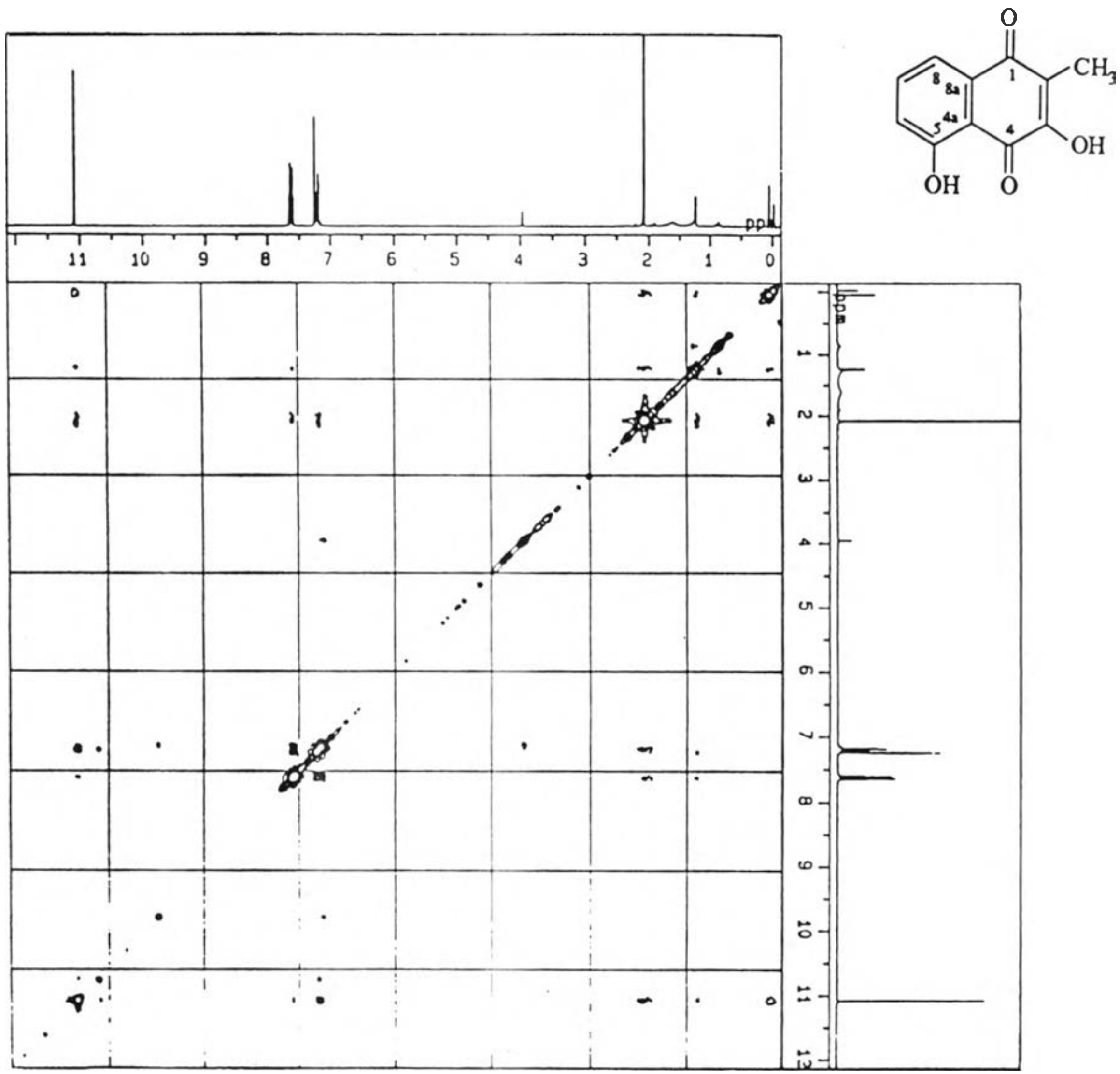


Figure 36 The NOESY (500 MHz) spectrum of compound 19 (in $CDCl_3$)

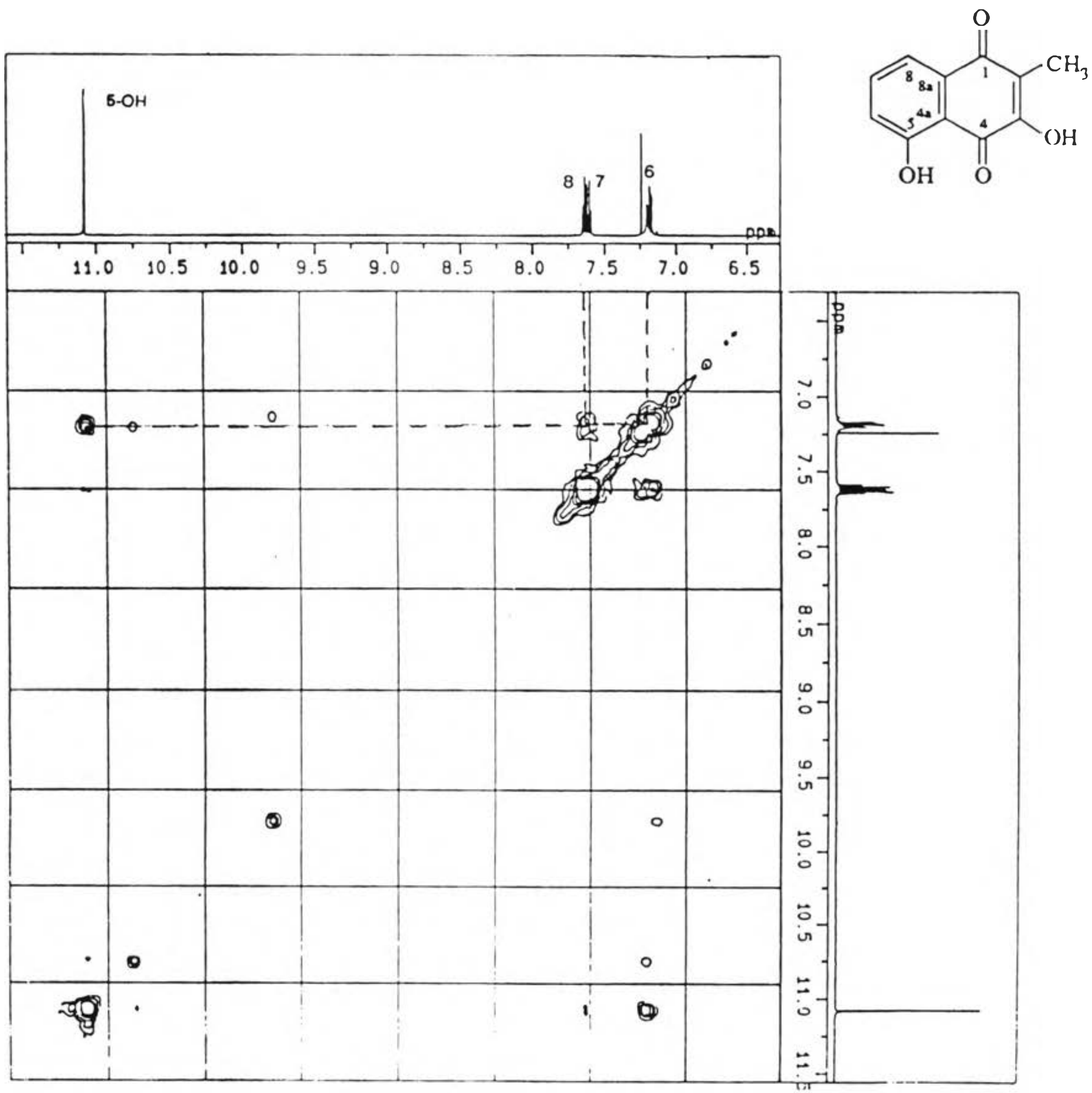


Figure 37 **Expansion** of the NOESY (500 MHz) spectrum of compound **19**

(in $CDCl_3$) : δ_H 6.50-11.50 ppm

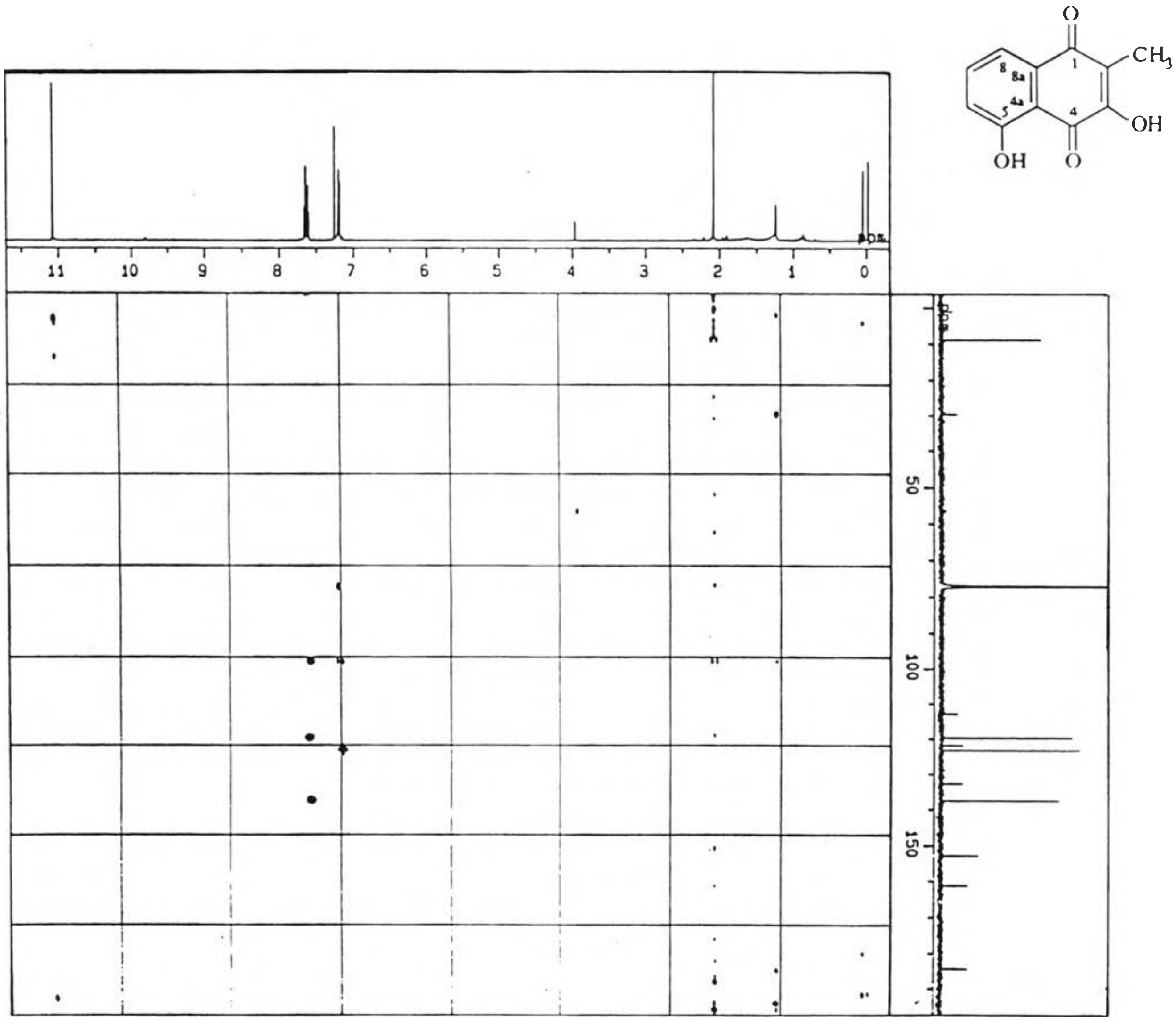


Figure 38 The HMQC spectrum of compound 19 (in $CDCl_3$)

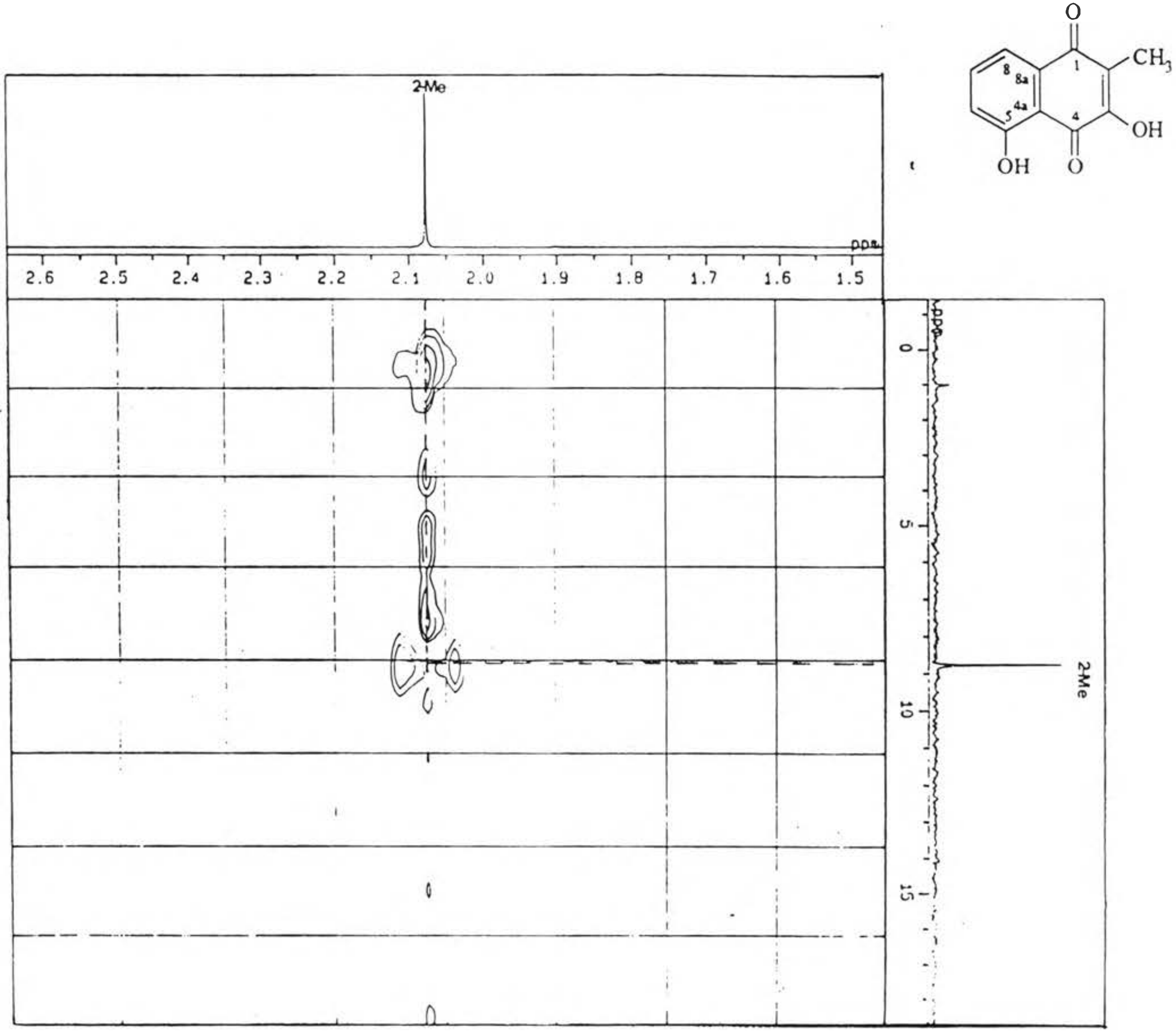


Figure 39 Expansion of the HMQC spectrum of compound **19** (in $CDCl_3$) :

δ_H 1.50-2.60 ; δ_C 0.00-18.00 ppm

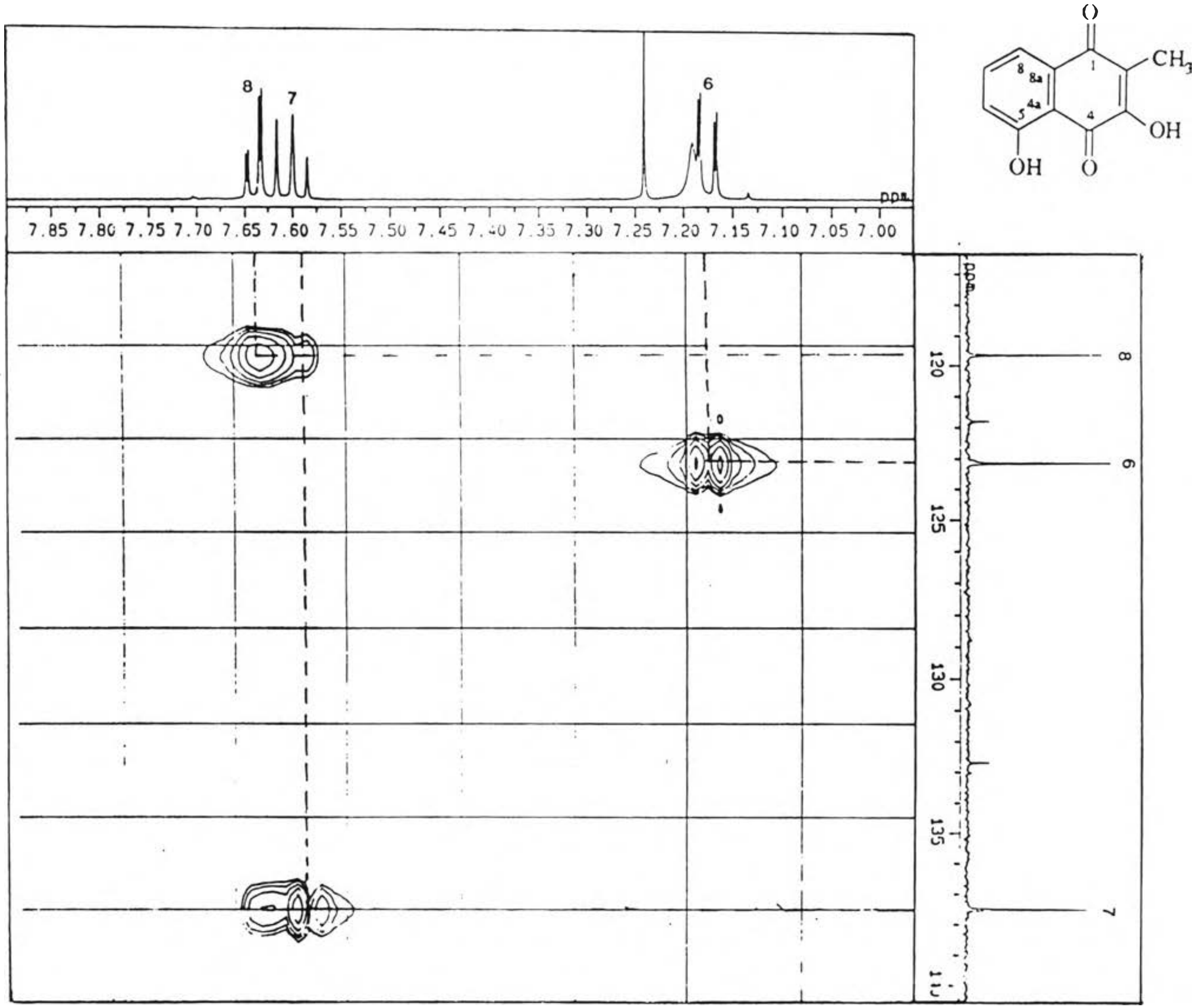


Figure 40 **Expansion of the HMQC spectrum of compound 19 (in $CDCl_3$) :**

δ_H 7.00-7.85 ; δ_C 117.00-140.00 ppm

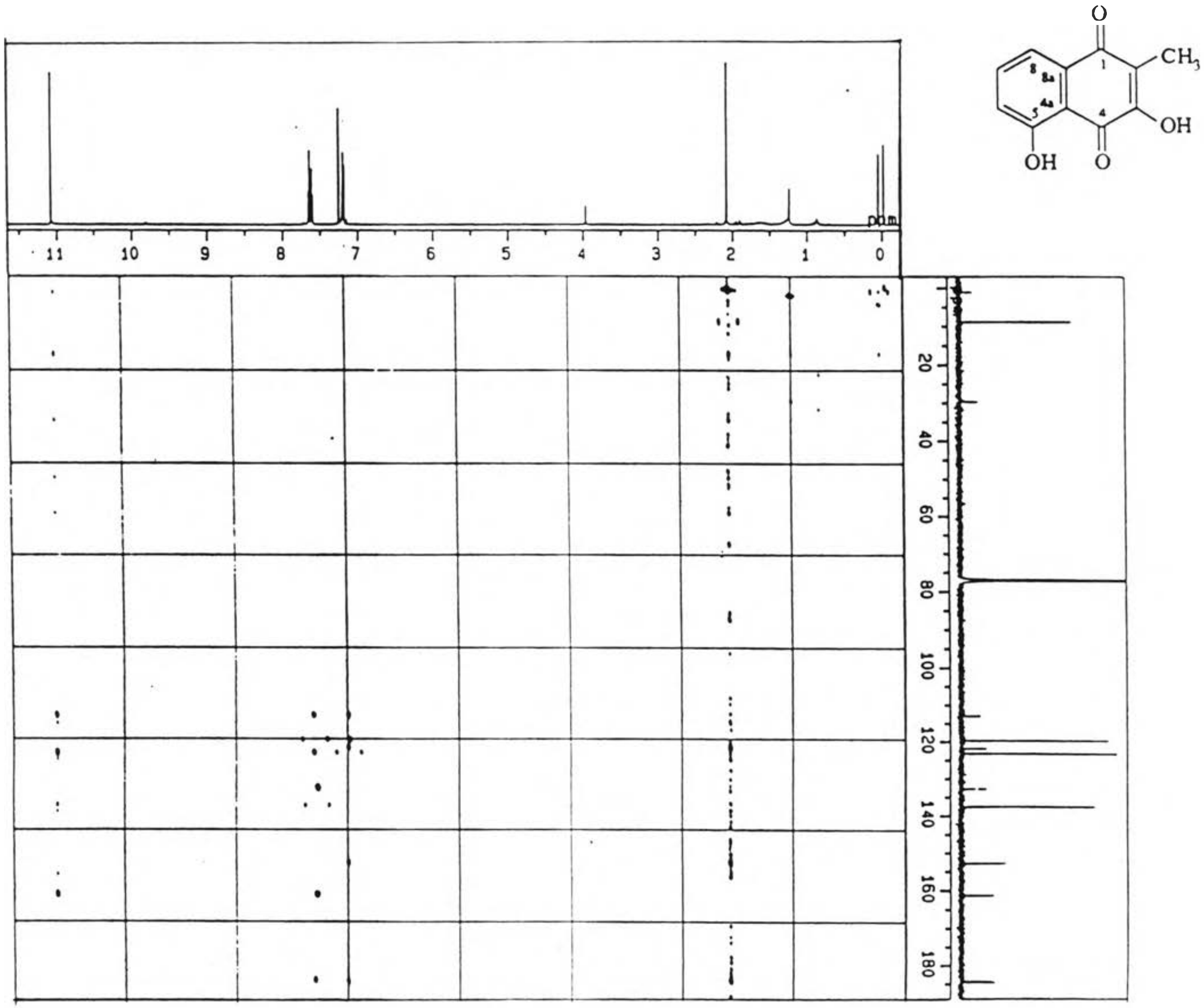


Figure 41 The HMBC spectrum of compound **19** (in $CDCl_3$)

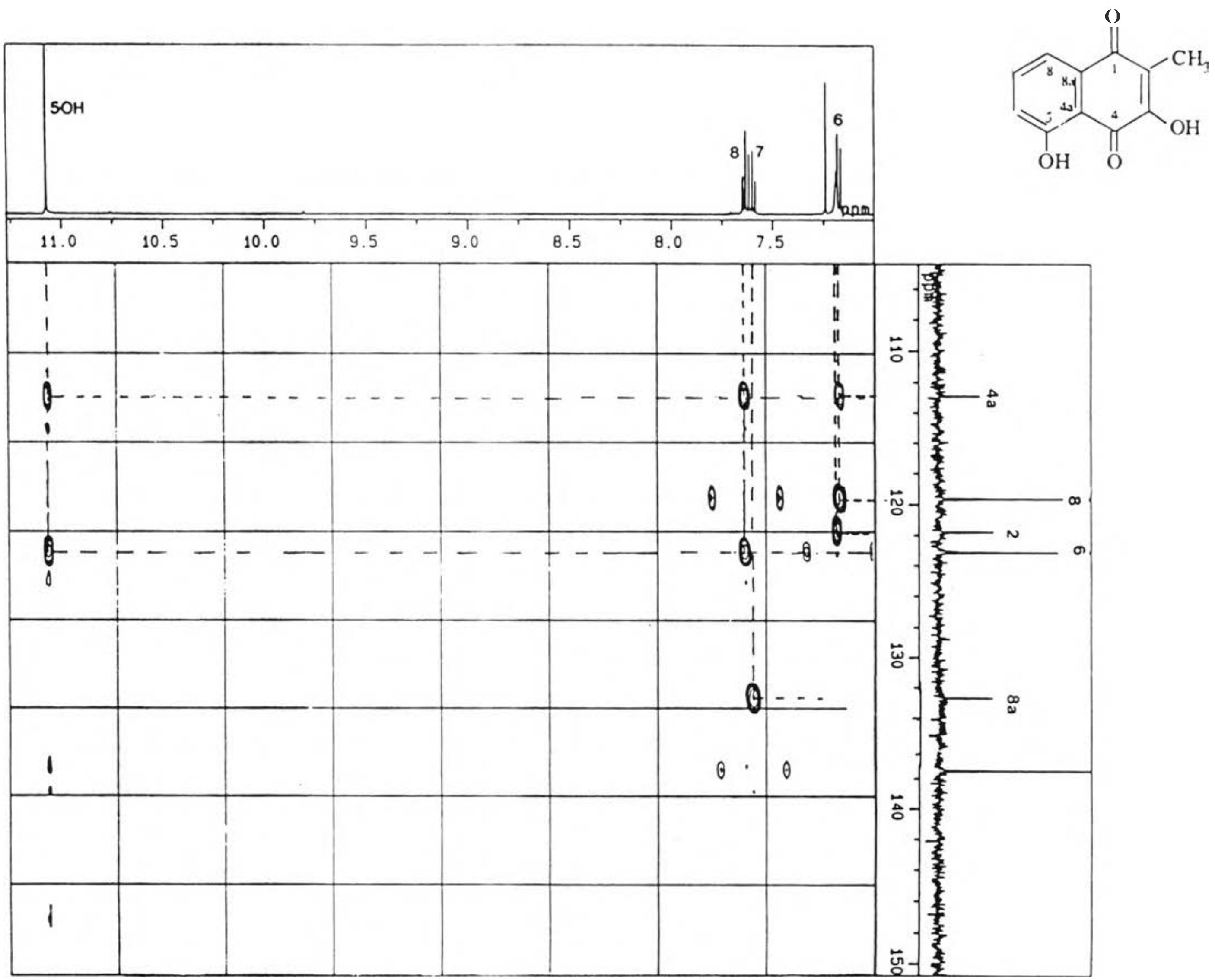


Figure 42 Expansion of the HMBC spectrum of compound 19 (in $CDCl_3$) :

δ_H 7.00-11.50 ; δ_C 108.00-150.00 ppm

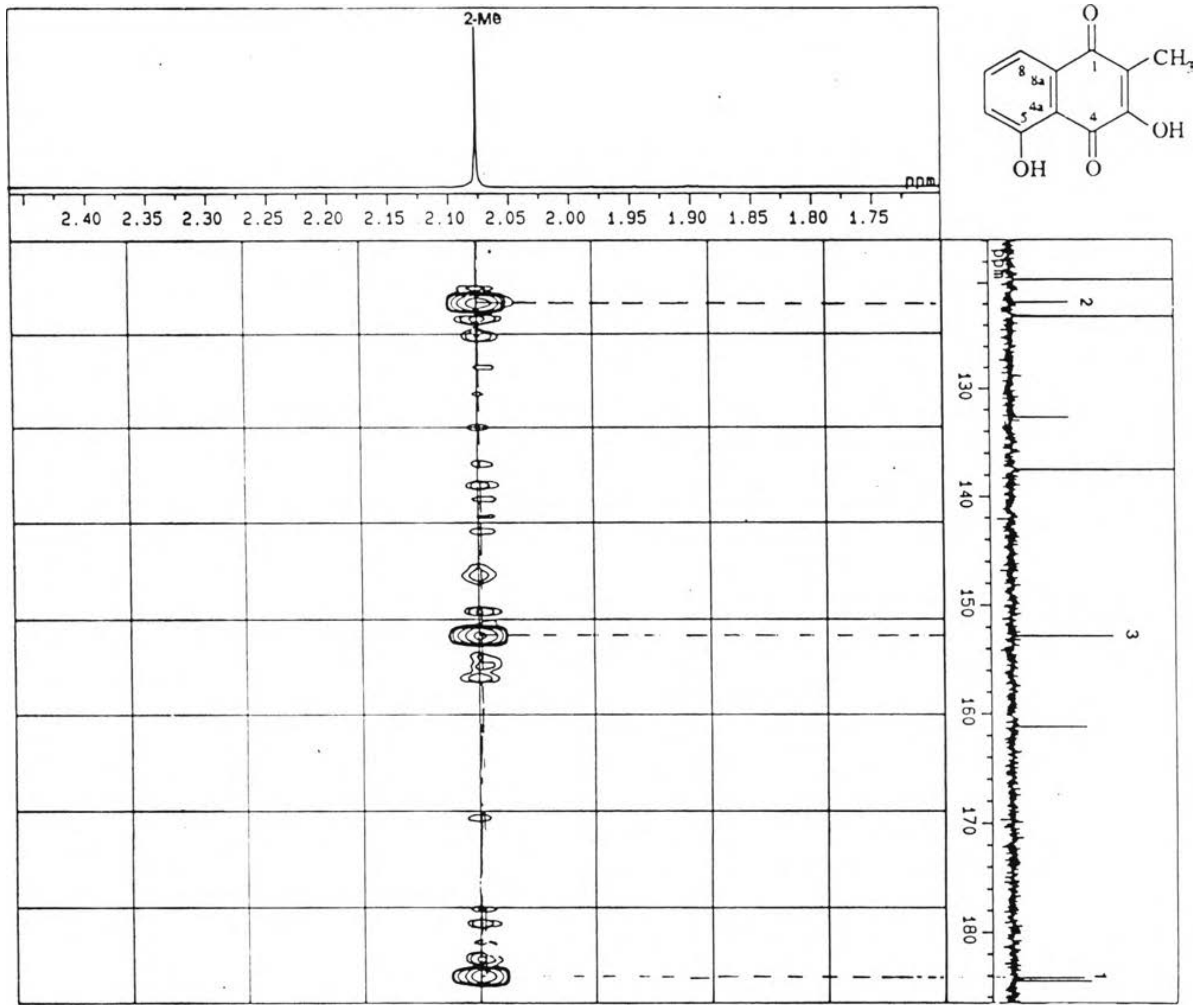


Figure 43 Expansion of the HMBC spectrum of compound **19** (in $CDCl_3$) :

δ_H 1.75-2.41 ; δ_C 124.00-183.00 ppm

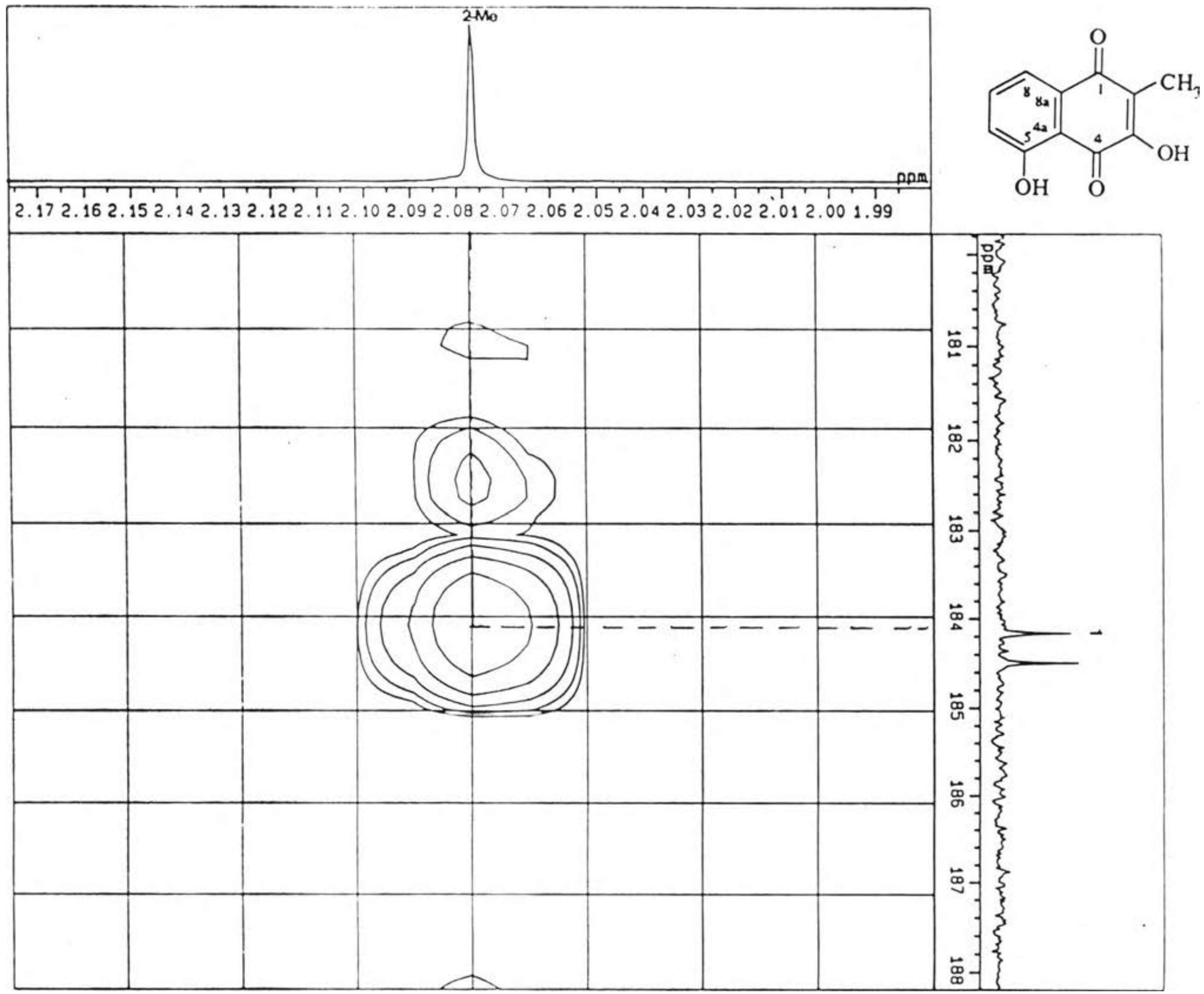


Figure 44 Expansion of the HMBC spectrum of compound **19** (in $CDCl_3$) :

δ_H 1.99-2.17 ; δ_C 180.00-188.00 ppm

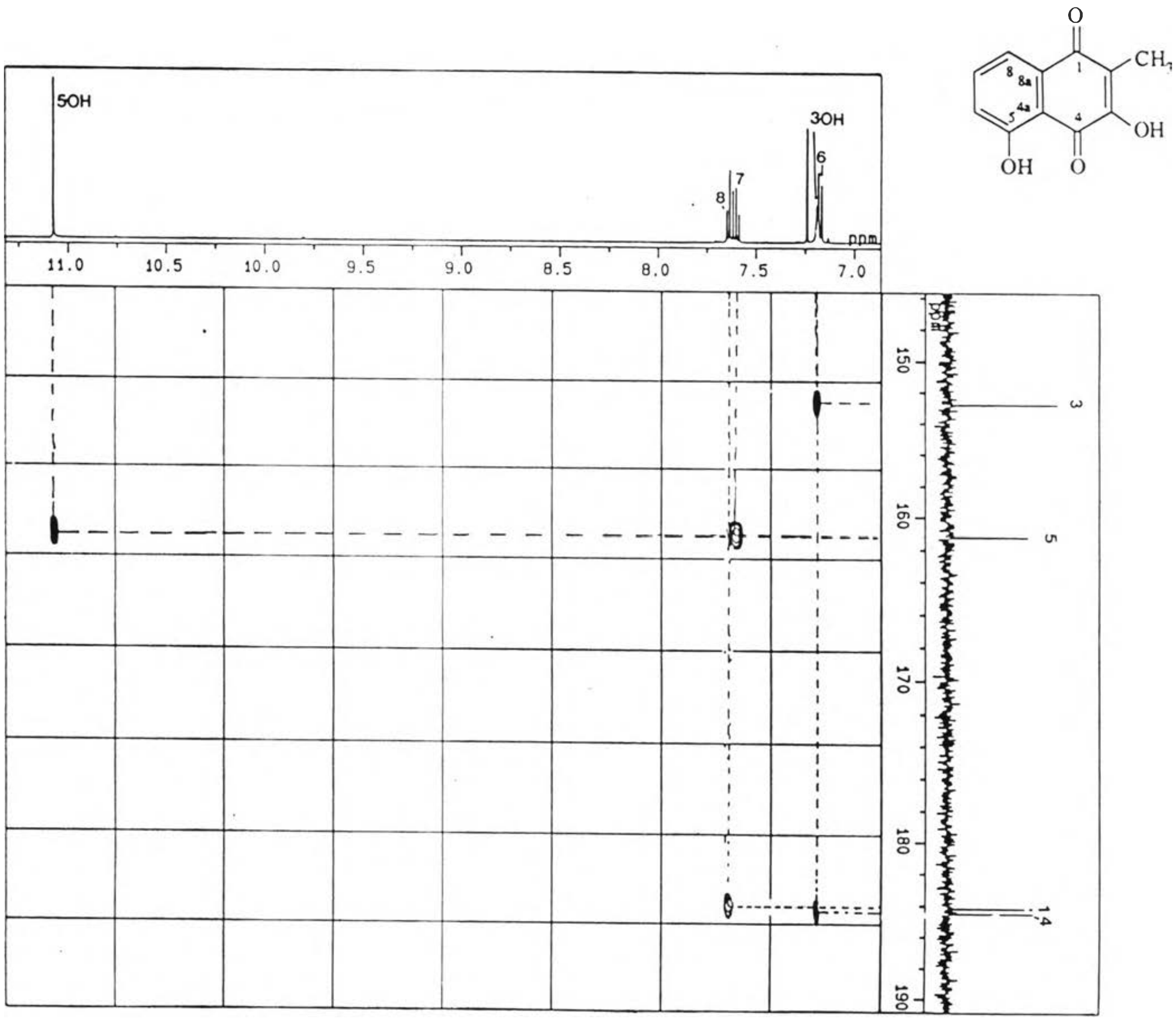


Figure 45 Expansion of the HMBC spectrum of compound **19** :

δ_H 7.00-11.50 ; δ_C 146.00-190.00 ppm

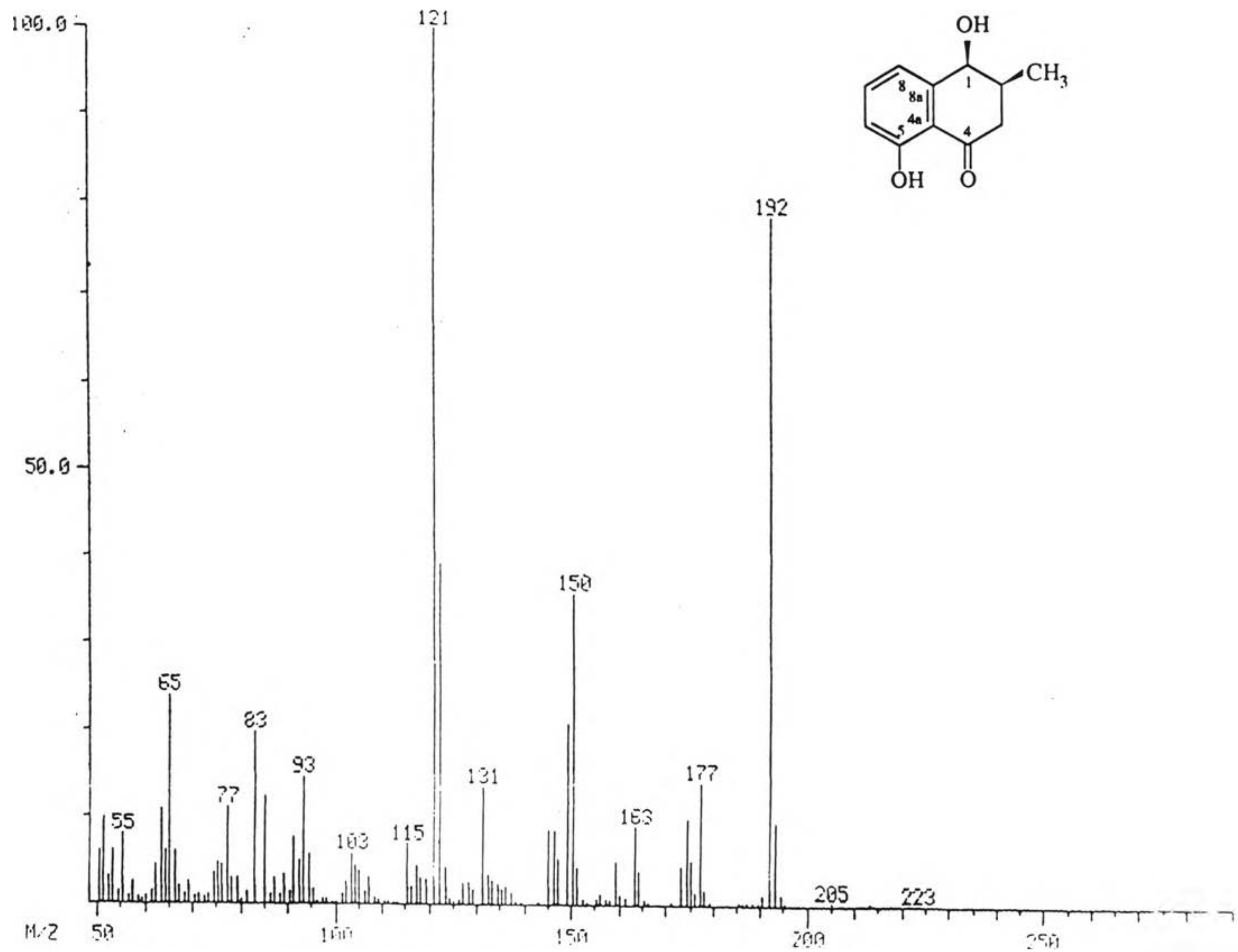


Figure 46 The EI mass spectrum of compound **102**

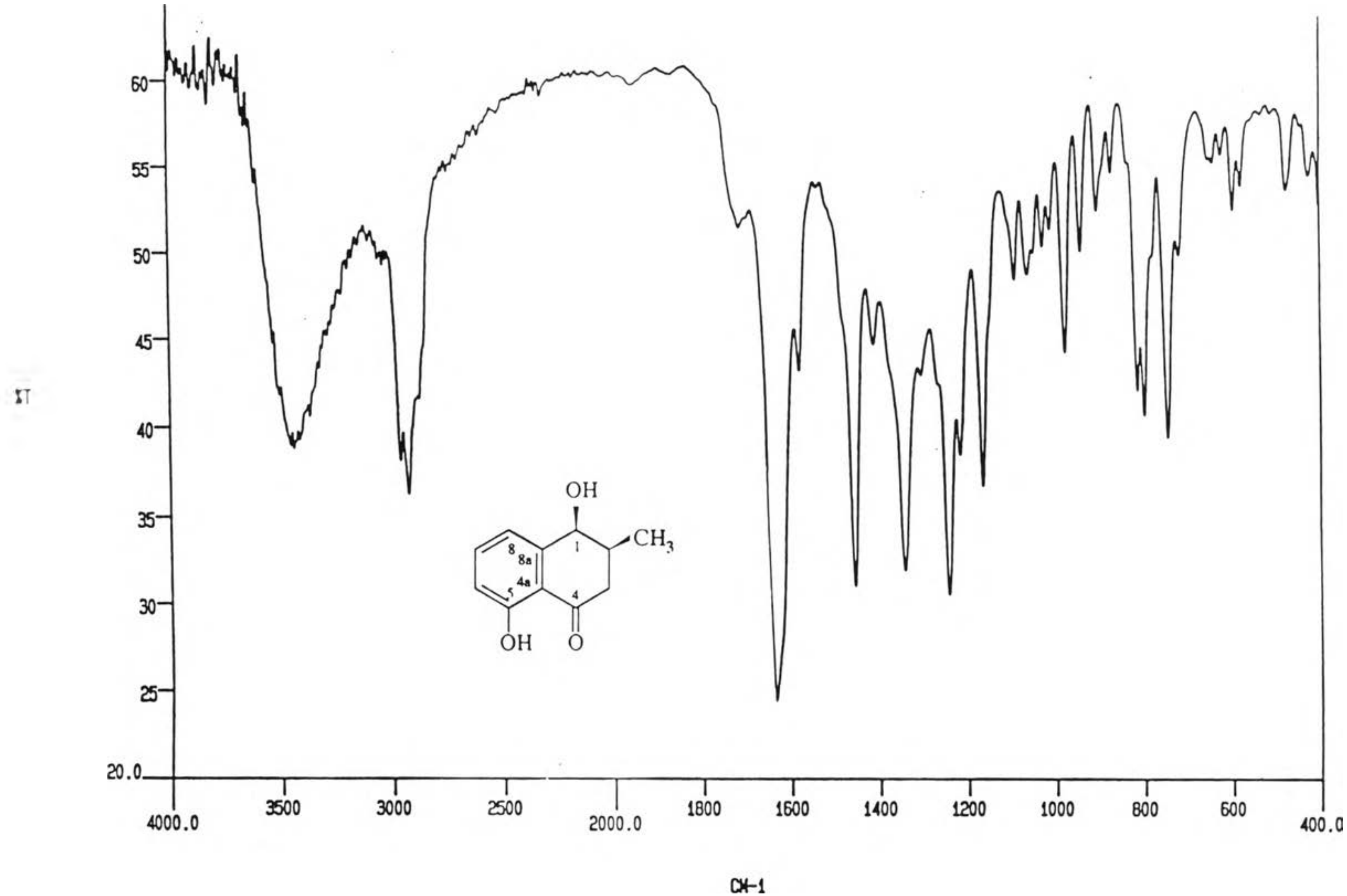


Figure 47 The IR spectrum of compound **102** (in KBr disc)

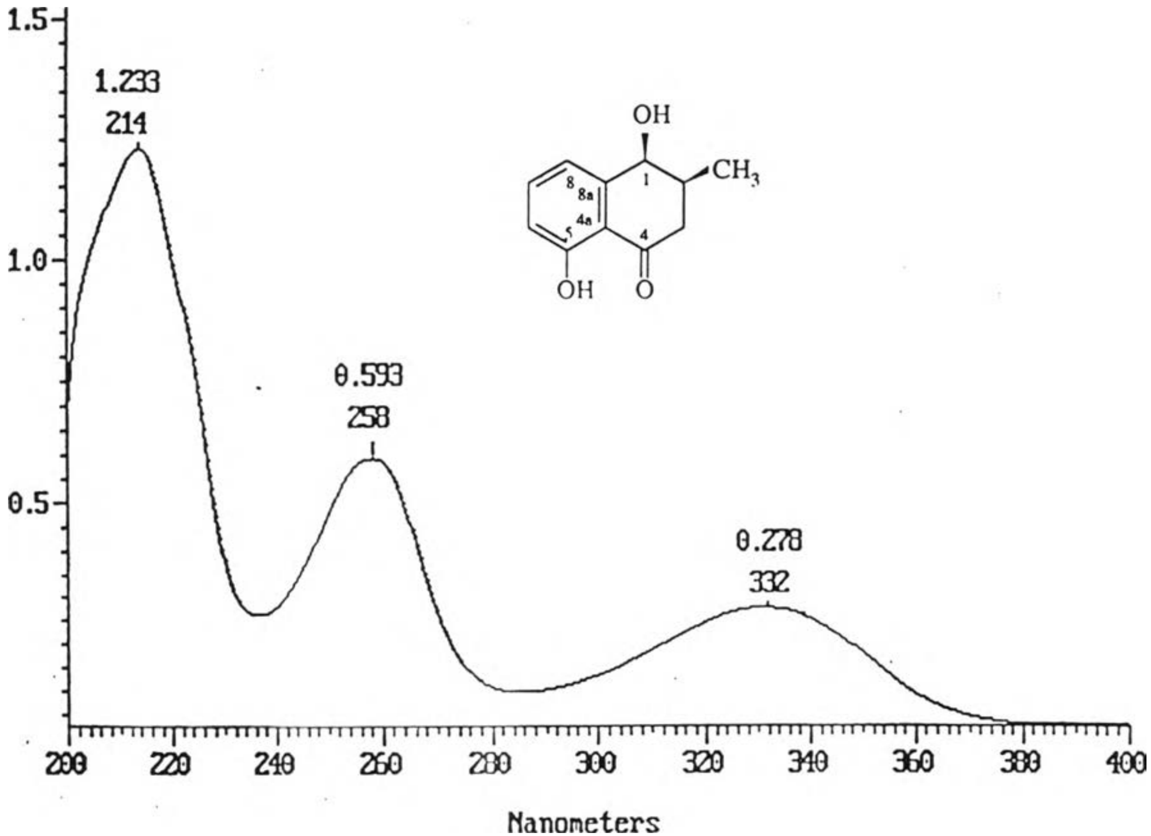


Figure 48 The UV spectrum of compound **102** (in MeOH)

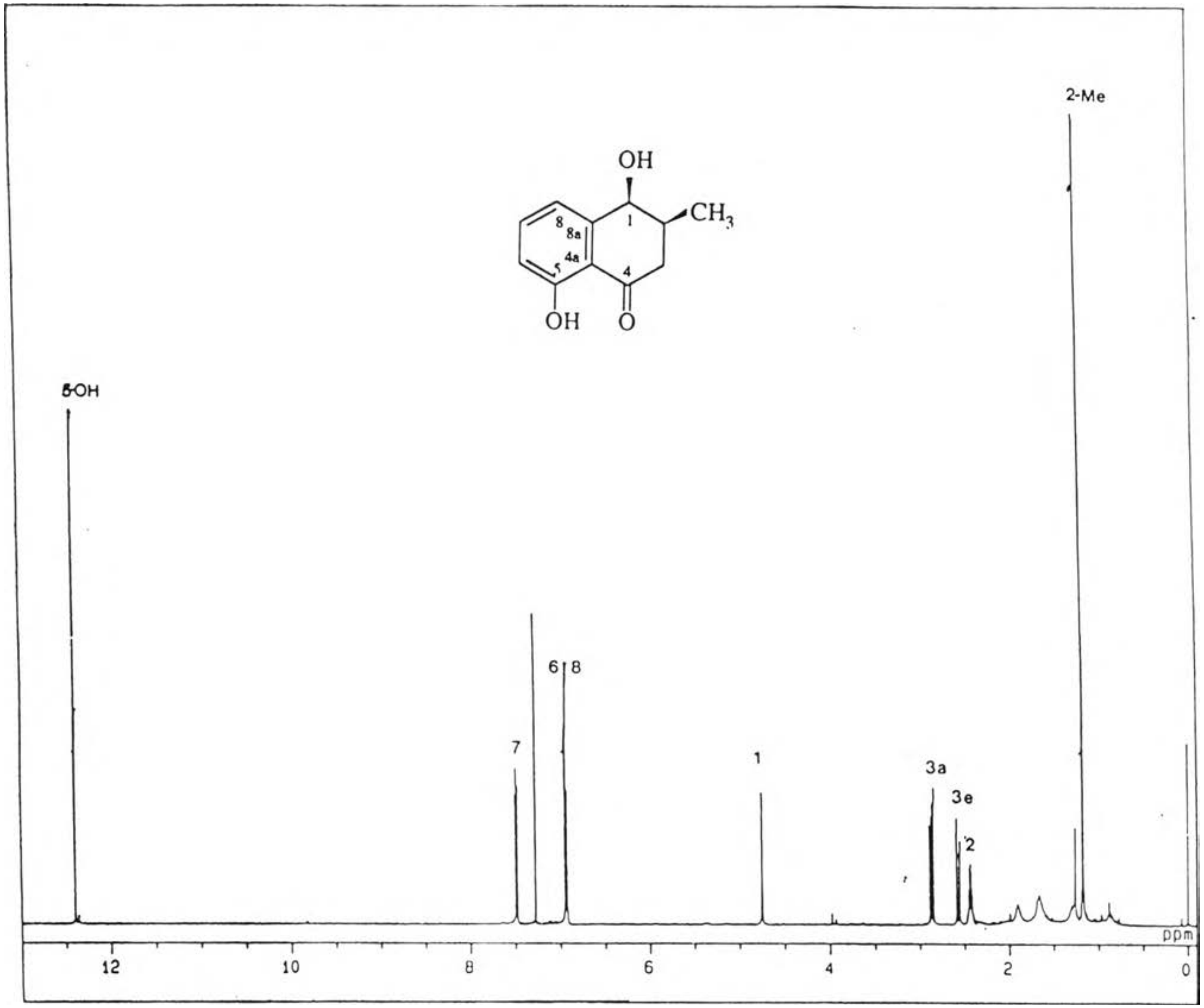


Figure 49 The ^{1}H NMR (500 MHz) spectrum of compound **102** (in $CDCl_3$)

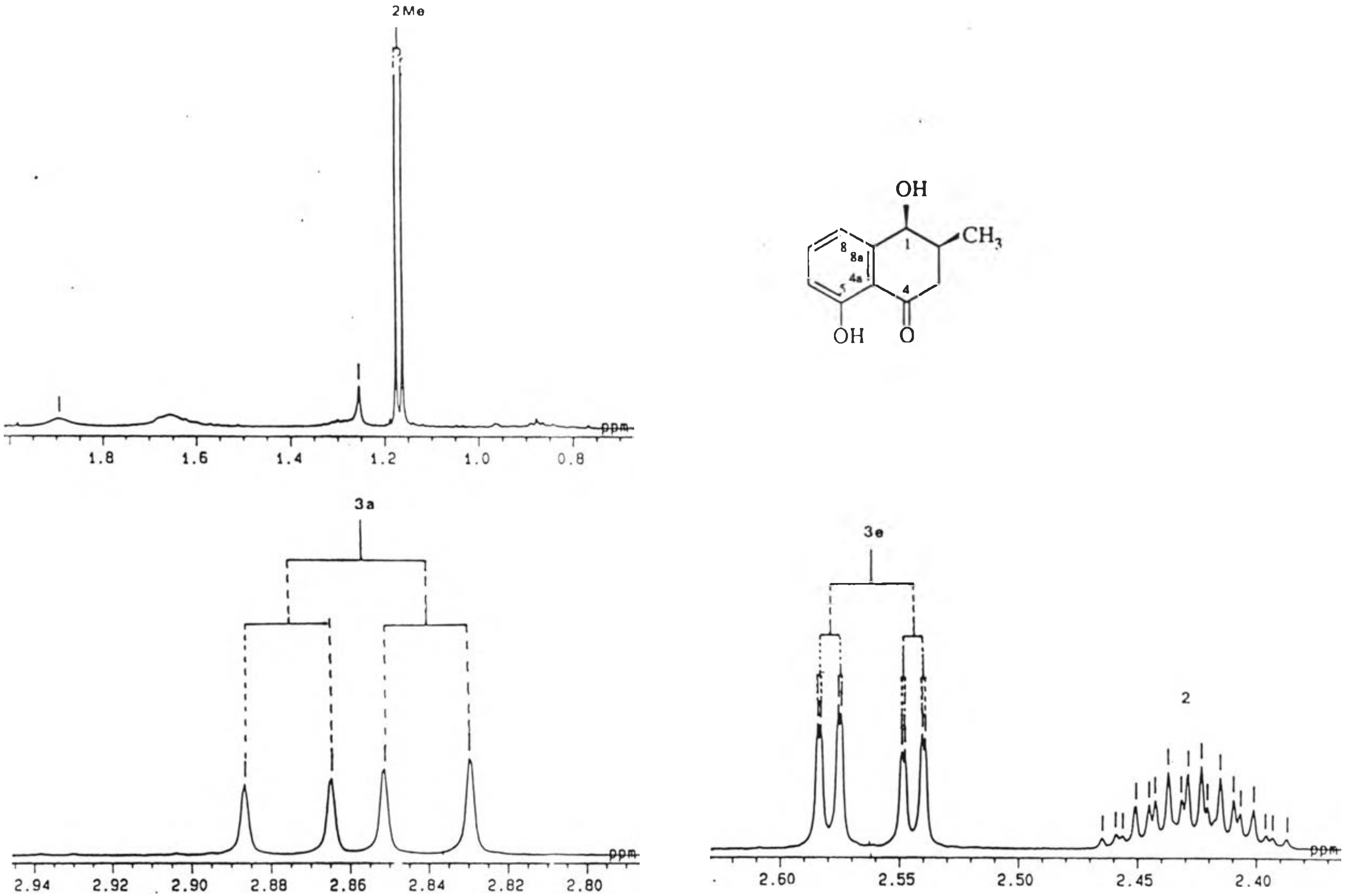


Figure 50 Expansion of the ^{1}H NMR (500 MHz) spectrum of compound **102**

(in $CDCl_3$) : δ_H 0.80-2.94 ppm

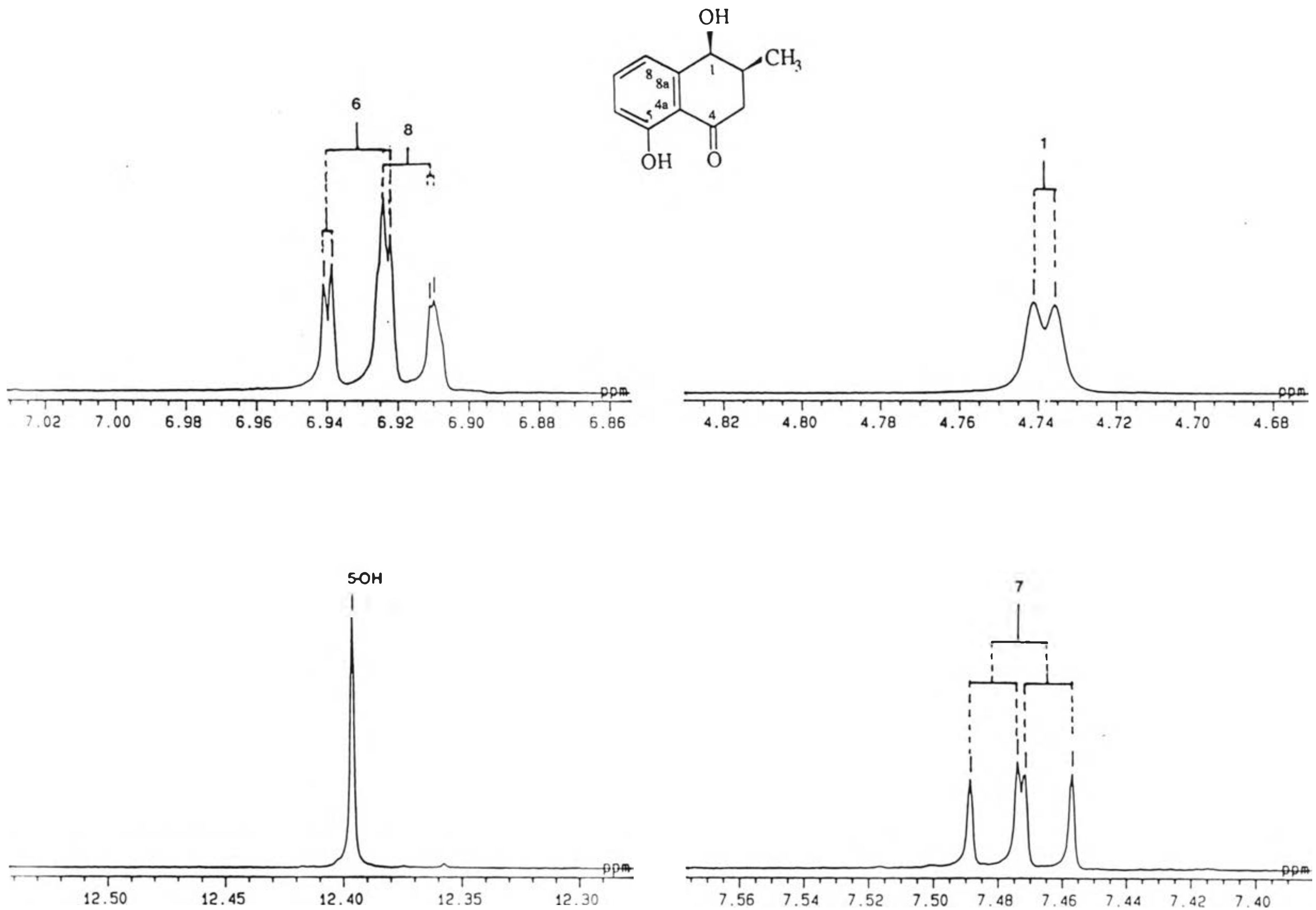


Figure 51 Expansion of the ^{1}H NMR (500 MHz) spectrum of compound **102** (in $CDCl_3$) : δ_H 4.68-12.50 ppm

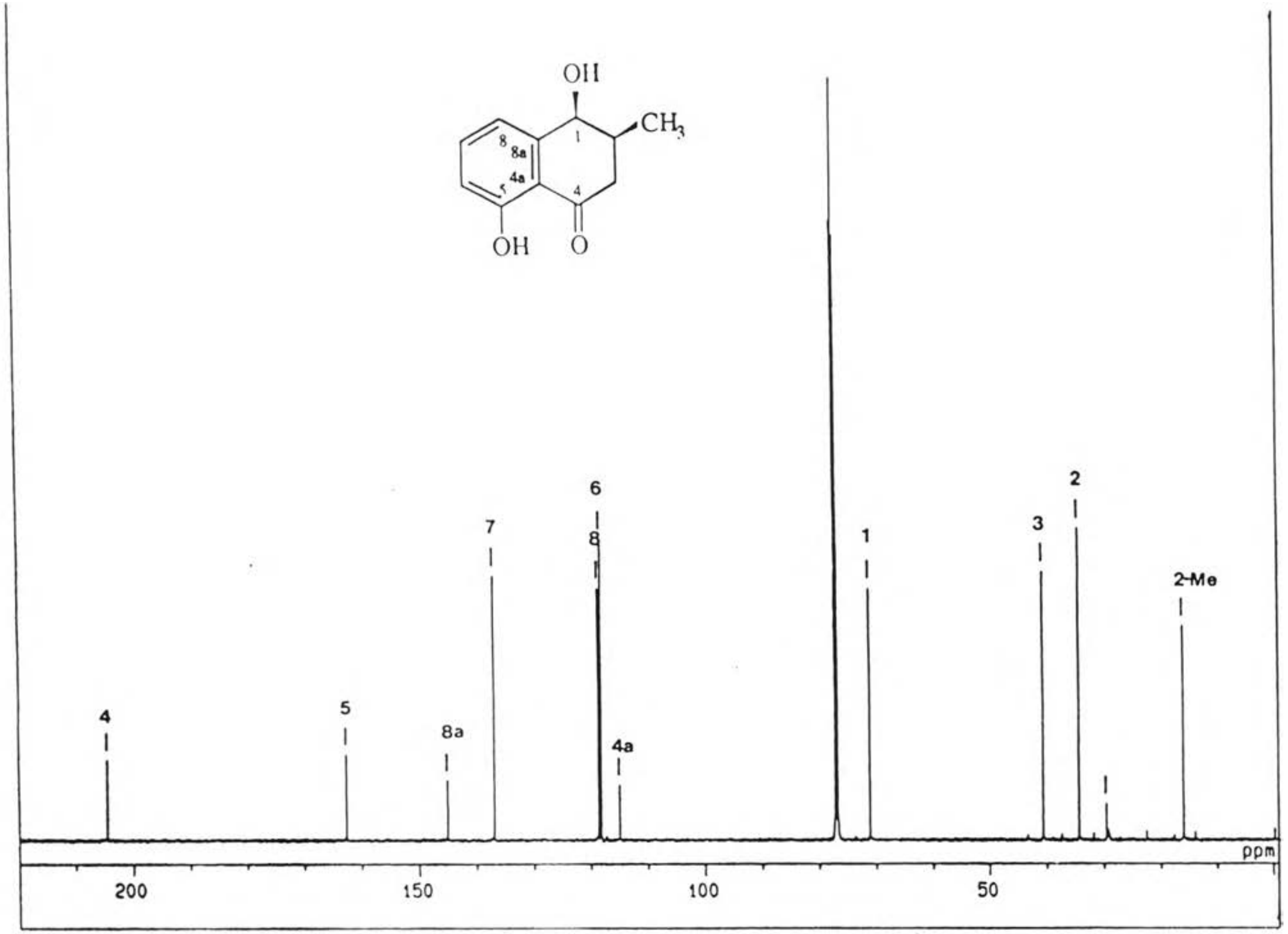


Figure 52 The ^{13}C NMR (125 MHz) spectrum of compound **102** (in $CDCl_3$)

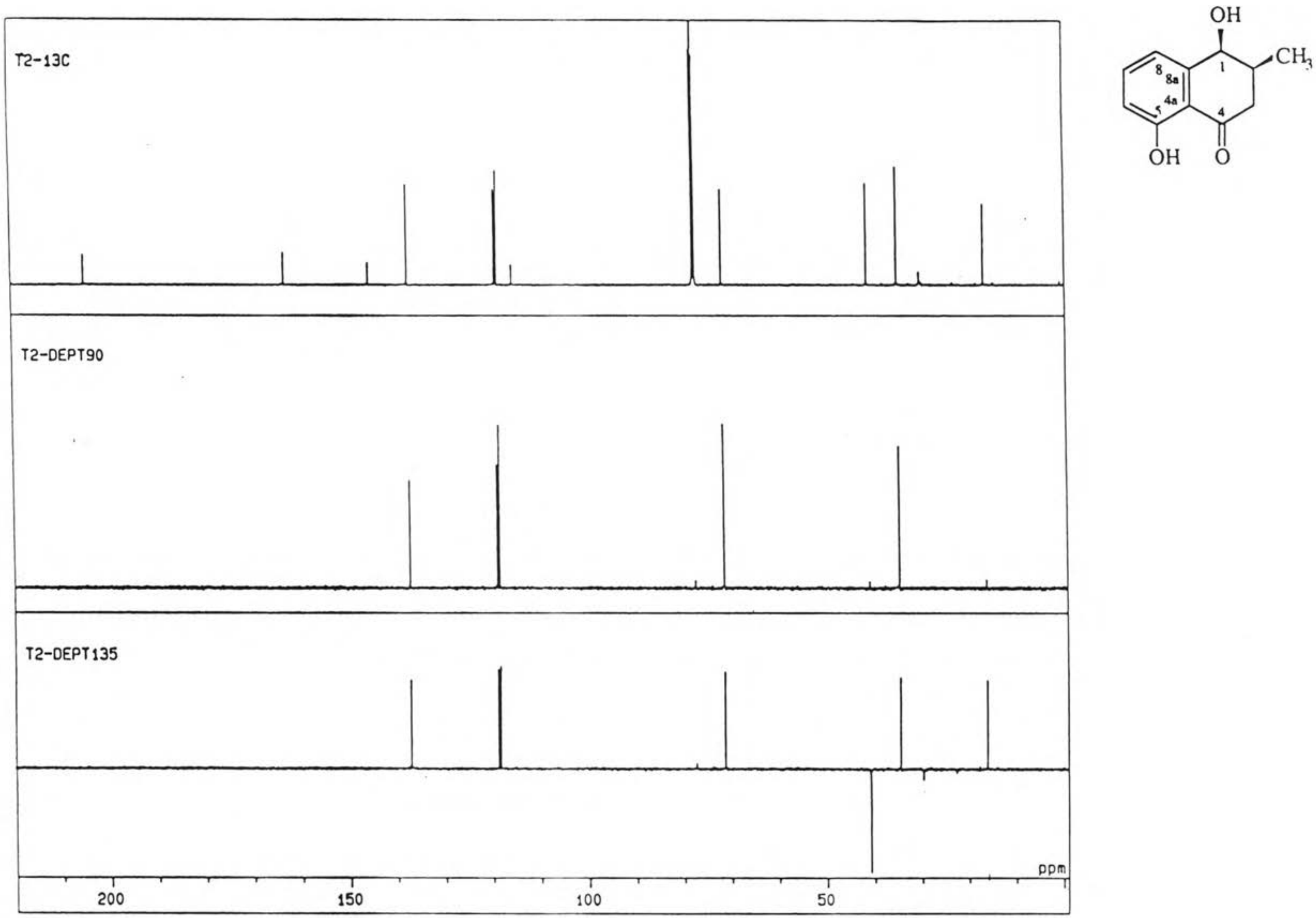


Figure 53 The DEPT (125 MHz) spectrum of compound **102** (in $CDCl_3$)

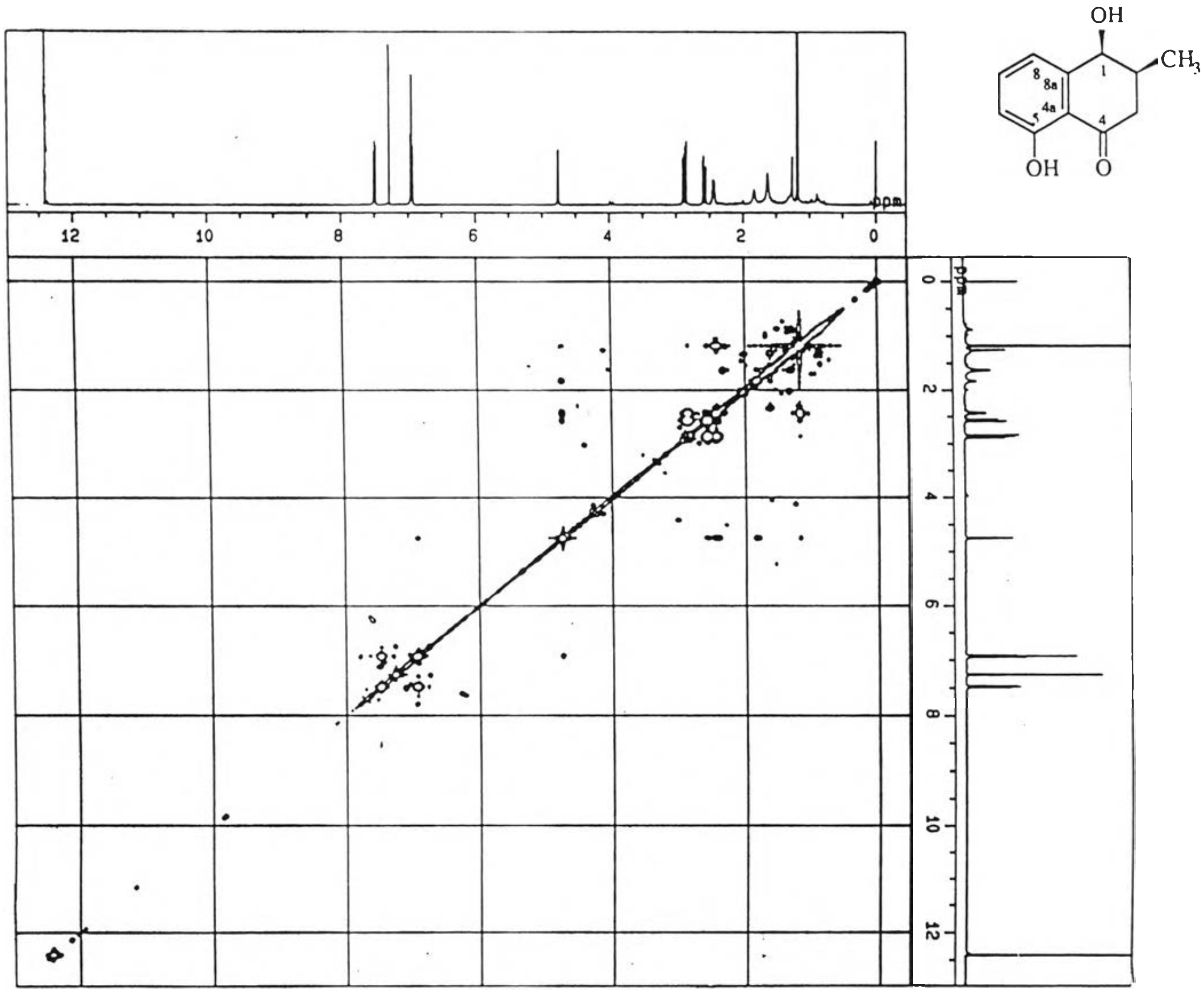


Figure 54 The ^{1}H-^{1}H COSY (500 MHz) spectrum of compound **102** (in $CDCl_3$)

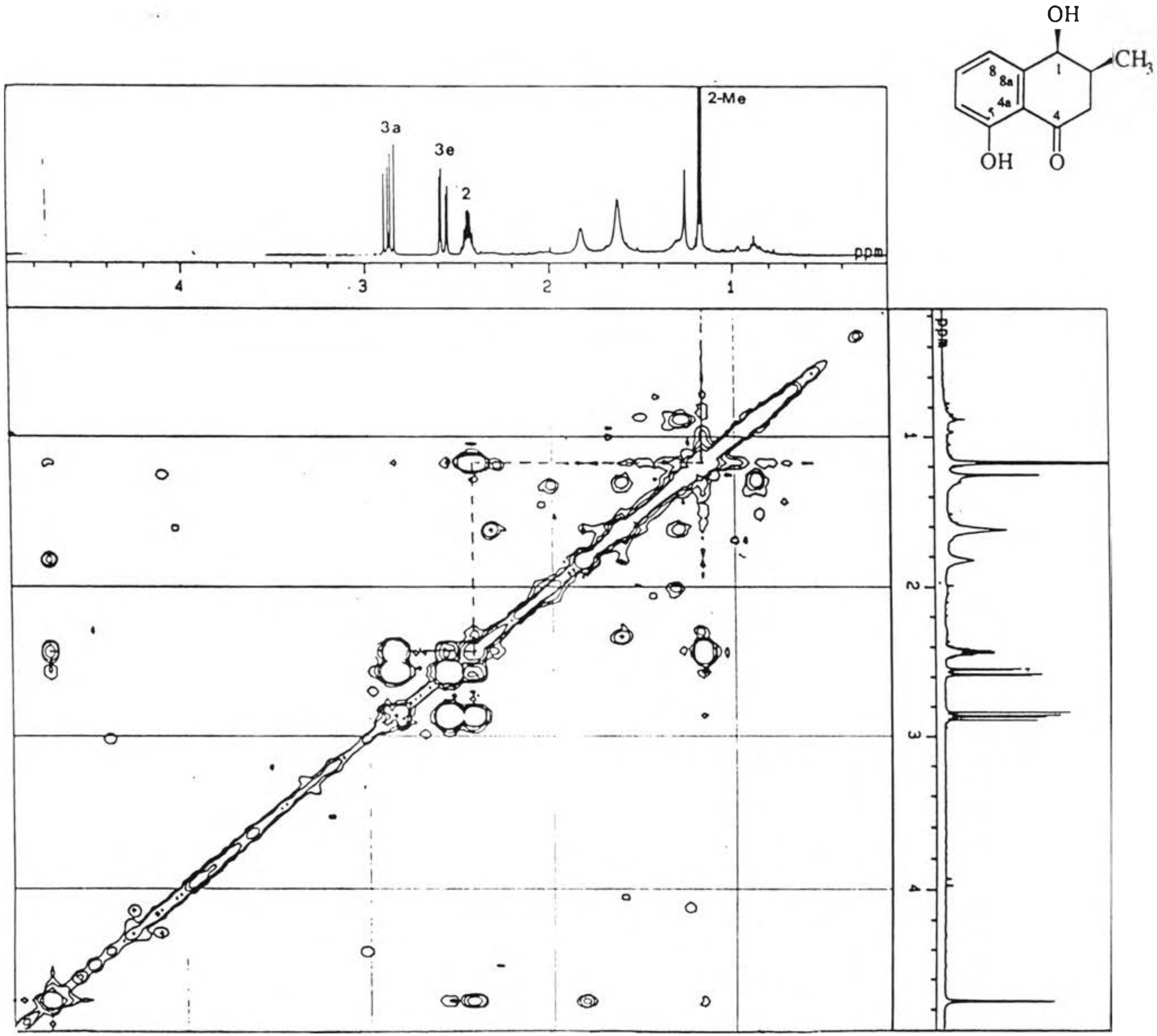


Figure 55 Expansion of the ^{1}H-^{1}H COSY (500 MHz) spectrum of compound **102** (in $CDCl_3$) : δ_H 0.40-4.80 ppm

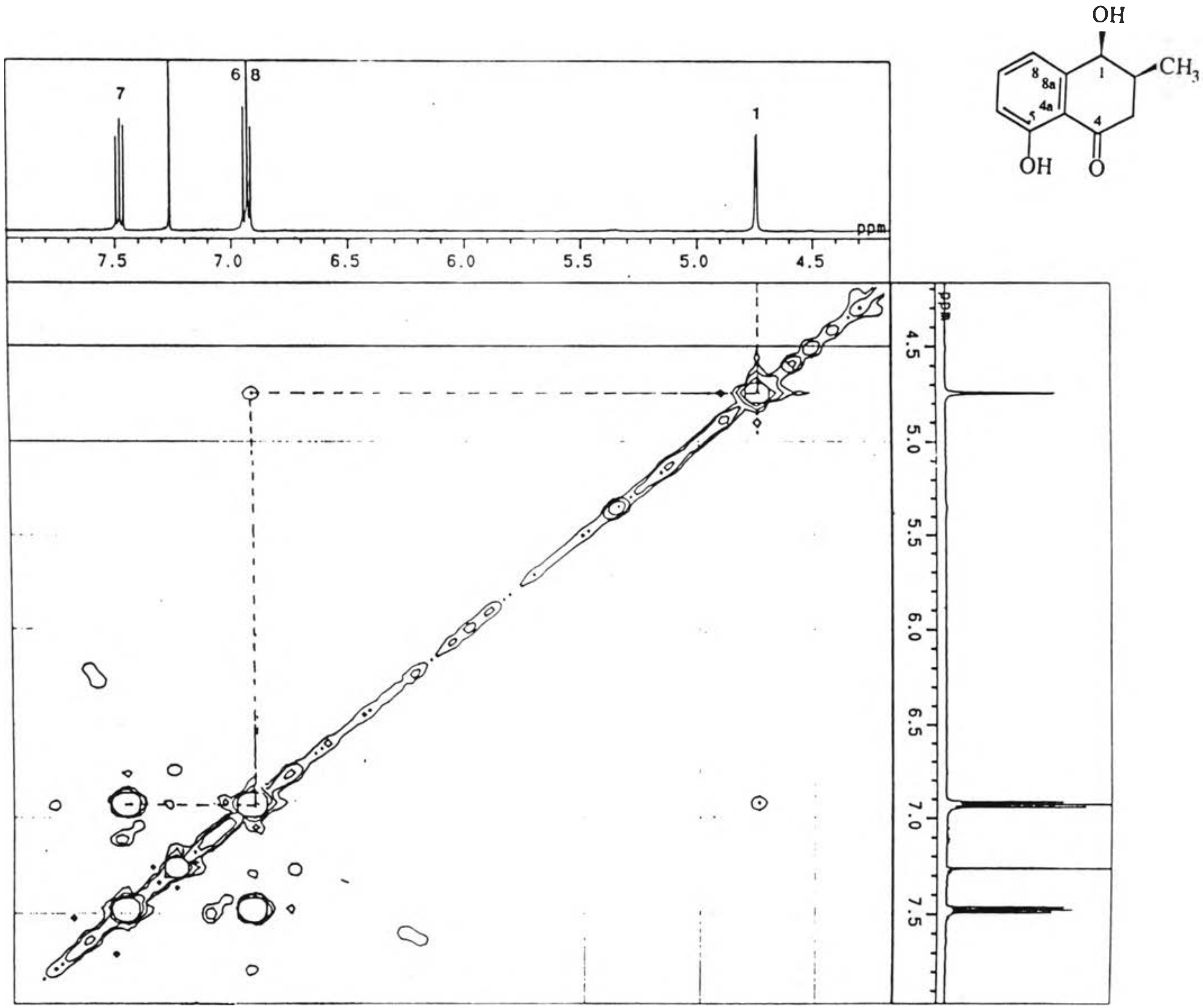
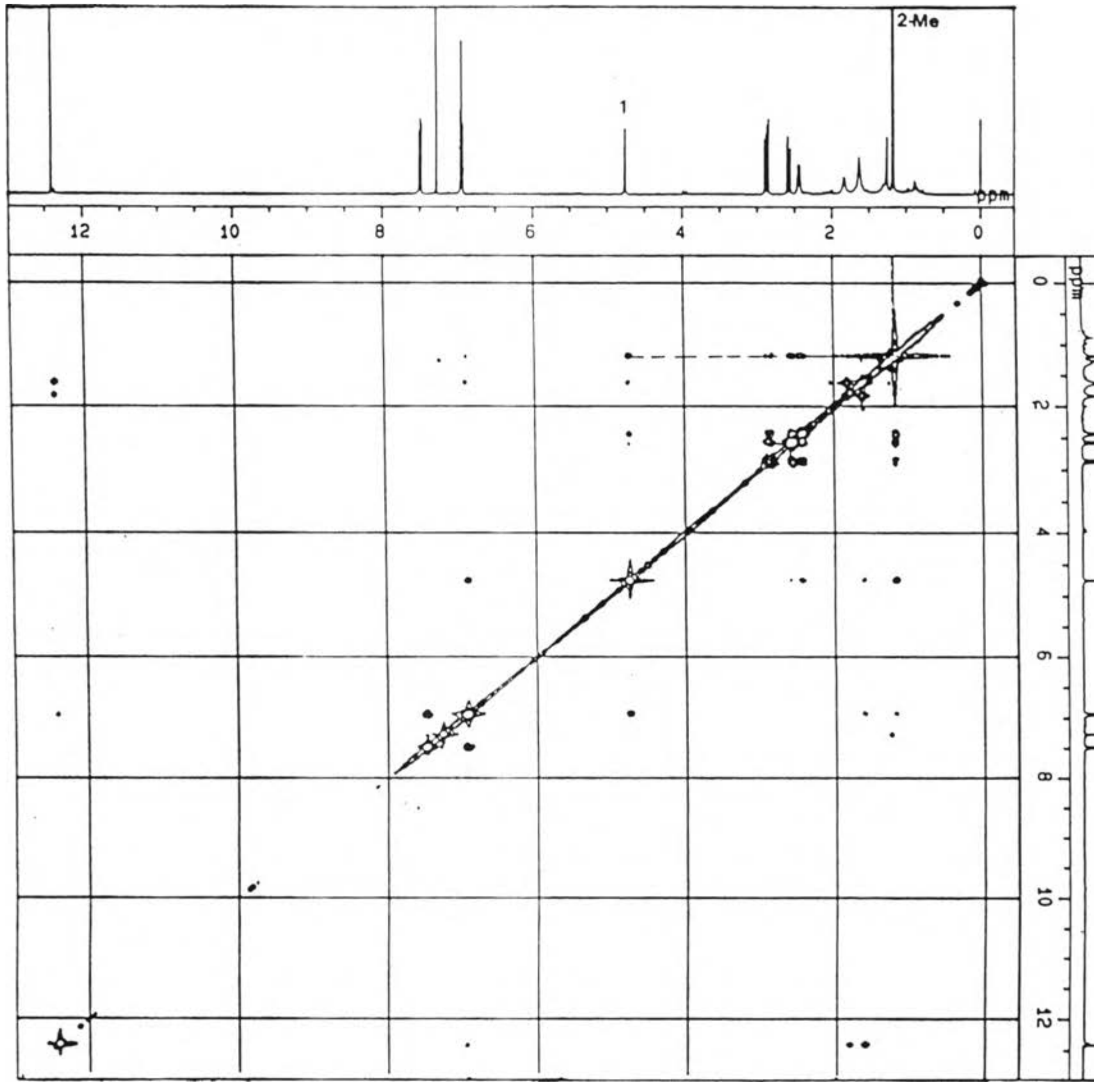


Figure 56 Expansion of the ^{1}H-^{1}H COSY (500 MHz) spectrum of compound **102** (in $CDCl_3$) : δ_H 4.30-7.90 ppm



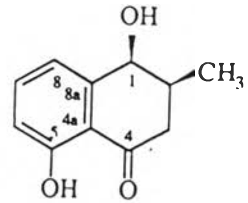
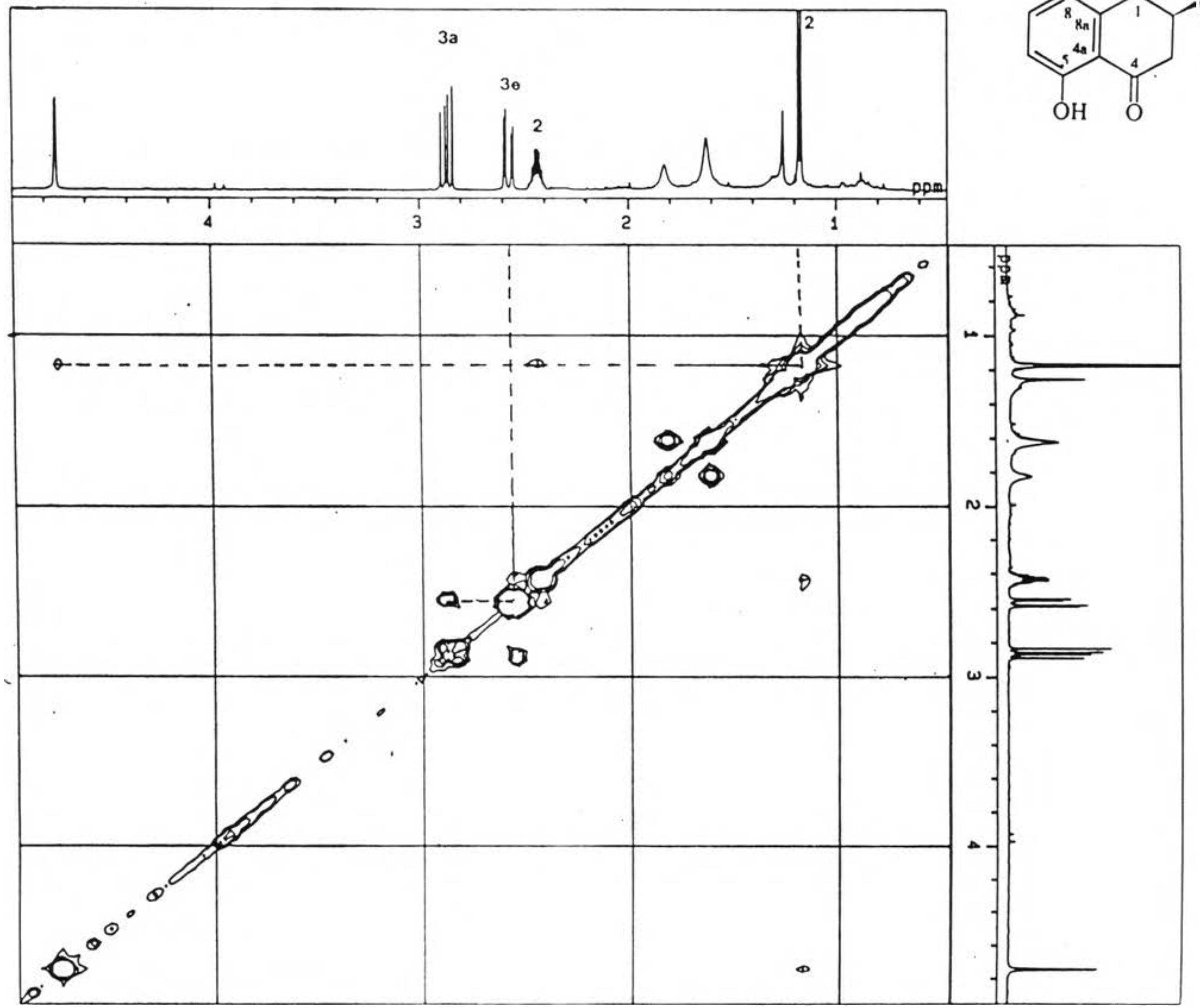


Figure 57 The NOESY (500 MHz) spectrum of compound **102** (in $CDCl_3$)



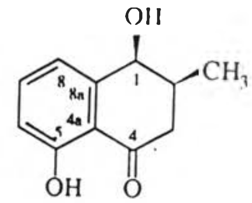


Figure 58 Expansion of the NOESY (500 MHz) spectrum of compound **102** (in $CDCl_3$) : δ_H 0.60-4.80 ppm

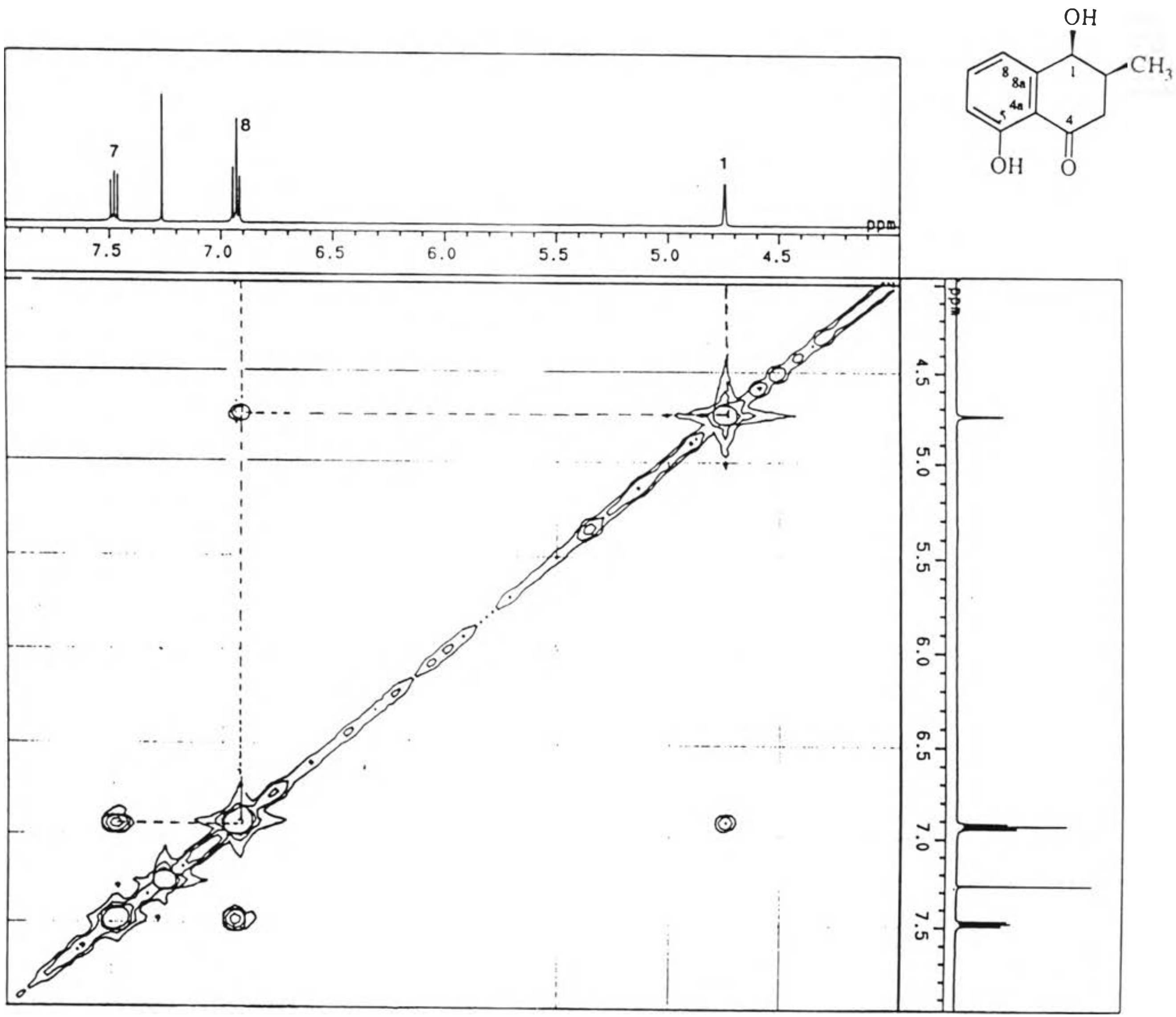


Figure 59 Expansion of the NOESY (500 MHz) spectrum of compound **102**

(in $CDCl_3$) : δ_H 4.10-7.80 ppm

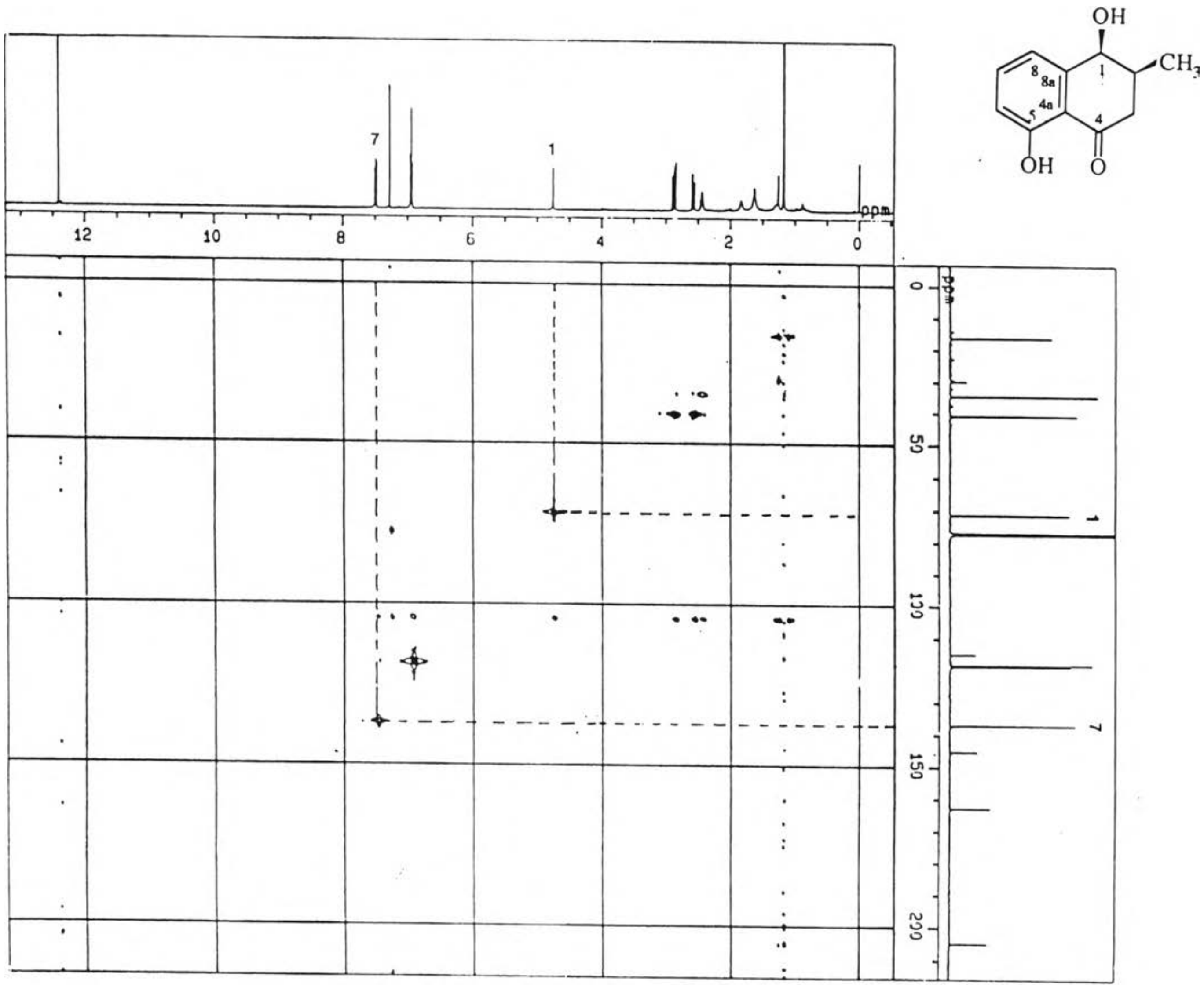
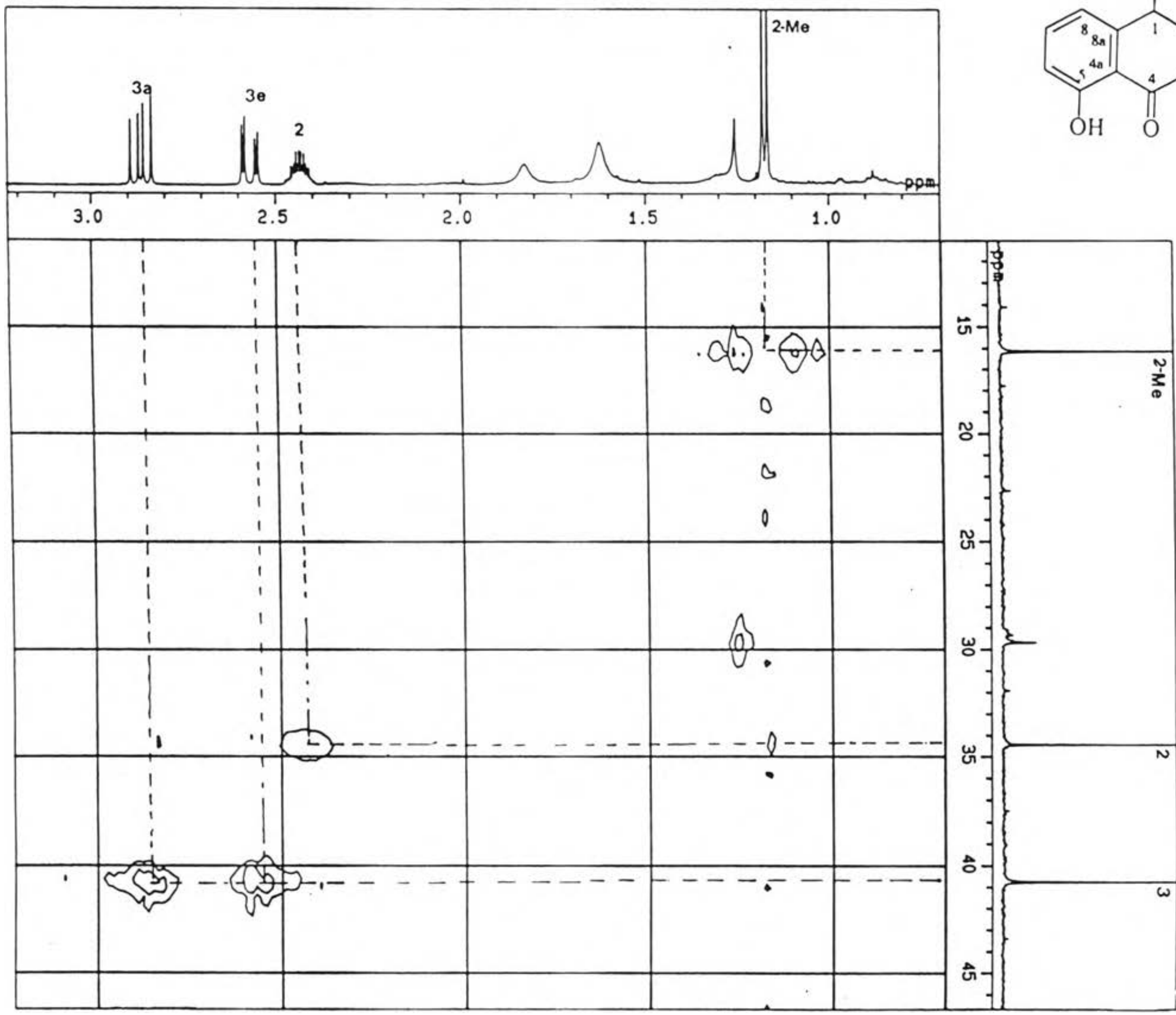


Figure 60 The HMQC spectrum of compound **102** (in $CDCl_3$)



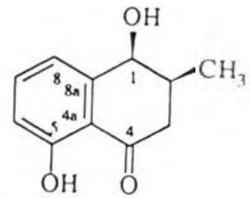


Figure 61 Expansion of the HMQC spectrum of compound **102** (in $CDCl_3$) : δ_H 0.60-3.20 ; δ_C 12.00-46.00 ppm

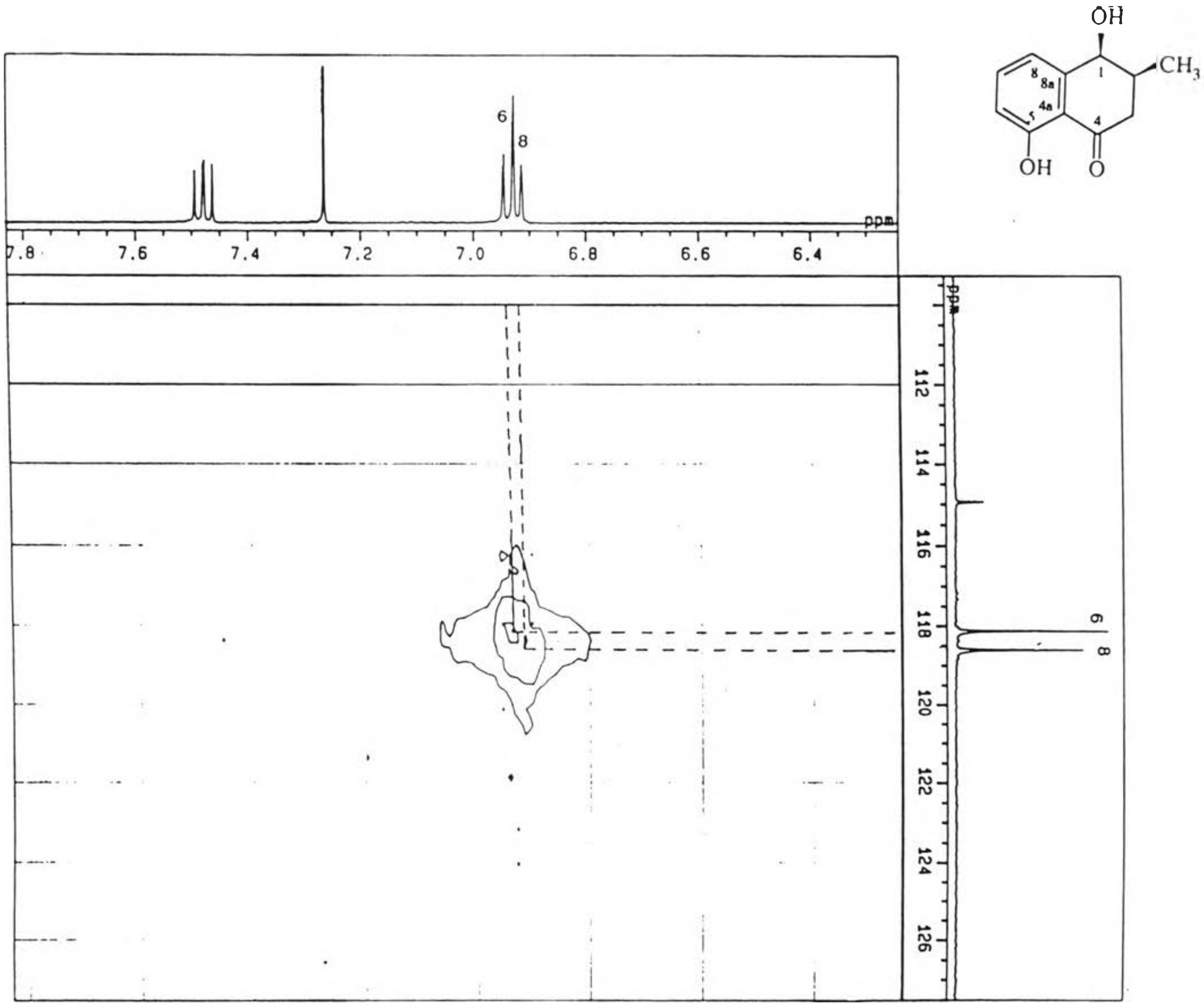


Figure 62 Expansion of the HMQC spectrum of compound **102** (in $CDCl_3$) :

δ_H 6.40-7.80 ; δ_C 112.00-126.00 ppm

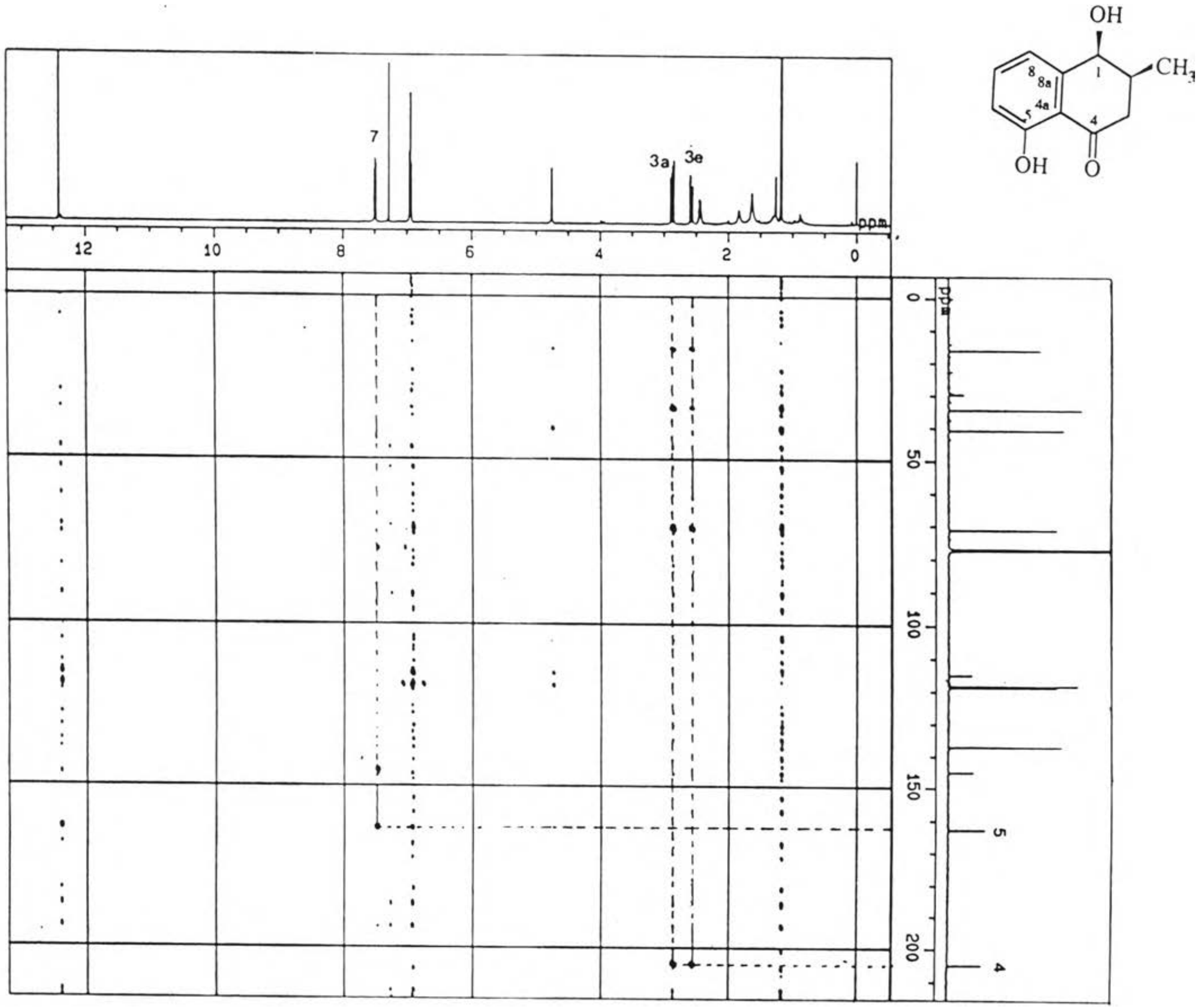


Figure 63 The HMBC spectrum of compound **102** (in $CDCl_3$)

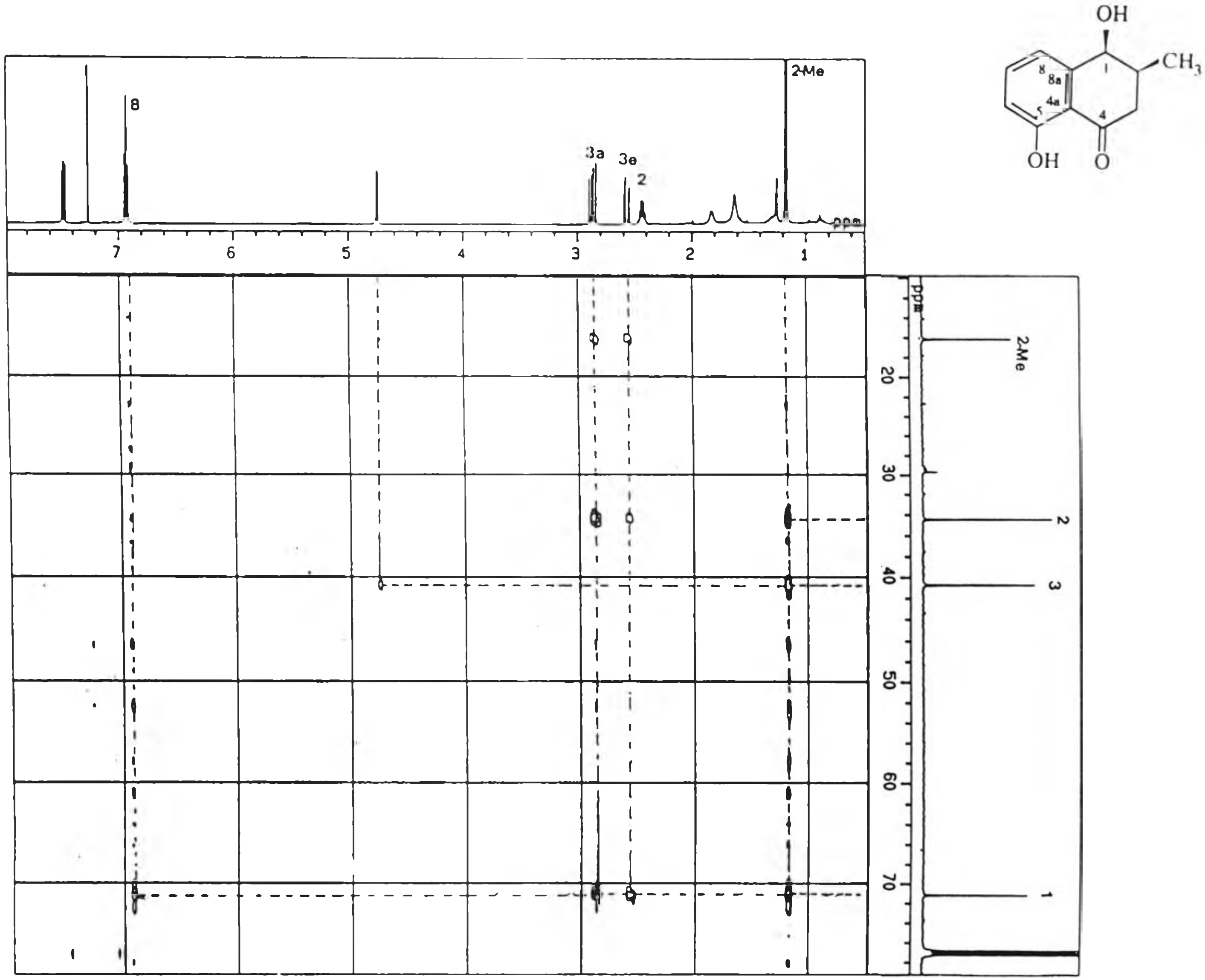


Figure 64 Expansion of the HMBC spectrum of compound **102** (in $CDCl_3$) :

δ_H 0.60-7.80 ; δ_C 10.00-78.00 ppm

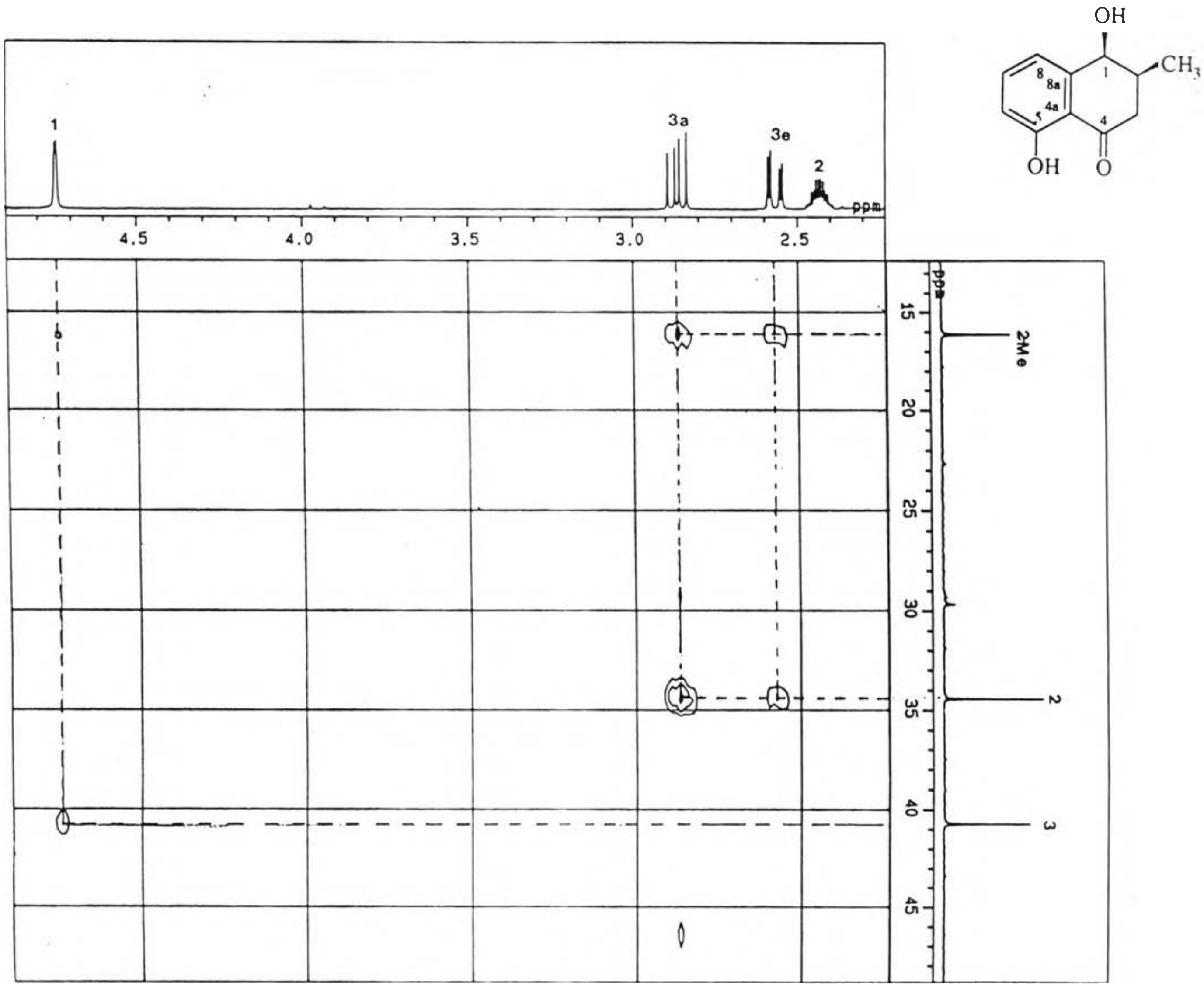


Figure 65 Expansion of the HMBC spectrum of compound **102** (in $CDCl_3$) :

δ_H 2.30-4.80 ; δ_C 13.00-48.00 ppm

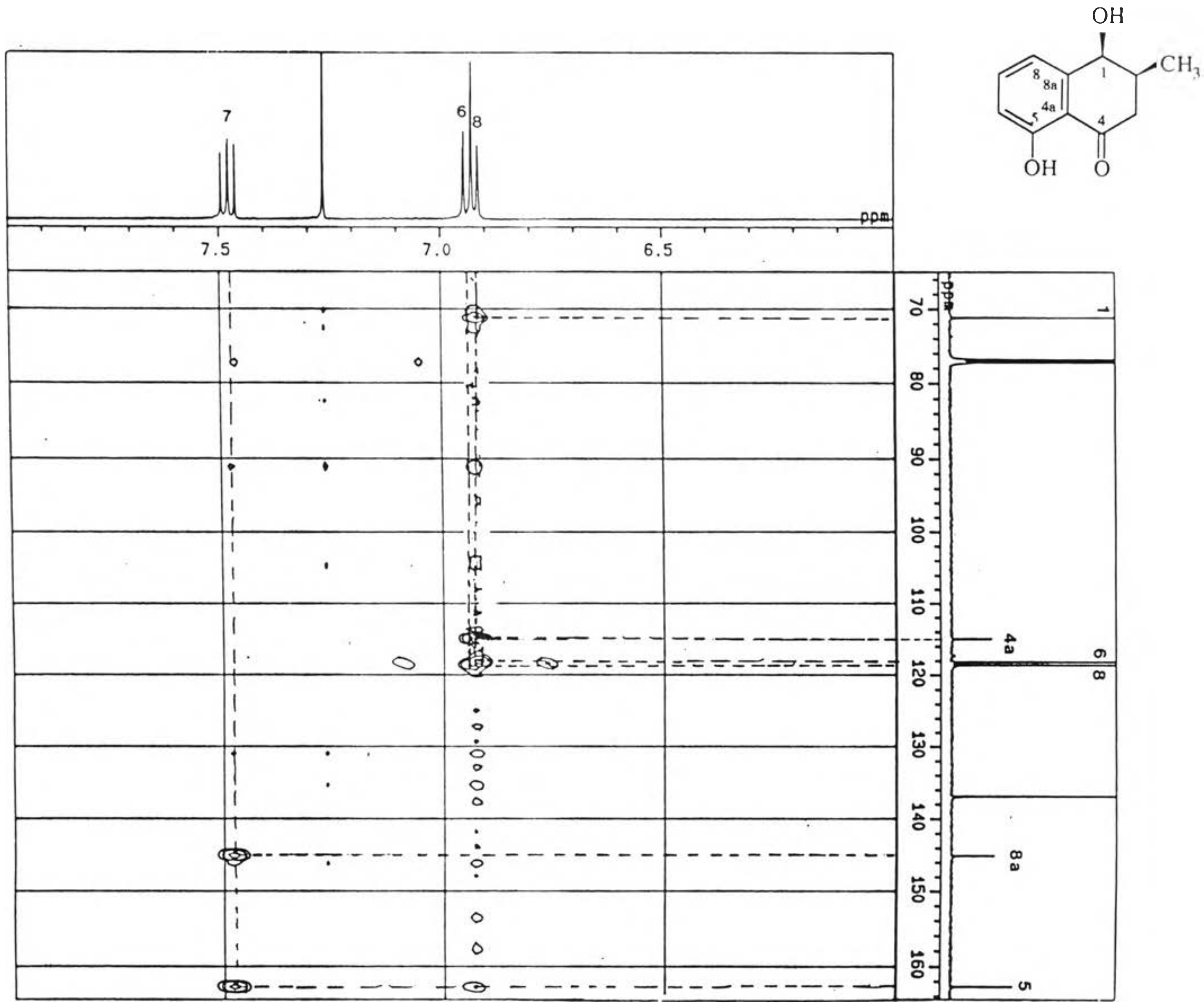


Figure 66 Expansion of the HMBC spectrum of compound **102** (in $CDCl_3$) :

δ_H 6.20-7.90 ; δ_C 66.00-164.00 ppm

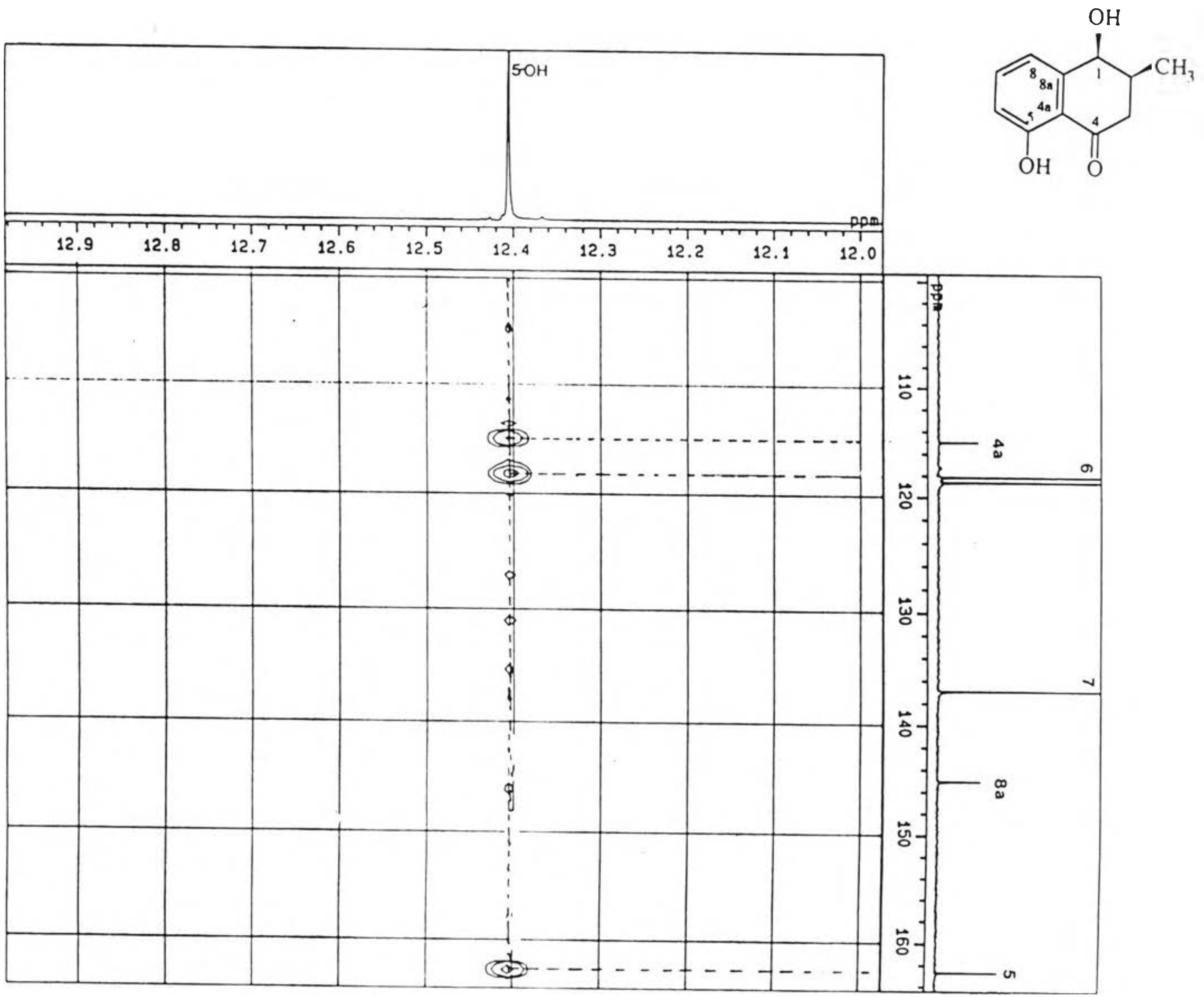


Figure 67 Expansion of the HMBC spectrum of compound **102** (in $CDCl_3$) :

δ_H 12.00-12.98 ; δ_C 110.00-164.00 ppm

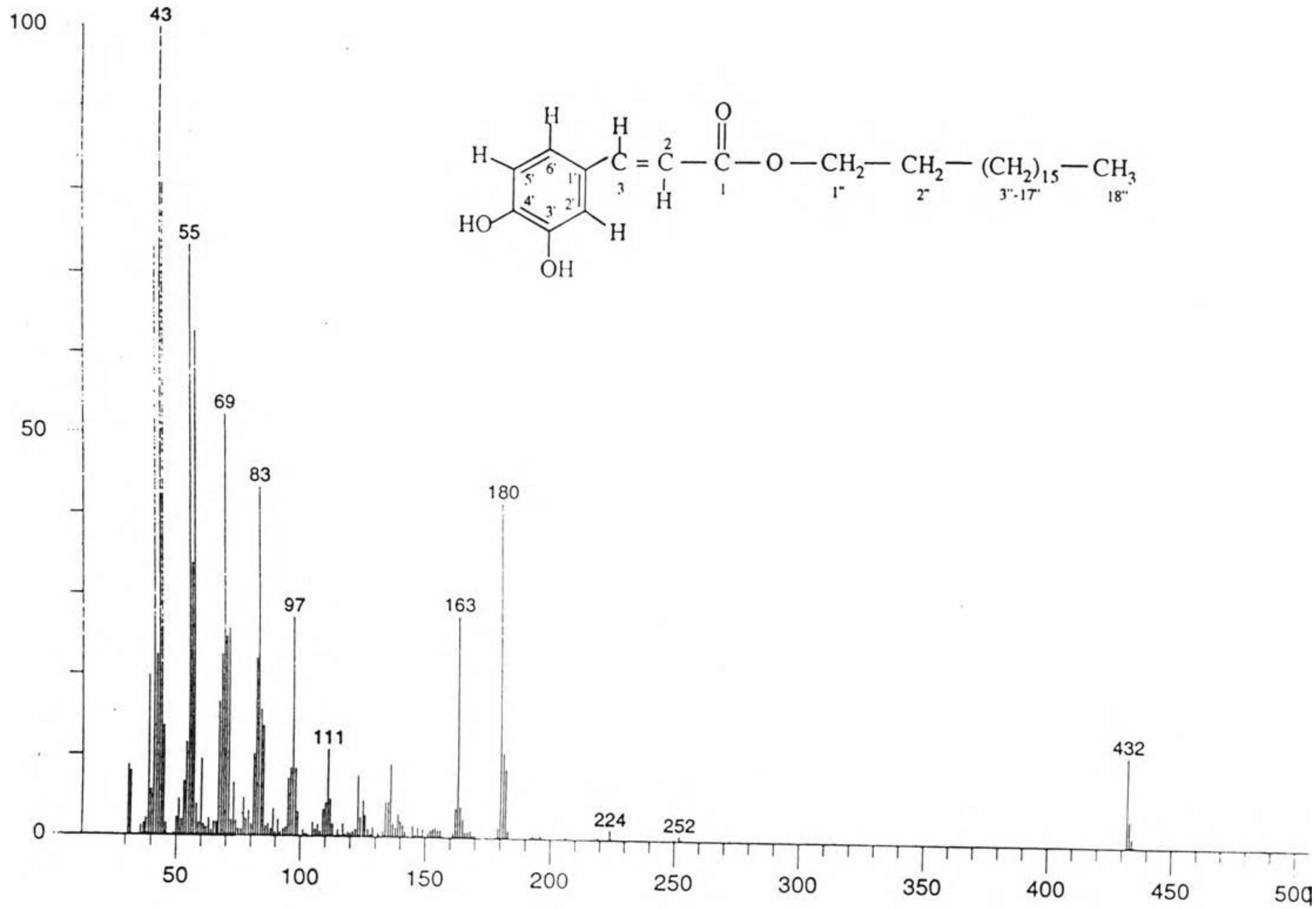


Figure 68 The EI mass spectrum of compound **103**

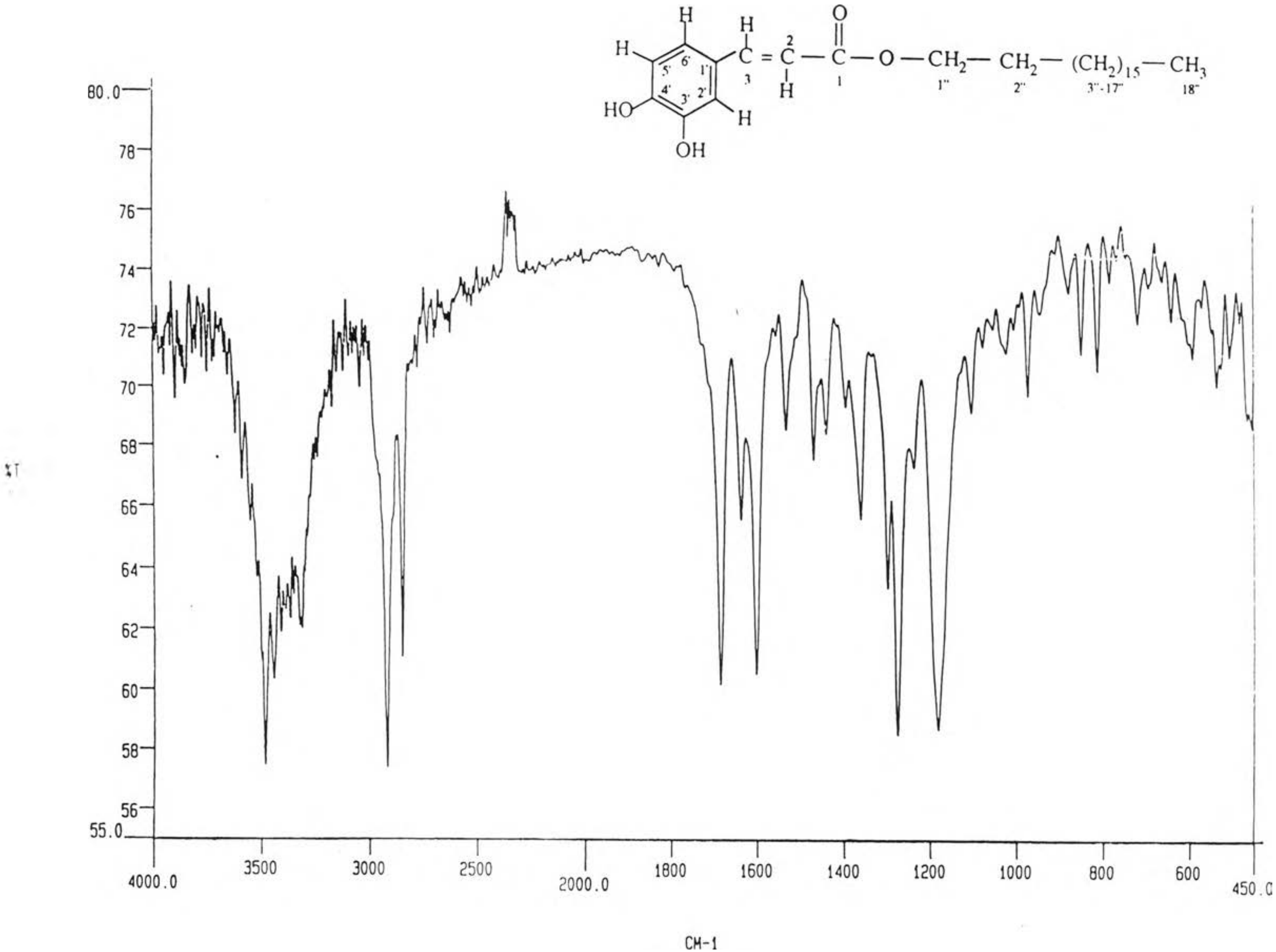


Figure 69 The IR spectrum of compound **103** (in KBr disc)

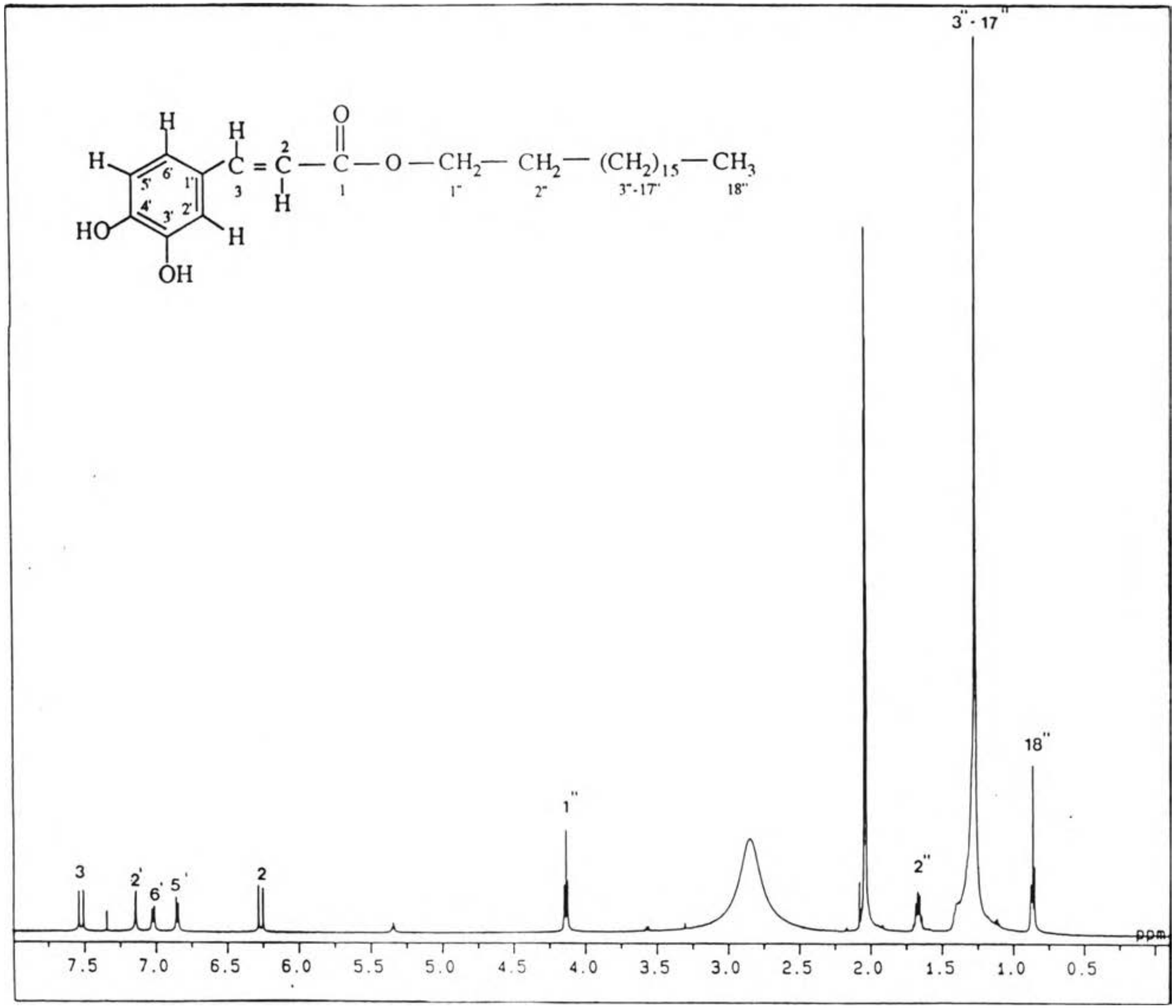


Figure 70 The ^{1}H NMR(500 MHz) spectrum of compound **103** (in acetone d_6)

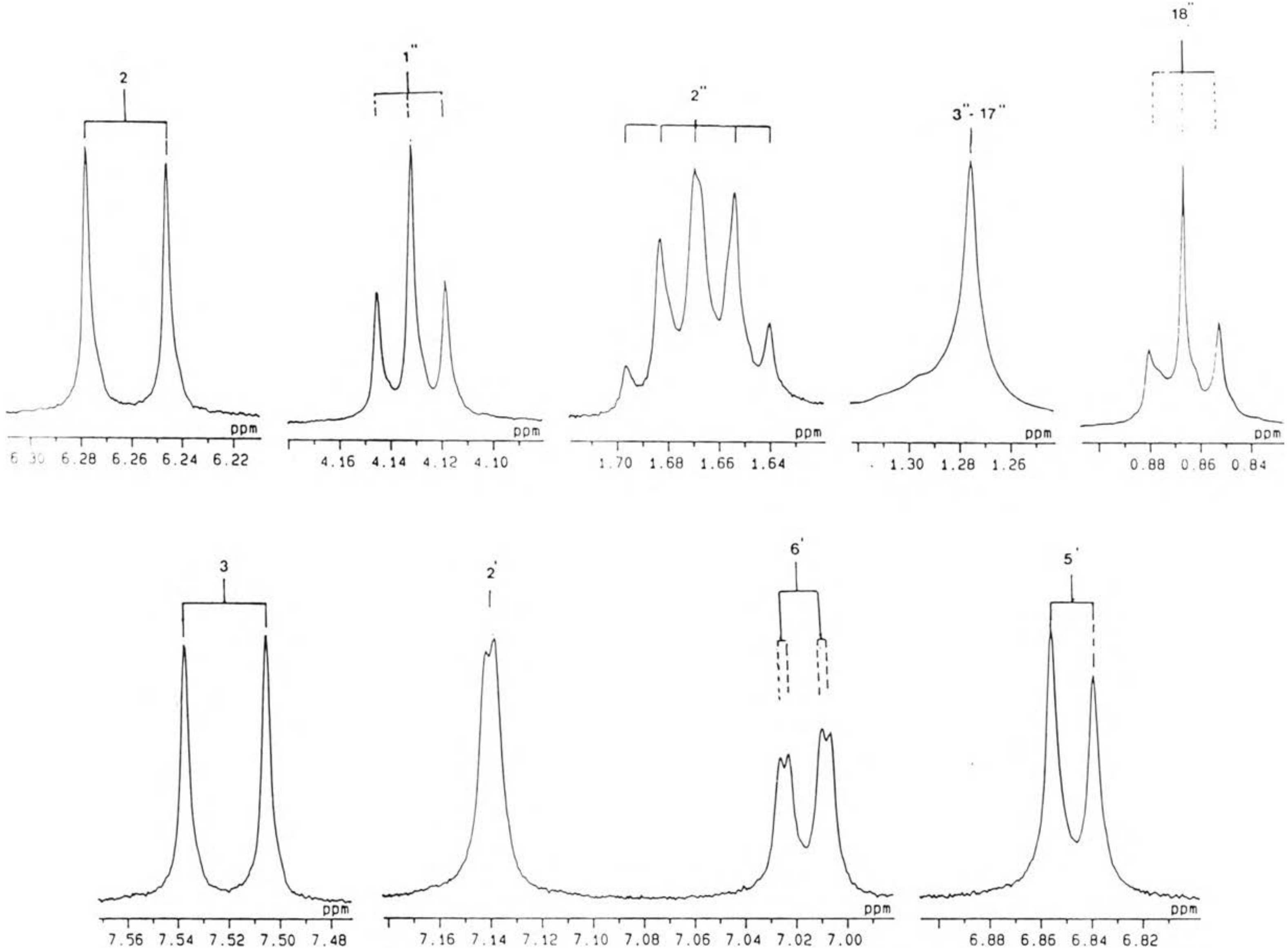


Figure 71 Expansion of the ^{1}H NMR (500 MHz) spectrum of compound **102** (in acetone-d_6) : δ_H 0.84-7.56 ppm

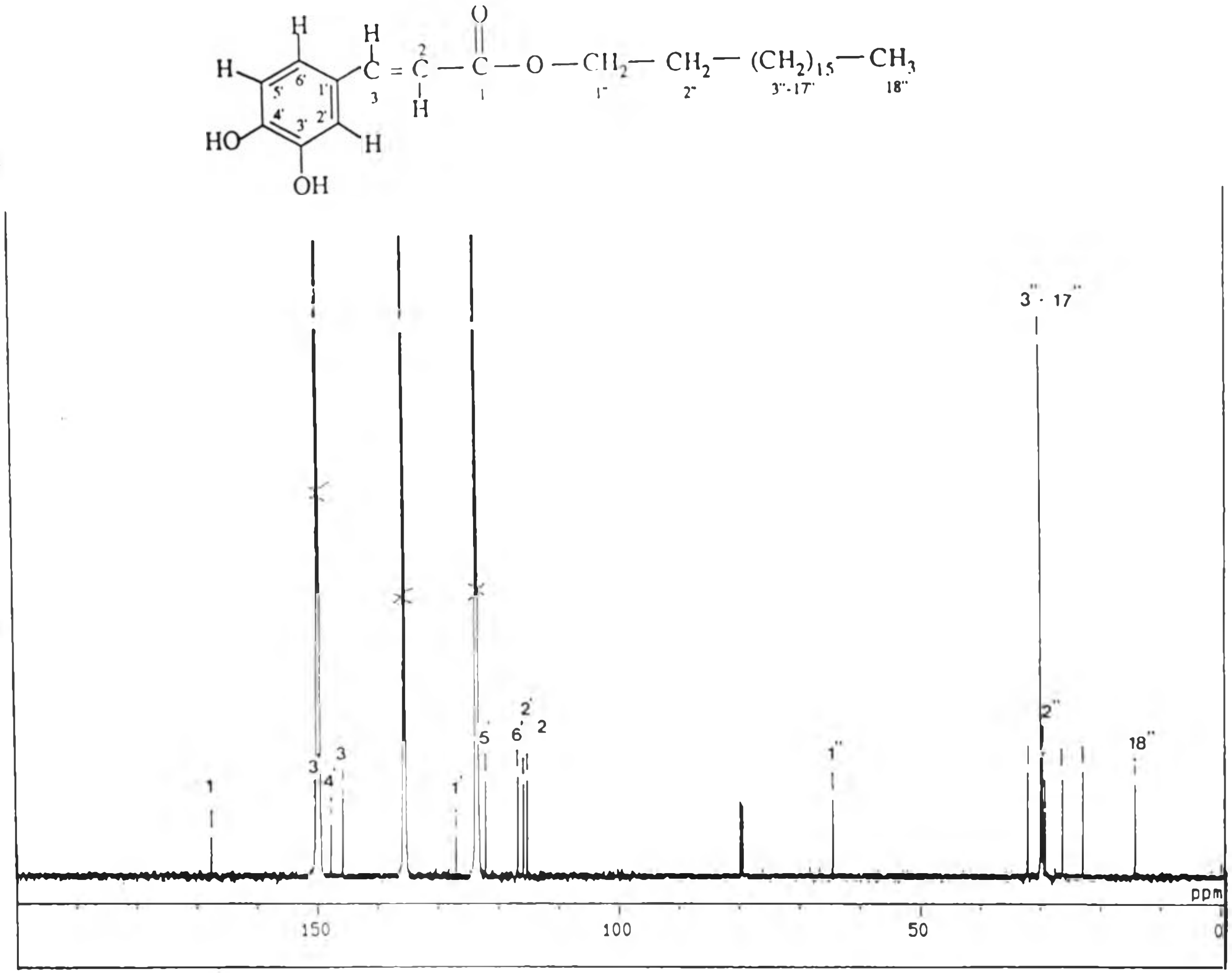


Figure 72 The ^{13}C NMR (125 MHz) spectrum of compound **103** (in pyridine-d_5)

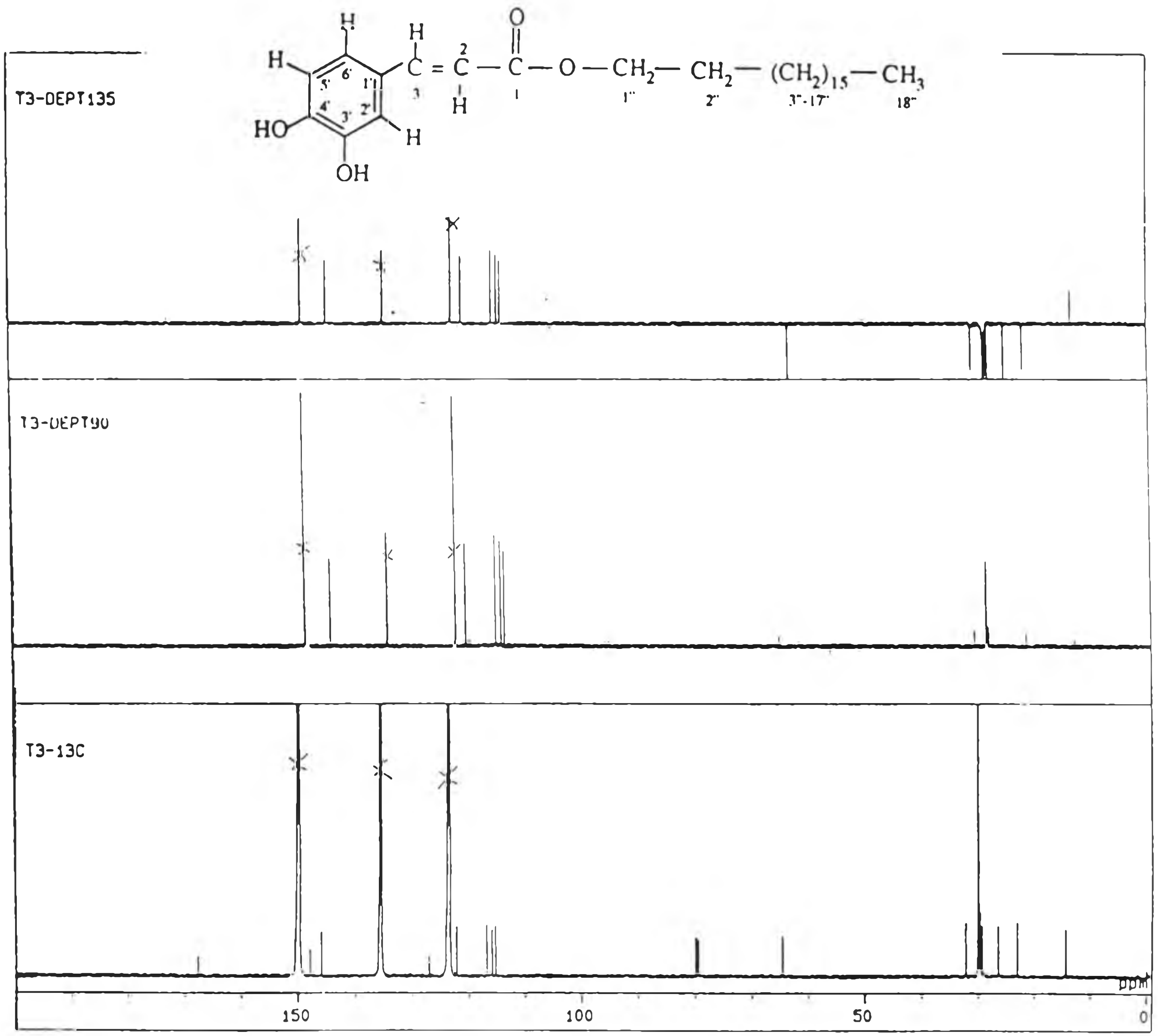


Figure 73 The DEPT (125 MHz) spectrum of compound **103** (in pyridine-d_5) :

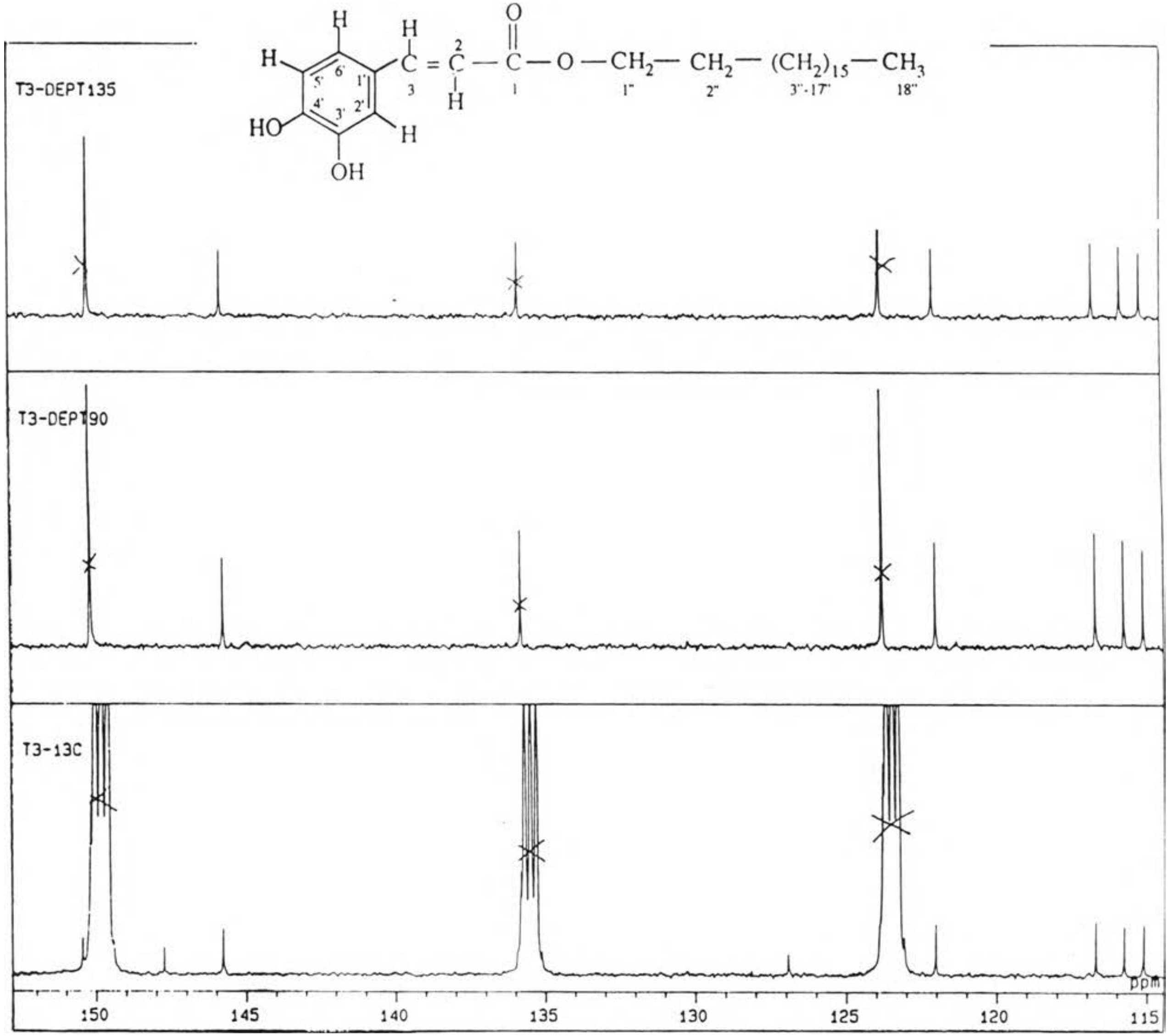


Figure 74 The DEPT (125 MHz) spectrum of compound **103** (in pyridine-d_5) :

δ_C 115.00-152.00 ppm

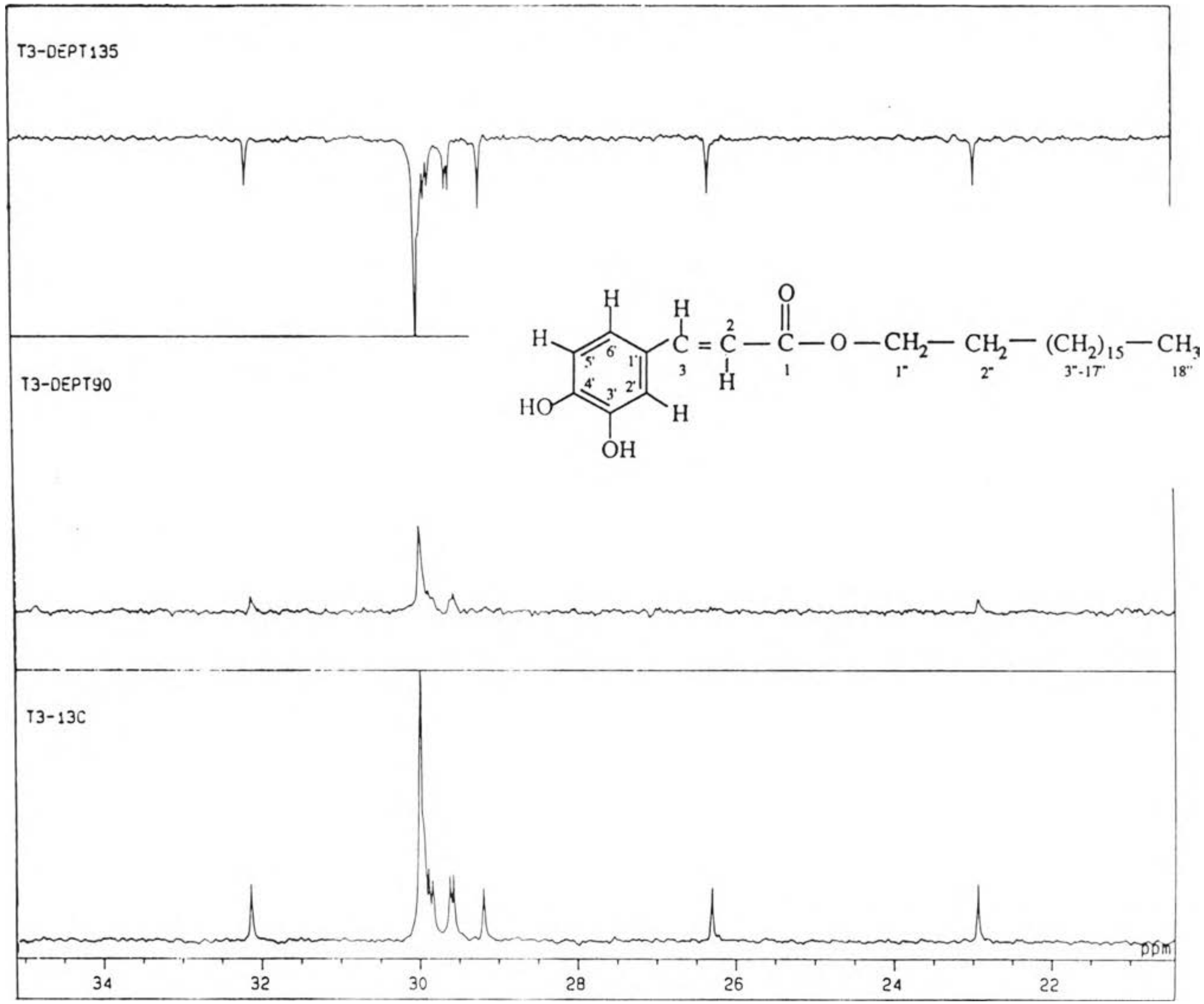


Figure 75 The DEPT (125 MHz) spectrum of compound **103** (in pyridine-d_5)

δ_C 23.00-35.00 ppm

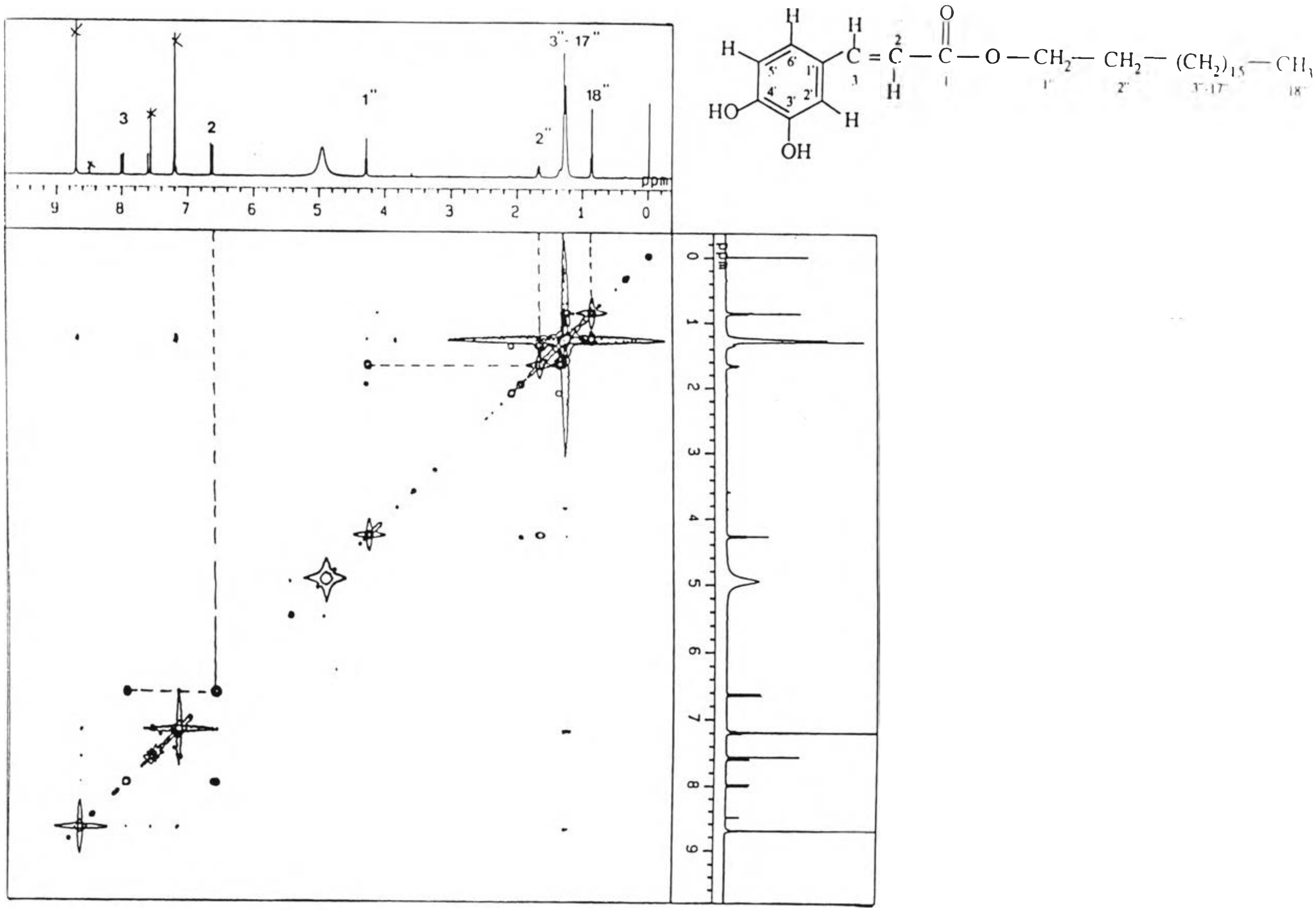


Figure 76 The ^{1}H-^{1}H COSY (500 MHz) spectrum of compound **103**

(in pyridine-d_5)

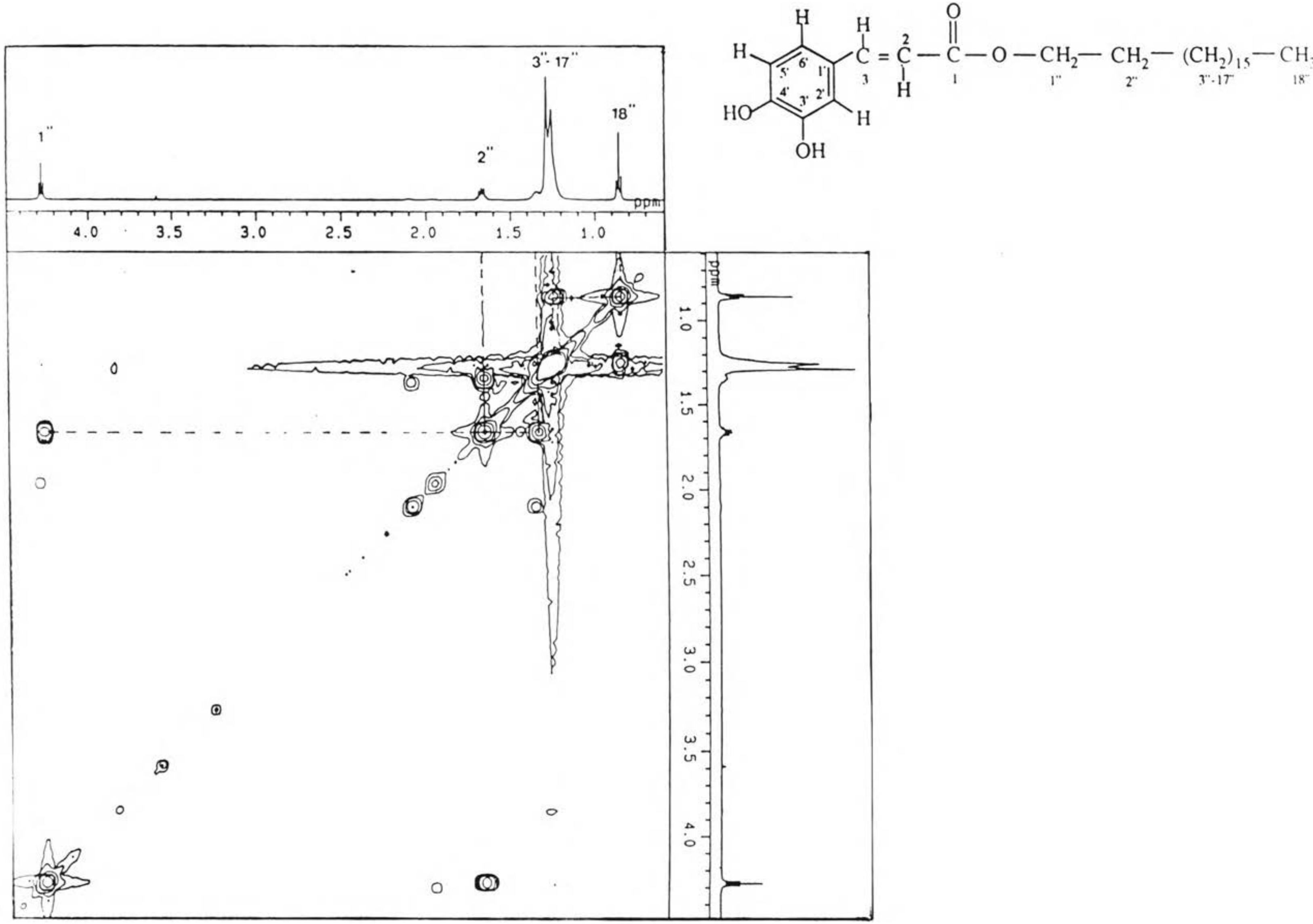


Figure 77 Expansion of the ^{1}H-^{1}H COSY (500 MHz) spectrum of compound **103** (in pyridine-d_5) : δ_H 0.70-4.40 ppm

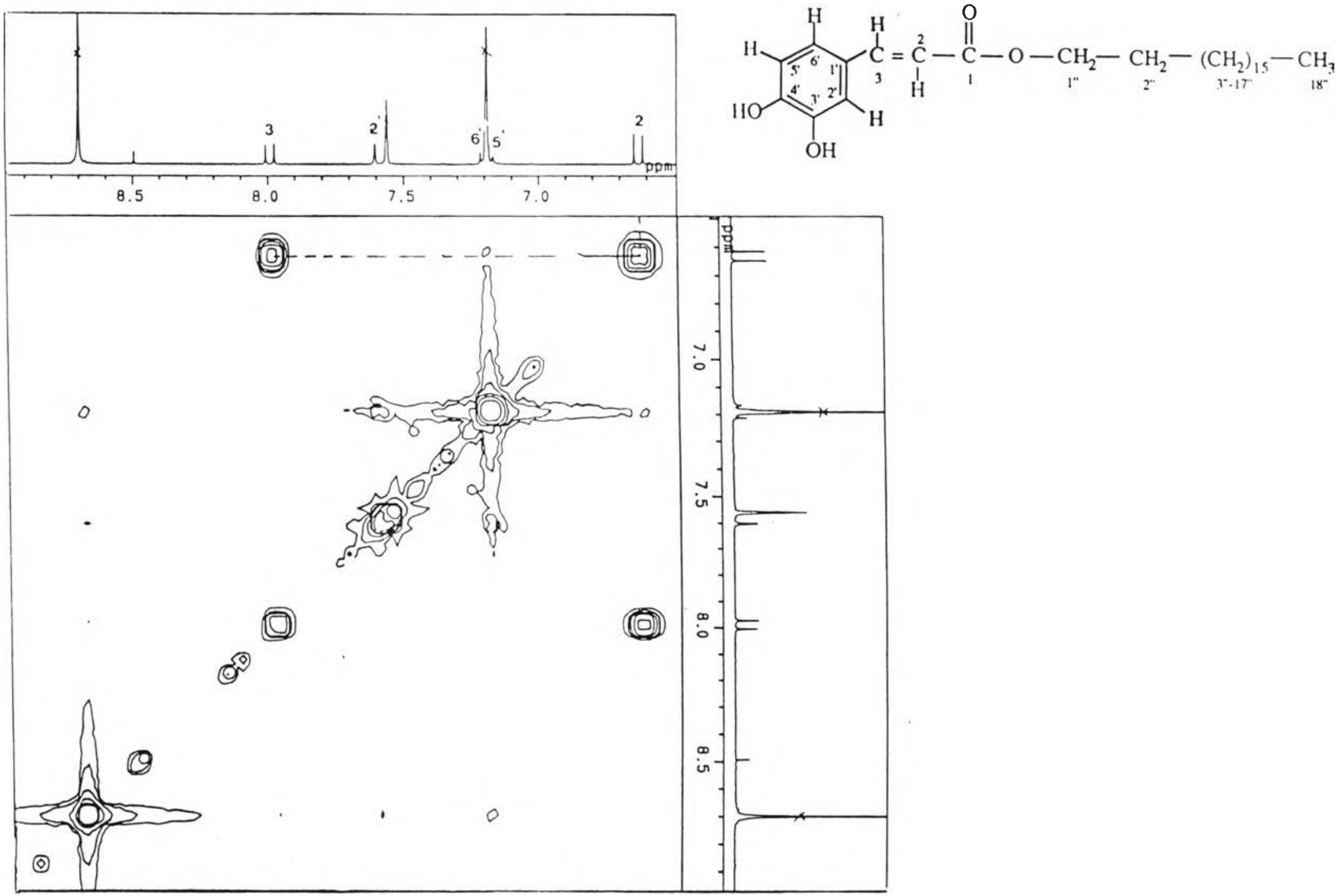


Figure 78 Expansion of the ^{1}H-^{1}H COSY (500 MHz) spectrum of compound **108** (in pyridine-d_5) : δ_H 6.60-8.90 ppm

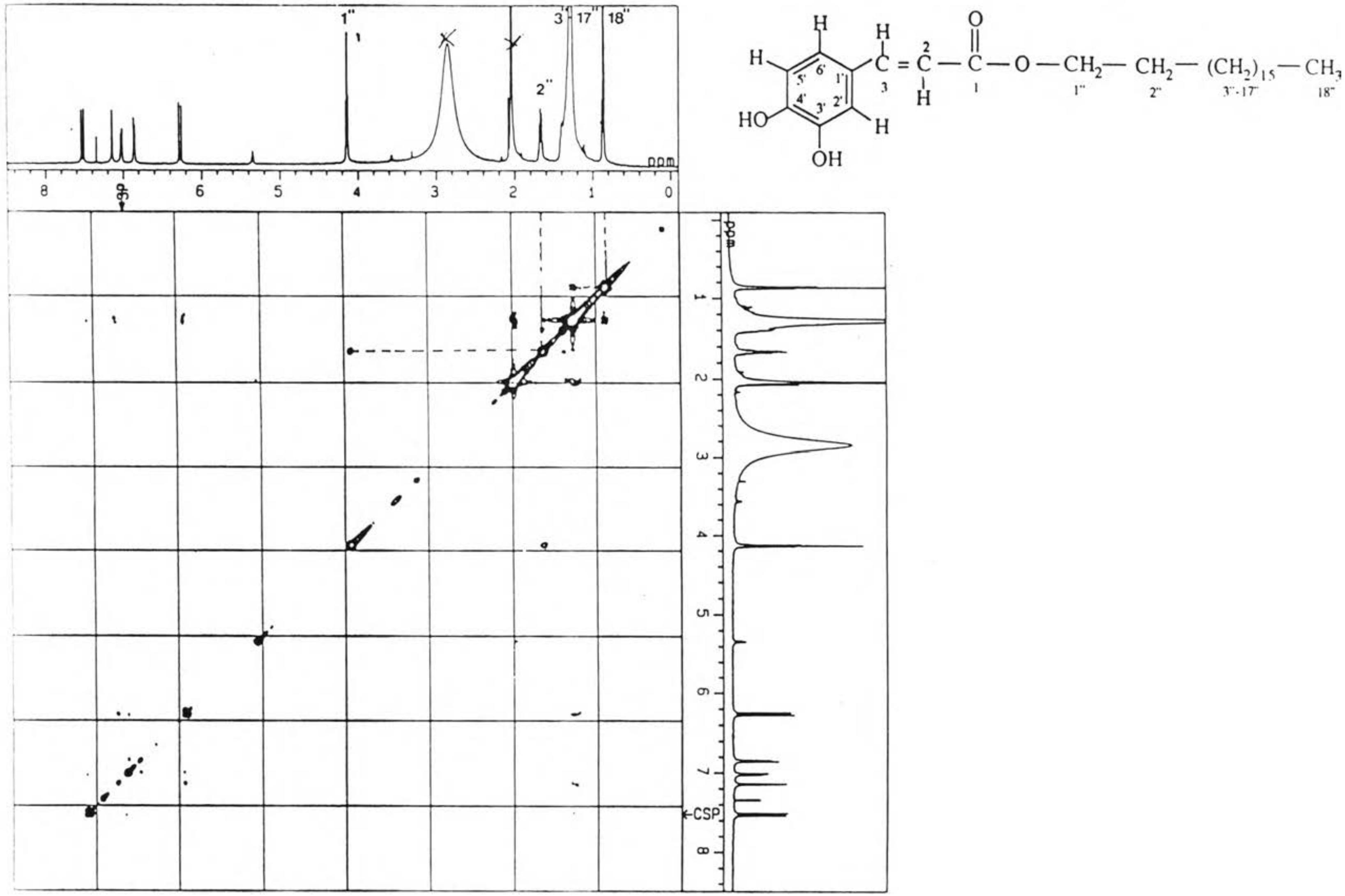


Figure 79 The NOESY (500 MHz) spectrum of compound **103** (in acetone-d_6)

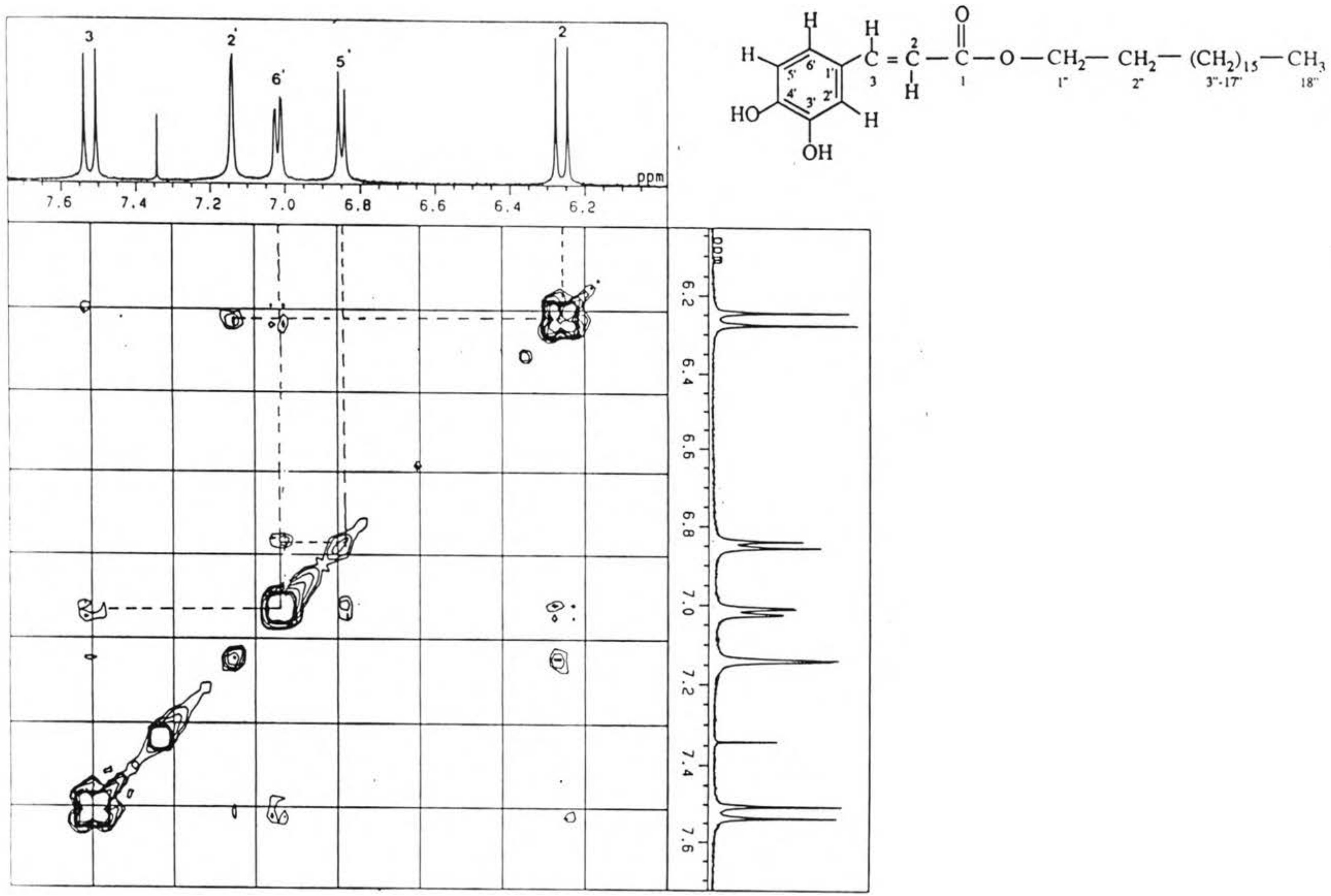


Figure 80 Expansion of the NOESY (500 MHz) spectrum of compound **103**

(in acetone-d_6) : δ_H 6.20-7.60 ppm

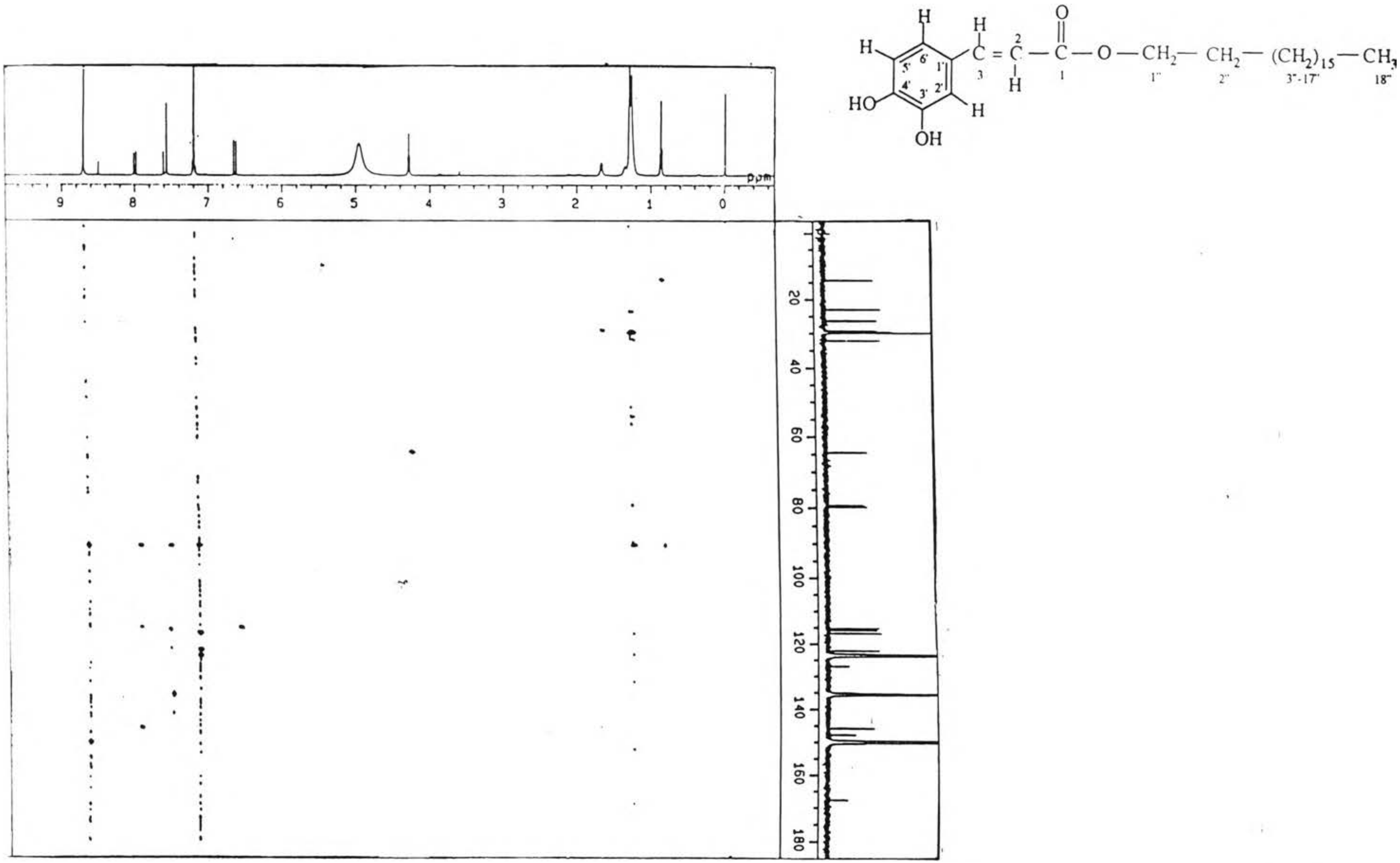
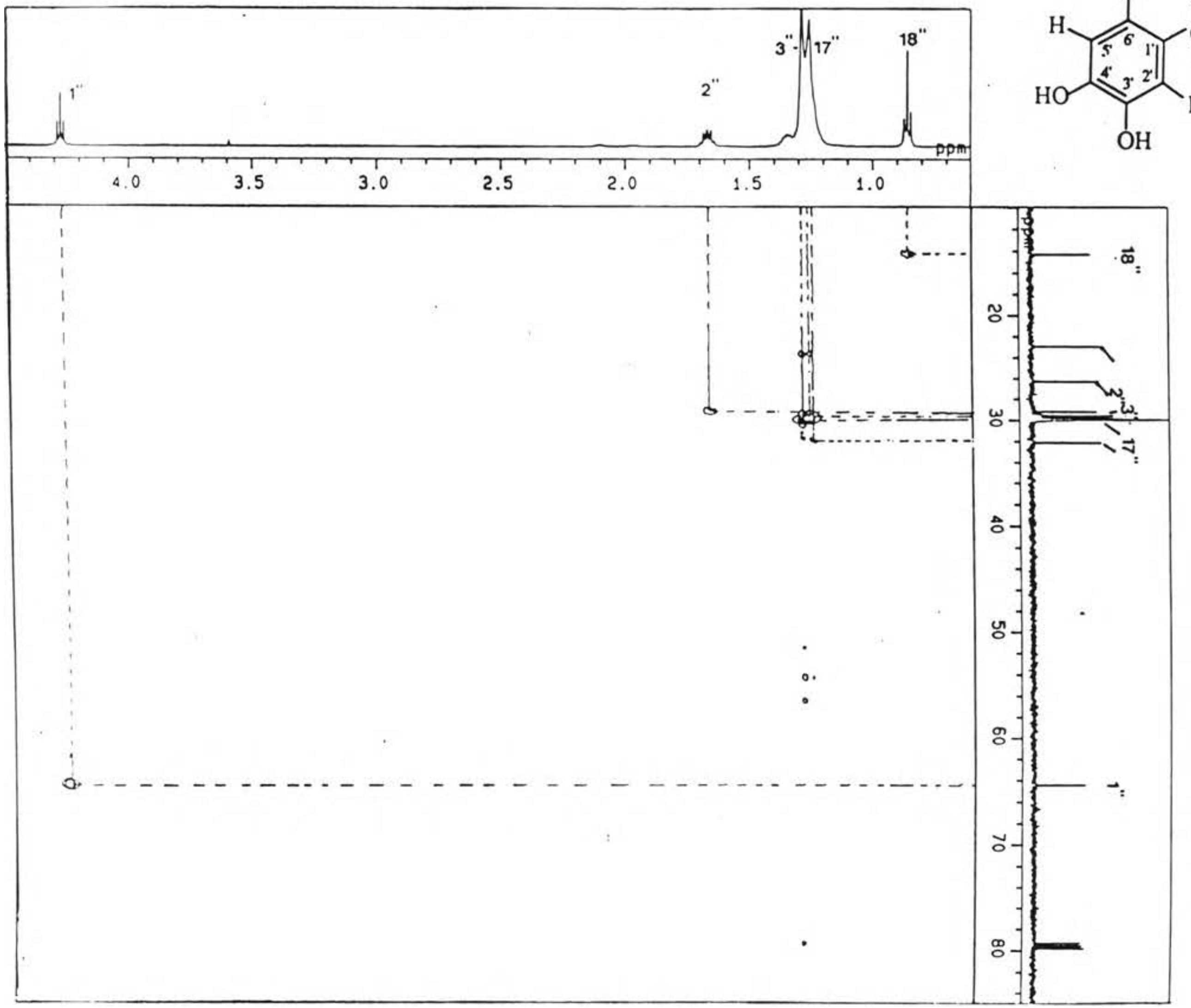


Figure 81 The HMQC spectrum of compound **103** (in pyridine-d_5)



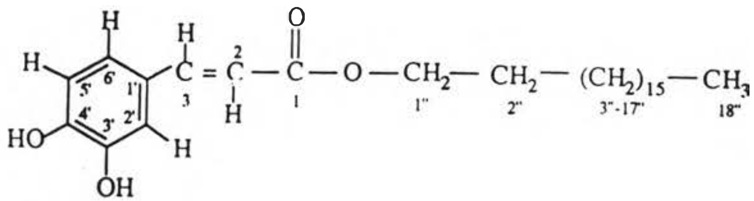


Figure 82 Expansion of the HMQC spectrum of compound **103** (in pyridine-d_5) :

δ_H 0.70-4.40 ; δ_C 10.00-80.00 ppm

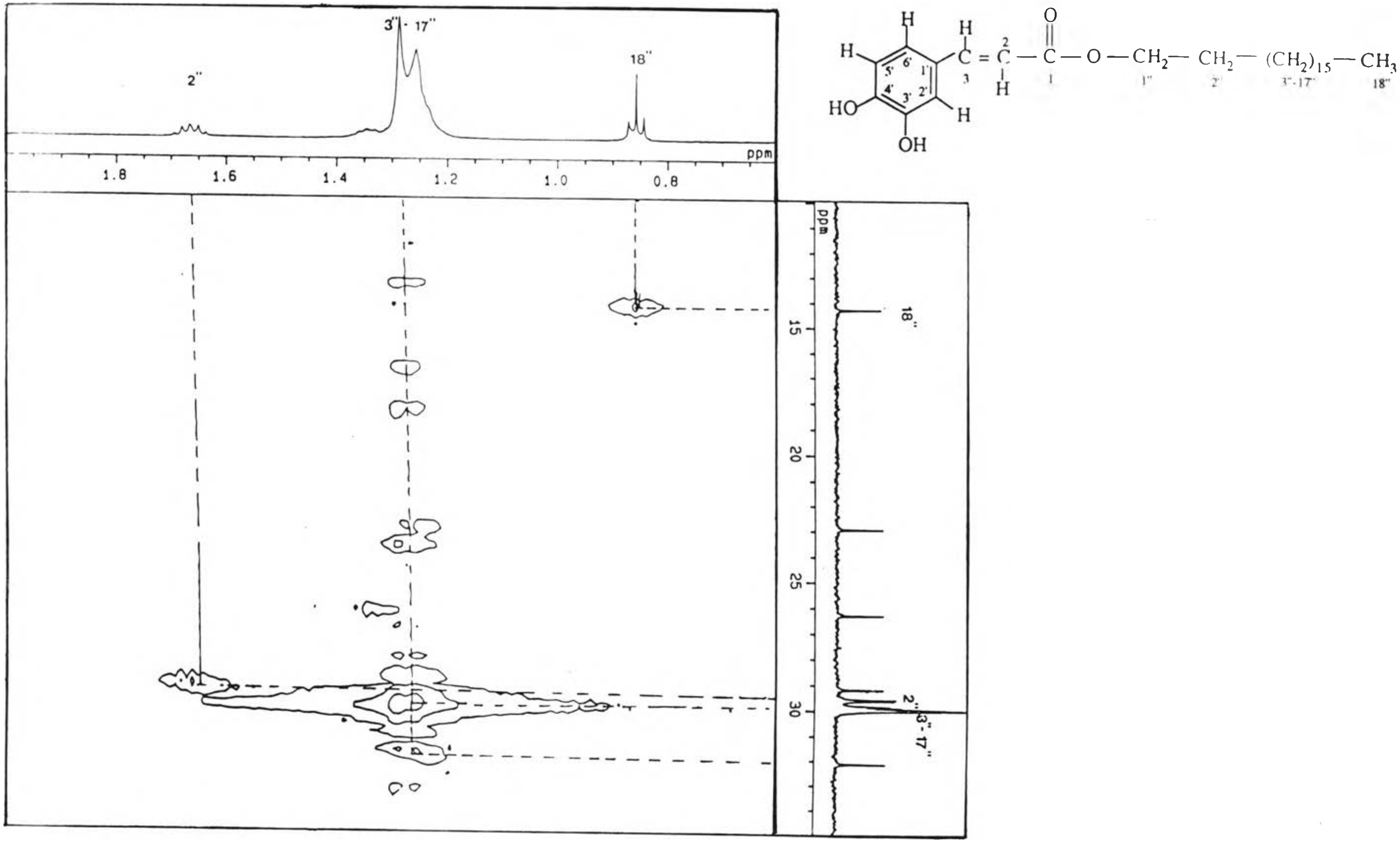
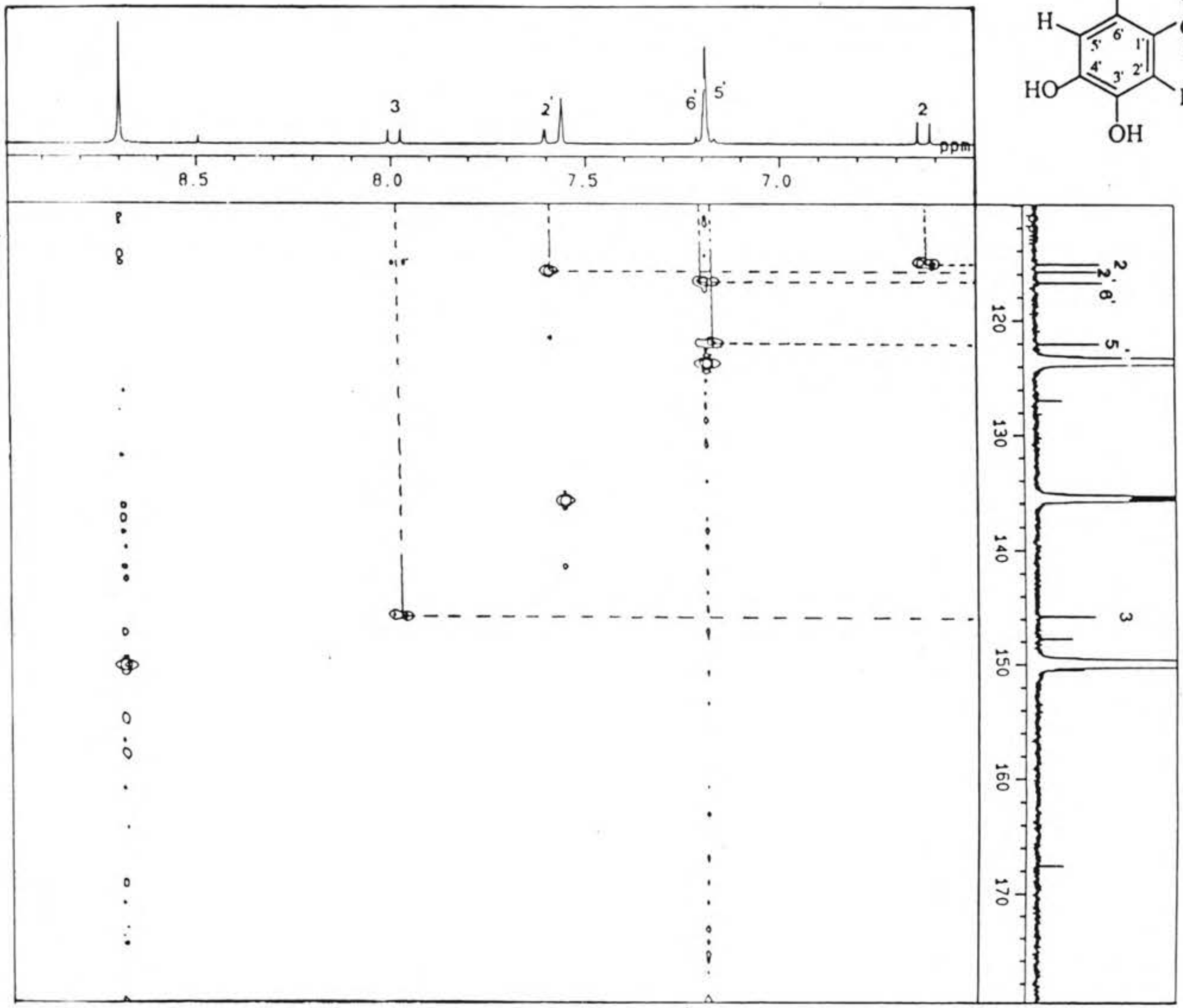


Figure 83 Expansion of the HMQC spectrum of compound **108** (in pyridine-d_5) :

δ_H 0.80-1.80 ; δ_C 10.00-34.00 ppm



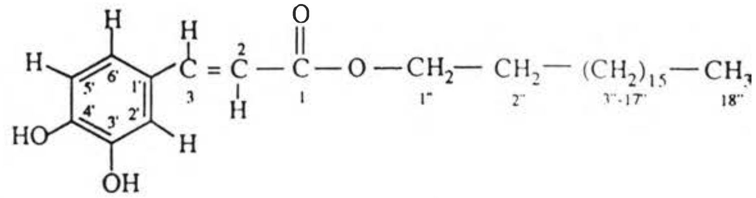


Figure 84 Expansion of the HMQC spectrum of compound **103** (in pyridine-d_5) :

δ_H 6.60-8.90 ; δ_C 110.00-178.00 ppm

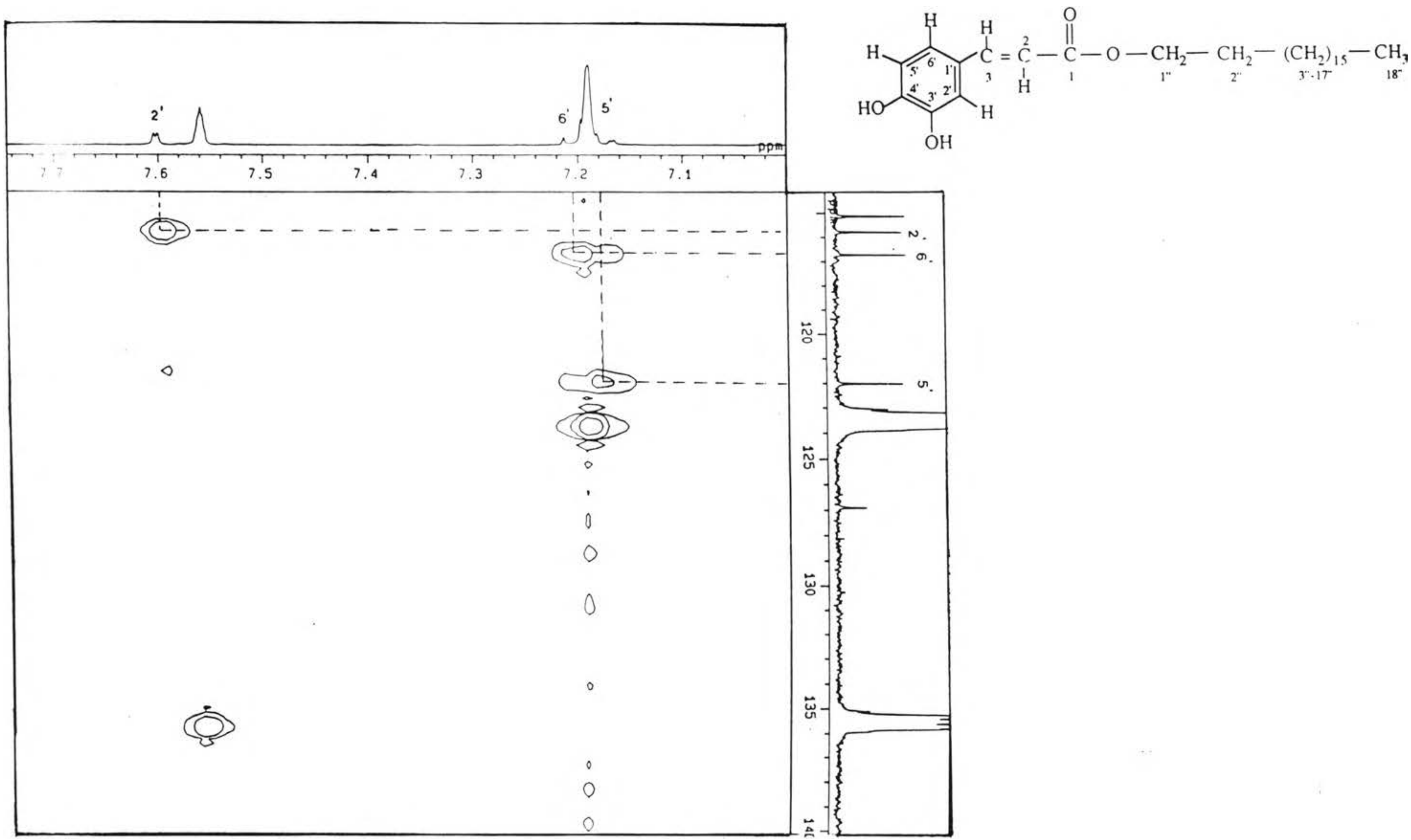


Figure 85 Expansion of the HMQC spectrum of compound **103** (in pyridine-d_5) :

δ_H 7.02-7.74 ; δ_C 115.00-140.00 ppm

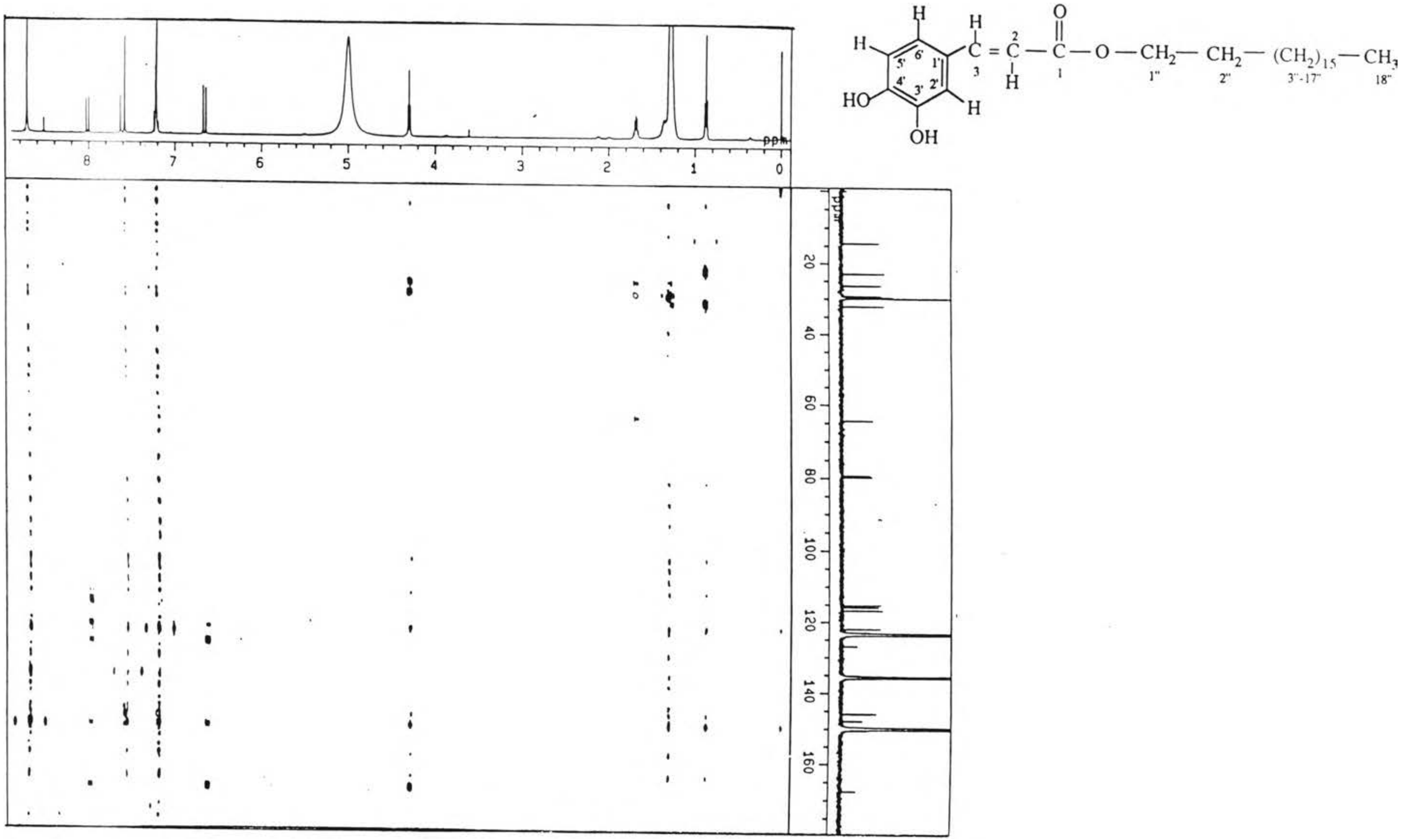


Figure 86 The HMBC spectrum of compound **103** (in pyridine-d_5)

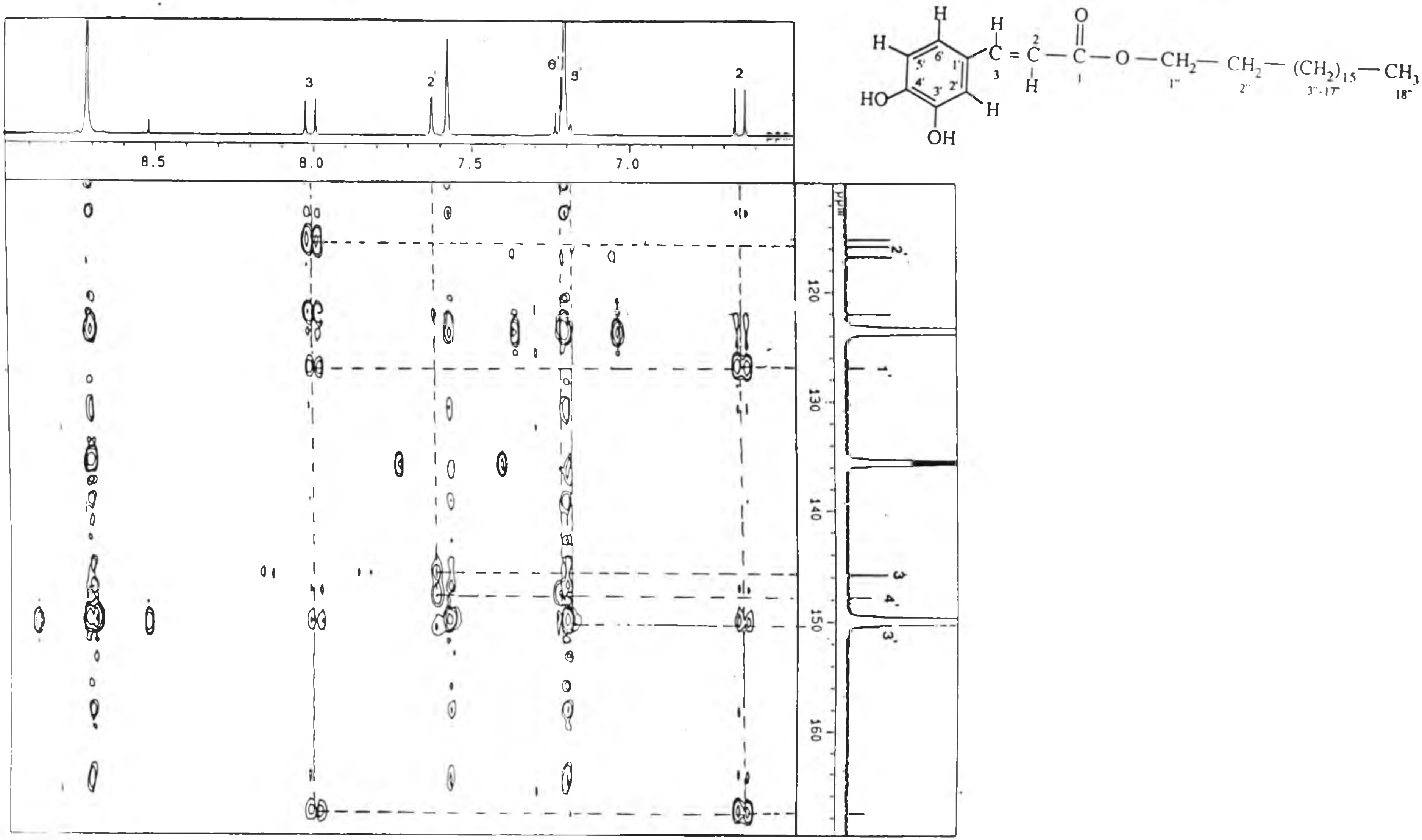


Figure 87 Expansion of the HMBC spectrum of compound **103** (in pyridine-d_5) :

δ_H 6.60-8.90 ; δ_C 110.00-168.00 ppm

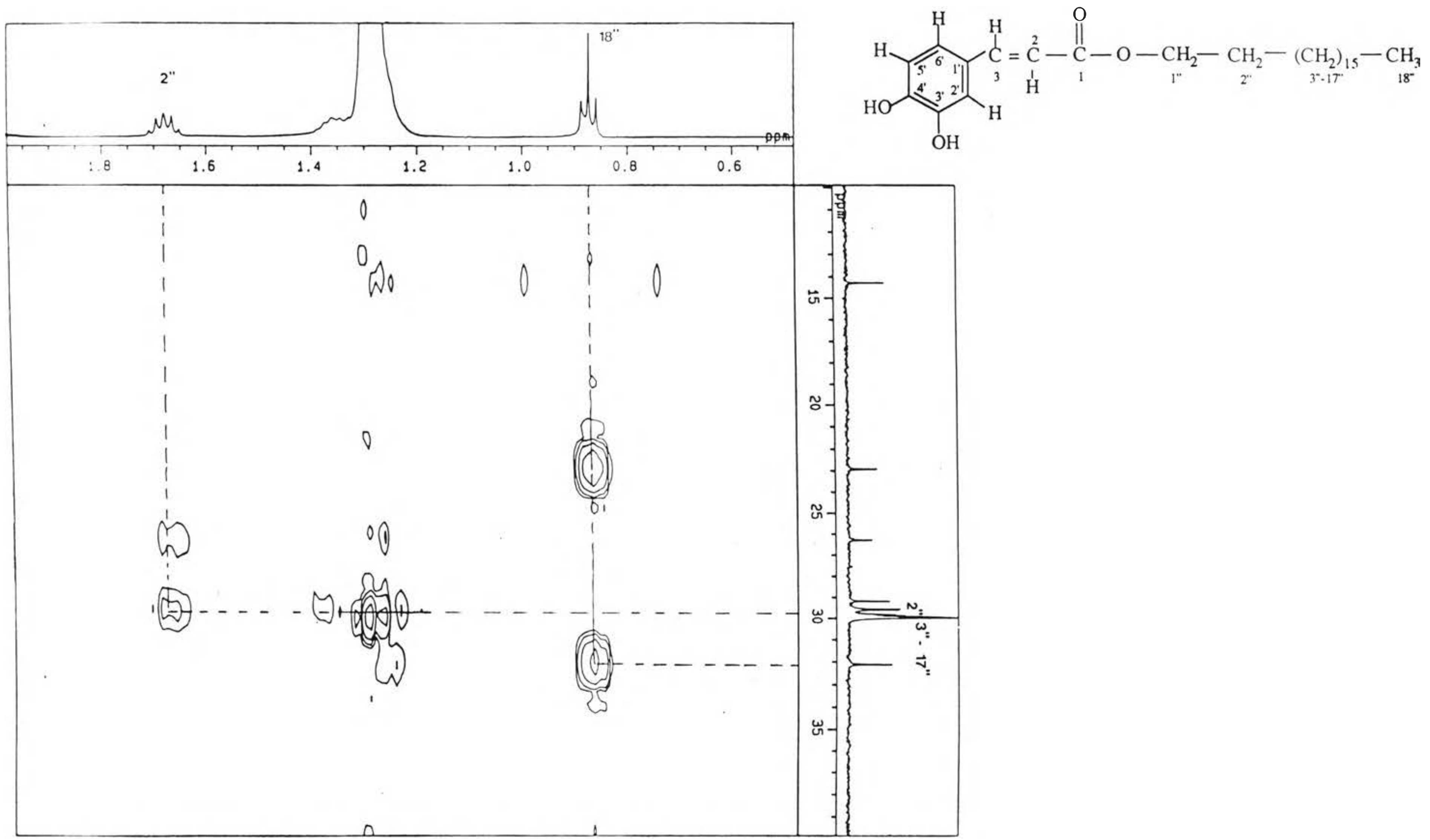


Figure 88 **Expansion of the** HMBC spectrum of compound **103** (in pyridine-d_5) :

δ_H 0.60-1.80 ; δ_C 10.00-35.00 ppm

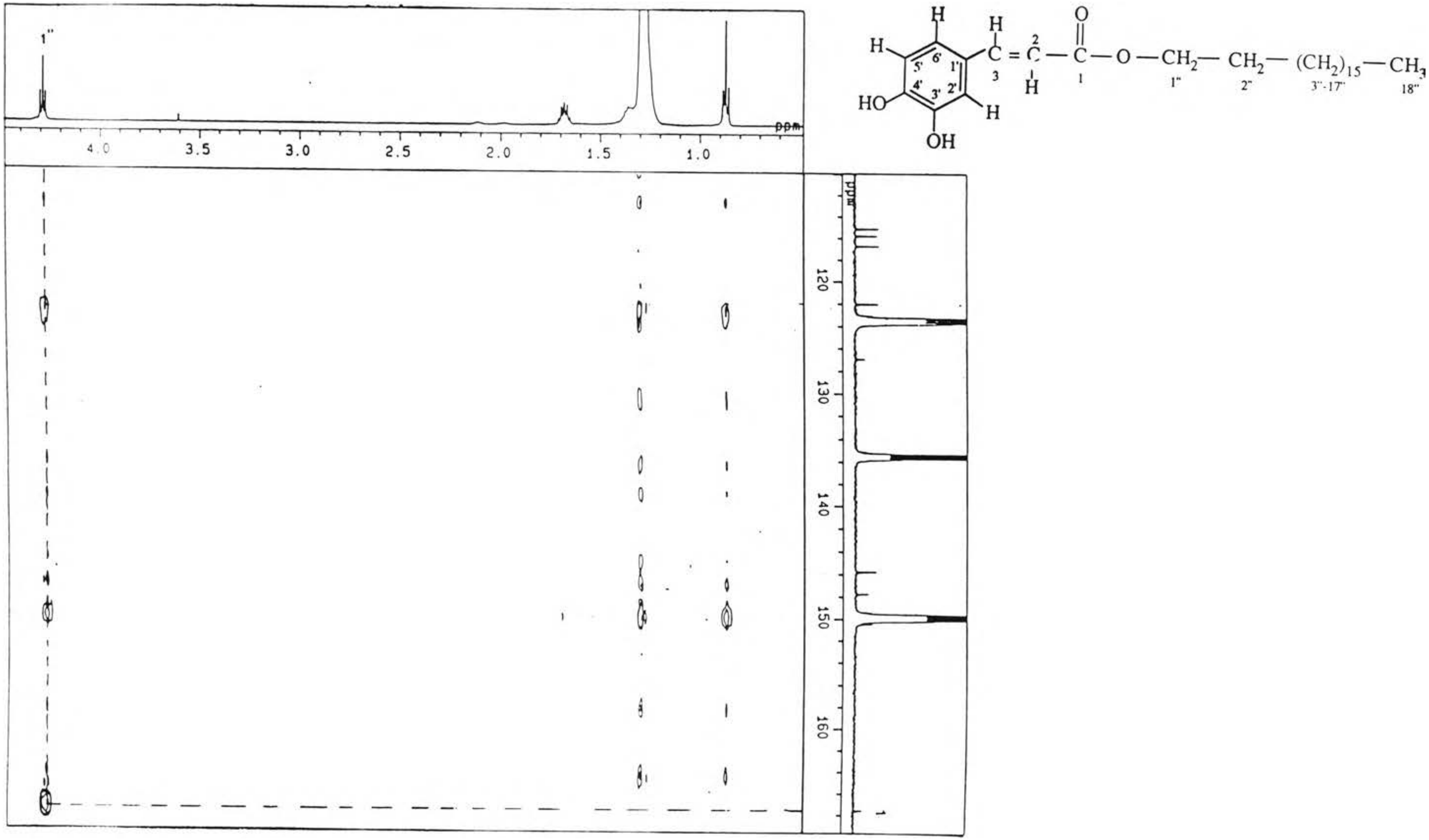
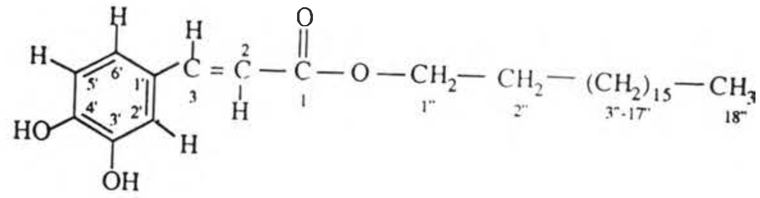


Figure 89 Expansion of the HMBC spectrum of compound **103** (in pyridine-d_5) :

δ_H 0.60-4.40 ; δ_C 110.00-164.00 ppm



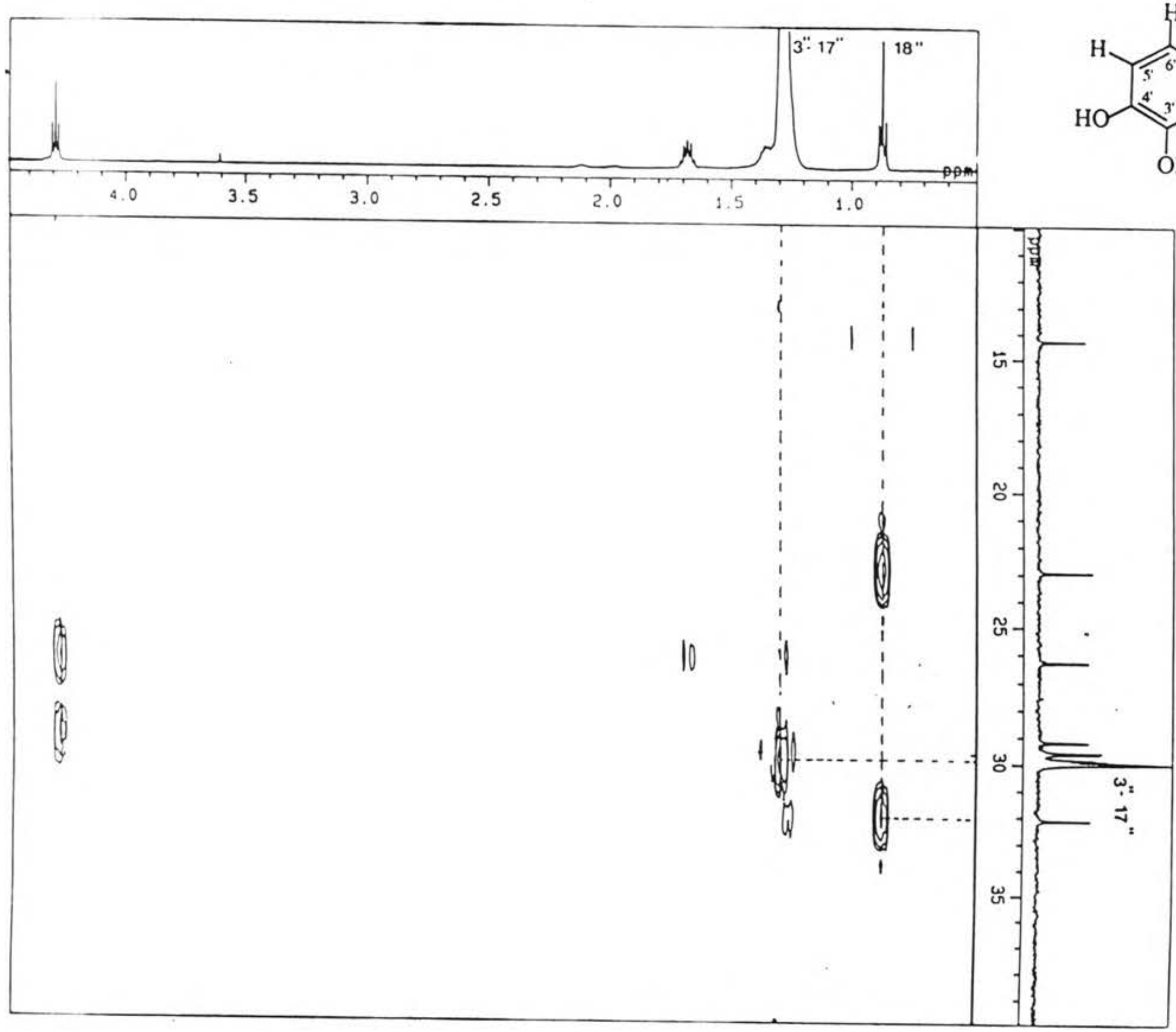


Figure 90 Expansion of the HMBC spectrum of compound **103** (in pyridine-d_5) :

δ_H 0.60-4.40 ; δ_C 10.00-39.00 ppm

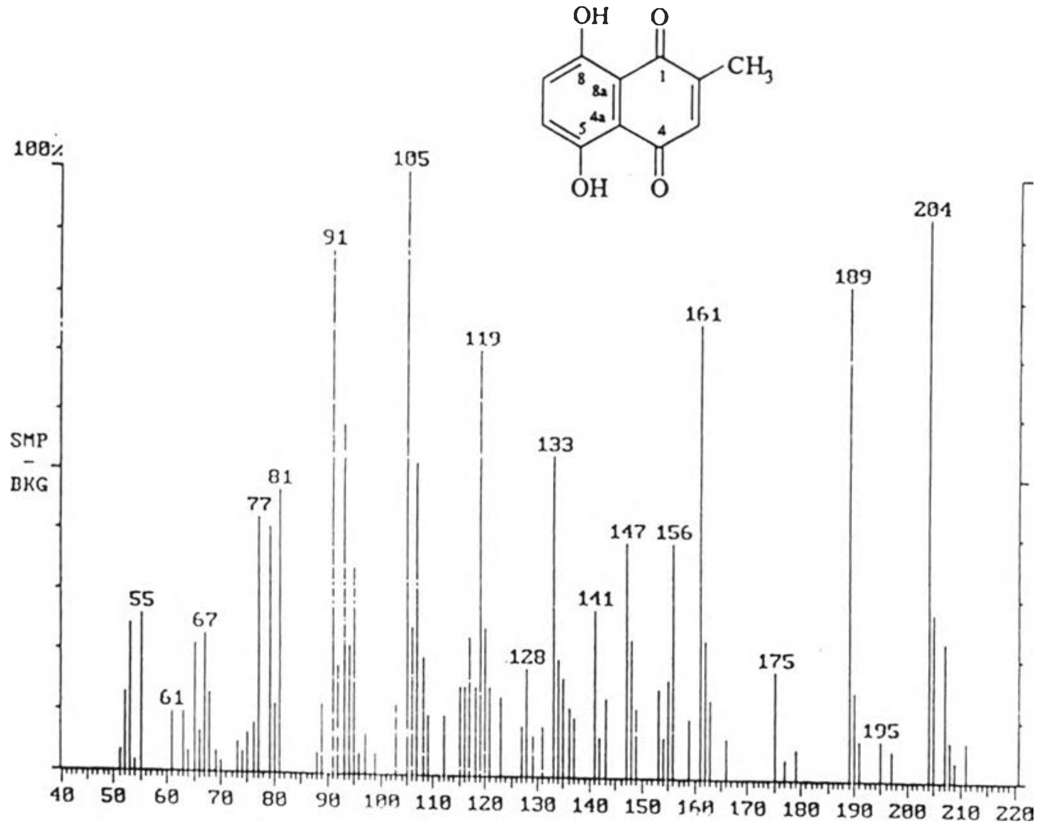


Figure 91 The EI mass spectrum of compound **104**

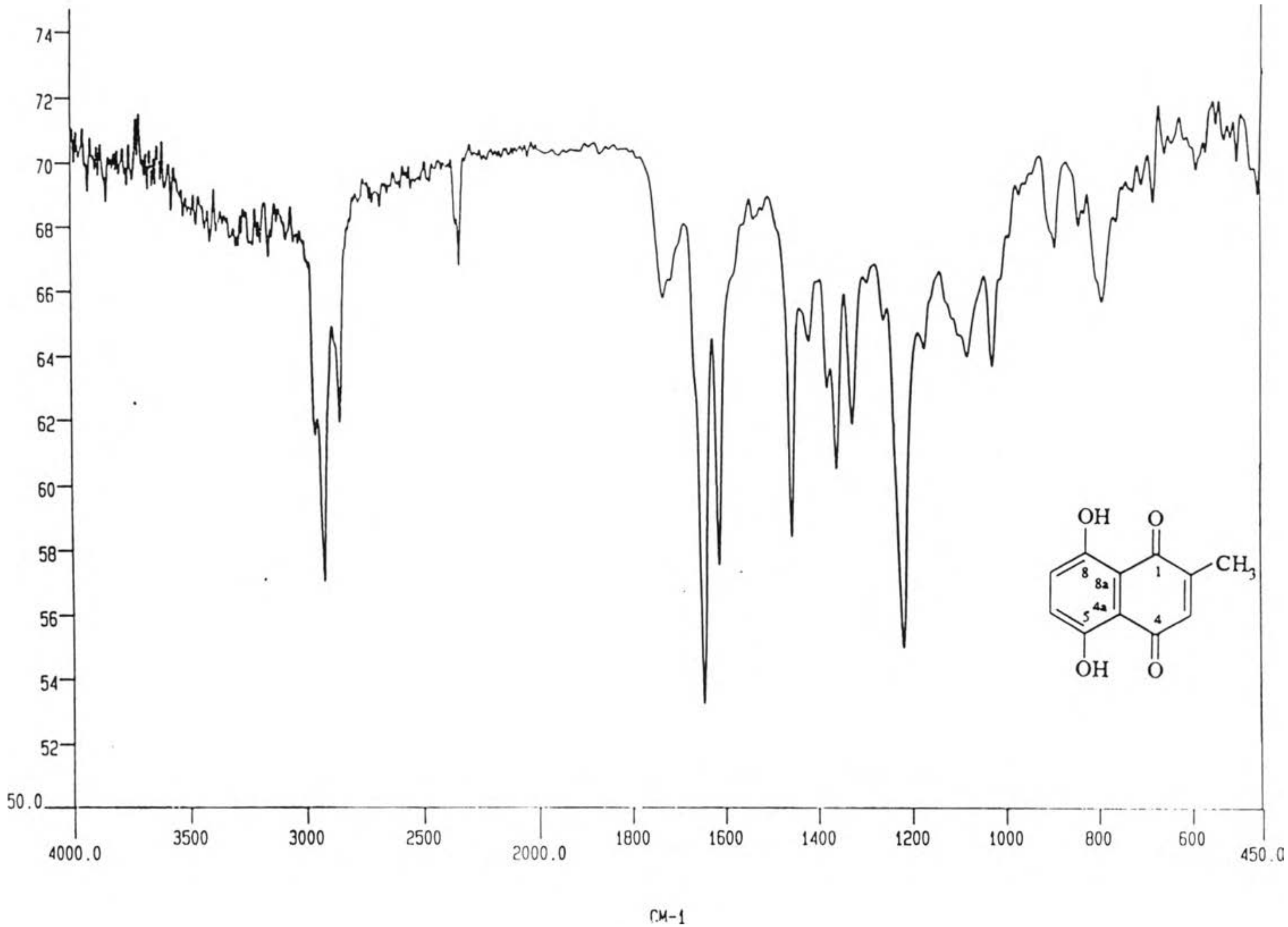


Figure 92 The IR spectrum of compound **104** (in KBr disc)

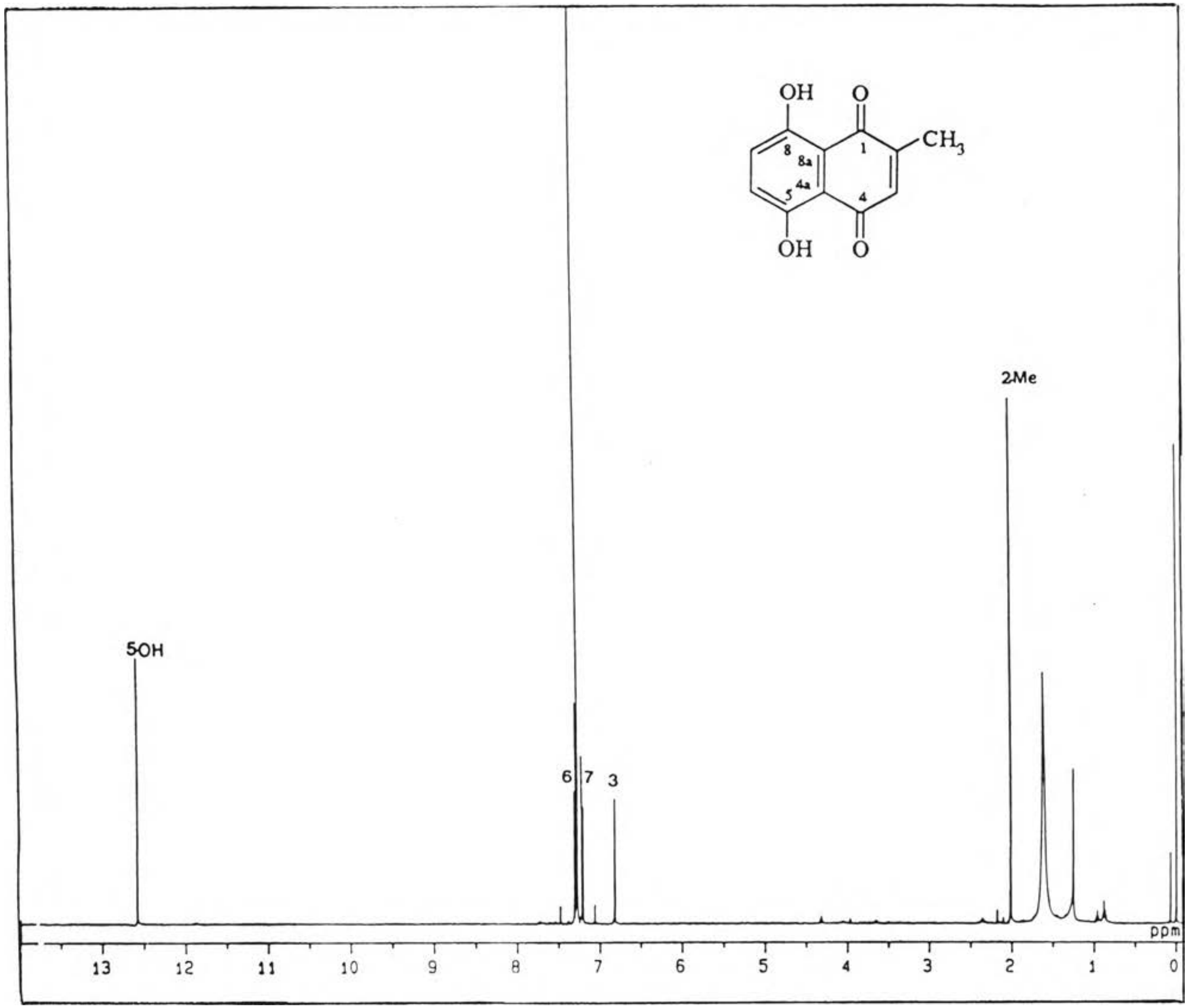


Figure 93 The ^{1}H NMR (500 MHz) spectrum of compound **104** (in $CDCl_3$)

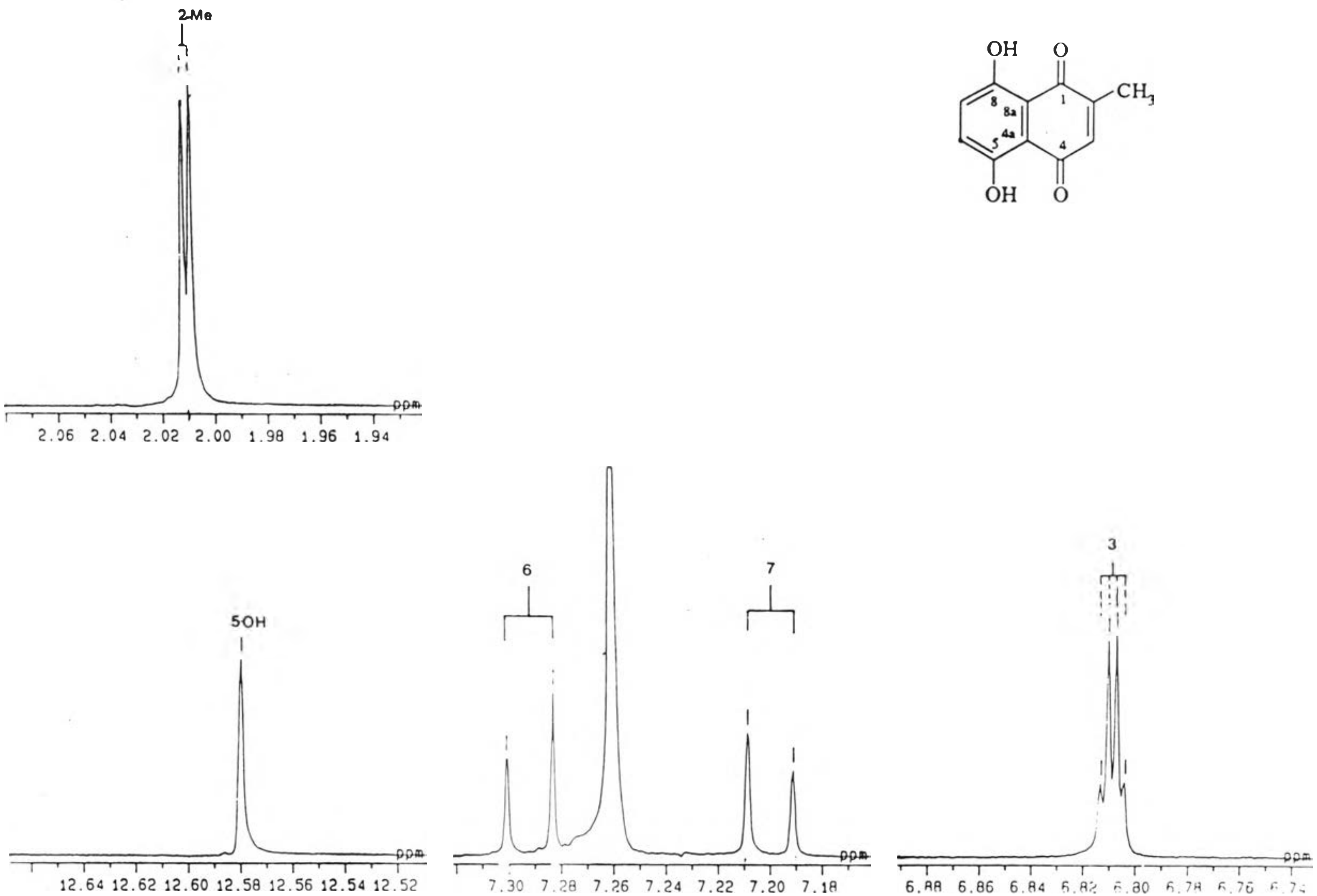


Figure 94 Expansion of the ^{1}H NMR (500 MHz) spectrum of compound **104** (in $CDCl_3$) : δ_H 1.94-12.64 ppm

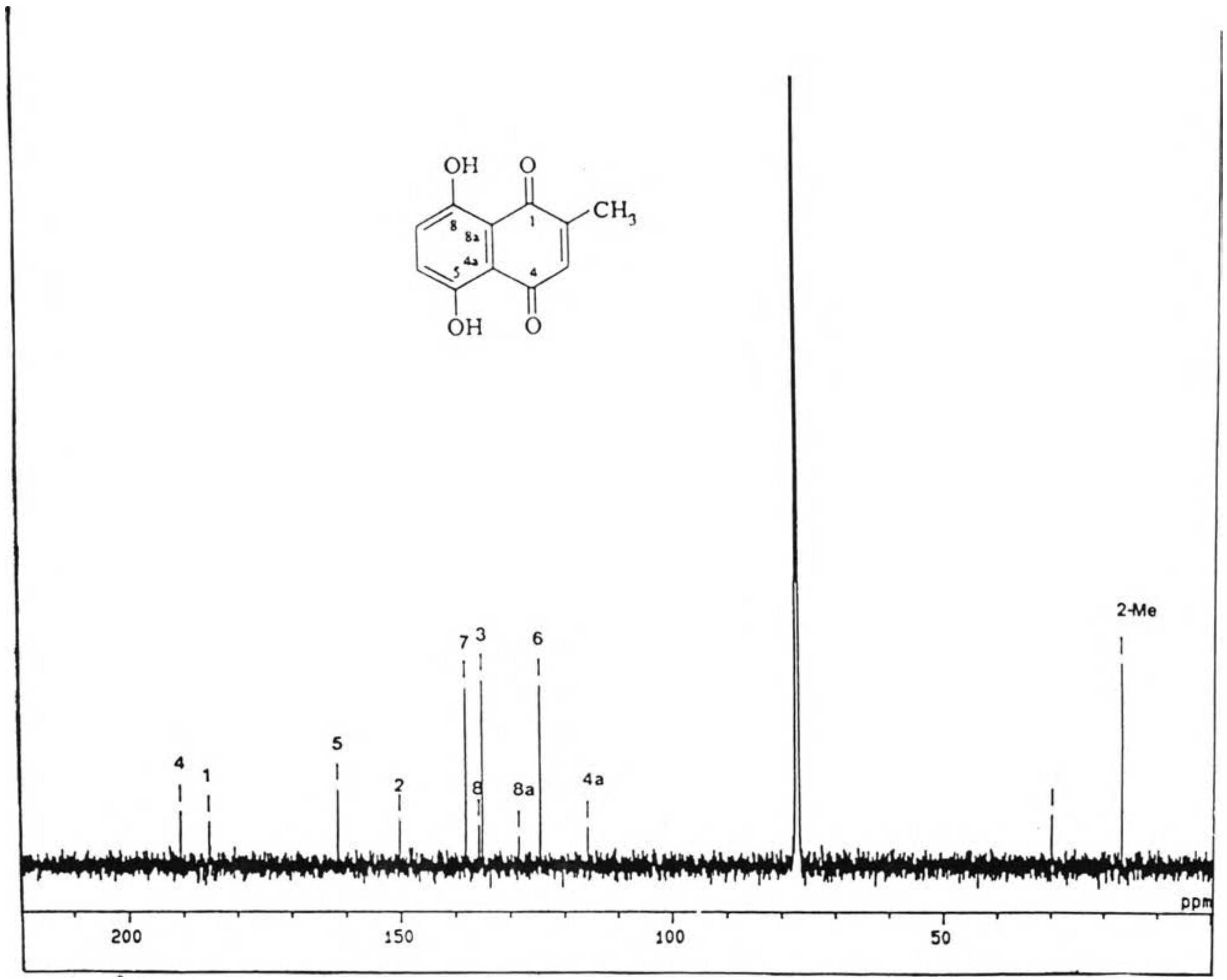


Figure 95 The ^{13}C NMR (125 MHz) spectrum of compound **104** (in $CDCl_3$)

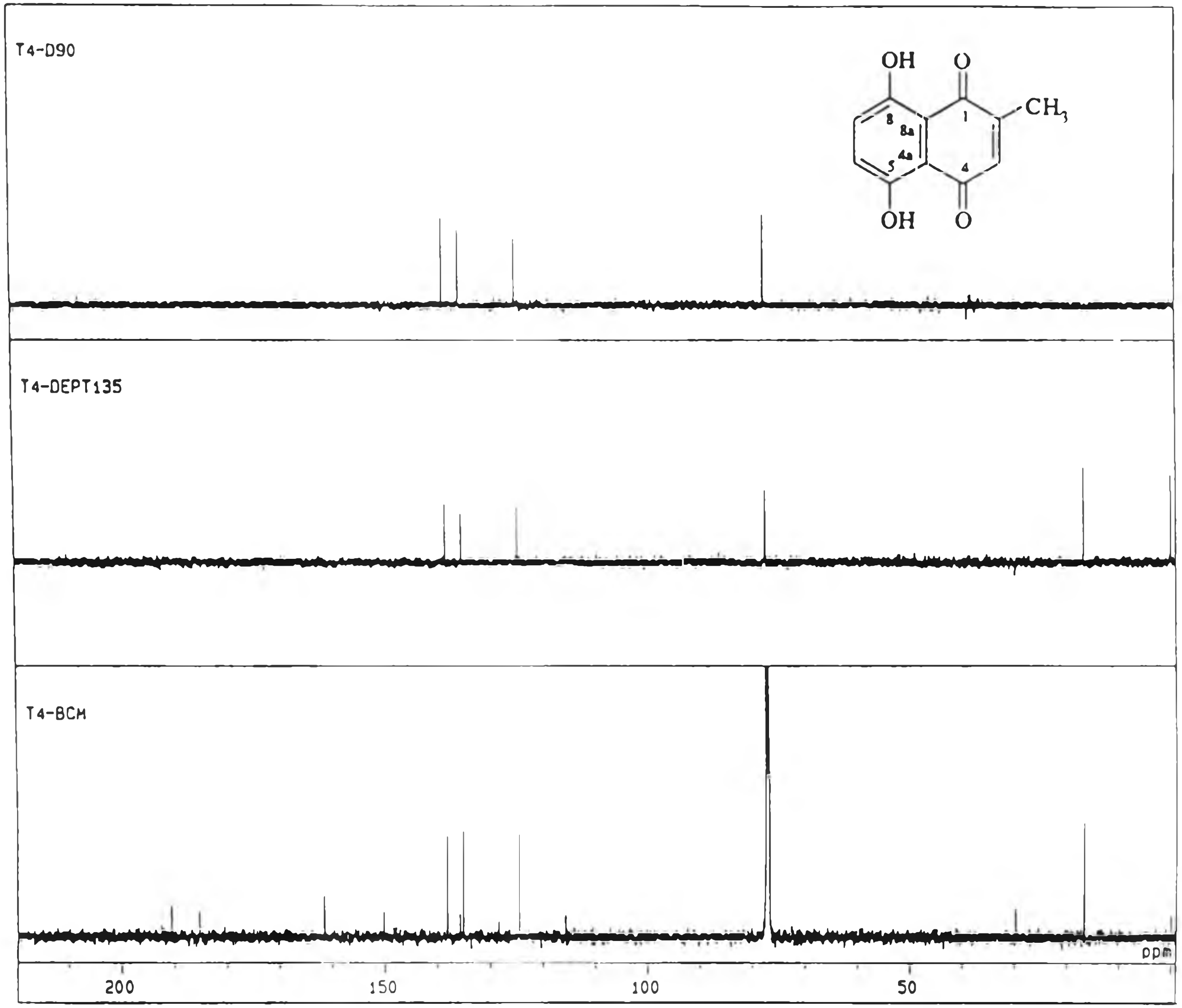


Figure 96 The DEPT (125 MHz) spectrum of compound **104** (in $CDCl_3$)

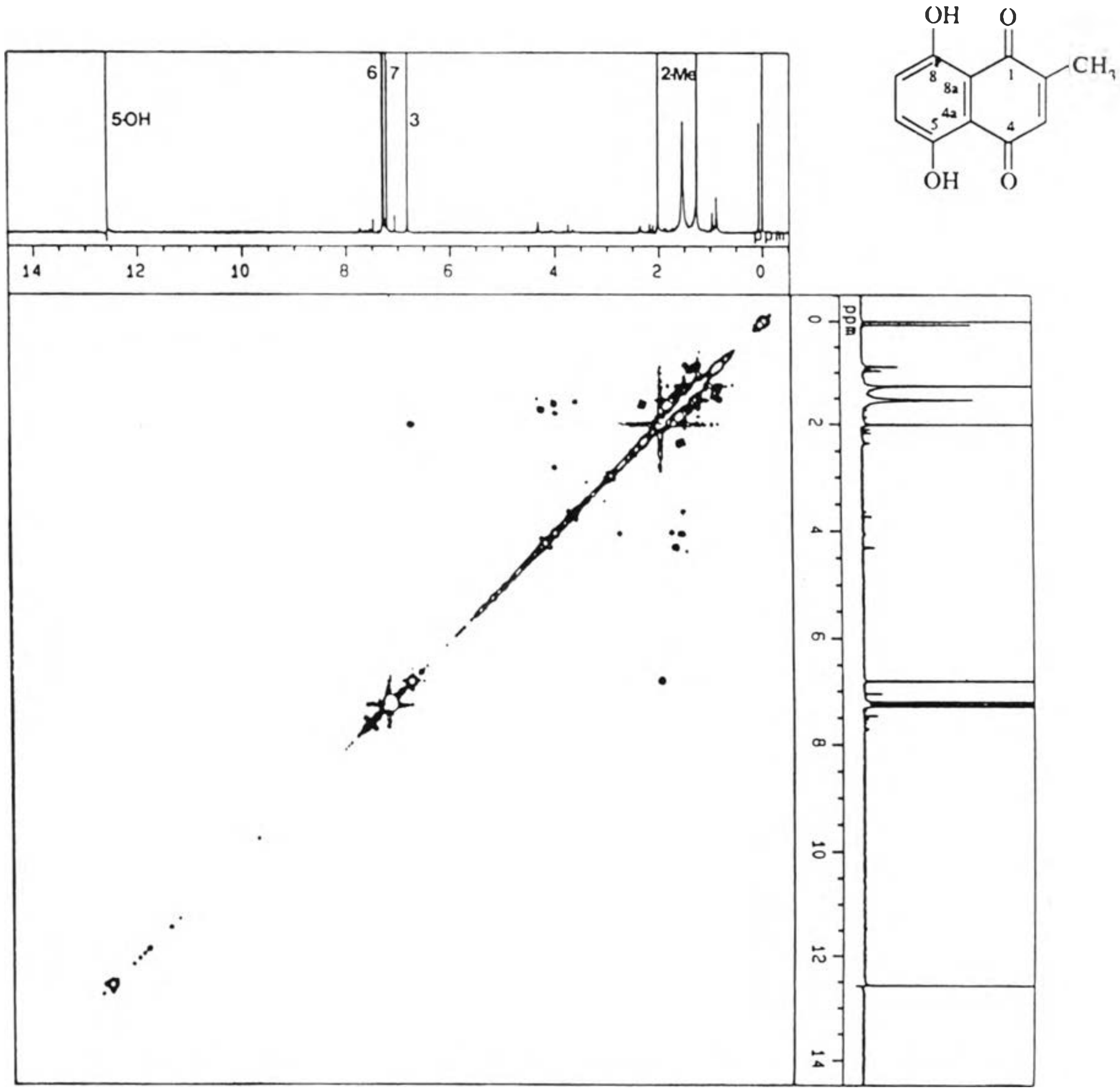
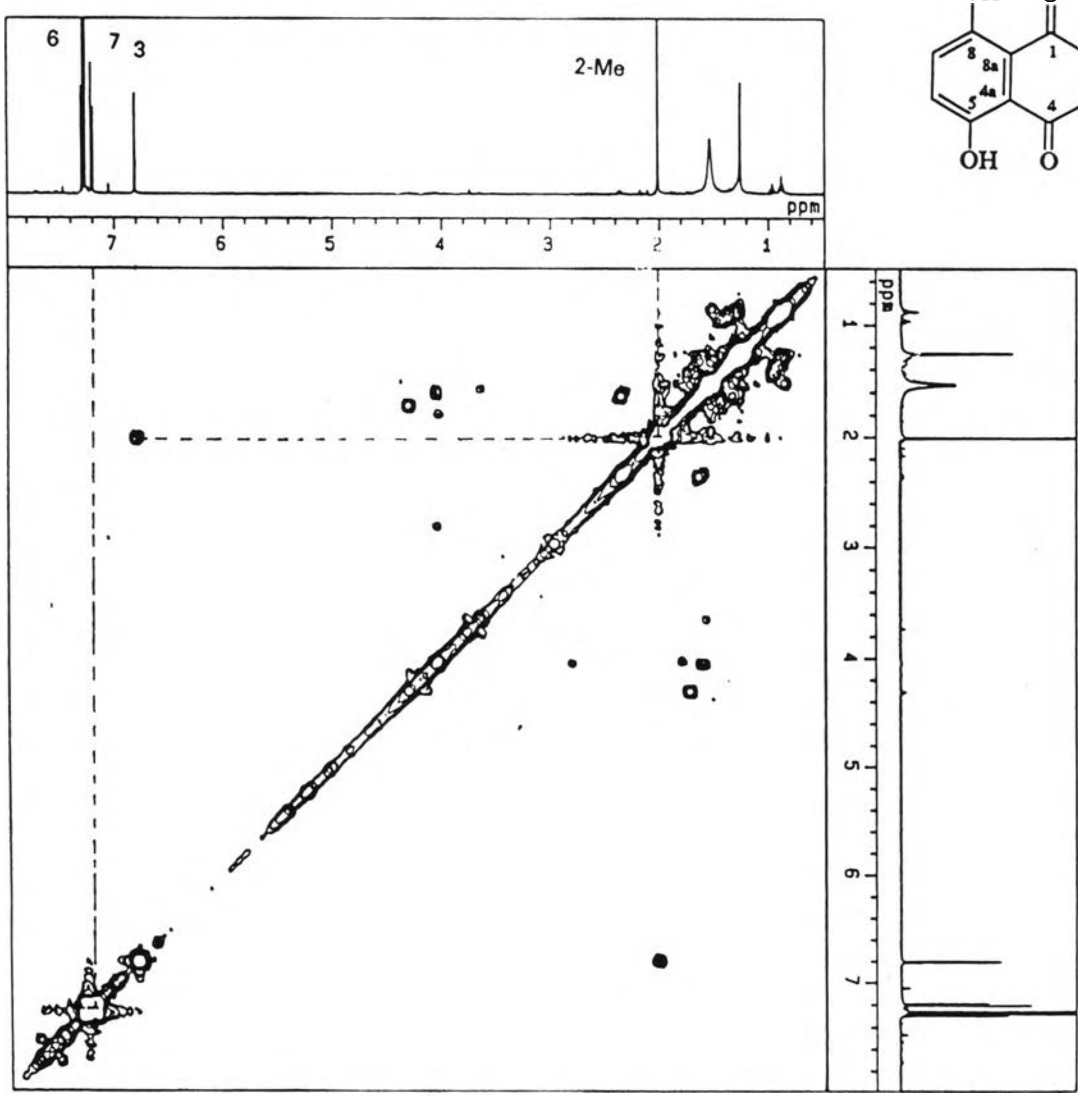


Figure 97 The ^{1}H-^{1}H COSY (500 MHz) spectrum of compound **104** (in $CDCl_3$)



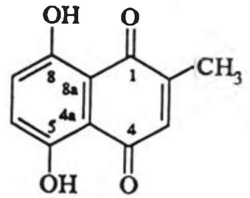


Figure 98 Expansion of the [1]H-[1]H COSY (500 MHz) spectrum of compound **104** (in $CDCl_3$) : δ_H 0.60-7.80 ppm

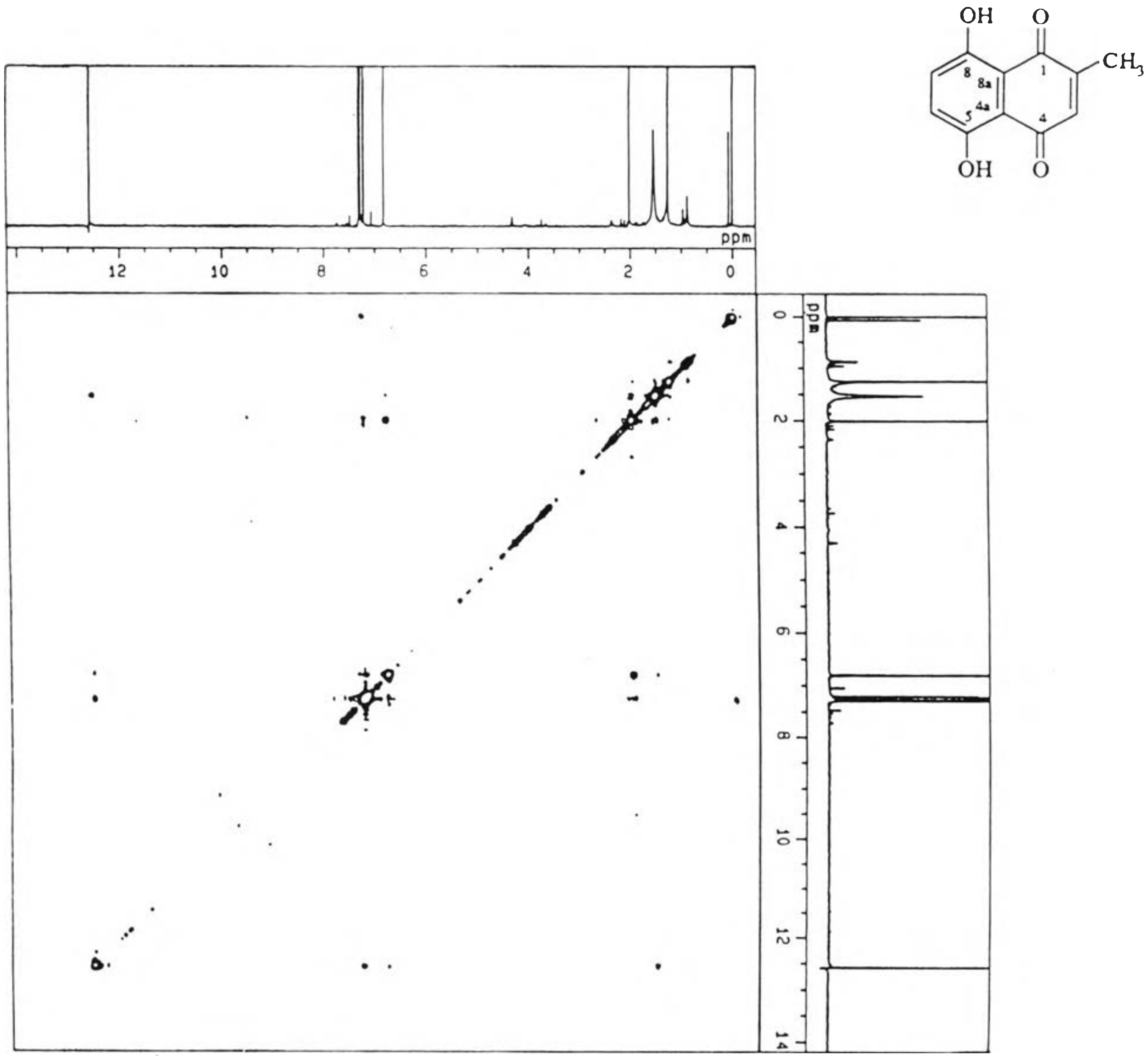


Figure 99 The NOESY (500 MHz) spectrum of compound **104** (in $CDCl_3$)

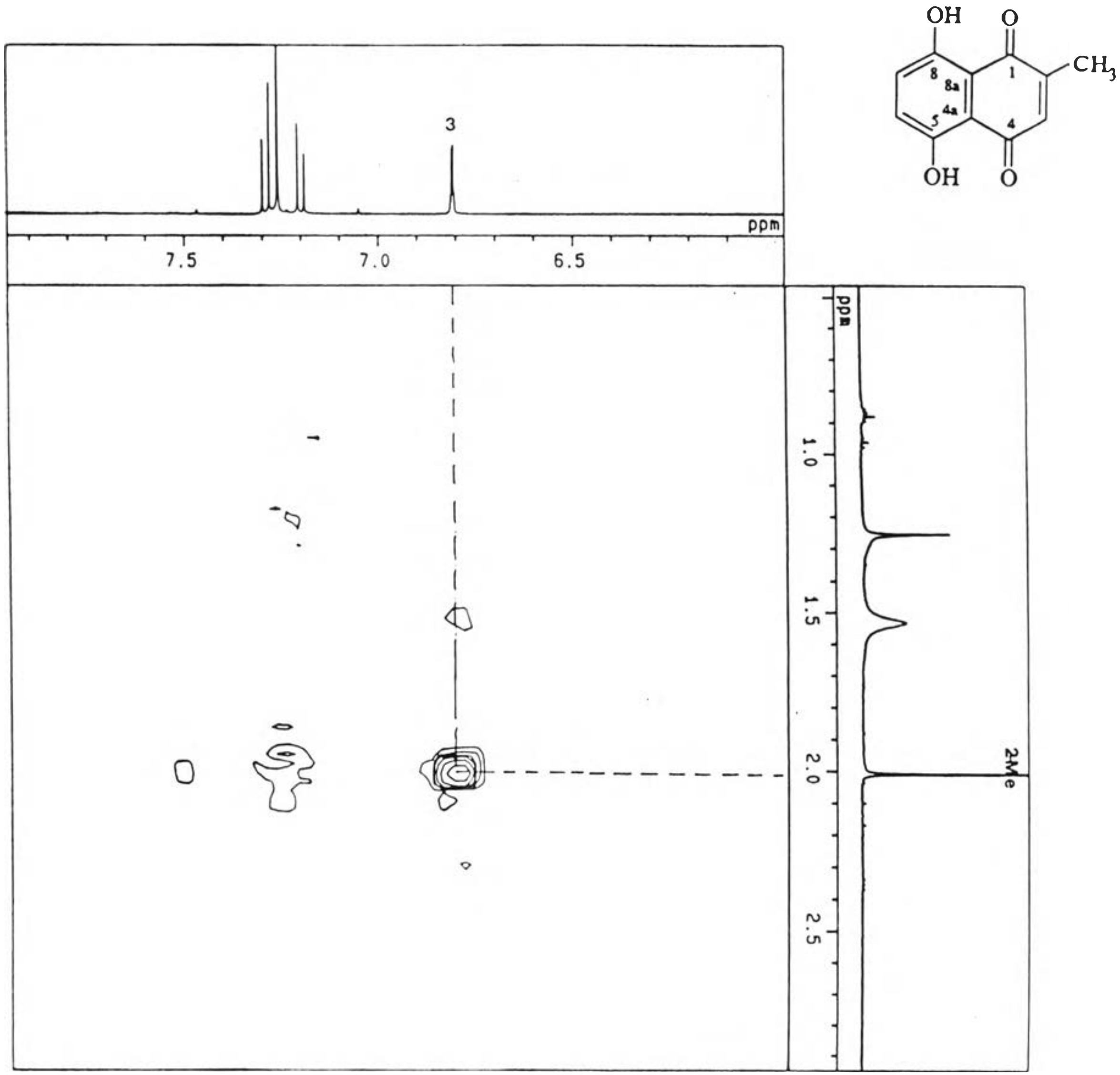


Figure 100 Expansion of the NOESY (500 MHz) spectrum of compound **104** (in $CDCl_3$) : δ_H 5.60-7.90 ppm

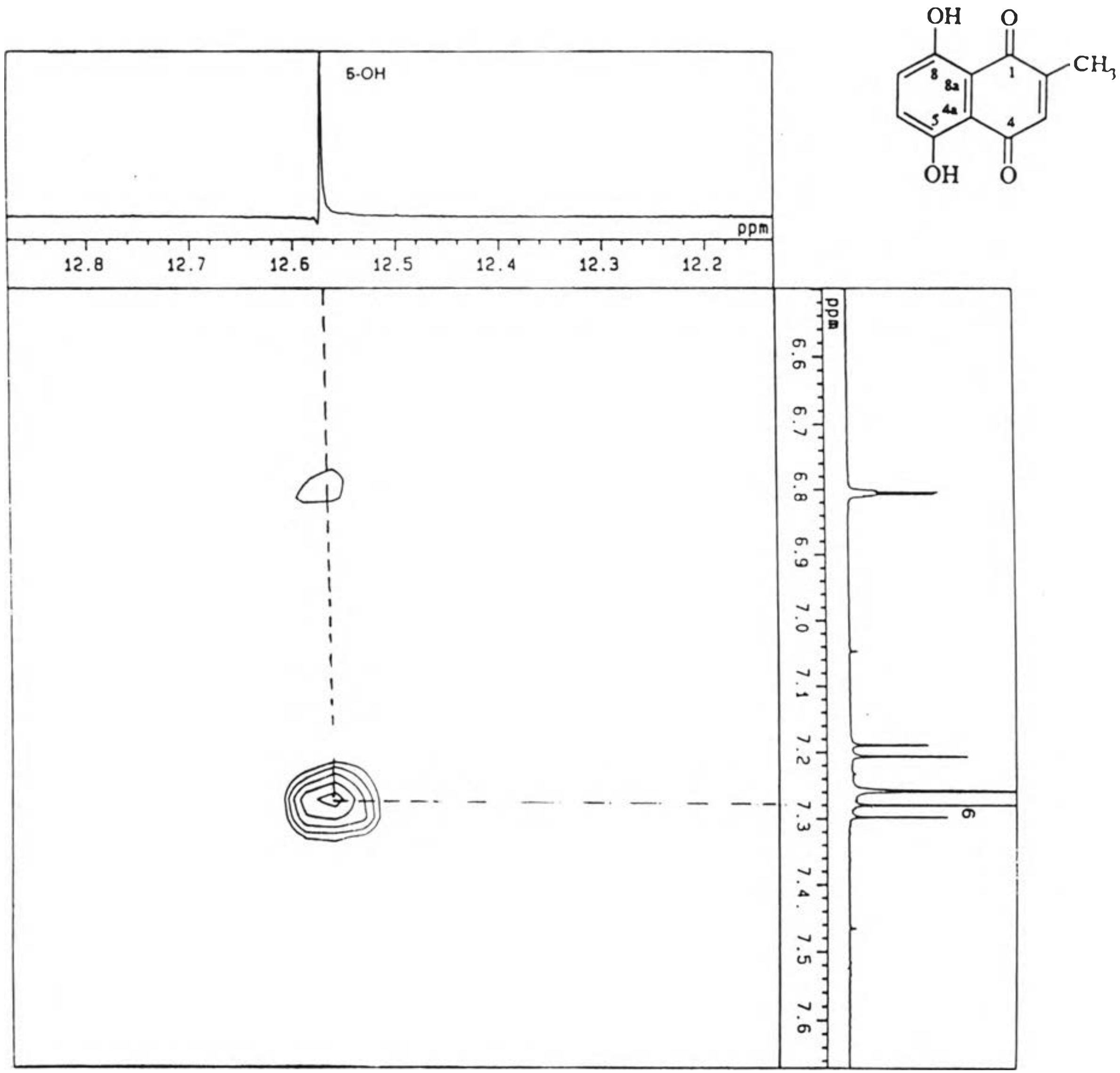


Figure 101 Expansion of the NOESY (500 MHz) spectrum of compound **104** (in $CDCl_3$) : δ_H 12.20-12.80 ppm

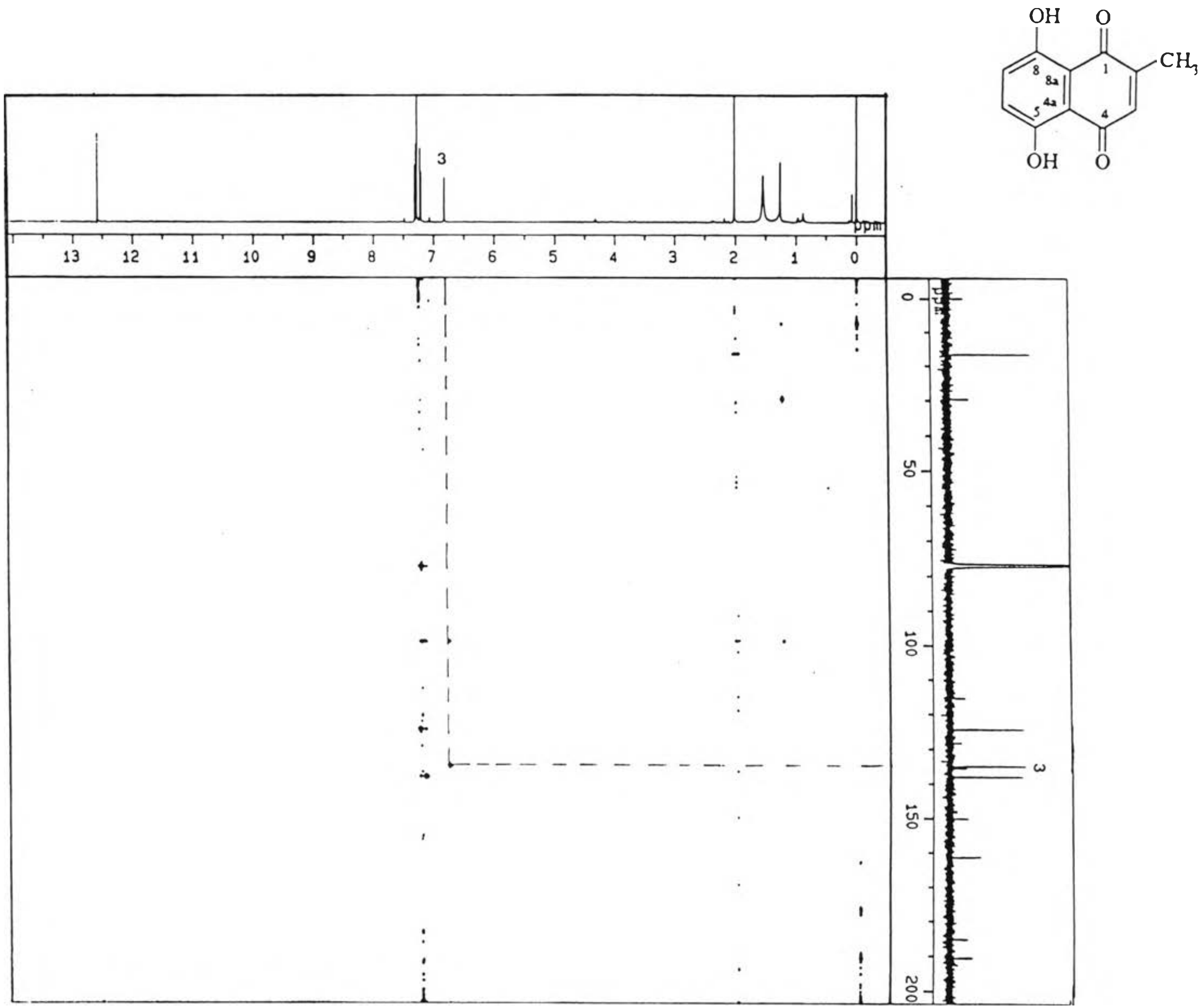


Figure 102 The HMQC spectrum of compound **104** (in $CDCl_3$)

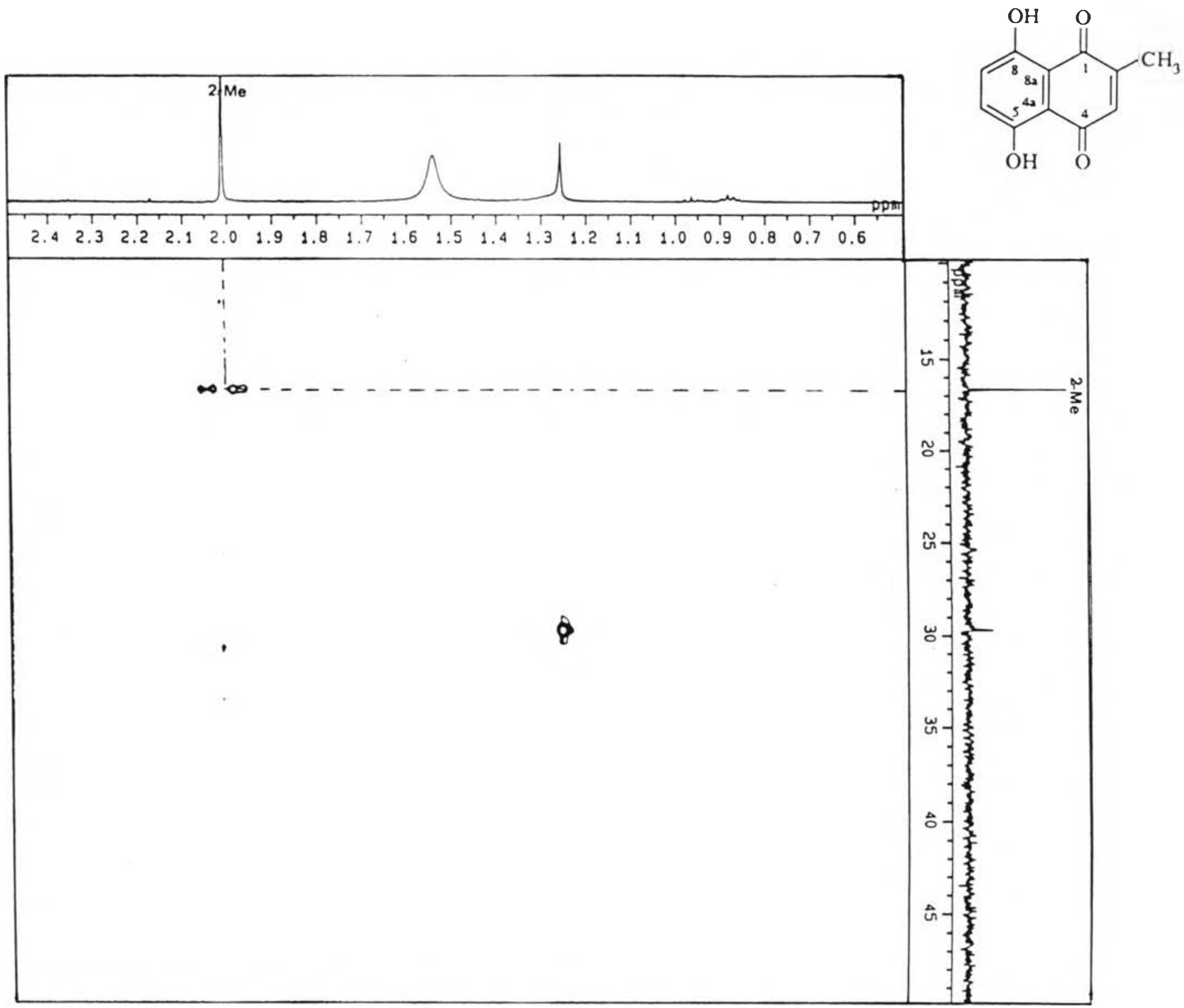


Figure 103 Expansion of the HMQC spectrum of compound **104** (in $CDCl_3$) :

δ_H 0.60-2.40 ; δ_C 10.00-45.00 ppm

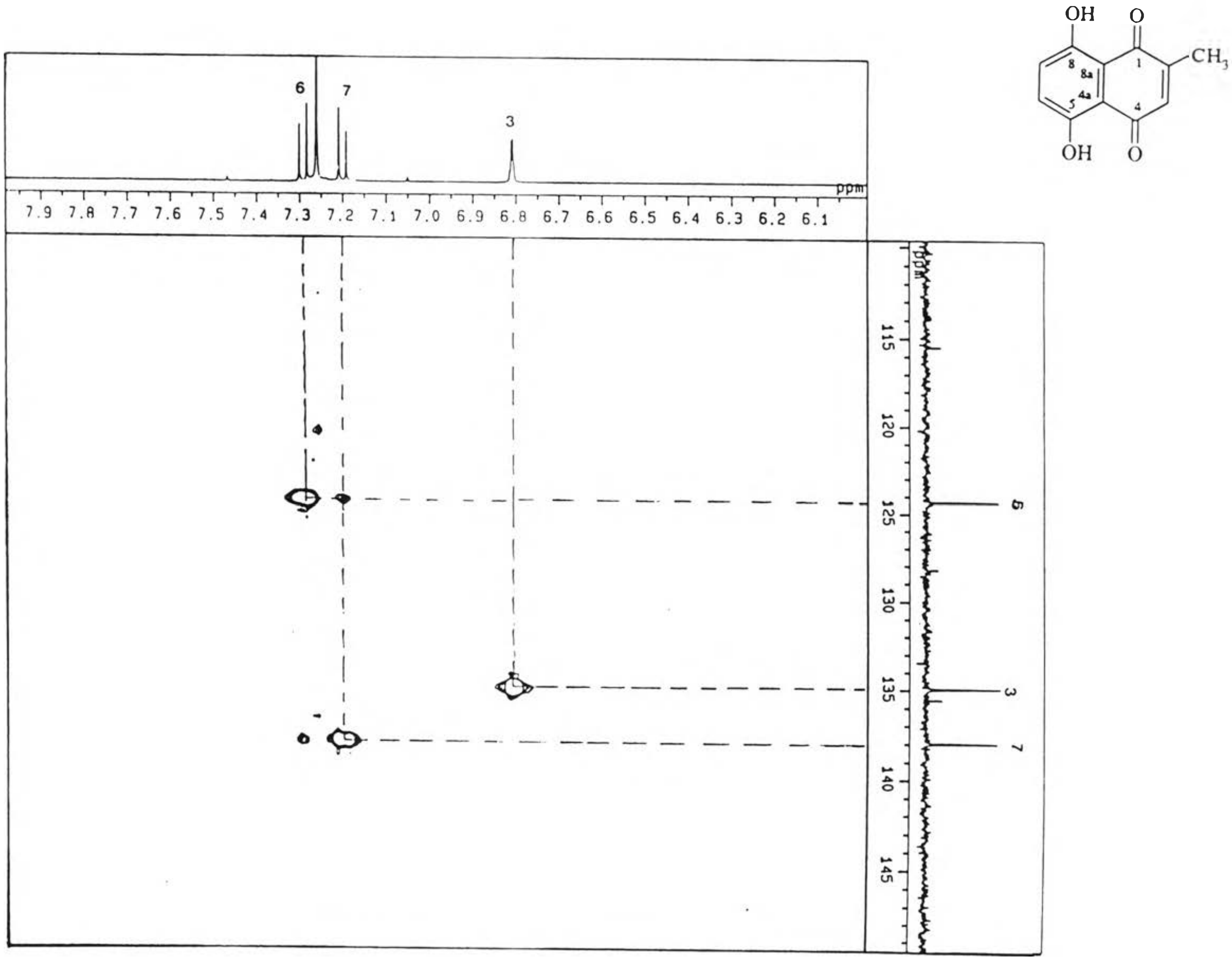


Figure 104 Expansion of the HMQC spectrum of compound **104** (in $CDCl_3$) :

δ_H 6.10-7.90 ; δ_C 110.00-145.00 ppm

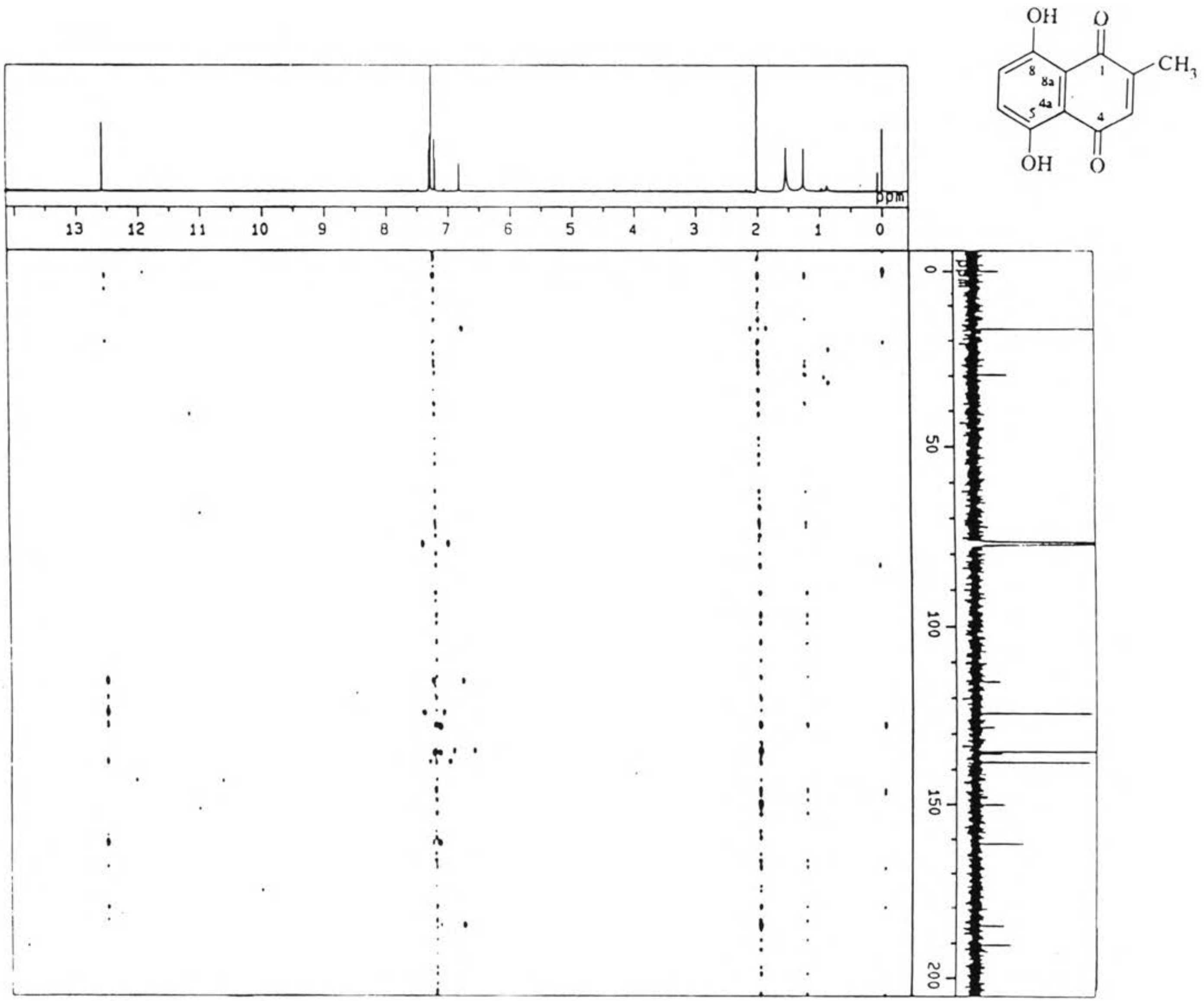


Figure 105 The HMBC spectrum of compound **104** (in $CDCl_3$)

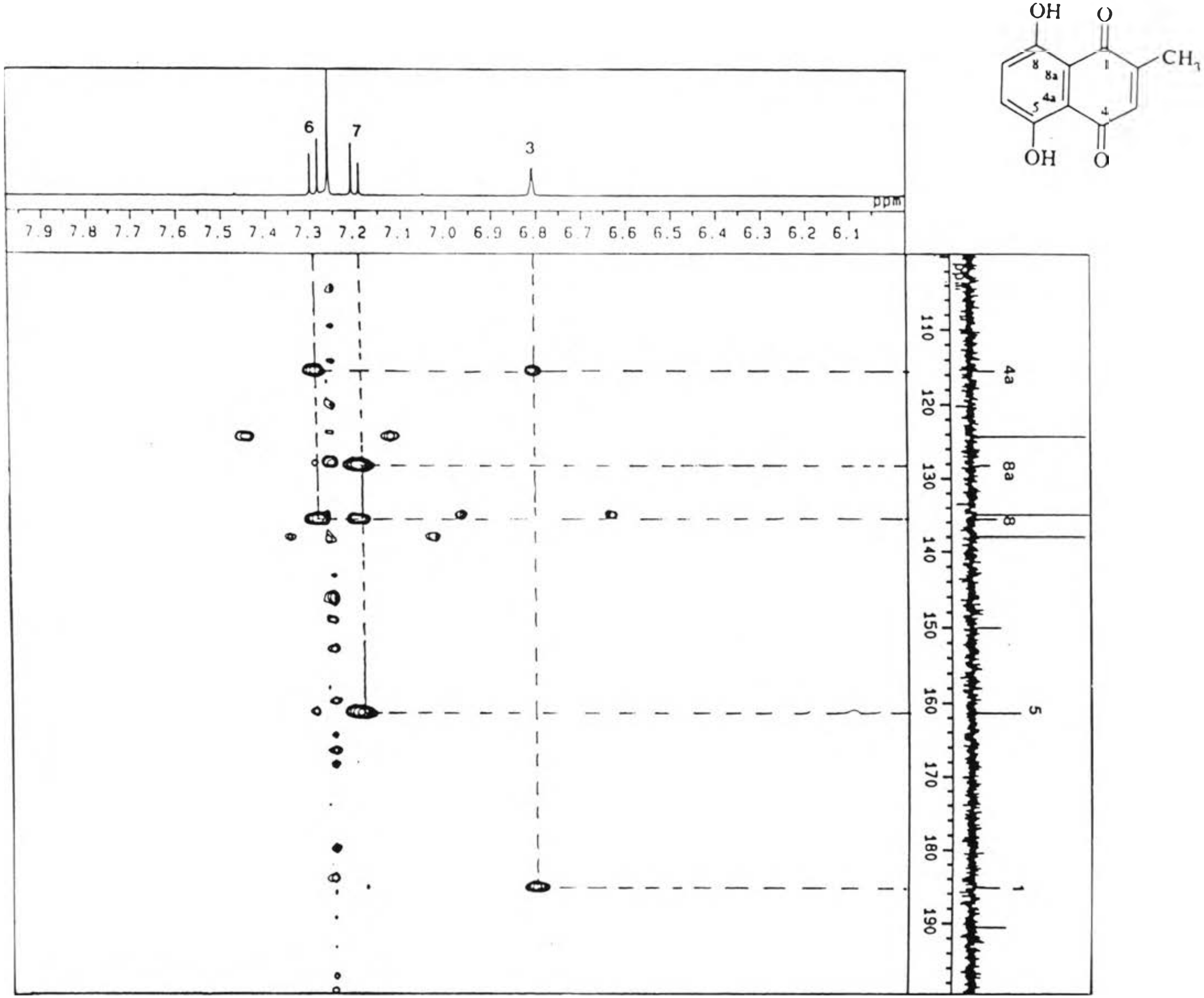
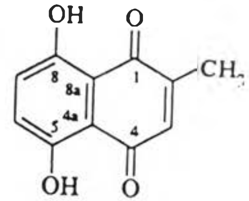


Figure 106 Expansion of the HMBC spectrum of compound **104** (in $CDCl_3$) :

δ_H 6.10-7.90 ; δ_C 105.00-194.00 ppm



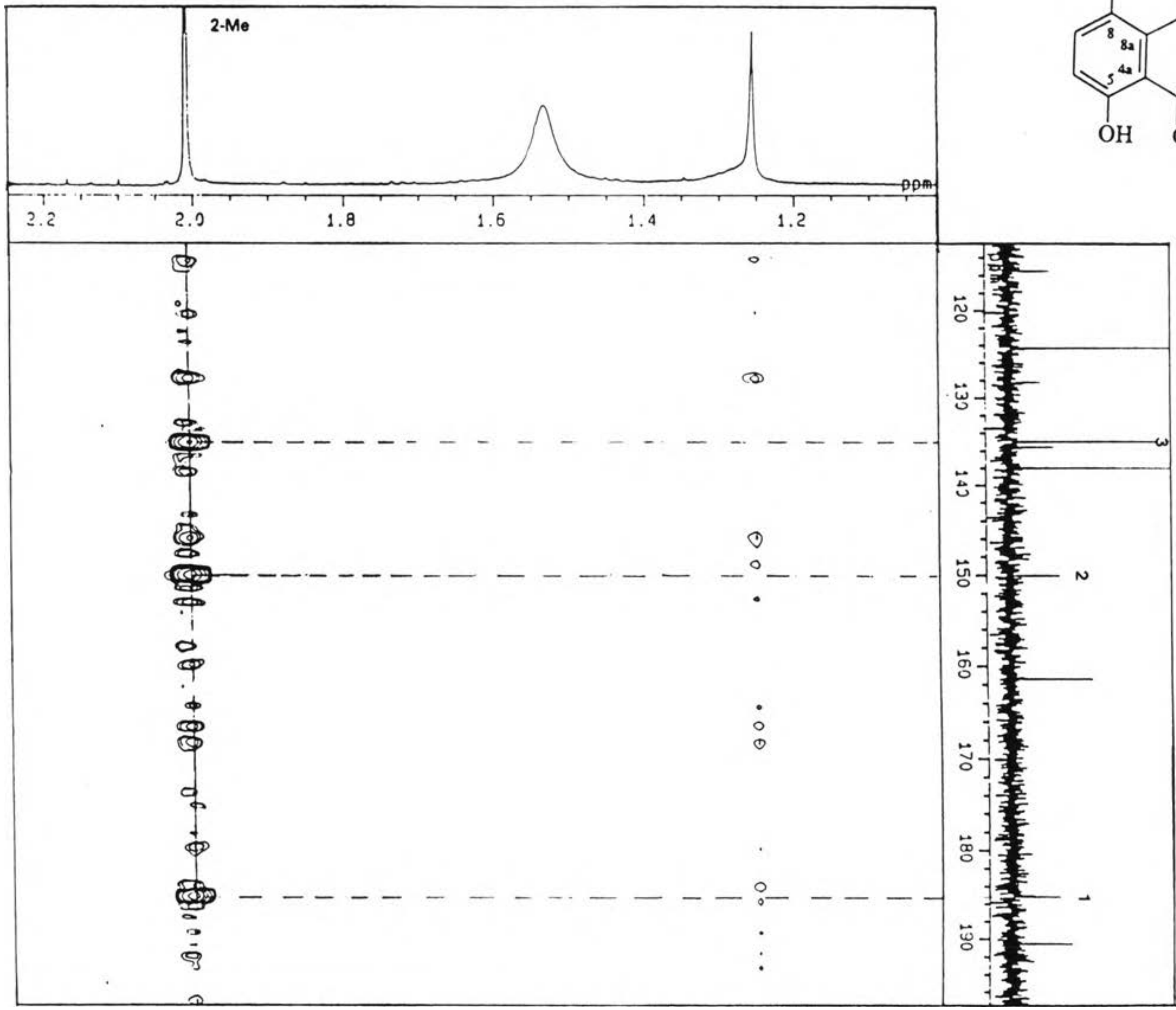


Figure 107 Expansion of the HMBC spectrum of compound **104**(in $CDCl_3$) :

δ_H 1.30-2.20 ; δ_C 117.00-193.00 ppm

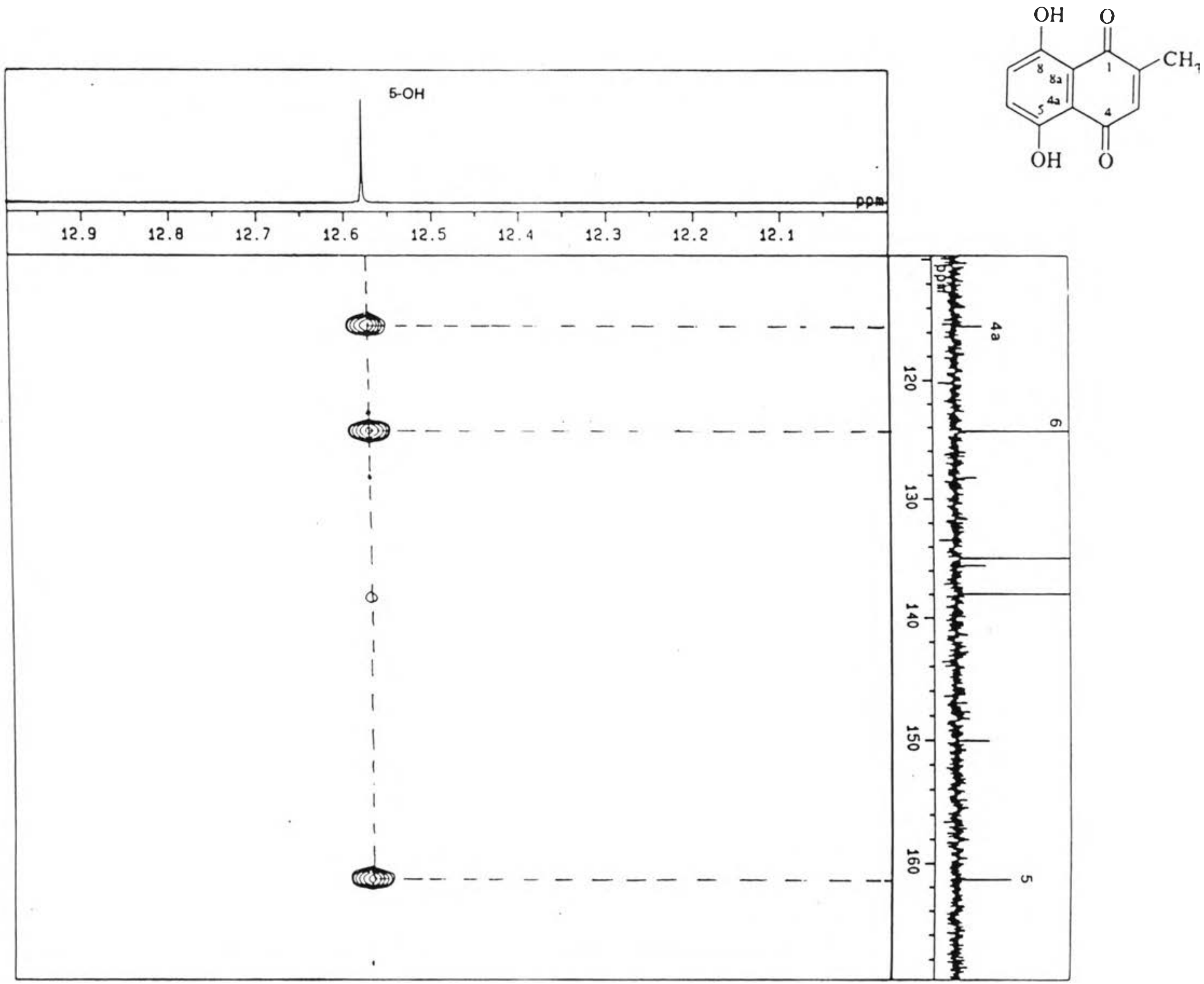


Figure 108 Expansion of the HMBC spectrum of compound **104** (in $CDCl_3$) :

δ_H 1.21-12.90 ; δ_C 110.00-168.00 ppm

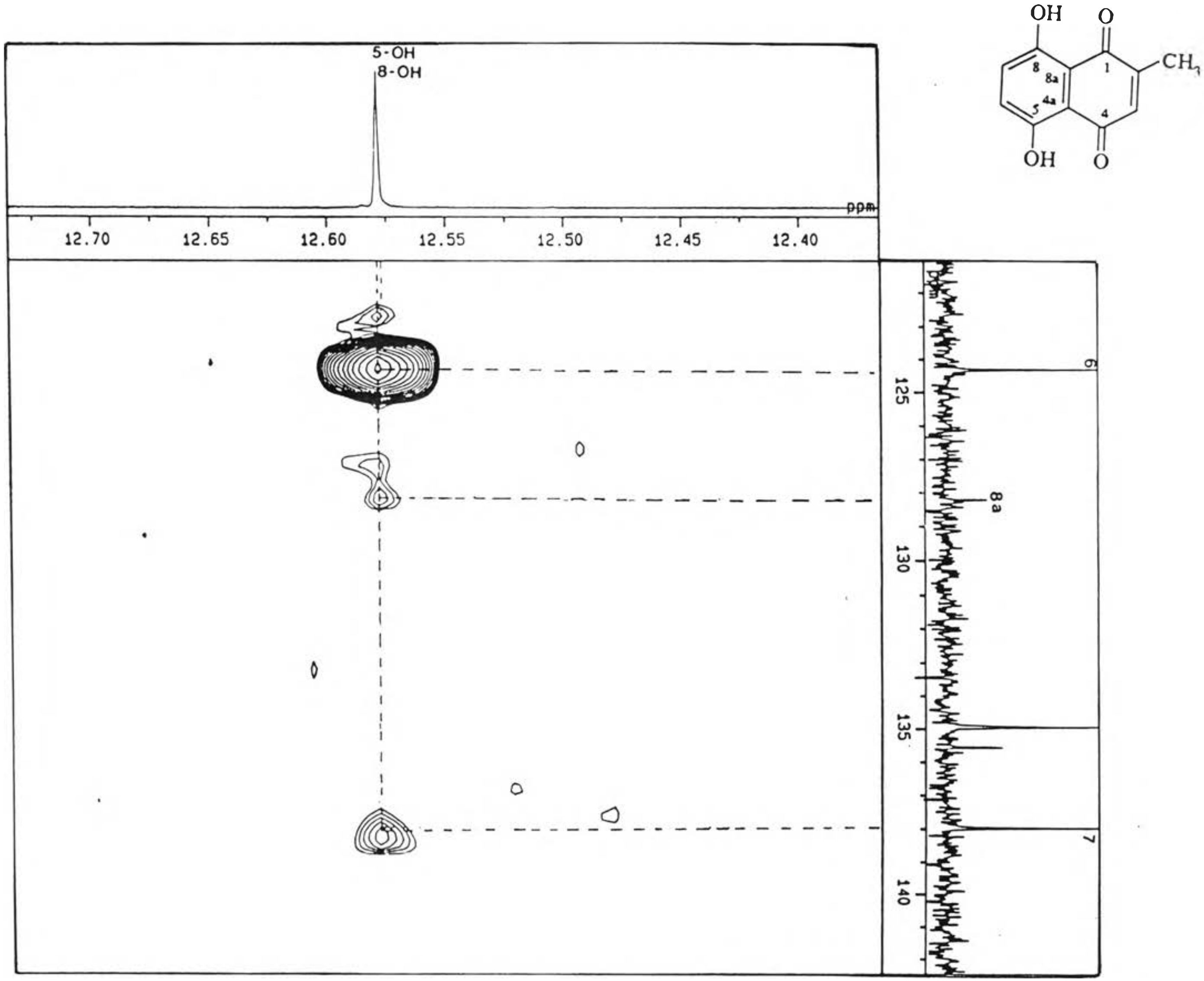


Figure 109 Expansion of the HMBC spectrum of compound **104** (in $CDCl_3$) :

δ_H 12.40-12.70 ; δ_C 122.00-142.00 ppm

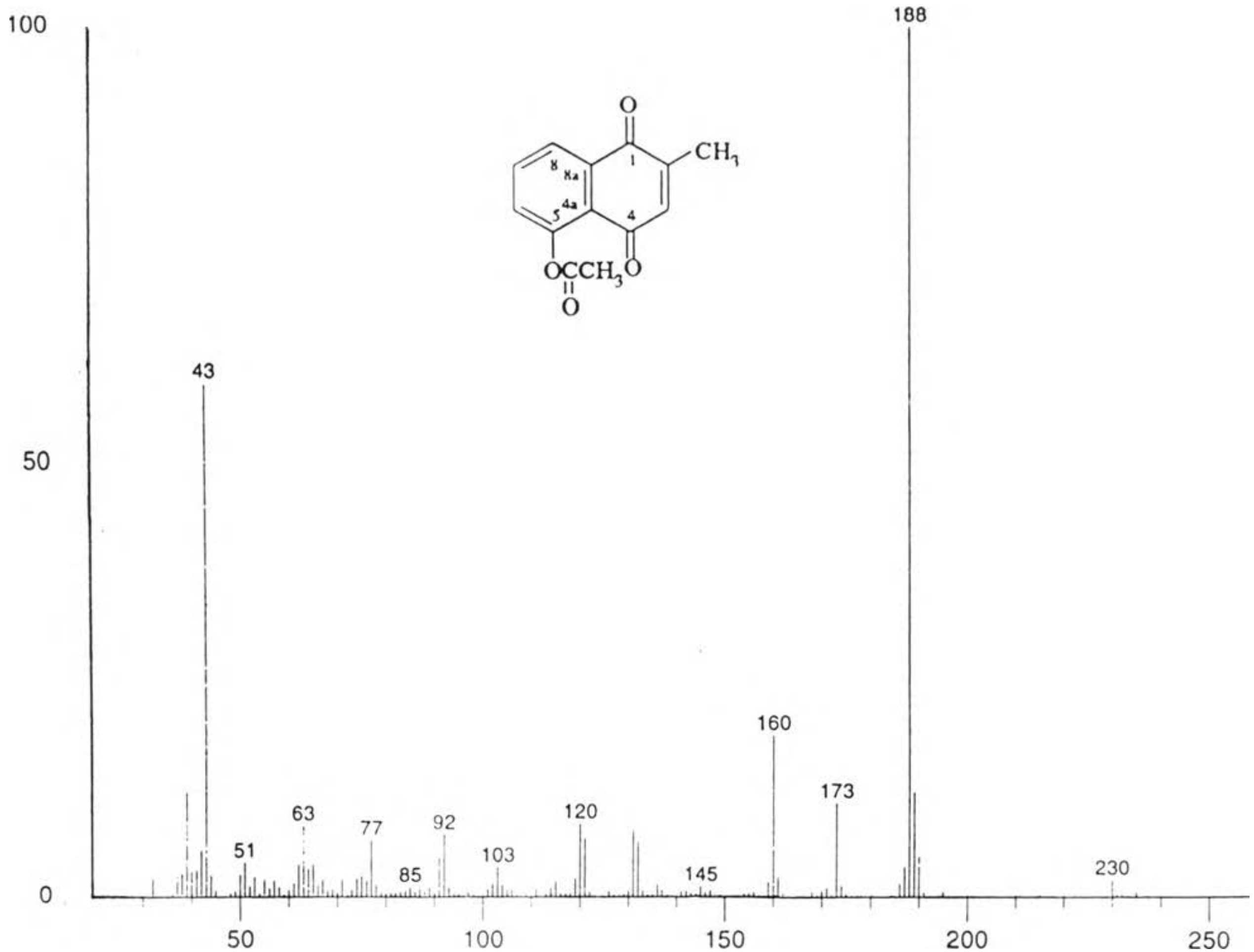


Figure 110 The EI mass spectrum of compound **105**

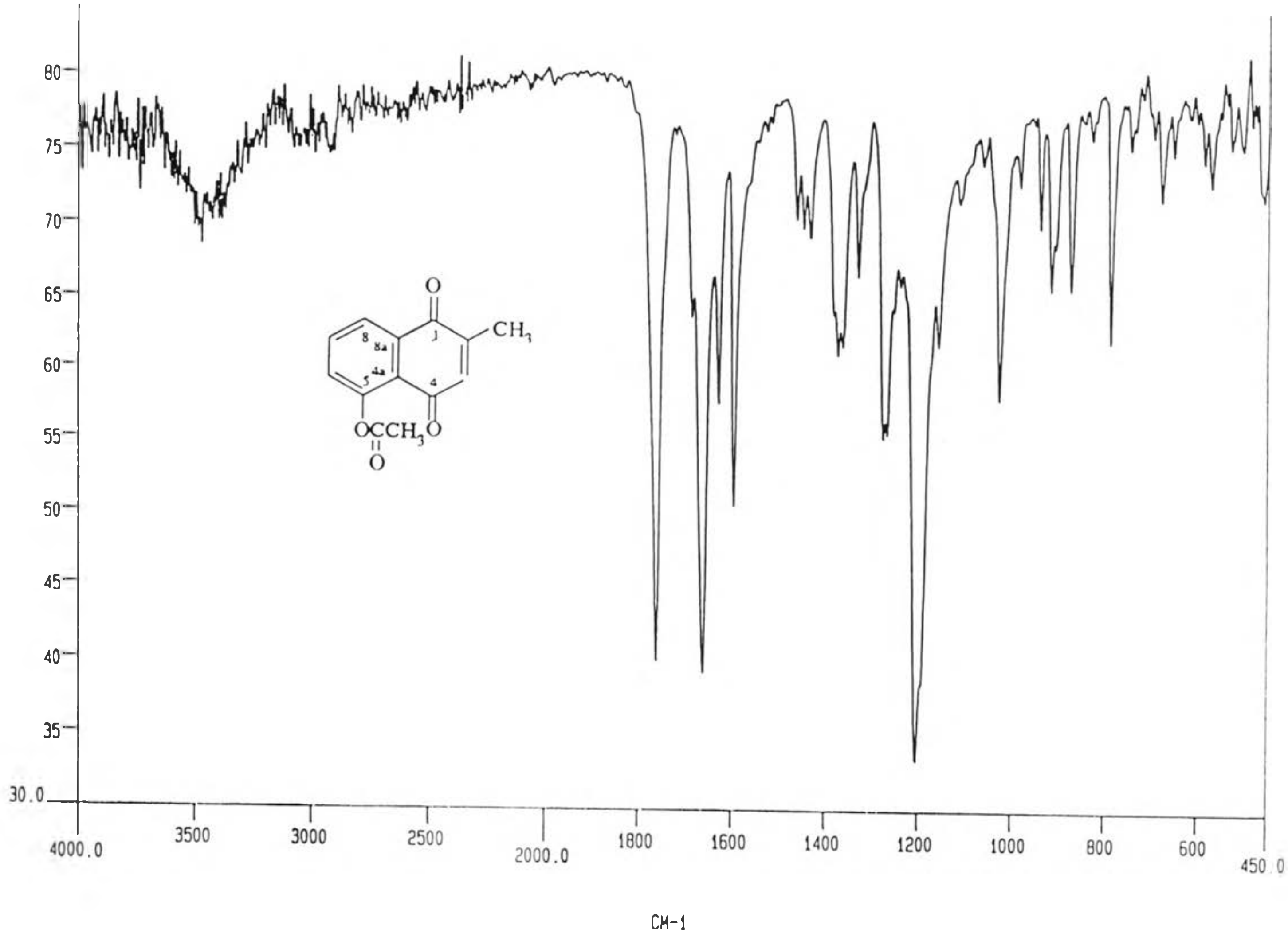


Figure 111 The IR spectrum of compound **105** (in KBr disc)

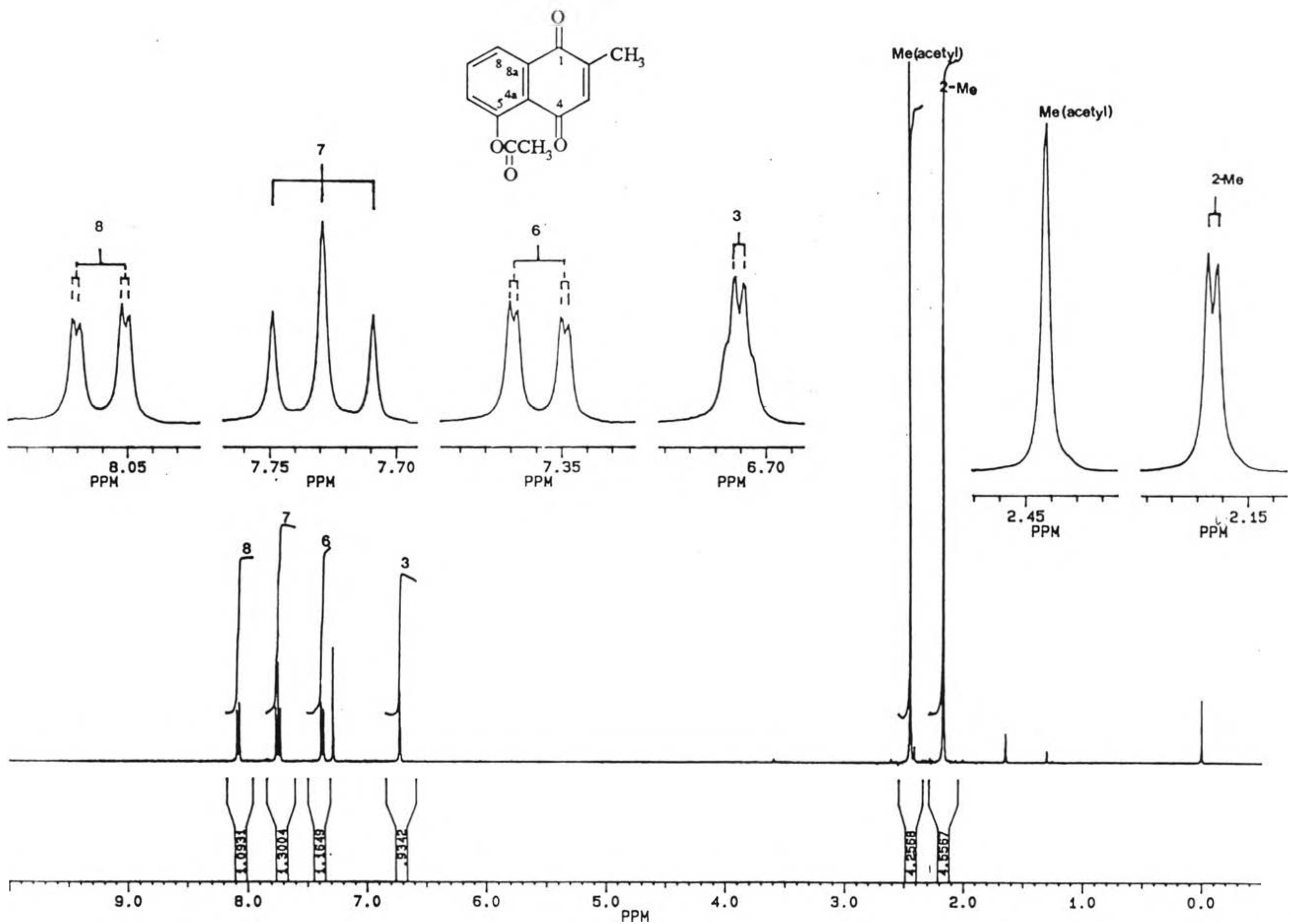


Figure 112 The [1]H NMR (400 MHz) spectrum of compound **105** (in $CDCl_3$)

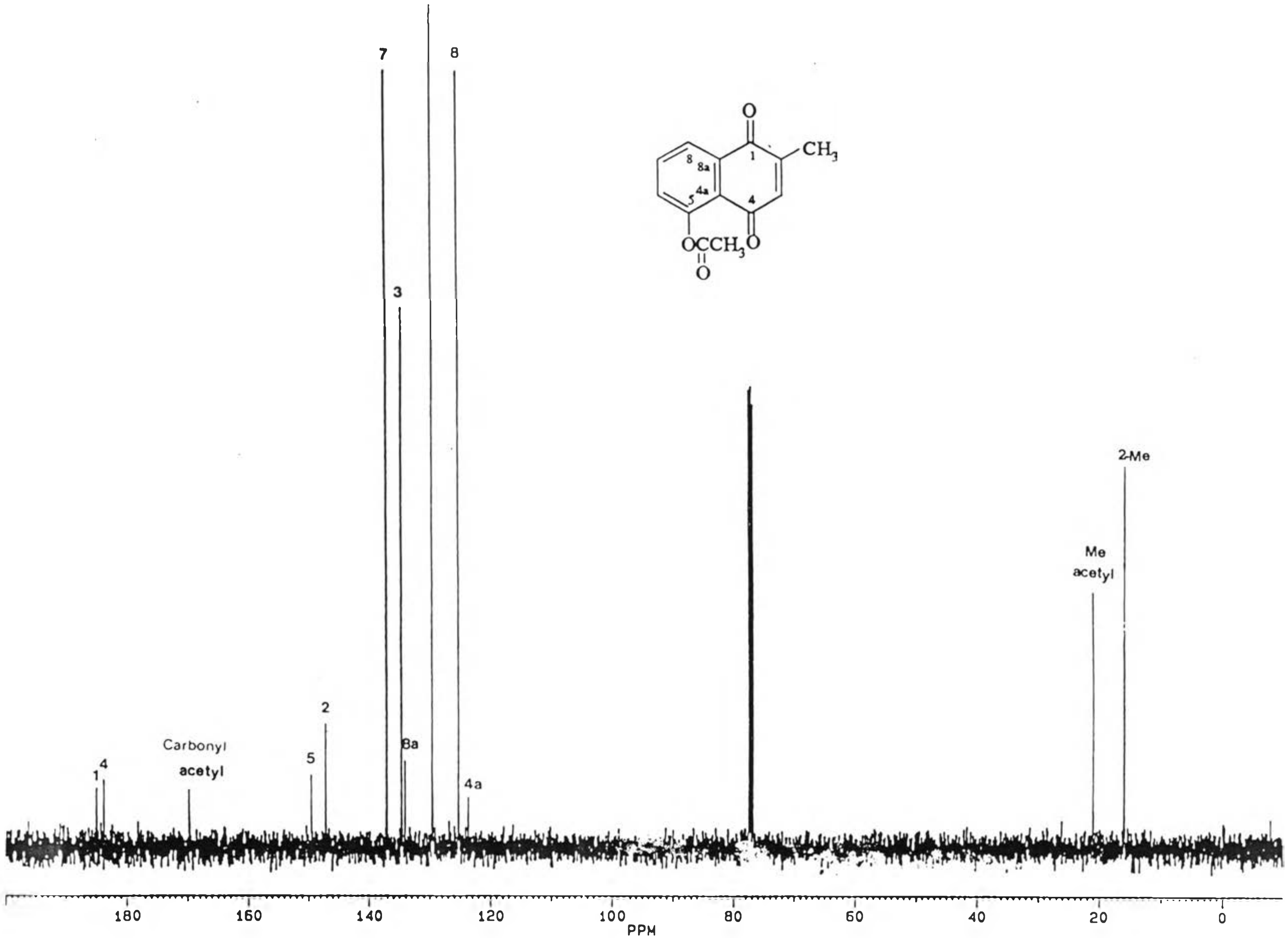


Figure 113 The ^{13}C NMR (100 MHz) spectrum of compound **105** (in $CDCl_3$)

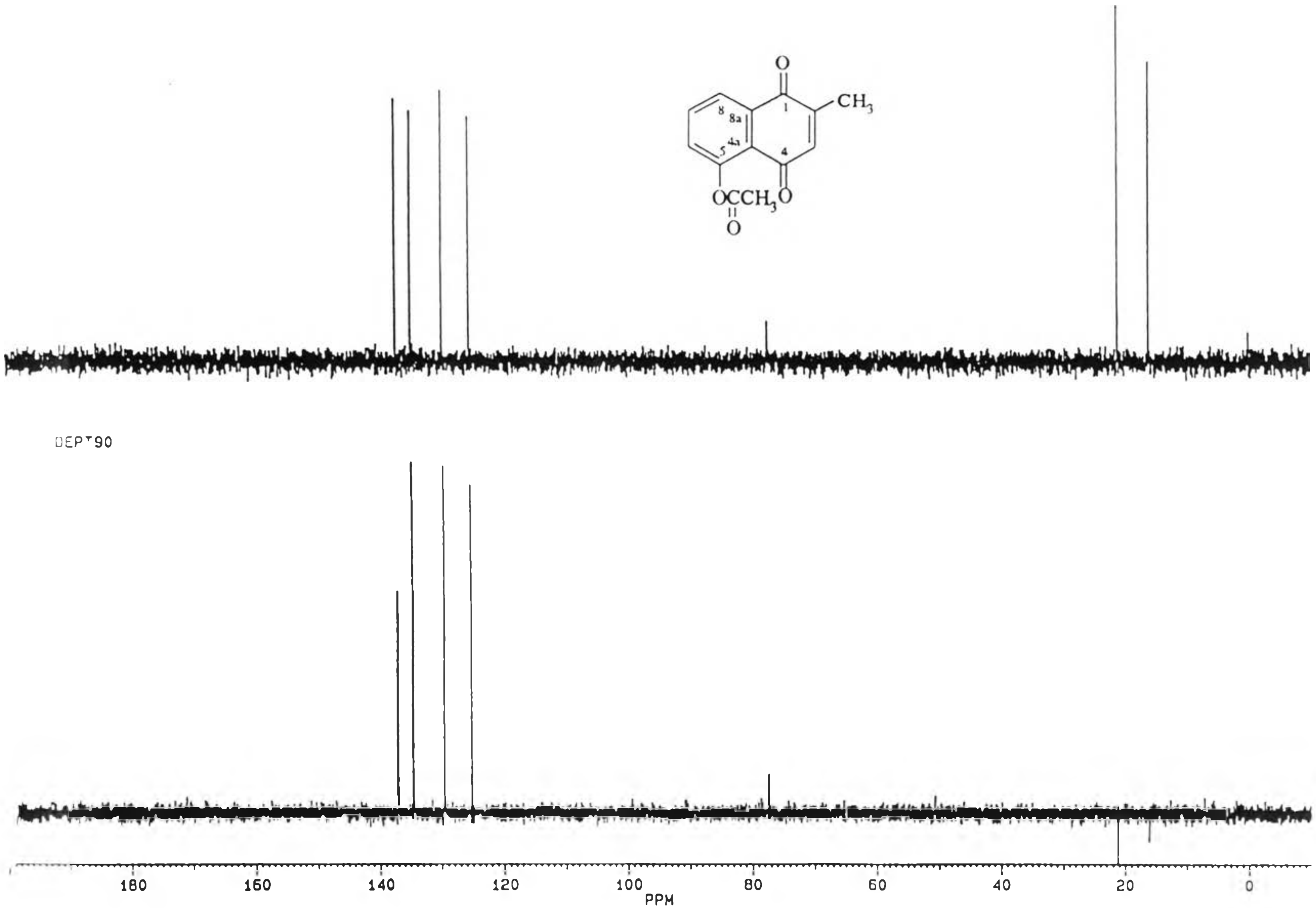


Figure 114 The DEPT (100 MHz) spectrum of compound **105** (in $CDCl_3$)

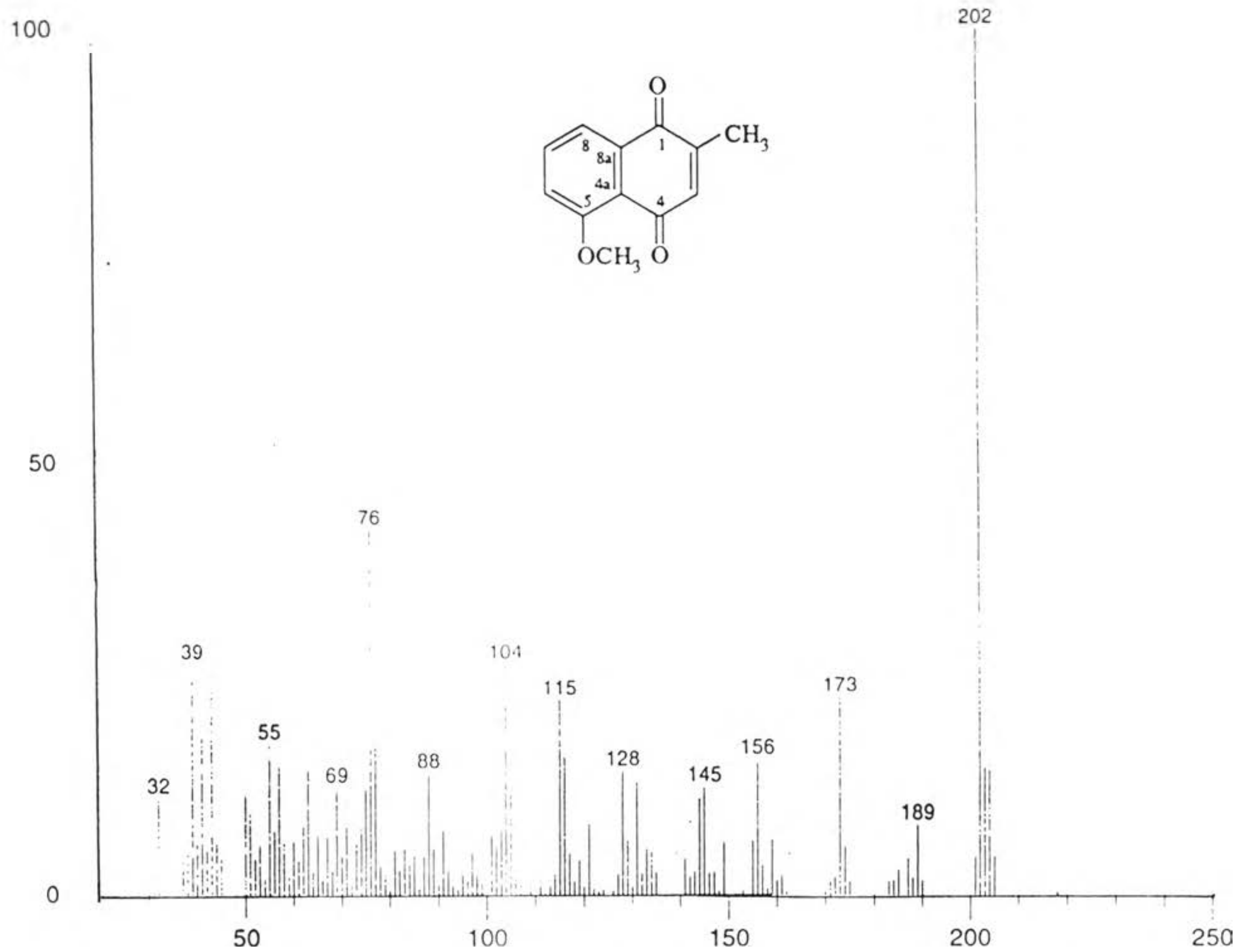


Figure 115 The EI mass spectrum of compound 106

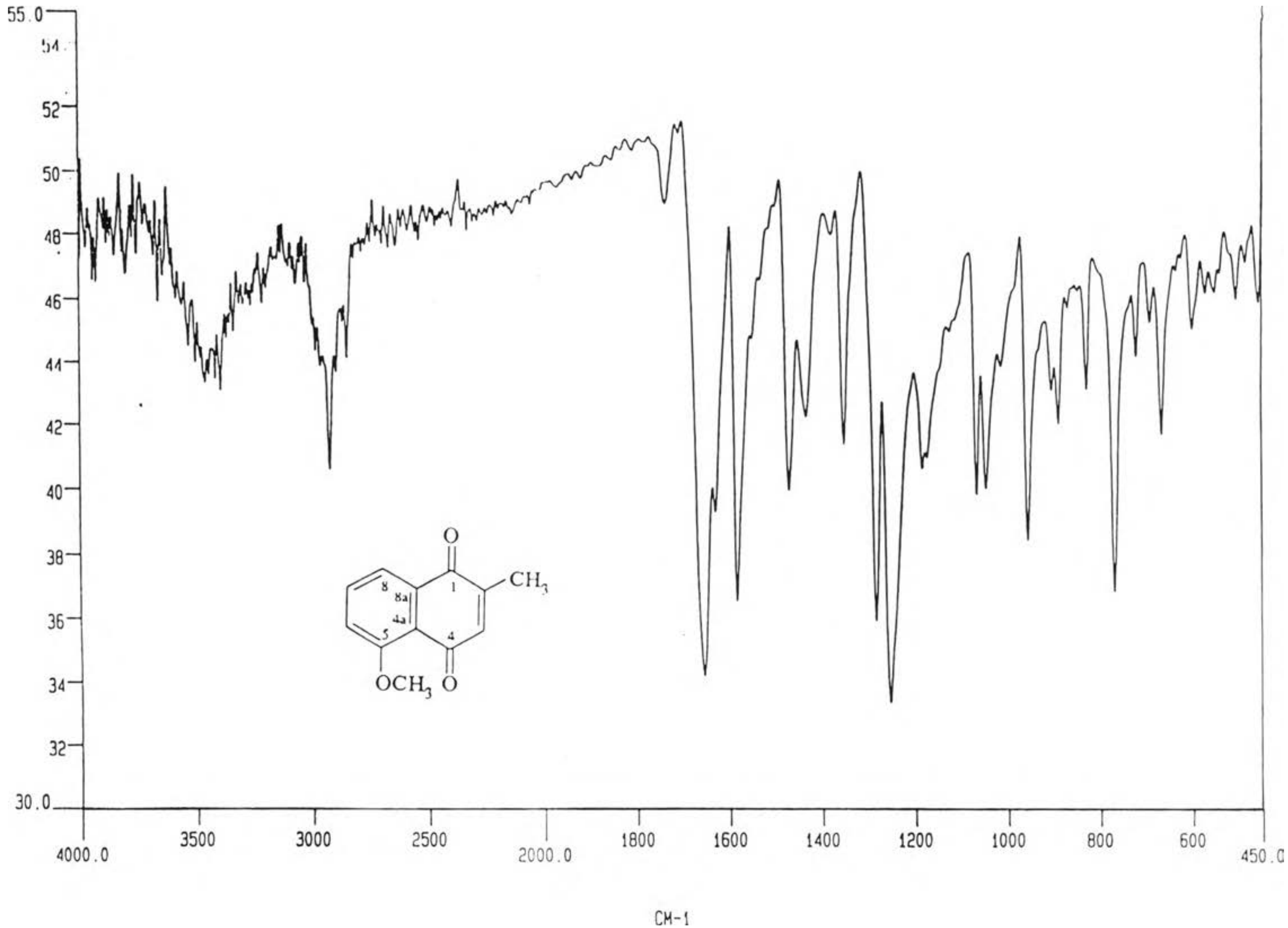


Figure 116 The IR spectrum of compound **106** (in KBr disc)

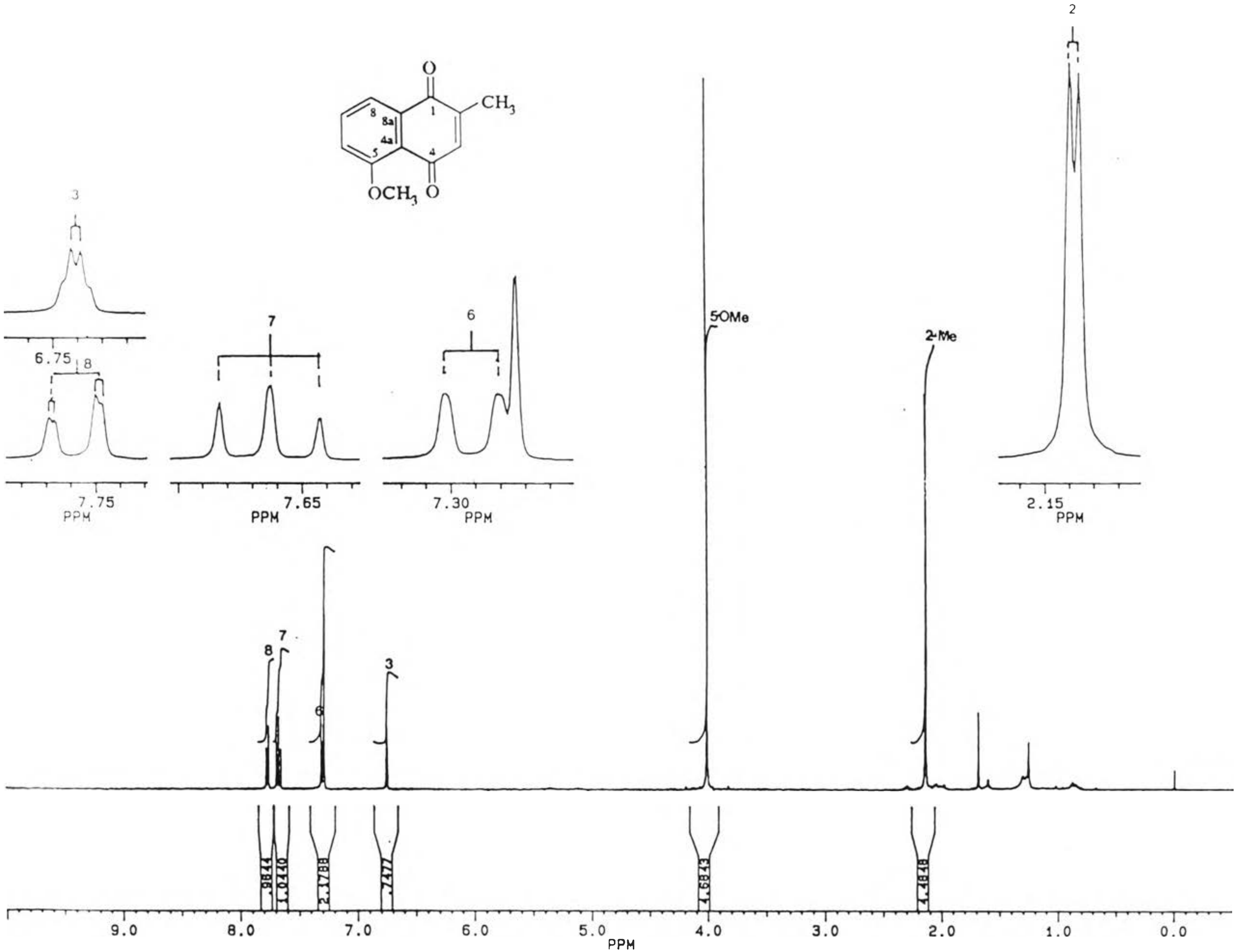


Figure 117 The ^{1}H NMR (400 MHz) spectrum of compound **106** (in $CDCl_3$)

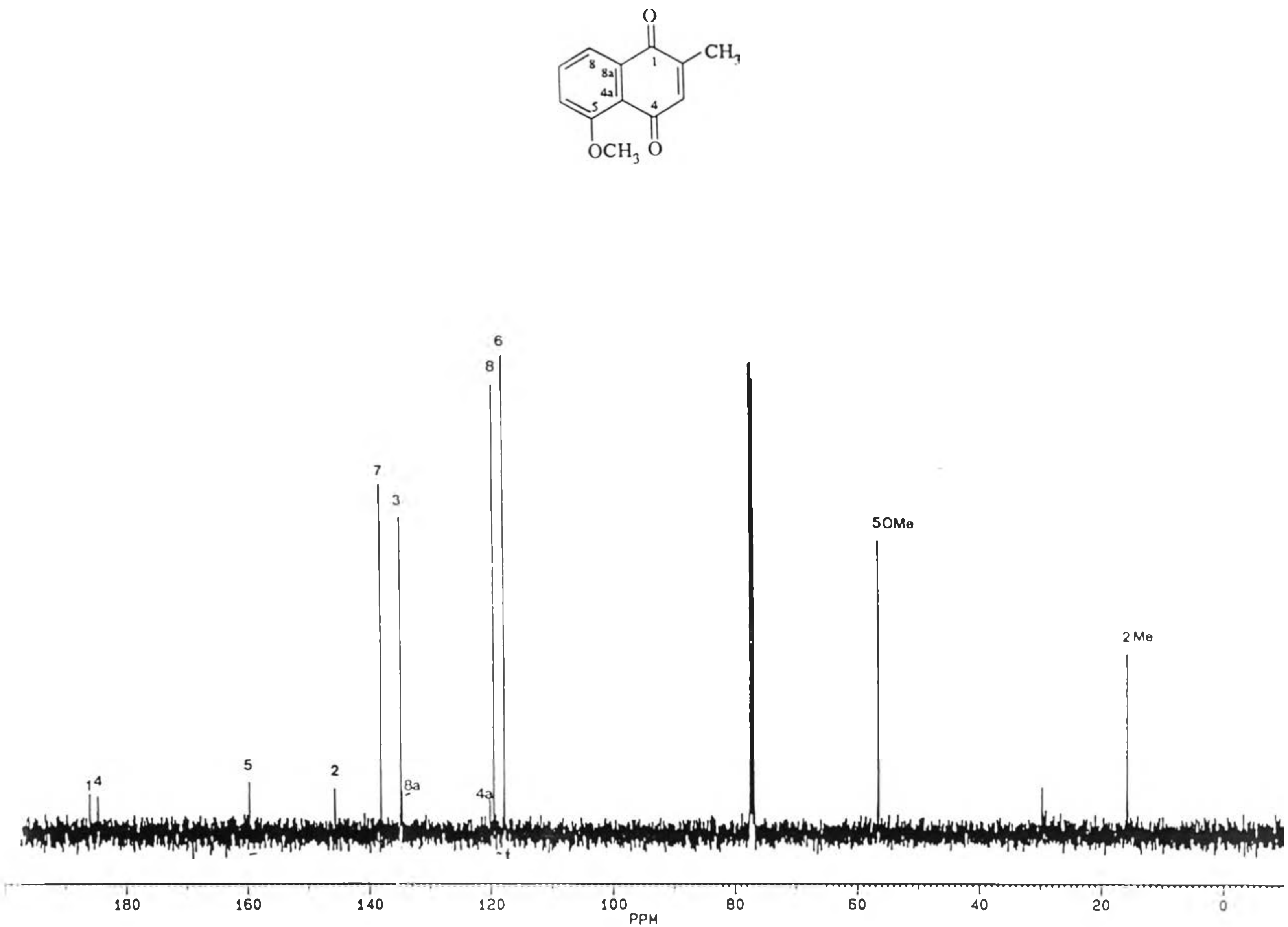


Figure 118 The ^{13}C NMR (100 MHz) spectrum of compound **106** (in $CDCl_3$)

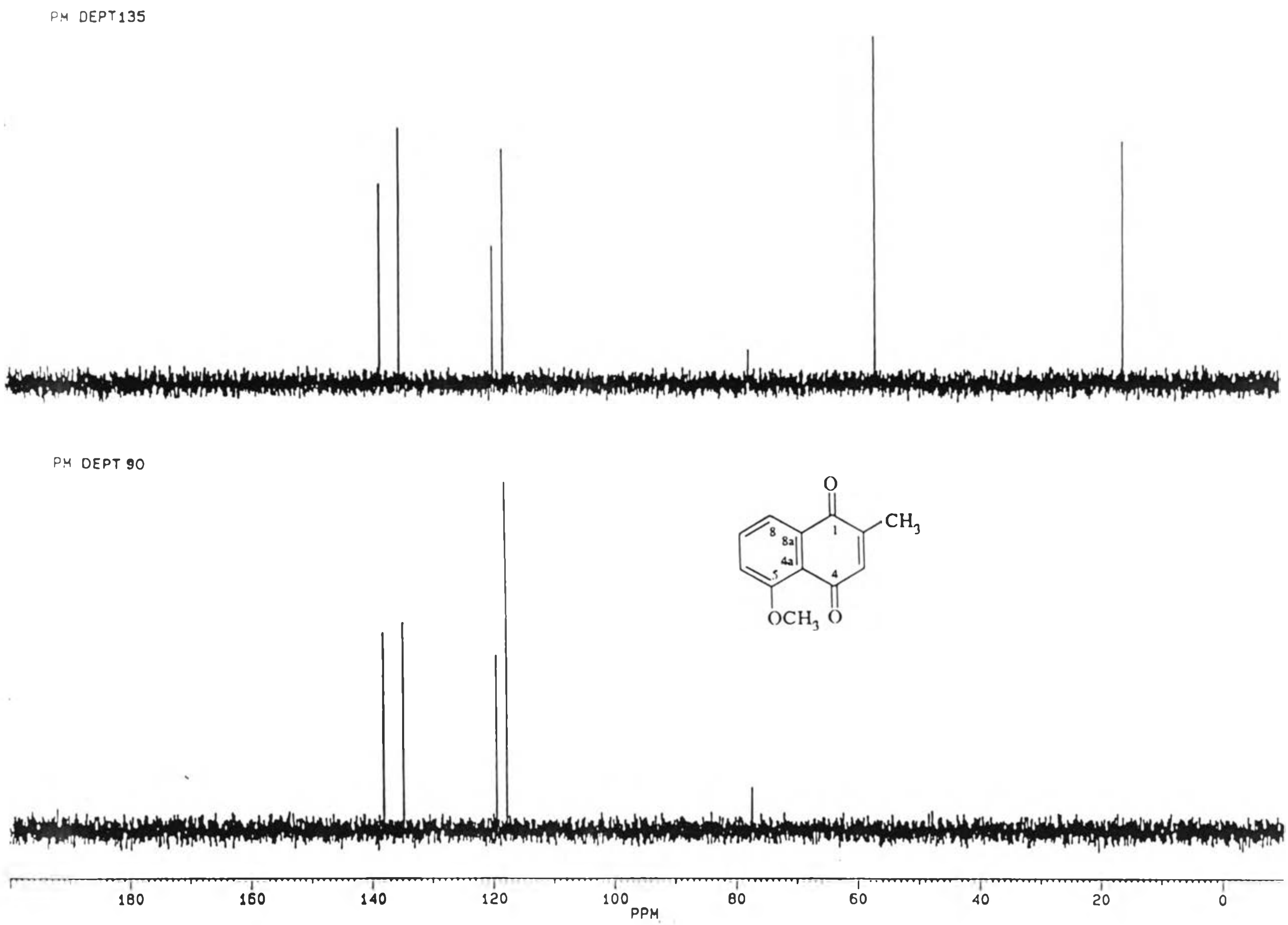


Figure 119 The DEPT (100 MHz) spectrum of compound **106** (in $CDCl_3$)

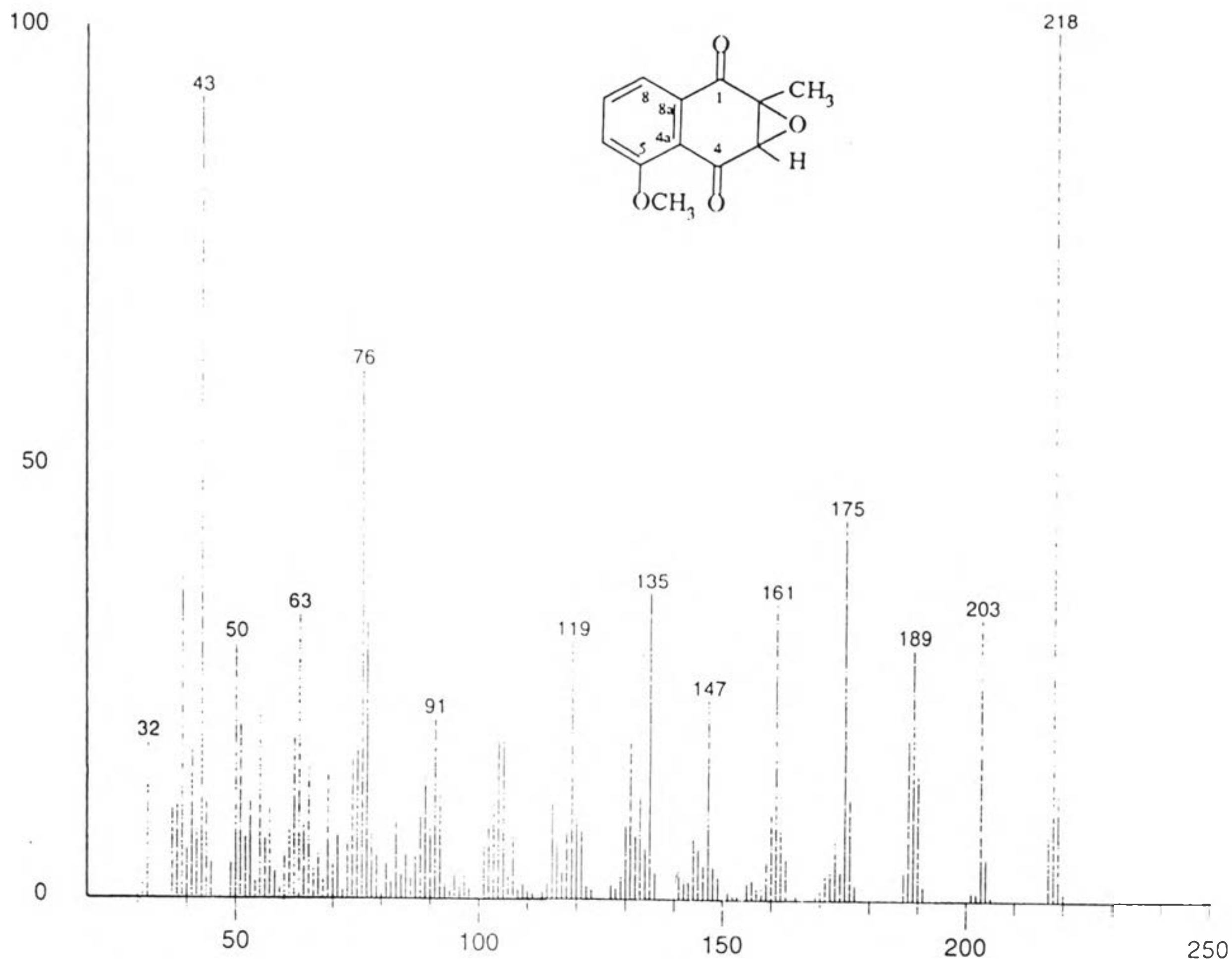


Figure 120 The EIMS spectrum of compound **107**

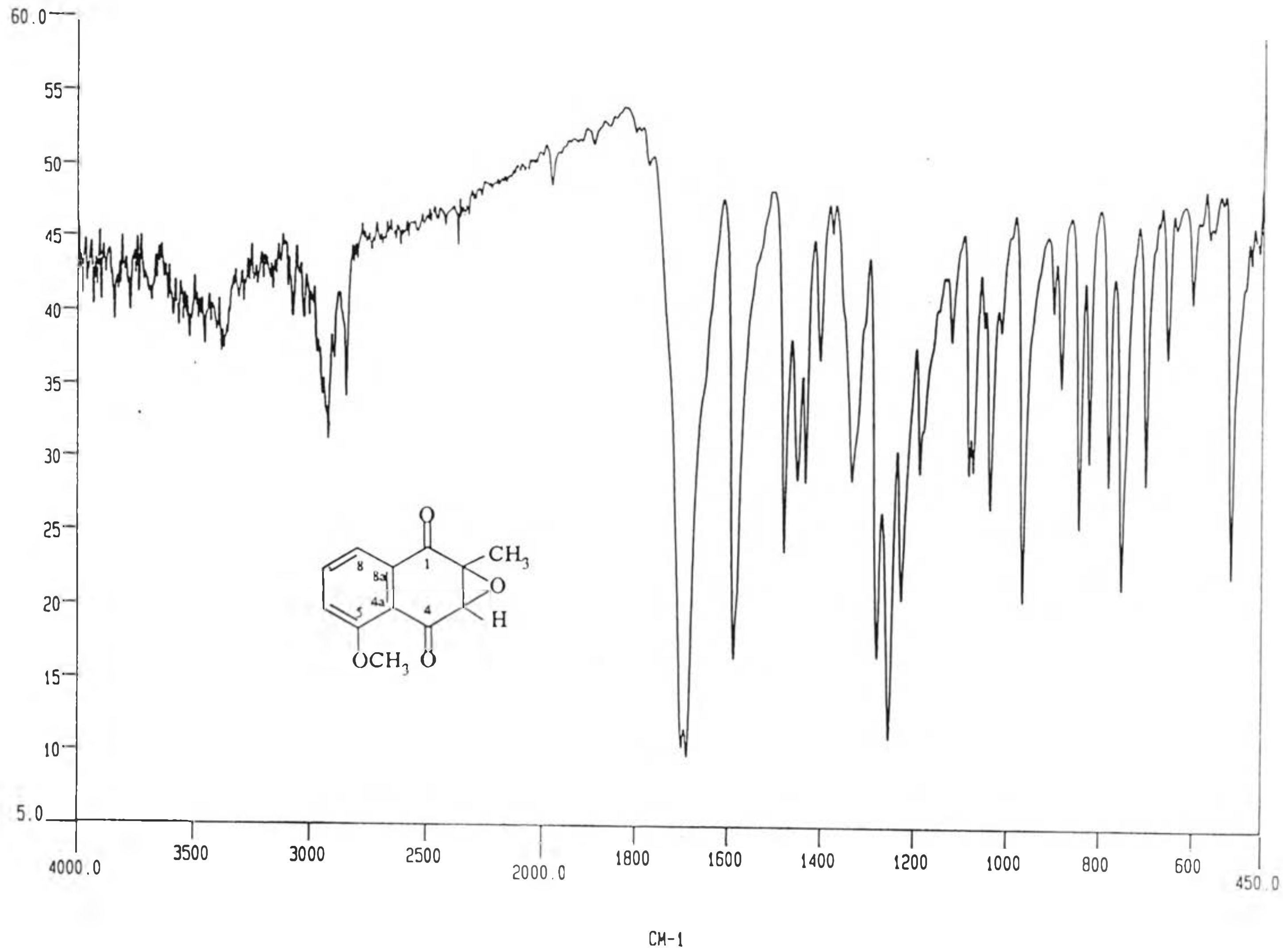


Figure 121 The IR spectrum of compound **107** (in KBr disc)

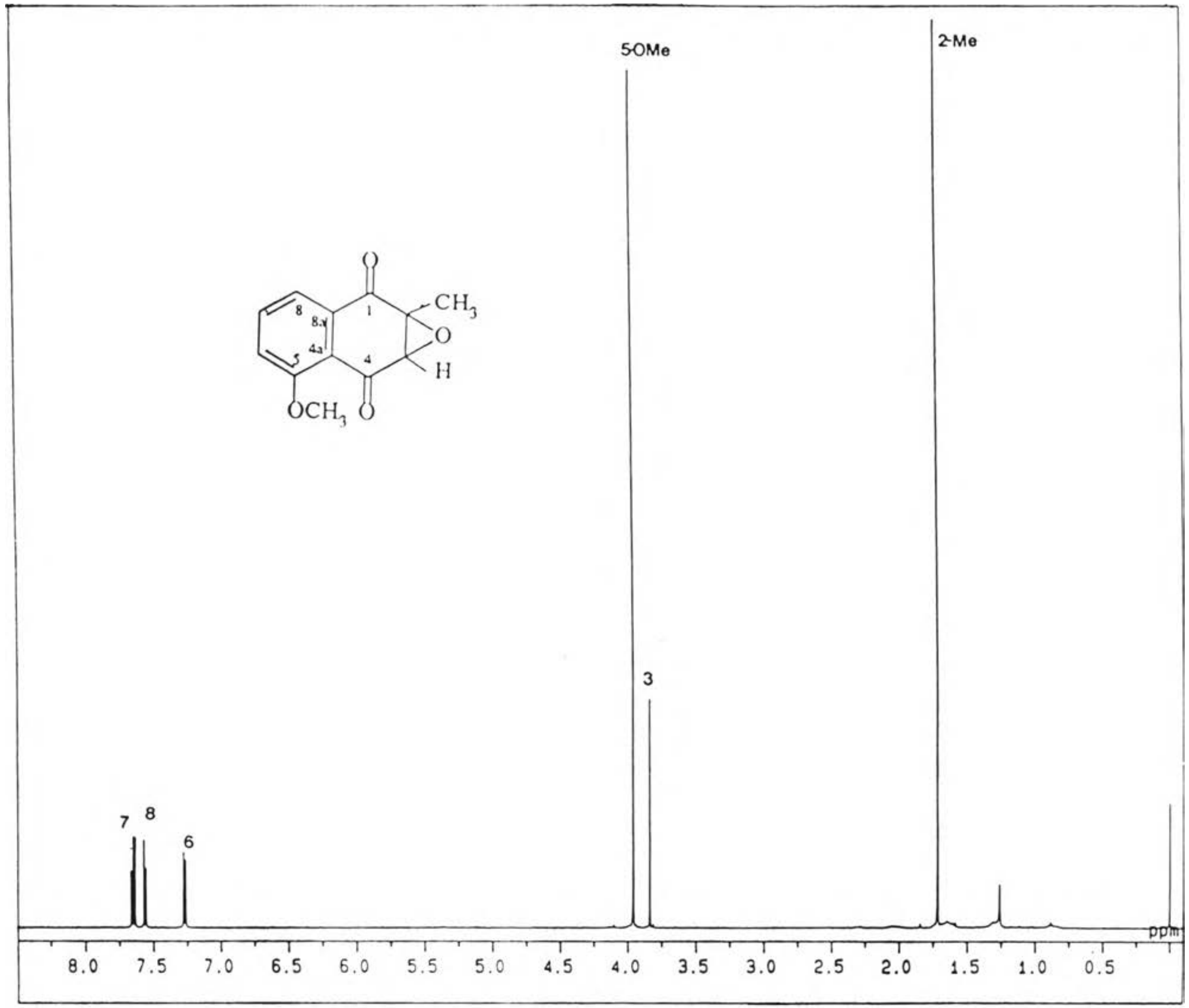


Figure 122 The ^{1}H NMR (500 MHz) spectrum of compound **107** (in $CDCl_3$)

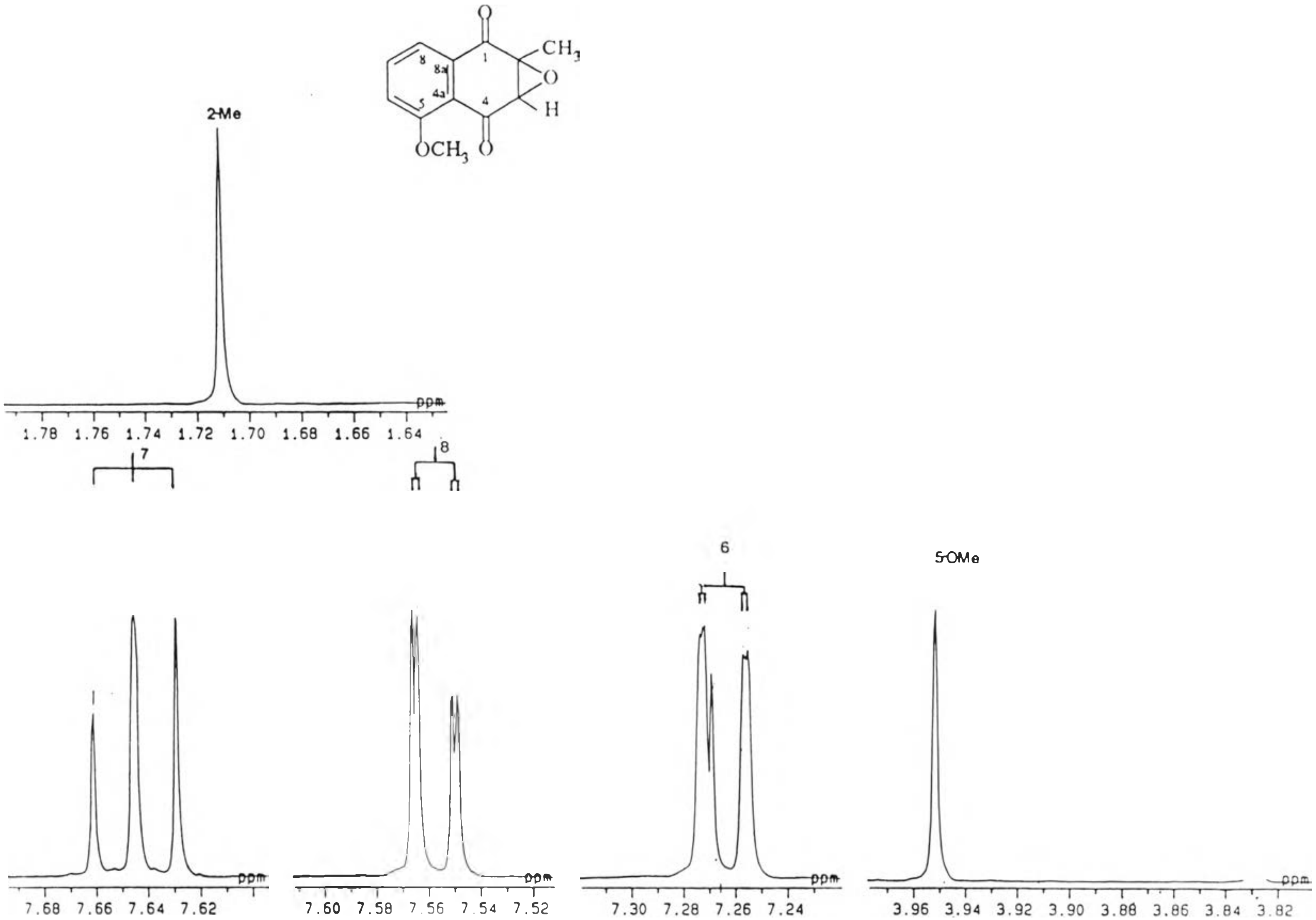


Figure 123 Expansion of the ^{1}H NMR (500 MHz) of compound **107** (in $CDCl_3$) :

δ_H 1.64-7.68 ppm

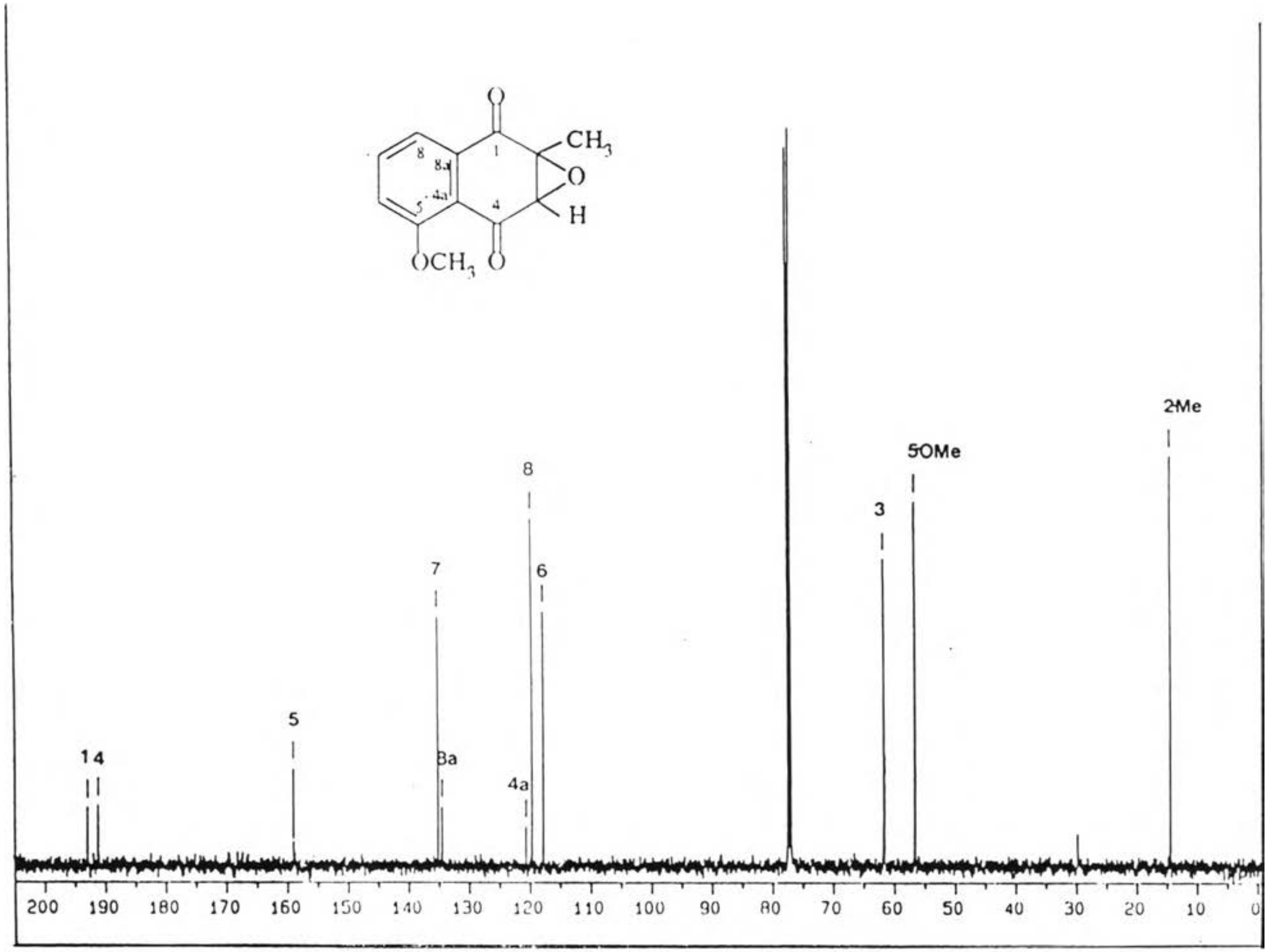


Figure 124 The ^{13}C NMR (125 MHz) of compound **107** (in $CDCl_3$)

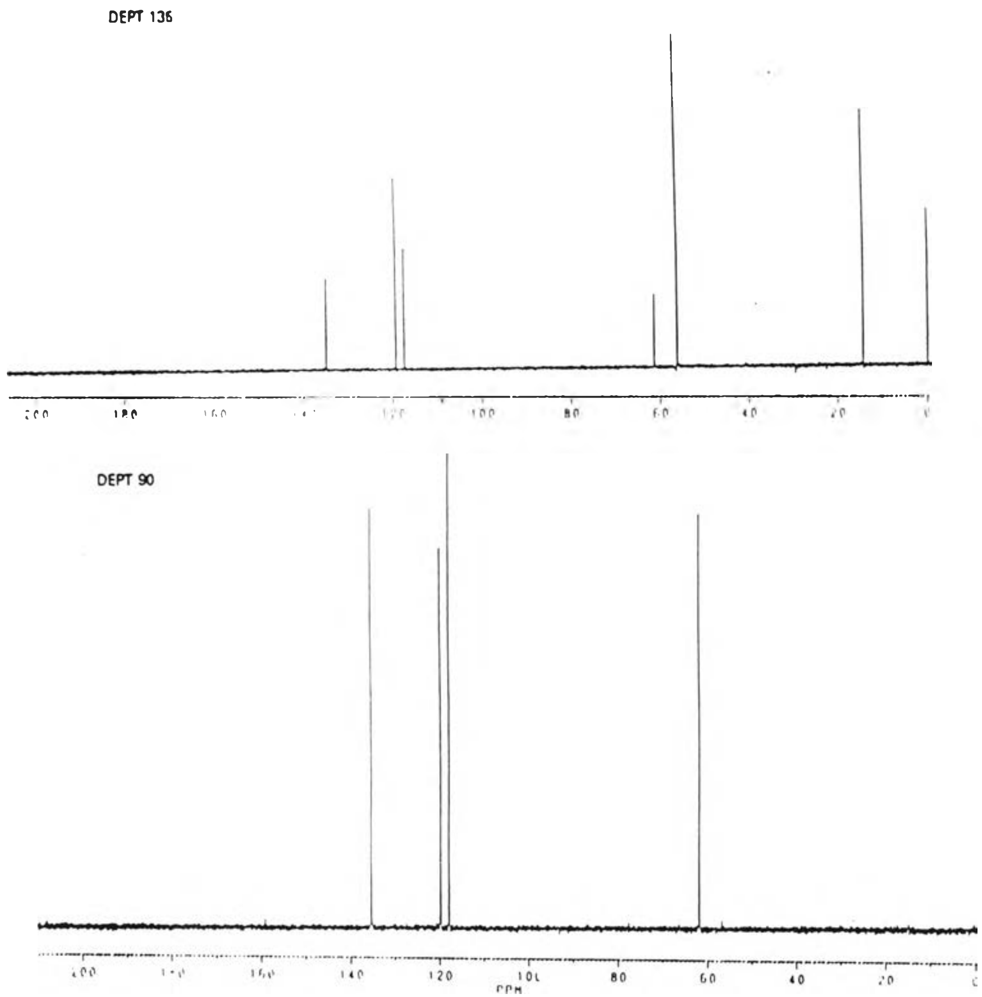


Figure 125 The DEPT (50 MHz) spectrum of compound **107** (in $CDCl_3$)

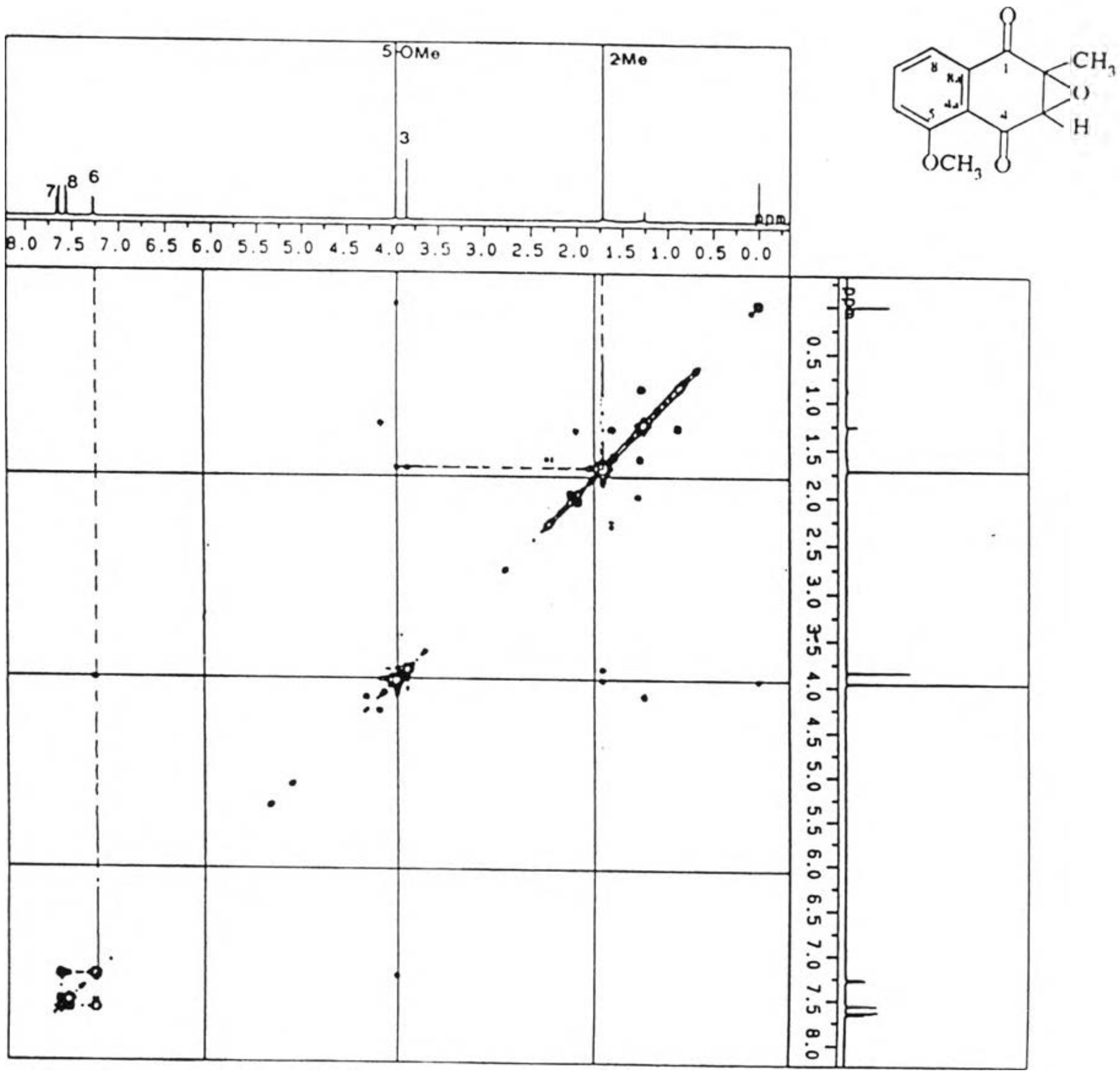


Figure 126 The [1]H-[1]H COSY (500 MHz) spectrum of compound **107** (in $CDCl_3$)

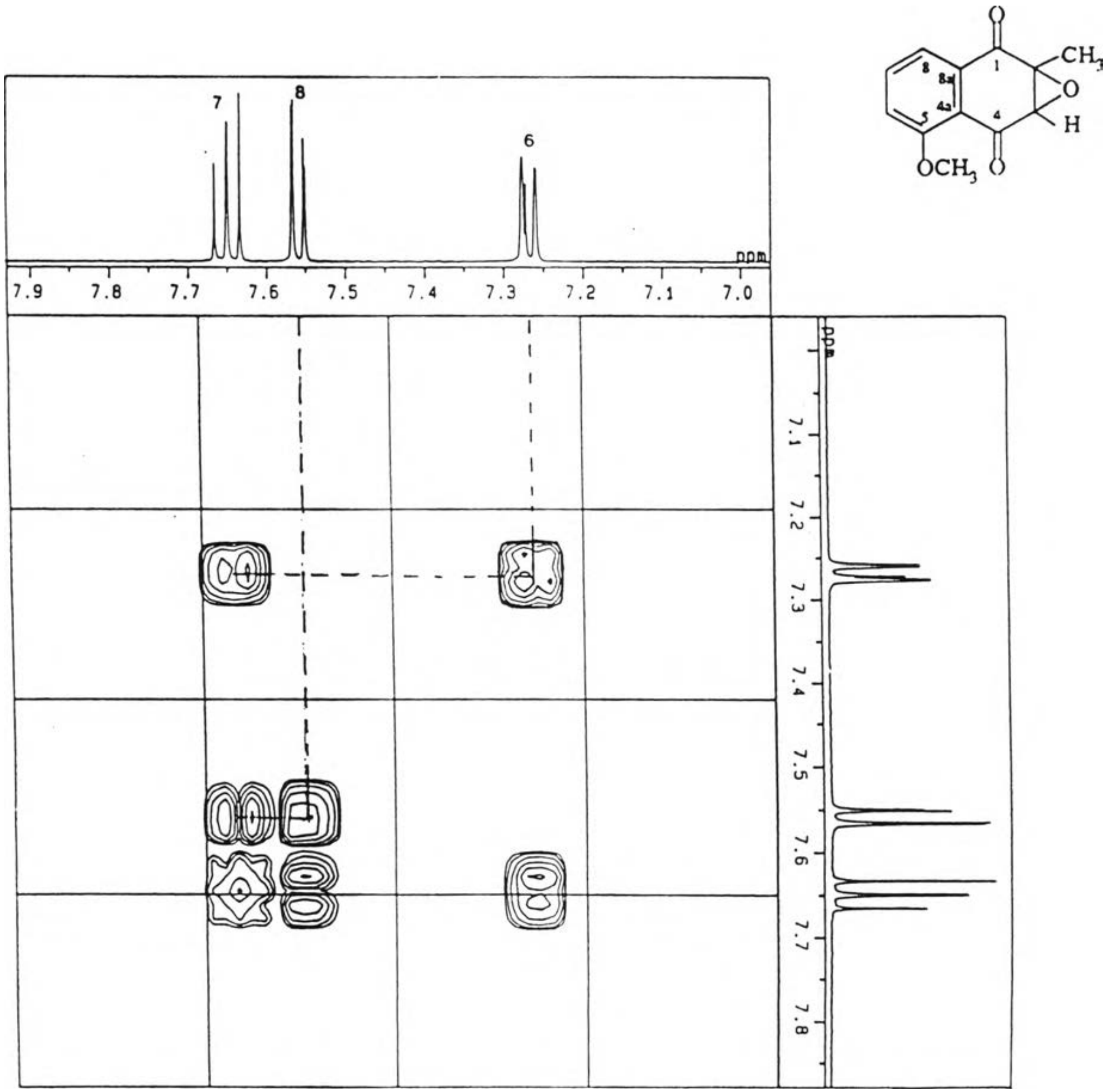


Figure 127 Expansion of the ^{1}H-^{1}H COSY (500 MHz) spectrum of compound **107** (in $CDCl_3$) : δ_H 7.00-7.90 ppm

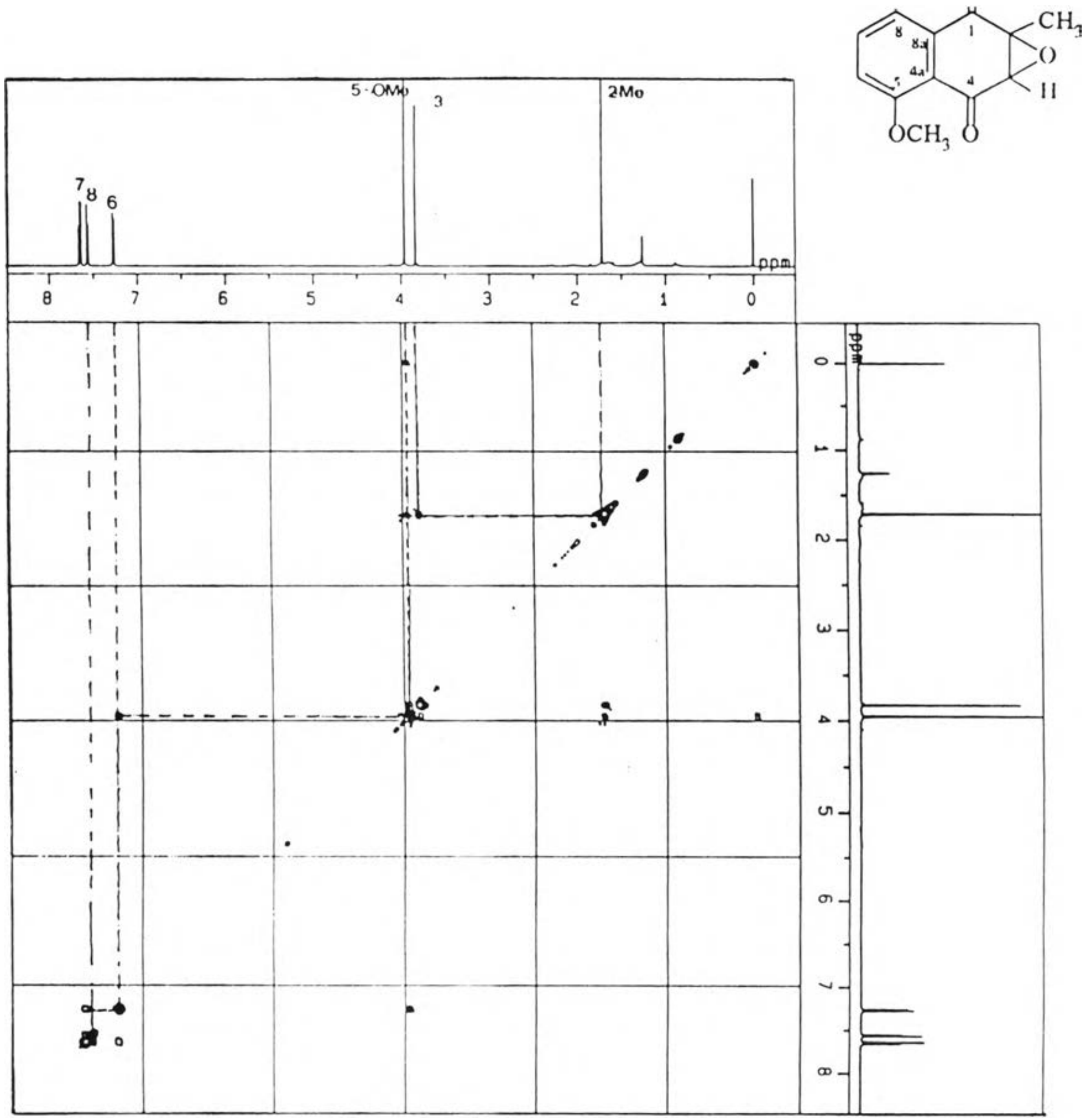


Figure 128 The NOESY (500 MHz) spectrum of compound **107** (in $CDCl_3$)

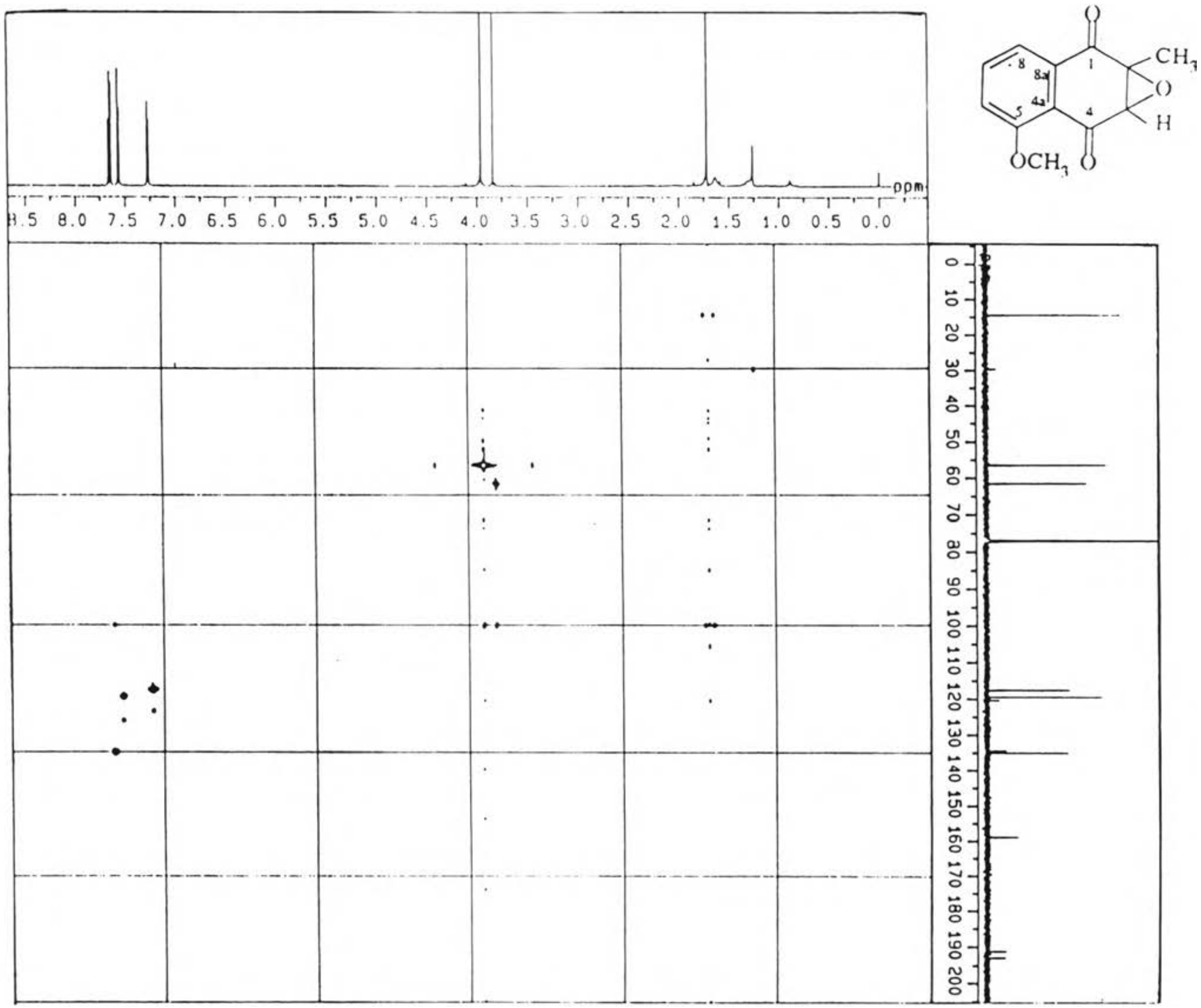
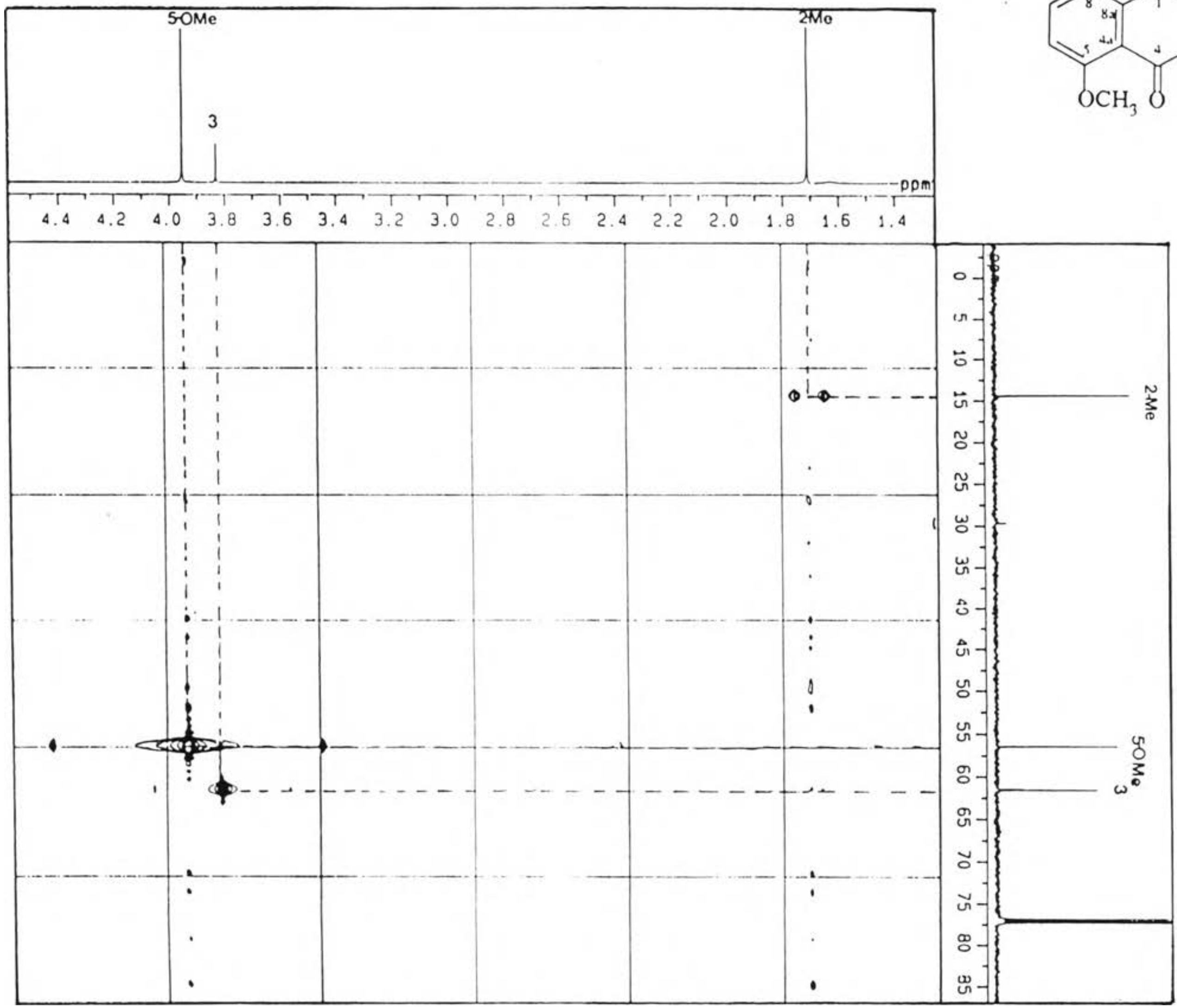


Figure 129 The HMQC spectrum of compound **107** (in $CDCl_3$)



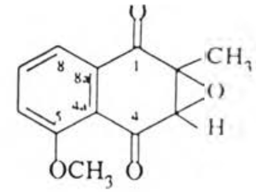


Figure 130 Expansion of the HMQC spectrum of compound **107** (in $CDCl_3$) :

δ_H 1.40-4.40 ; δ_C 0.00-0.85 ppm

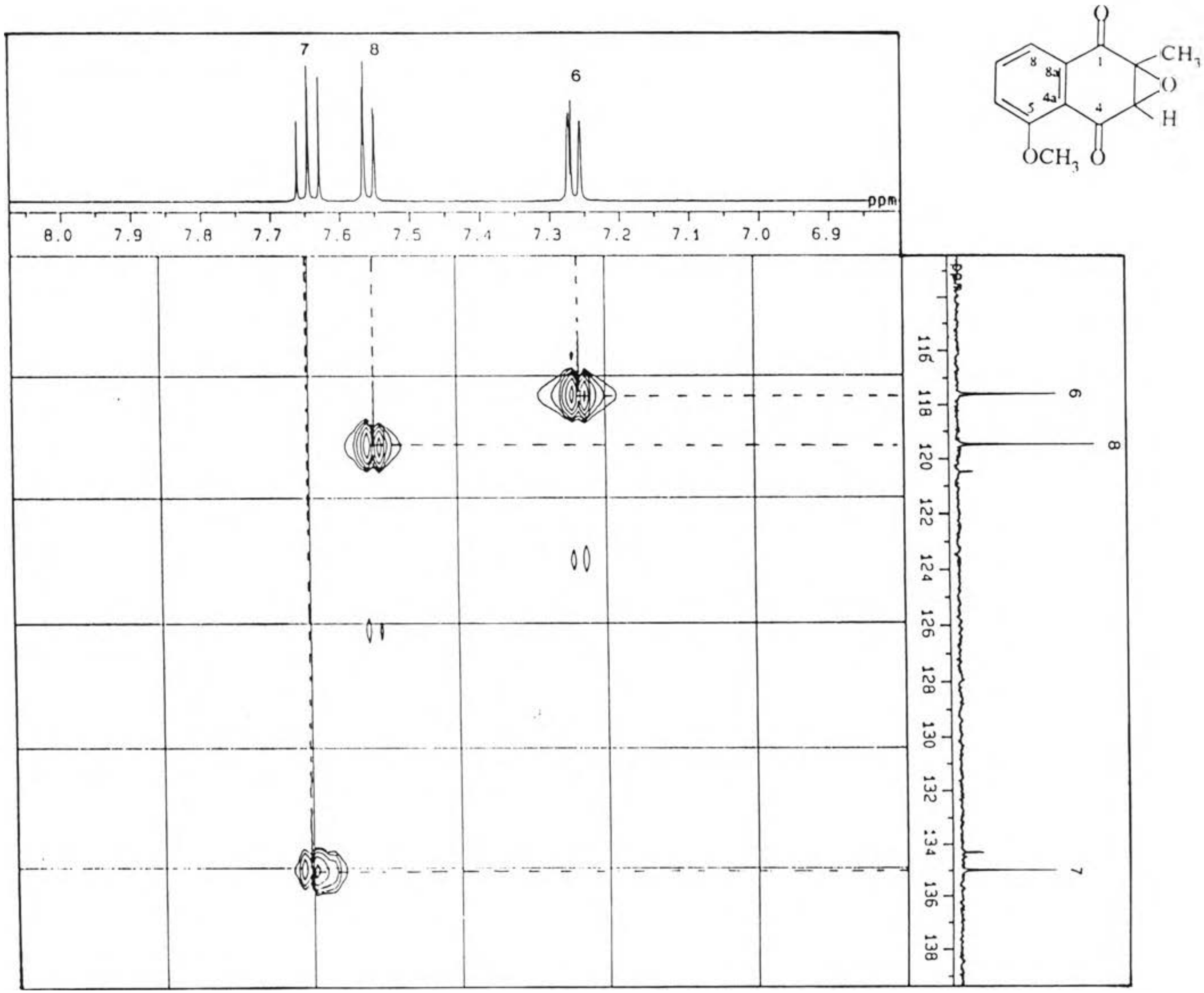


Figure 131 Expansion of the HMQC spectrum of compound **107** (in $CDCl_3$) :

δ_H 6.90-8.00 ; δ_C 116.00-138.00 ppm

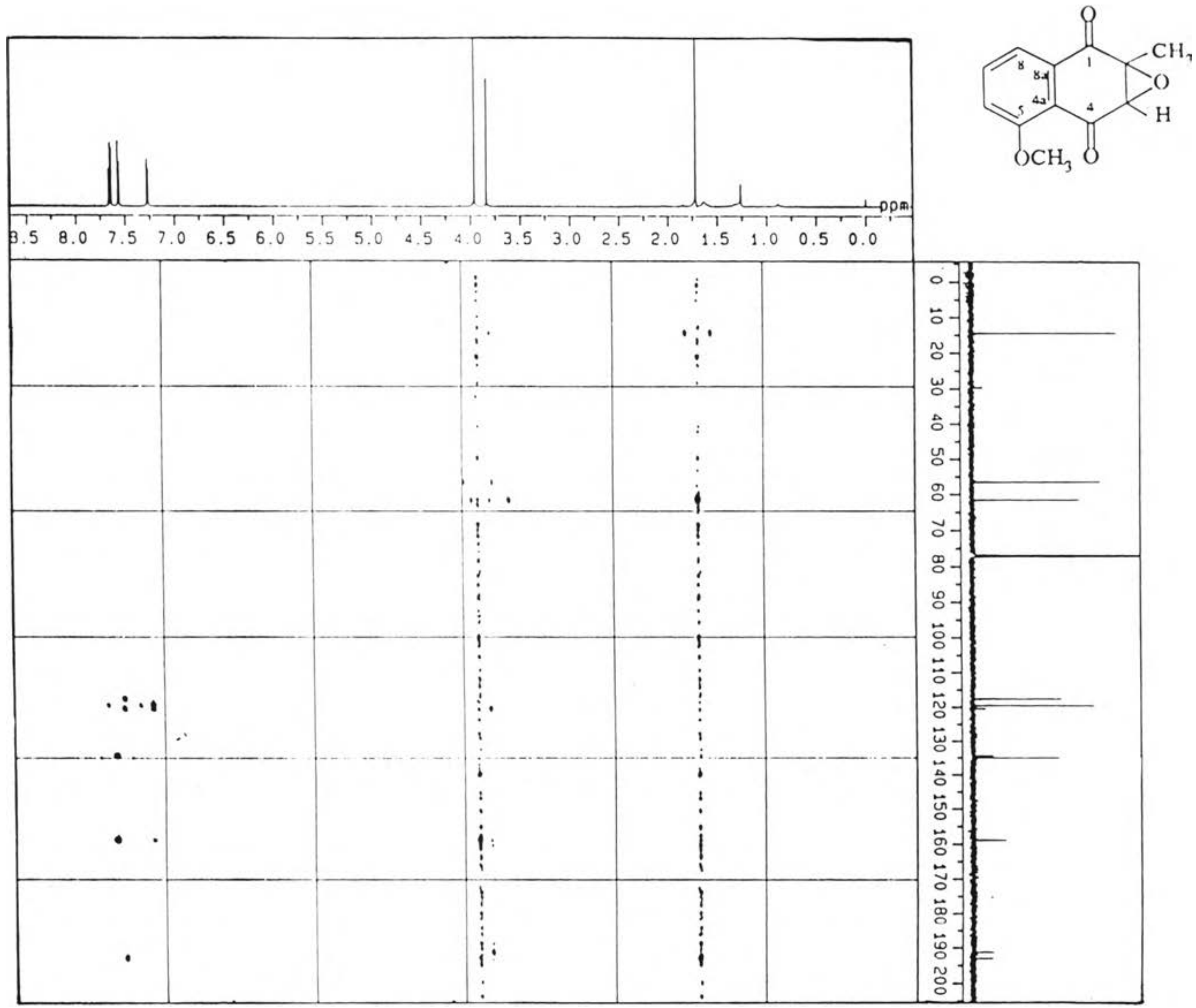
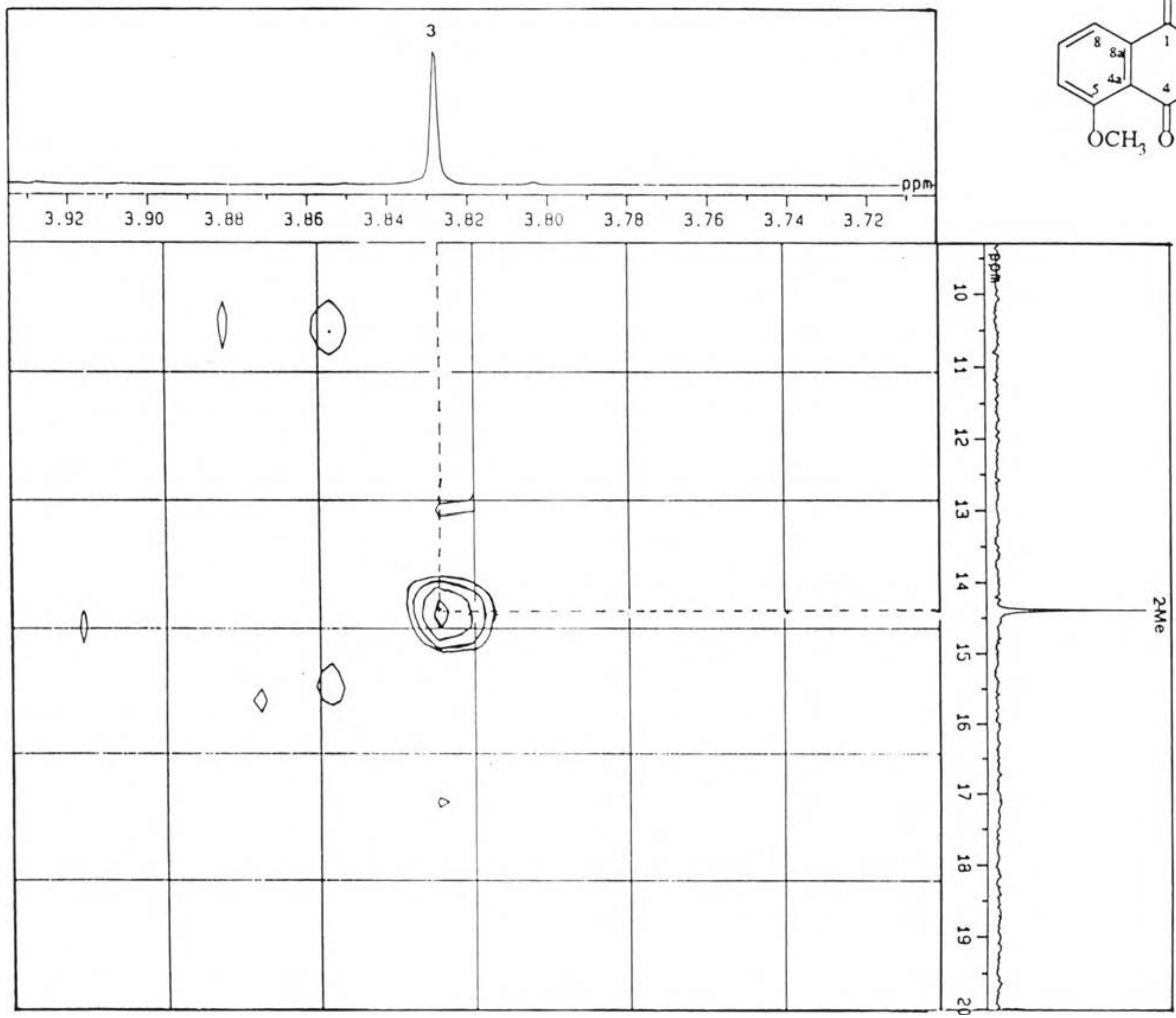


Figure 132 The HMBC spectrum of compound **107** (in $CDCl_3$)



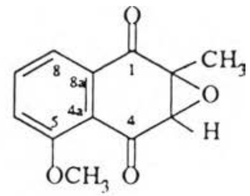


Figure 133 Expansion of the HMBC spectrum of compound **107** (in $CDCl_3$) :

δ_H 3.72-3.92 ; δ_C 10.00-20.00 ppm

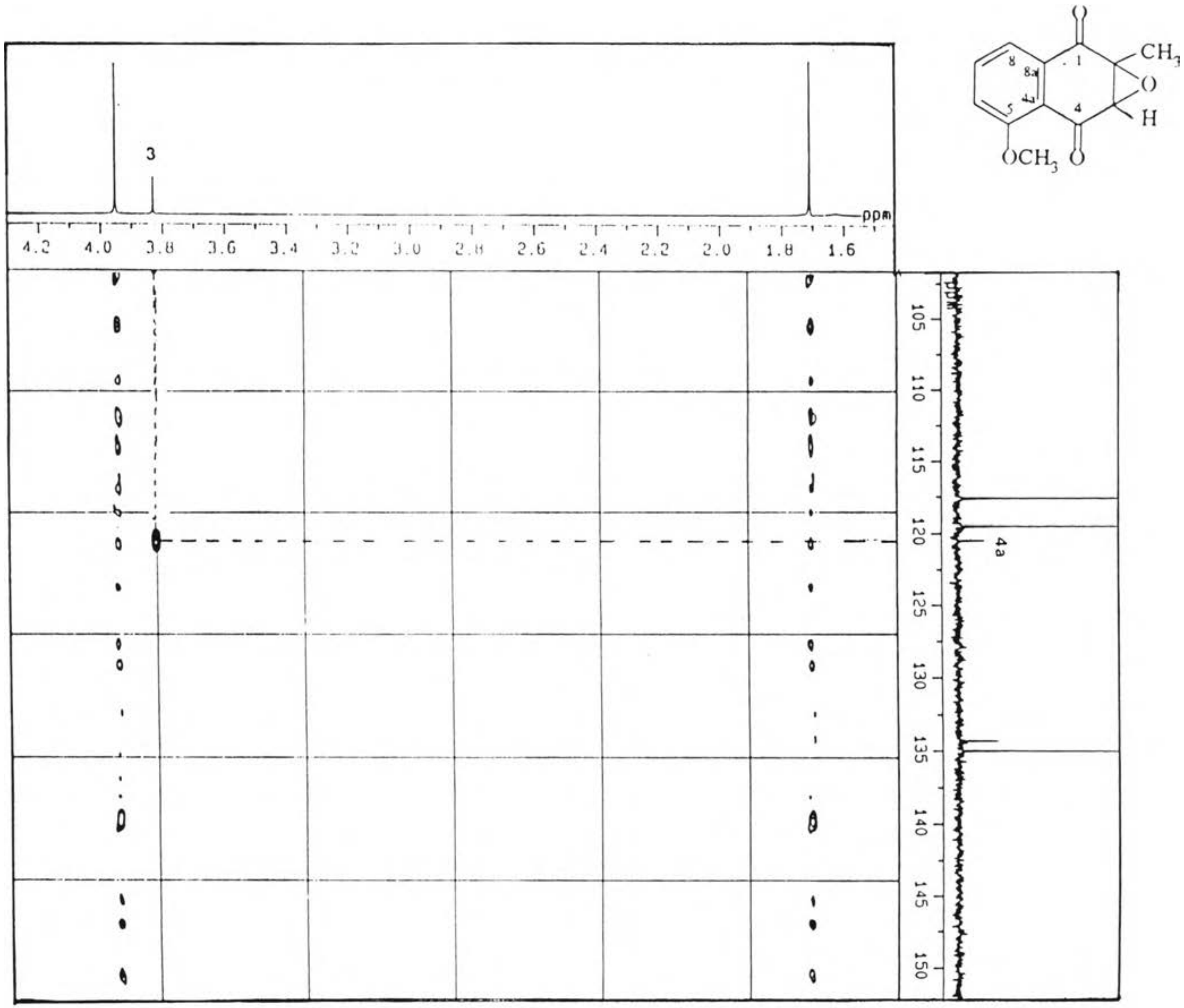


Figure 134 Expansion of the HMBC spectrum of compound **107** (in $CDCl_3$) :

δ_H 1.60-4.20 ; δ_C 105.00-150.00 ppm

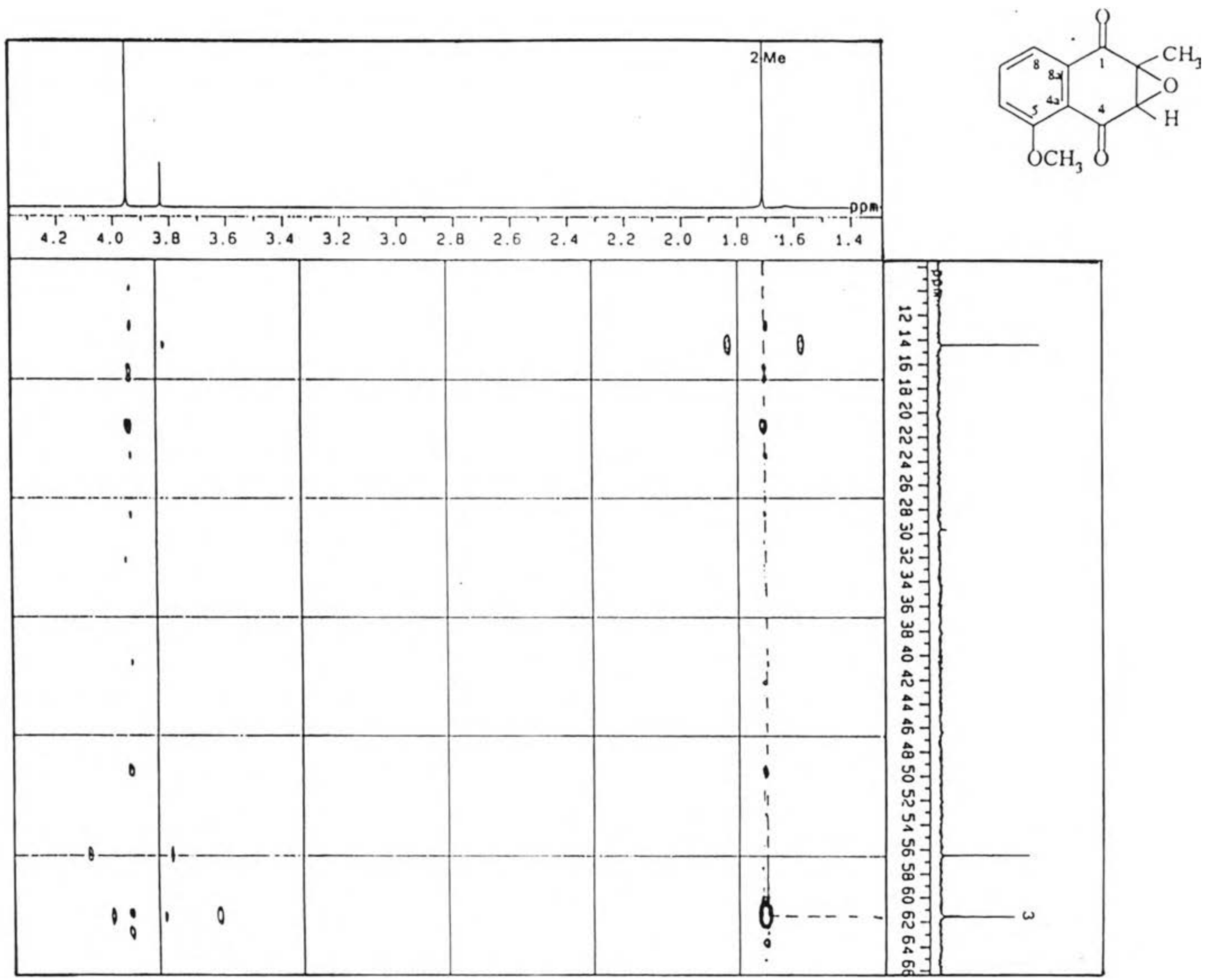


Figure 135 Expansion of the HMBC spectrum of compound 107 (in $CDCl_3$) :

δ_H 1.40-4.20 ; δ_C 12.00-66.00 ppm

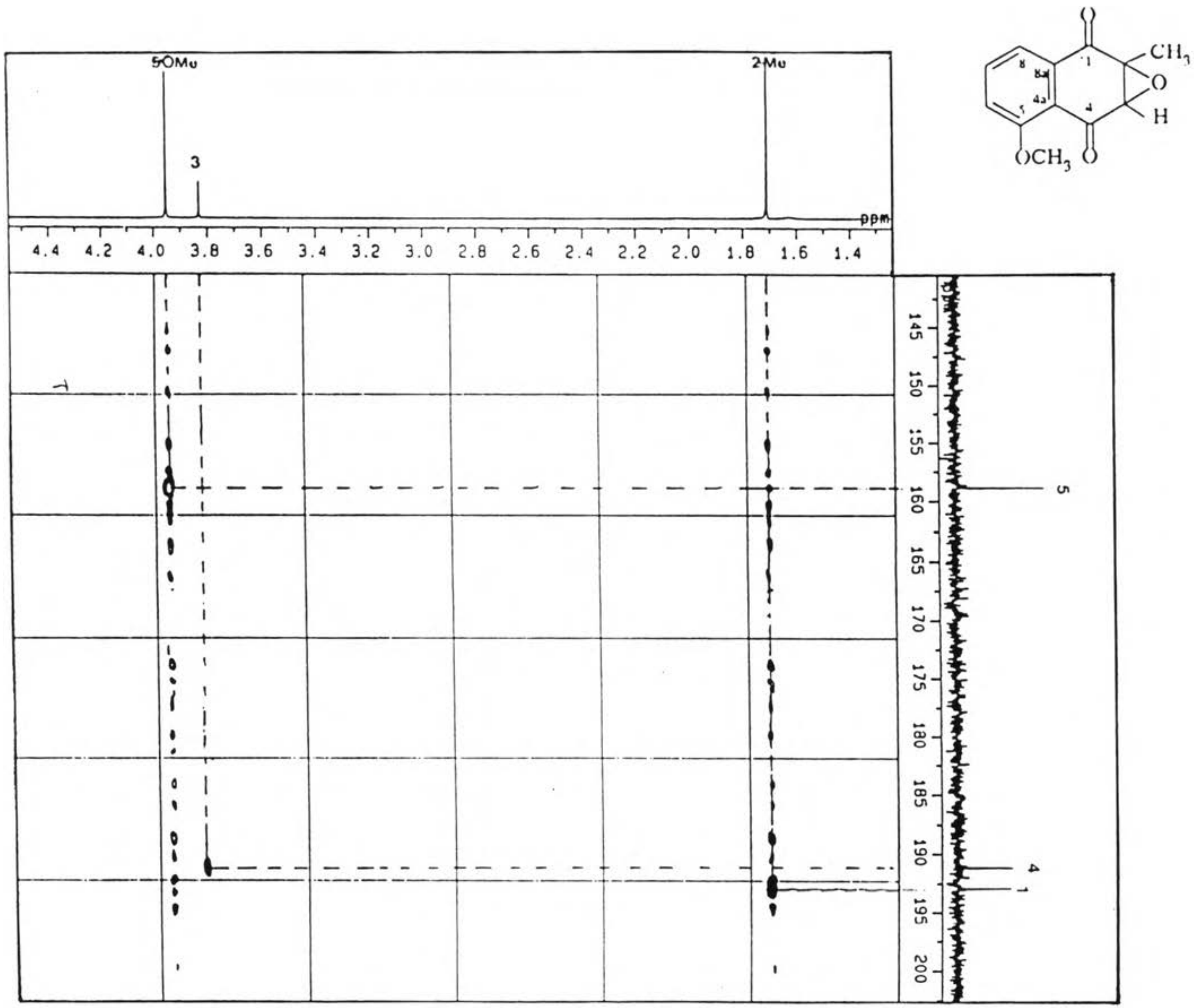


Figure 136 Expansion of the HMBC spectrum of compound **107** (in $CDCl_3$) :

δ_H 1.40-4.40 ; δ_C 145.00-200.00 ppm

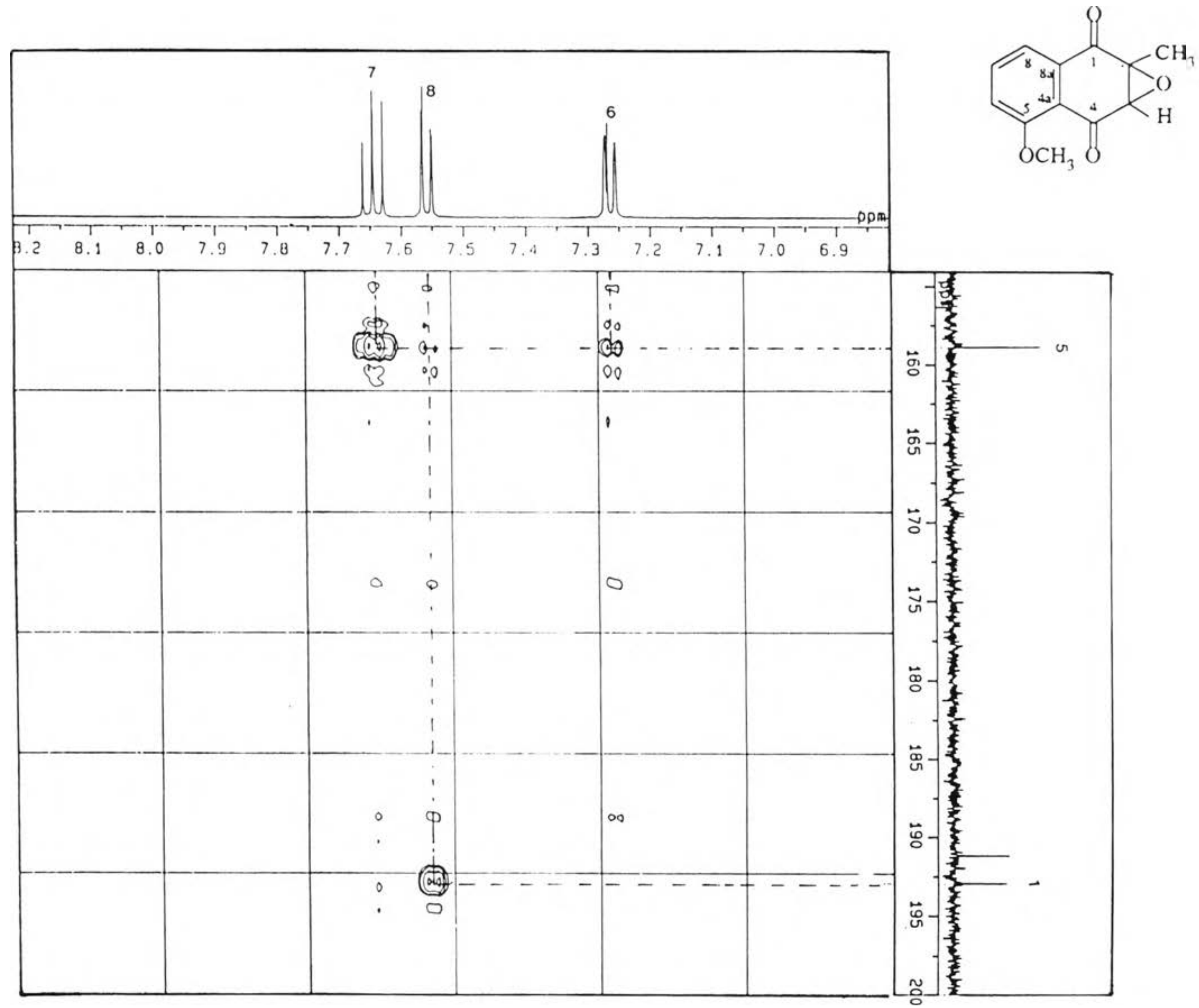


Figure 137 Expansion of the HMBC spectrum of compound **107** (in $CDCl_3$) :

δ_H 6.90-8.20 ; δ_C 155.00-200.00 ppm

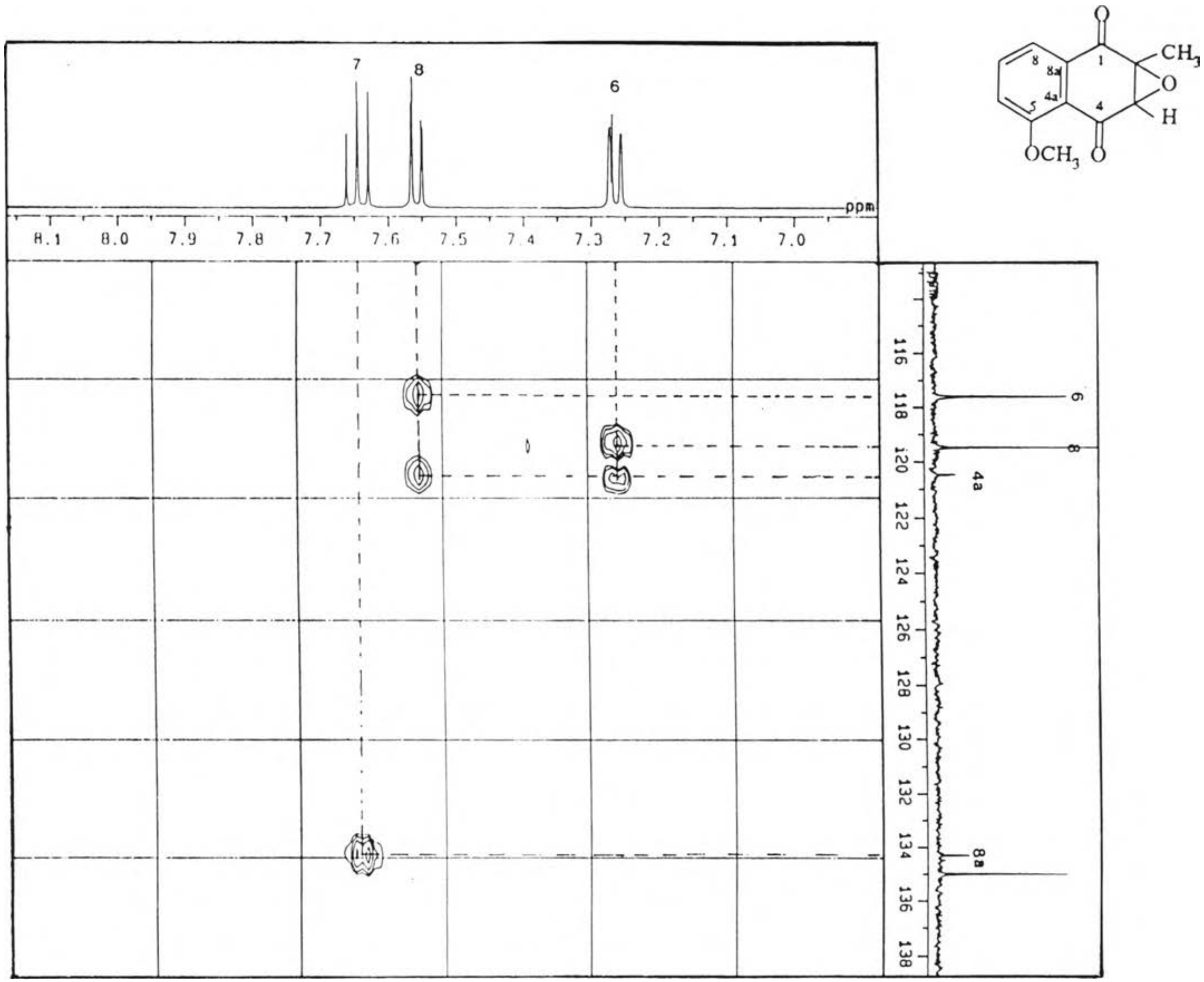


Figure 138 Expansion of the HMBC spectrum of compound **107** (in $CDCl_3$) :

δ_H 7.00-8.10 ; δ_C 116.00-138.00 ppm

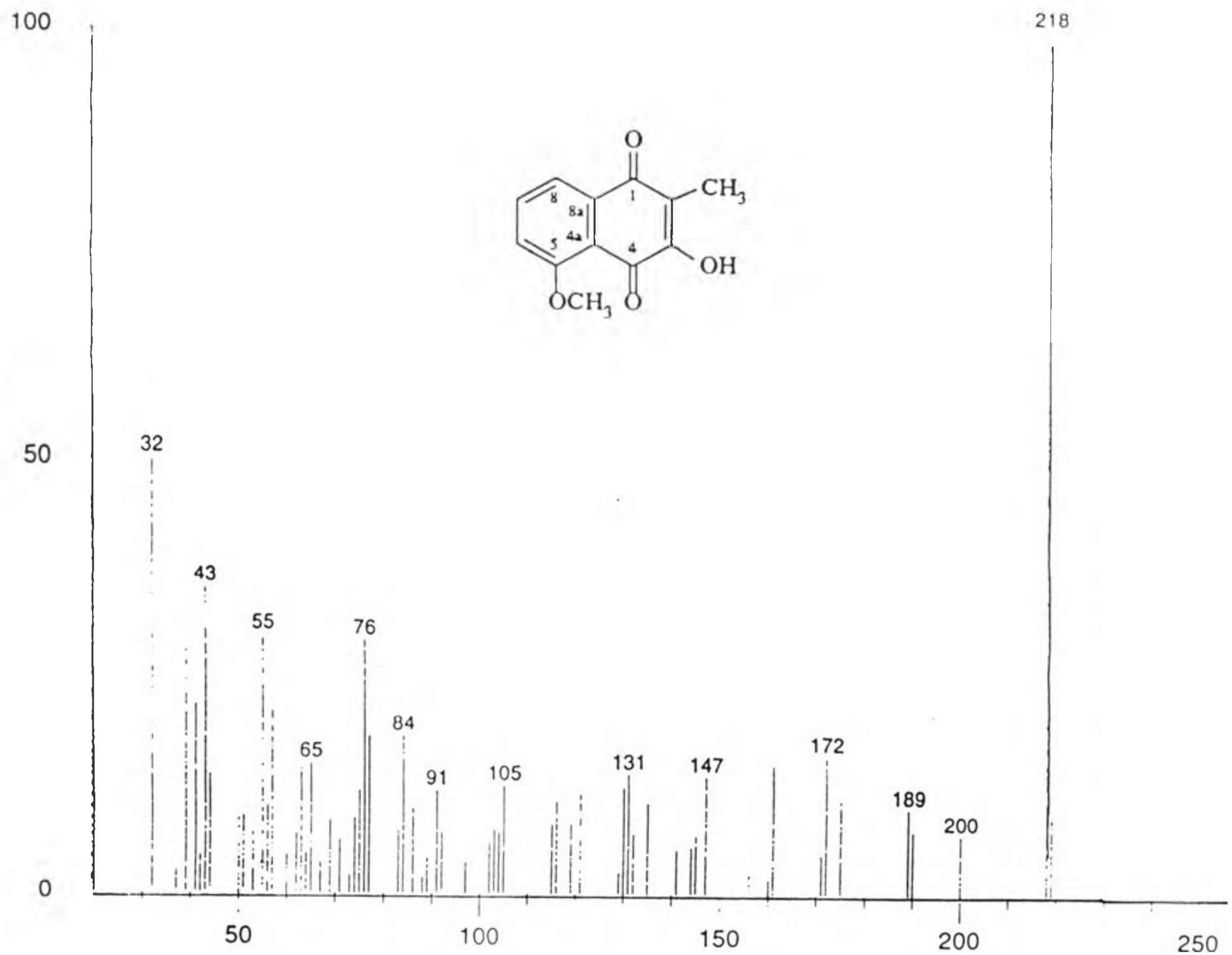


Figure 139 The EI mass spectrum of compound **108**

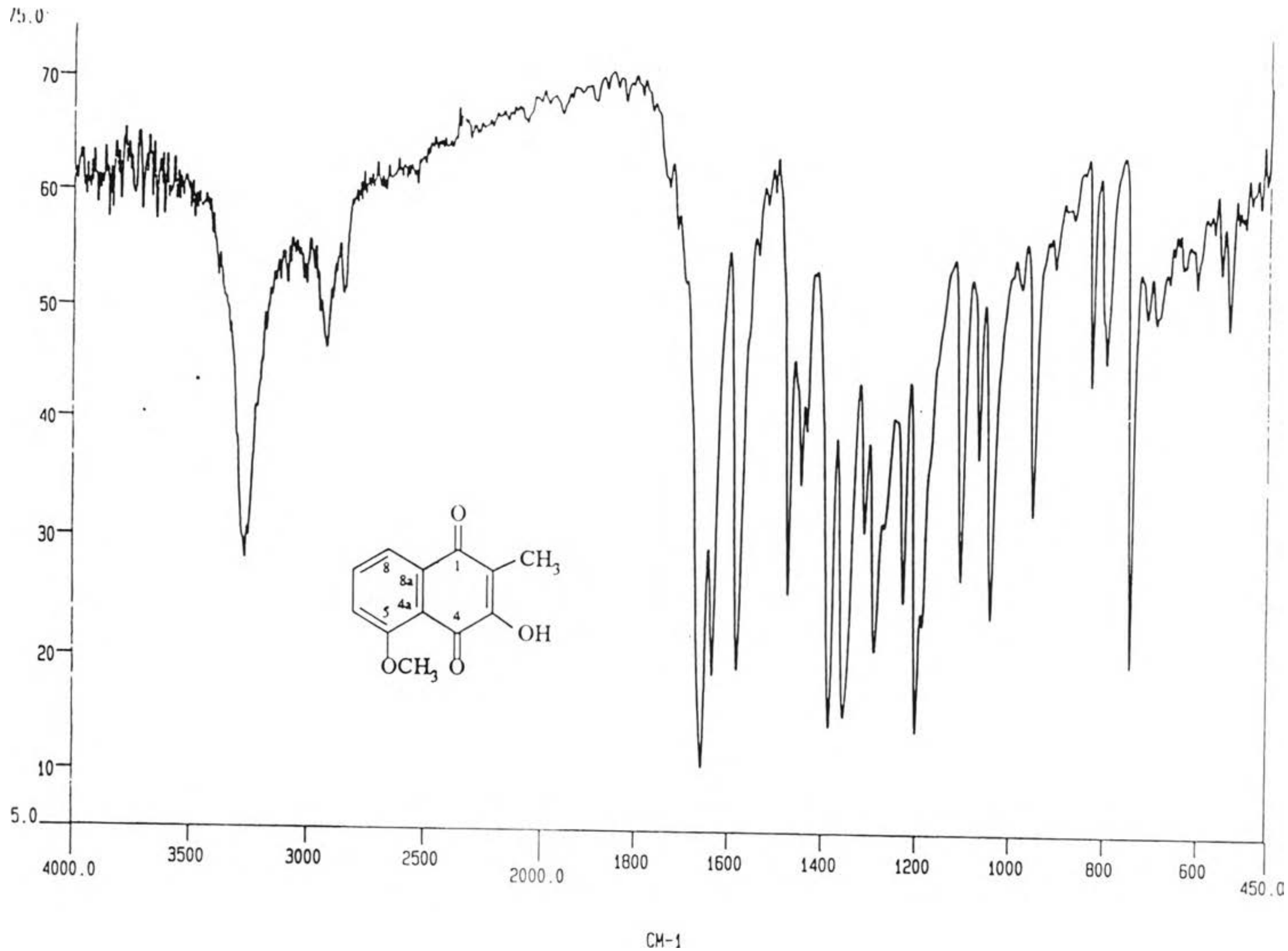


Figure 140 The IR spectrum of compound **108** (in KBr disc)

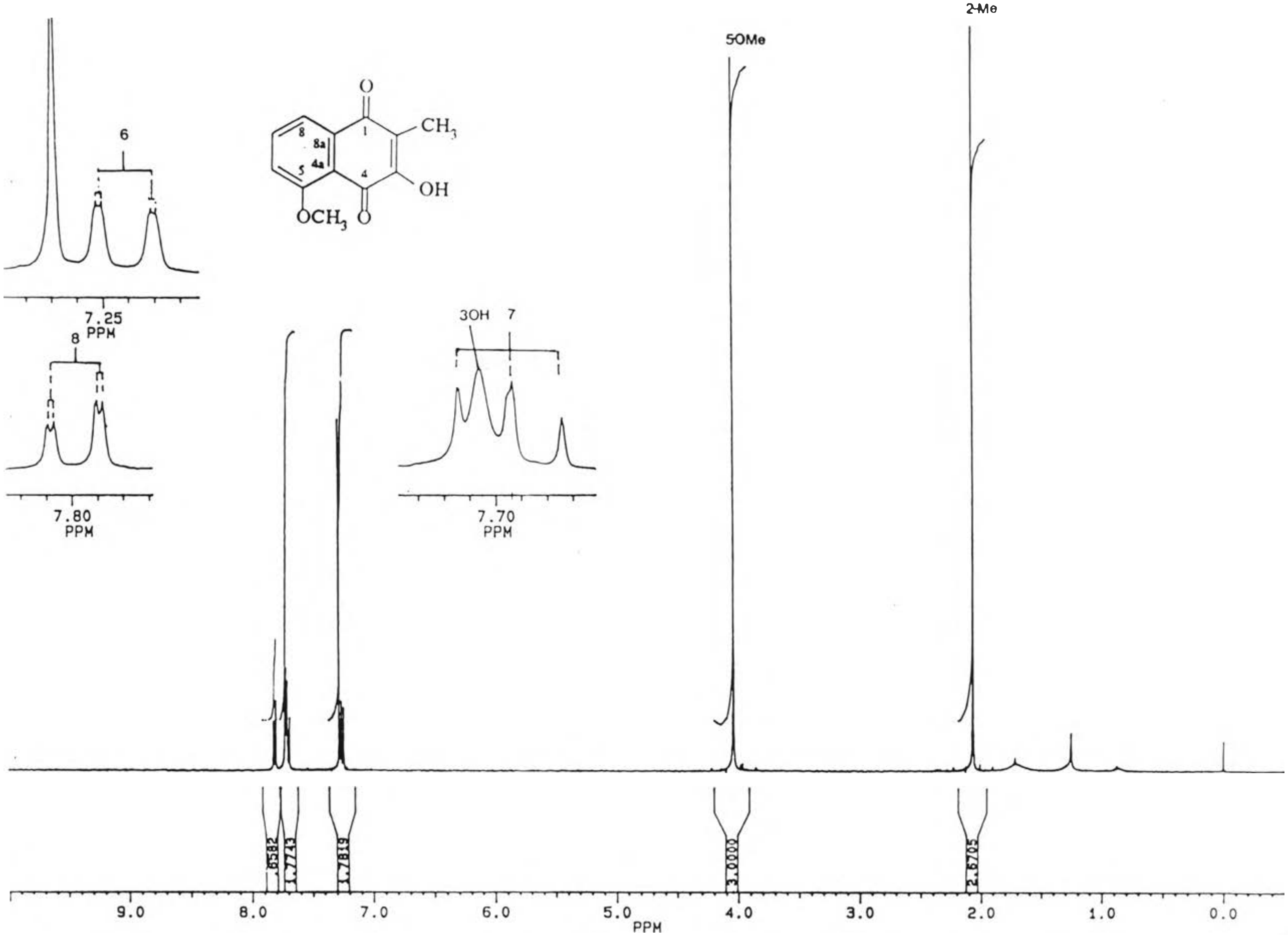


Figure 141 The ^{1}H NMR (400 MHz) spectrum of compound **108** (in $CDCl_3$)

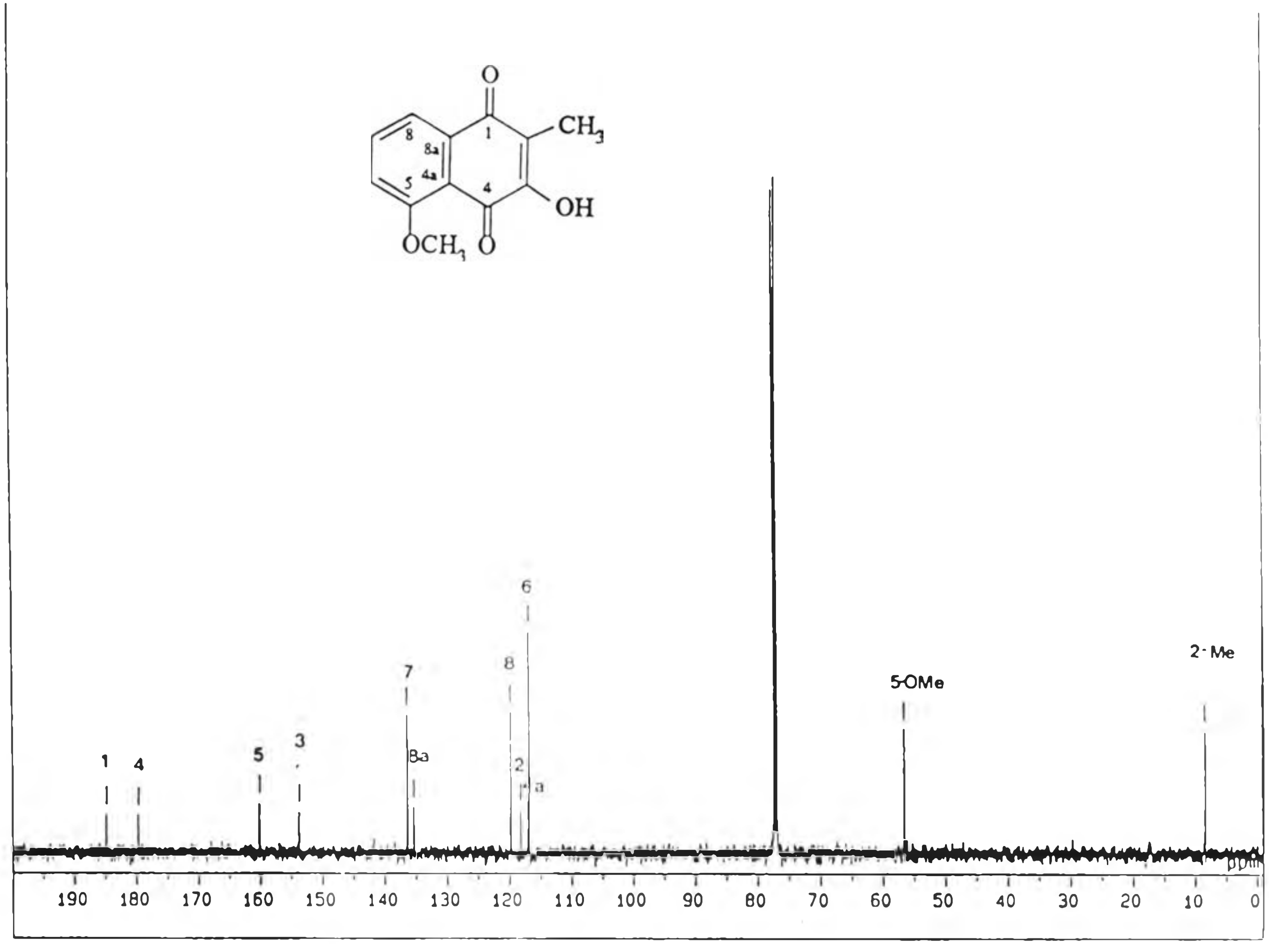


Figure 142 The ^{13}C NMR (125 MHz) spectrum of compound **108** (in $CDCl_3$)

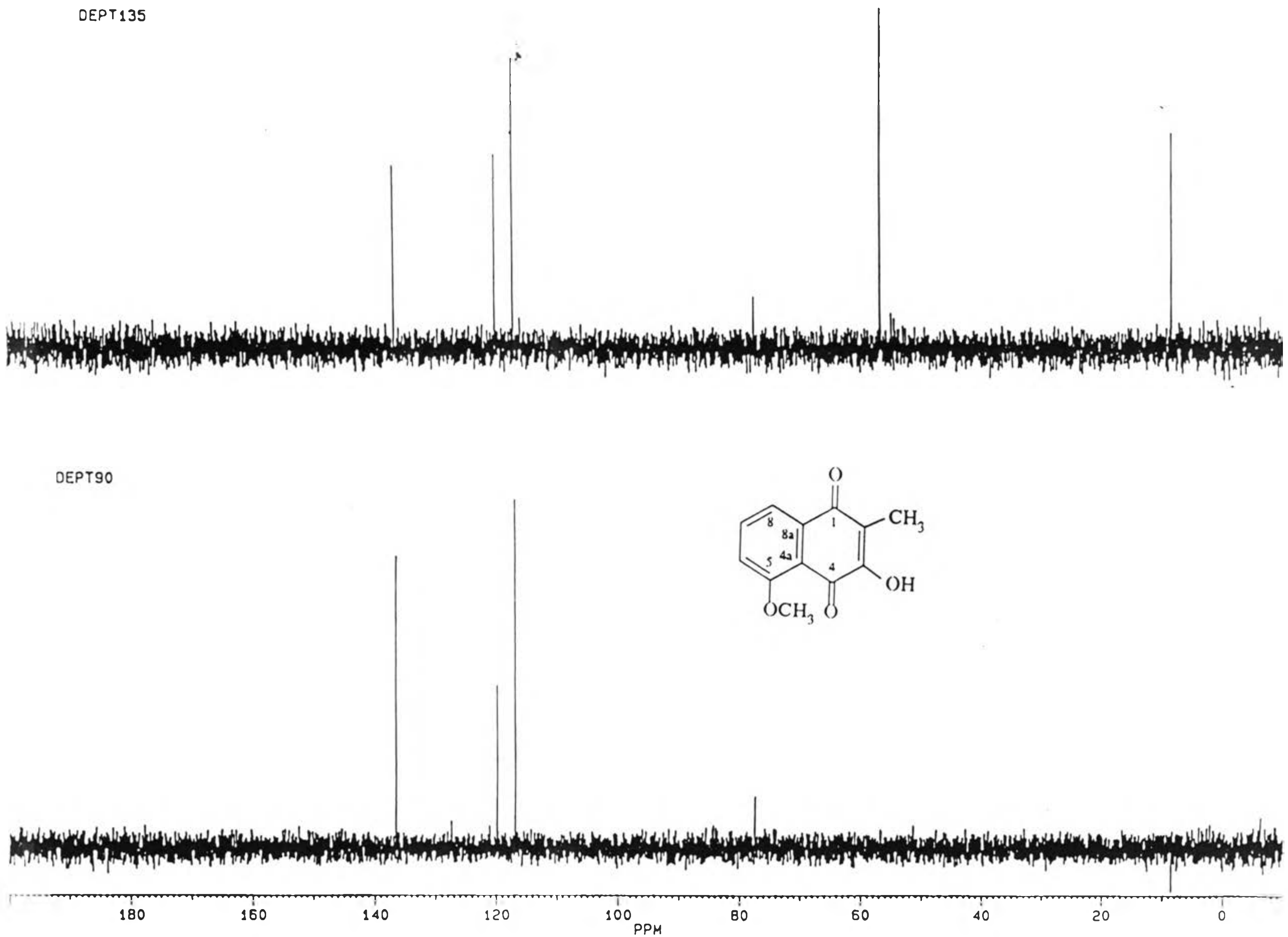


Figure 143 The DEPT (100 MHz) spectrum of compound **108** (in $CDCl_3$)

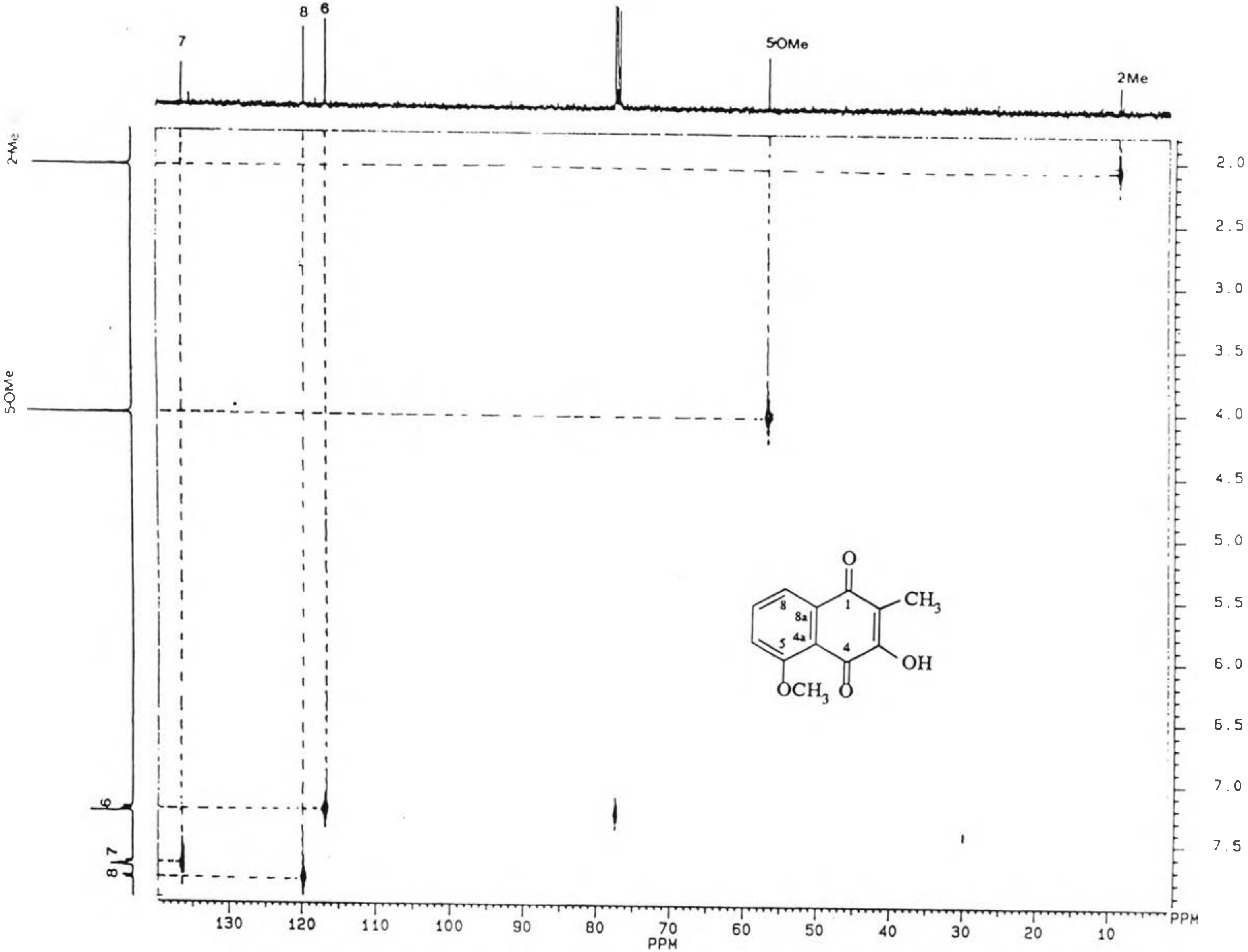


Figure 144 The HETCOR spectrum of compound **108** (in $CDCl_3$)

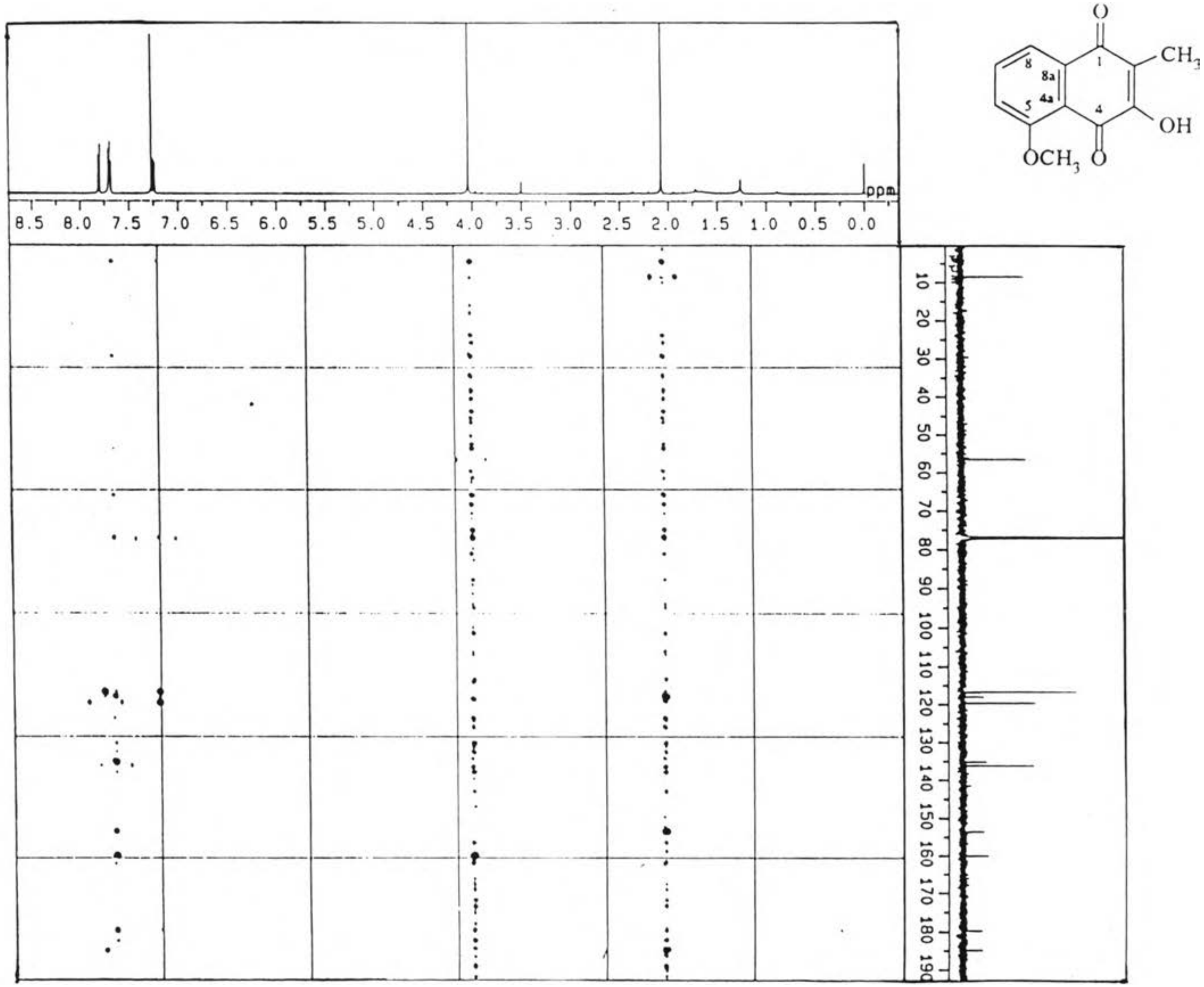


Figure 145 The HMBC spectrum of compound **108** (in $CDCl_3$)

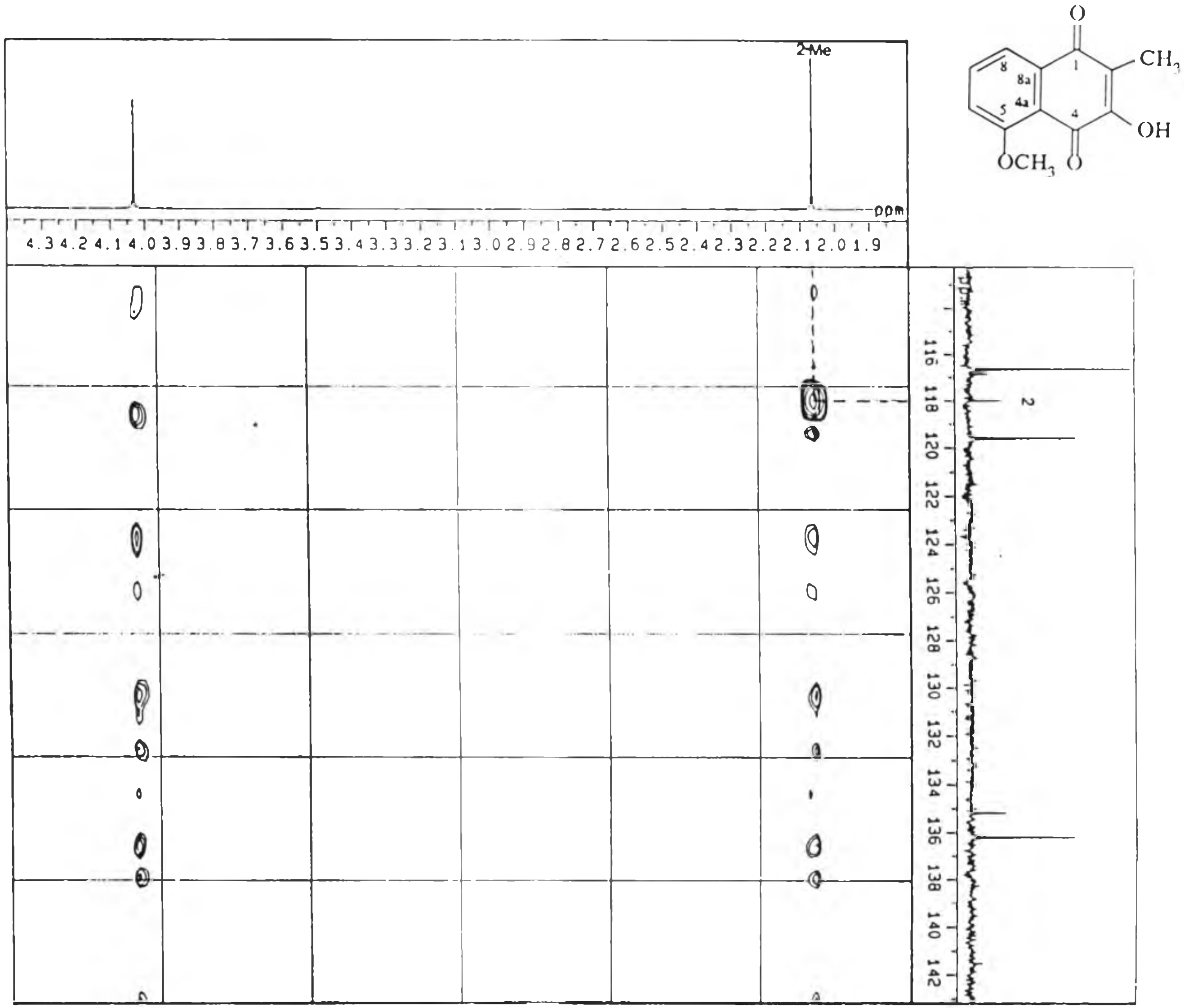


Figure 146 Expansion of the HMBC spectrum of compound 108 (in $CDCl_3$) :

δ_H 1.90-4.30 ; δ_C 116.00-142.00 ppm

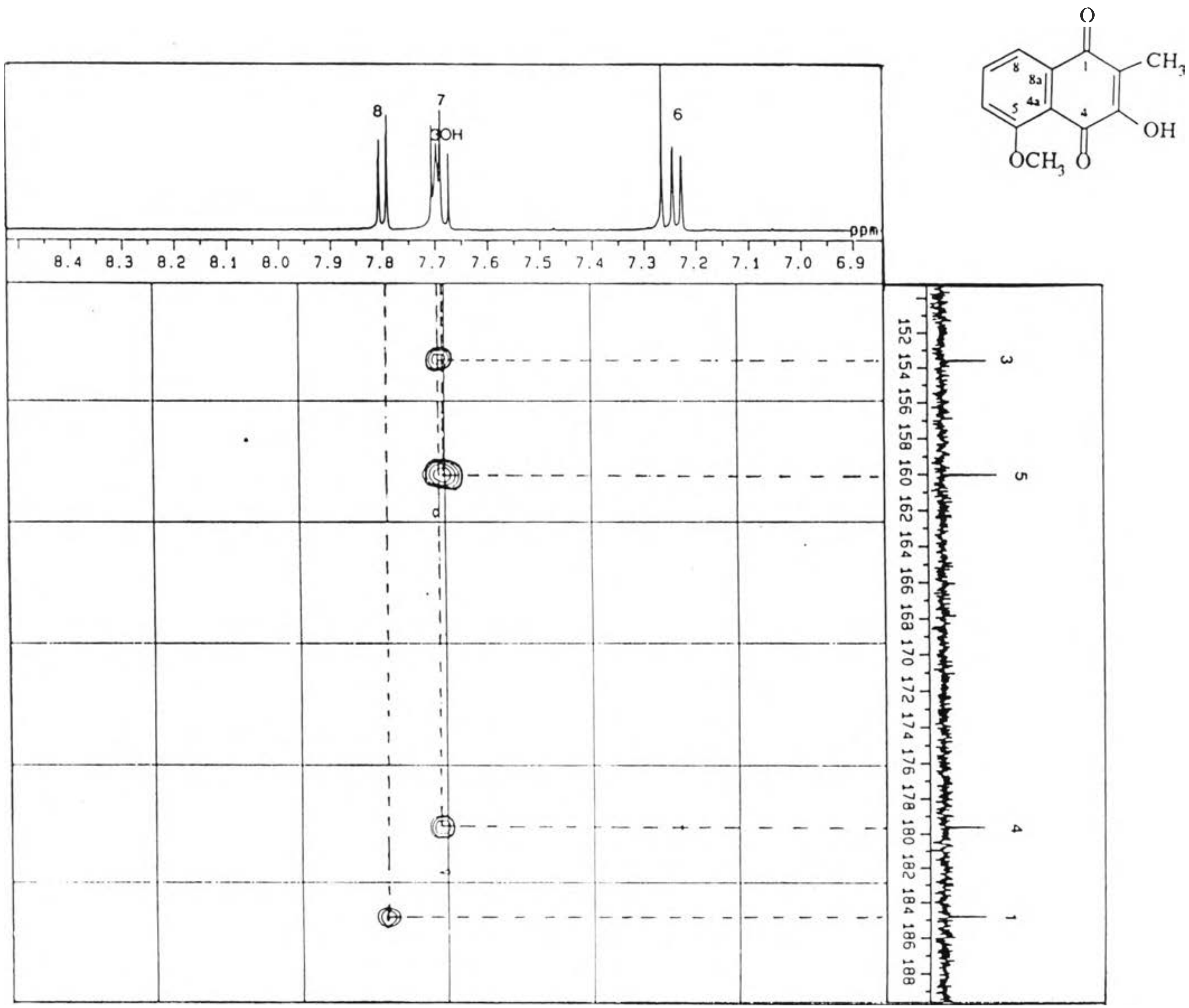


Figure 147 Expansion of the HMBC spectrum of compound **108** (in $CDCl_3$) :

δ_H 6.90-8.40 ; δ_C 152.00-188.00 ppm

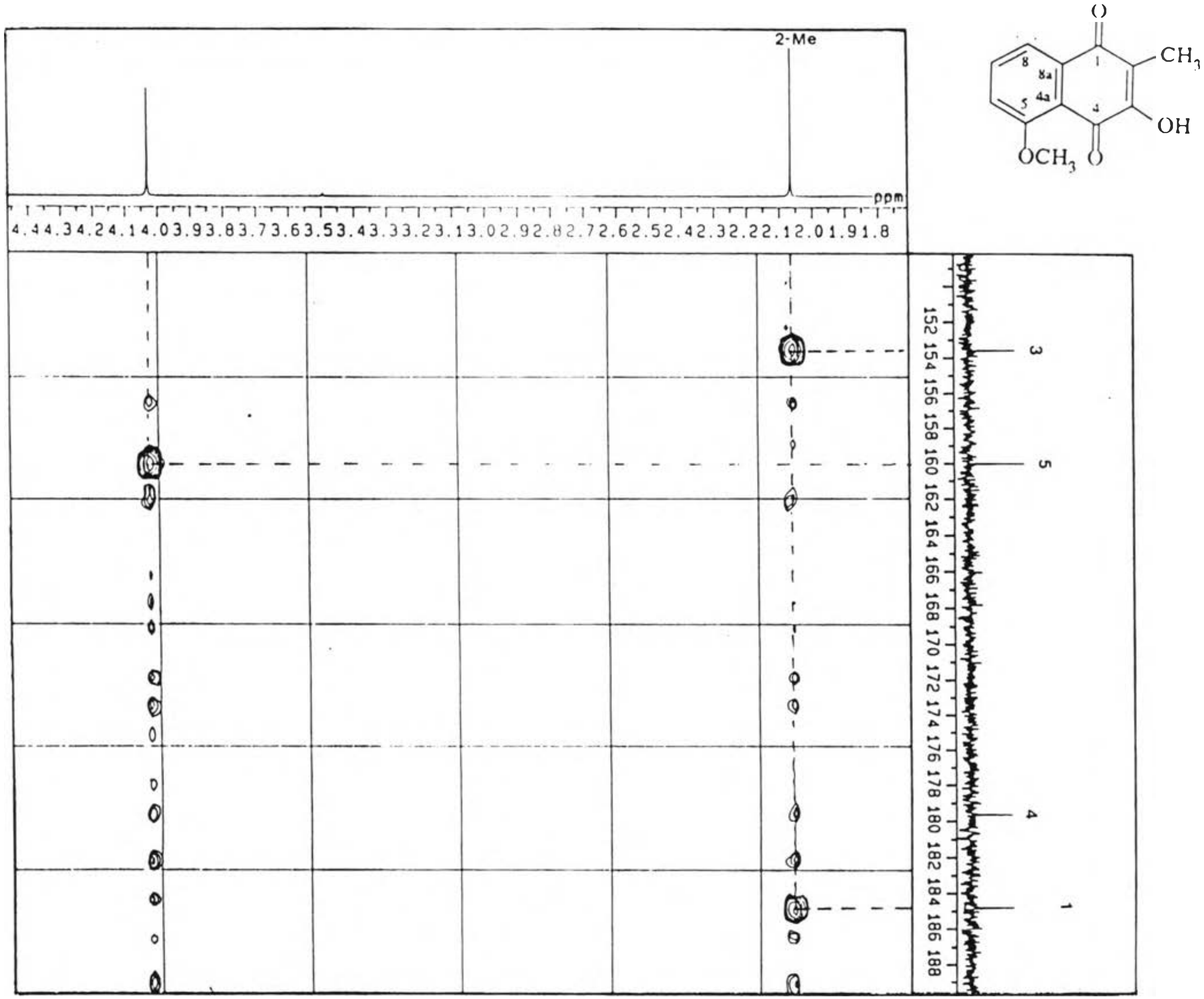


Figure 148 Expansion of the HMBC spectrum of compound 108 (in $CDCl_3$) :

δ_H 1.80-4.40 ; δ_C 152.00-188.00 ppm

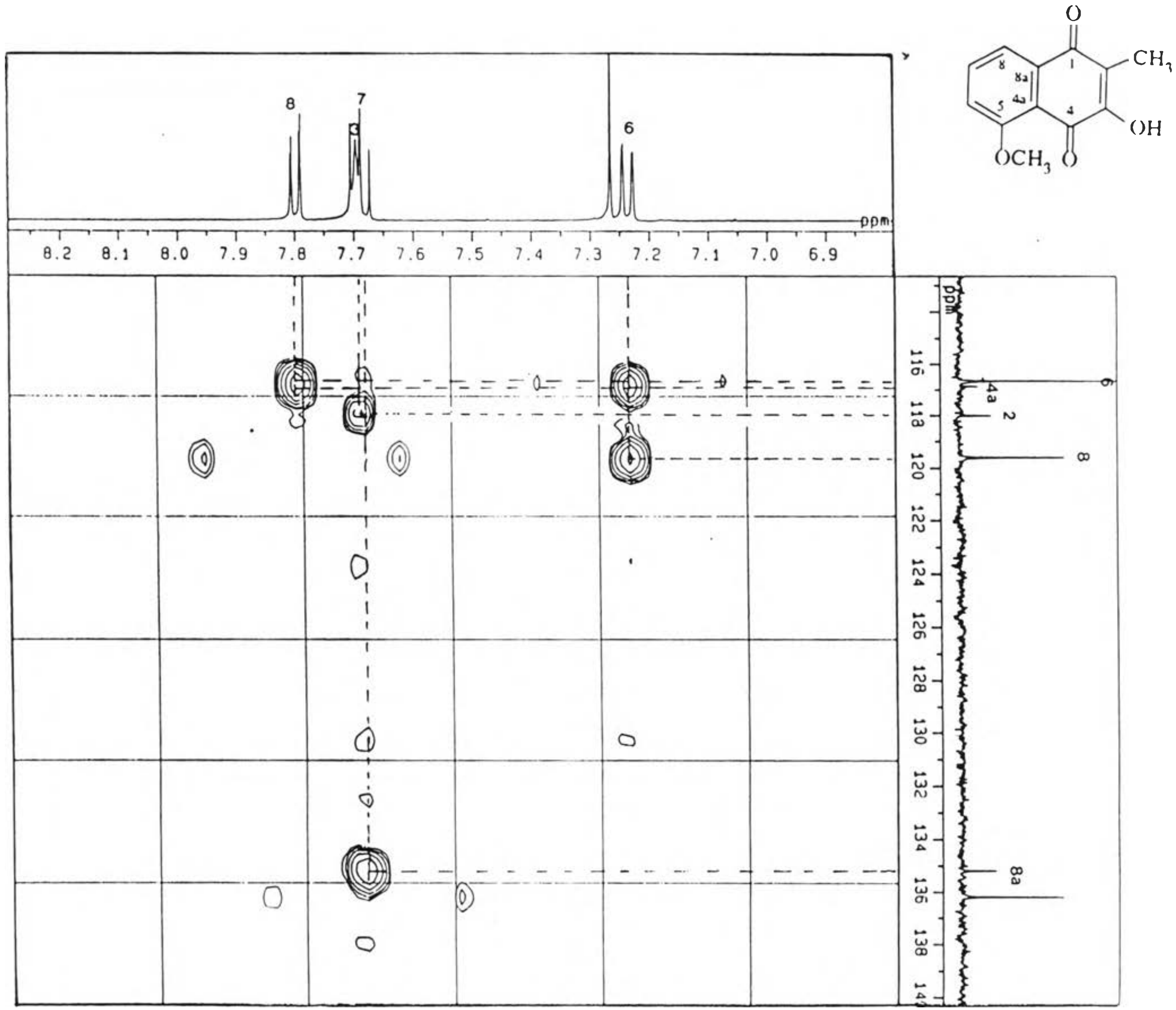


Figure 149 Expansion of the HMBC spectrum of compound 108 (in $CDCl_3$) :

δ_H 6.90-8.20 ; δ_C 116.00-140.00 ppm

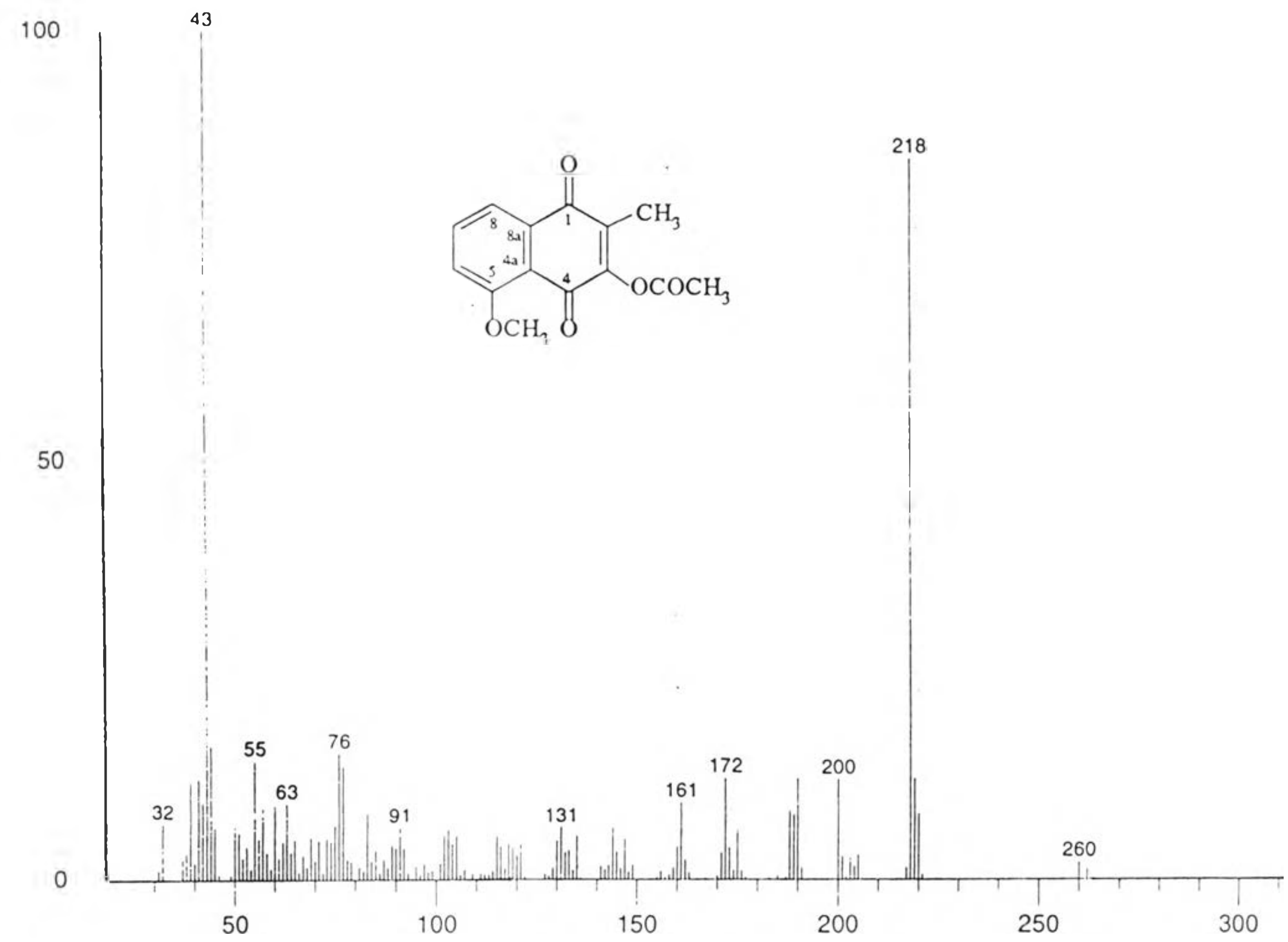


Figure 150 The EI mass spectrum of compound **109**

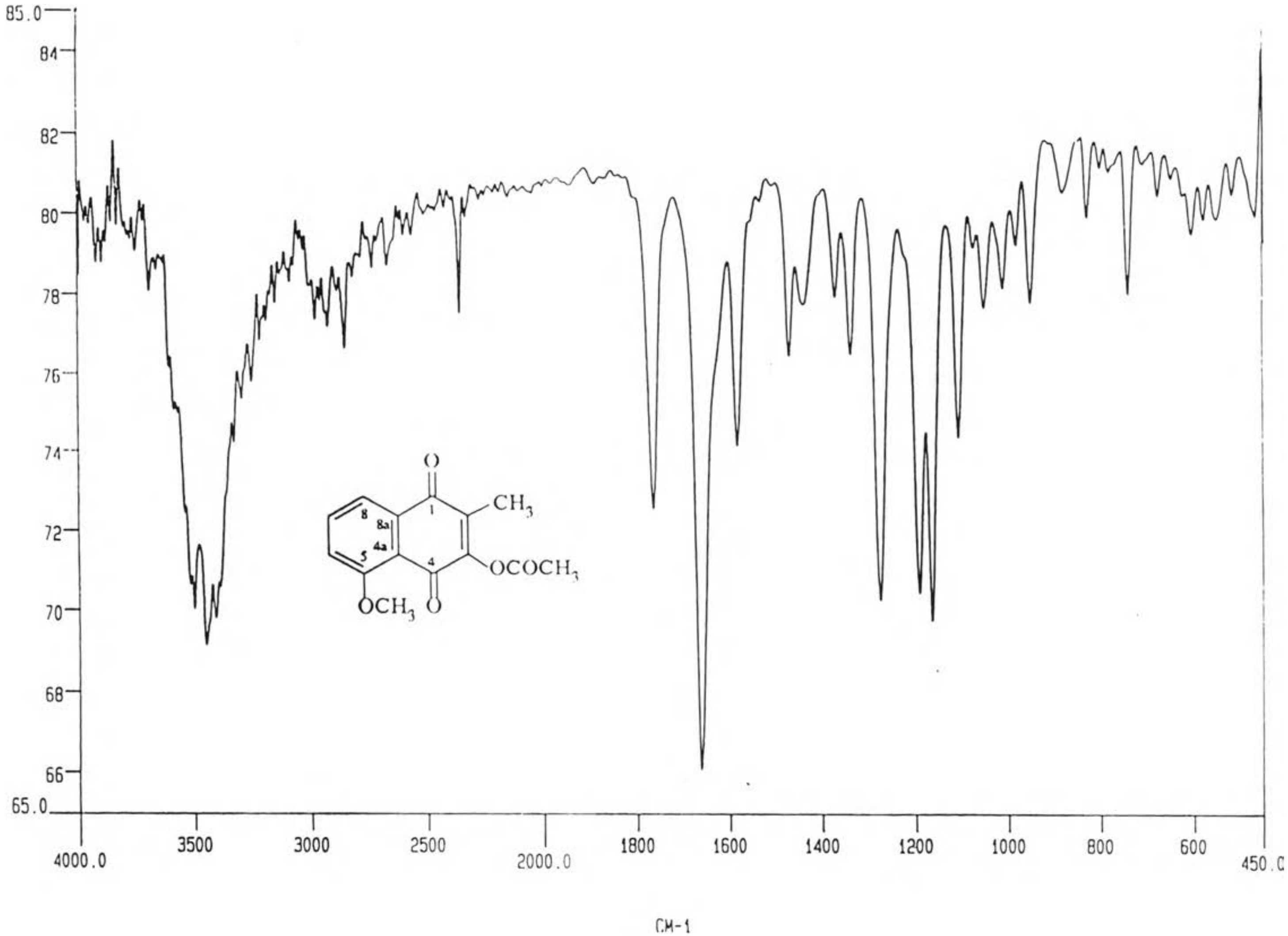


Figure 151 The IR spectrum of compound **109** (in $CDCl_3$)

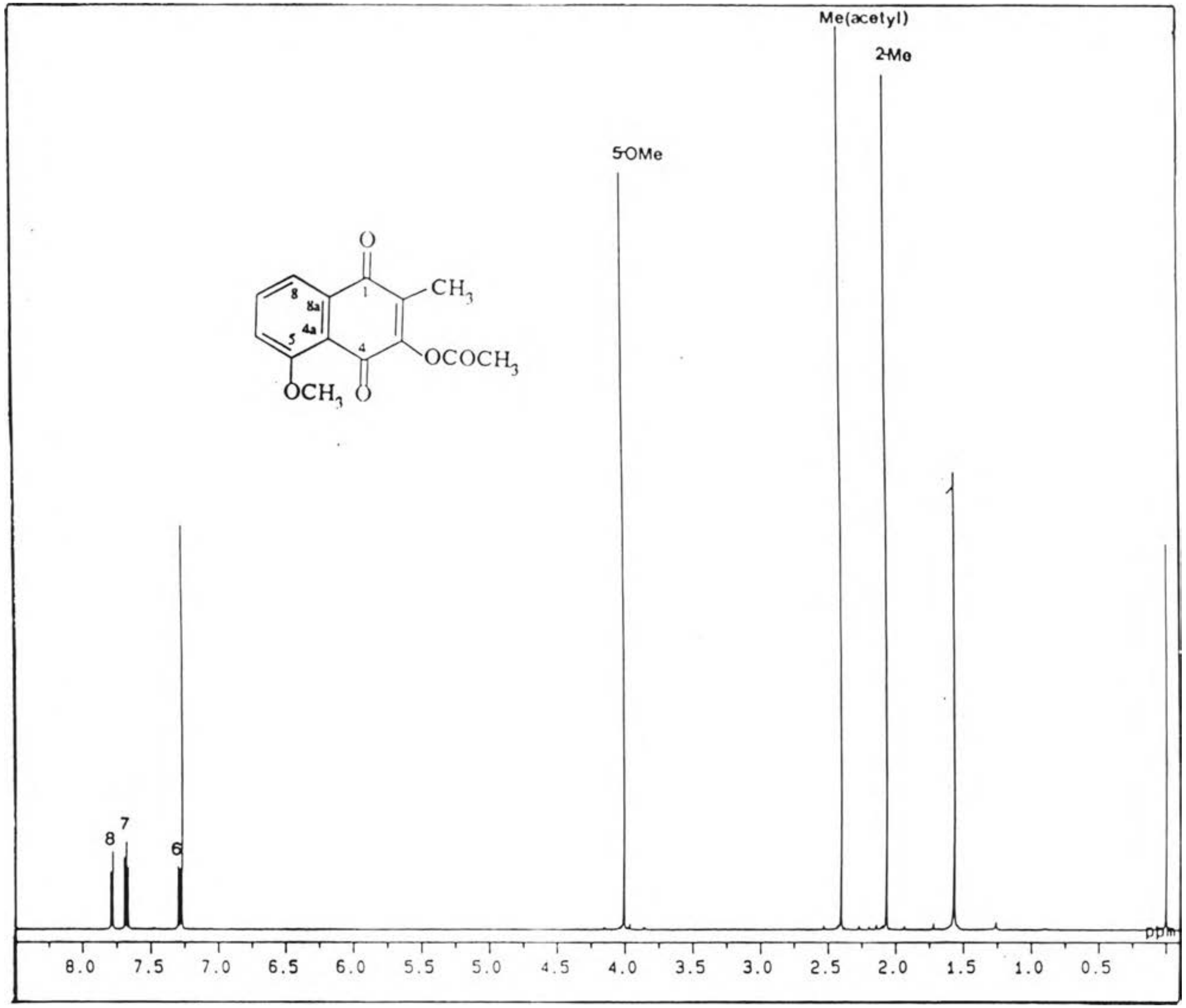


Figure 152 The ^{1}H NMR (500 MHz) spectrum of compound **109** (in $CDCl_3$)

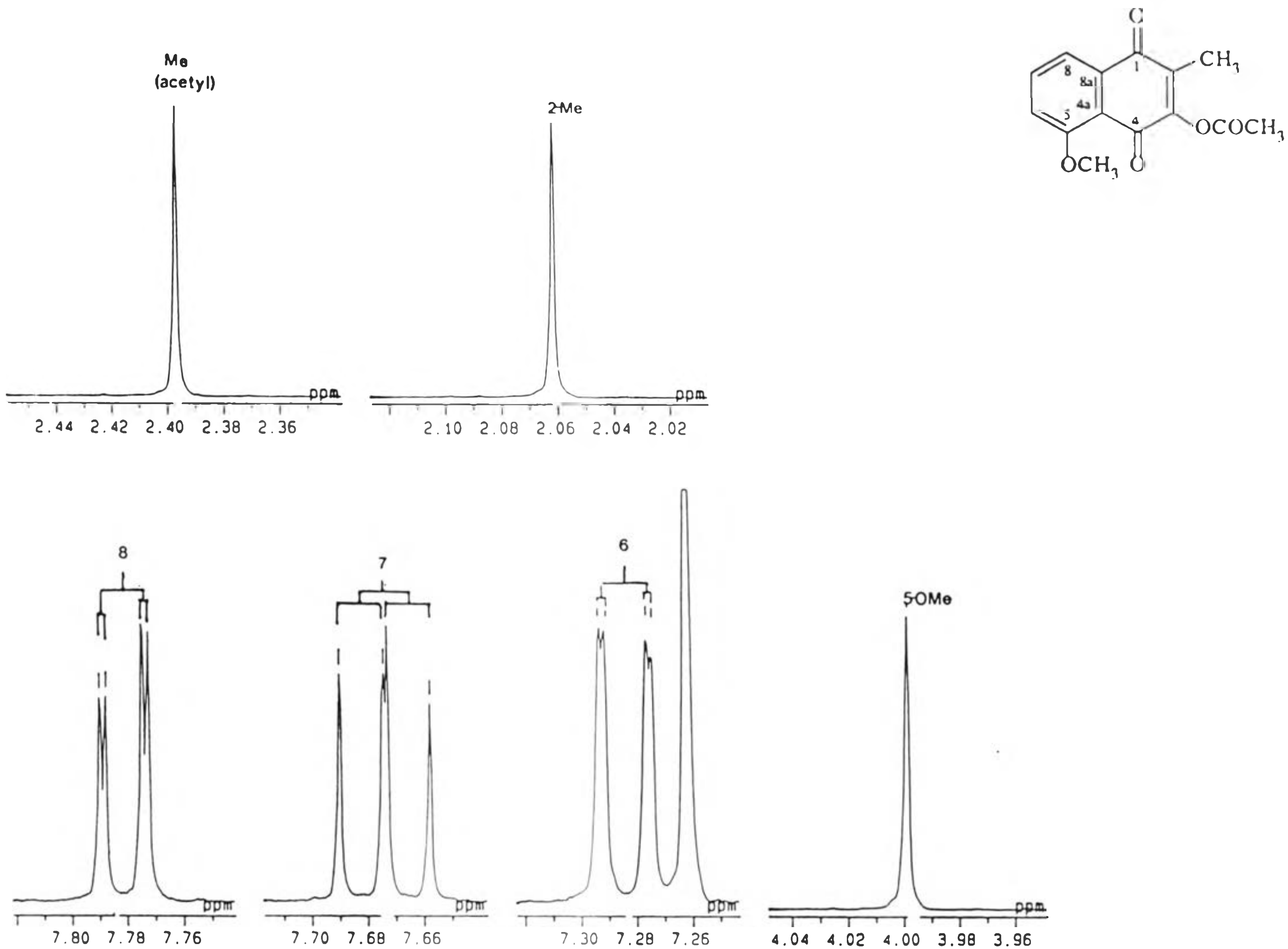


Figure 153 Expansion of the ^{1}H NMR (500 MHz) spectrum of compound **109** (in $CDCl_3$) : δ_H 2.02-7.80 ppm

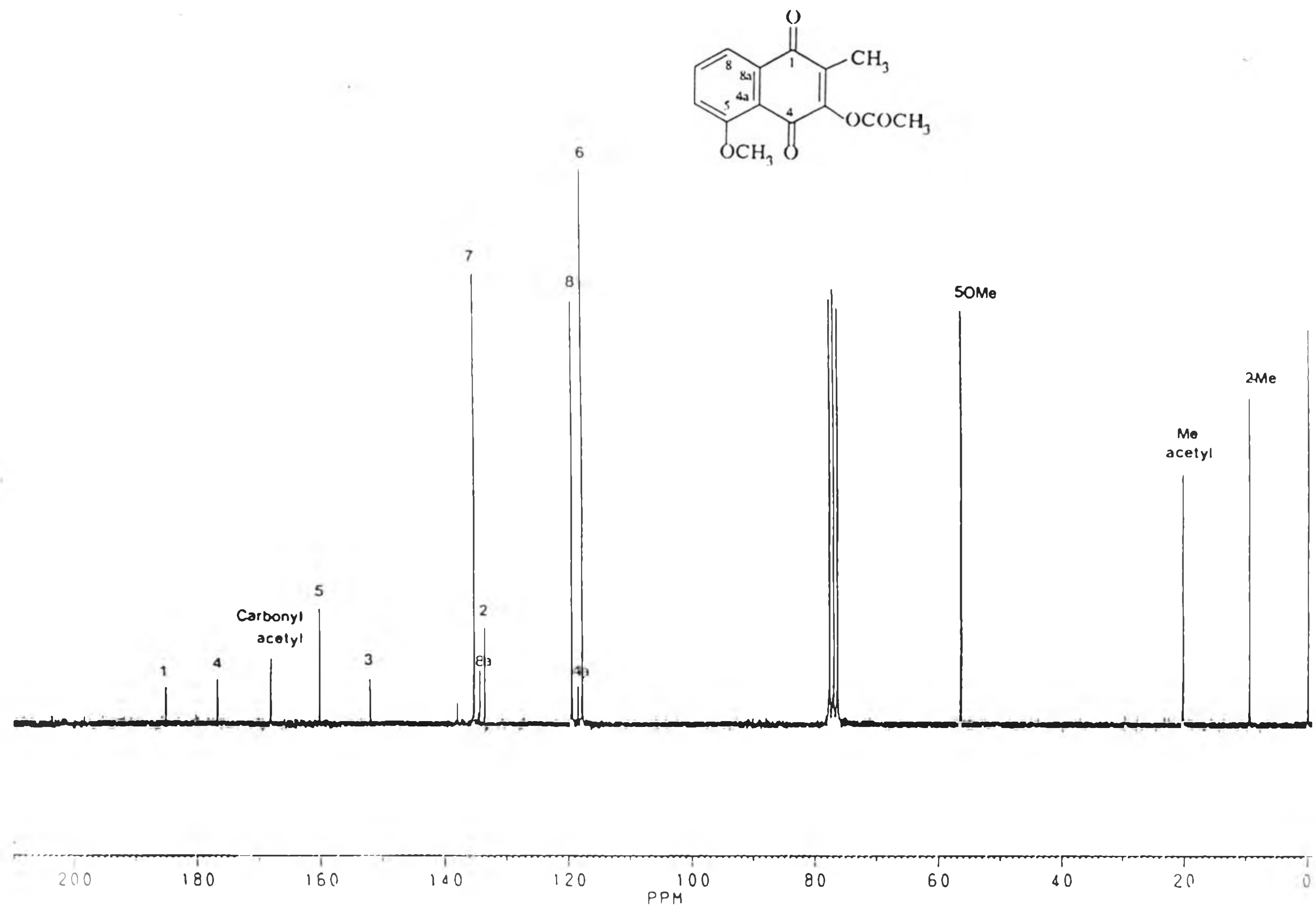


Figure 154 The ^{13}C NMR (50 MHz) spectrum of compound **109** (in $CDCl_3$)

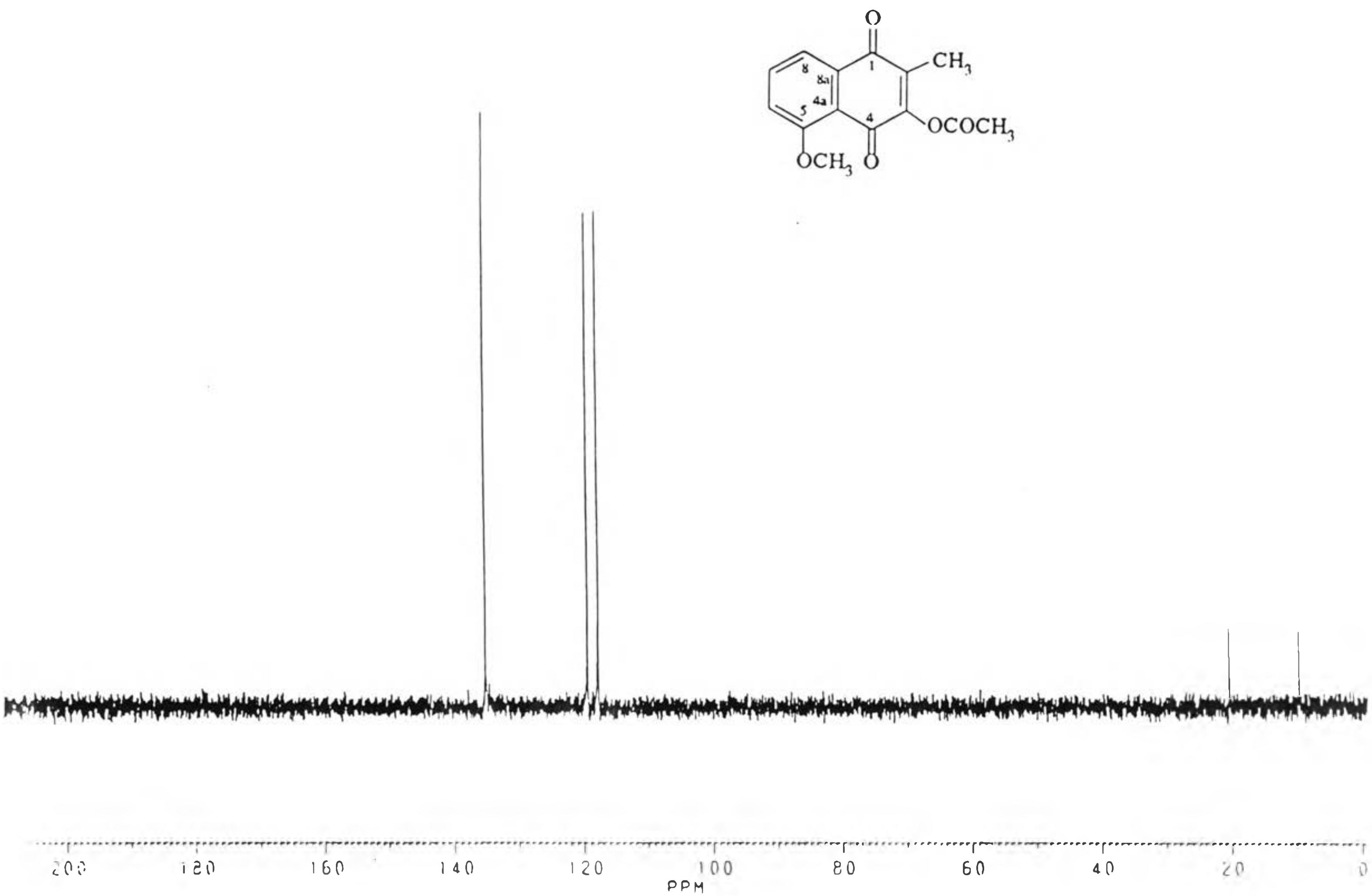


Figure 155 The DEPT 90 (50 MHz) spectrum of compound **109** (in $CDCl_3$)

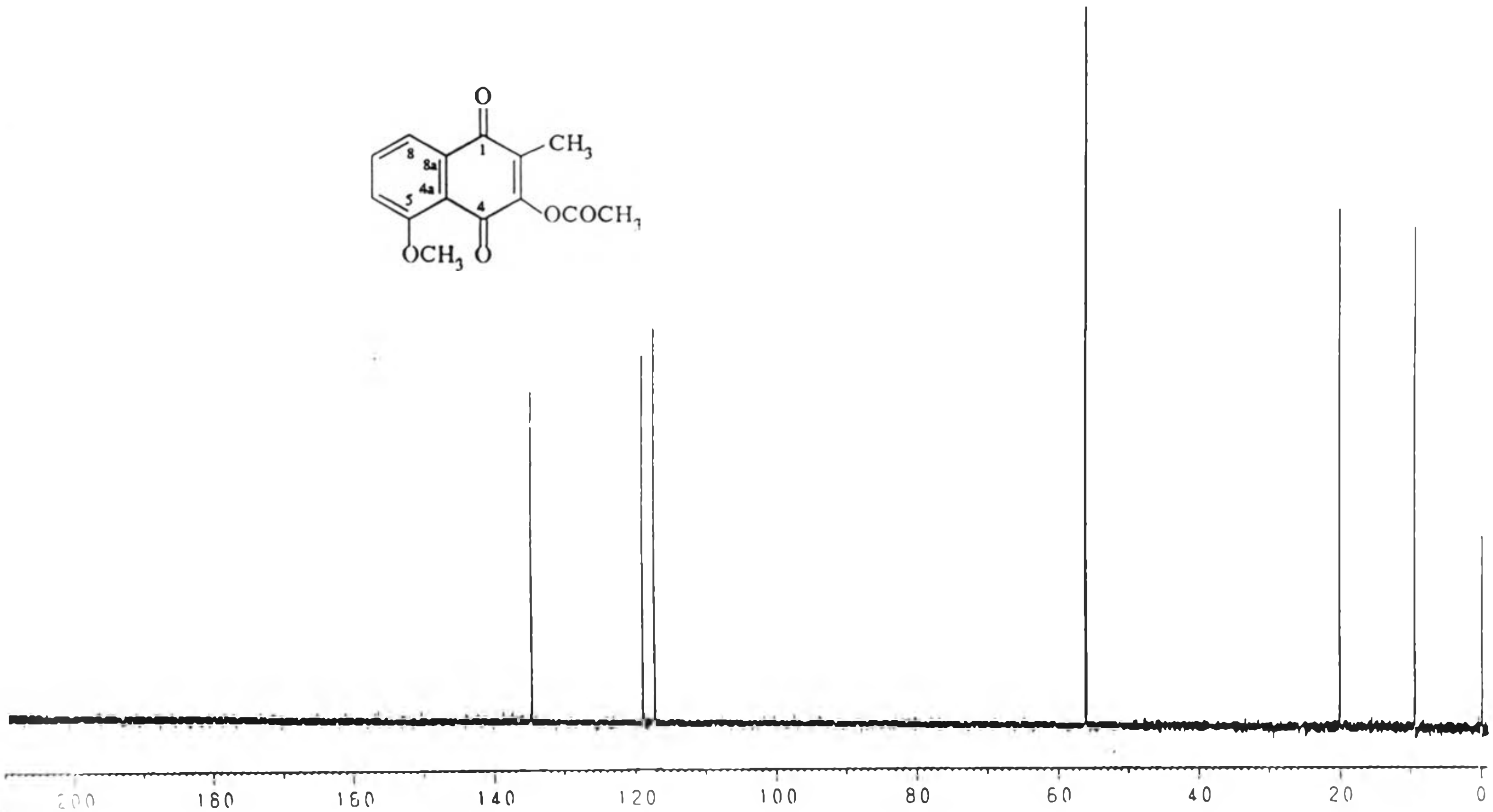


Figure 156 The DEPT 135 (50 MHz) spectrum of compound **109** (in $CDCl_3$)

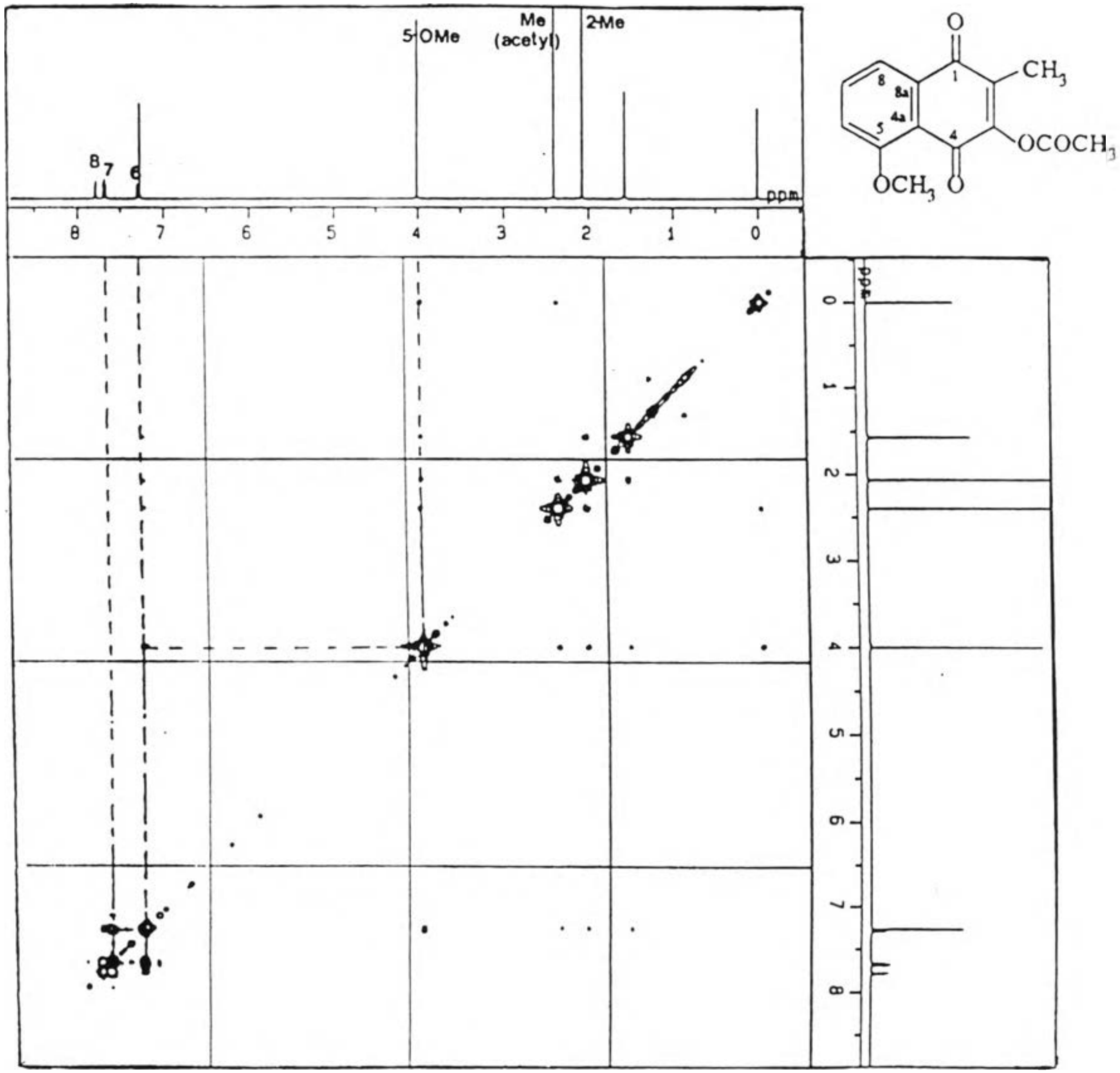


Figure 157 The ^{1}H-^{1}H COSY (500 MHz) spectrum of compound **109** (in $CDCl_3$)

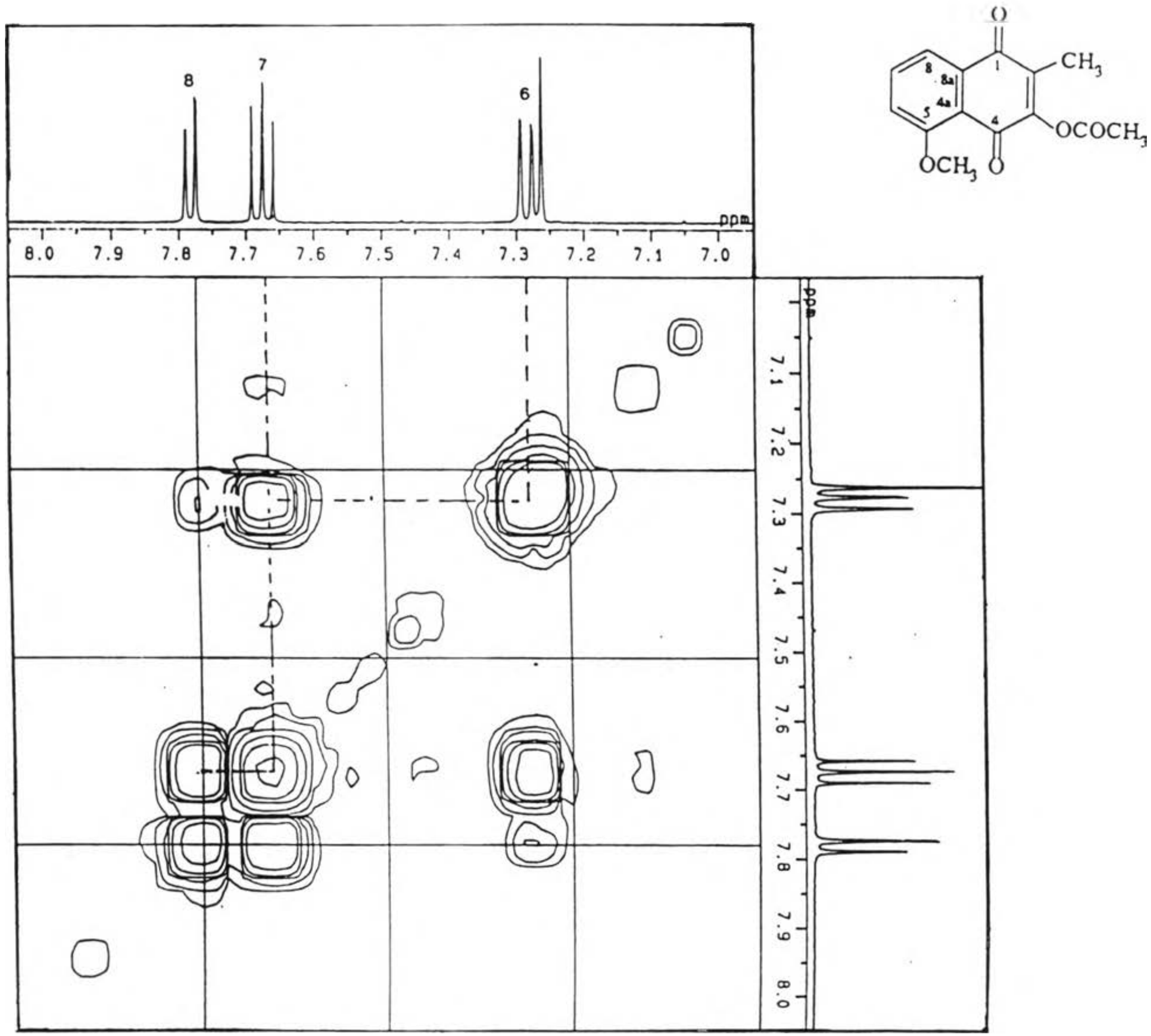


Figure 158 Expansion of the ^1H-^1H COSY (500 MHz) spectrum of compound 109 (in $CDCl_3$) : δ_H 7.00-8.00 ppm

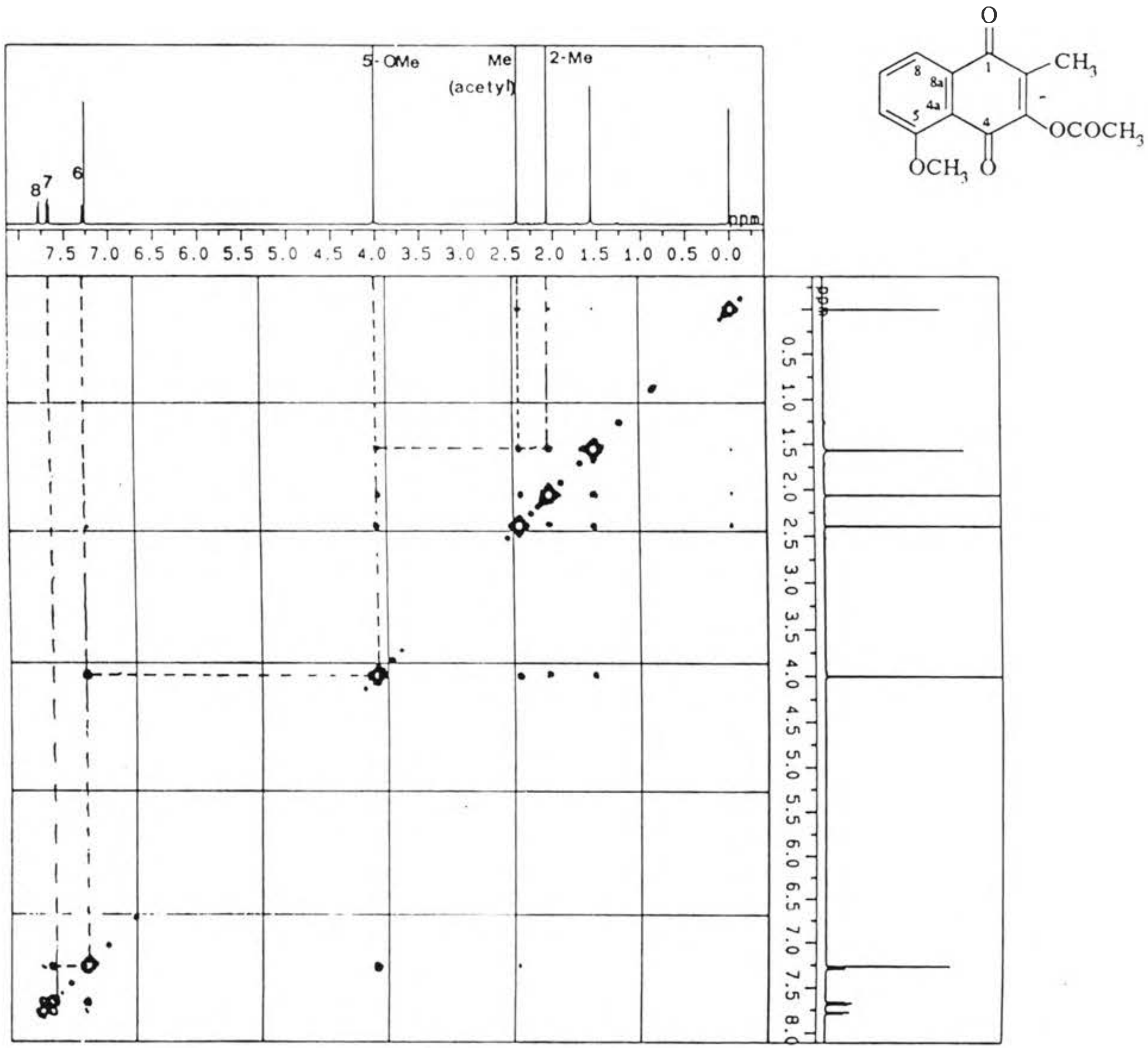


Figure 159 The NOESY (500 MHz) spectrum of compound **109** (in $CDCl_3$)

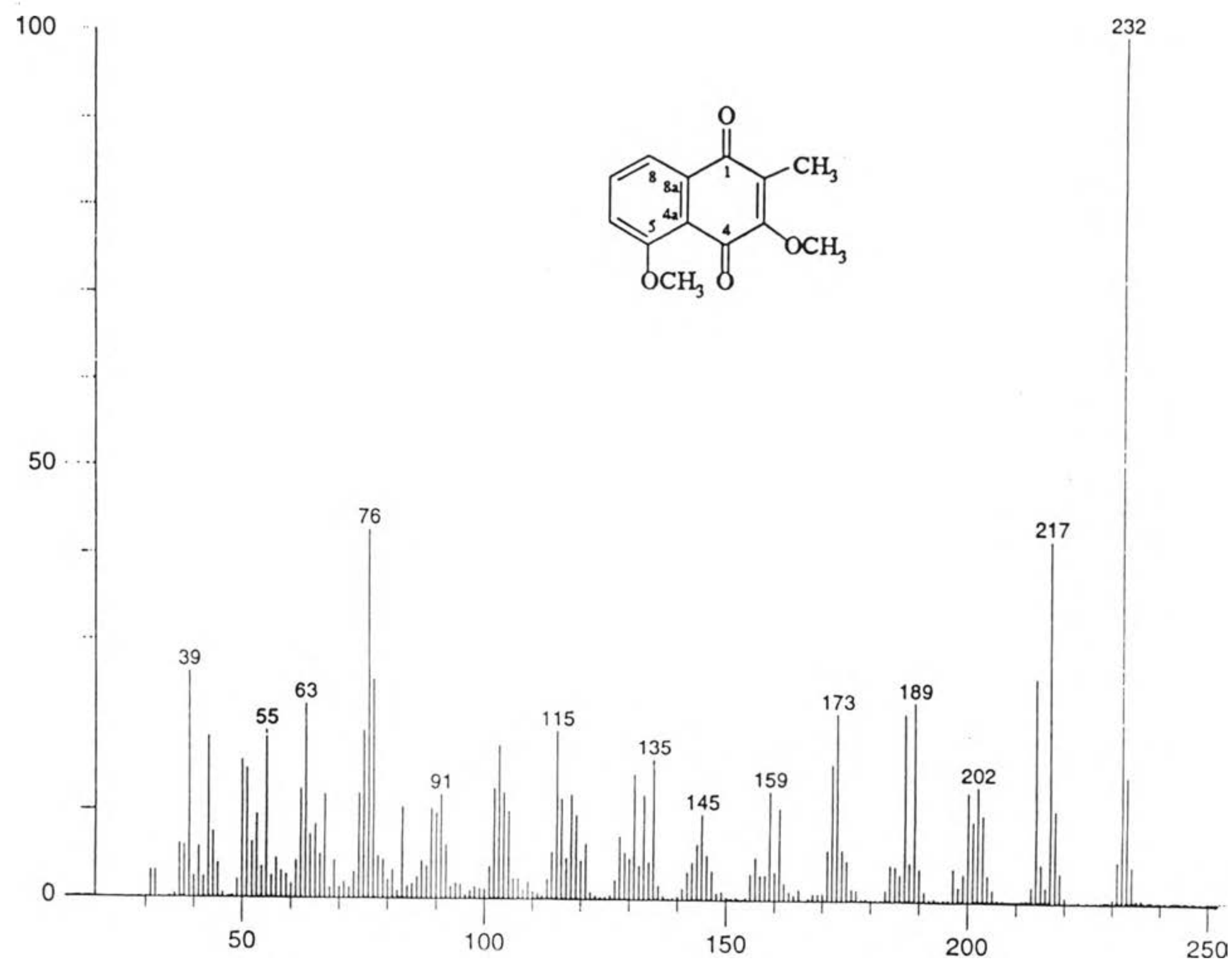


Figure 160 The EI mass spectrum of compound **110**

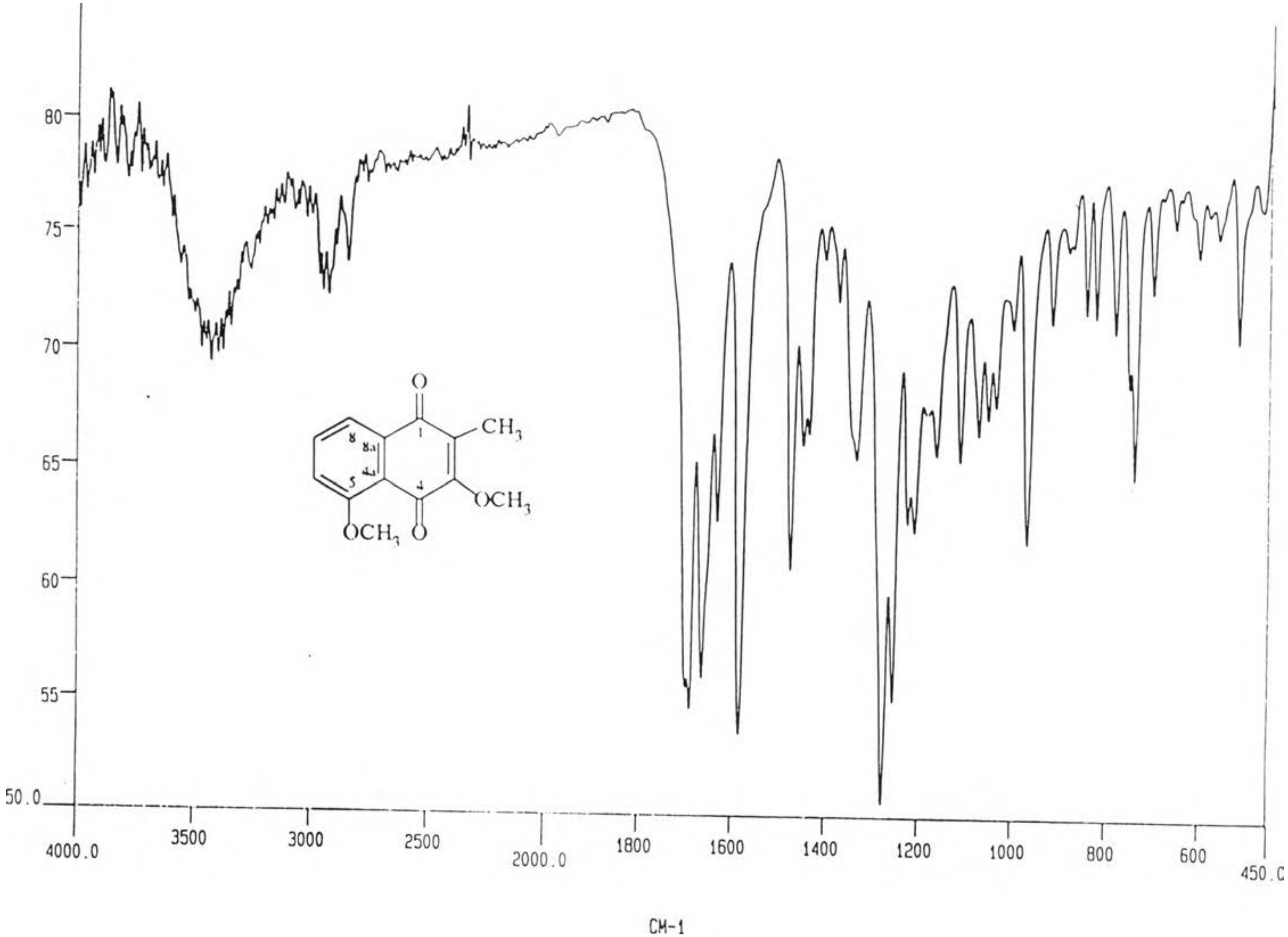


Figure 161 The IR spectrum of compound **110** (in KBr disc)

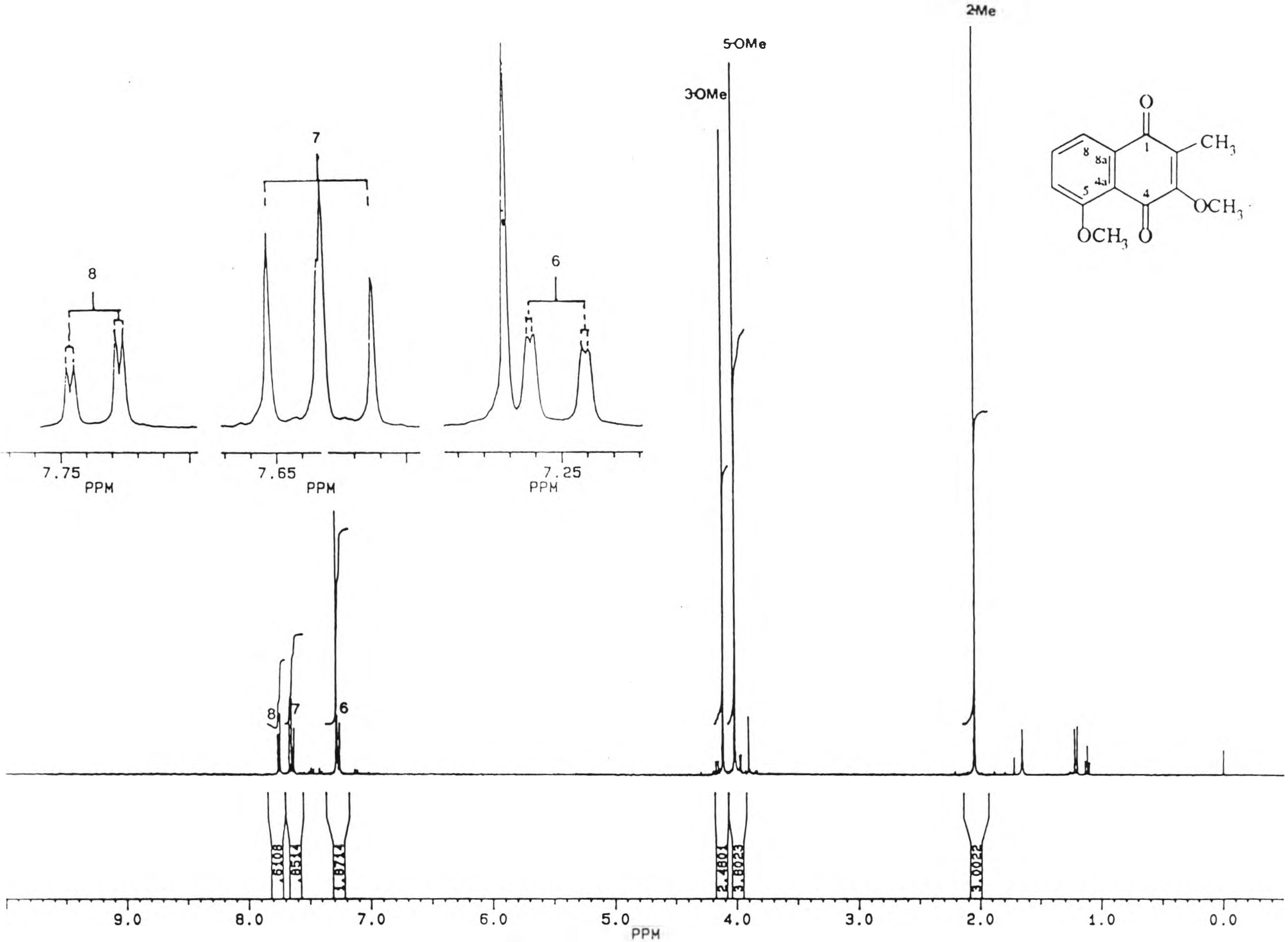


Figure 162 The ^{1}H NMR (400 MHz) spectrum of compound **110** (in $CDCl_3$)

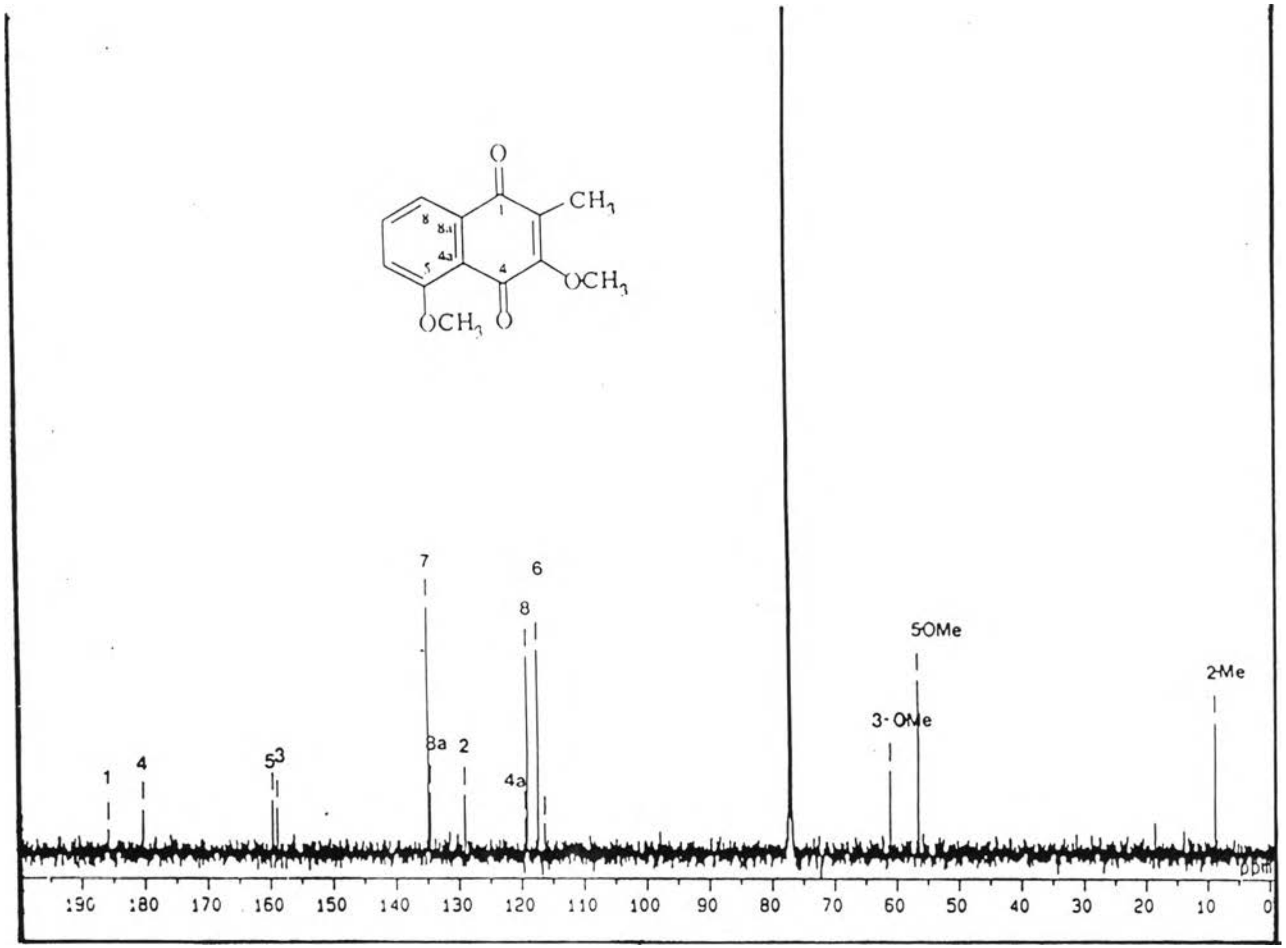


Figure 163 The ^{13}C NMR (125 MHz) of compound **110** (in $CDCl_3$)

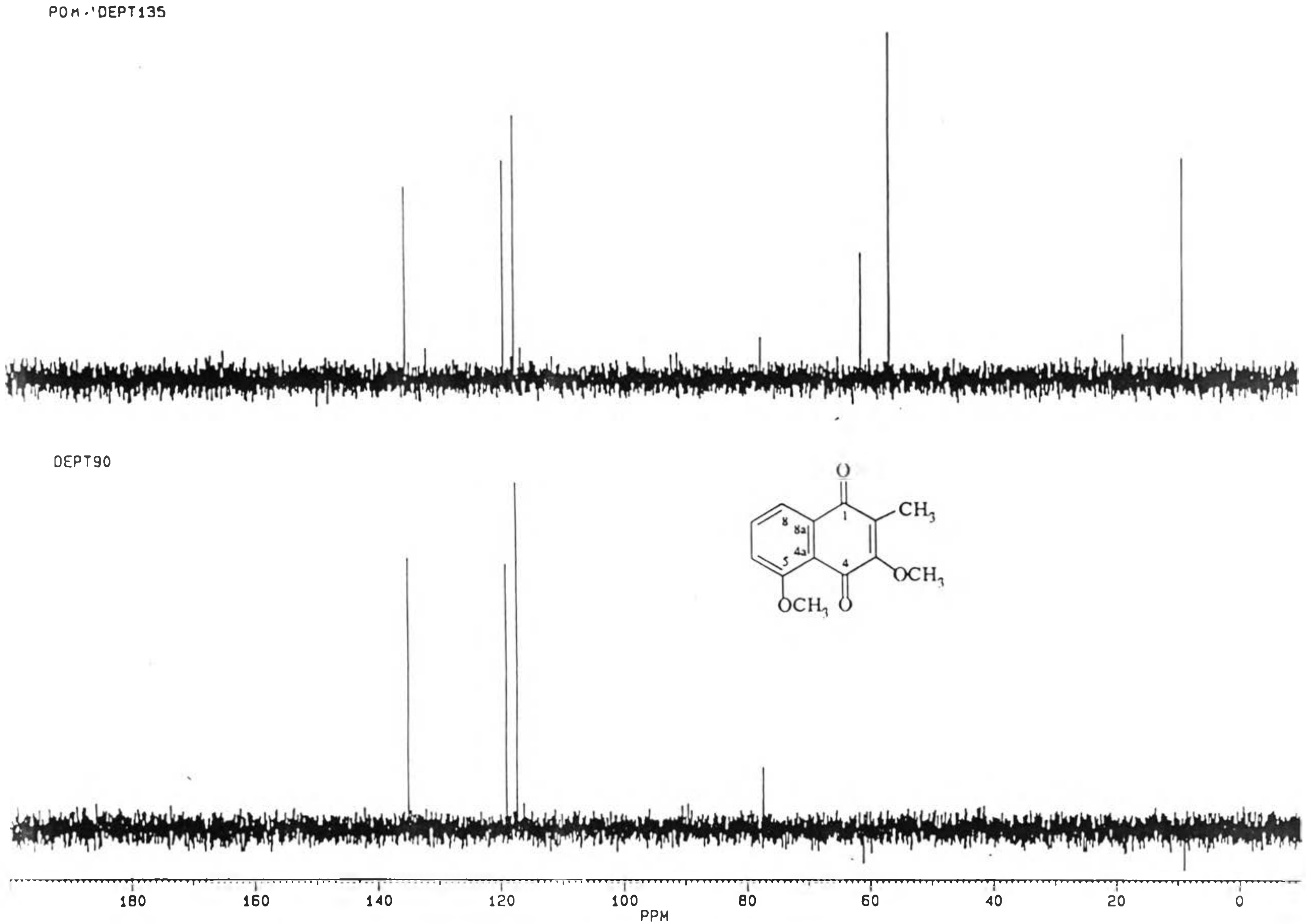


Figure 164 The DEPT (100 MHz) spectrum of compound **110** (in $CDCl_3$)

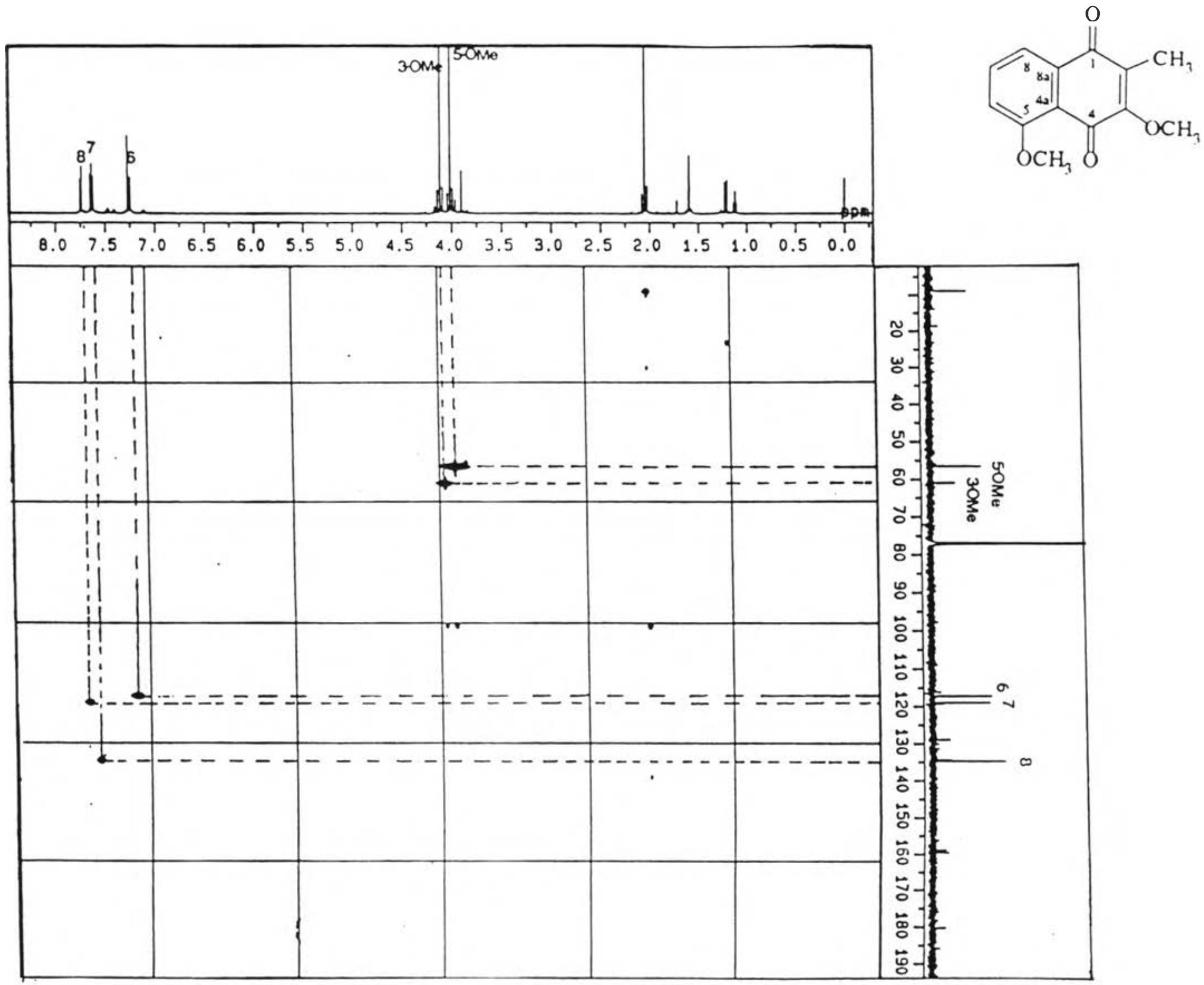
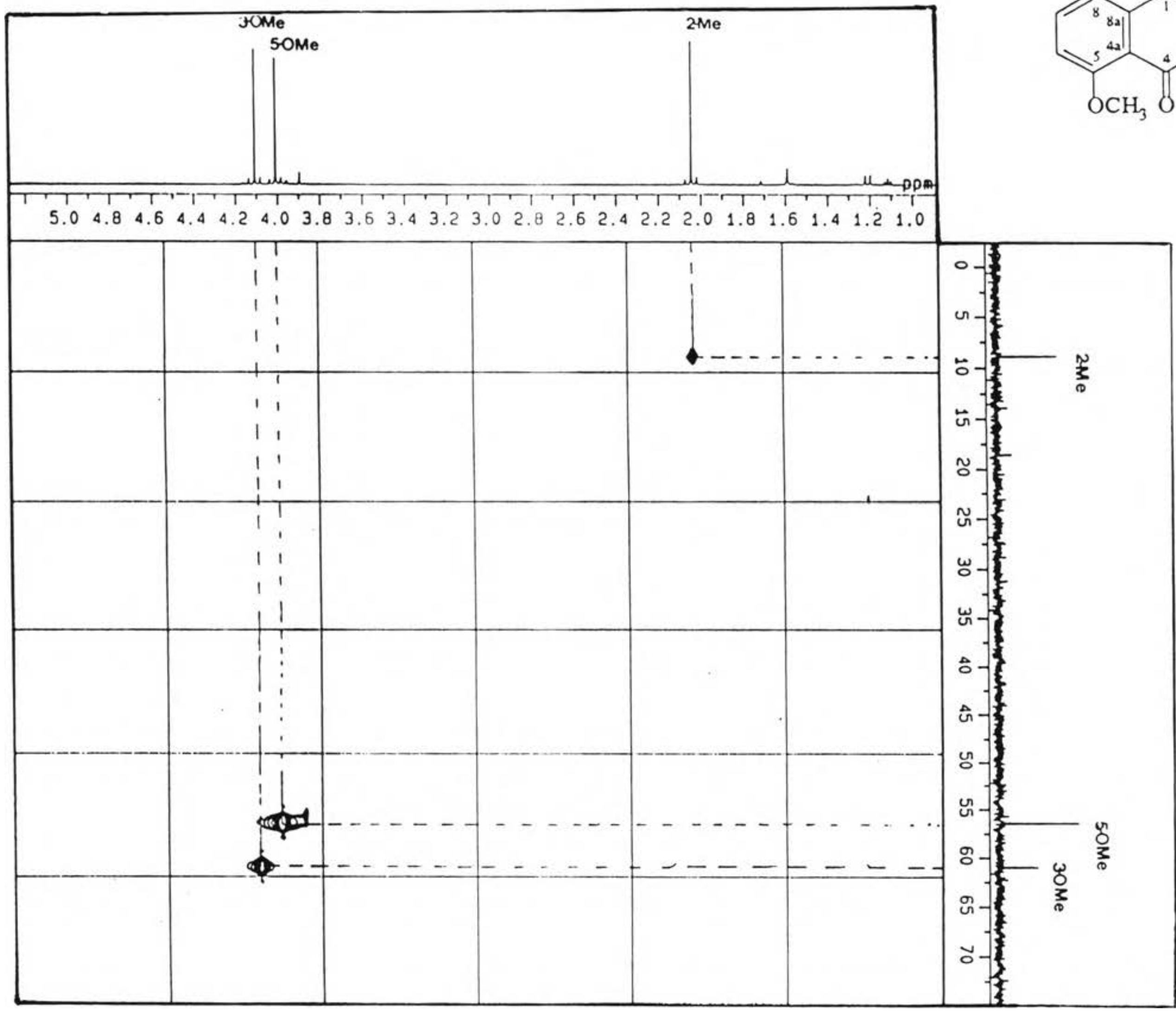


Figure 165 The HMQC spectrum of compound 110 (in $CDCl_3$)



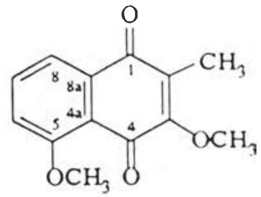


Figure 166 Expansion of the HMQC spectrum of compound **110** (in $CDCl_3$) :

δ_H 1.00-5.00 ; δ_C 0.00-70.00 ppm

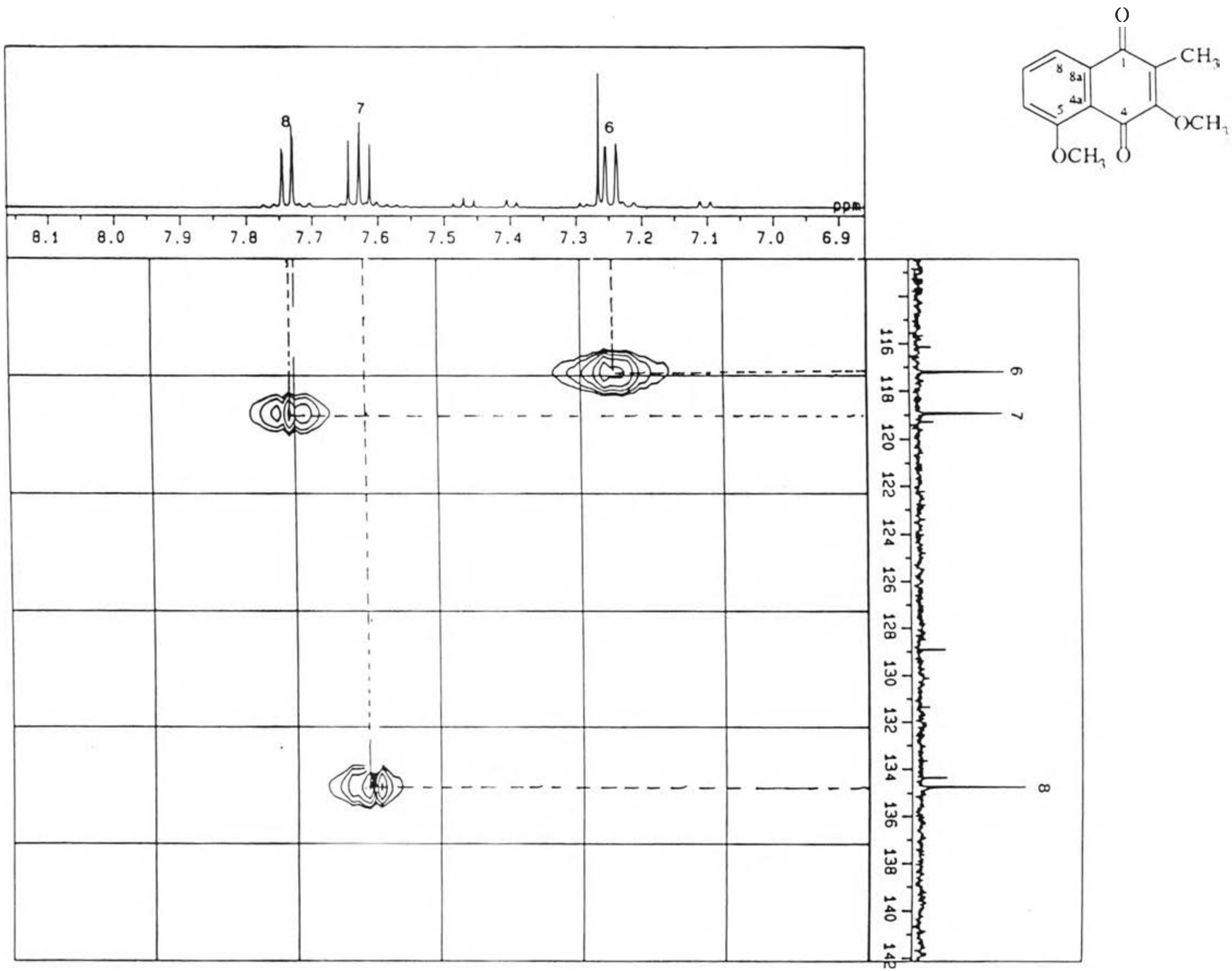


Figure 167 Expansion of the HMQC spectrum of compound **110** (in $CDCl_3$) :

δ_H 6.90-8.10 ; δ_C 114.00-142.00 ppm

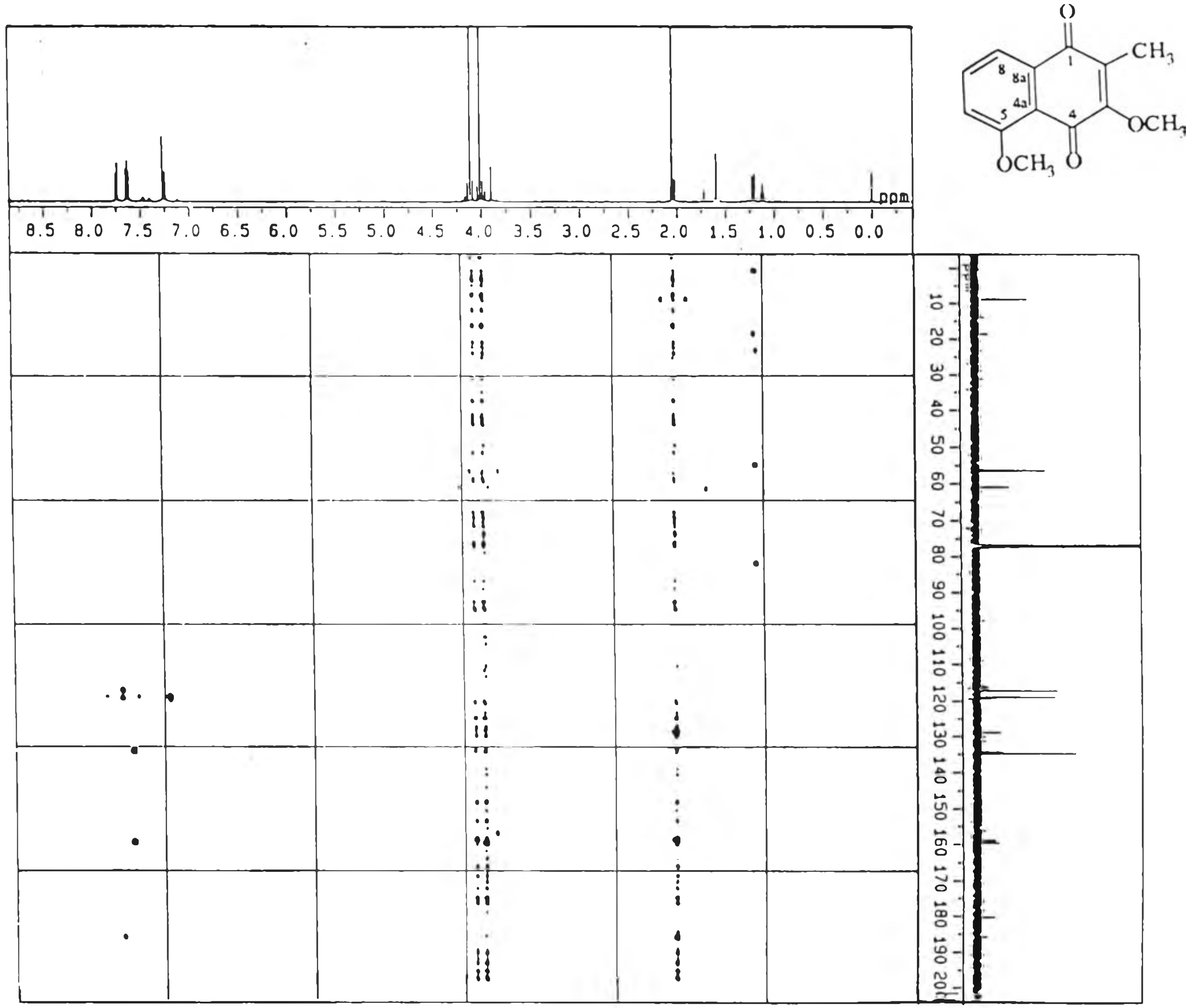


Figure 168 The HMBC spectrum of compound **110** (in $CDCl_3$)

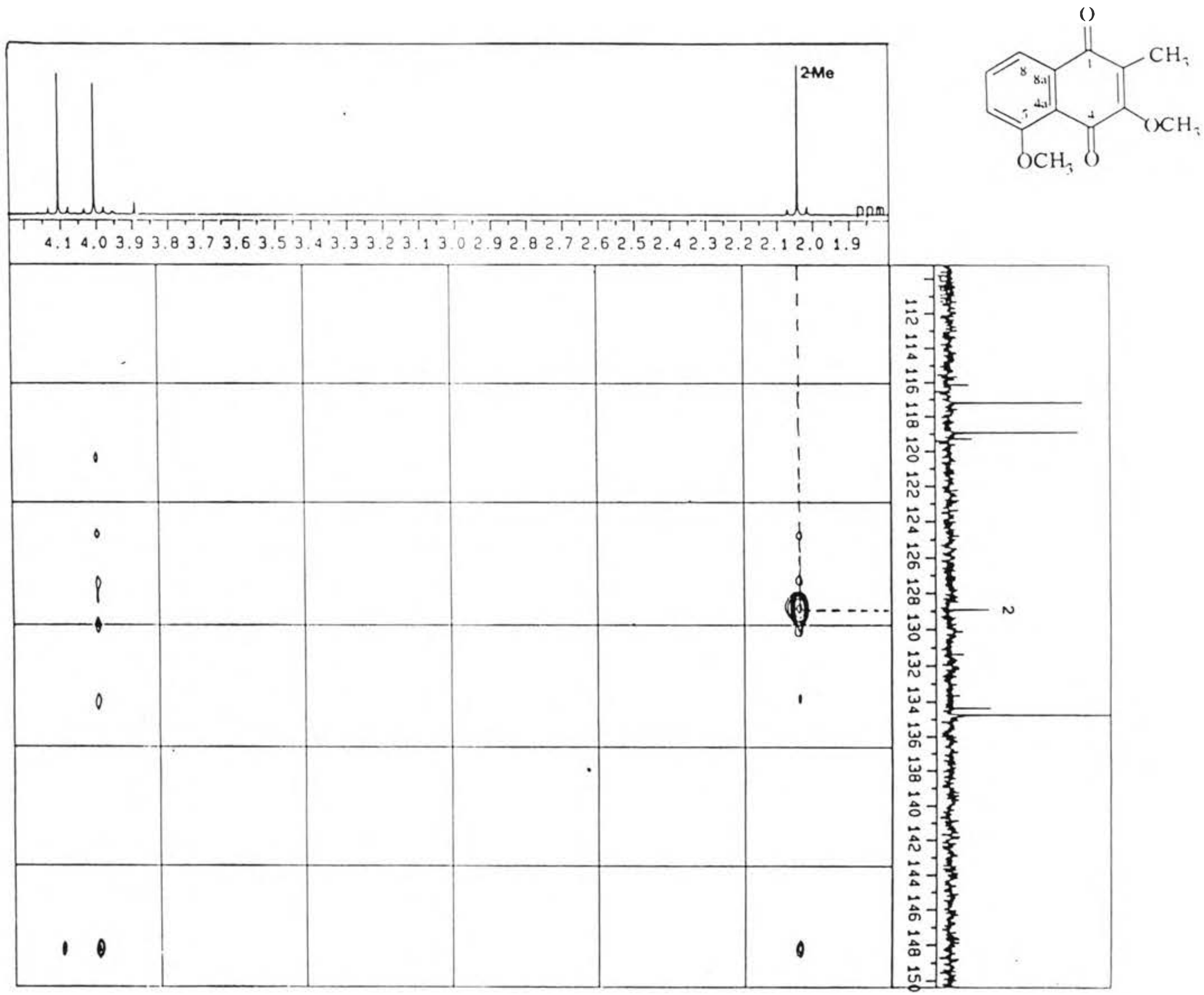


Figure 169 Expansion of the HMBC spectrum of compound **110** (in $CDCl_3$) :

δ_H 1.90-4.10 ; δ_C 112.00-150.00 ppm

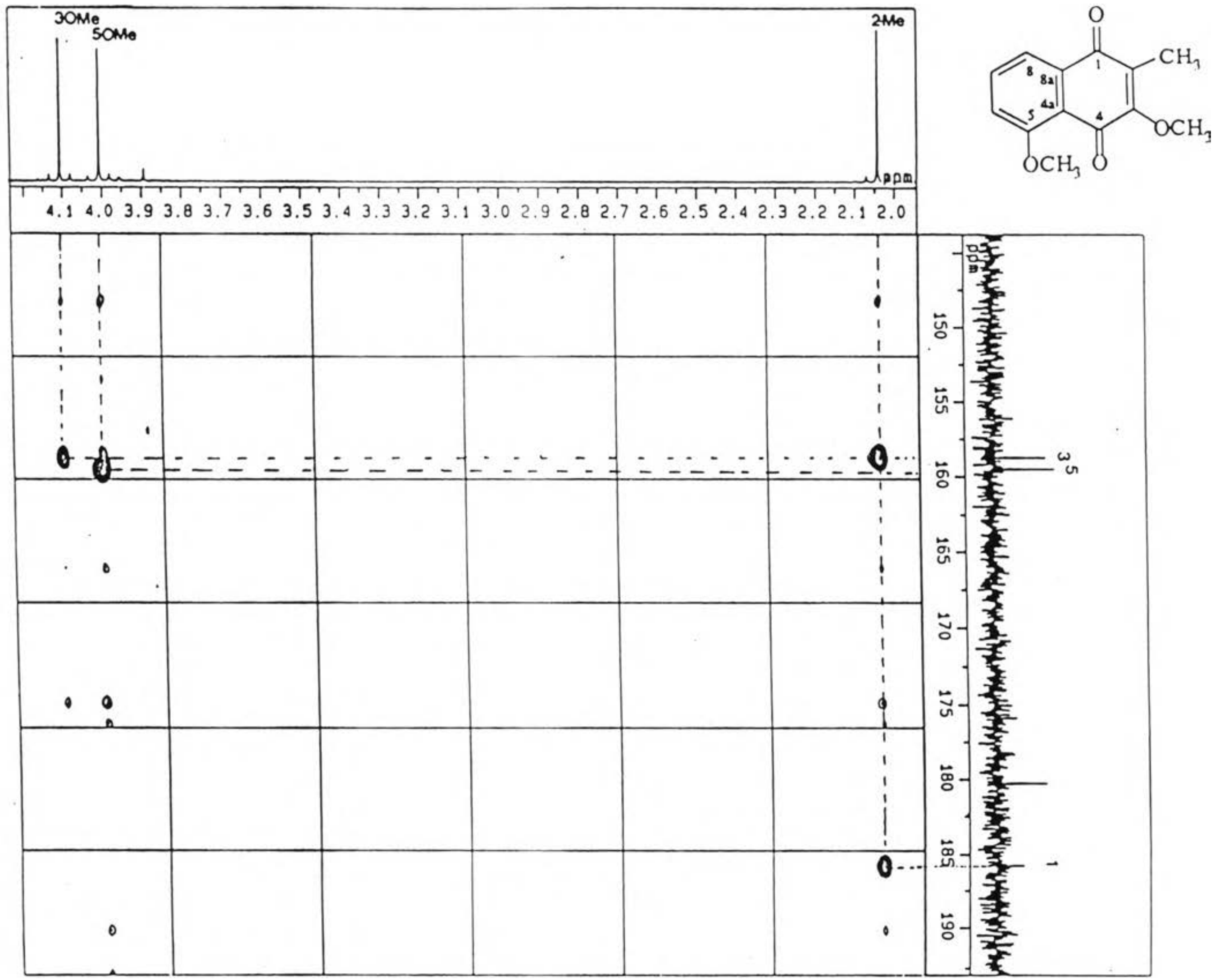


Figure 170 Expansion of the HMBC spectrum of compound **110** (in $CDCl_3$) :

δ_H 2.00-4.10 ; δ_C 145.00-190.00 ppm

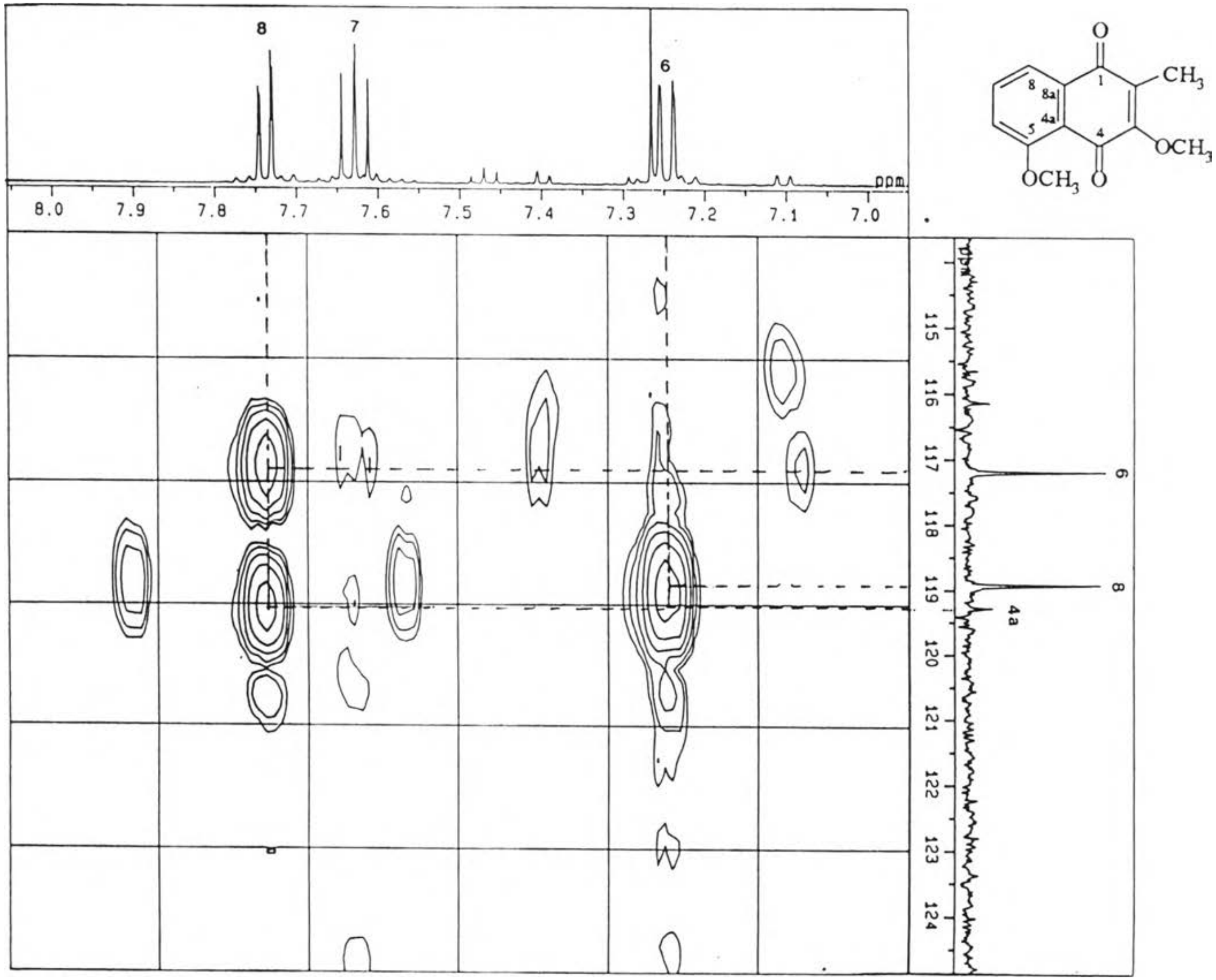


Figure 171 Expansion of the HMBC spectrum of compound **110** (in $CDCl_3$) :

δ_H 7.00-8.00 ; δ_C 115.00-124.00 ppm

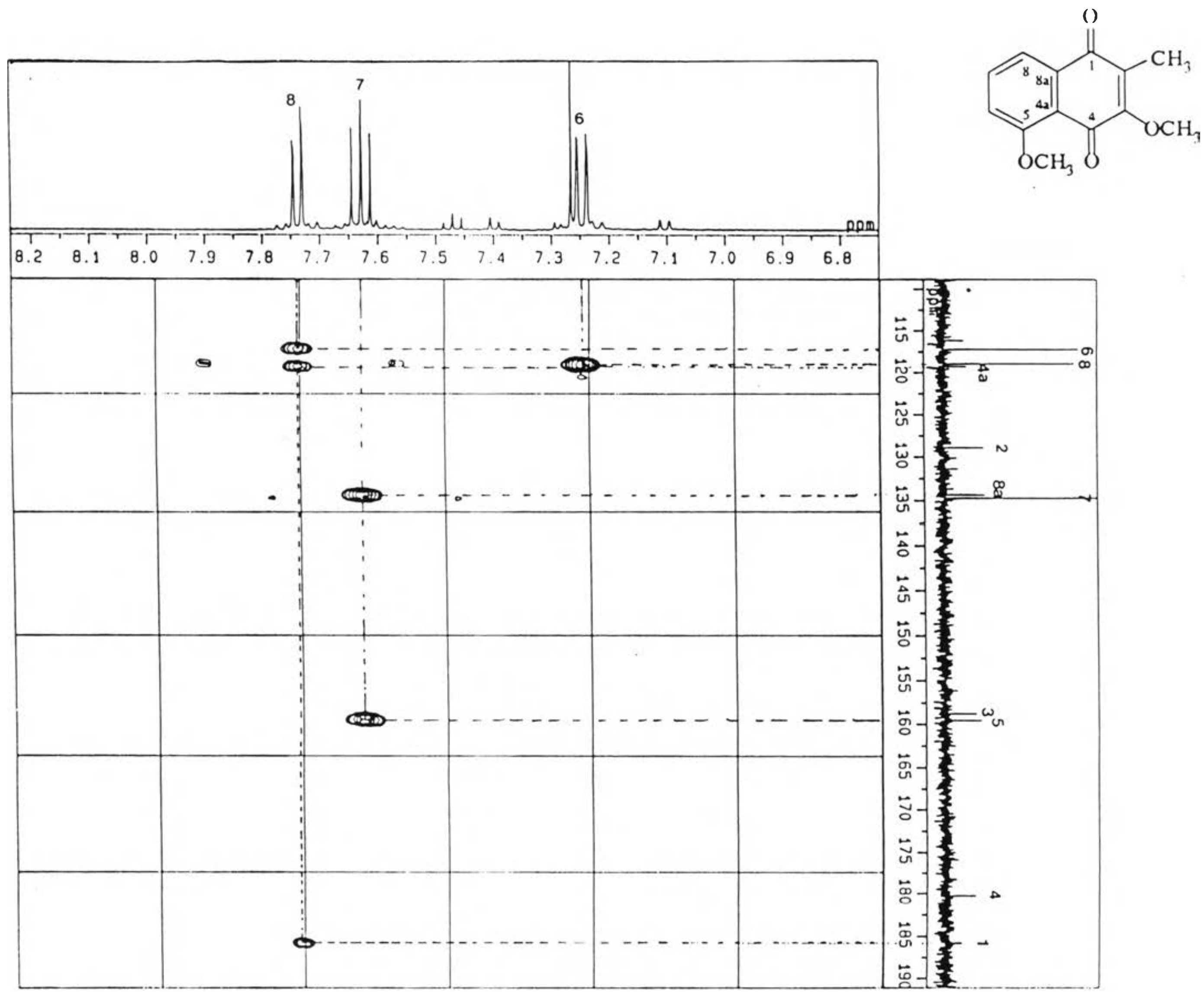


Figure 172 Expansion of the HMBC spectrum of compound **111** (in $CDCl_3$) :

δ_H 6.80-8.20 ; δ_C 115.00-190.00 ppm

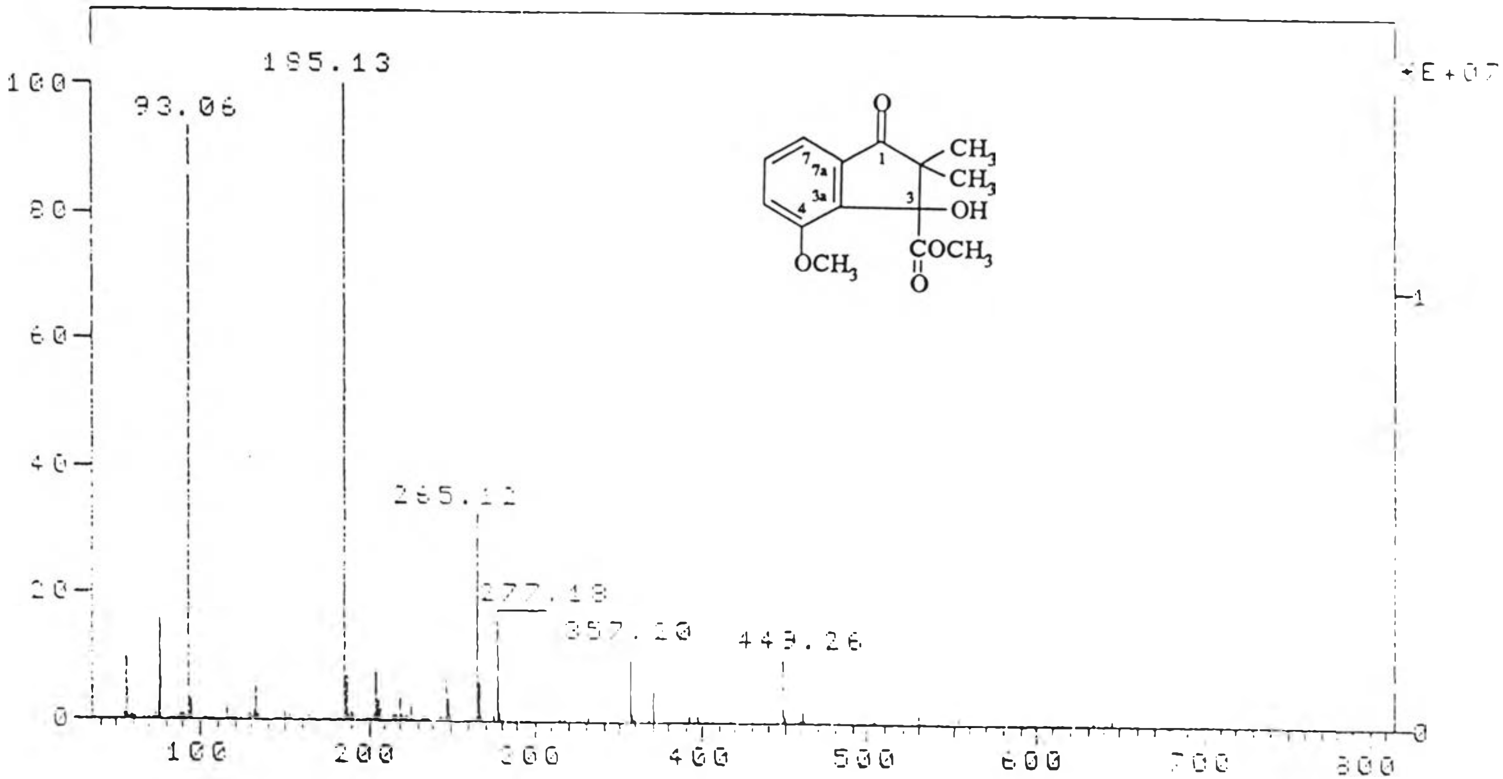


Figure 173 The HRFAB-MS spectrum of compound **111**

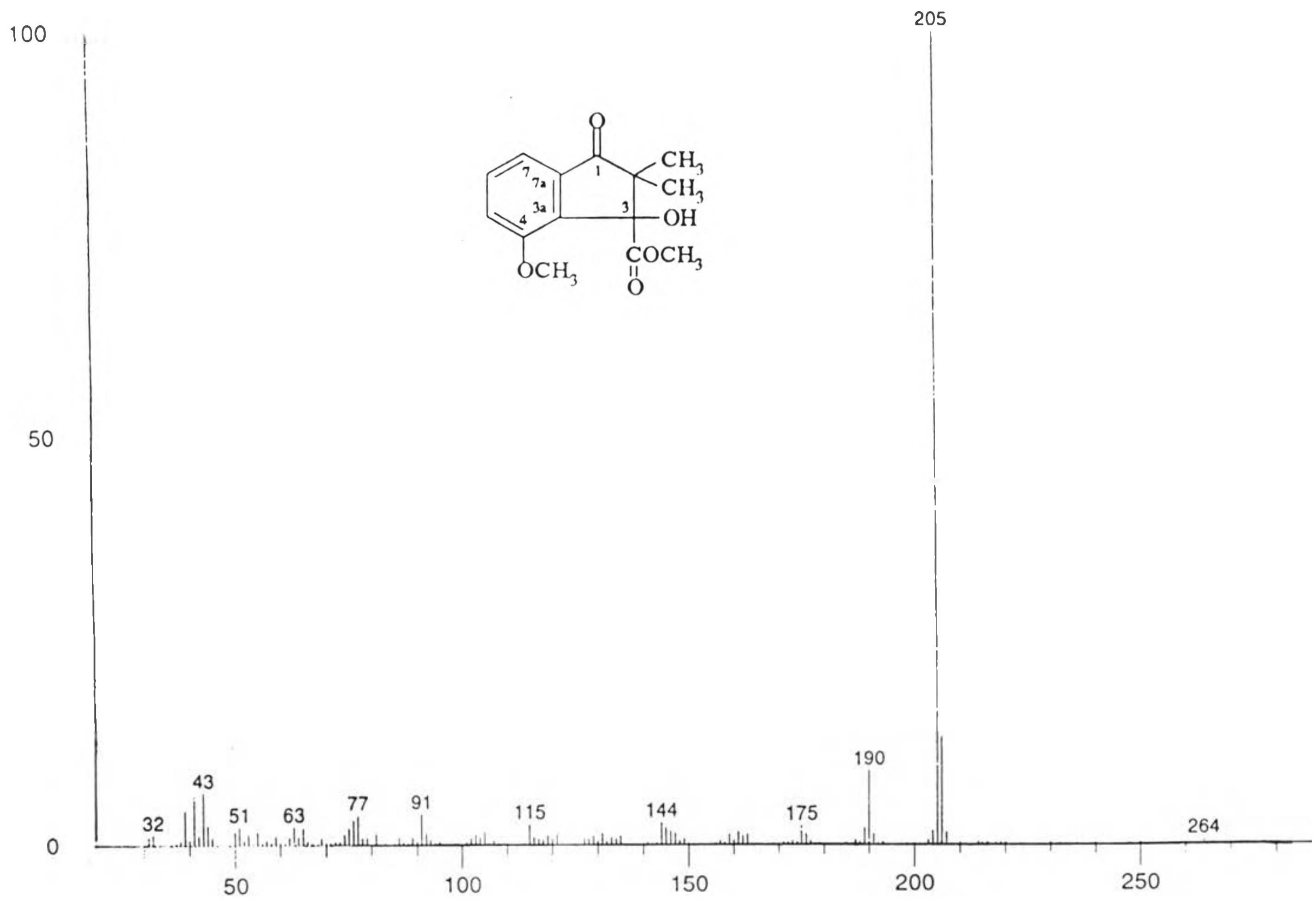


Figure 174 The EIMS spectrum of compound **111**

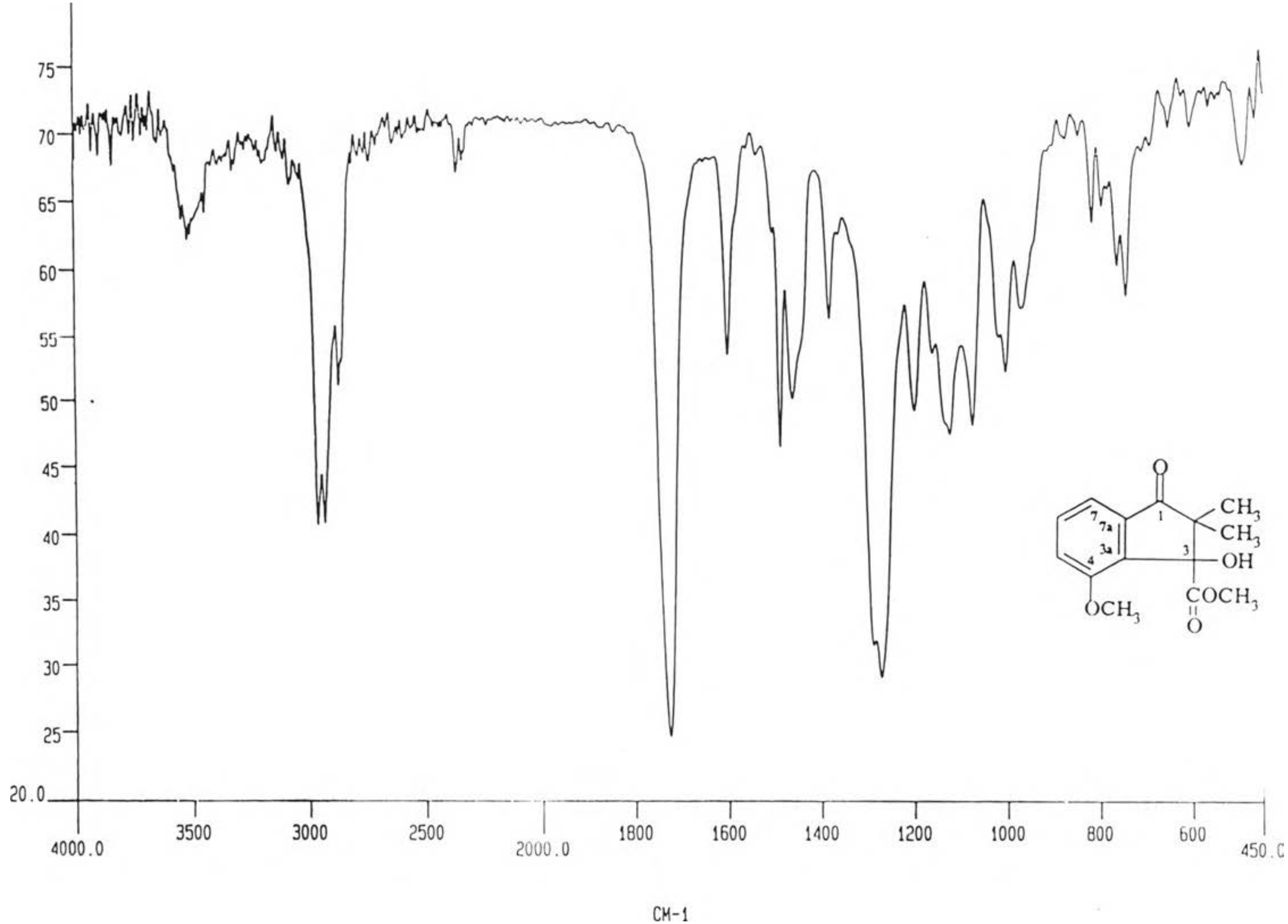


Figure 175 The IR spectrum of compound **111** (in $CDCl_3$)

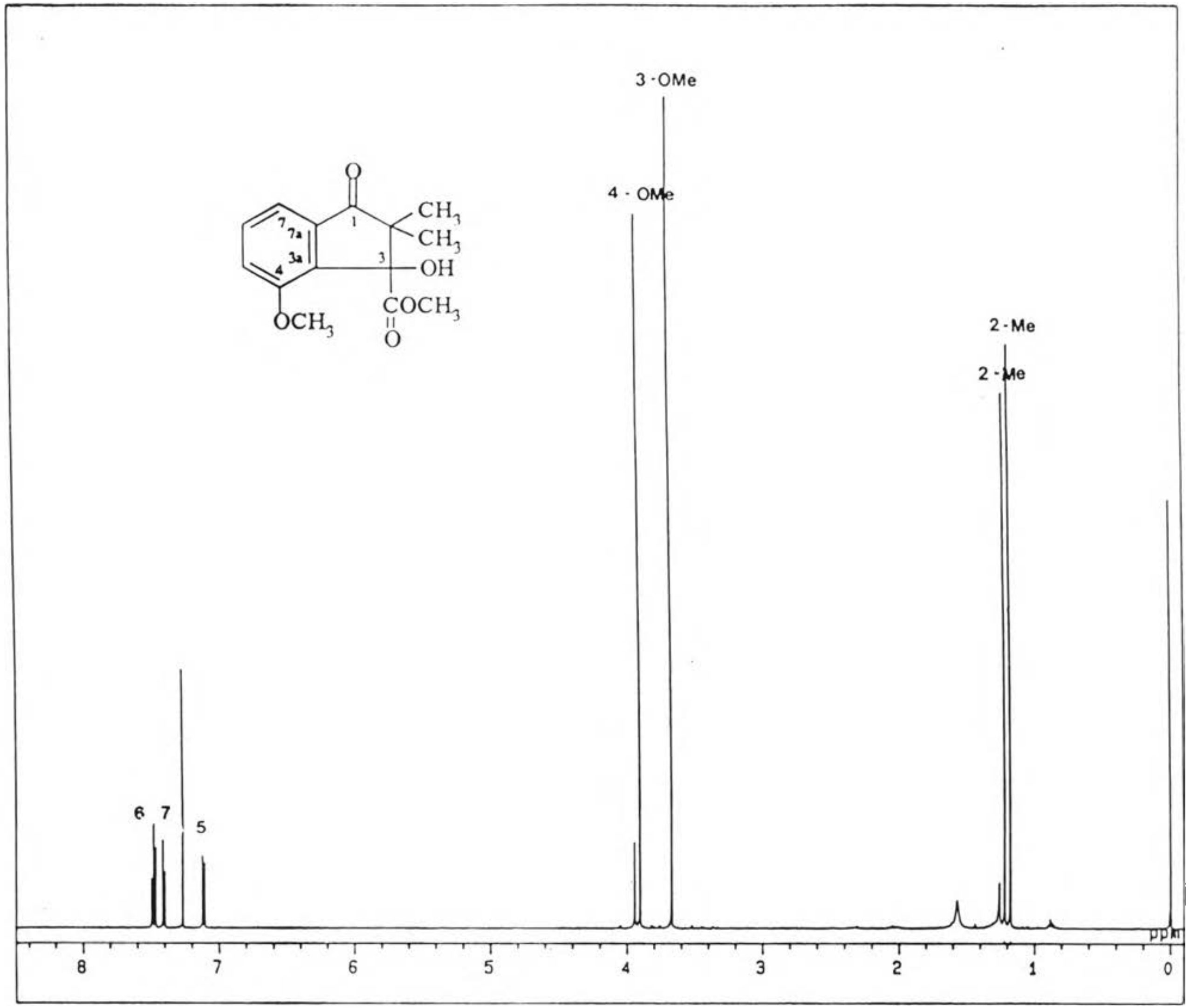


Figure 176 The [1]H NMR (500 MHz) spectrum of compound **111** (in $CDCl_3$)

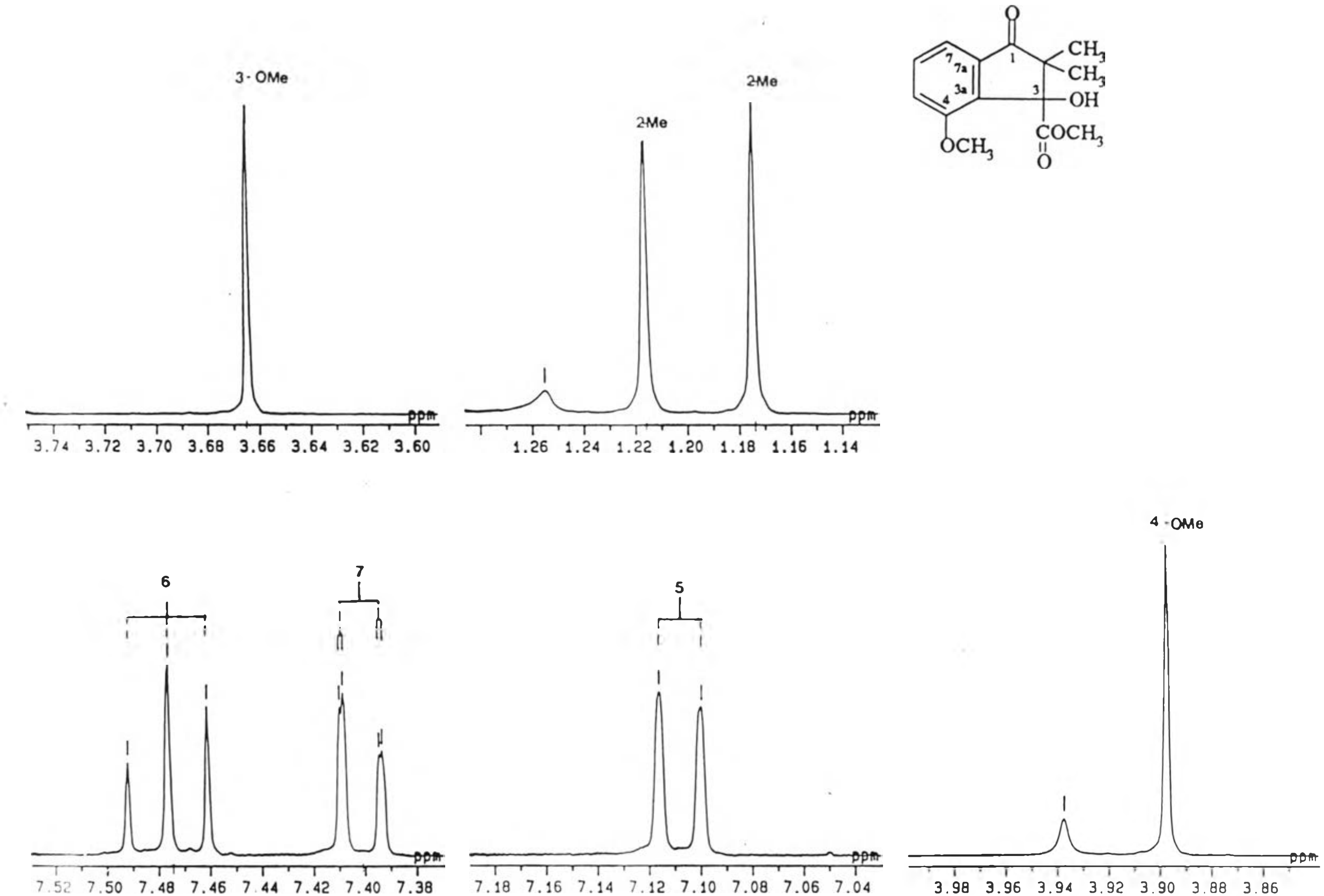


Figure 177 Expansion of the ^{1}H NMR (500 MHz) spectrum of compound **111** (in $CDCl_3$) : δ_H 1.14-7.52 ppm

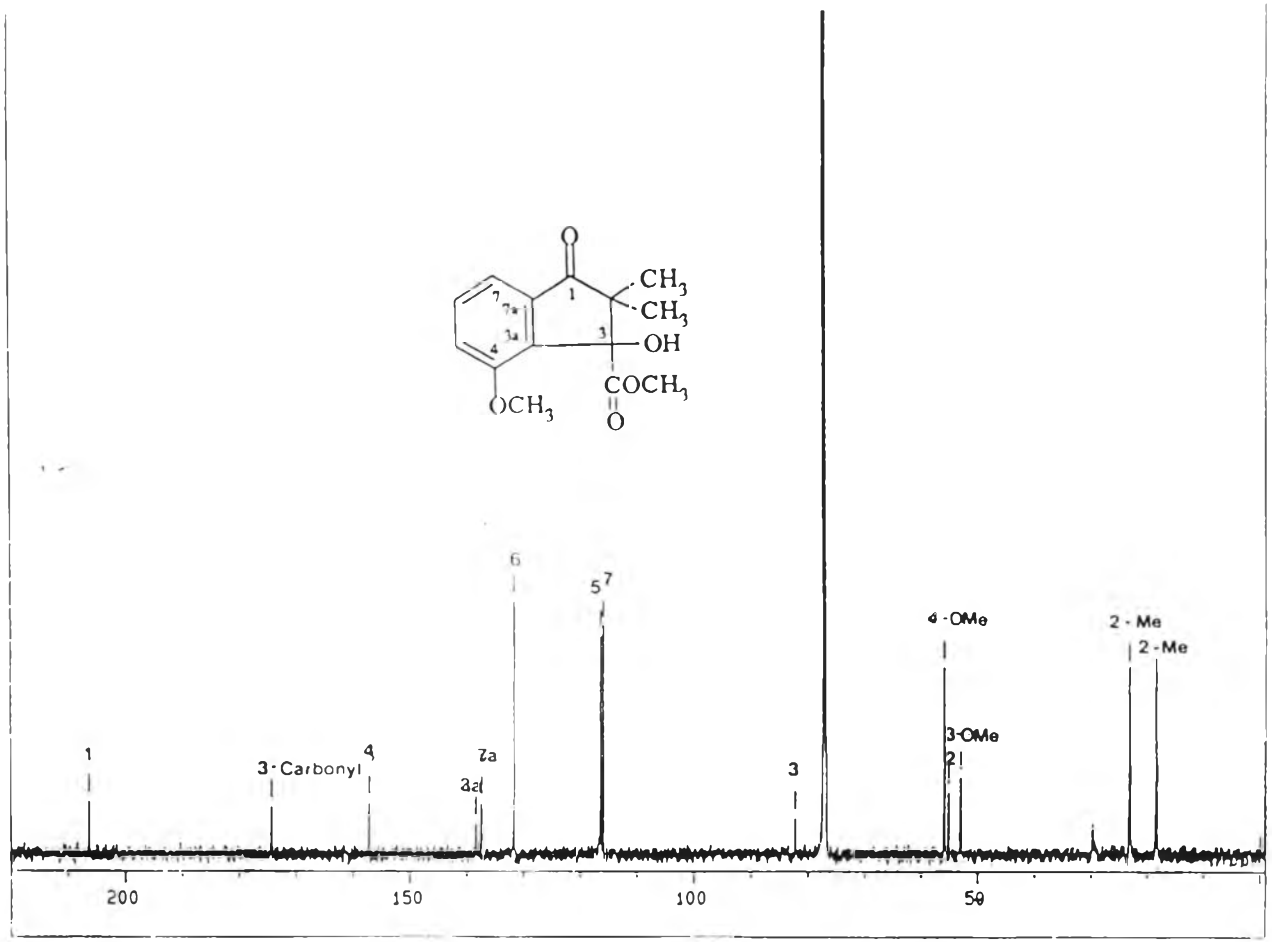
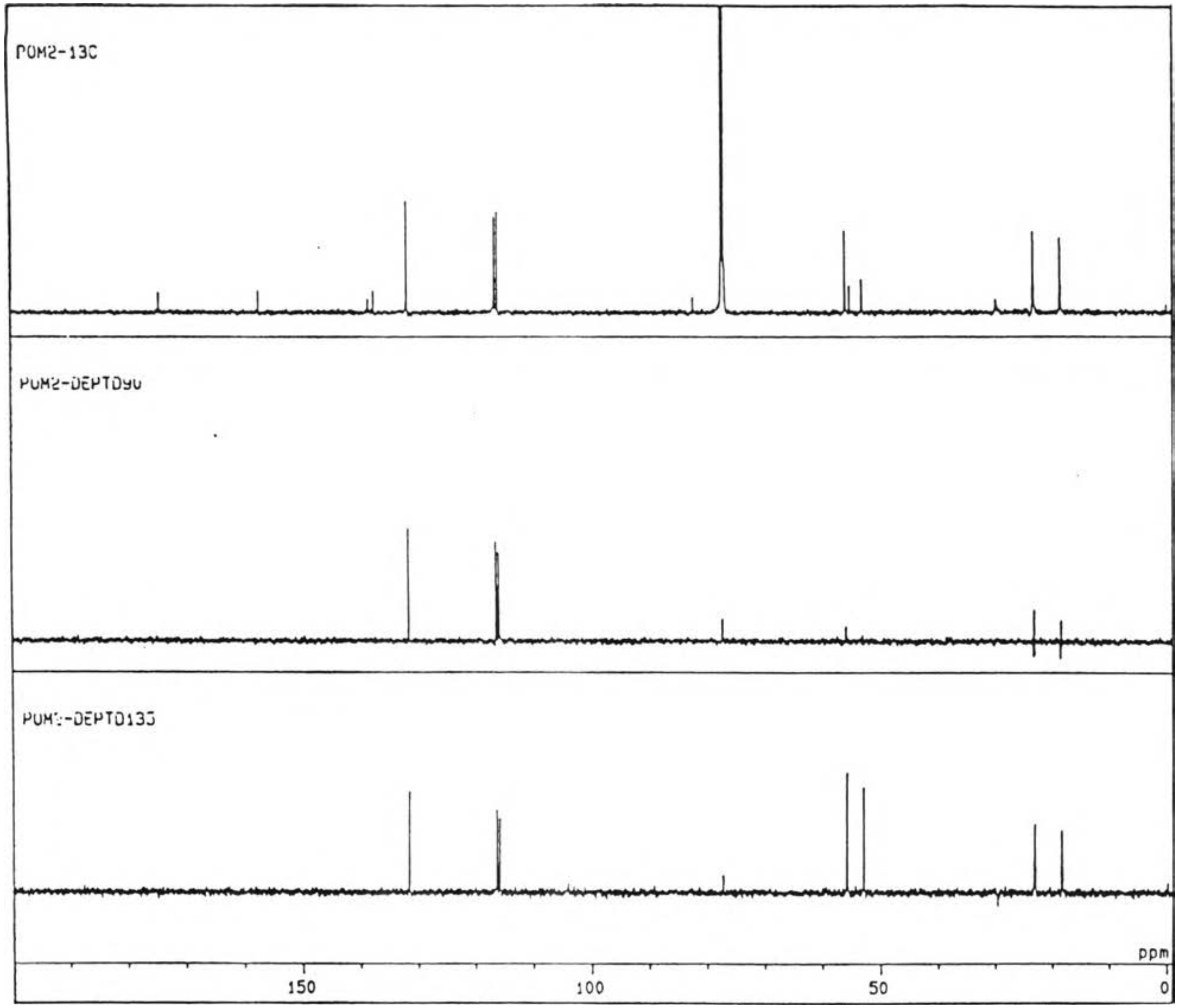


Figure 178 The ^{13}C NMR (125 MHz) spectrum of compound **111** (in $CDCl_3$)



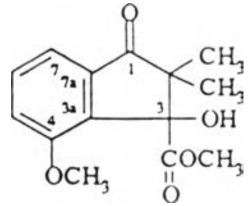


Figure 179 The DEPT (125 MHz) spectrum of compound **111** (in $CDCl_3$)

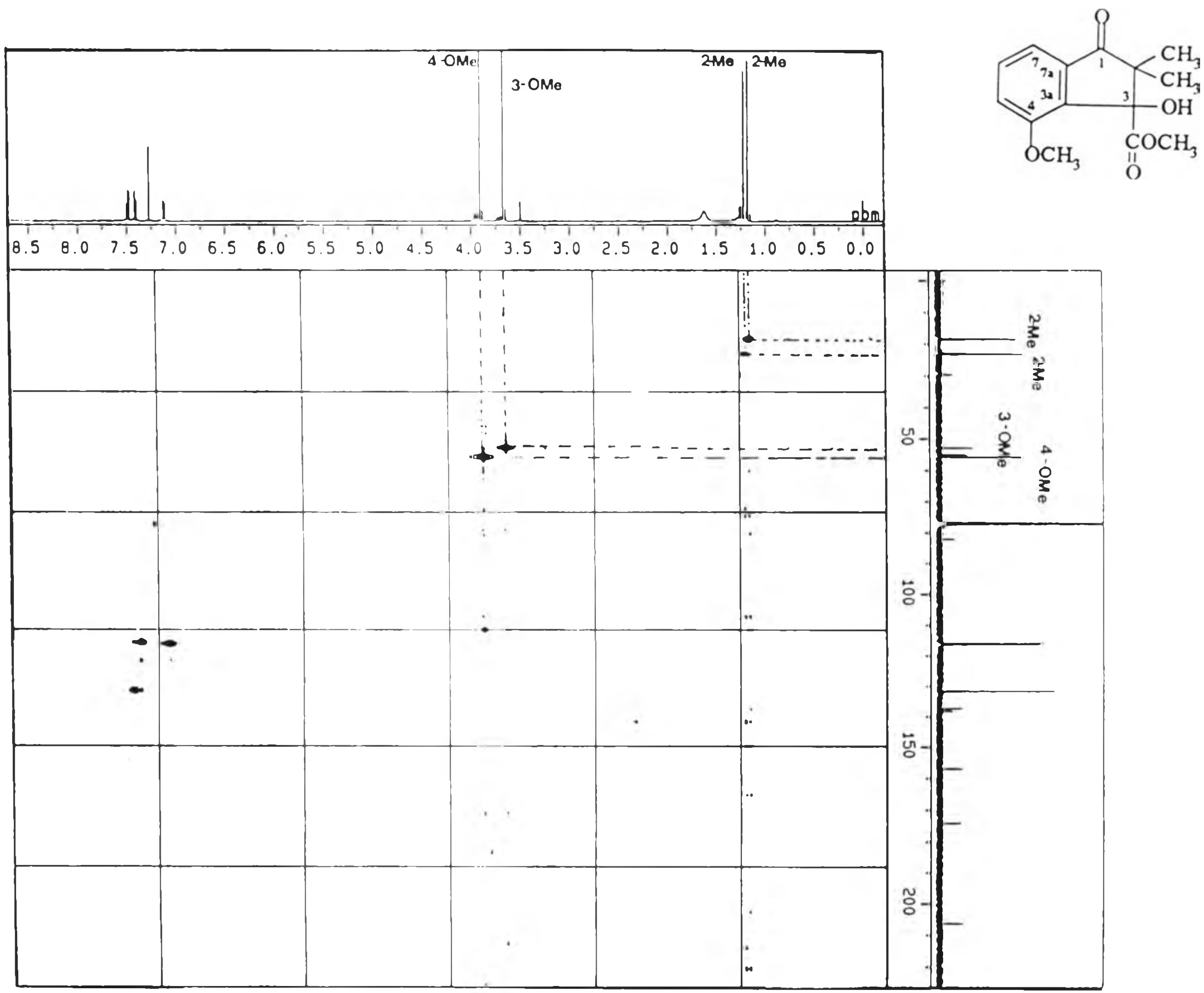


Figure 180 The HMQC spectrum of compound **111** (in $CDCl_3$)

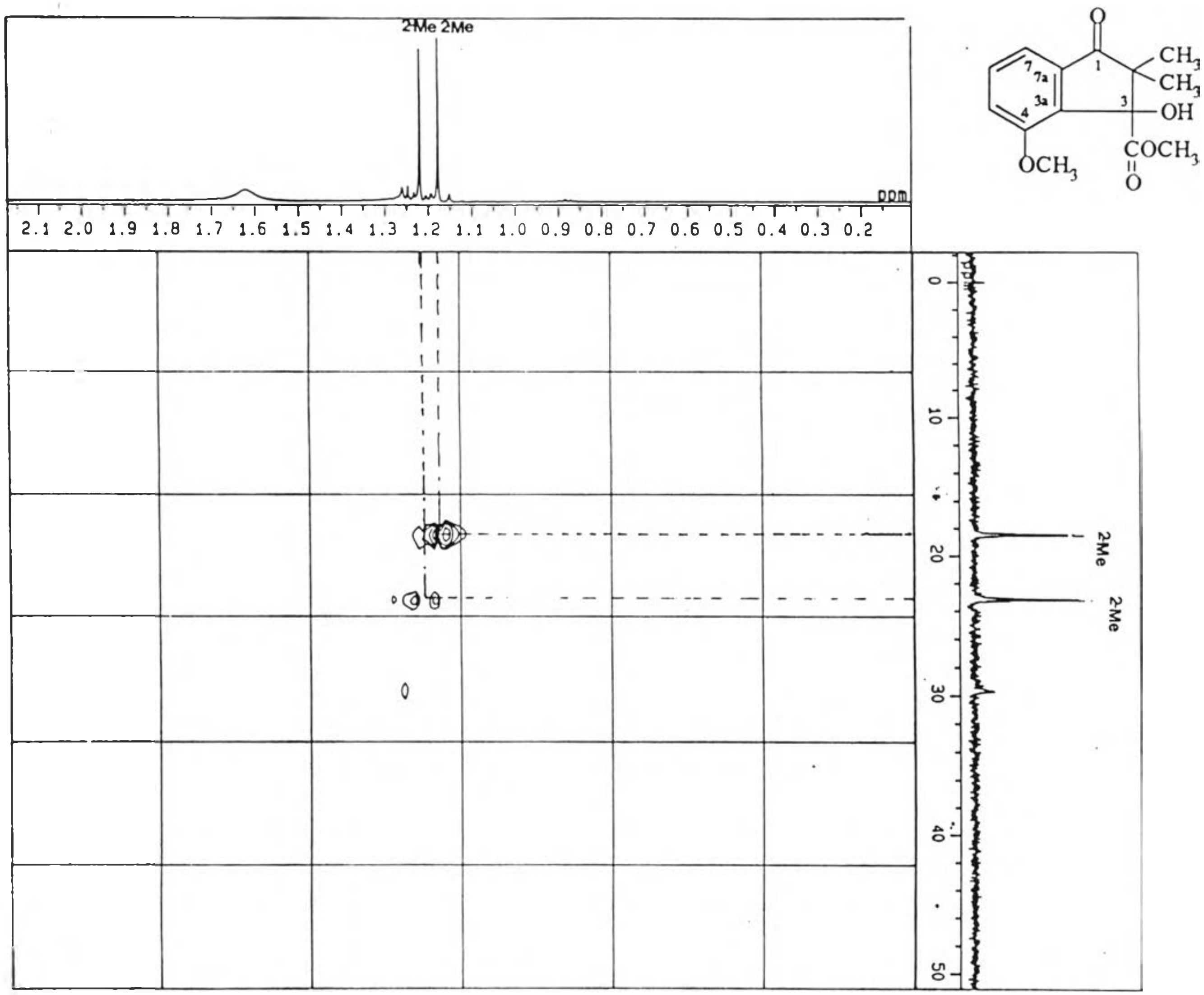


Figure 181 Expansion of the HMQC spectrum of compound **111** (in $CDCl_3$) :

δ_H 0.20-2.10 ; δ_C 0.00-50.00 ppm

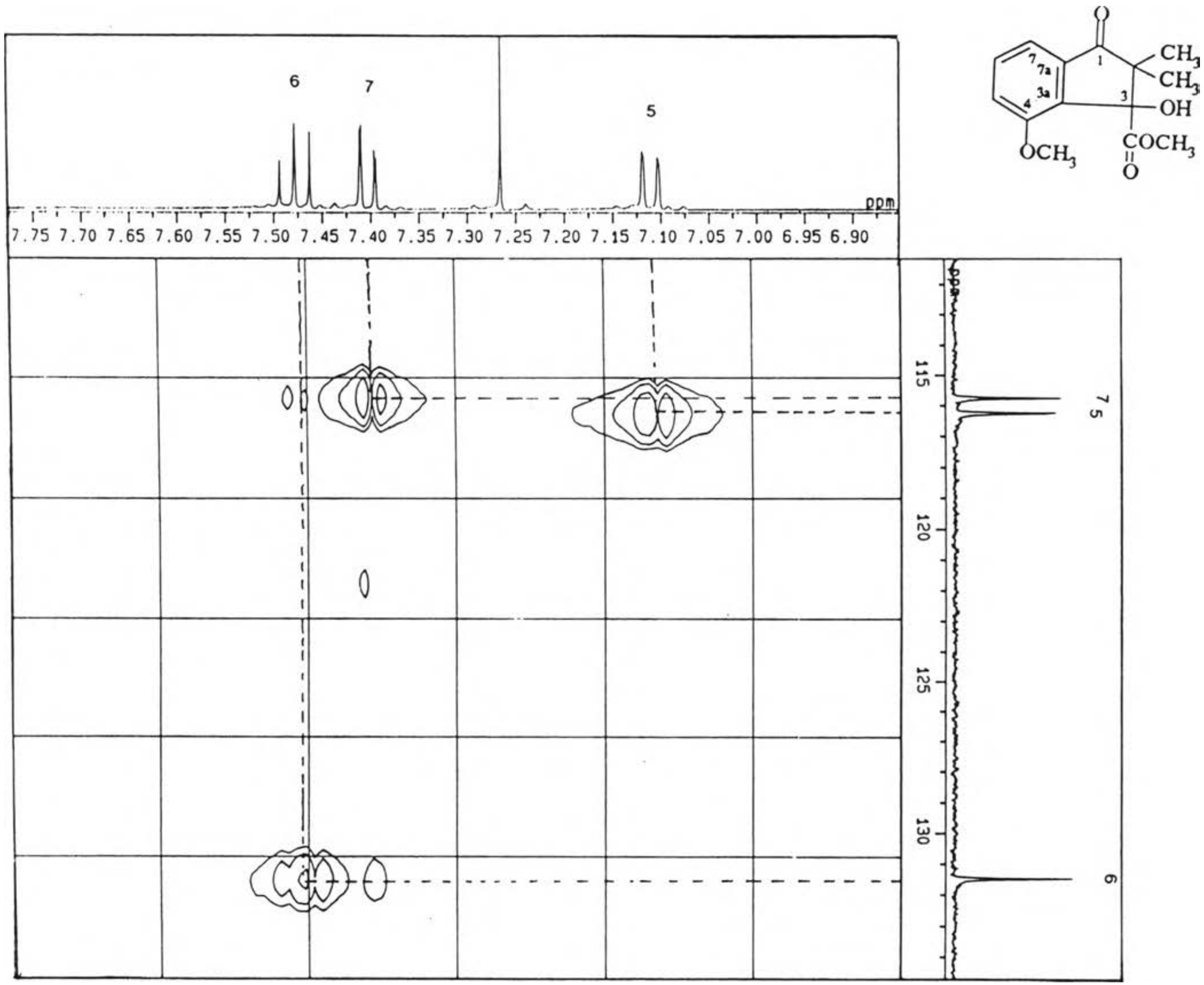


Figure 182 Expansion of the HMQC spectrum of compound **111** (in $CDCl_3$) :

δ_H 6.90-7.75 ; δ_C 112.00-134.00 ppm

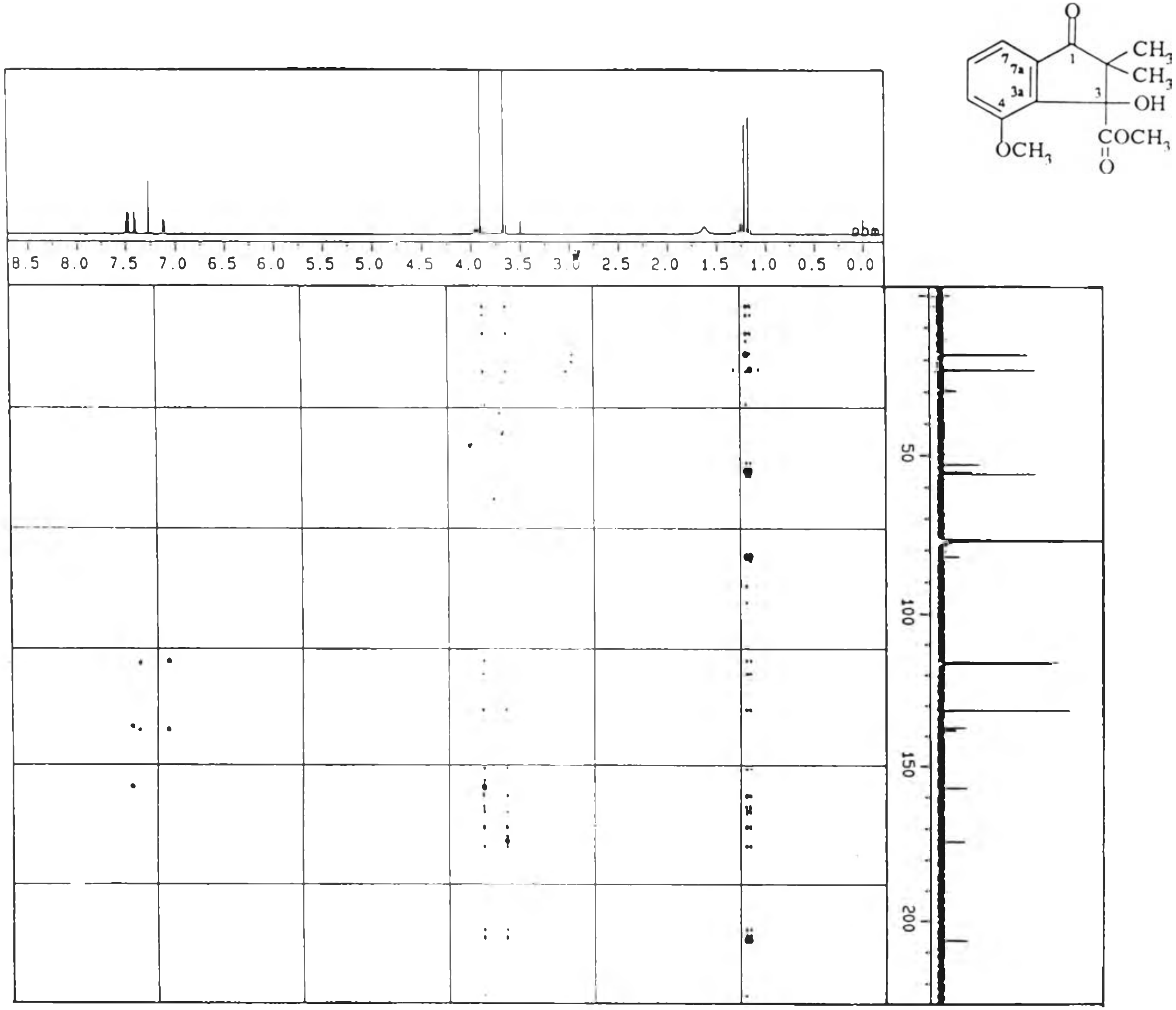


Figure 183 The HMBC spectrum of compound **111** (in $CDCl_3$)

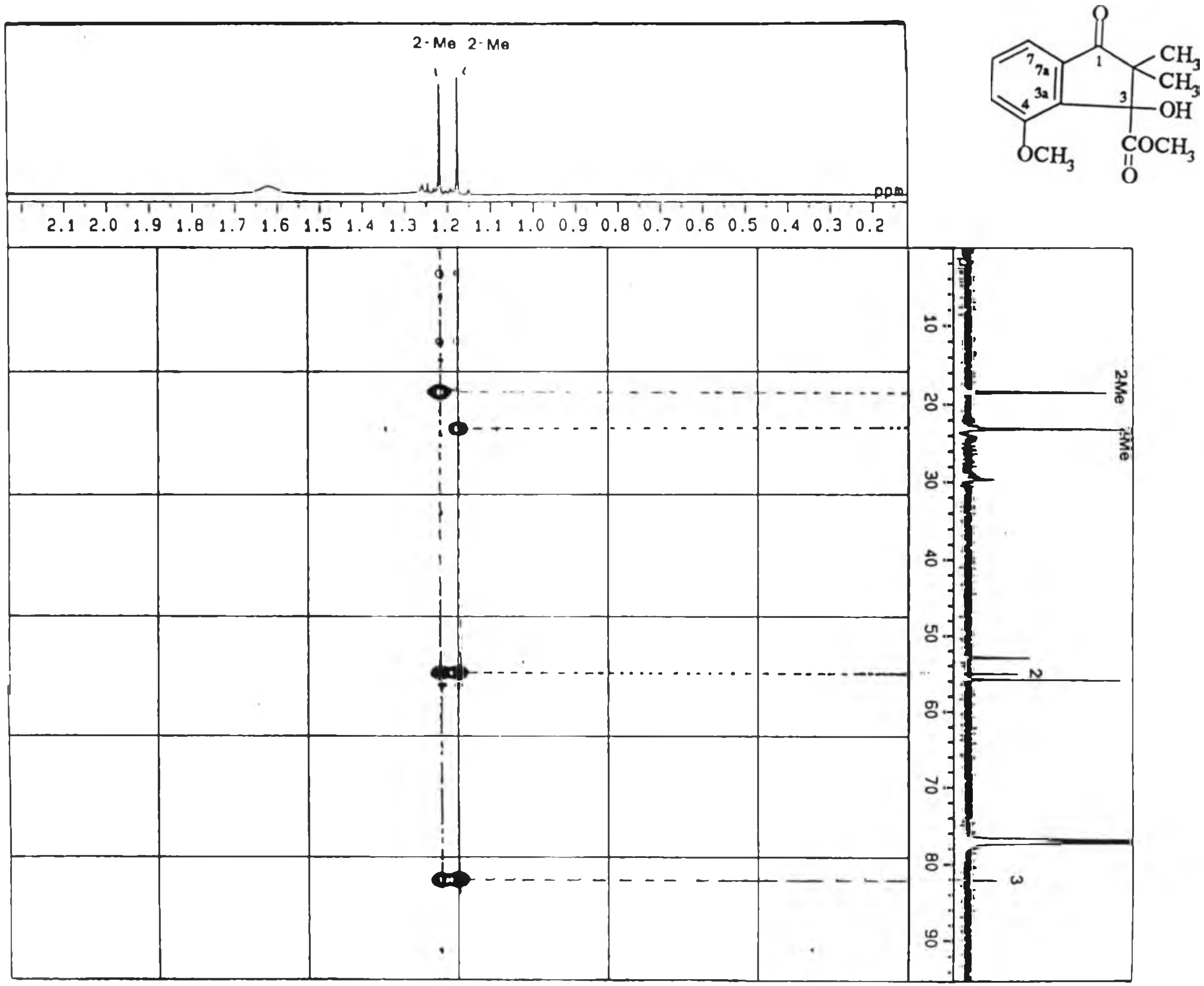


Figure 184 Expansion of the HMBC spectrum of compound **111** (in $CDCl_3$) :

δ_H 0.20-2.10 ; δ_C 10.00-90.00 ppm

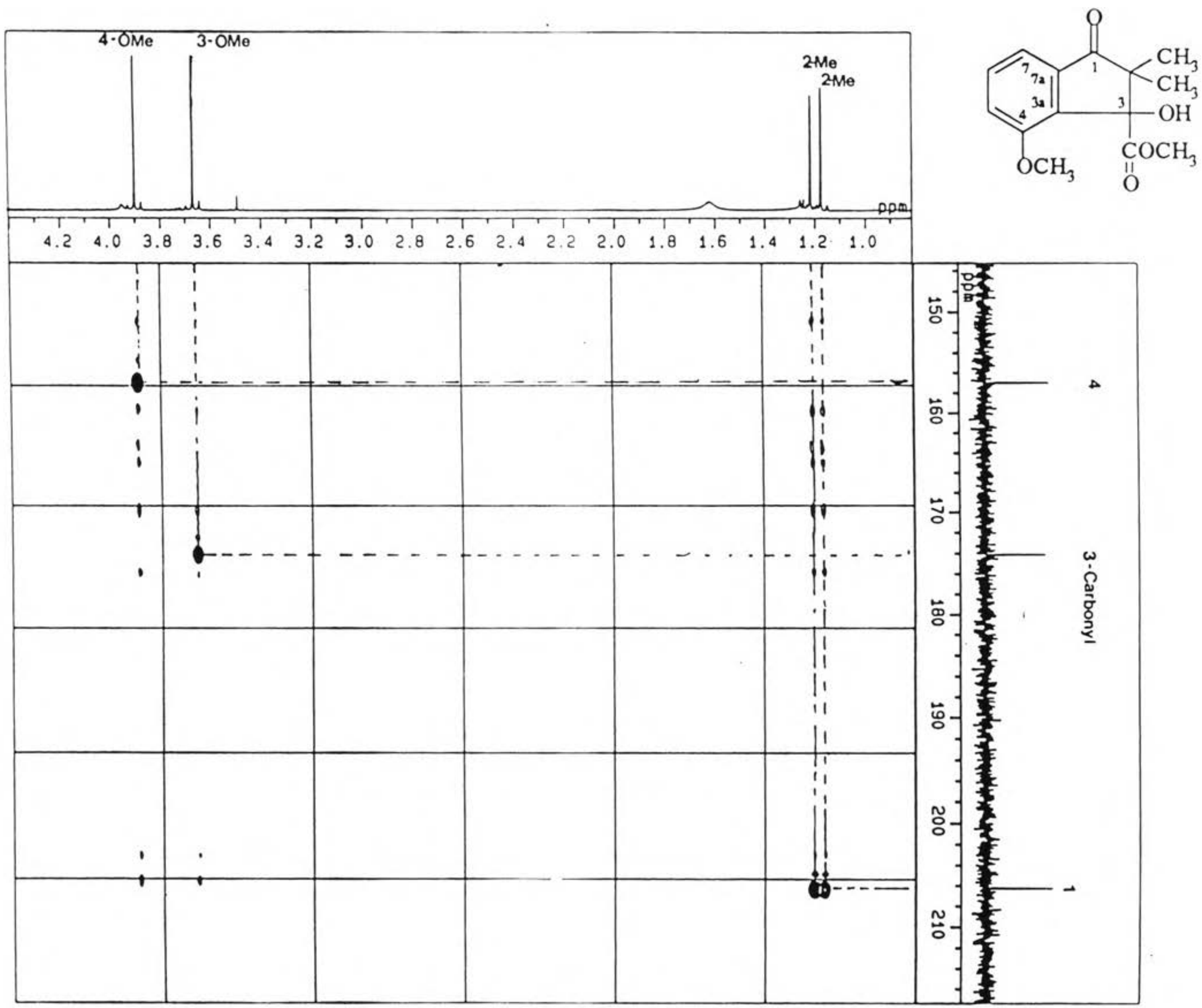


Figure 185 Expansion of the HMBC spectrum of compound **111** (in $CDCl_3$) :

δ_H 1.00-4.20 ; δ_C 150.00-210.00 ppm

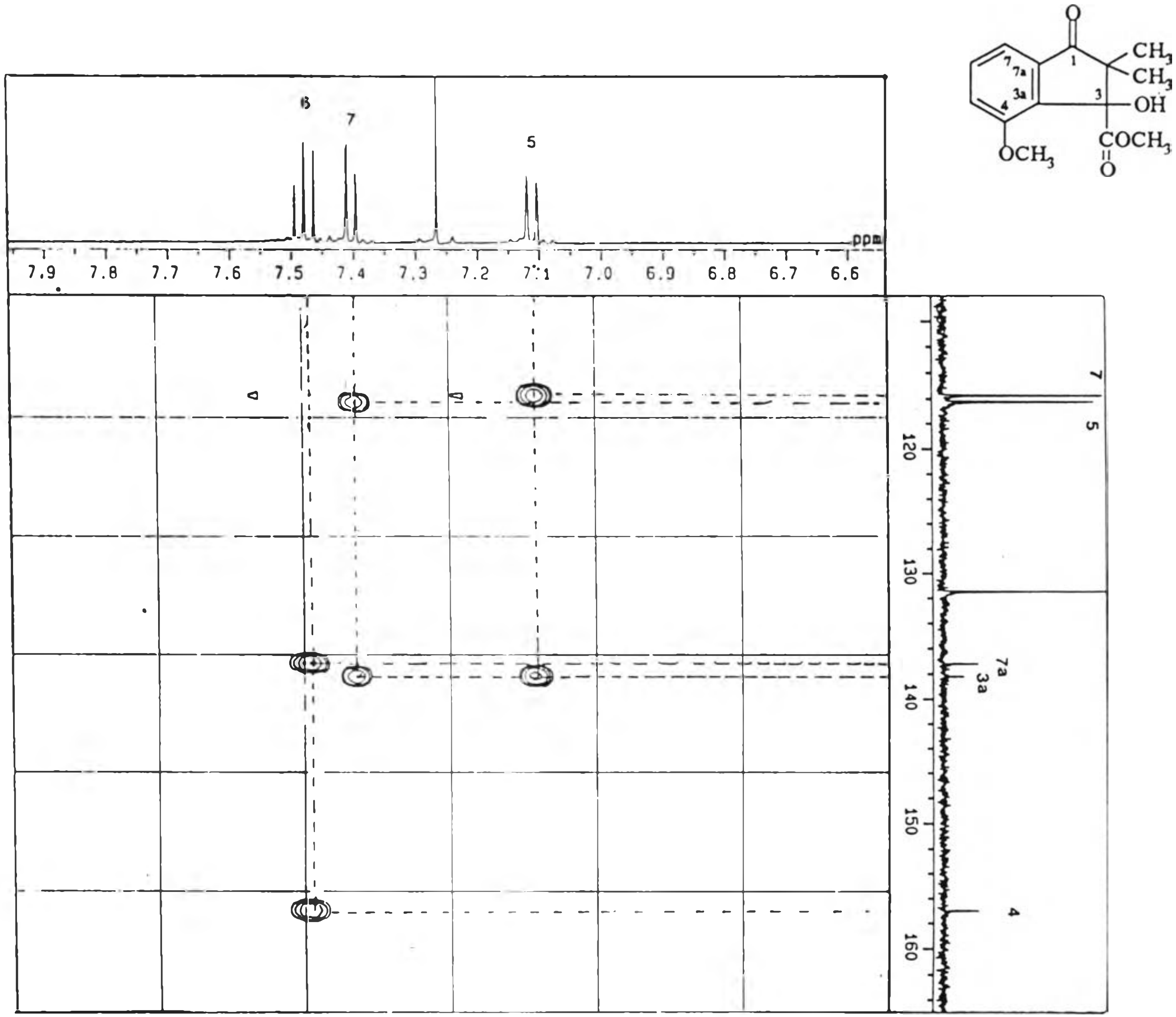


Figure 186 Expansion of the HMBC spectrum of compound **111** (in $CDCl_3$) :

δ_H 6.60-7.90 ; δ_C 110.00-160.00 ppm

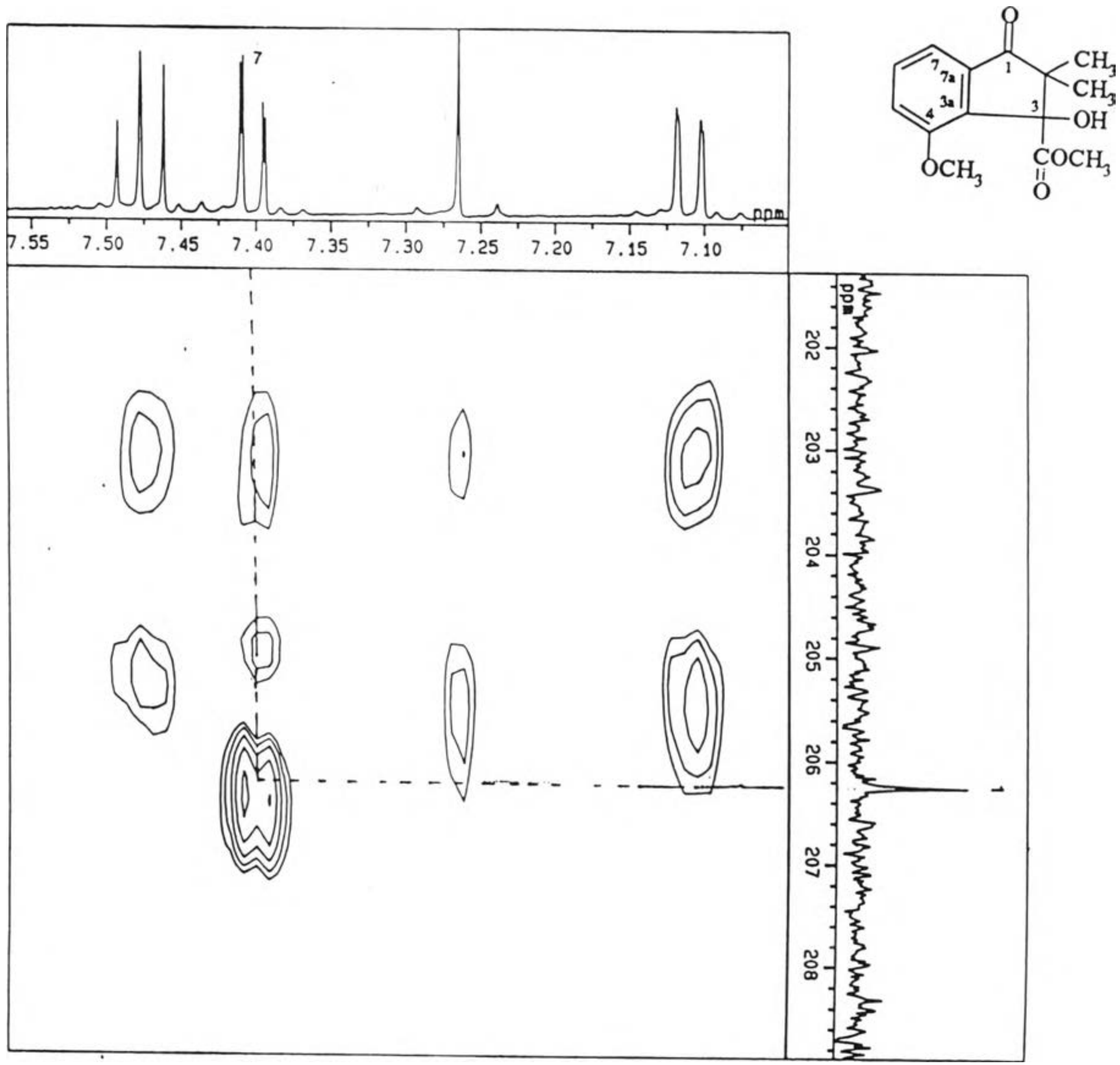


Figure 187 Expansion of the HMBC spectrum of compound **111** (in $CDCl_3$) : δ_H 7.10-7.55 ; δ_C 202.00-208.00 ppm

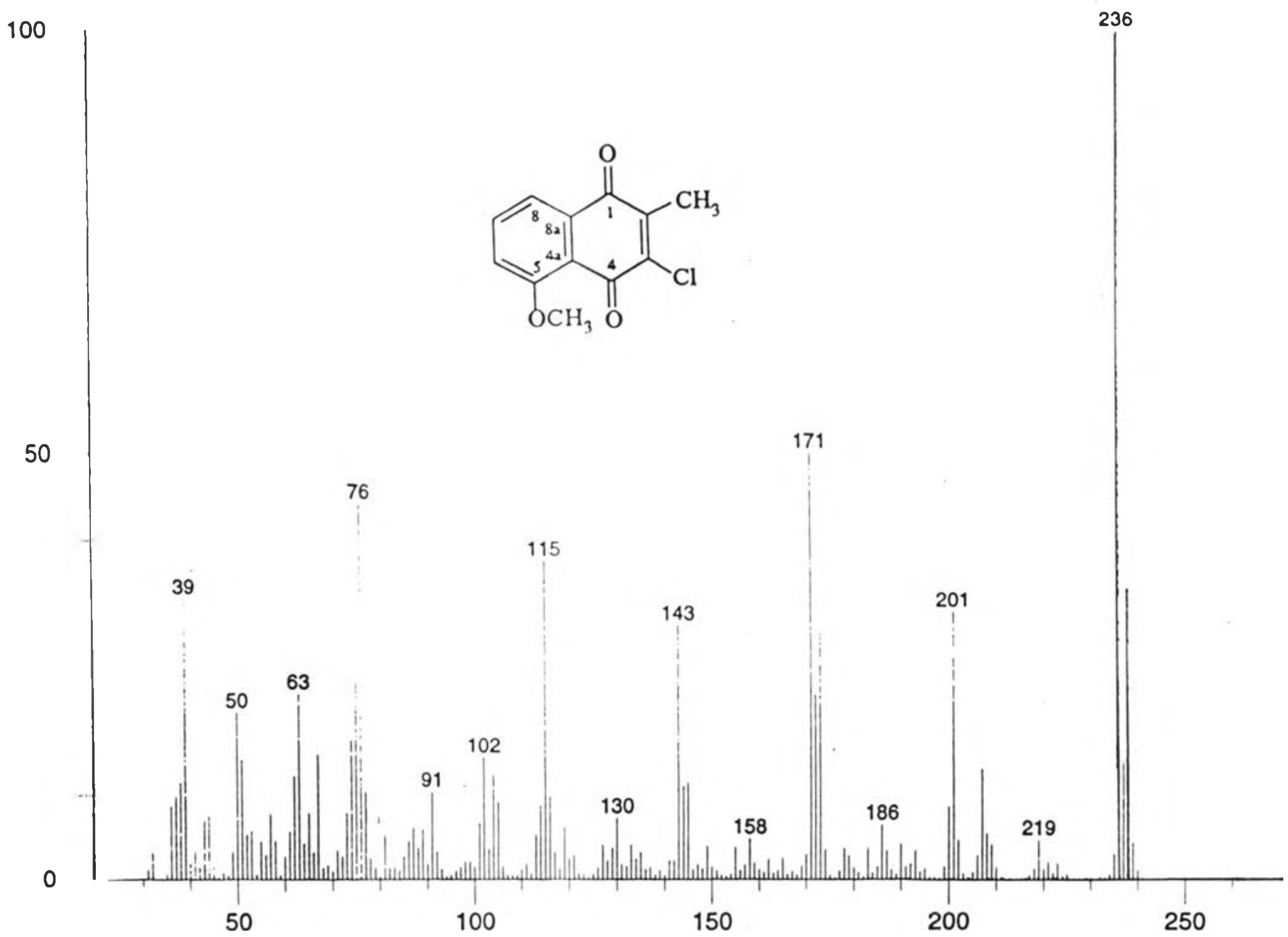


Figure 189 The EI mass spectrum of compound **112**

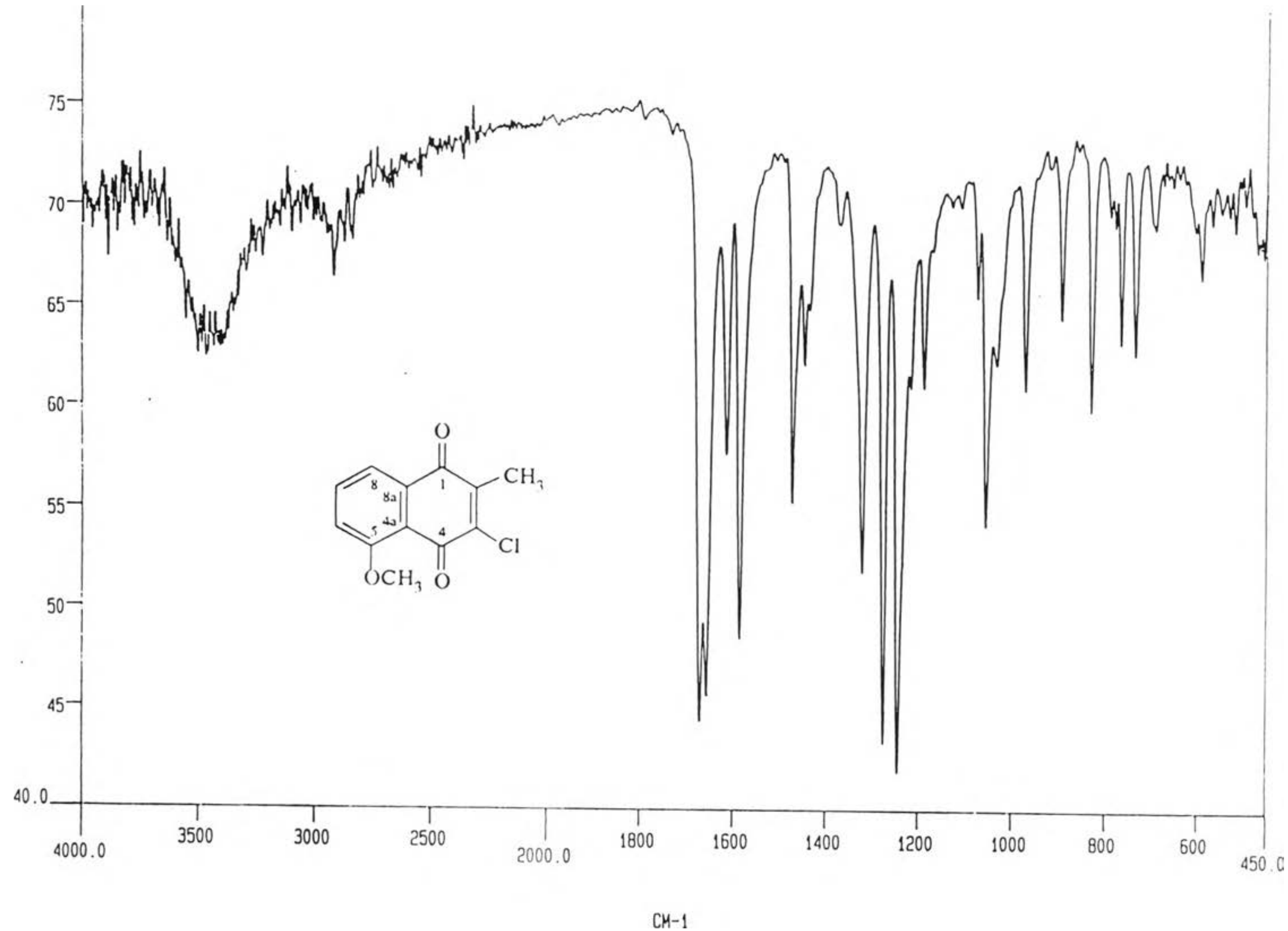


Figure 190 The IR spectrum of compound **112** (in KBr disc)

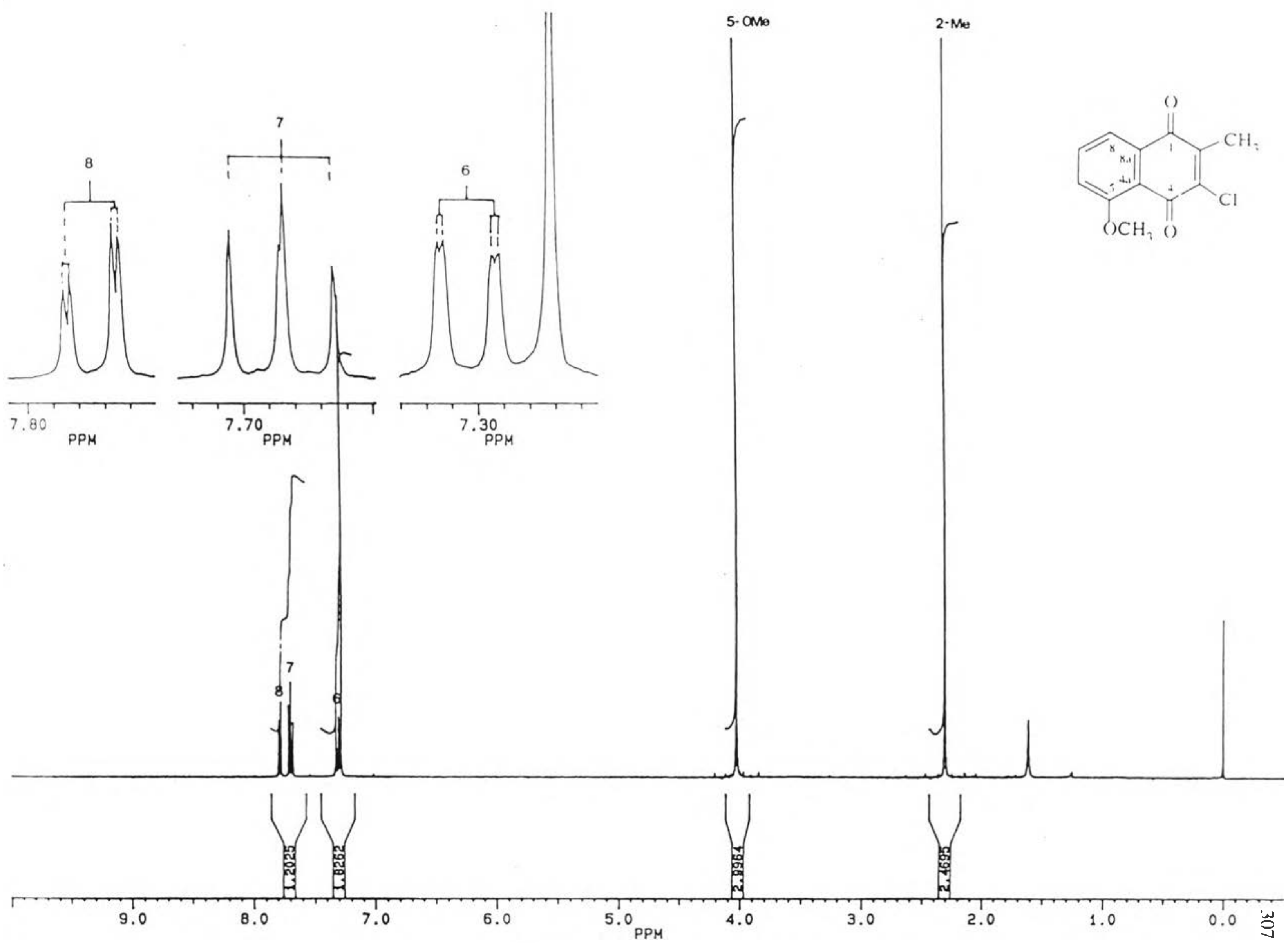


Figure 191 The ^{1}H NMR (400 MHz) of compound **112** (in $CDCl_3$)

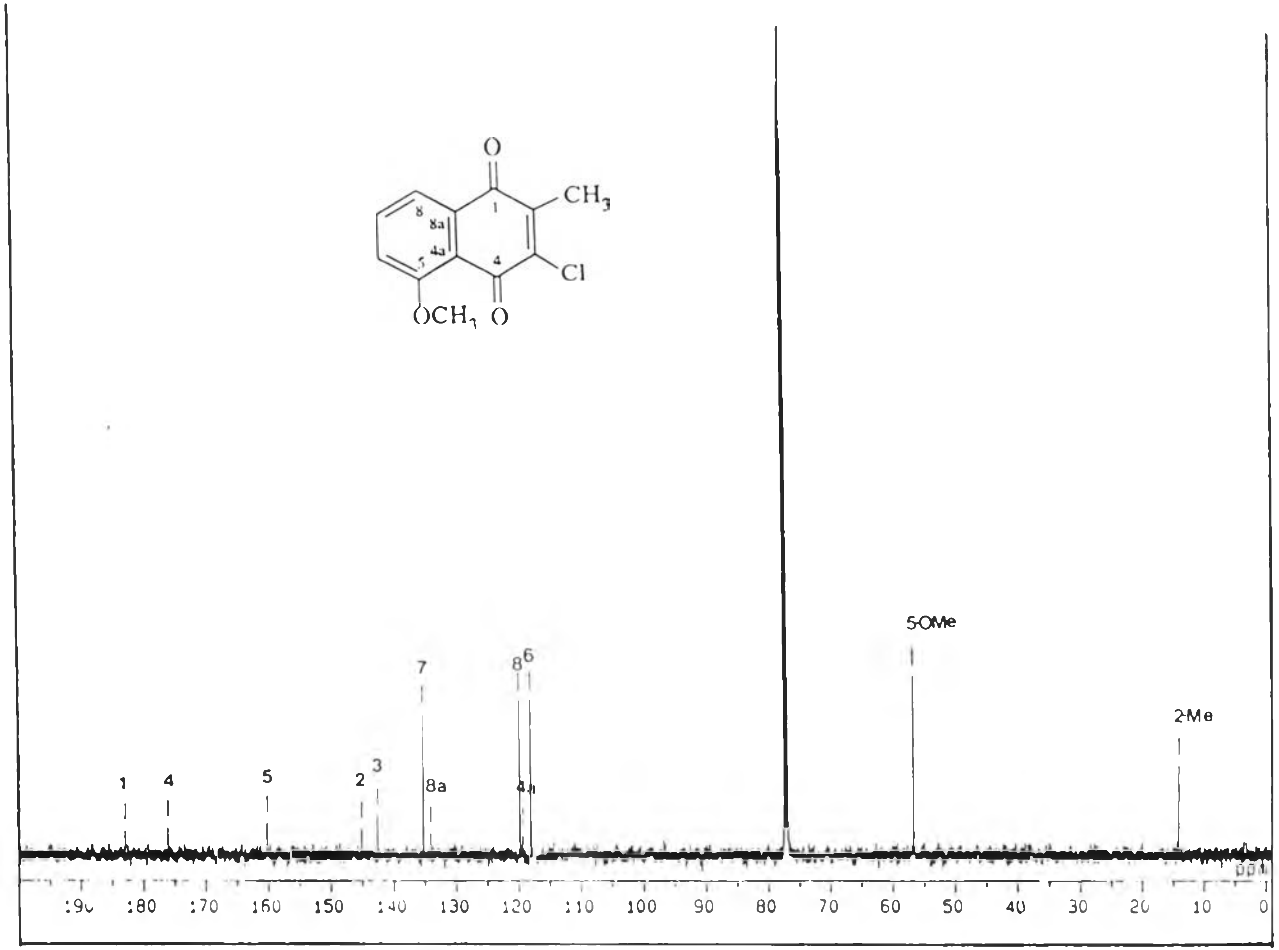


Figure 192 The ^{13}C NMR (125 MHz) of compound **112** (in $CDCl_3$)

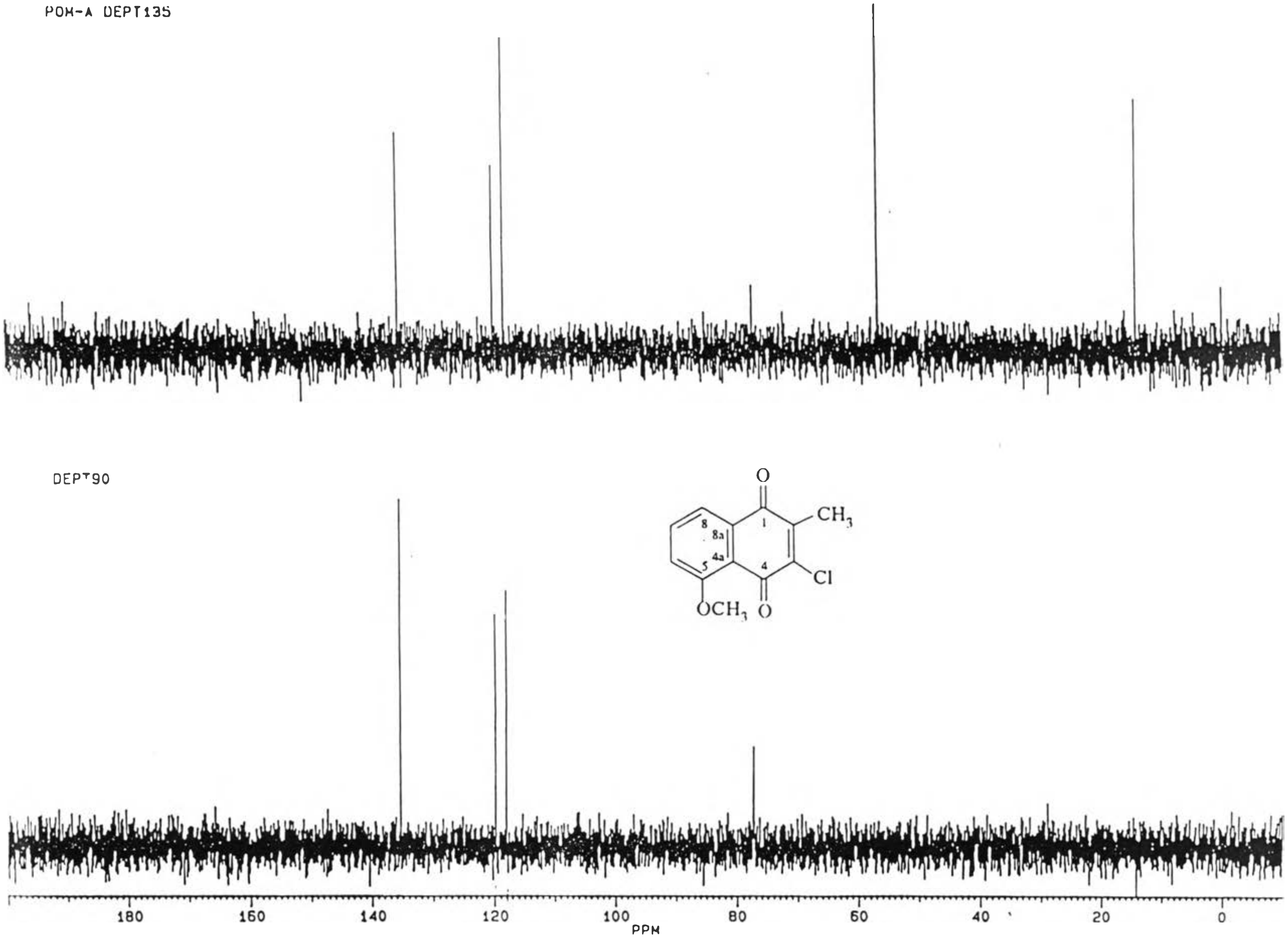


Figure 193 The DEPT (100 MHz) of compound **112** (in $CDCl_3$)

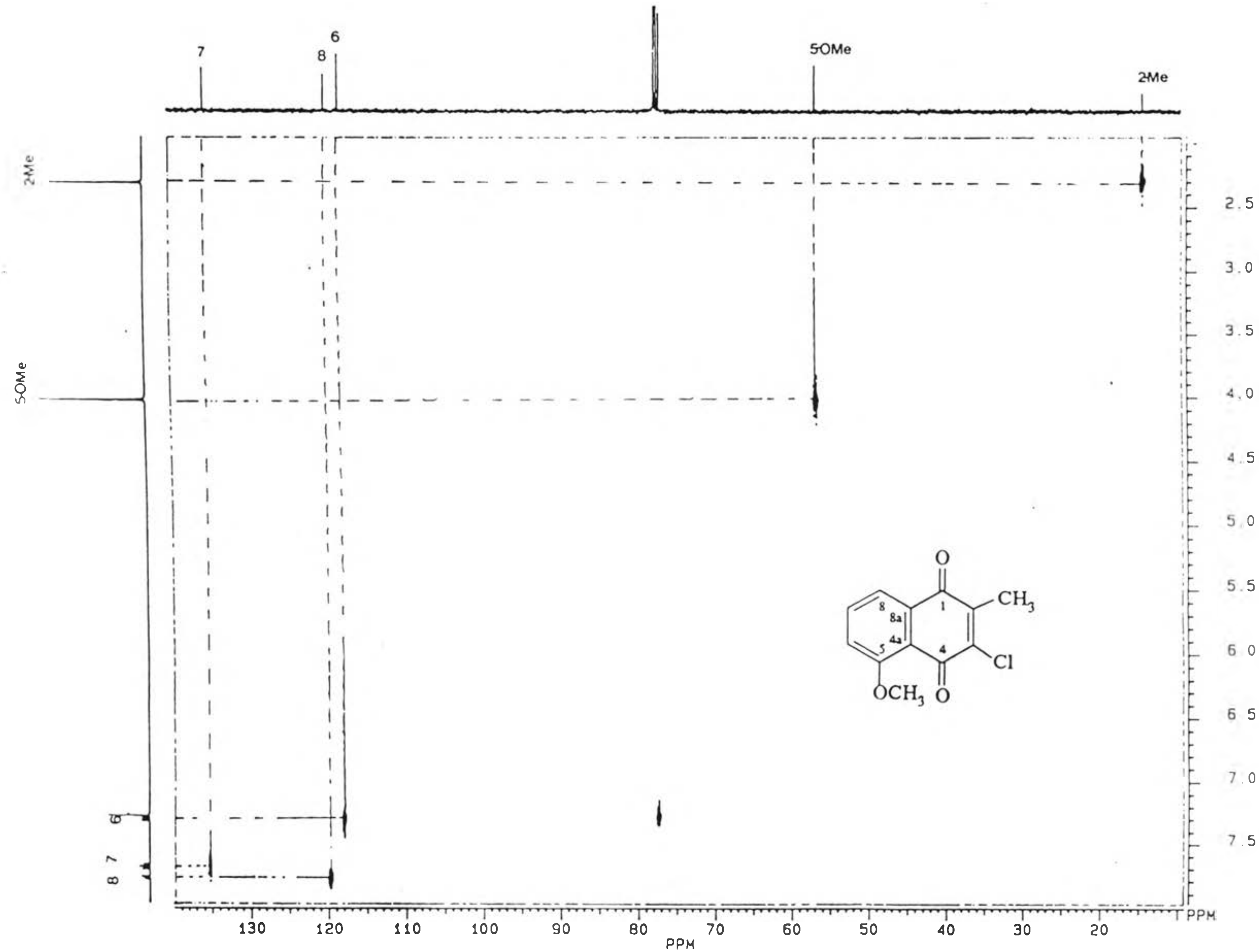


Figure 194 The HETCOR spectrum of compound **112** (in $CDCl_3$)

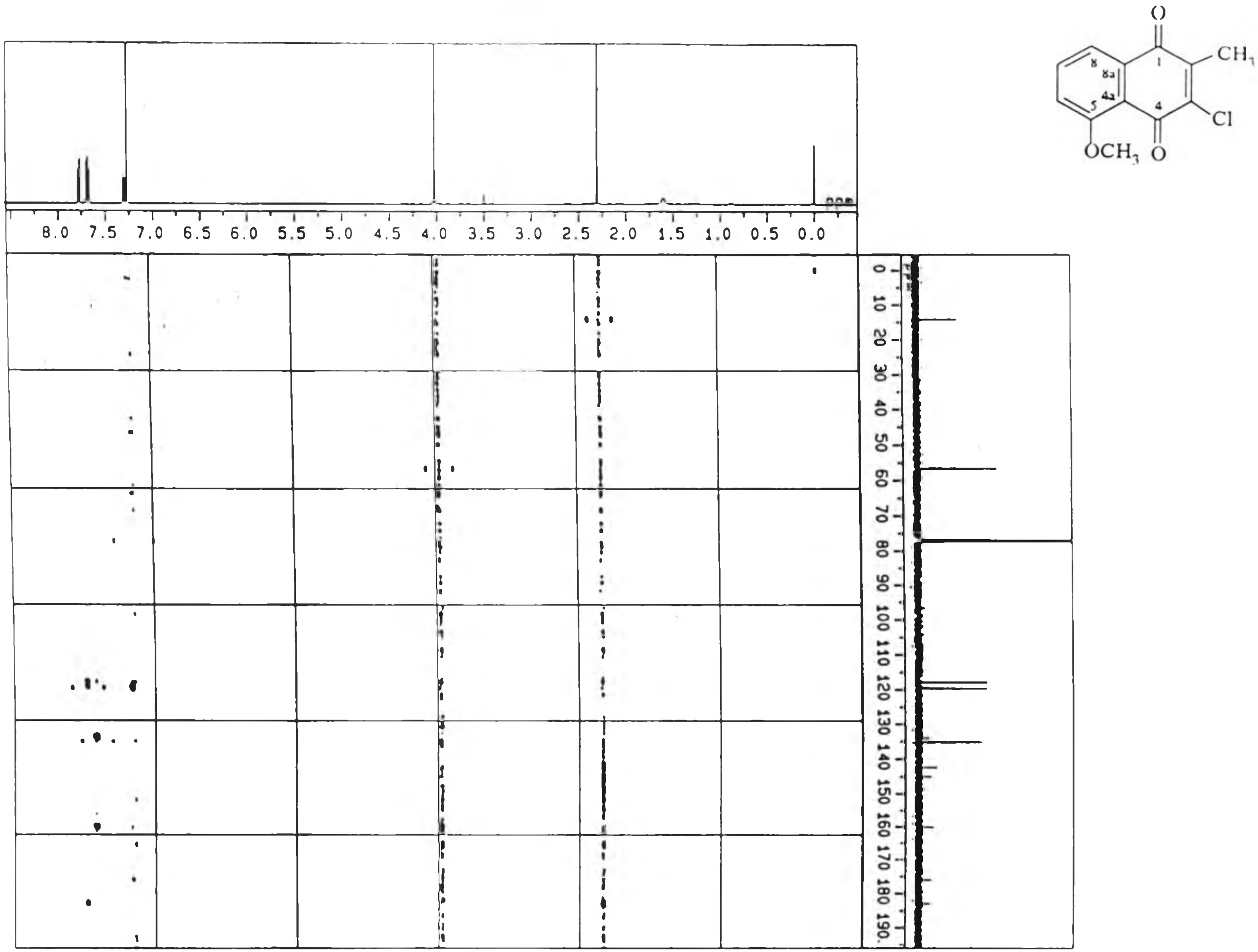


Figure 195 The HMBC spectrum of compound **112** (in $CDCl_3$)

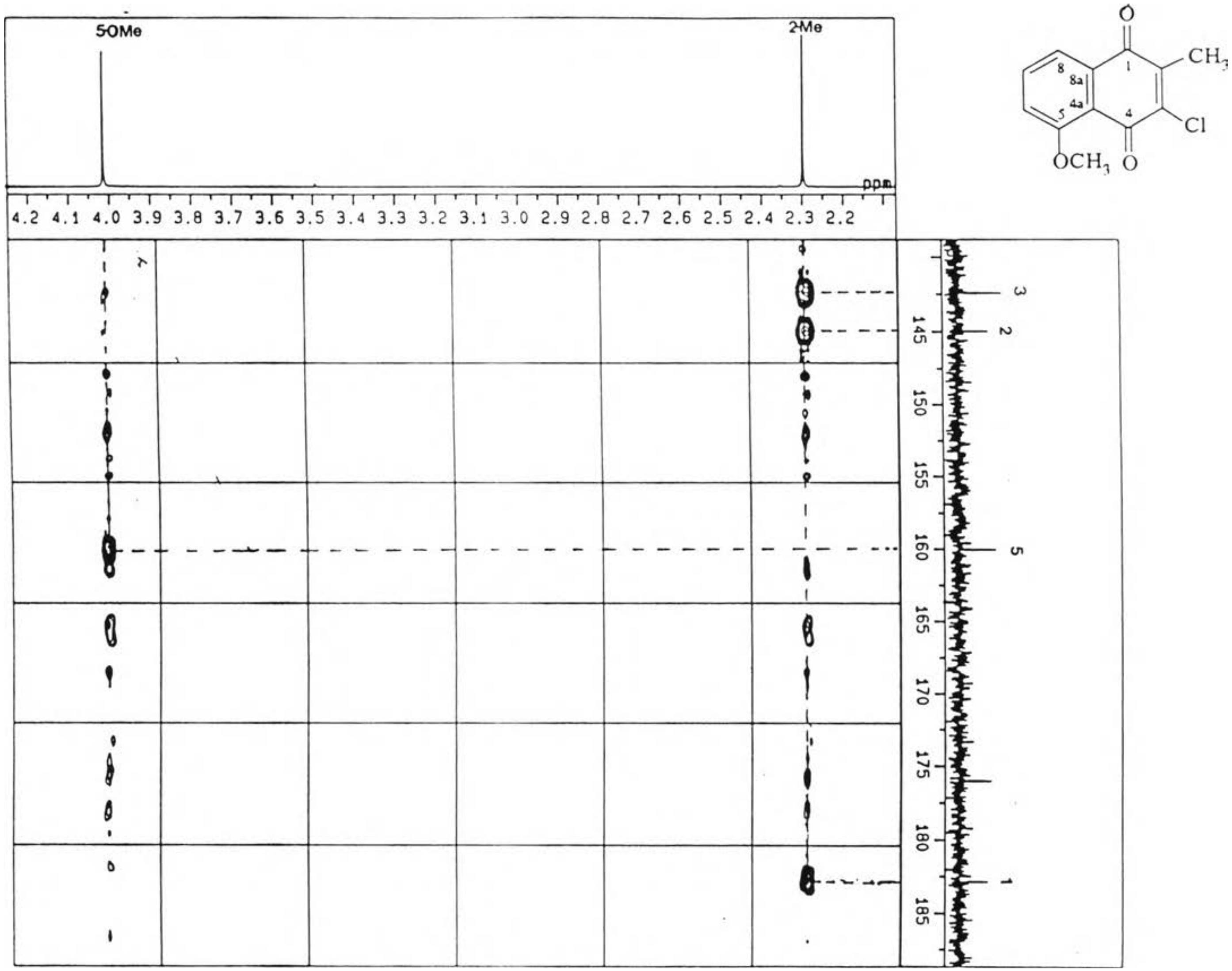


Figure 196 Expansion of the HMBC spectrum of compound **112** (in $CDCl_3$) :

δ_H 2.20-4.20 ; δ_C 140.00-185.00 ppm

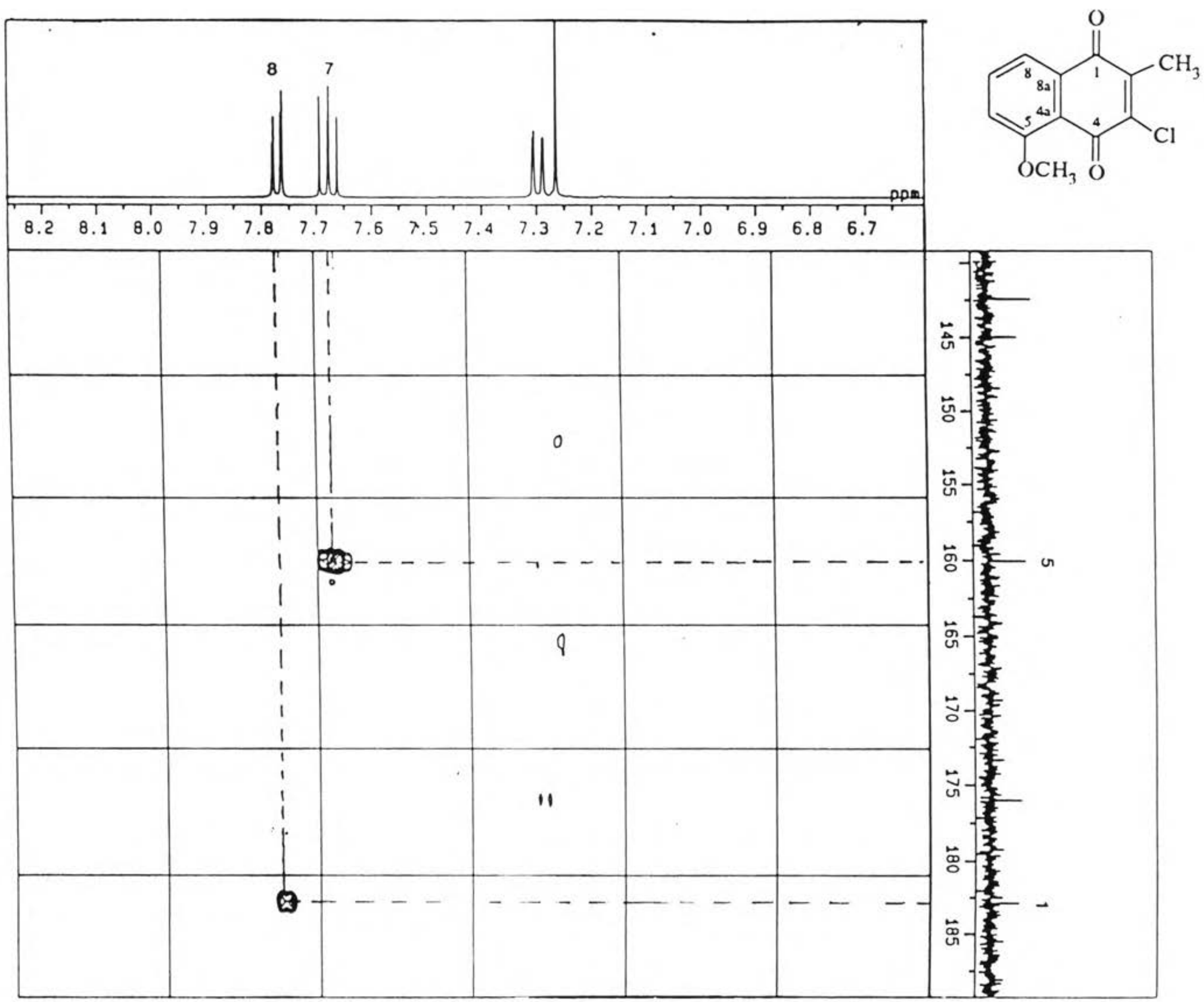
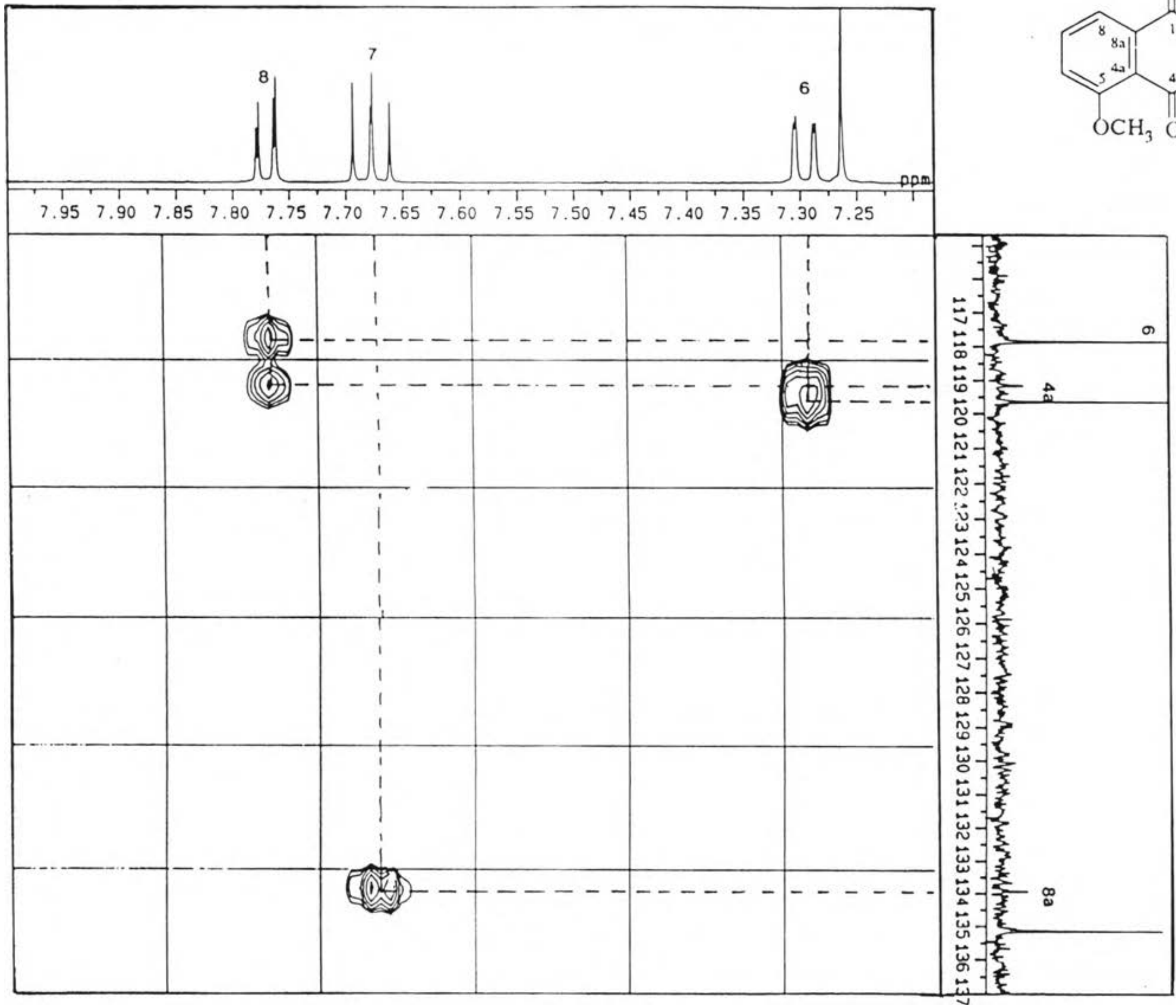


Figure 197 Expansion of the HMBC spectrum of compound **112** (in $CDCl_3$) :

δ_H 6.70-8.20 ; δ_C 140.00-185.00 ppm



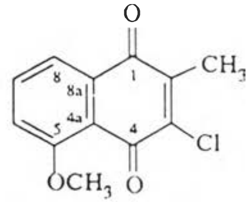


Figure 198 Expansion of the HMBC spectrum of compound **112** (in $CDCl_3$) :

δ_H 7.25-7.95 ; δ_C 117.00-135.00 ppm

Vita

Miss Rawiwun Kaewamatawong was born on May, 20, 1970 in Ubon Ratchathani, Thailand. She recieved her Bachelor of Science in Pharmacy in 1993 from the Faculty of Pharmacy, Rangsit University. Throughout her M.S. study, she recieved a scholarship from the University Development Commission (UDC) with an obligation to serve, after graduation, as a faculty member at the Faculty of Pharmacy, Ubon Ratchathani University.