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APPENDICES

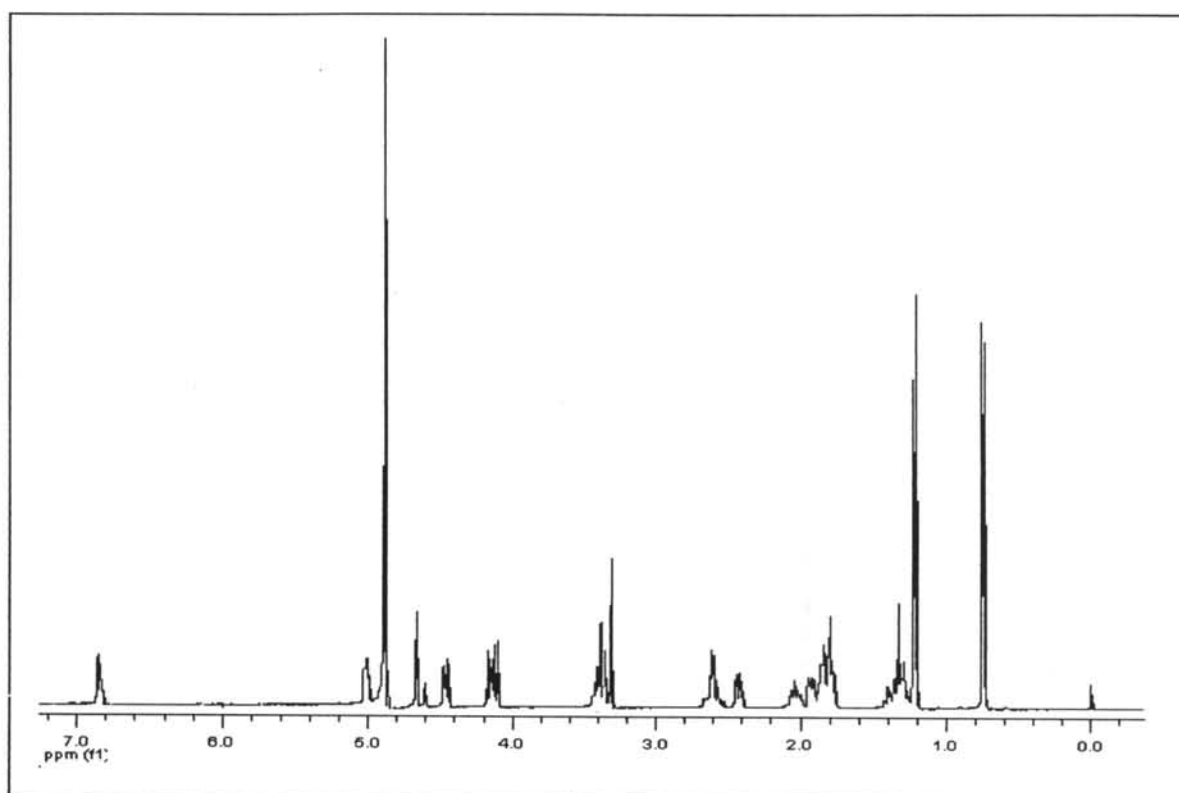


Figure 1 The $^1\text{H-NMR}$ spectrum of Andrographolide (1)

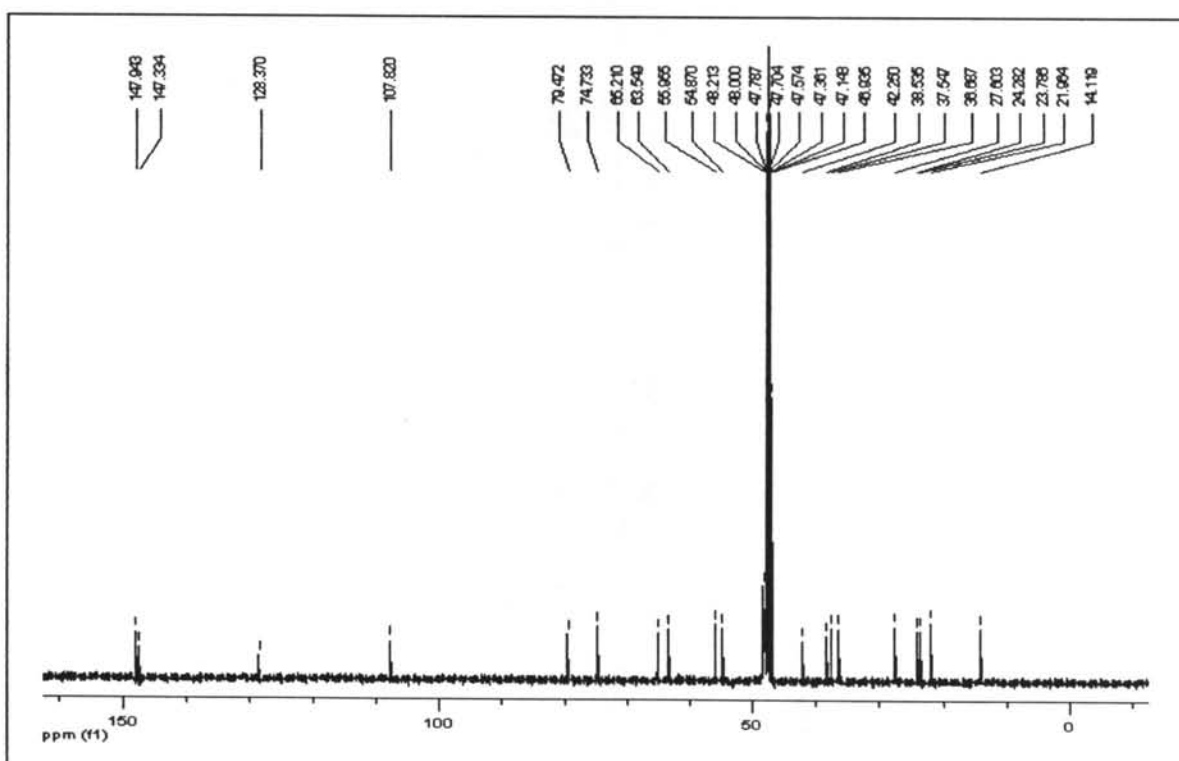


Figure 2 The $^{13}\text{C-NMR}$ spectrum of Andrographolide (1)

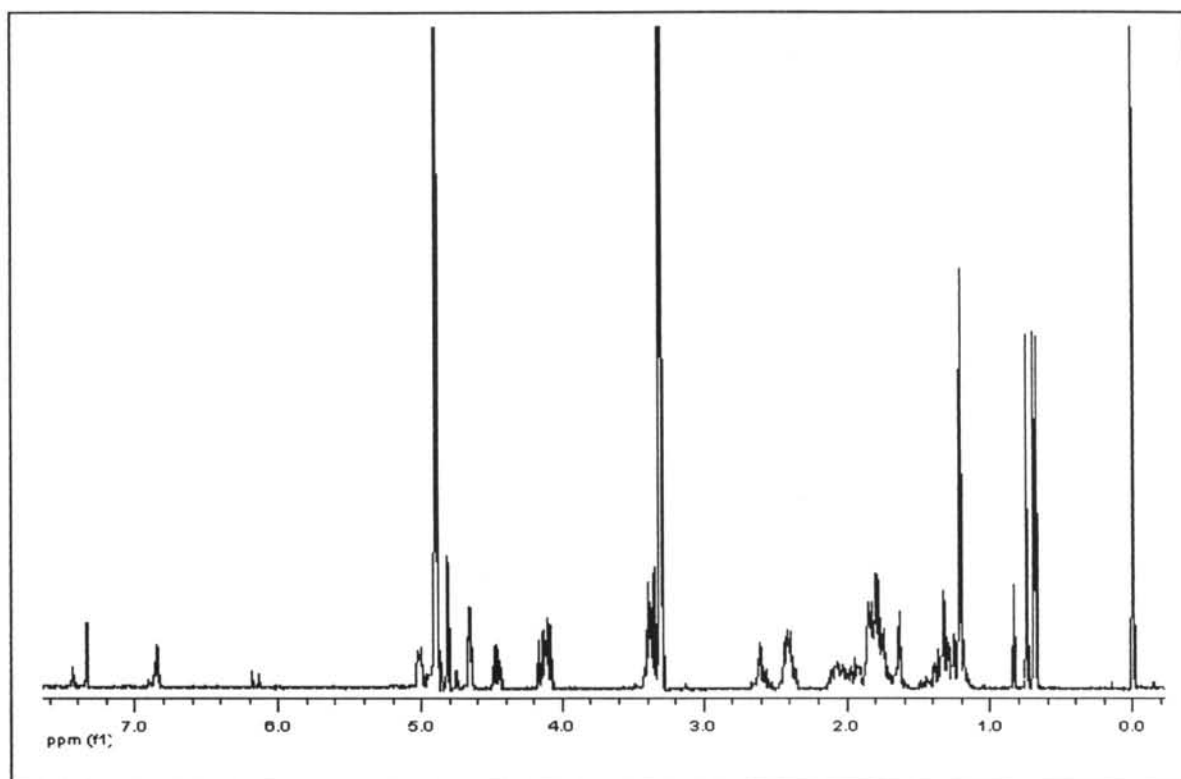


Figure 3 The ^1H -NMR spectrum of 14-Deoxy-11,12 didehydro andrographolide (2)

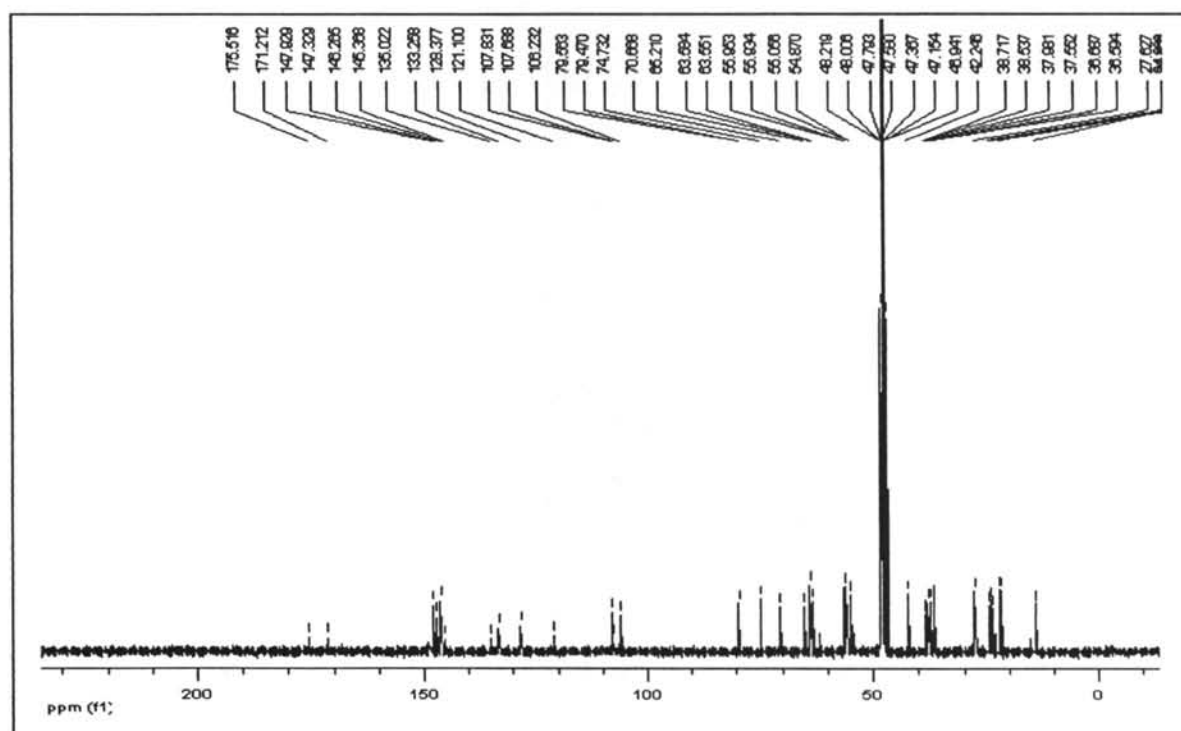


Figure 4 The ^{13}C -NMR spectrum of 14-Deoxy-11,12 didehydro andrographolide (2)

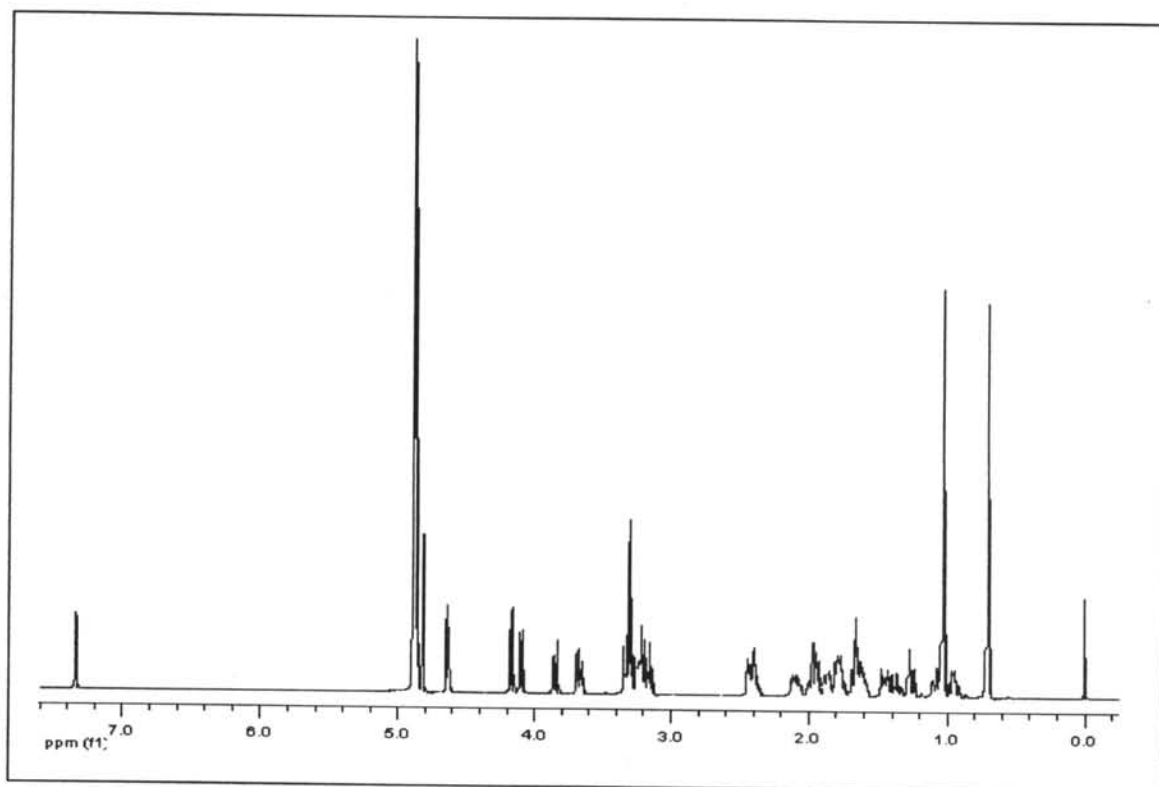


Figure 5 The $^1\text{H-NMR}$ spectrum of Neoandrographolide (3)

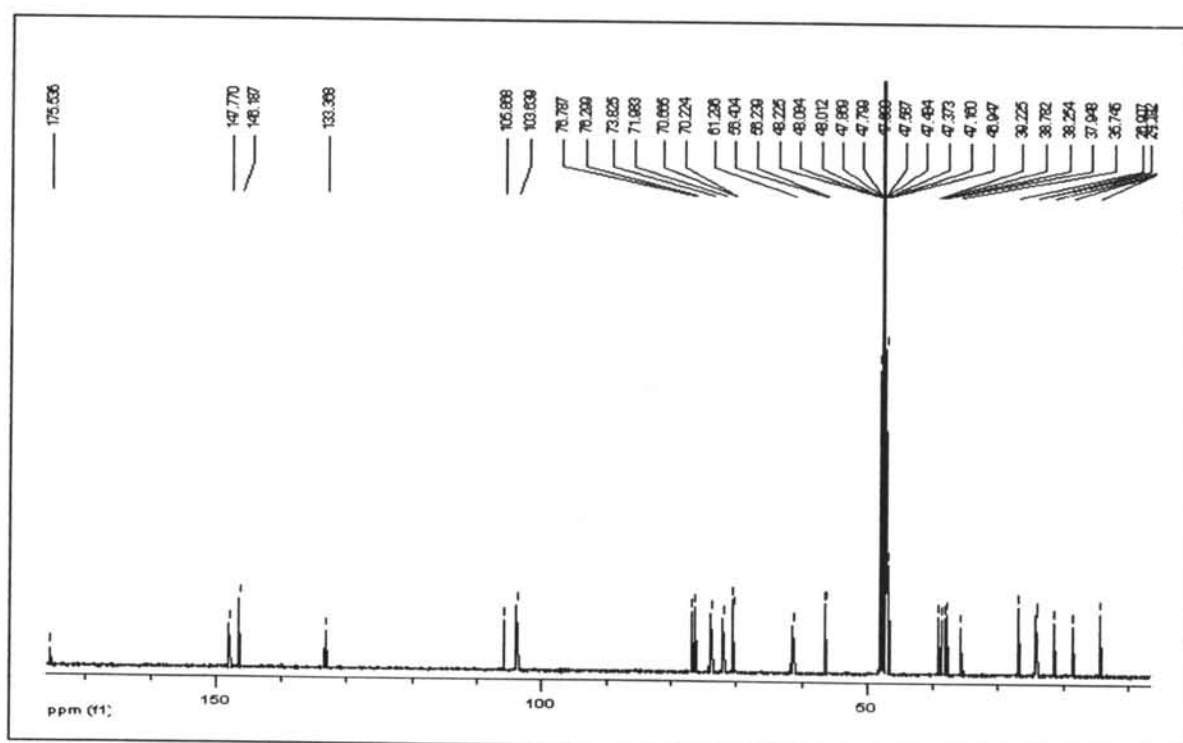


Figure 6 The $^{13}\text{C-NMR}$ spectrum of Neoandrographolide (3)

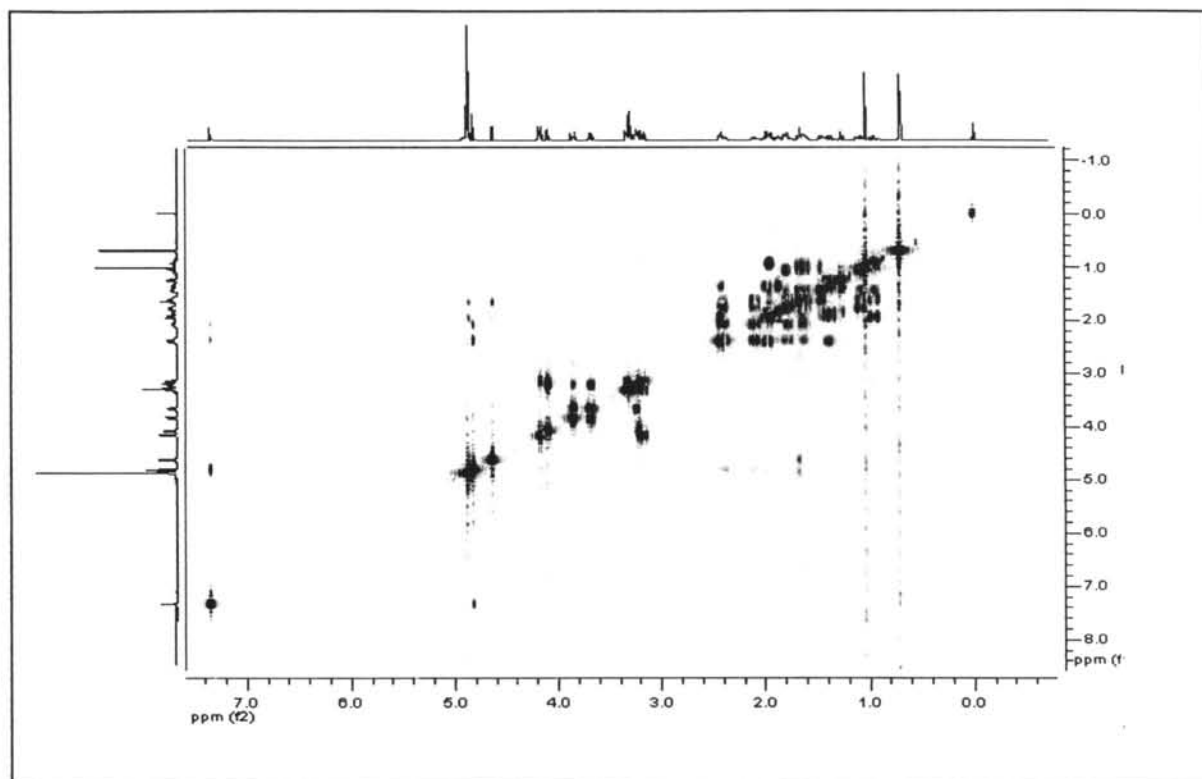


Figure 7 The COSY spectrum of Neoandrographolide (3)

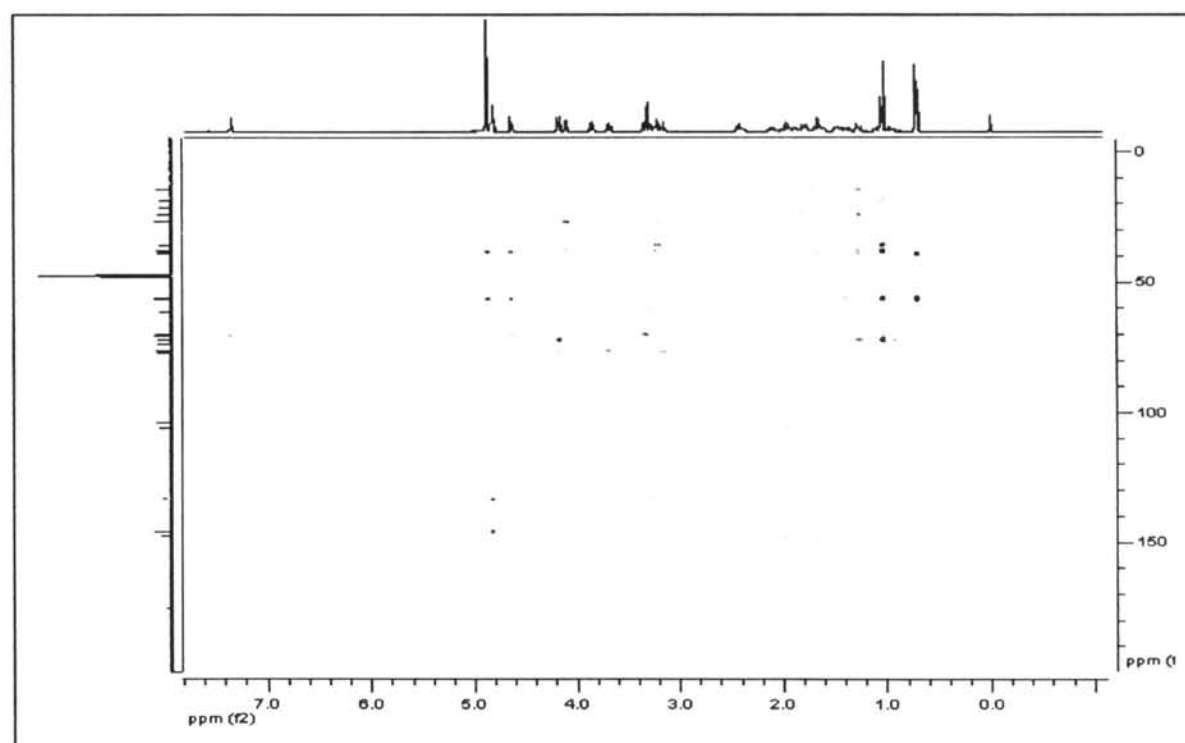


Figure 8 The HMBC spectrum of Neoandrographolide (3)

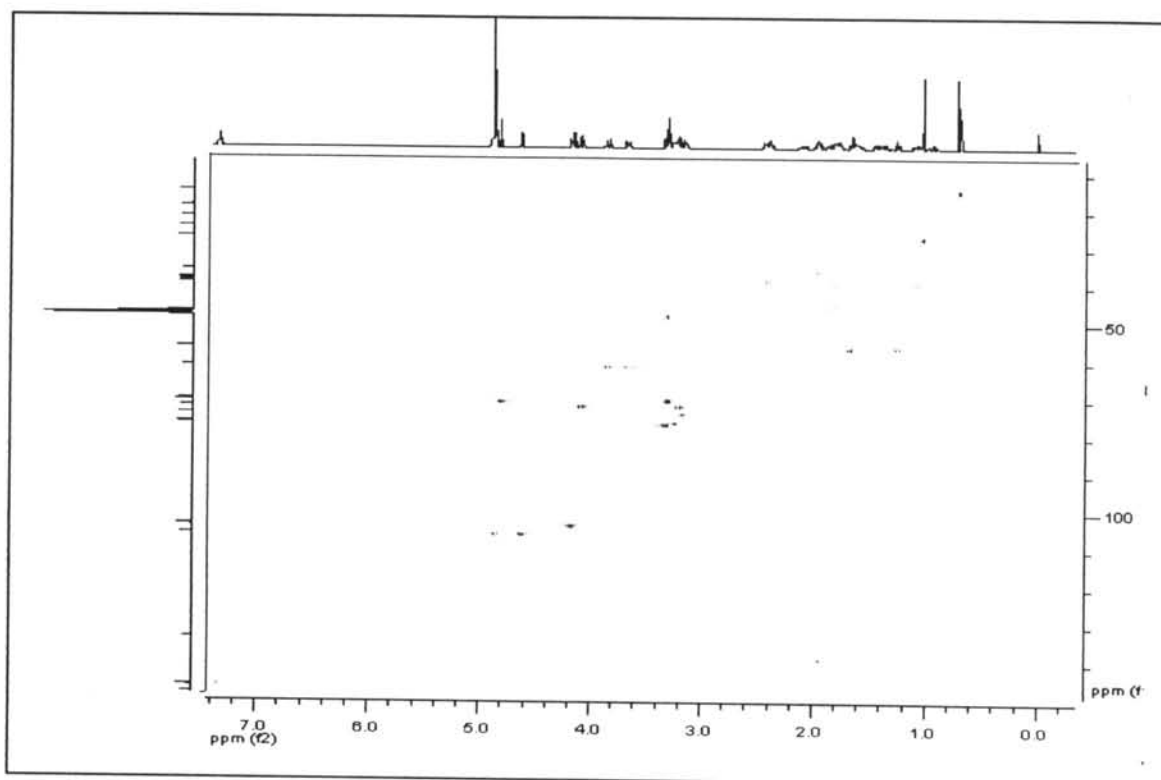


Figure 9 The HSQC spectrum of Neoandrographolide (3)

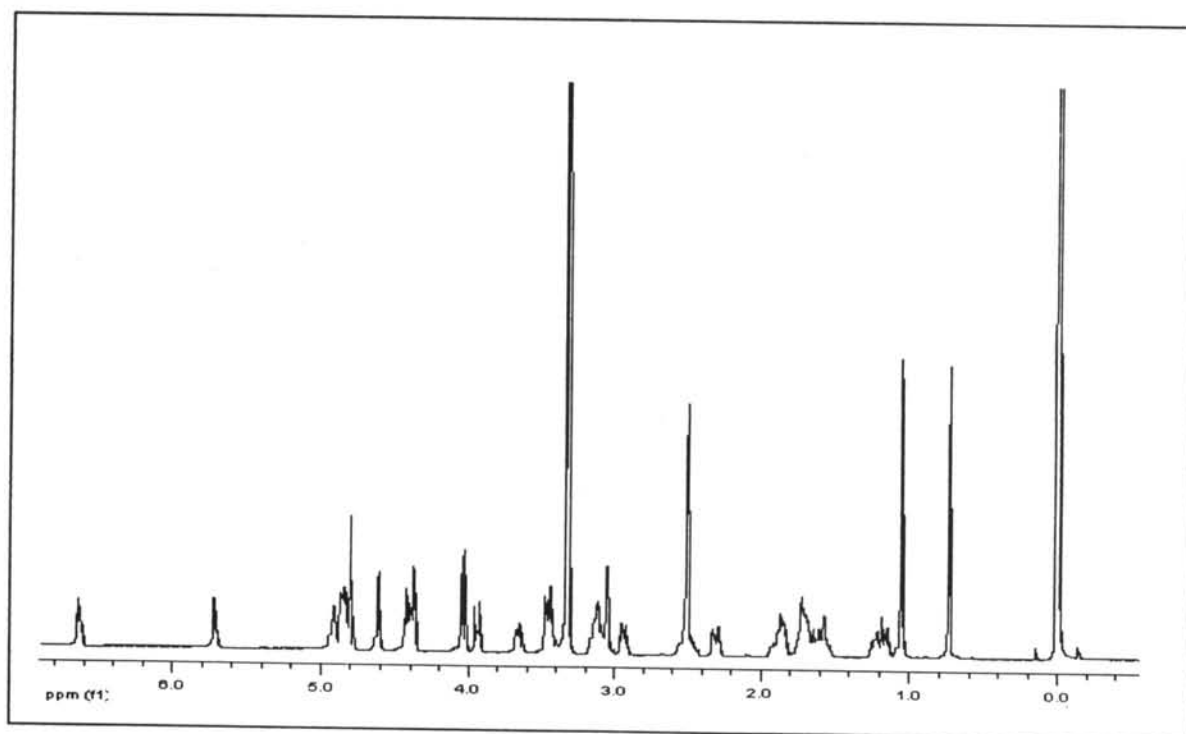


Figure 10 The ^1H -NMR spectrum of Andrographiside (4)

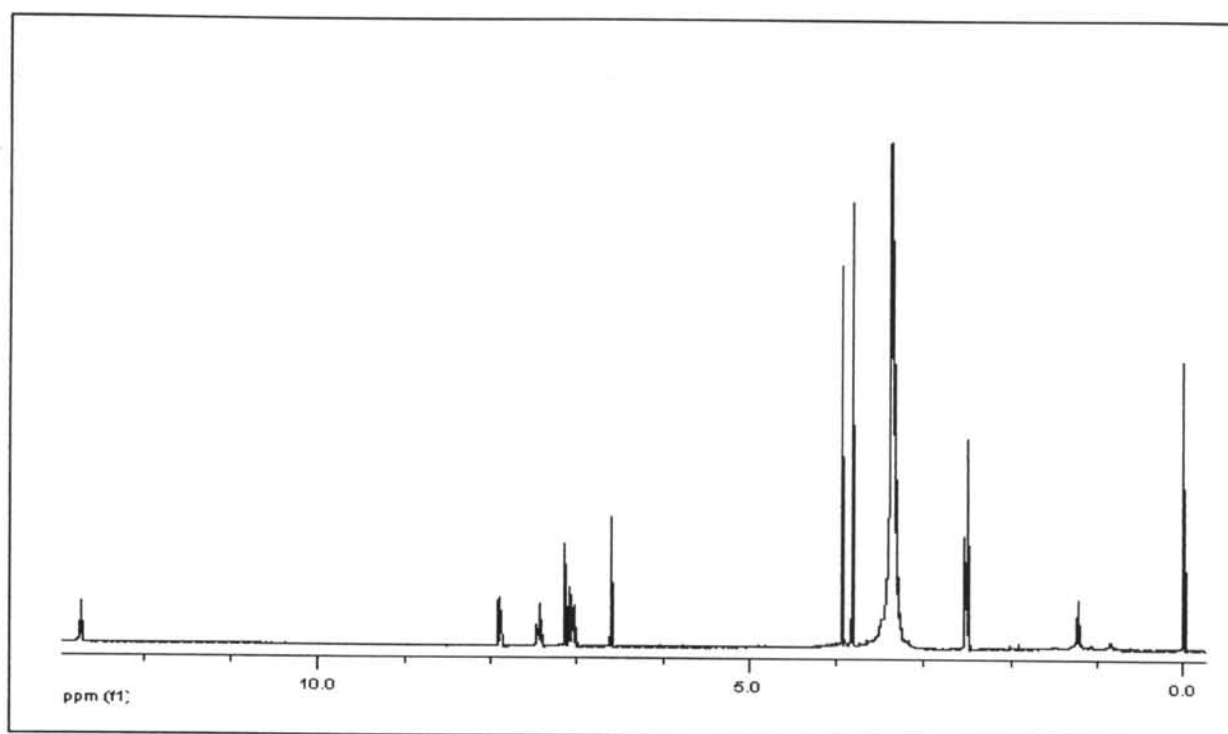


Figure 11 The ^1H -NMR spectrum of 5,2'-Dihydroxy-7,8-dimethoxy flavone (5)

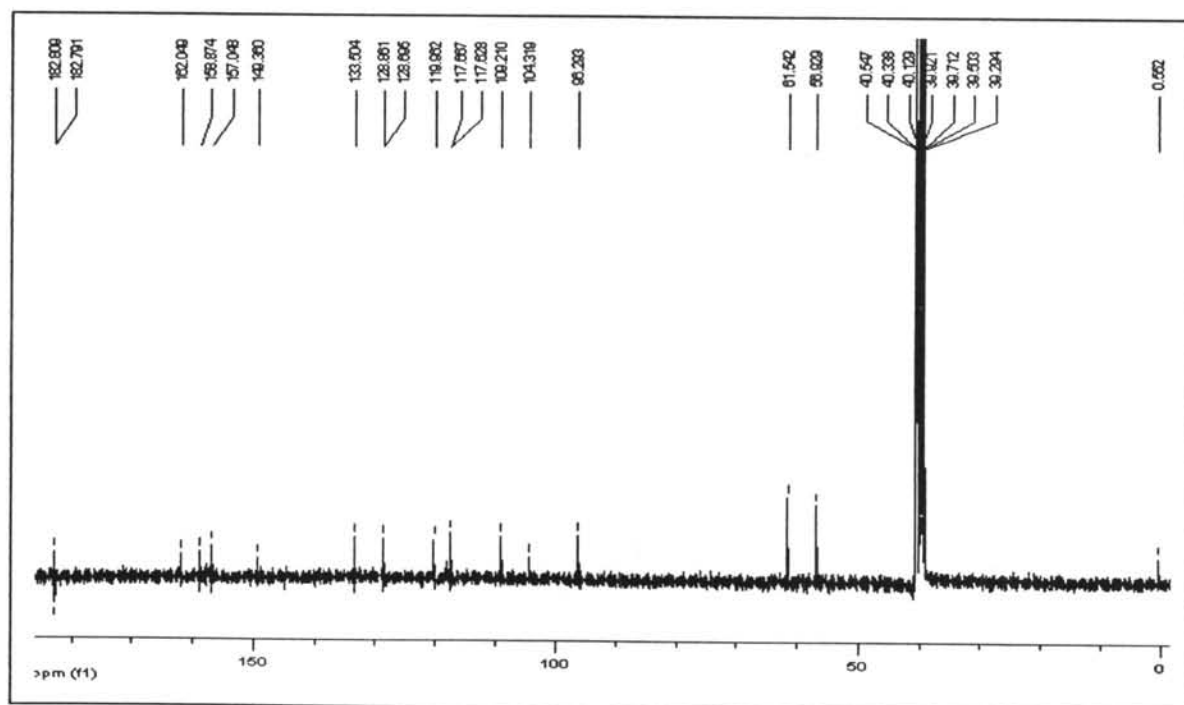


Figure 12 The ^{13}C -NMR spectrum of 5,2'-Dihydroxy-7,8-dimethoxy flavone (5)

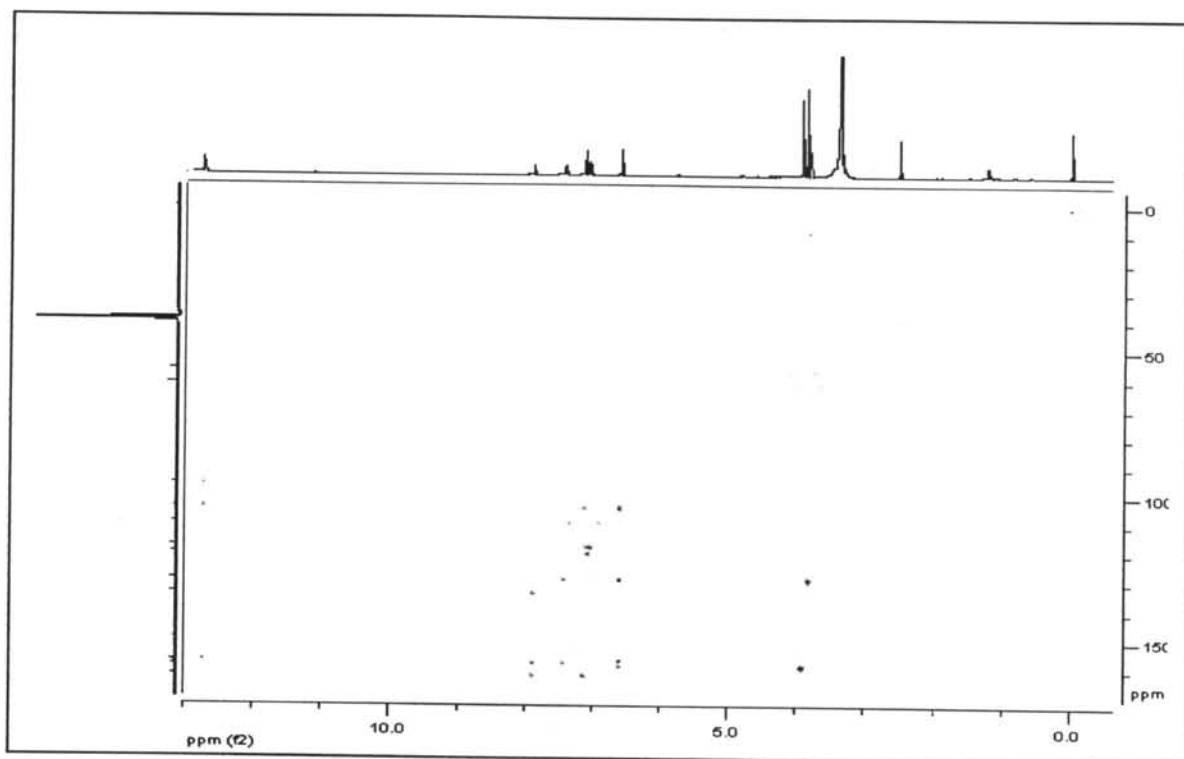


Figure 13 The HMBC spectrum of 5,2'-Dihydroxy-7,8-dimethoxy flavone (5)

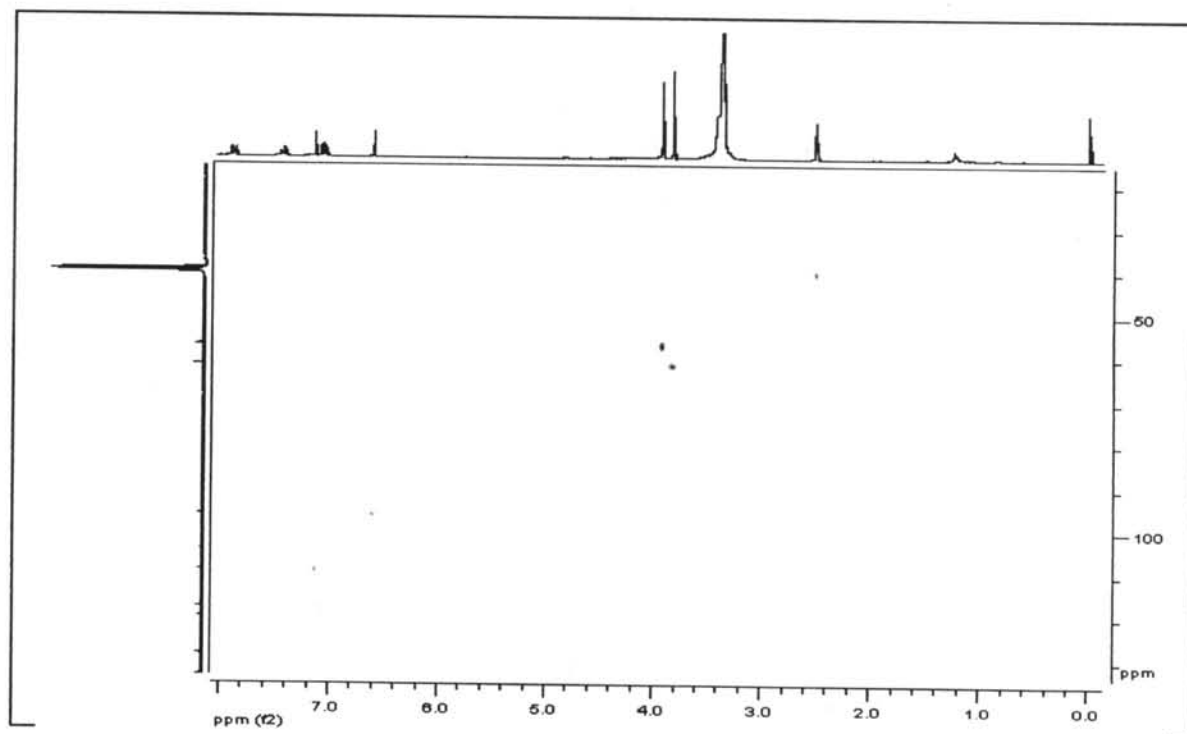


Figure 14 The HSQC spectrum of 5,2'-Dihydroxy-7,8-dimethoxy flavone (5)

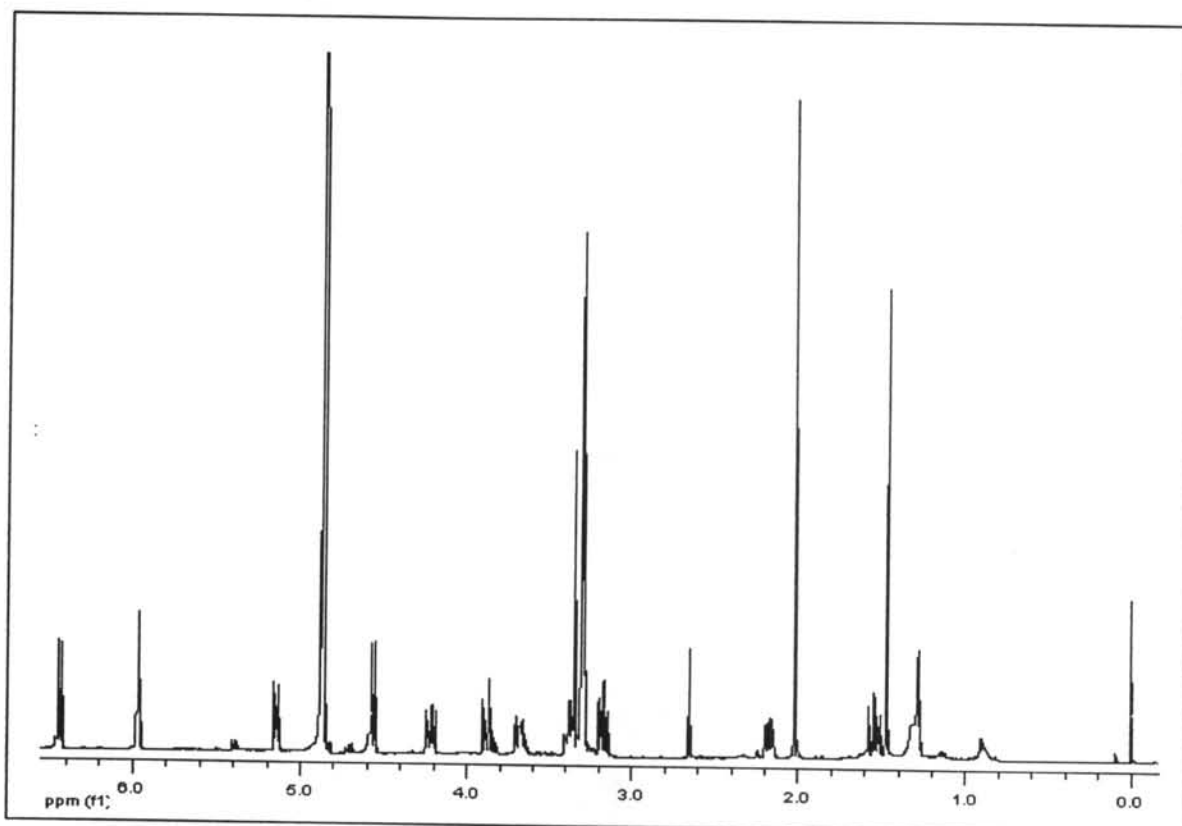


Figure 15 The $^1\text{H-NMR}$ spectrum of 8-*O*-Acetylharpagide (6)

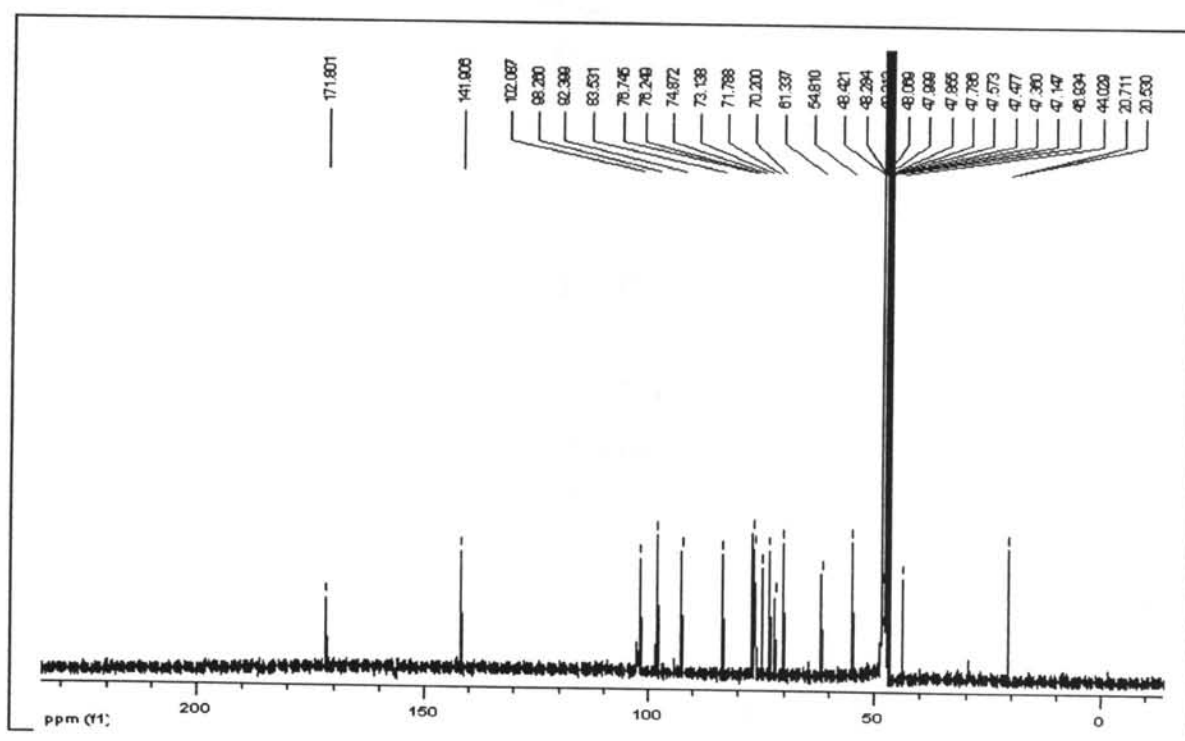


Figure 16 The $^{13}\text{C-NMR}$ spectrum of 8-*O*-Acetylharpagide (6)

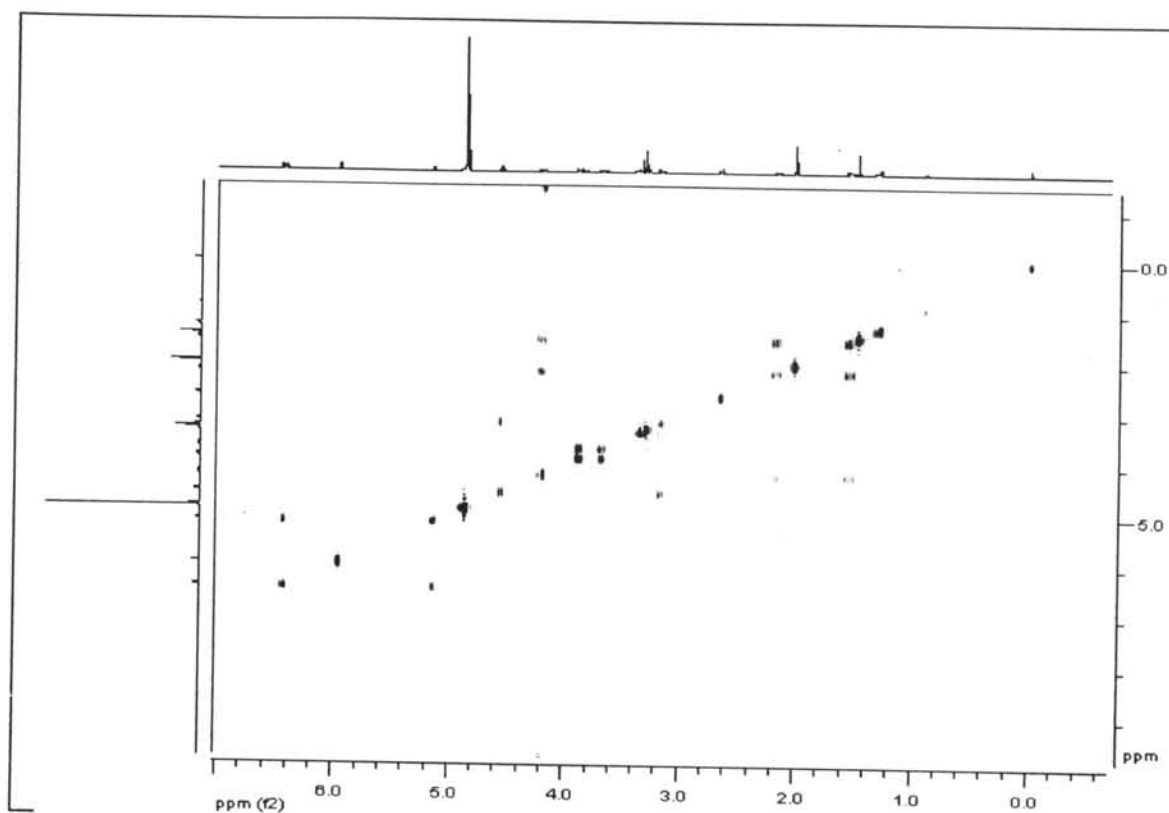


Figure 17 The COSY spectrum of 8-*O*-Acetylharpagide (6)

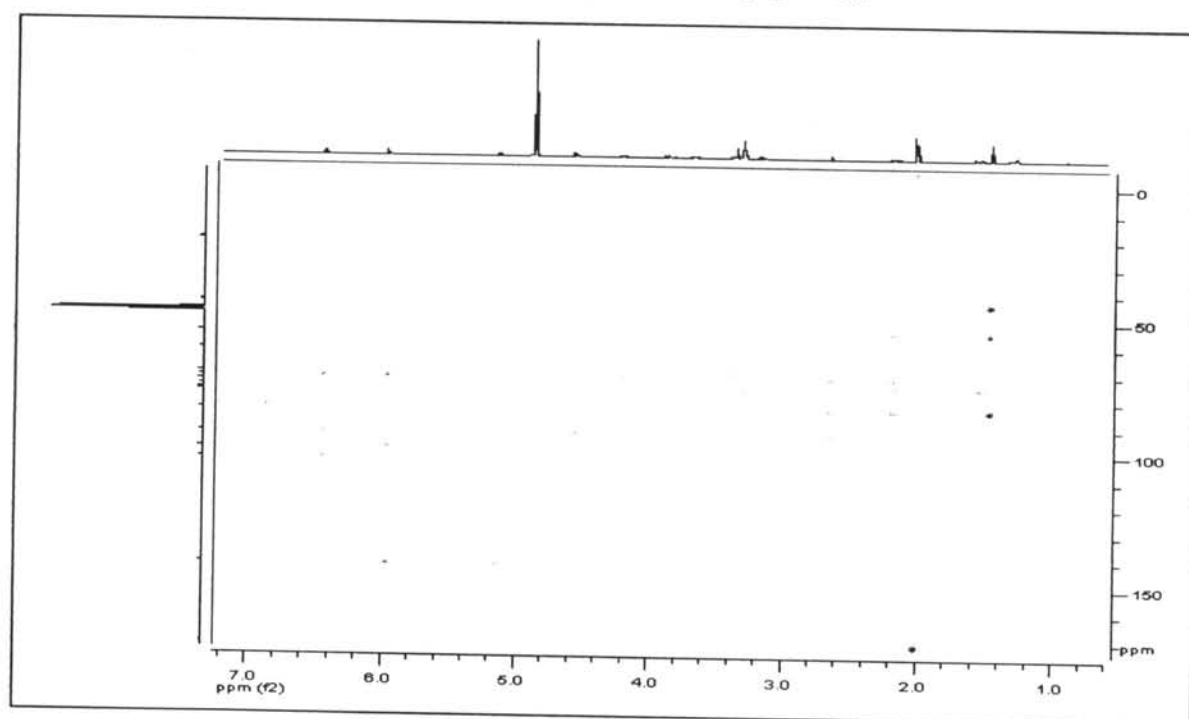


Figure 18 The HMBC spectrum of 8-*O*-Acetylharpagide (6)

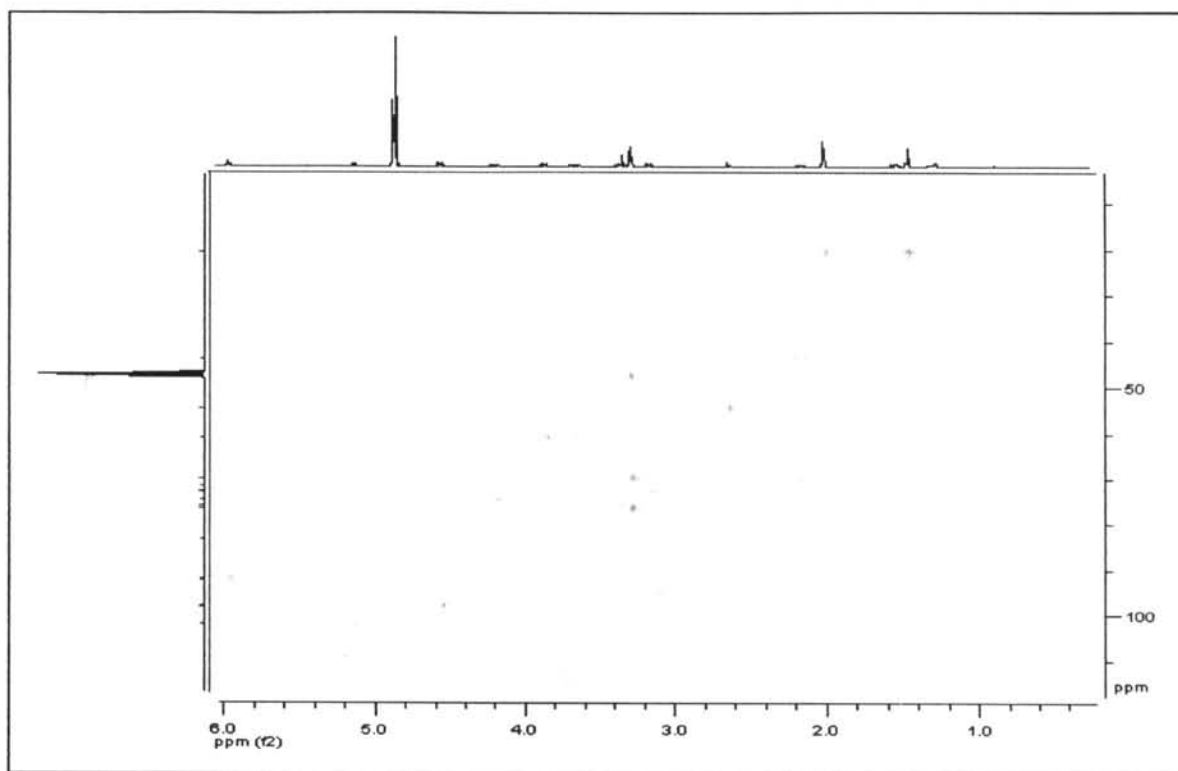


Figure 19 The HSQC spectrum of 8-*O*-Acetylharpagide (6)

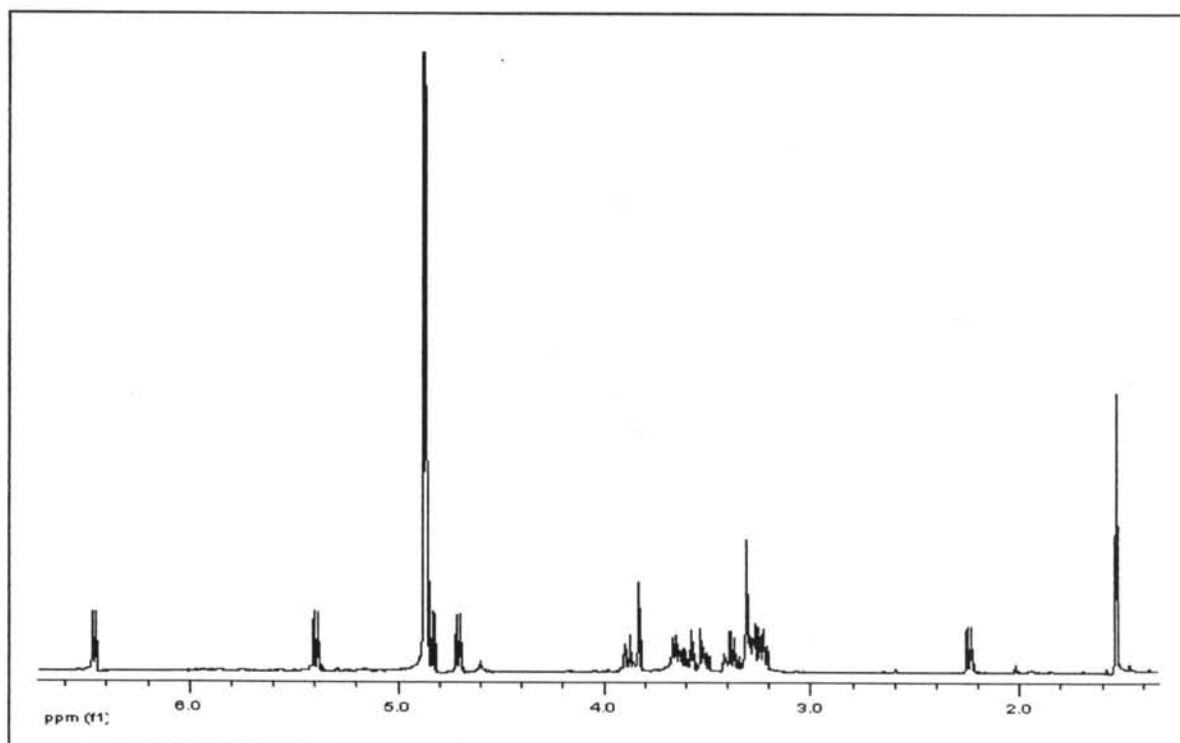


Figure 20 The ^1H -NMR spectrum of Antirrinoside (7)

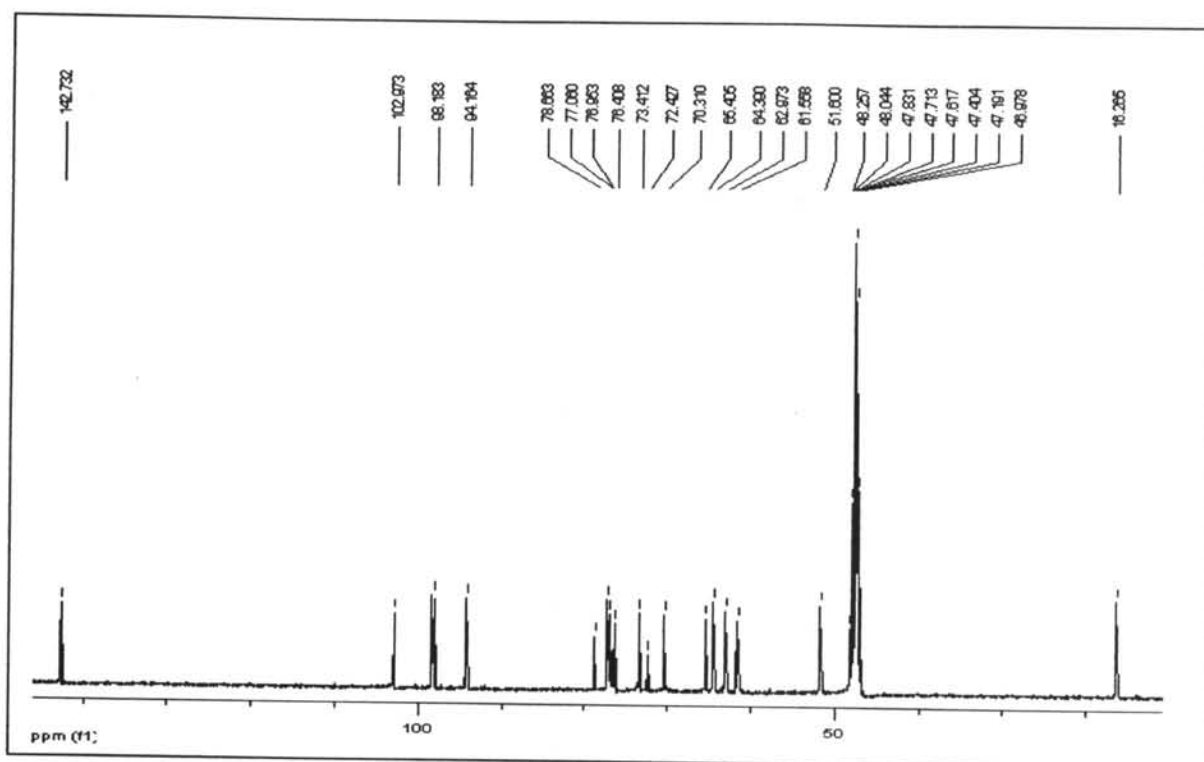


Figure 21 The ^{13}C -NMR spectrum of Antirrhinoside (7)

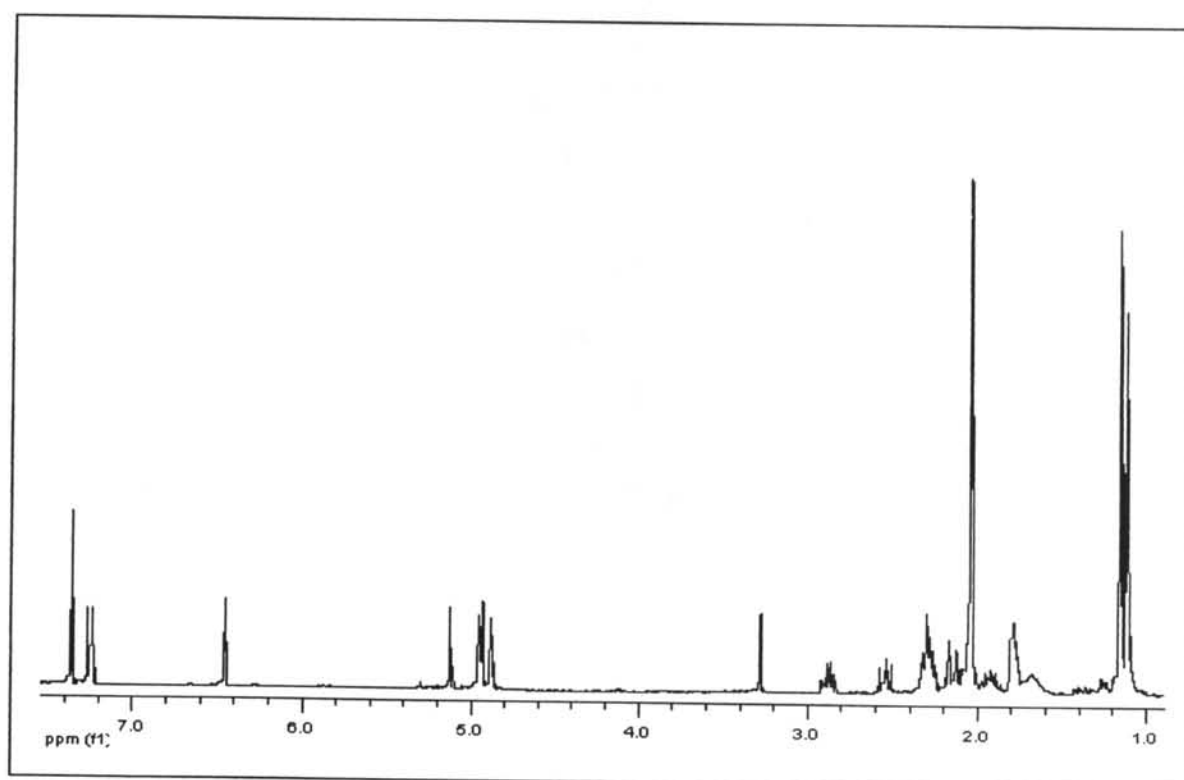


Figure 22 The ^1H -NMR spectrum of Caesalpinins C (8)

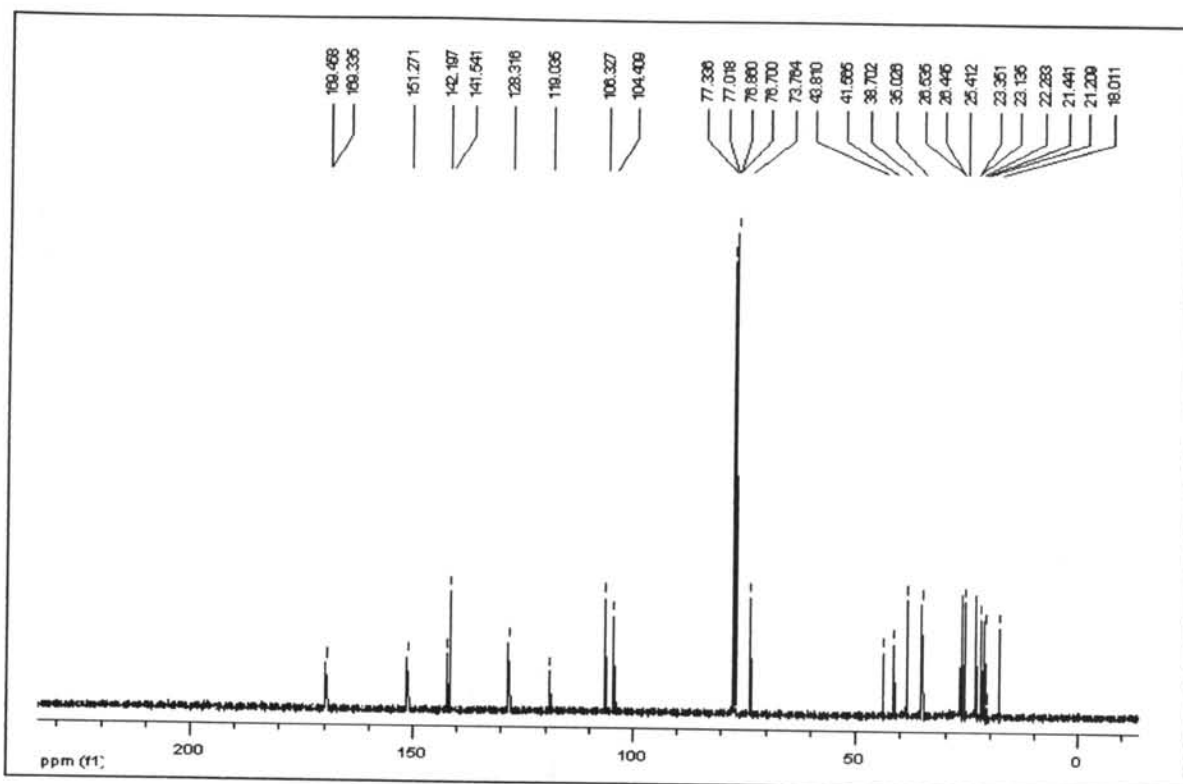


Figure 23 The ^{13}C -NMR spectrum of Caesalpinins C (8)

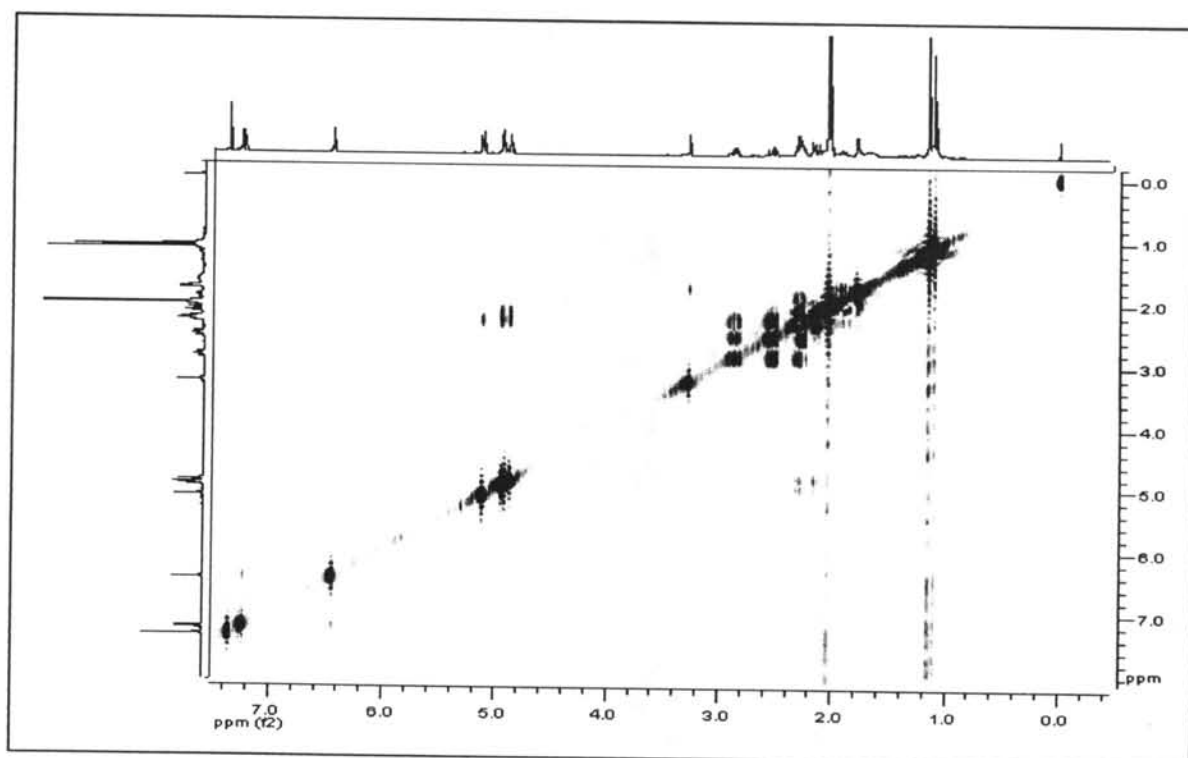


Figure 24 The COSY spectrum of Caesalpinins C (8)

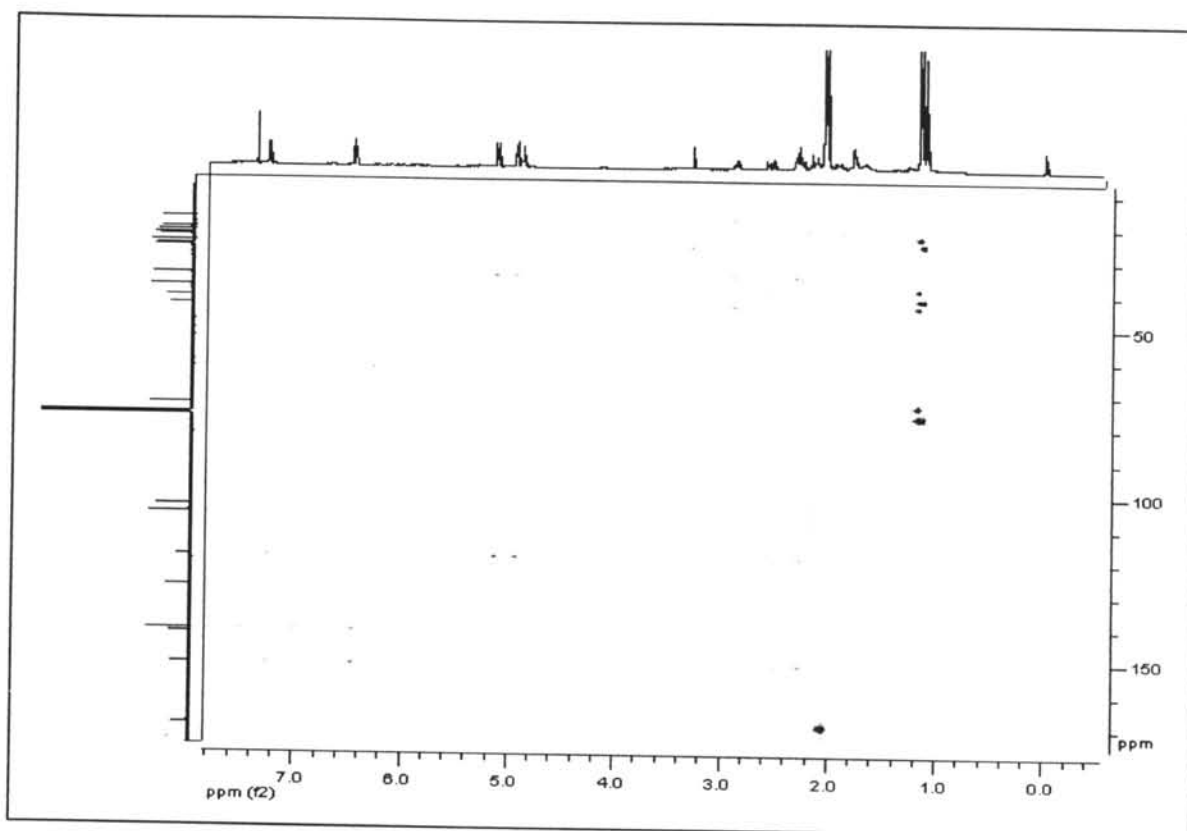


Figure 25 The HMBC spectrum of Caesalpinins C (8)

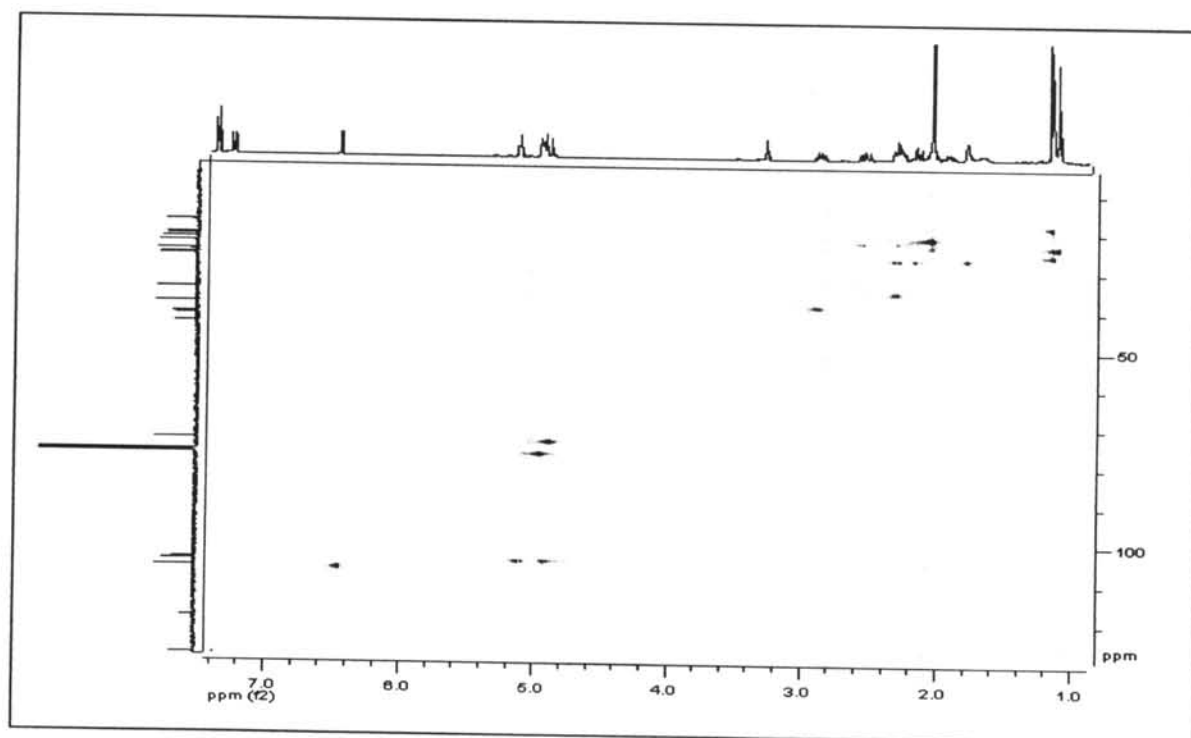


Figure 26 The HSQC spectrum of Caesalpinins C (8)

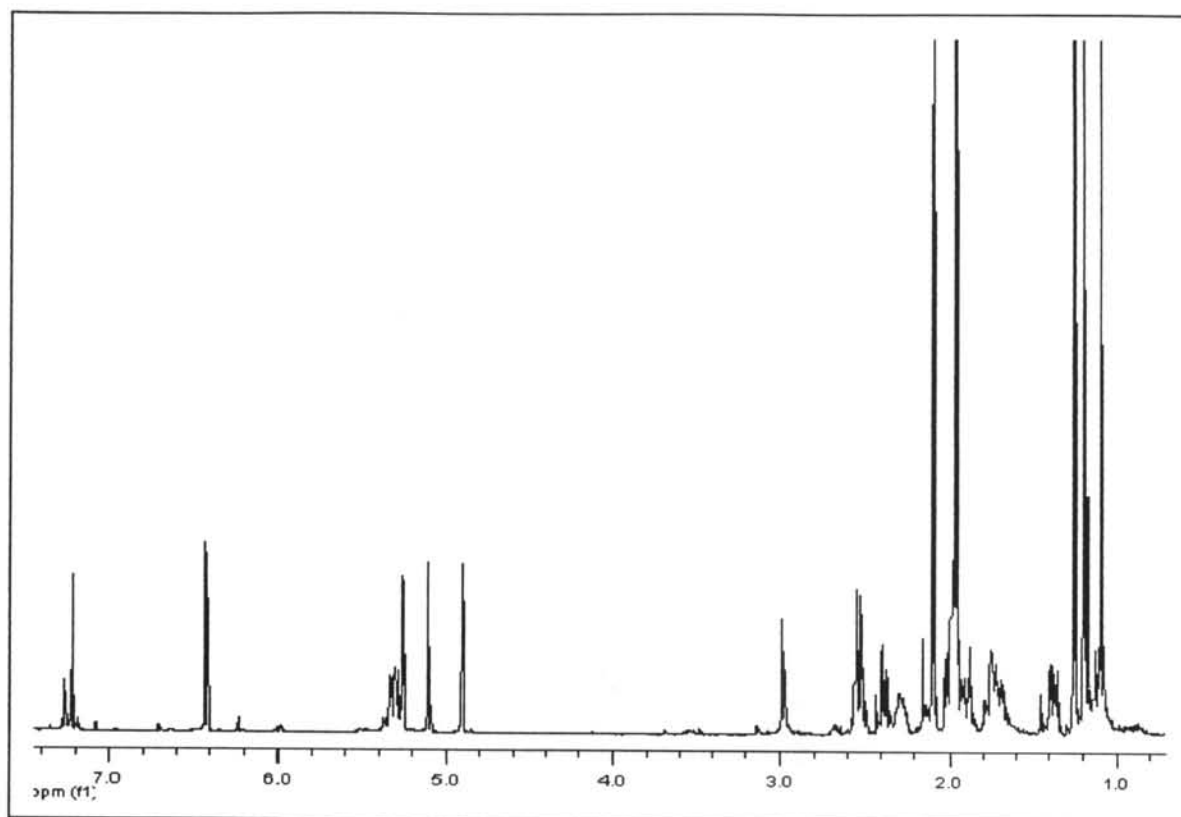


Figure 27 The $^1\text{H-NMR}$ spectrum of Caesalpinins P (9)

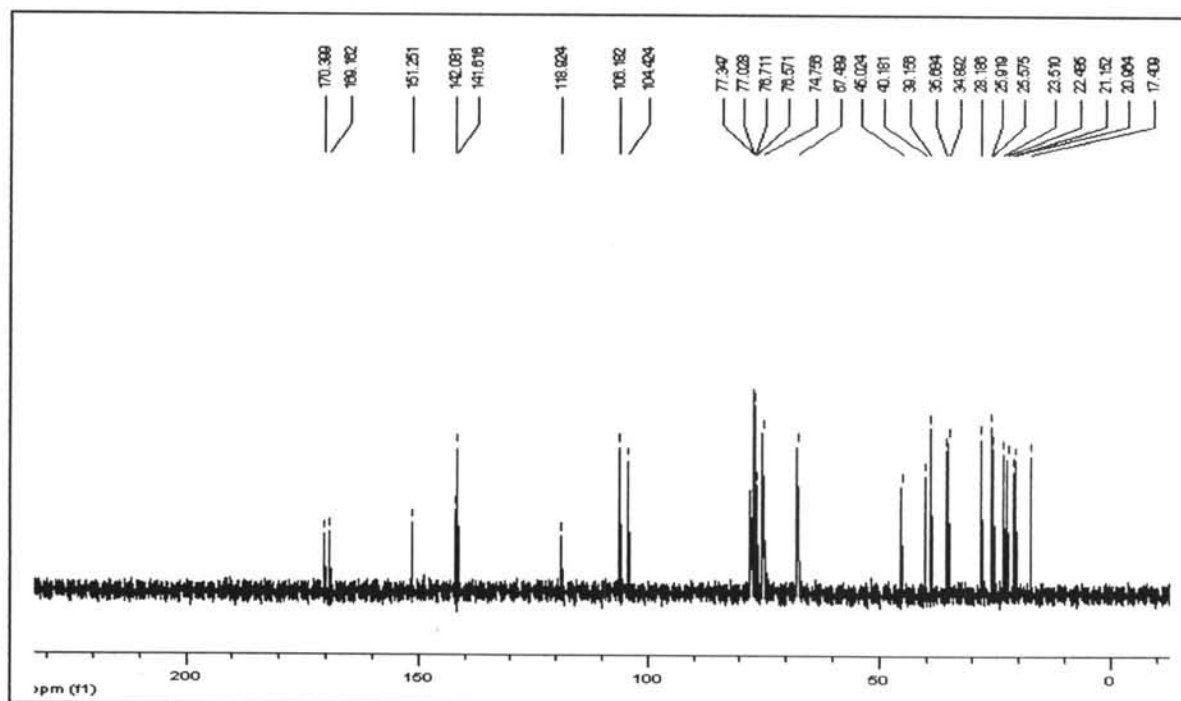


Figure 28 The $^{13}\text{C-NMR}$ spectrum of Caesalpinins P (9)

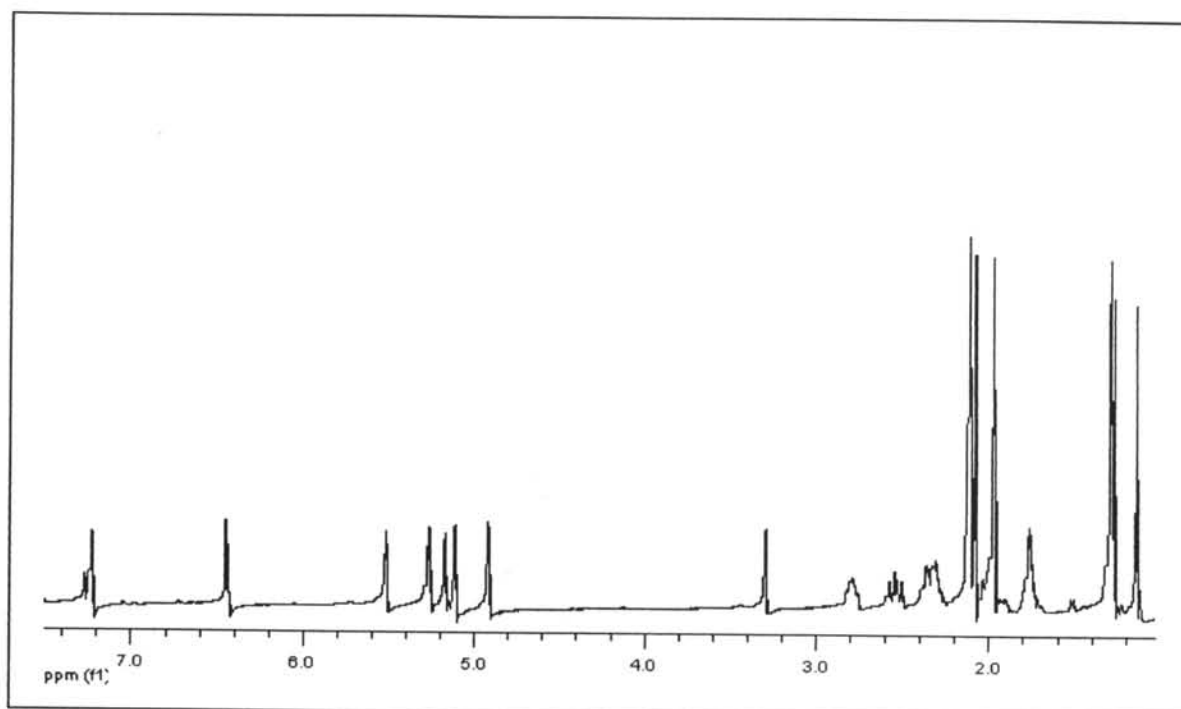


Figure 29 The $^1\text{H-NMR}$ spectrum of 14(17)-Dehydrocaesalpin F (10)

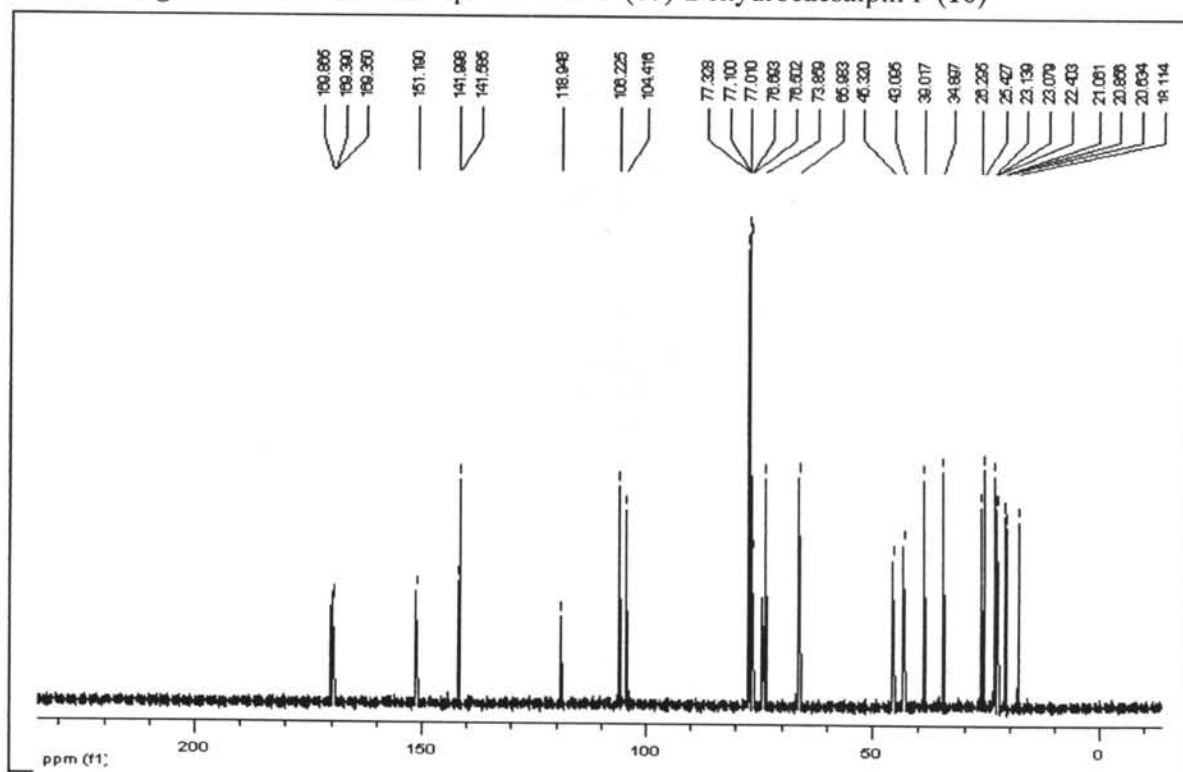


Figure 30 The $^{13}\text{C-NMR}$ spectrum of 14(17)-Dehydrocaesalpin F (10)

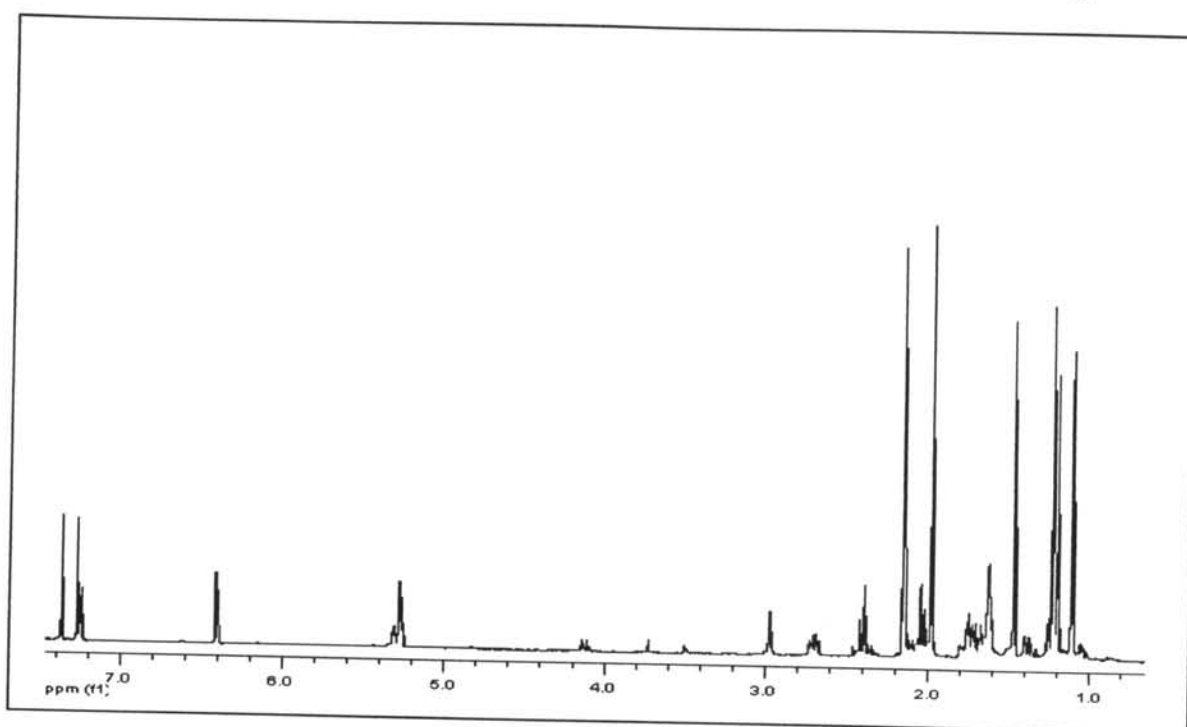


Figure 31 The $^1\text{H-NMR}$ spectrum of ϵ -Caespalin (11)

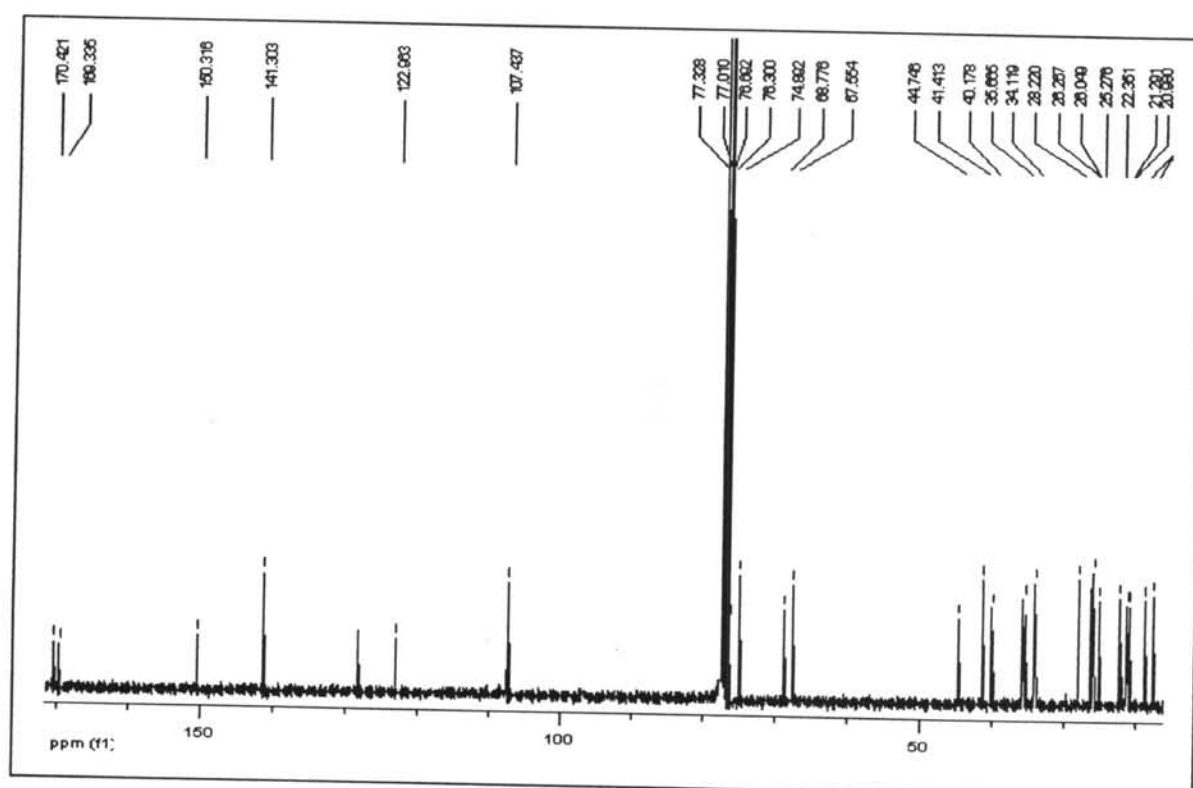


Figure 32 The $^{13}\text{C-NMR}$ spectrum of ϵ -Caespalin (11)

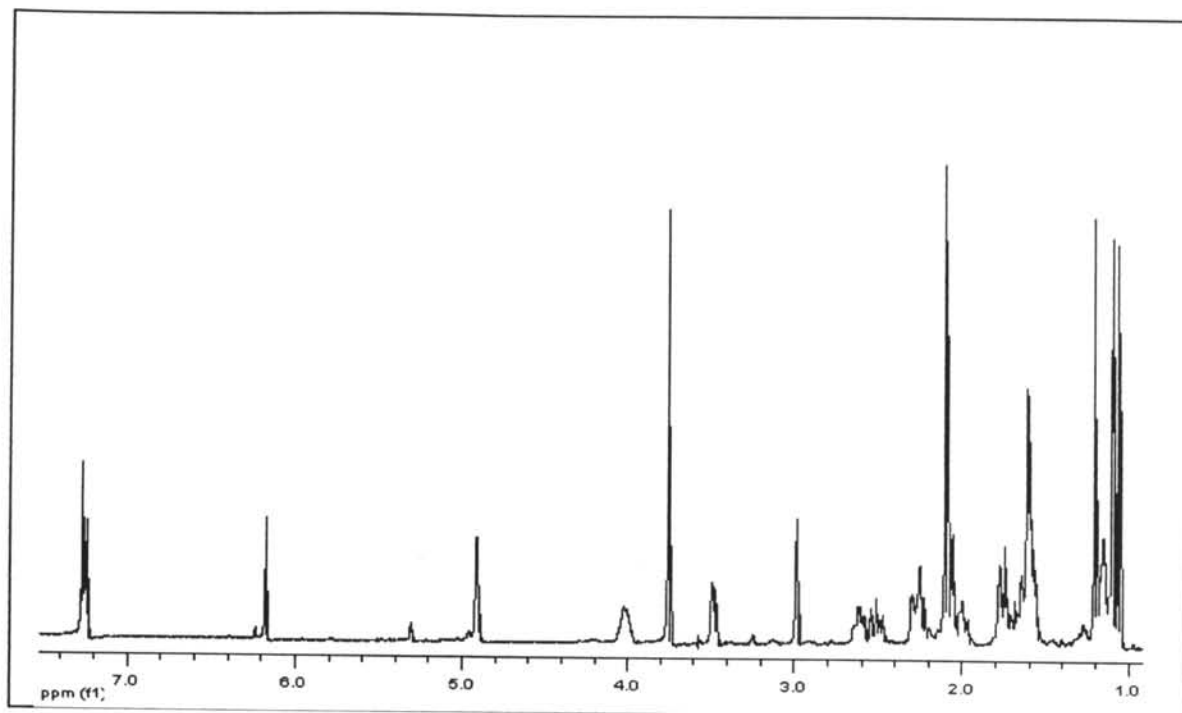


Figure 33 The $^1\text{H-NMR}$ spectrum of Bonducellpins C (12)

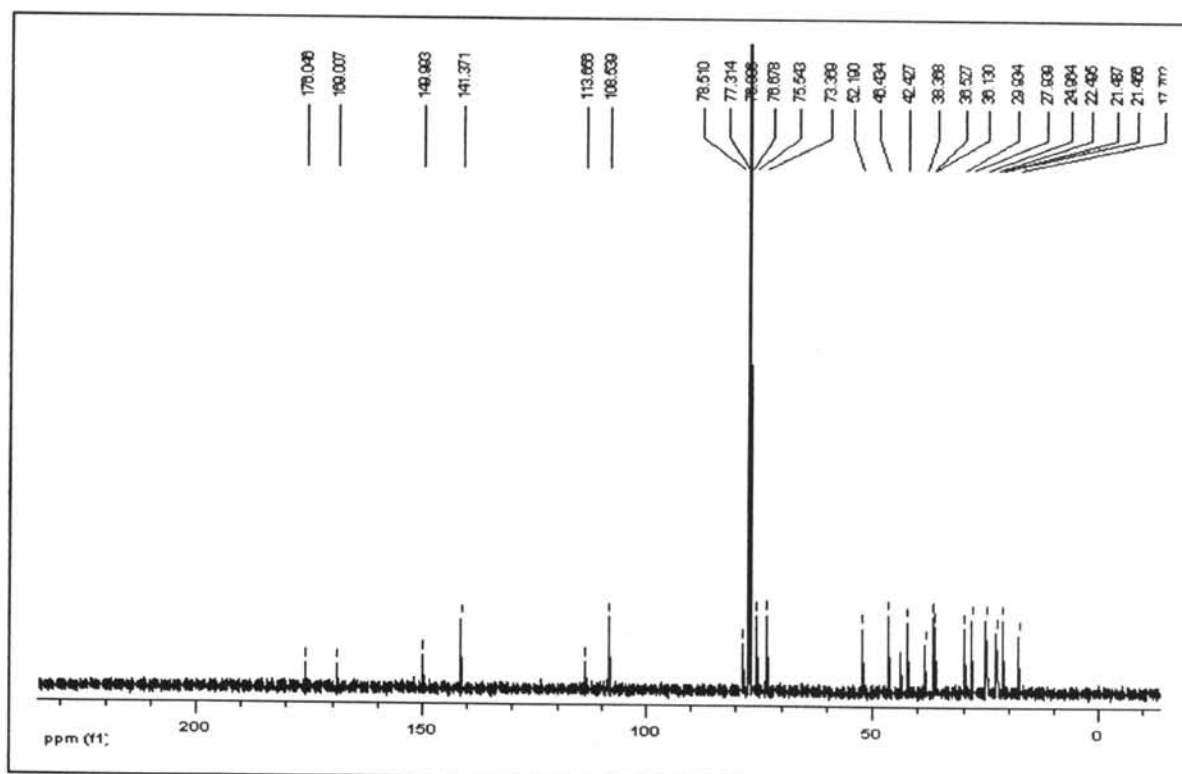


Figure 34 The $^{13}\text{C-NMR}$ spectrum of Bonducellpins C (12)

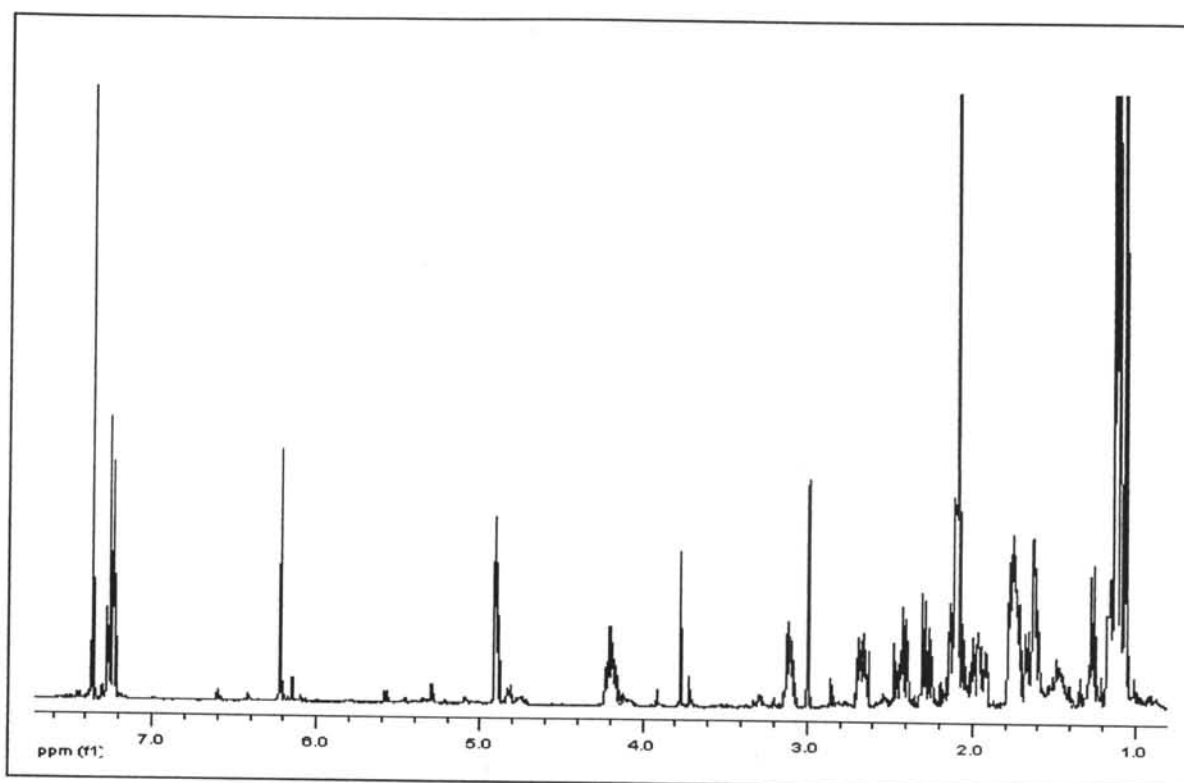


Figure 35 The $^1\text{H-NMR}$ spectrum of Caesalpinins K (13)

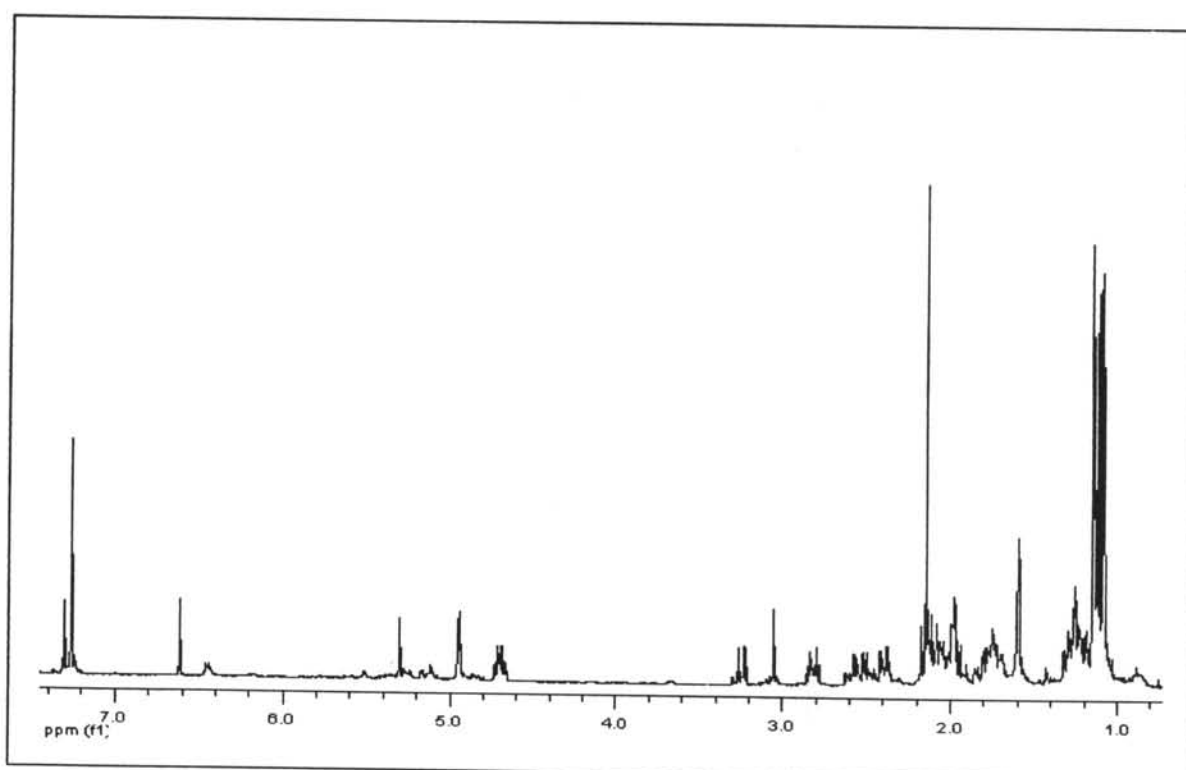


Figure 36 The $^1\text{H-NMR}$ spectrum of Caesalmin B (14)

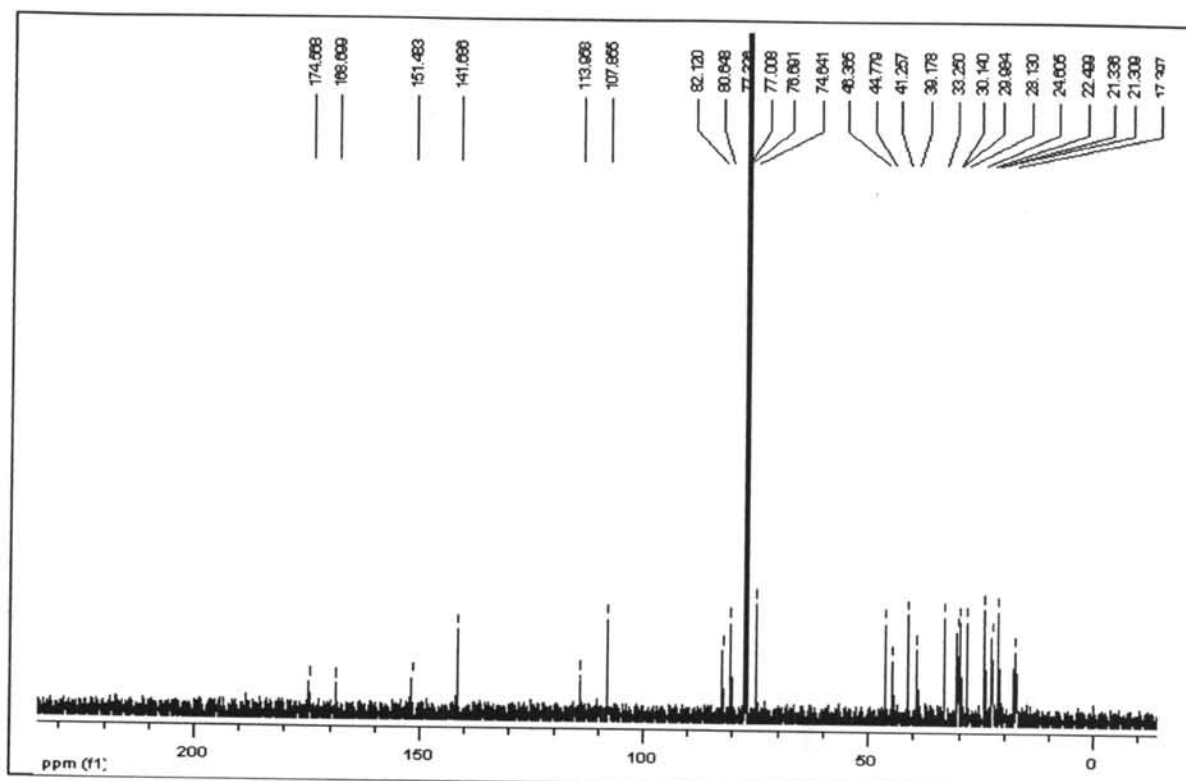


Figure 37 The ^{13}C -NMR spectrum of Caesalmin B (14)

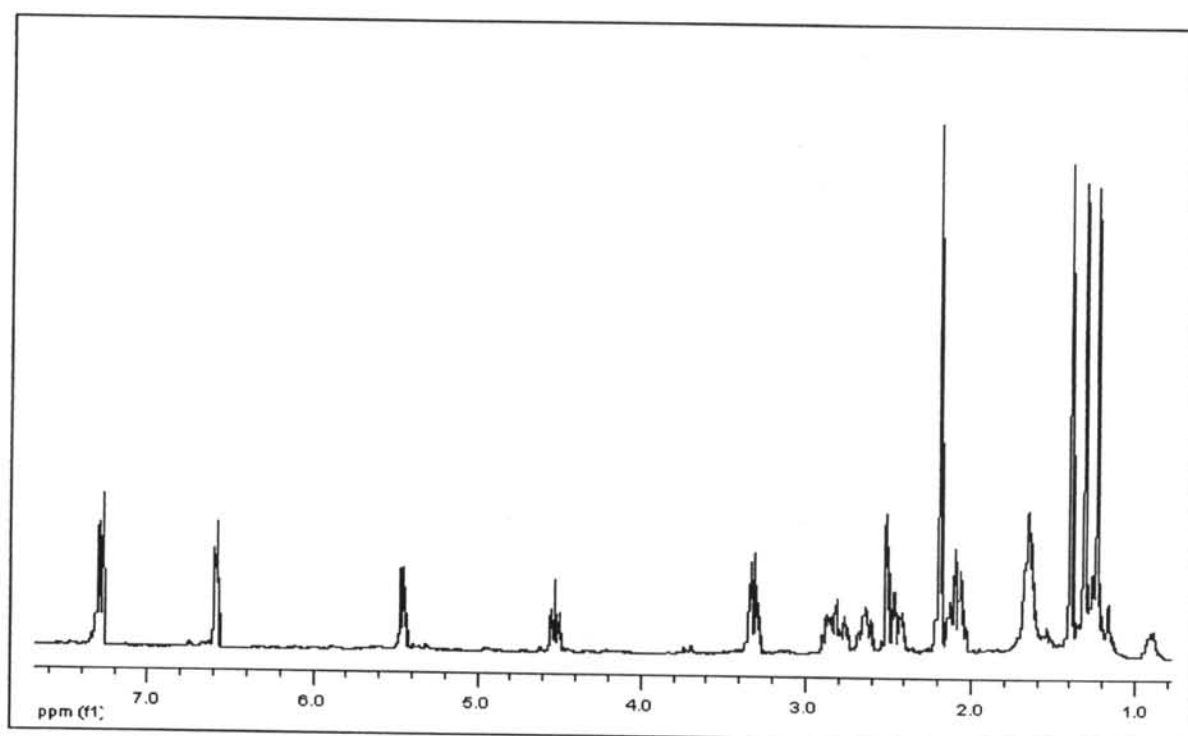


Figure 38 The ^1H -NMR spectrum of Caesalpinins I (15)

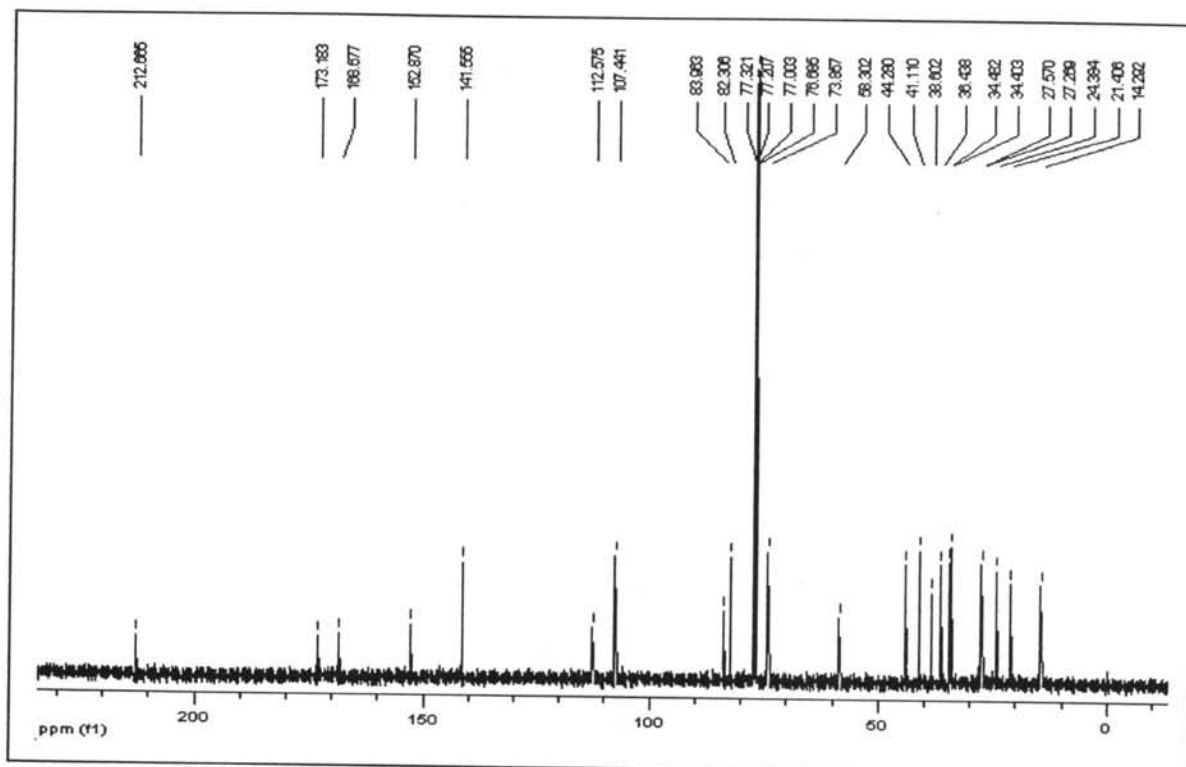


Figure 39 The ^{13}C -NMR spectrum of Caesalpinins I (15)

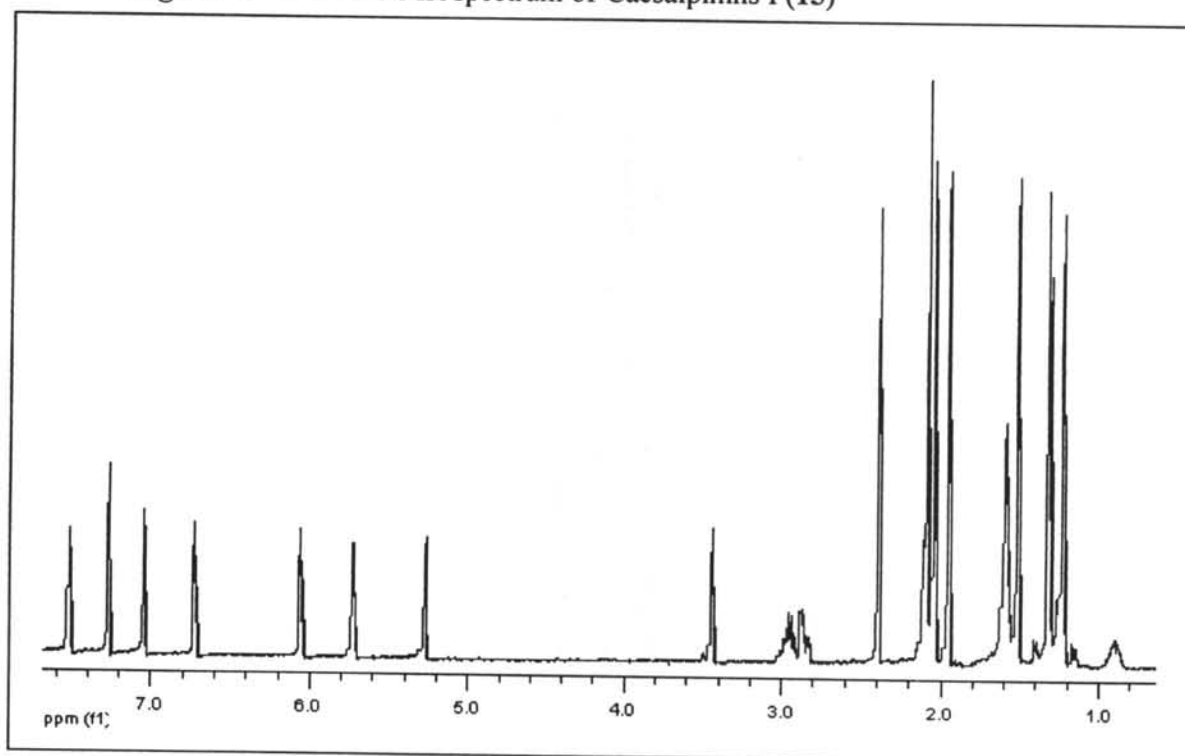


Figure 40 The ^1H -NMR spectrum of 2-Acetoxycaesaldehyd (16)

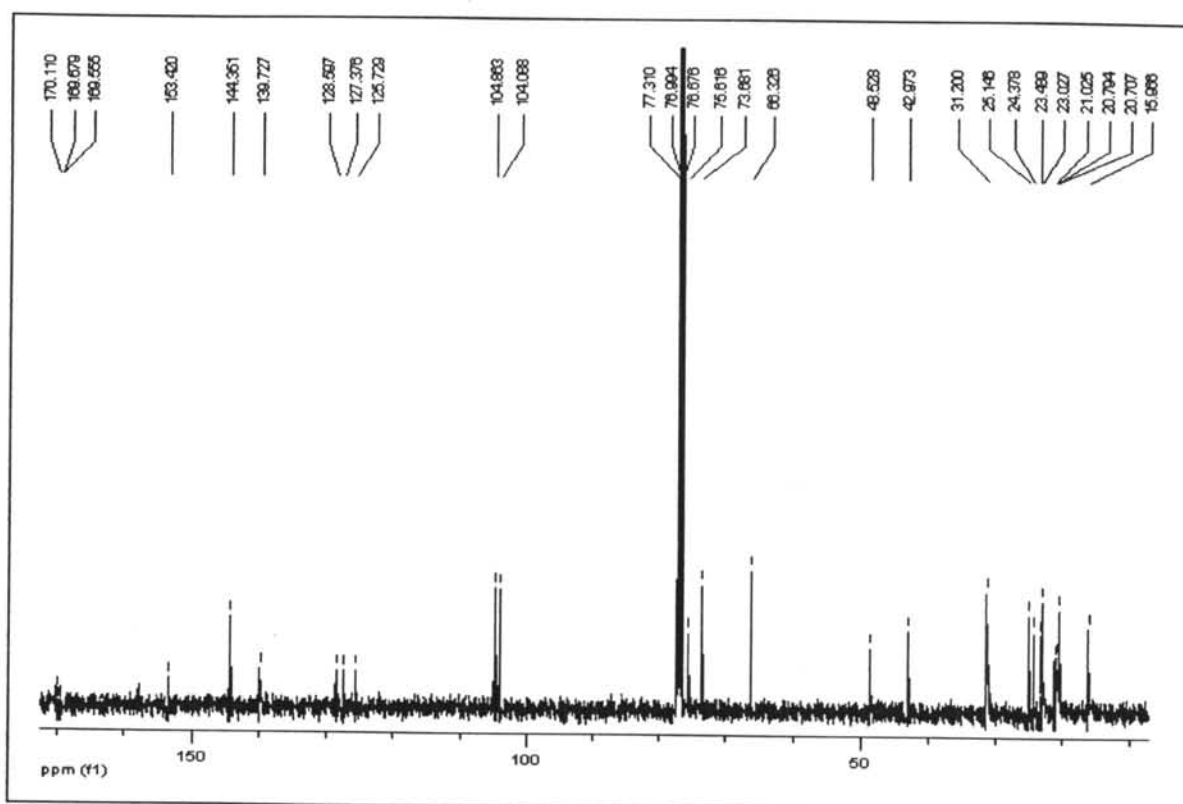


Figure 41 The ^{13}C -NMR spectrum of 2-Acetoxycaesaldehyd (16)

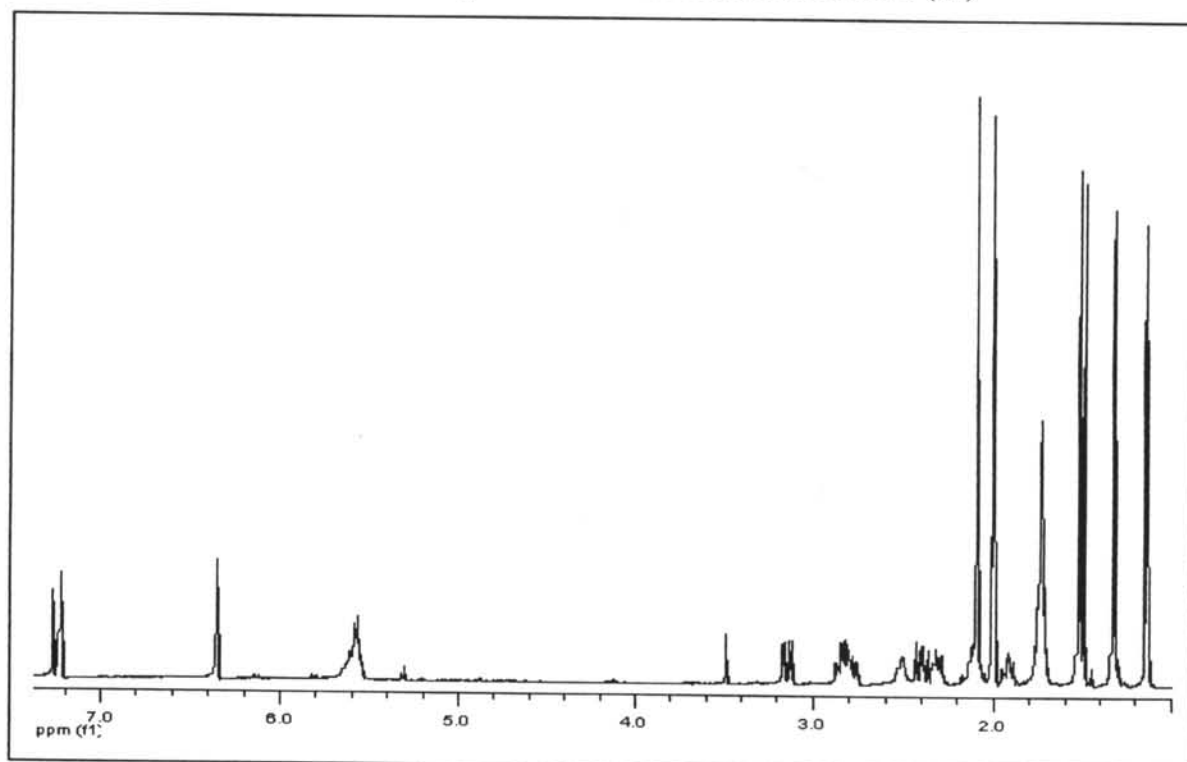


Figure 42 The ^1H -NMR spectrum of Caesalpinins Q (17)

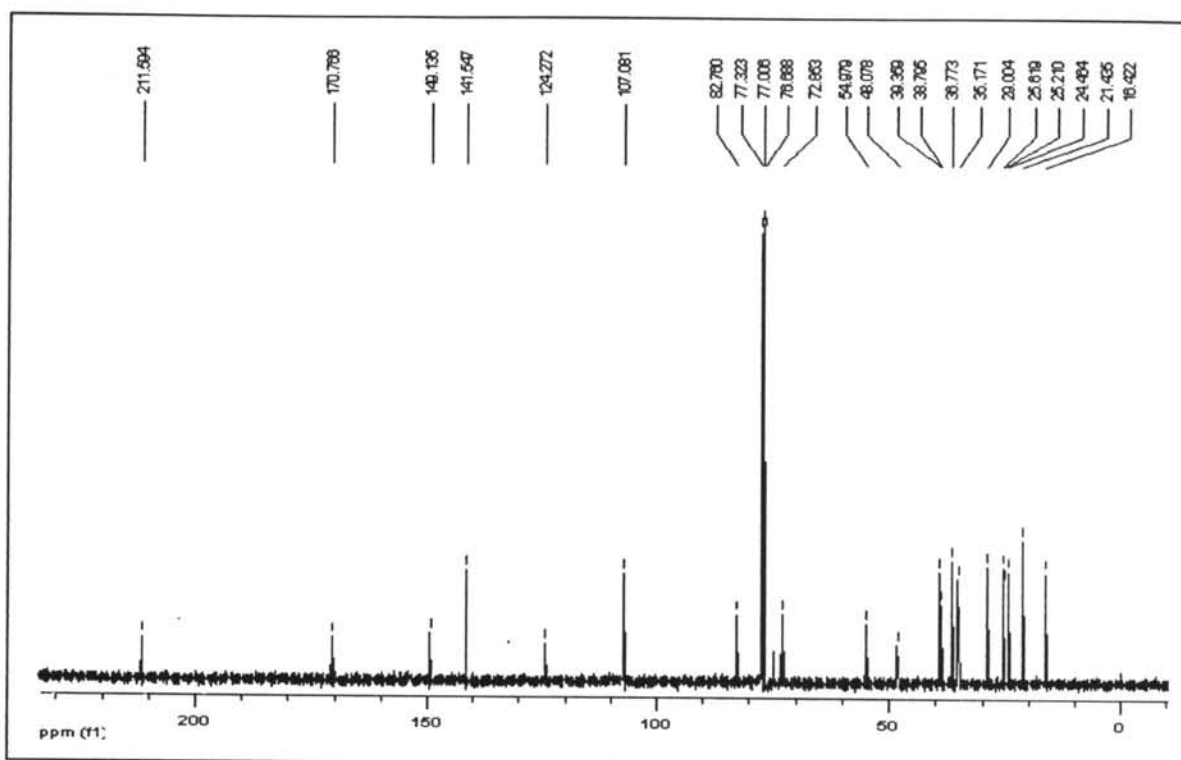


Figure 43 The ^{13}C -NMR spectrum of Caesalpinins Q (17)

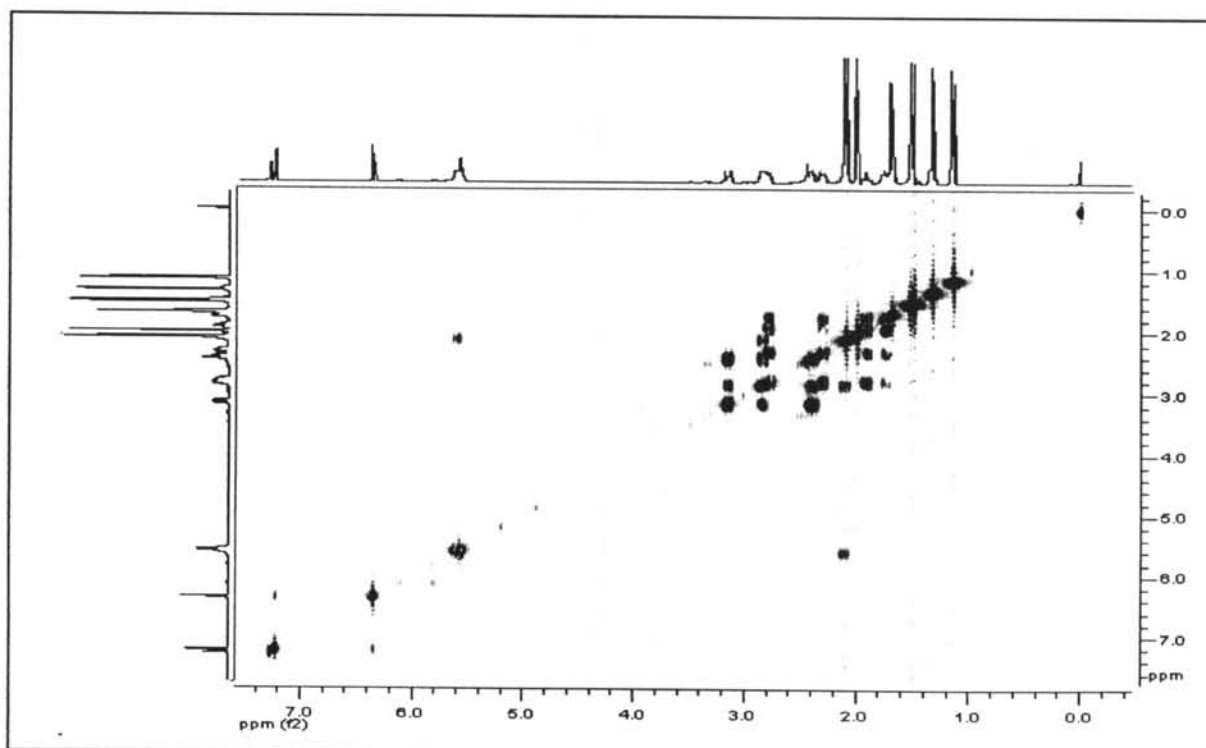


Figure 44 The COSY spectrum of Caesalpinins Q (17)

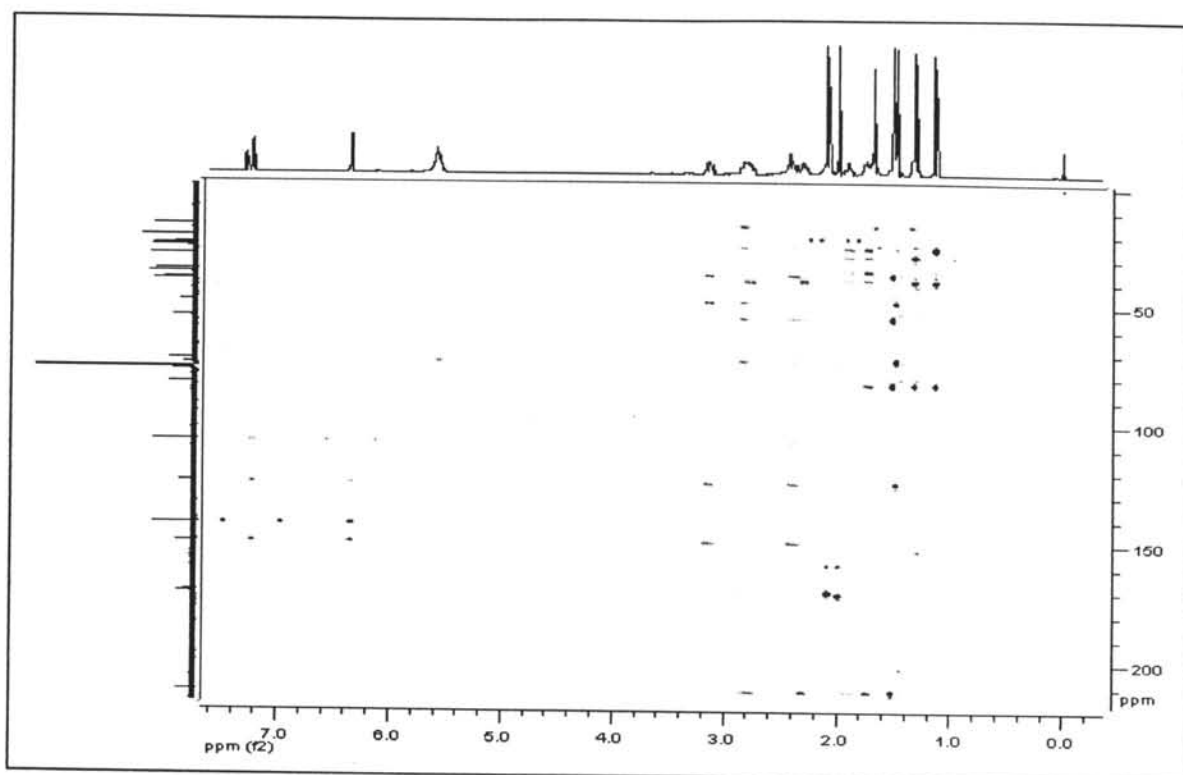


Figure 45 The HMBC spectrum of Caesalpinins Q (17)

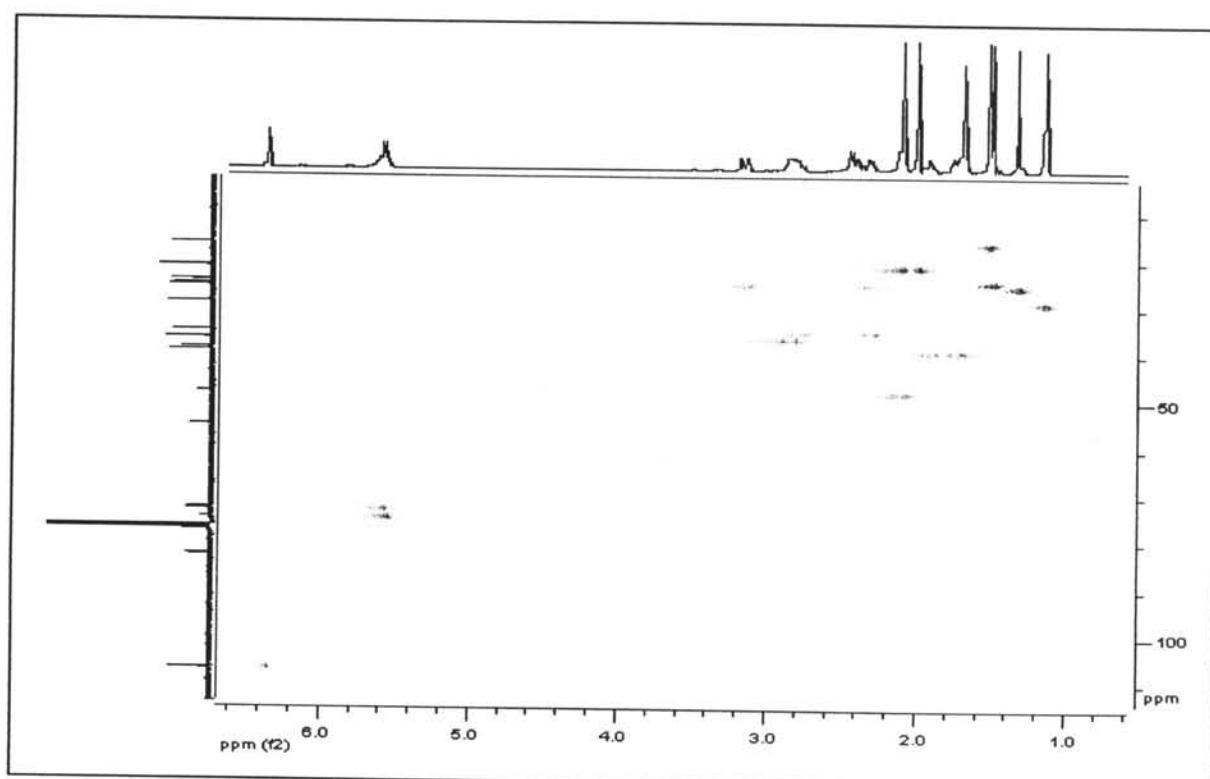


Figure 46 The HSQC spectrum of Caesalpinins Q (17)

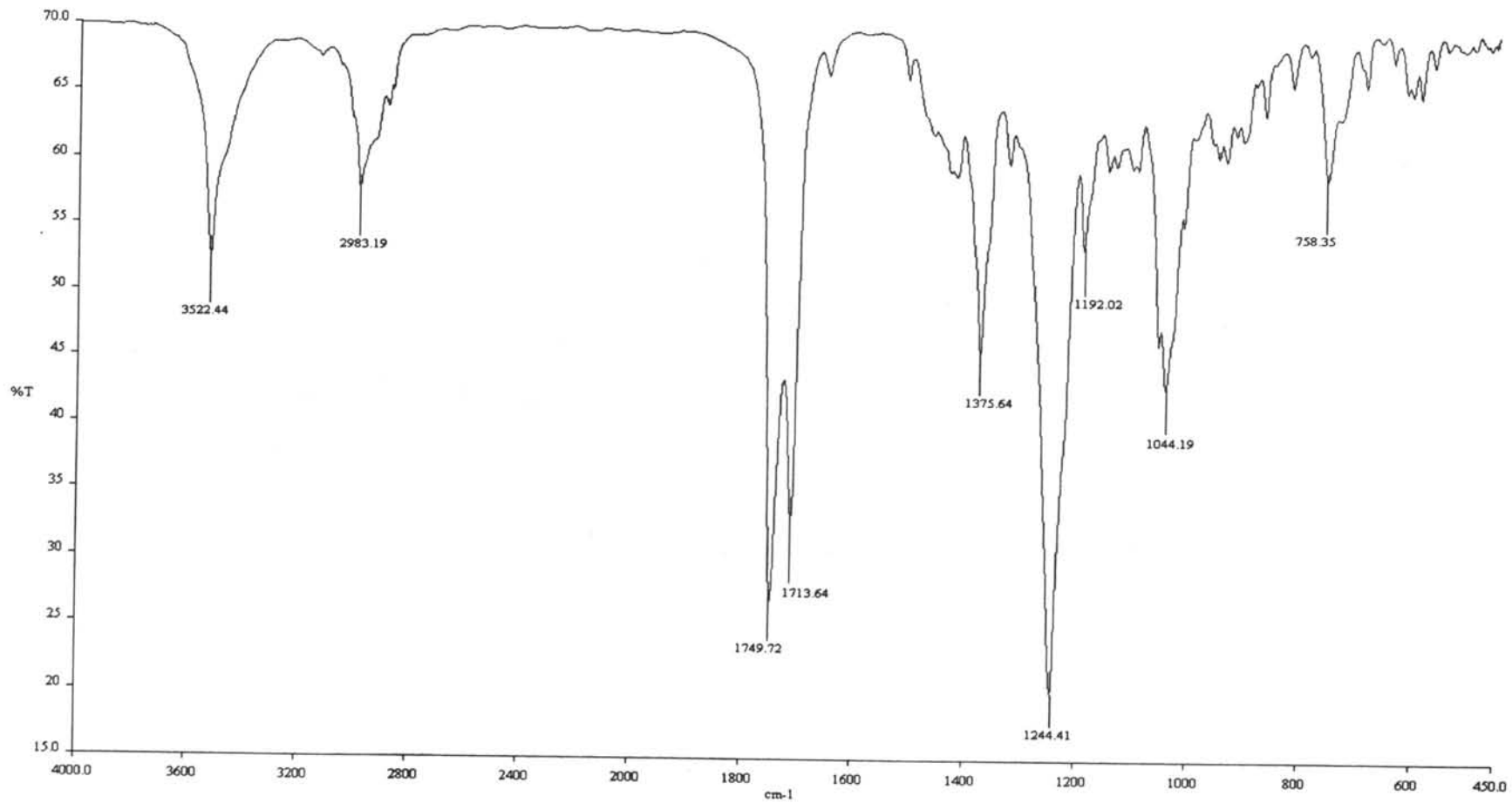


Figure 47 IR spectrum of Caesalpinins Q (17)

VITA

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