APPENDIX A: NMR Data of isolates

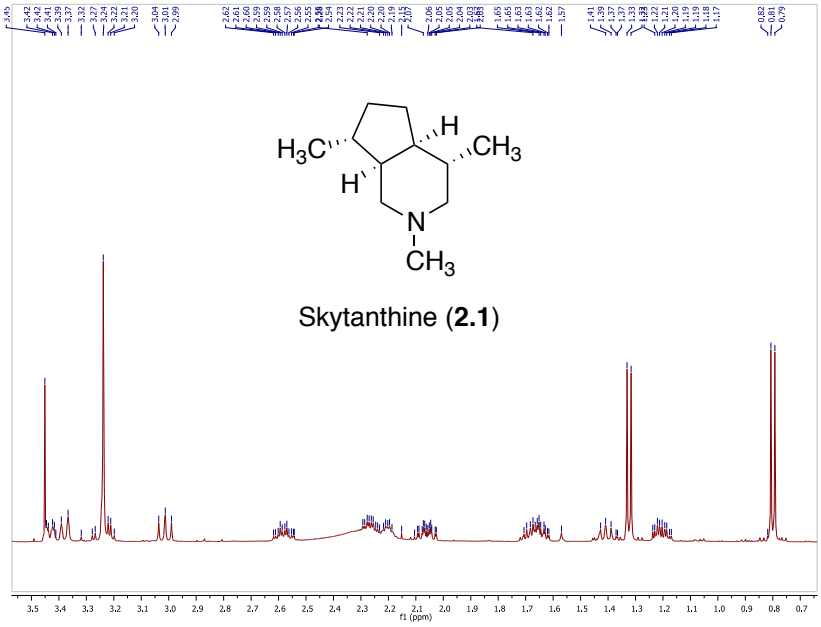


Figure A1. ^{1}H-NMR ($CDCl_3$, 500 MHz) spectra of skytantihne (**2.1**)

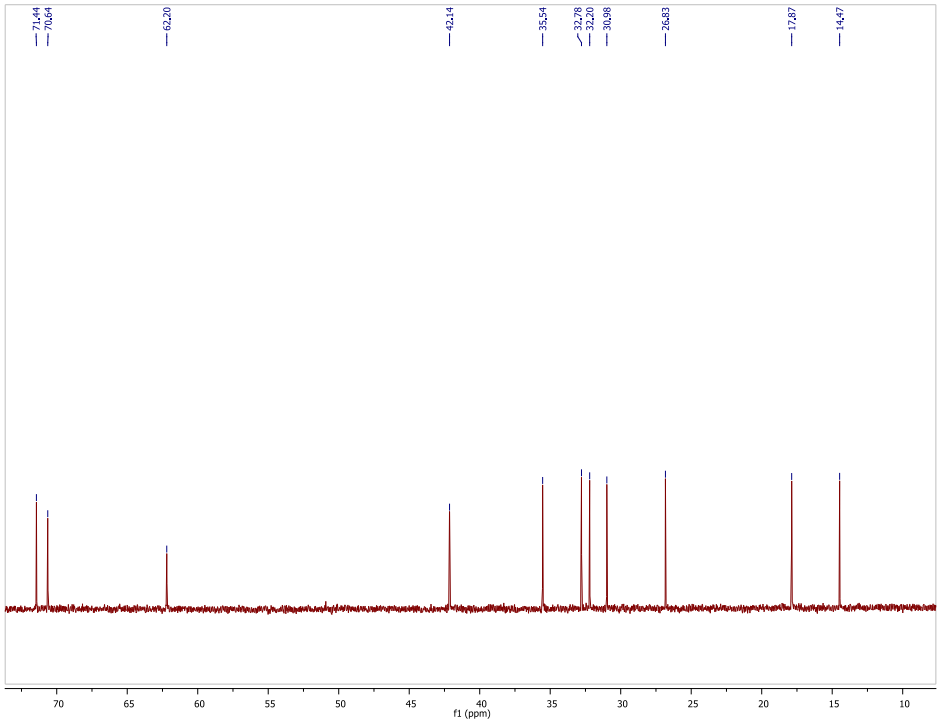


Figure A2. ^{13}C-NMR ($CDCl_3$, 133 MHz) spectra of skytanthine (**2.1**)

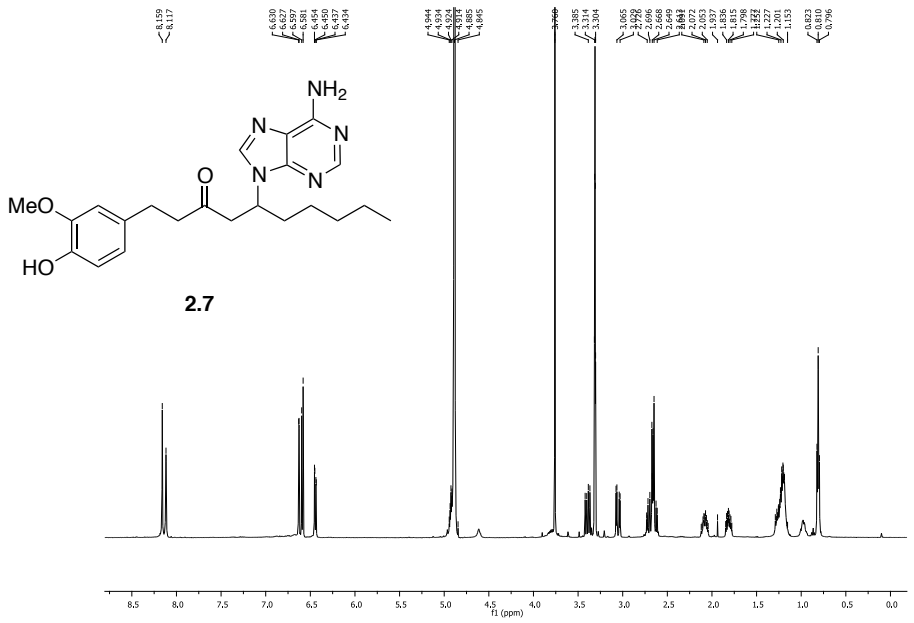


Figure A3 ^{1}H-NMR spectrum of [6]-zingerine (**2.7**) (500 MHz, CD_3OD)

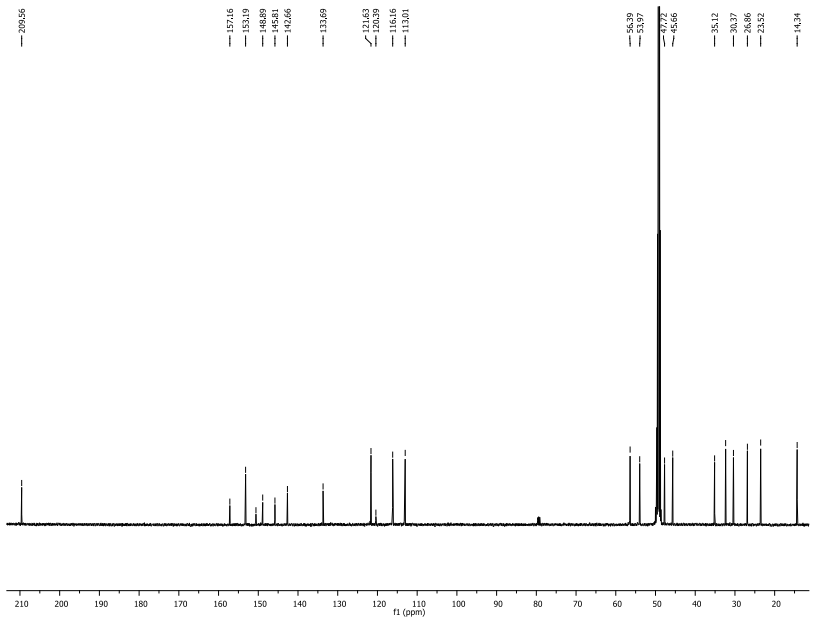


Figure A4 ^{13}C-NMR spectrum of [6]-zingerine (**2.7**) (125 MHz, CD_3OD)

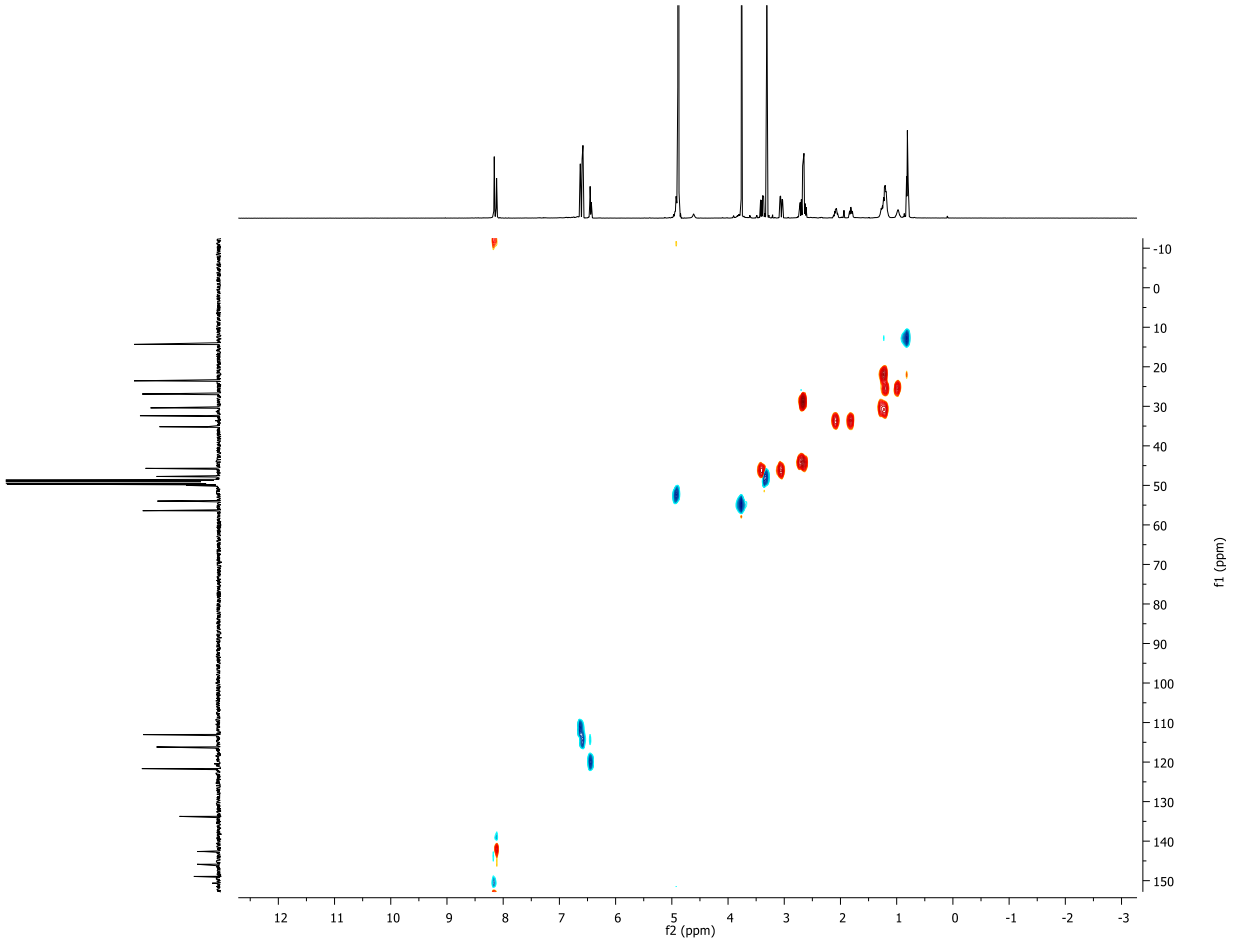


Figure A5 HSQC spectrum of [6]-zingerine (**2.7**) (500 MHz, CD_3OD)

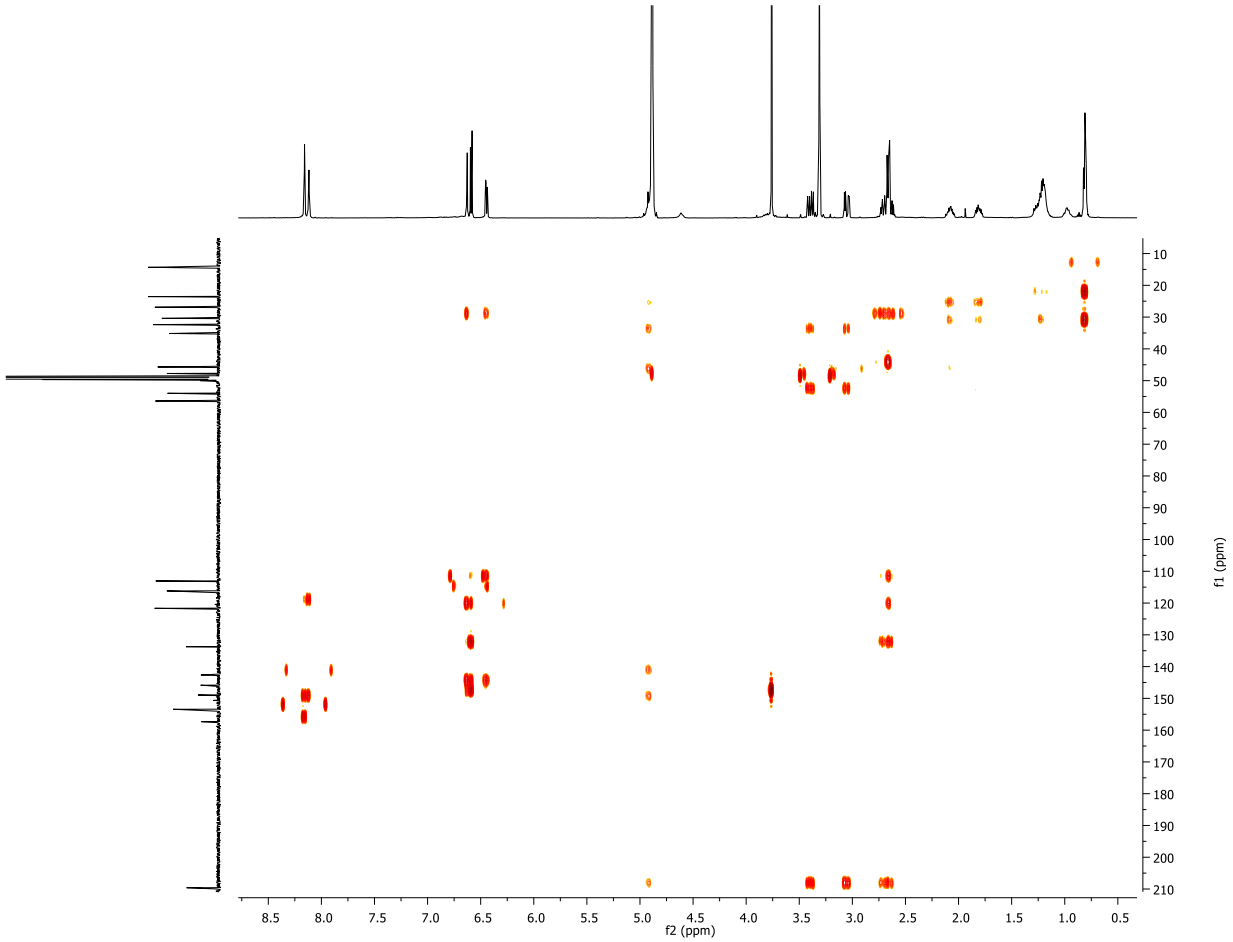


Figure A6 HMBC spectrum of [6]-zingerine (**2.7**) (500 MHz, CD_3OD)

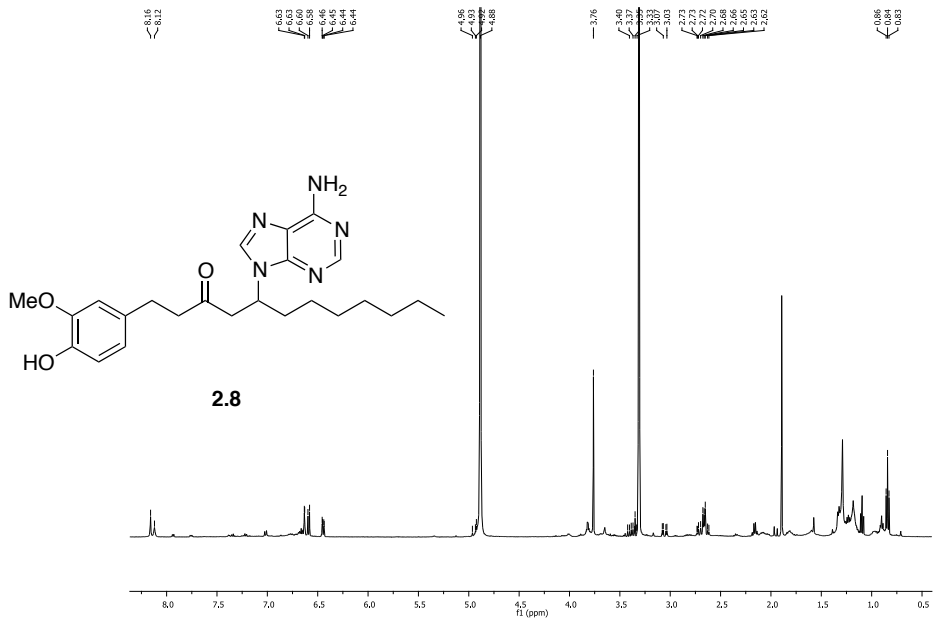


Figure A7 ^{1}H-NMR spectrum of [8]-zingerine (**2.8**) (500 MHz, CD_3OD)

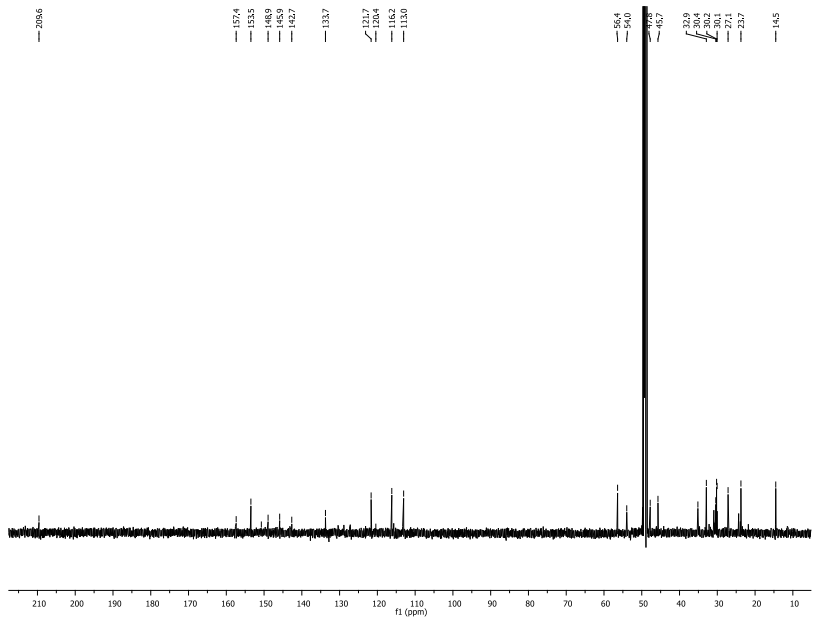


Figure A8 ^{13}C-NMR spectrum of [8]-zingerine (**2.8**) (125 MHz, CD_3OD)

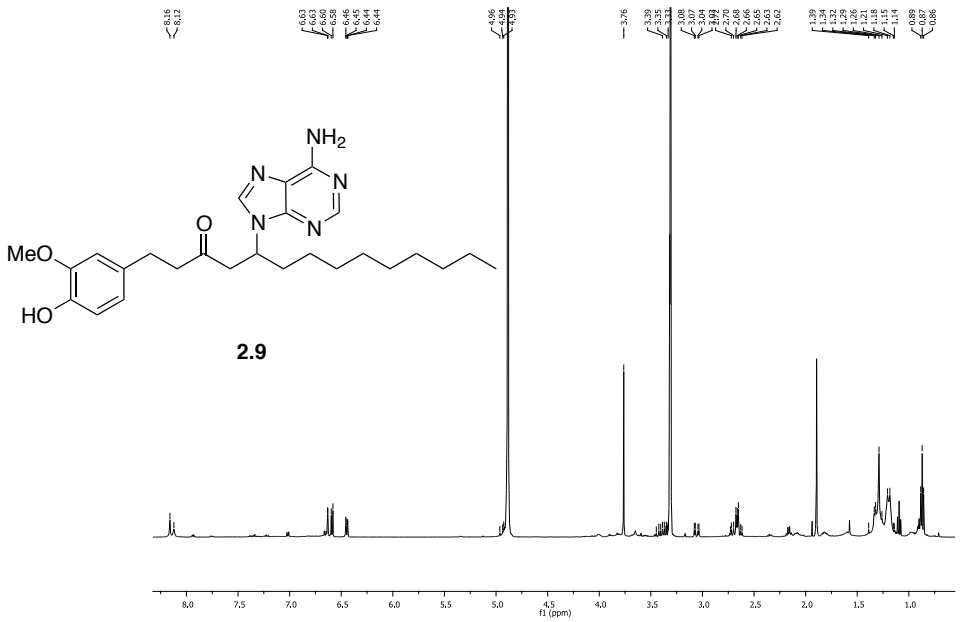


Figure A9 ^{1}H-NMR spectrum of [10]-zingerine (**2.9**) (500 MHz, CD_3OD)

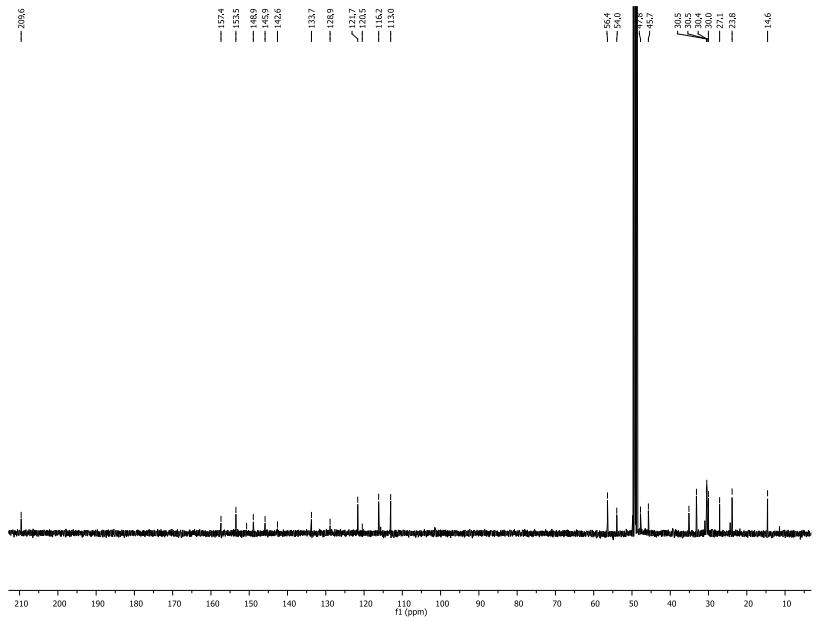


Figure A10 ^{13}C-NMR spectrum of [10]-zingerine (**2.10**) (125 MHz, CD_3OD)

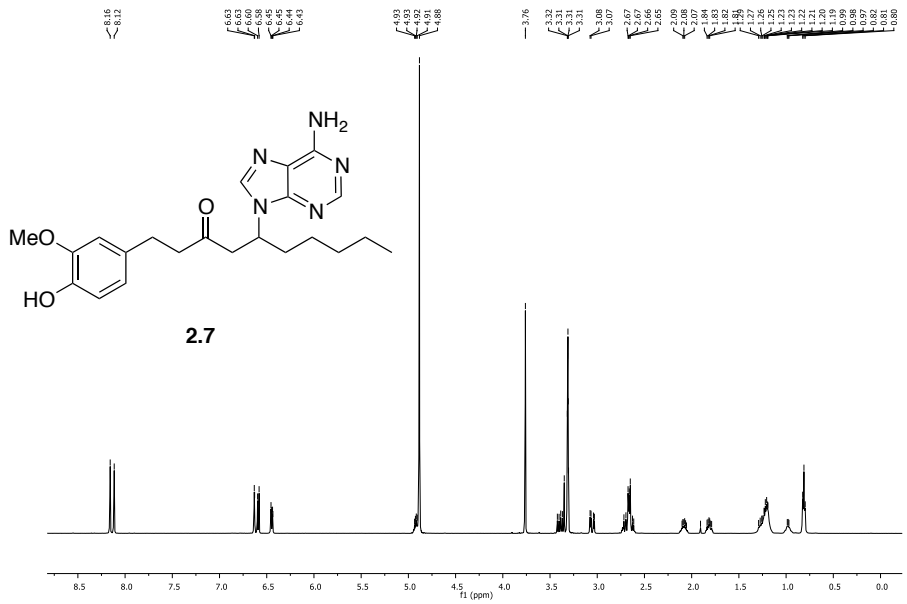


Figure A11. ^{1}H-NMR spectrum of [6]-zingerine (**2.7**) (500 MHz, CD_3OD) obtained by synthesis.

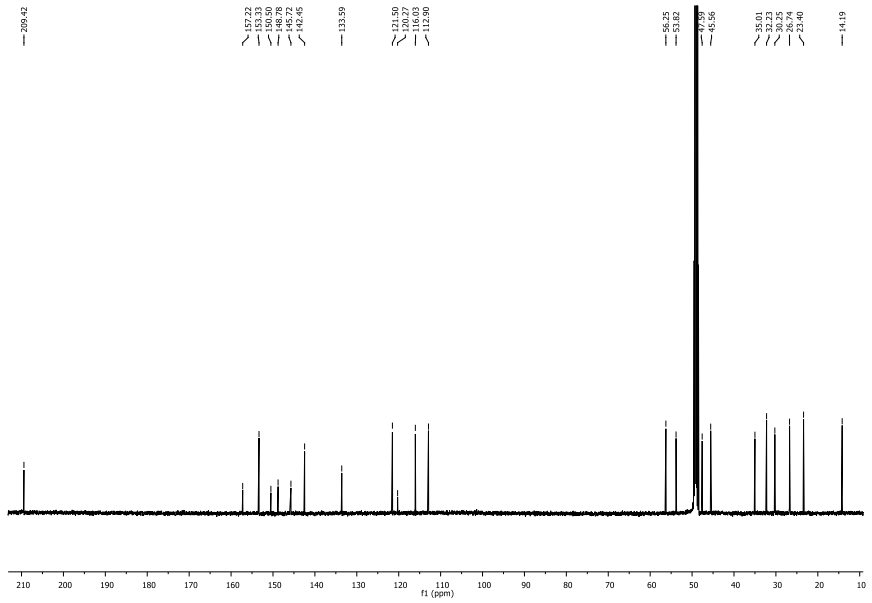


Figure A12. ^{13}C-NMR spectrum of [6]-zingerine (**2.7**) (125 MHz, CD_3OD) obtained by synthesis.

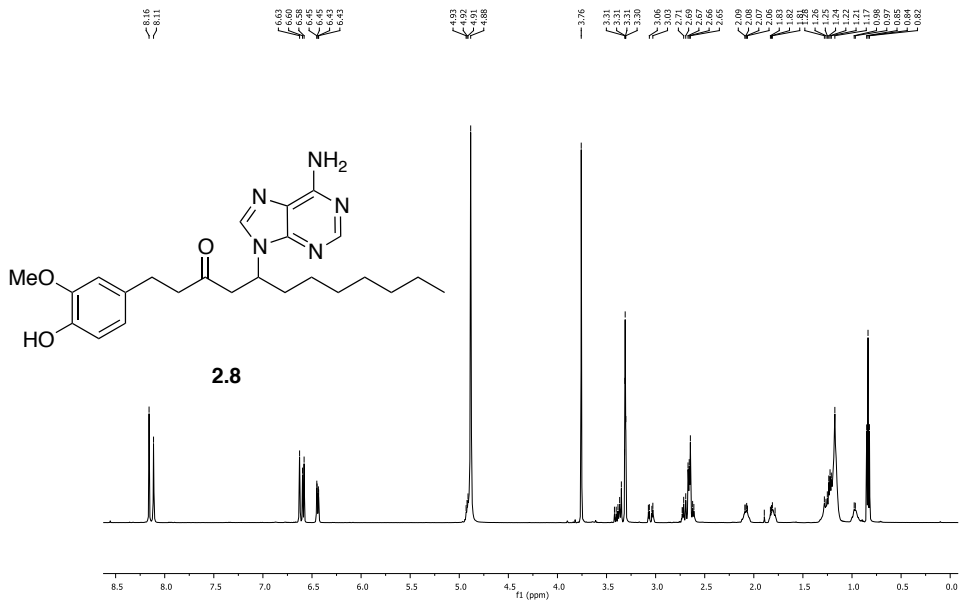


Figure A13. ^{1}H-NMR spectrum of [8]-zingerine (**2.8**) (500 MHz, CD_3OD) obtained by synthesis.

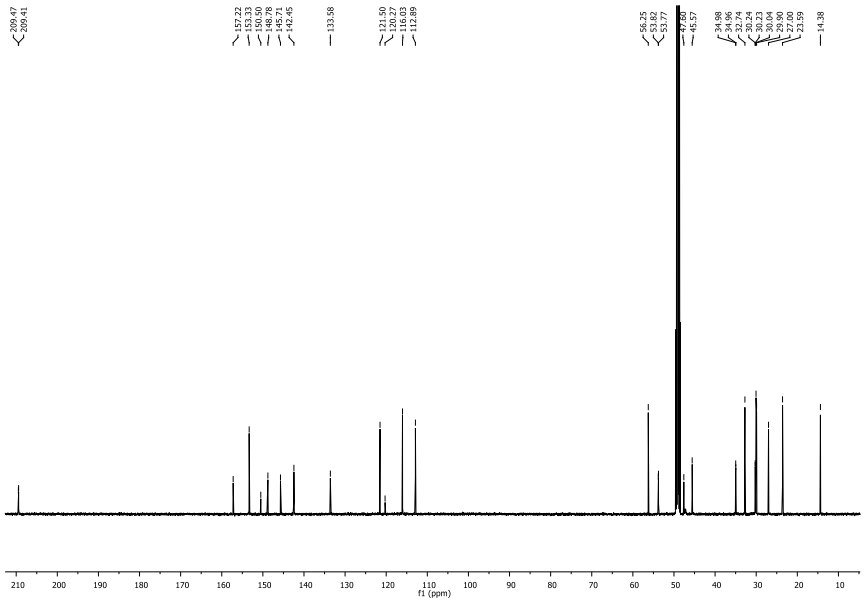


Figure A14. ^{13}C-NMR spectrum of [8]-zingerine (**2.8**) (125 MHz, CD_3OD) obtained by synthesis.

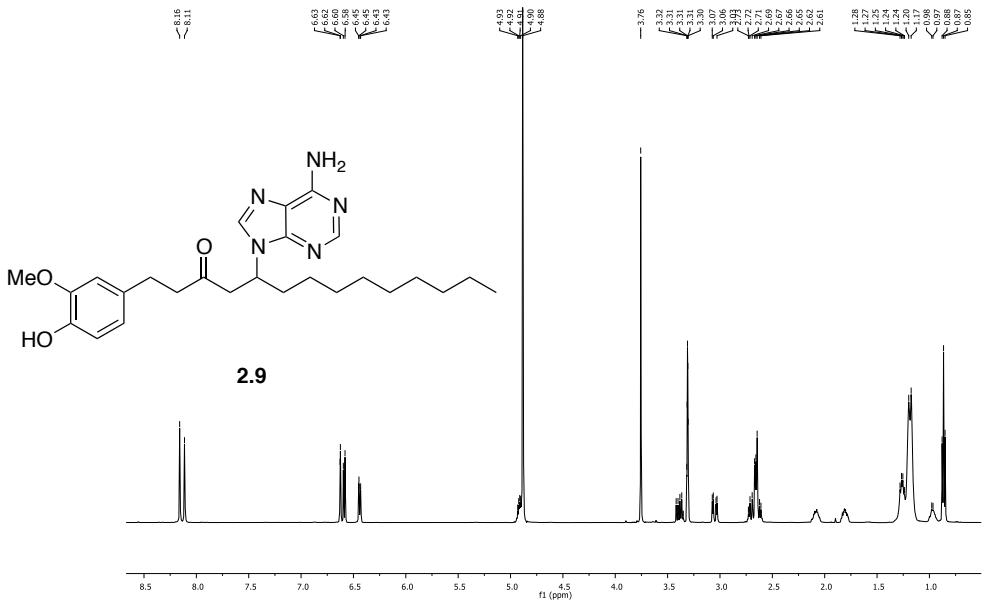


Figure A15. ^{1}H-NMR spectrum of [10]-zingerine (**2.9**) (500 MHz, CD_3OD) obtained by synthesis.

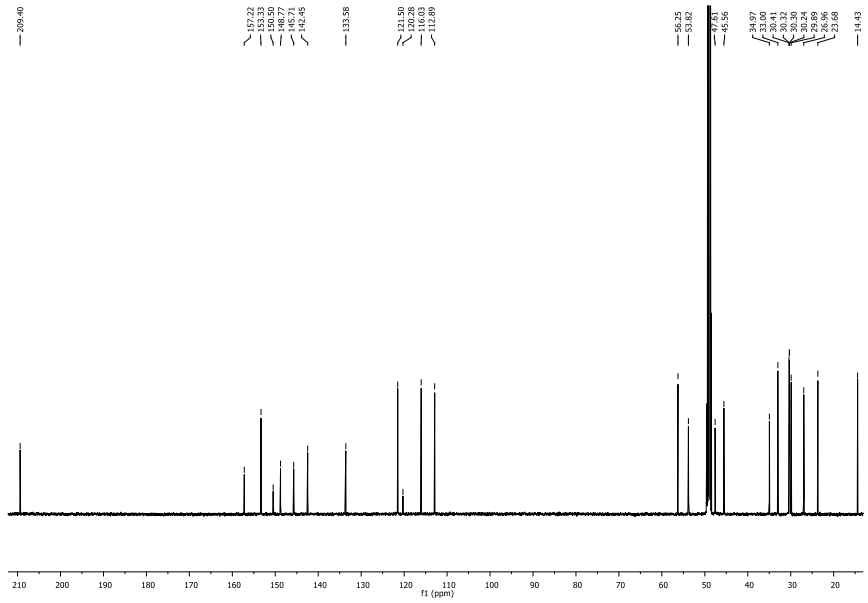


Figure A16. ^{13}C-NMR spectrum of [10]-zingerine (**2.9**) (125 MHz, CD_3OD) obtained by synthesis.

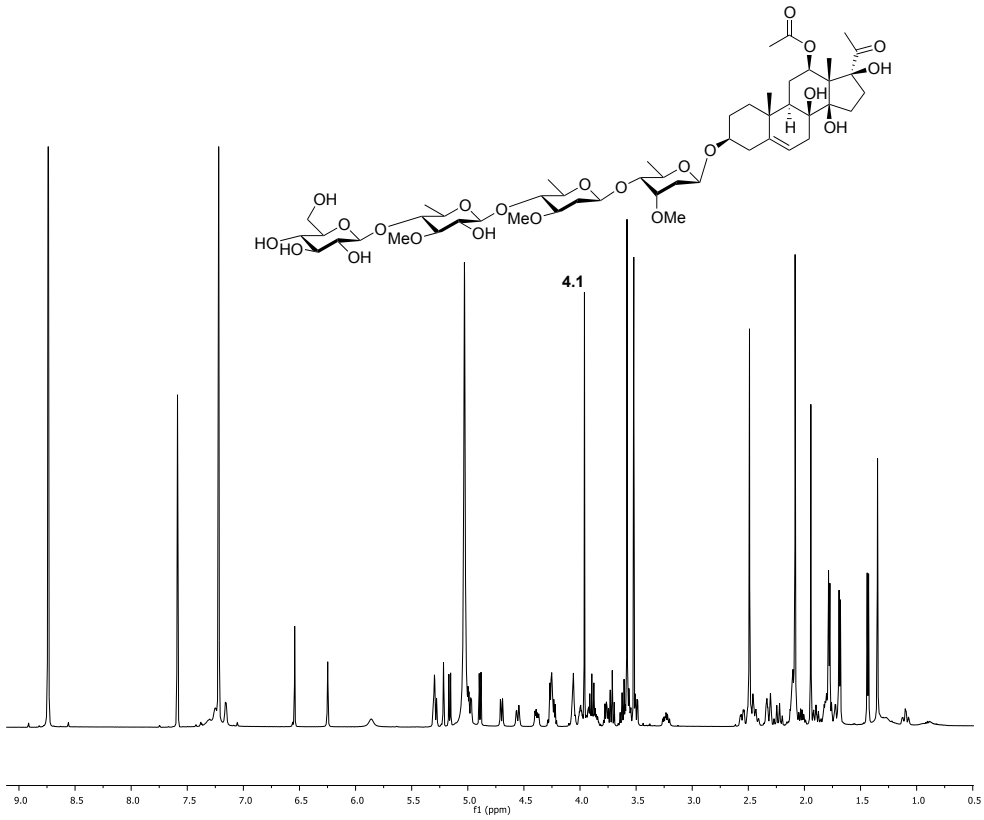


Figure A17 ^{1}H-NMR spectrum of verticilloside A (**4.1**) (500 MHz, C_5D_5N)

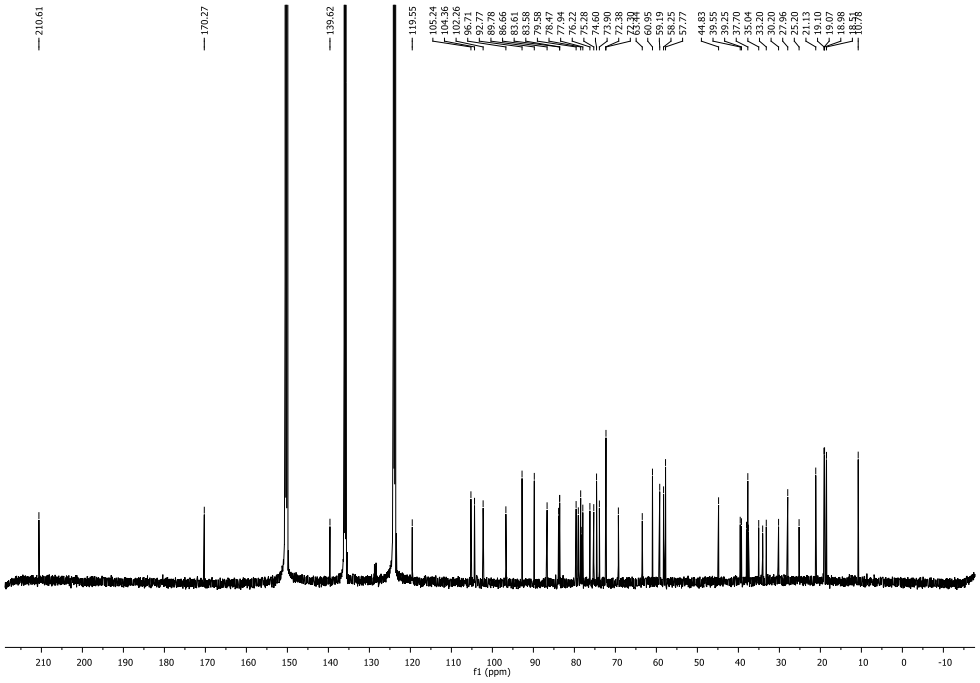


Figure A18 ^{13}C-NMR spectrum of verticilloside A (**4.1**) (500 MHz, C_5D_5N)

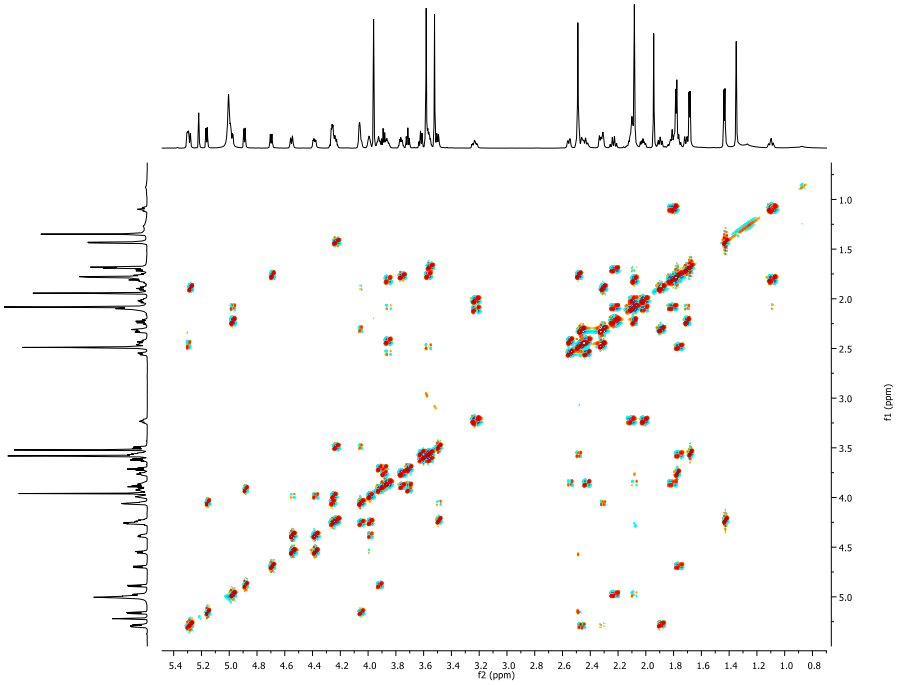


Figure A19 DQF ^{1}H, ^{1}H-COSY spectrum of verticilloside A (**4.1**) (800 MHz, C_5D_5N)

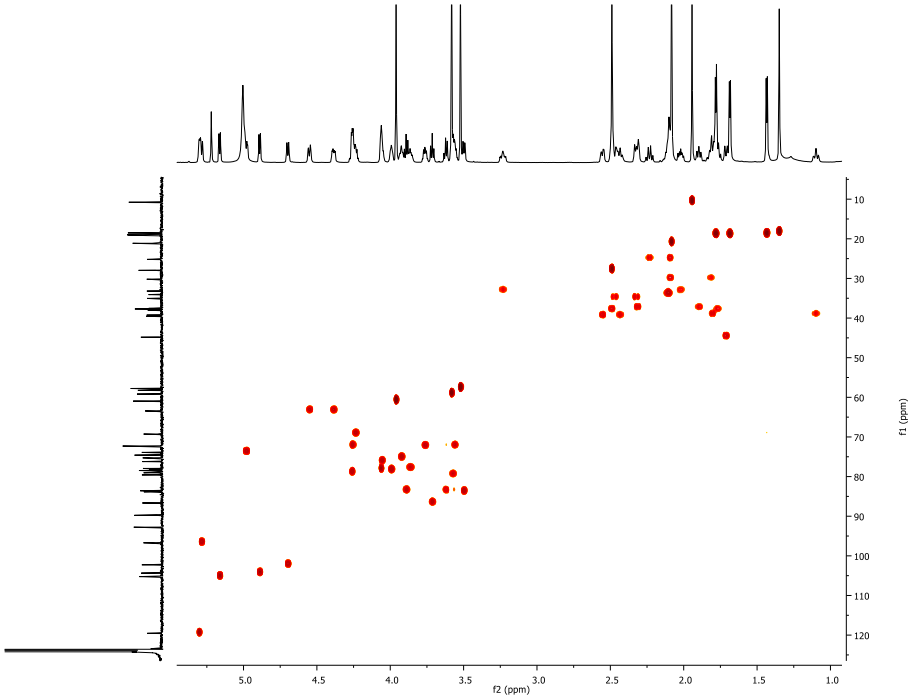


Figure A20 HSQC spectrum of verticilloside A (**4.1**) (800 MHz, C_5D_5N)

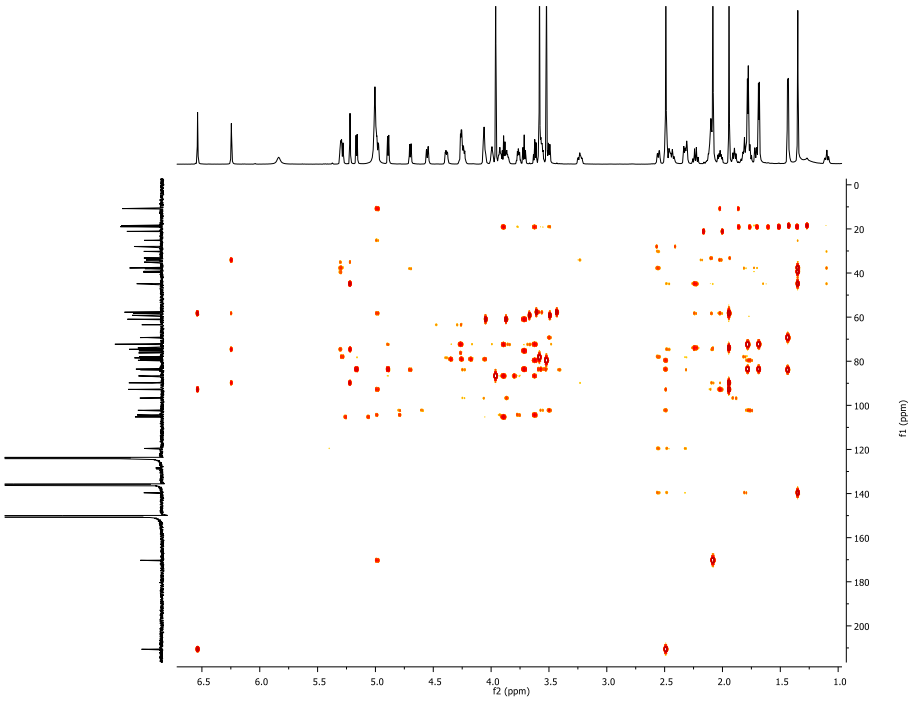


Figure A21 HMBC spectrum of verticilloside A (**4.1**) (800 MHz, C_5D_5N)

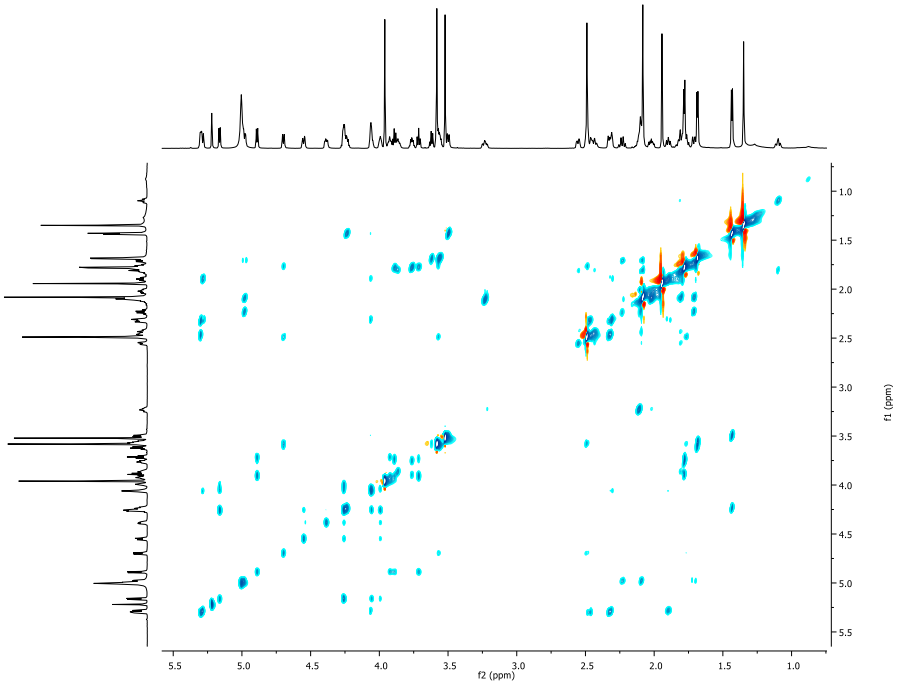


Figure A22 TOCSY spectrum of verticilloside A (**4.1**) (800 MHz, C_5D_5N)

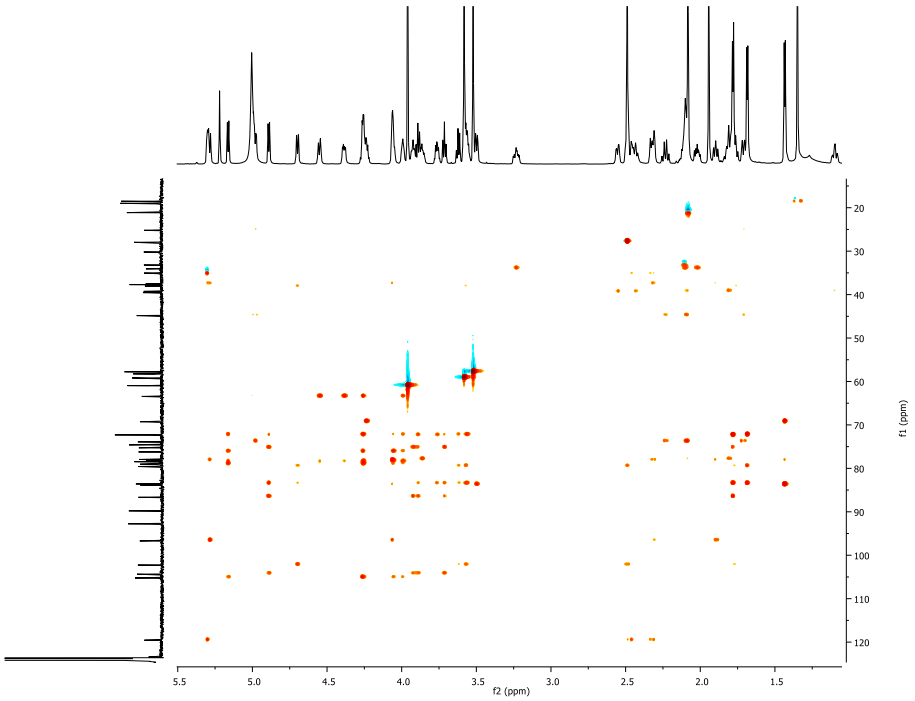


Figure A23 HSQC-TOCSY spectrum of verticilloside A (**4.1**) (800 MHz, C_5D_5N)

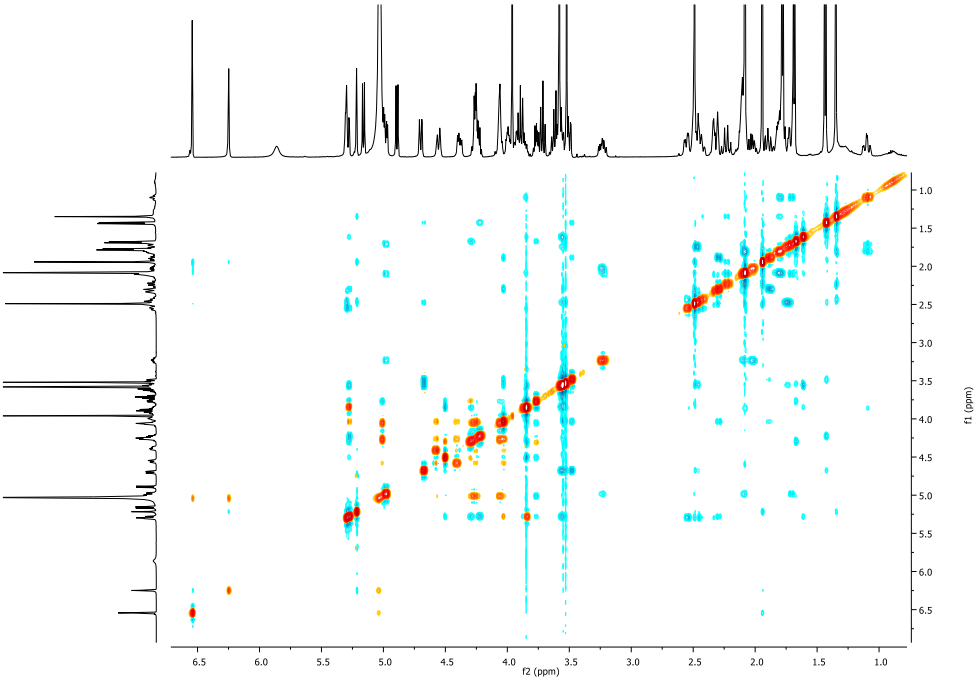


Figure A24 ROESY spectrum of verticilloside A (**4.1**) (800 MHz, C_5D_5N)

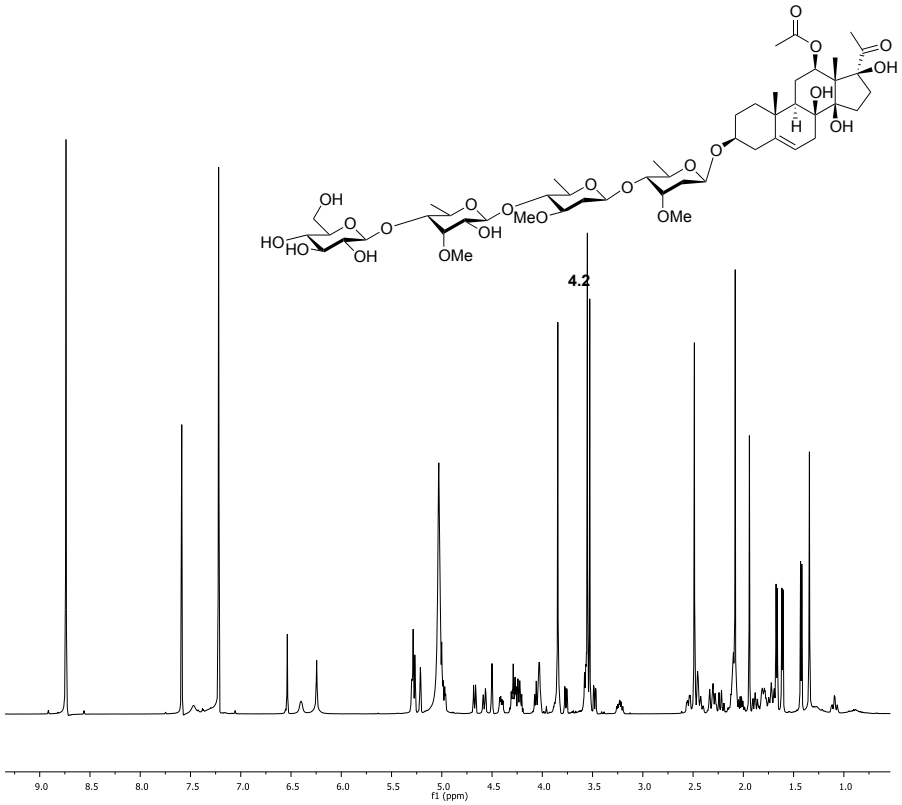


Figure A25 ^{1}H-NMR spectrum of verticilloside B (**4.2**) (500 MHz, C_5D_5N)

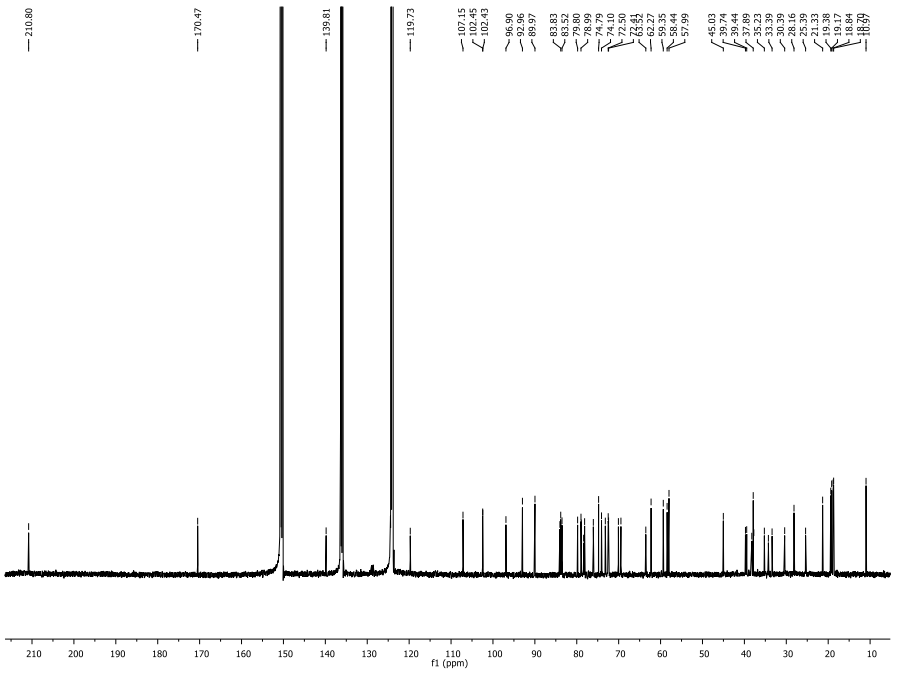


Figure A26 ^{13}C-NMR spectrum of verticilloside B (**4.2**) (500 MHz, C_5D_5N)

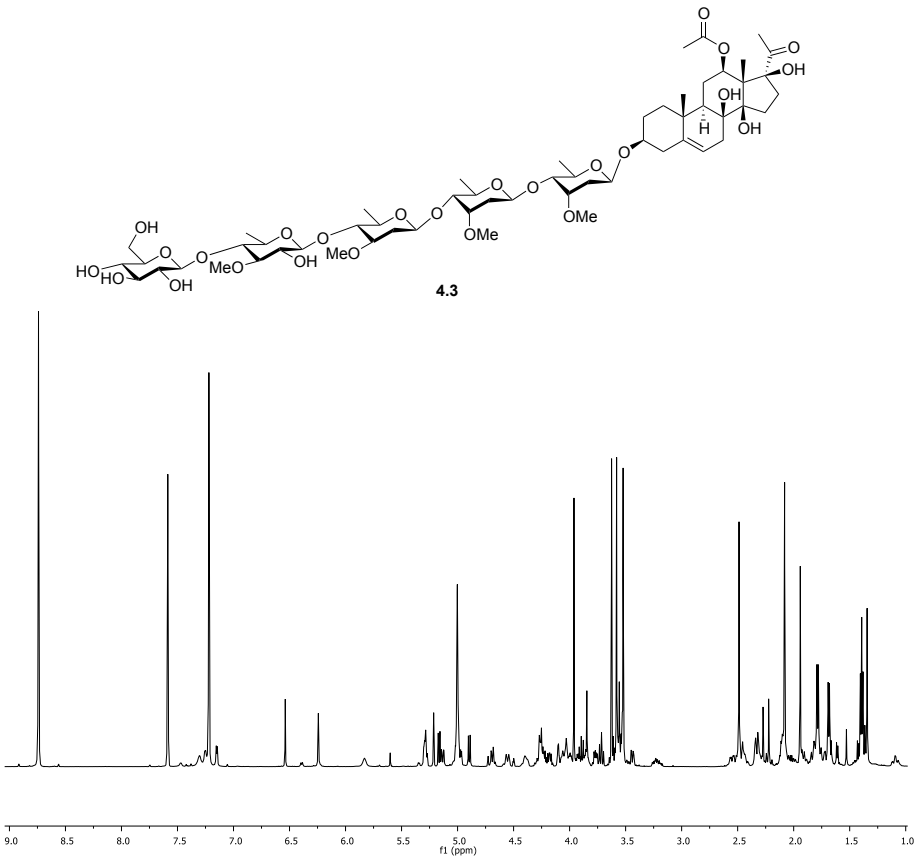


Figure A27 ^{1}H-NMR spectrum of verticilloside C (**4.3**) (500 MHz, C_5D_5N)

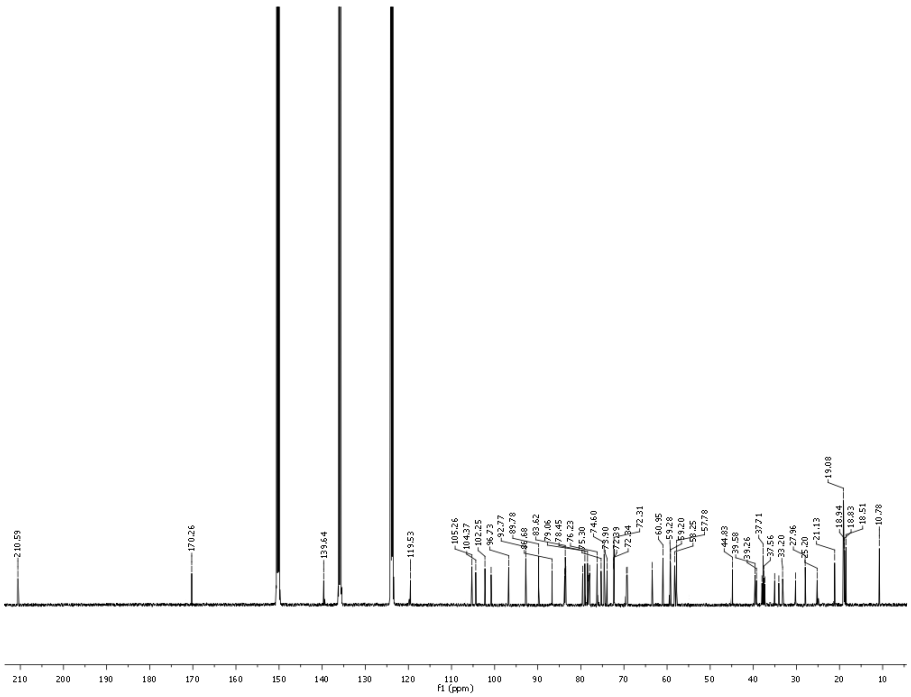


Figure A28 ^{13}C-NMR spectrum of verticilloside C (**4.3**) (500 MHz, C_5D_5N)

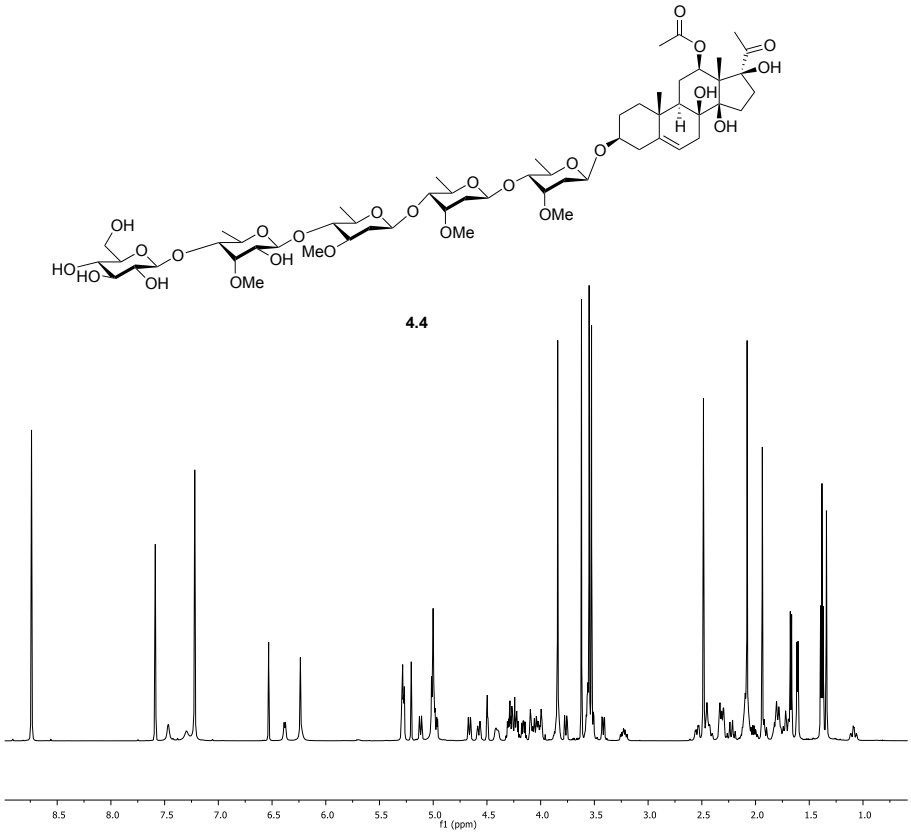


Figure A29 ^{1}H-NMR spectrum of verticilloside D (**4.4**) (500 MHz, C_5D_5N)

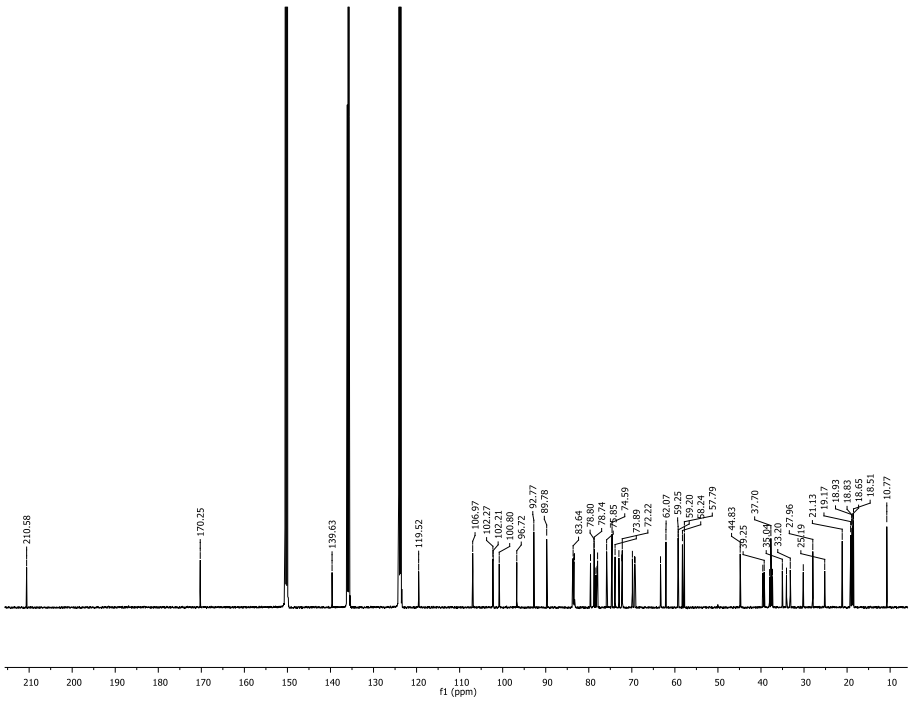


Figure A30 ^{13}C-NMR spectrum of verticilloside D (**4.4**) (500 MHz, C_5D_5N)

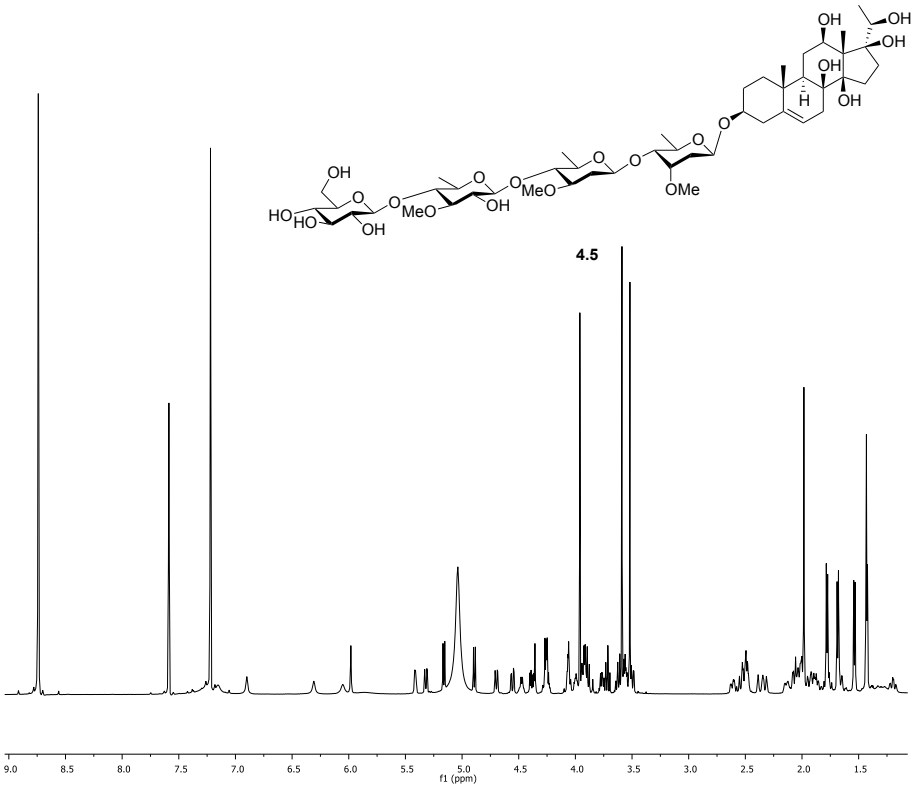


Figure A31 ^{1}H-NMR spectrum of verticilloside E (**4.5**) (500 MHz, C_5D_5N)

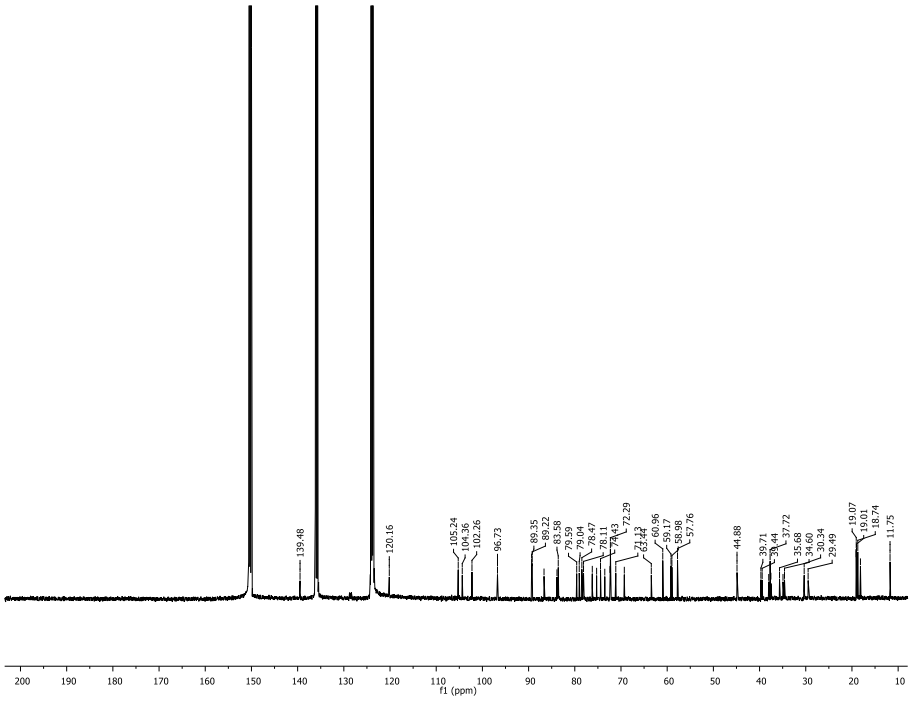


Figure A32 ^{13}C-NMR spectrum of verticilloside E (**4.5**) (500 MHz, C_5D_5N)

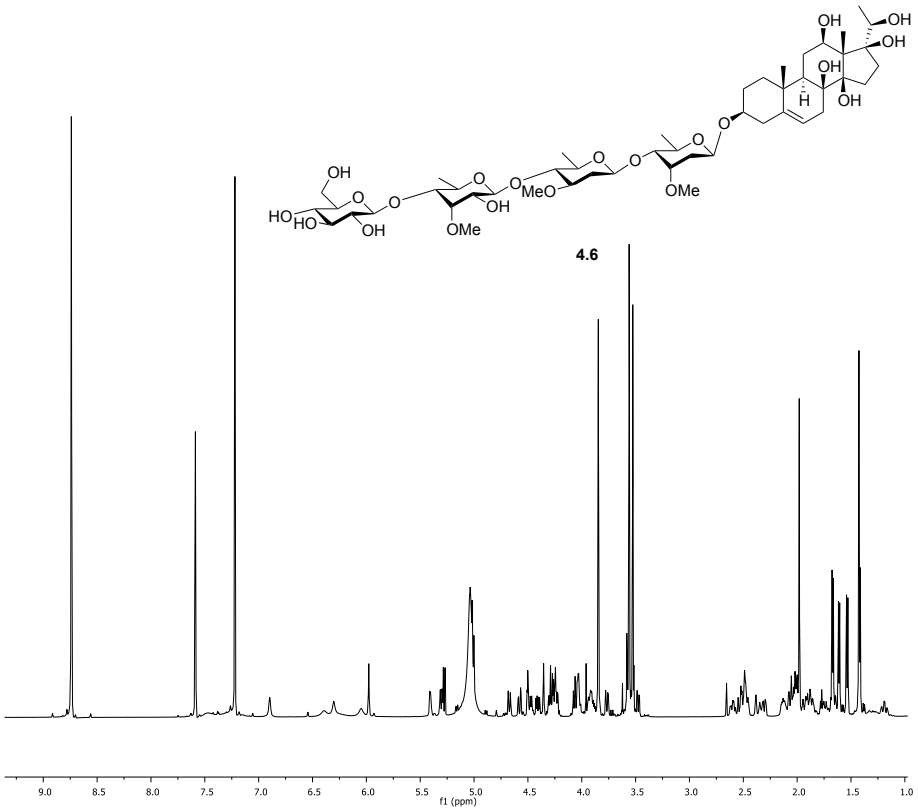


Figure A33 ^{1}H-NMR spectrum of verticilloside F (**4.6**) (500 MHz, C_5D_5N)

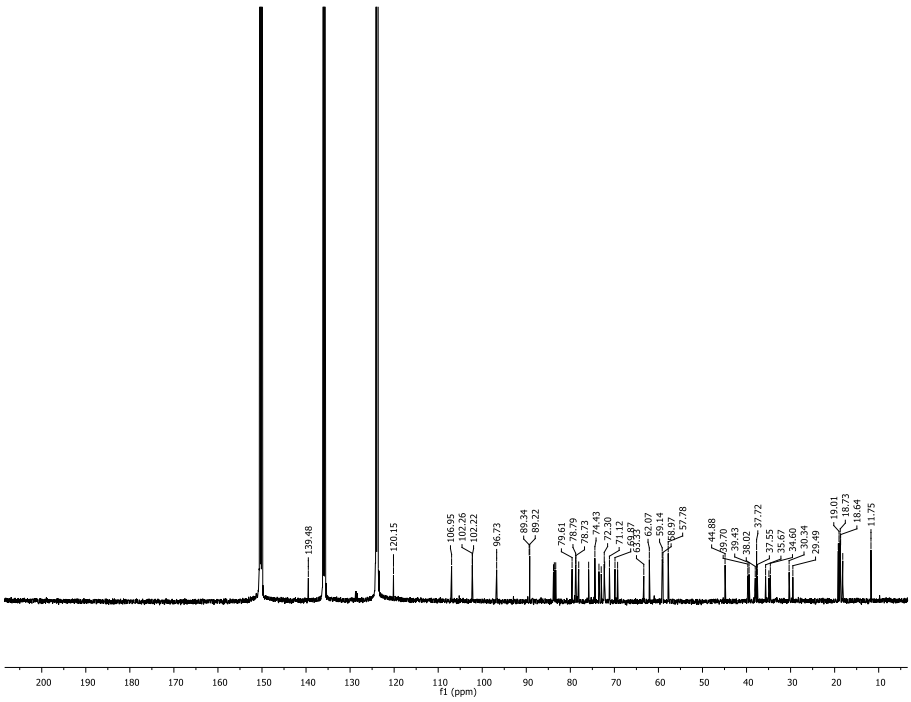


Figure A34 ^{13}C-NMR spectrum of verticilloside F (**4.6**) (500 MHz, C_5D_5N)

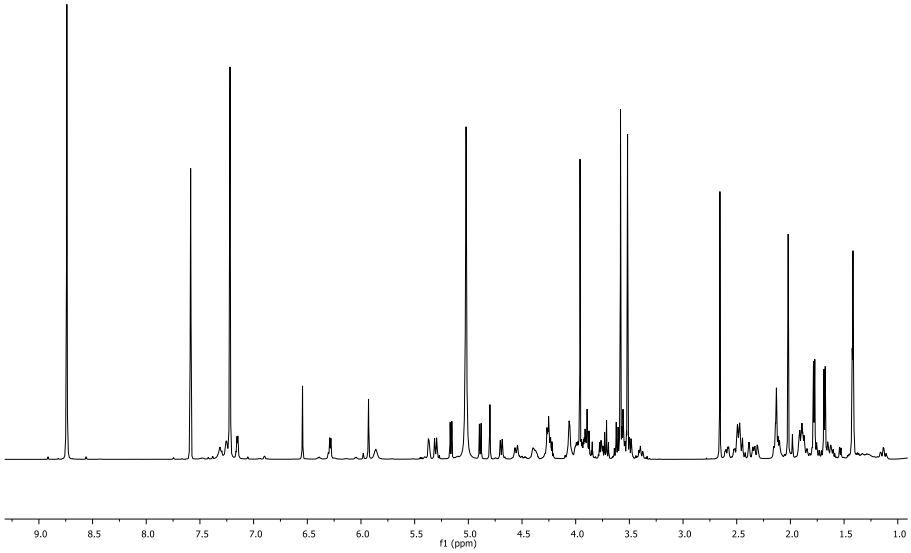


Figure A35 ^{1}H-NMR spectrum of verticilloside G (**4.7**) (500 MHz, C_5D_5N)

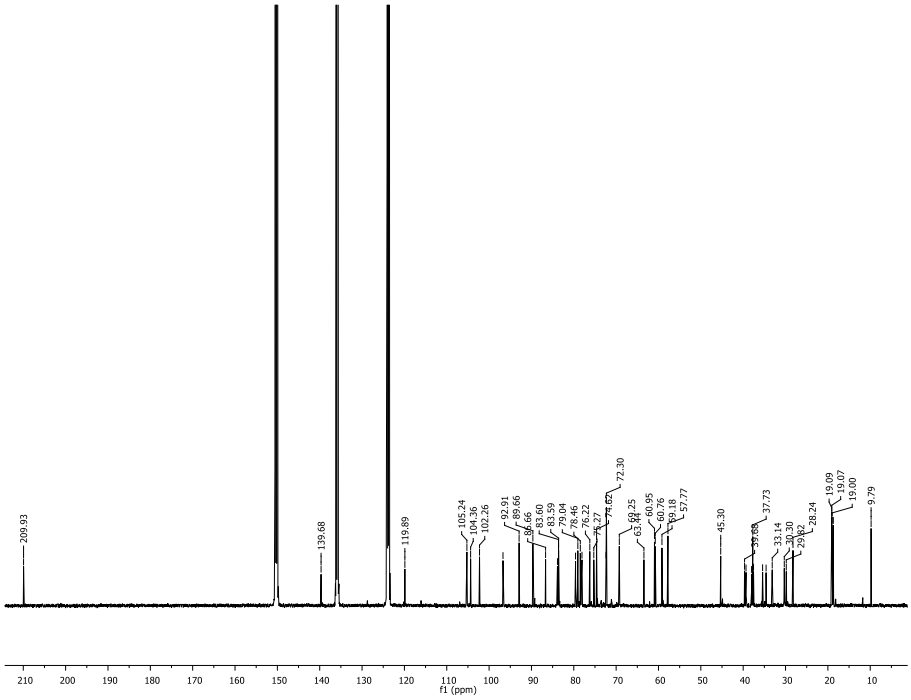
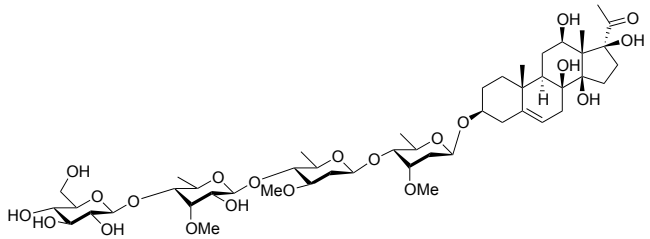


Figure A36 ^{13}C-NMR spectrum of verticilloside G (**4.7**) (500 MHz, C_5D_5N)



4.8

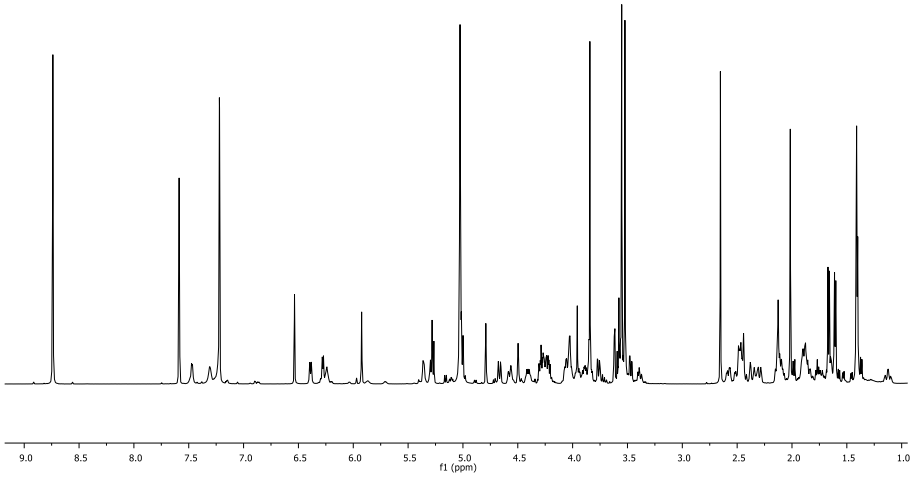


Figure A37 ^{1}H-NMR spectrum of verticilloside H (**4.8**) (500 MHz, C_5D_5N)

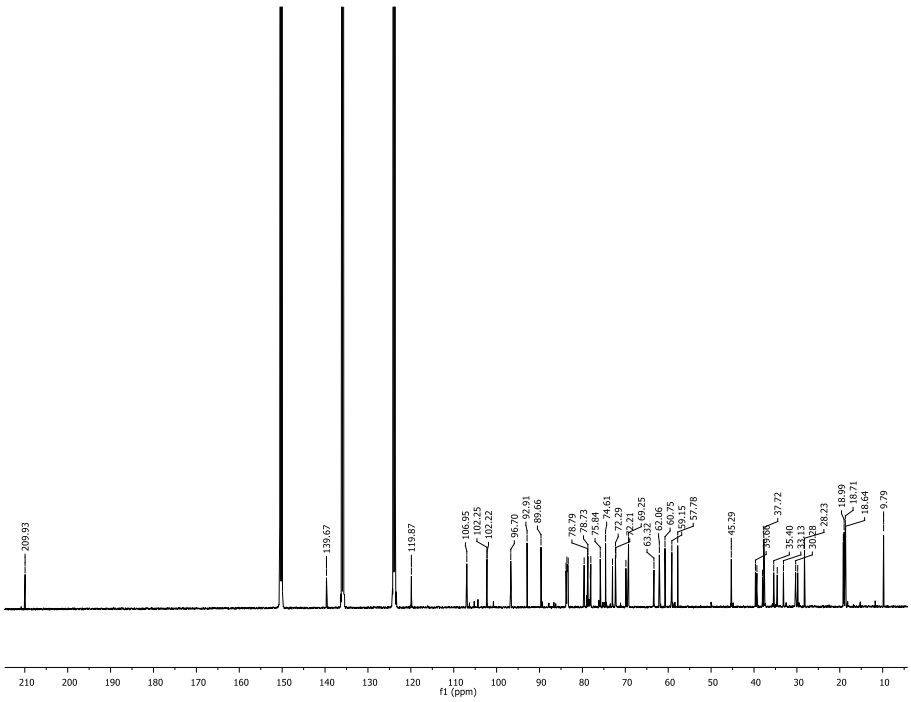


Figure A38 ^{13}C-NMR spectrum of verticilloside H (**4.8**) (500 MHz, C_5D_5N)

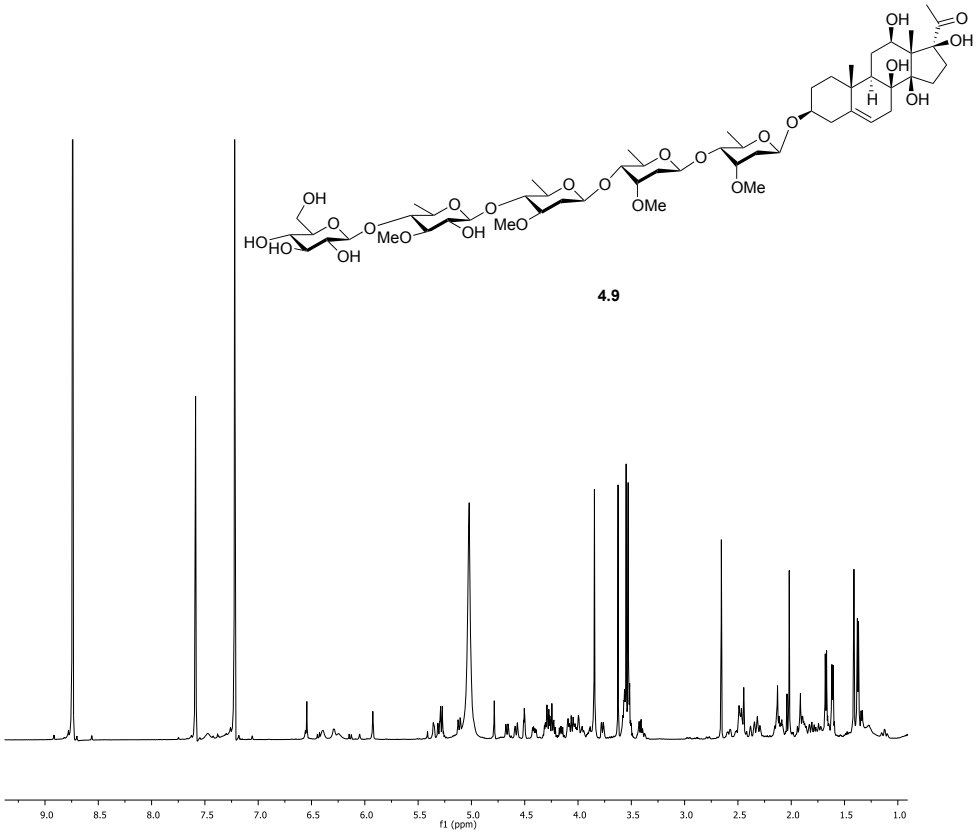


Figure A39 ^{1}H-NMR spectrum of verticilloside I (**4.9**) (500 MHz, C_5D_5N)

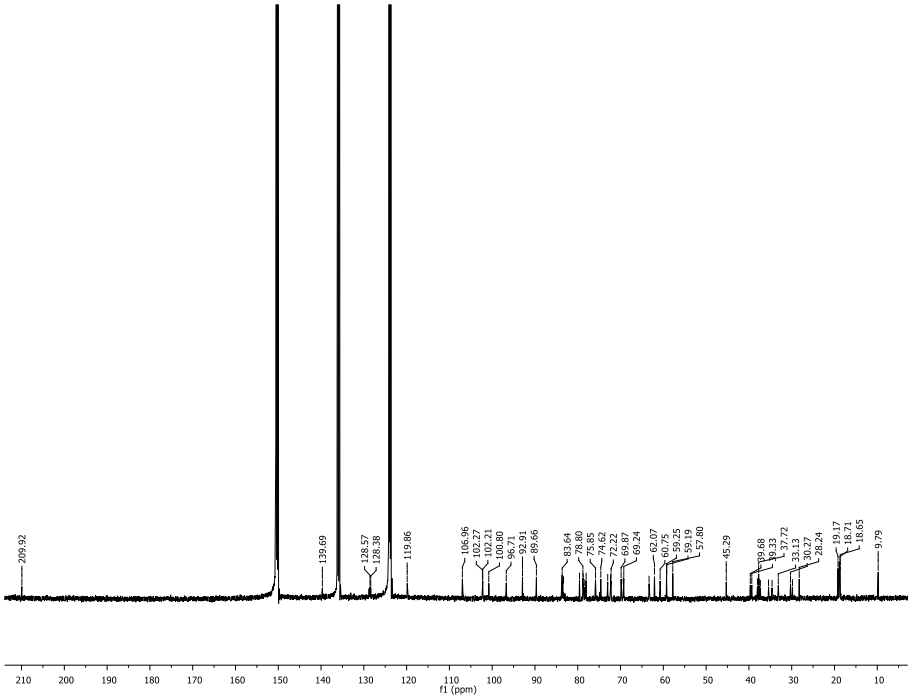


Figure A40 ^{13}C-NMR spectrum of verticilloside I (**4.9**) (500 MHz, C_5D_5N)

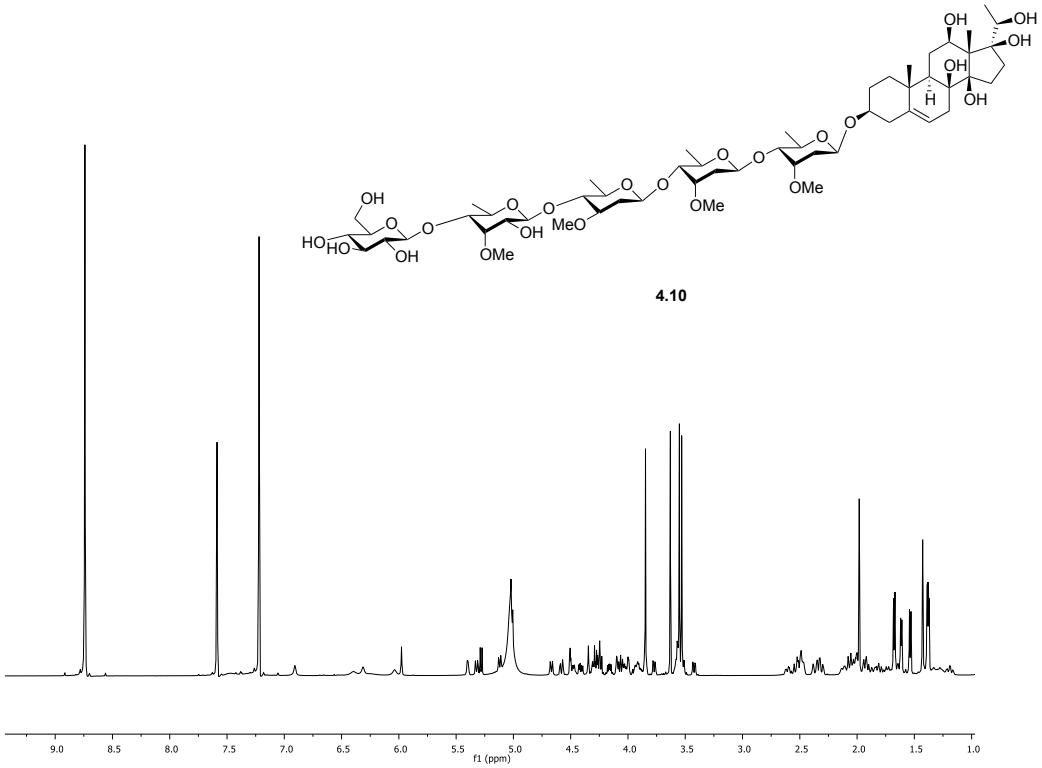


Figure A41 ^{1}H-NMR spectrum of verticilloside J (**4.10**) (500 MHz, C_5D_5N)

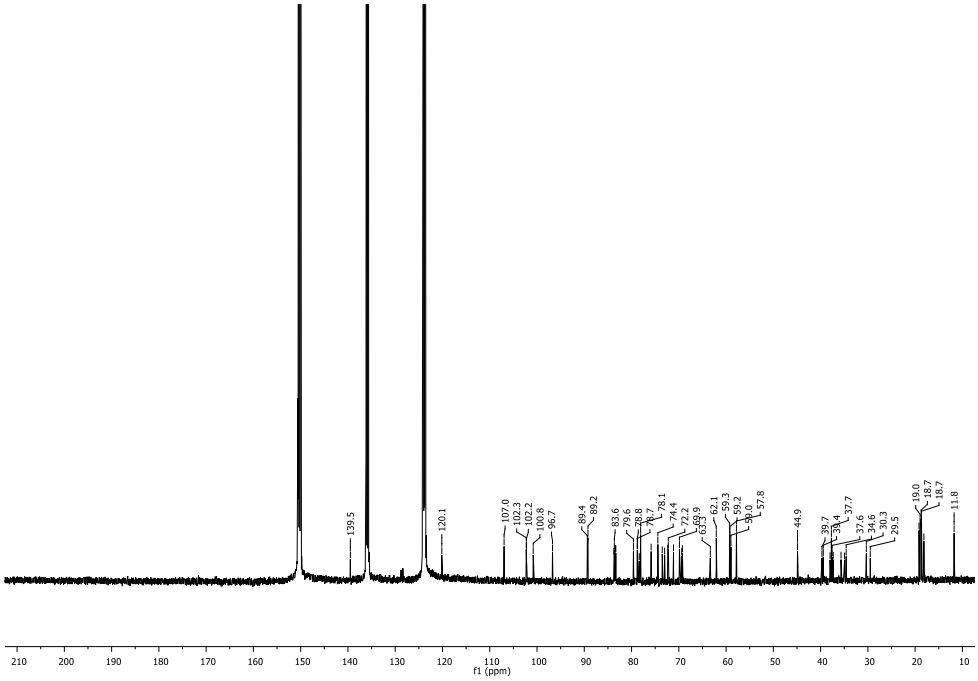
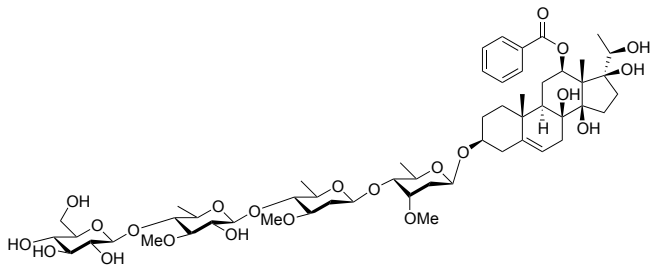


Figure A42 ^{13}C-NMR spectrum of verticilloside J (**4.10**) (500 MHz, C_5D_5N)



4.11

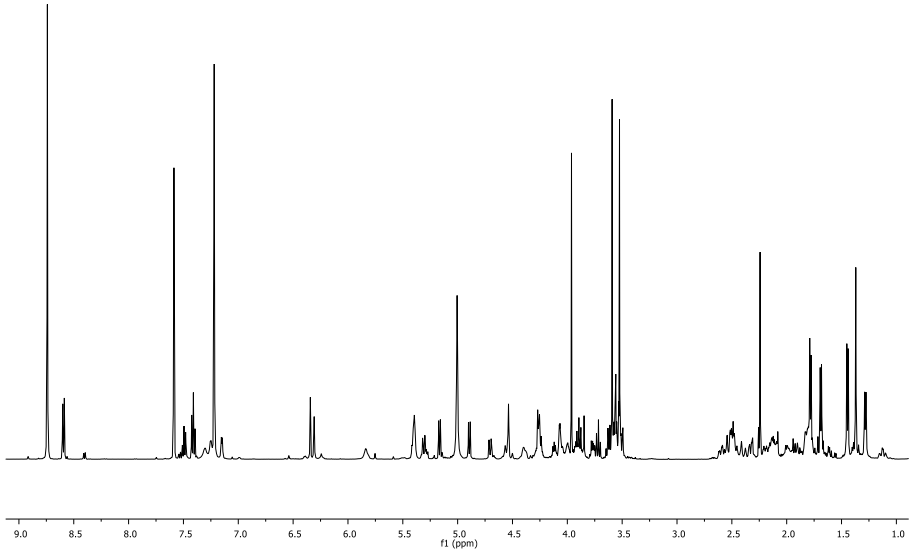


Figure A43 ^{1}H-NMR spectrum of verticilloside K (**4.11**) (500 MHz, C_5D_5N)

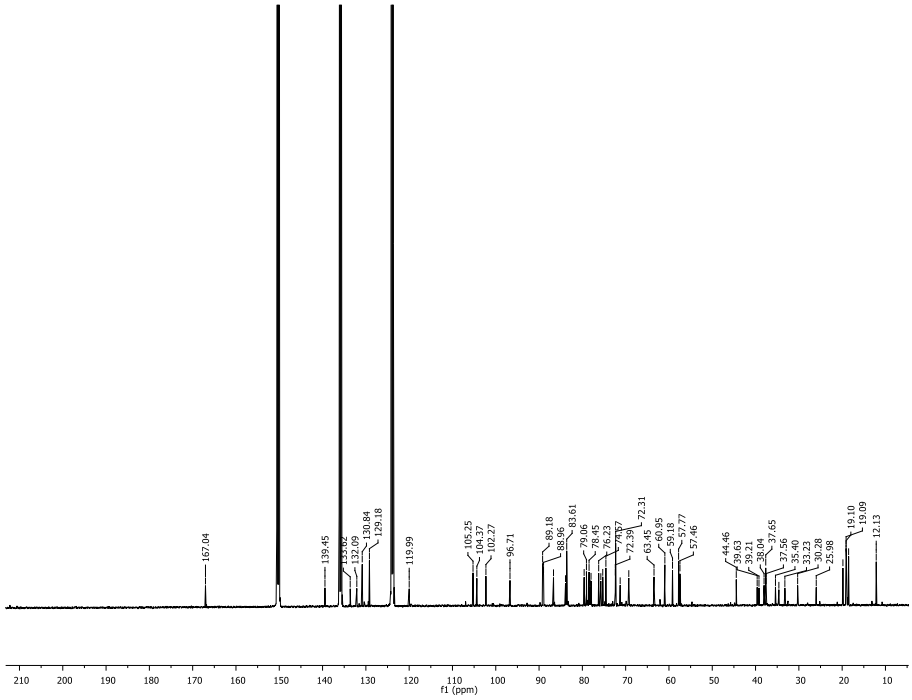


Figure A44 ^{13}C-NMR spectrum of verticilloside K (**4.11**) (500 MHz, C_5D_5N)

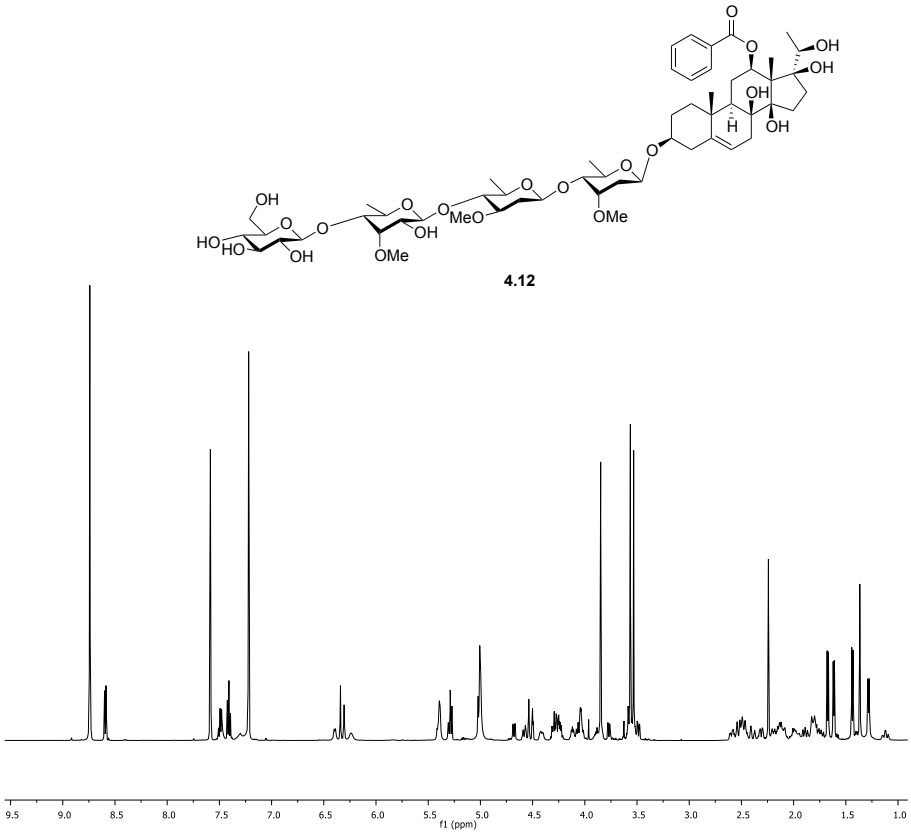


Figure A45 ^{1}H-NMR spectrum of verticilloside L (**4.12**) (500 MHz, C_5D_5N)

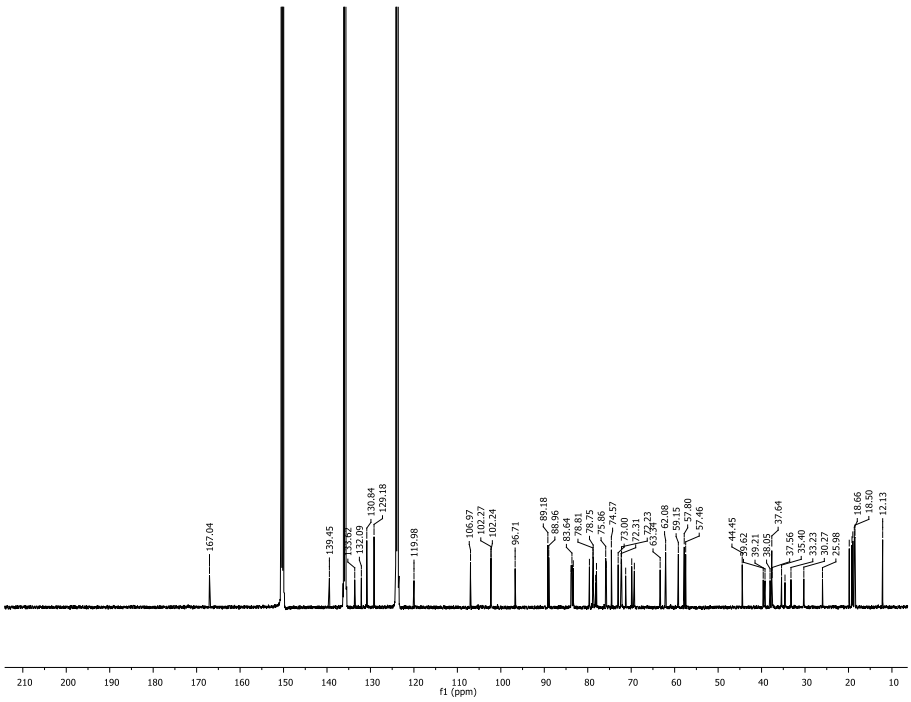


Figure A46 ^{13}C-NMR spectrum of verticilloside L (**4.12**) (500 MHz, C_5D_5N)

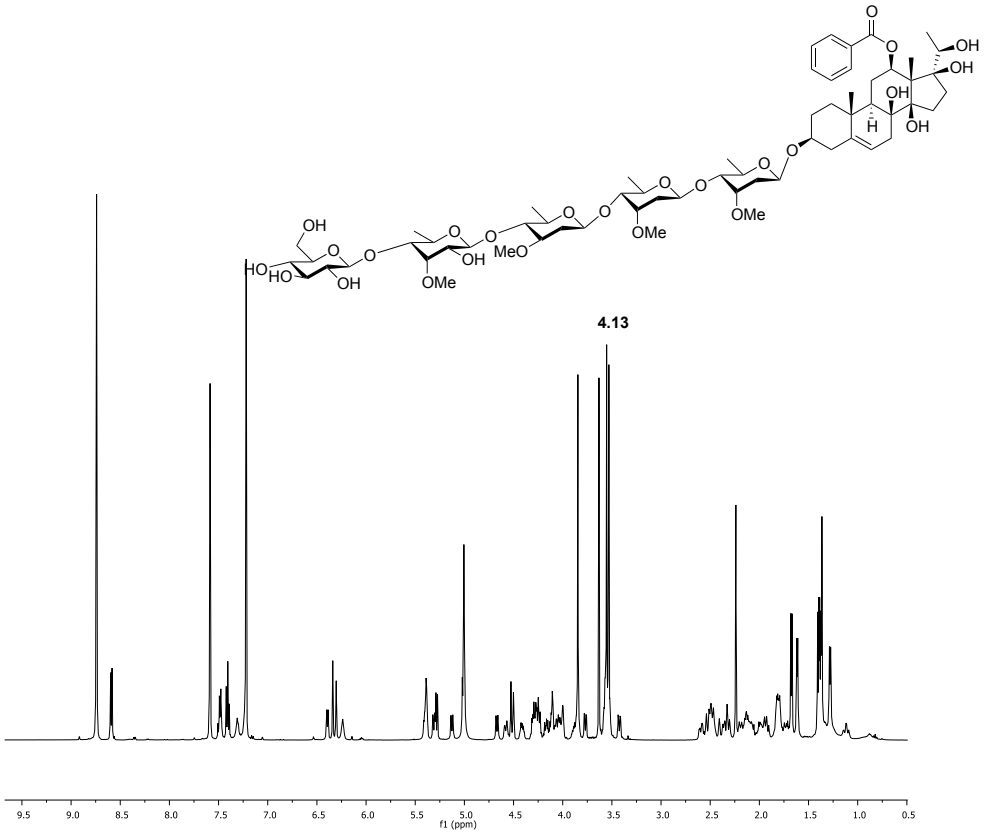


Figure A47 ^{1}H-NMR spectrum of verticilloside L (**4.13**) (500 MHz, C_5D_5N)

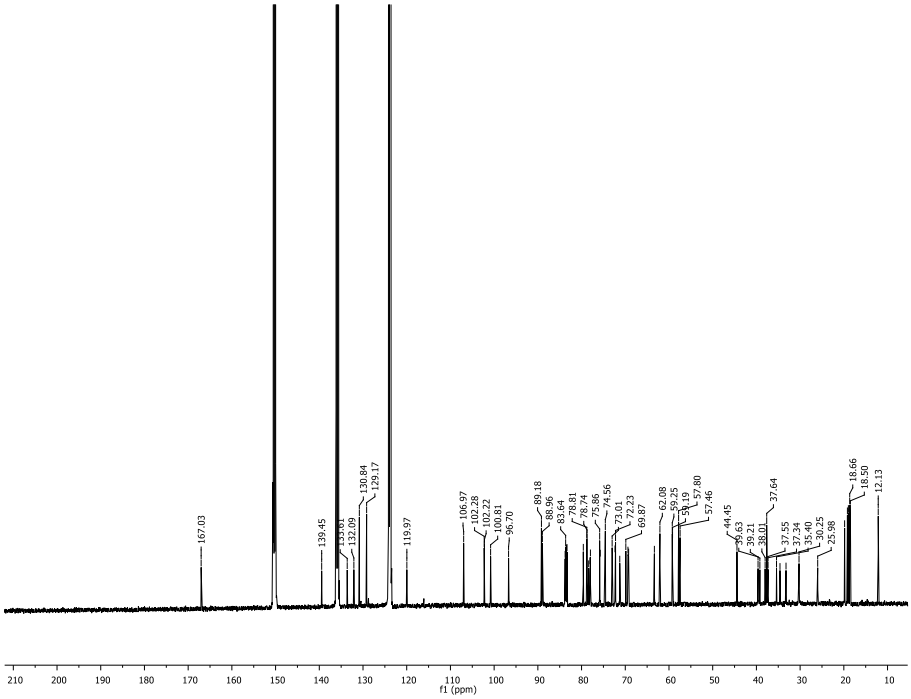


Figure A48 ^{13}C-NMR spectrum of verticilloside L (**4.13**) (500 MHz, C_5D_5N)

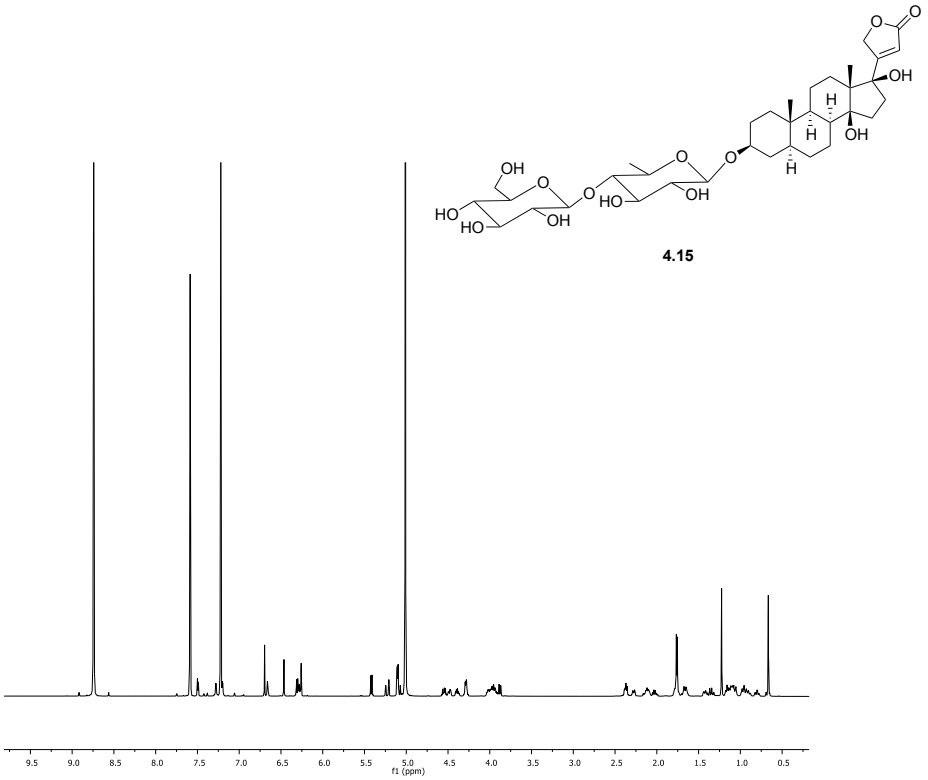


Figure A49 ^{1}H-NMR spectrum of **4.15** (500 MHz, C_5D_5N)

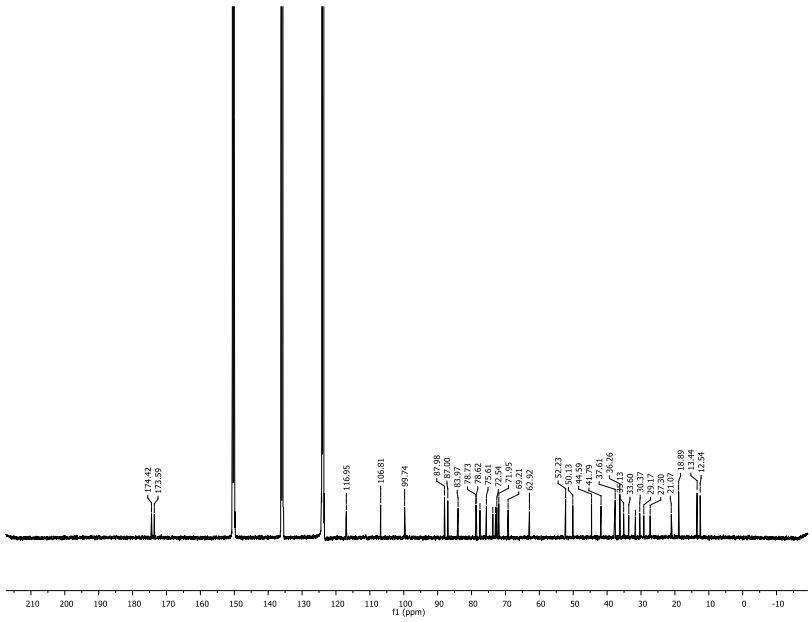


Figure A50 ^{13}C-NMR spectrum of **4.15** (500 MHz, C_5D_5N)

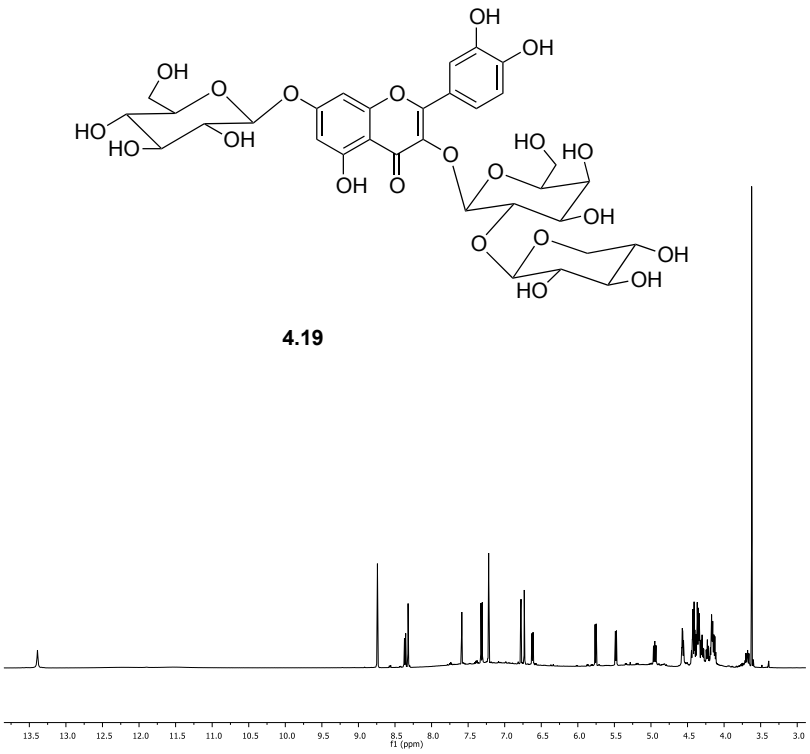


Figure A51 ^{1}H-NMR spectrum of **4.19** (500 MHz, C_5D_5N)

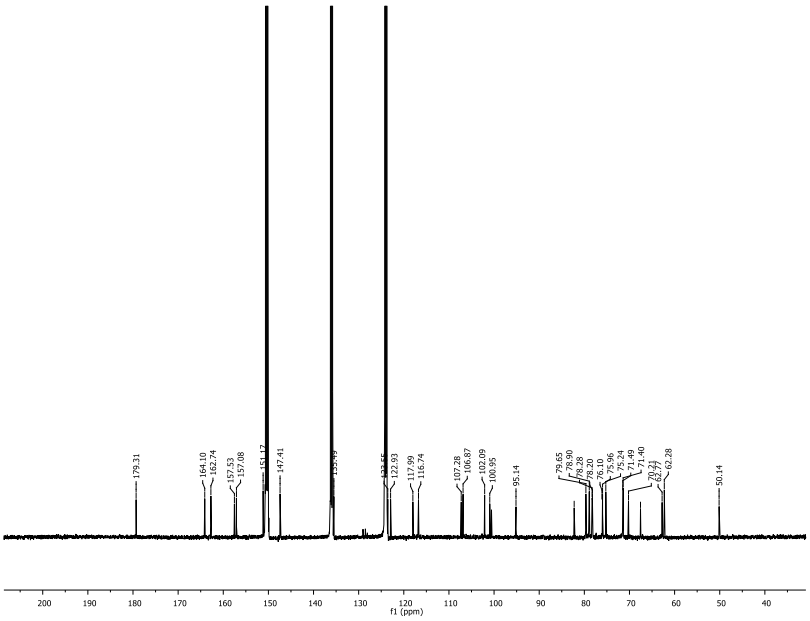
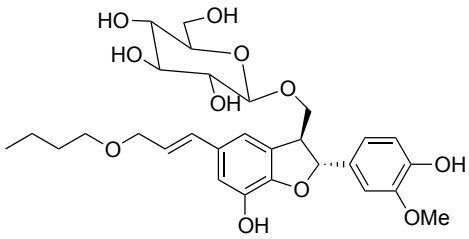


Figure A52 ^{13}C-NMR spectrum of **4.19** (500 MHz, C_5D_5N)



4.20

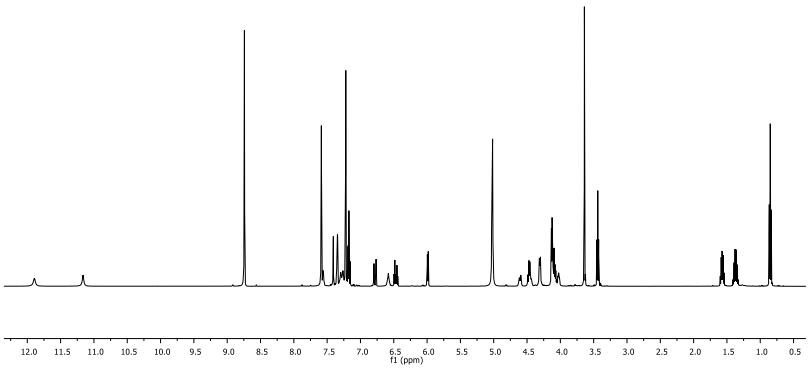


Figure A53 ^{1}H-NMR spectrum of **4.20** (500 MHz, C_5D_5N)

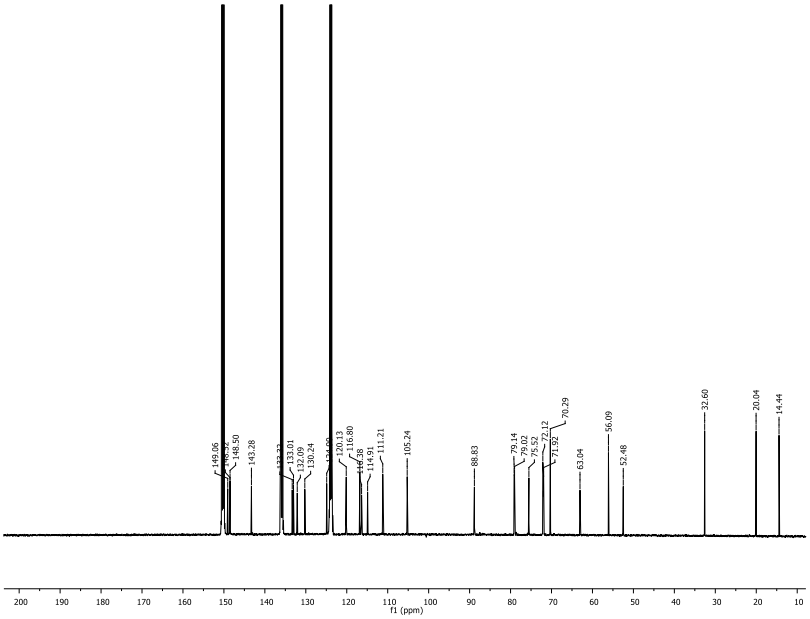
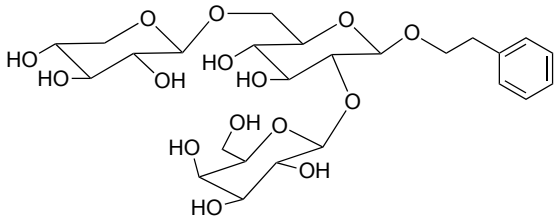


Figure A54 ^{13}C-NMR spectrum of **4.20** (500 MHz, C_5D_5N)



4.21

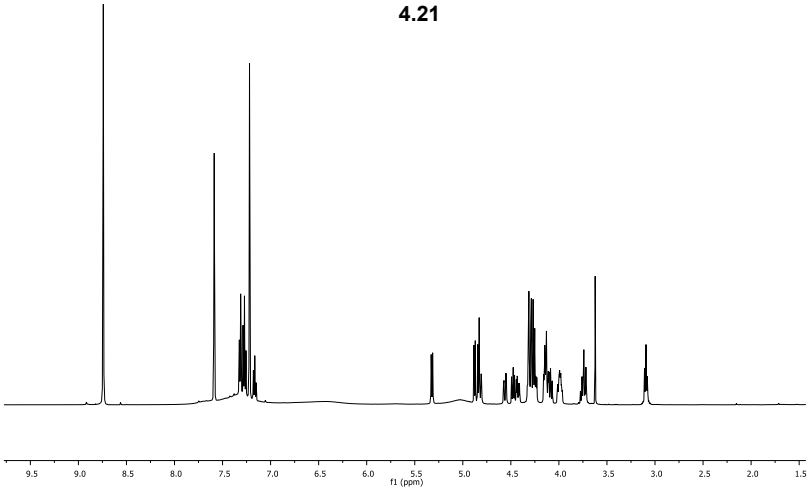


Figure A55 ^{1}H-NMR spectrum of **4.21** (500 MHz, C_5D_5N)

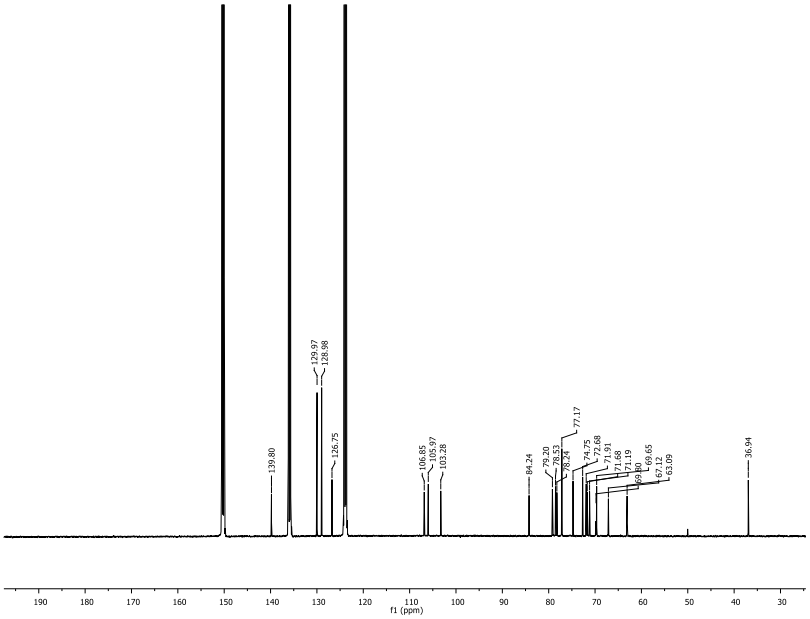


Figure A56 ^{13}C-NMR spectrum **4.21** (500 MHz, C_5D_5N)

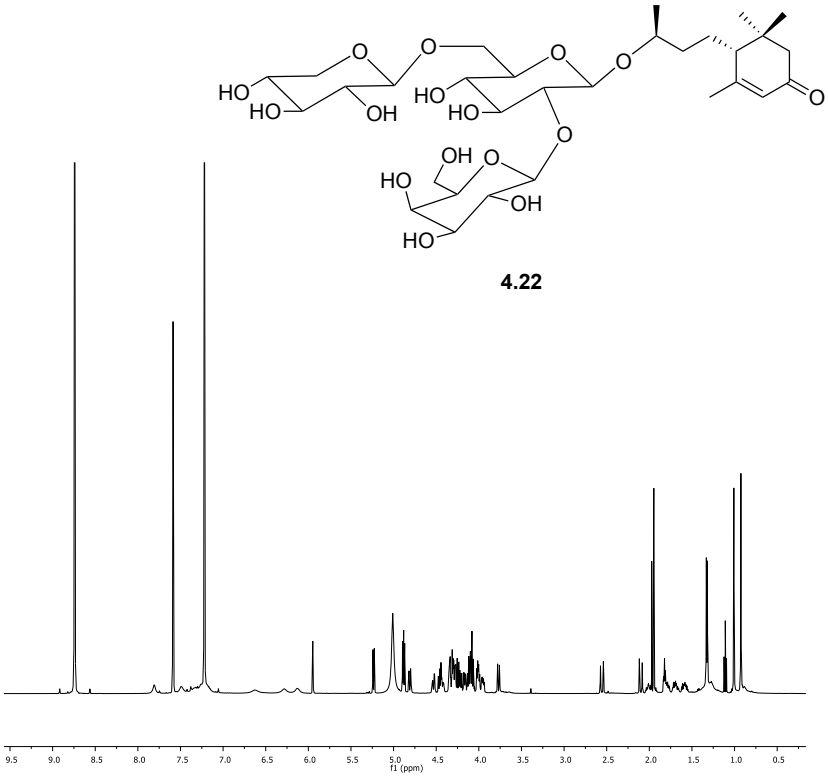


Figure A57. ^{1}H-NMR spectrum of **4.22** (500 MHz, C_5D_5N)

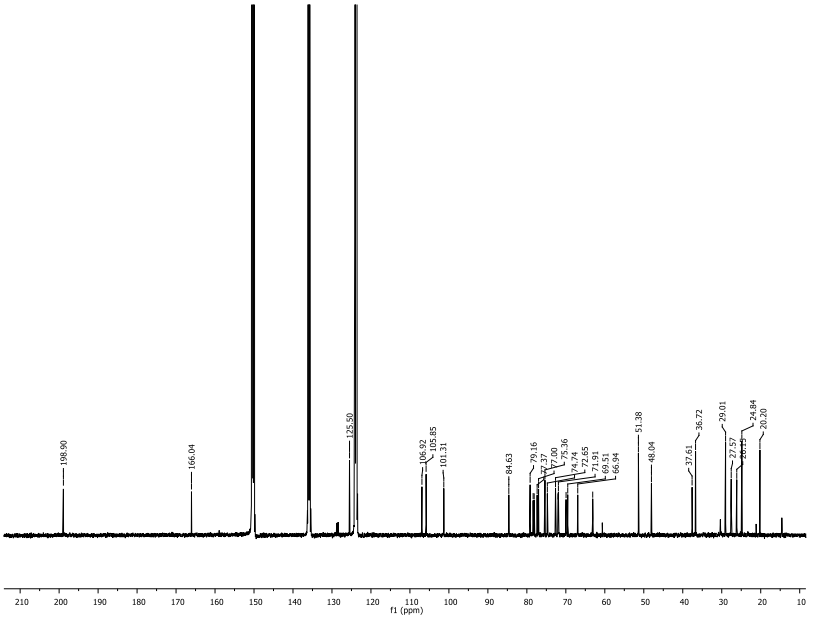


Figure A58 ^{13}C-NMR spectrum of **4.22** (500 MHz, C_5D_5N)

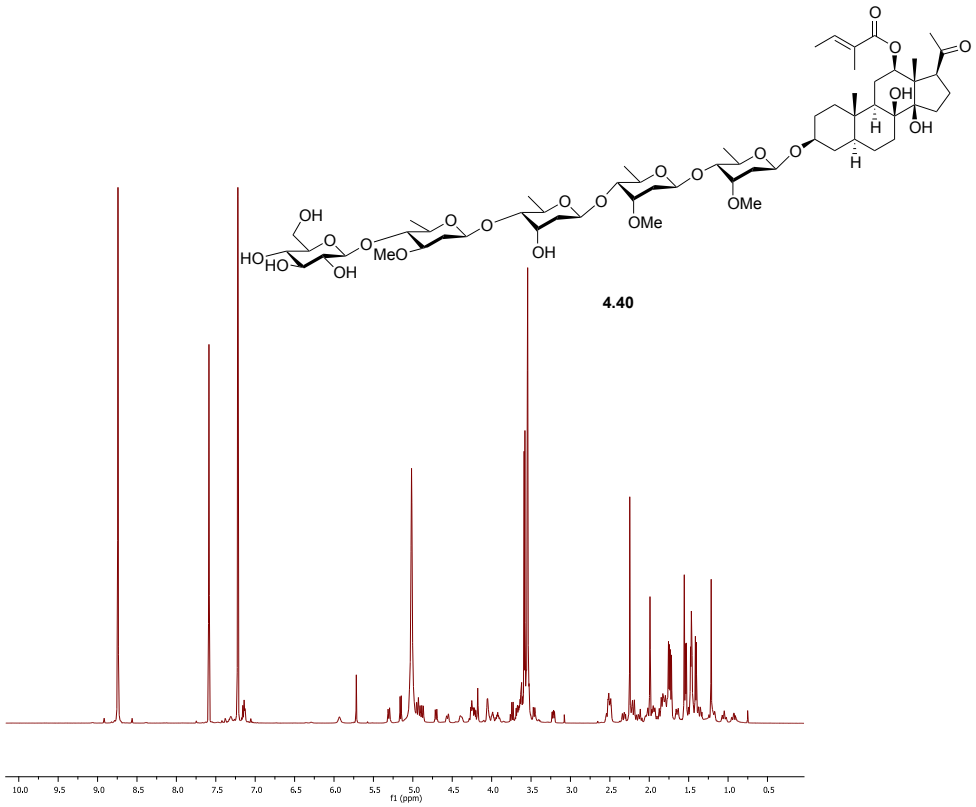


Figure A59. ^{1}H-NMR spectrum of **4.40** (500 MHz, C_5D_5N)

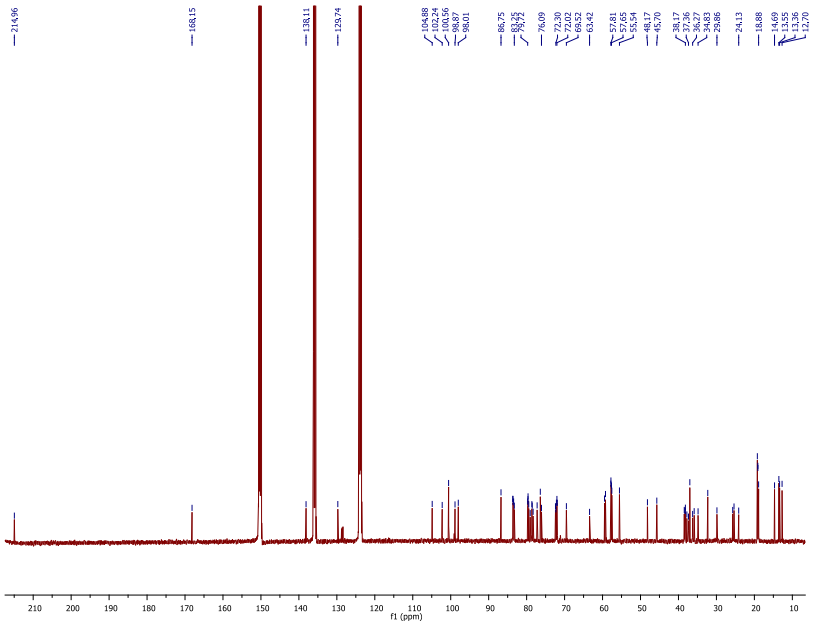


Figure A60 ^{13}C-NMR spectrum of **4.40** (500 MHz, C_5D_5N)

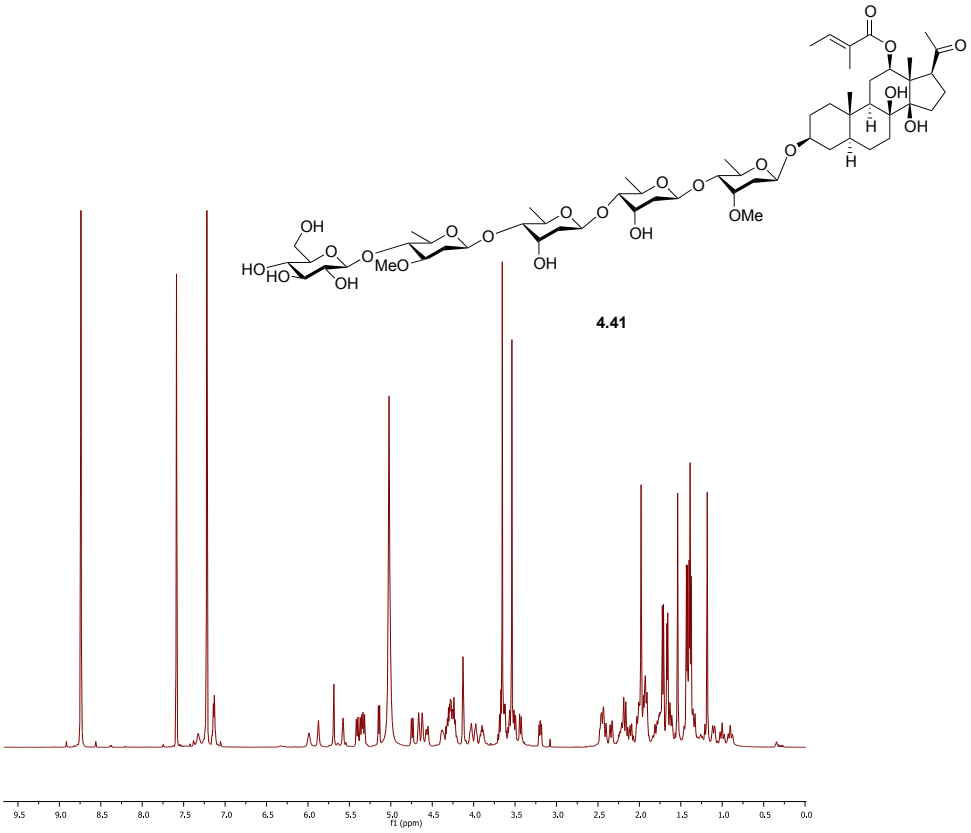


Figure A61. ^{1}H-NMR spectrum of **4.41** (500 MHz, C_5D_5N)

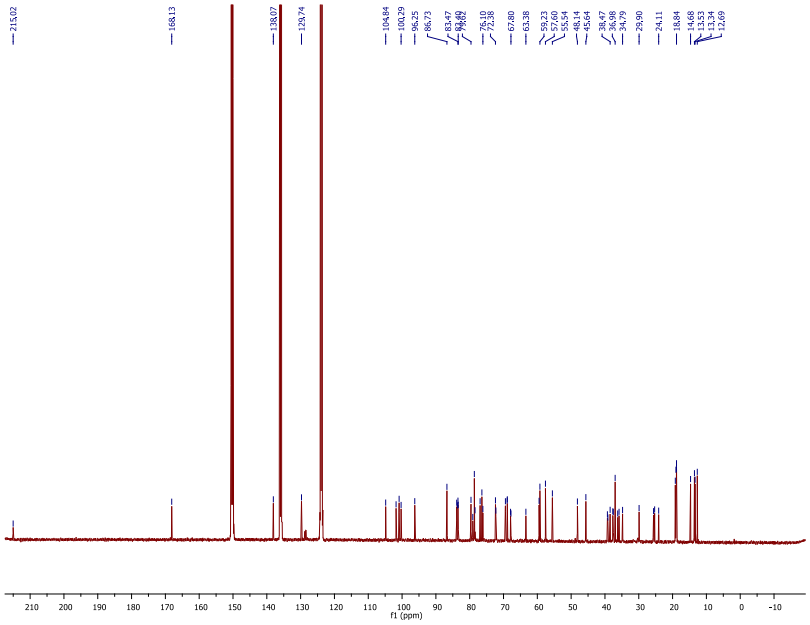


Figure A62 ^{13}C-NMR spectrum of **4.41** (500 MHz, C_5D_5N)

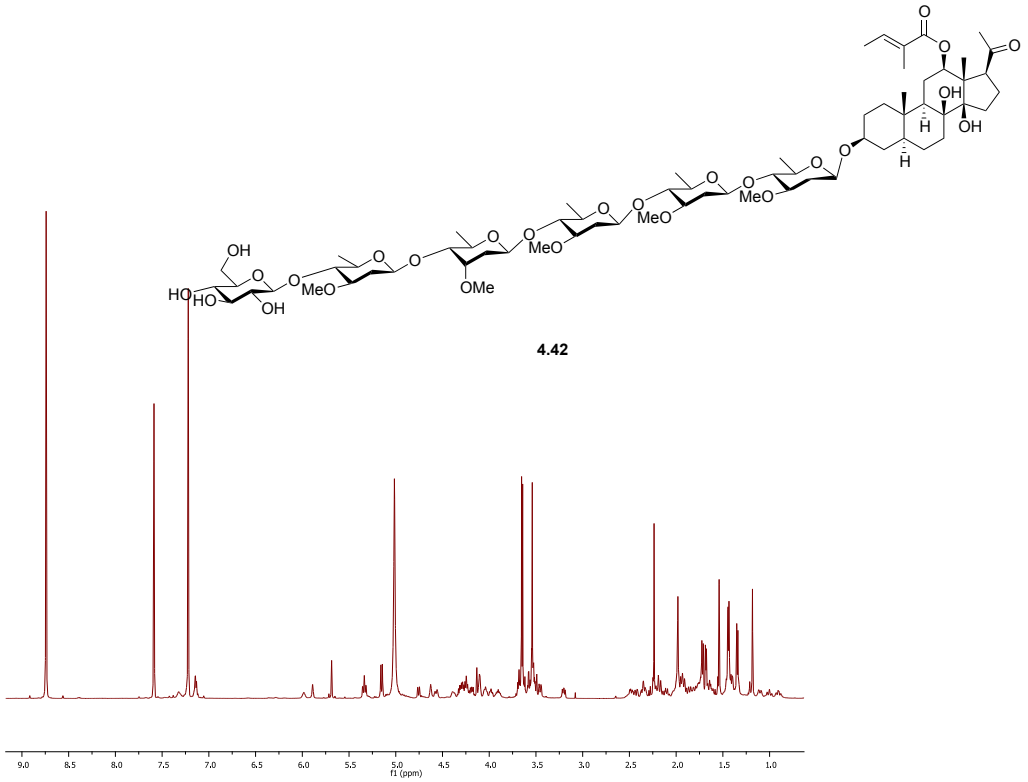


Figure A63 ^{1}H-NMR spectrum of **4.42** (500 MHz, C_5D_5N)

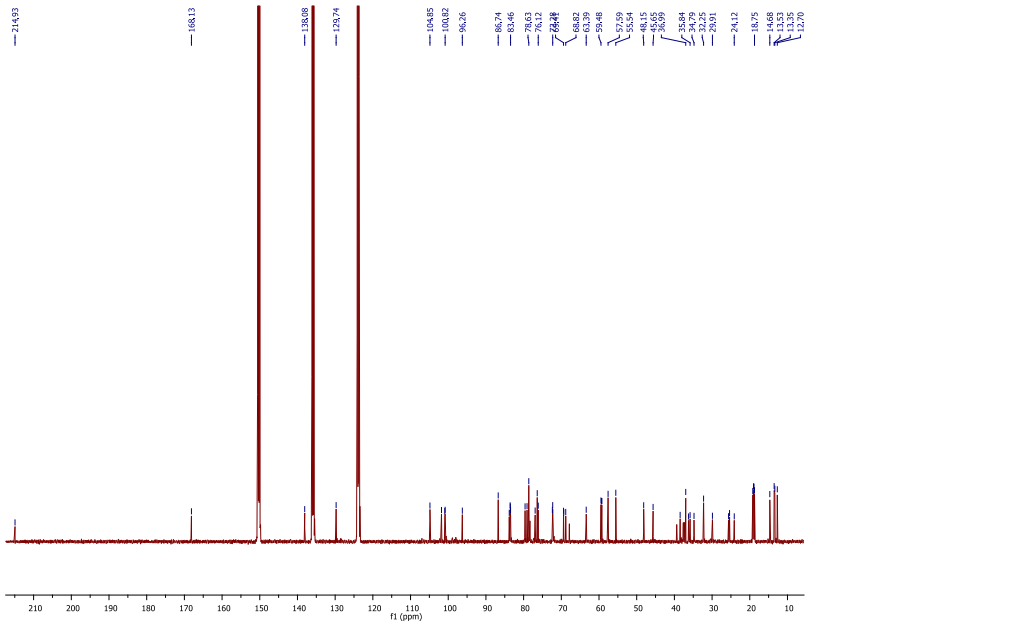


Figure A64 ^{13}C-NMR spectrum of **4.42** (500 MHz, C_5D_5N)

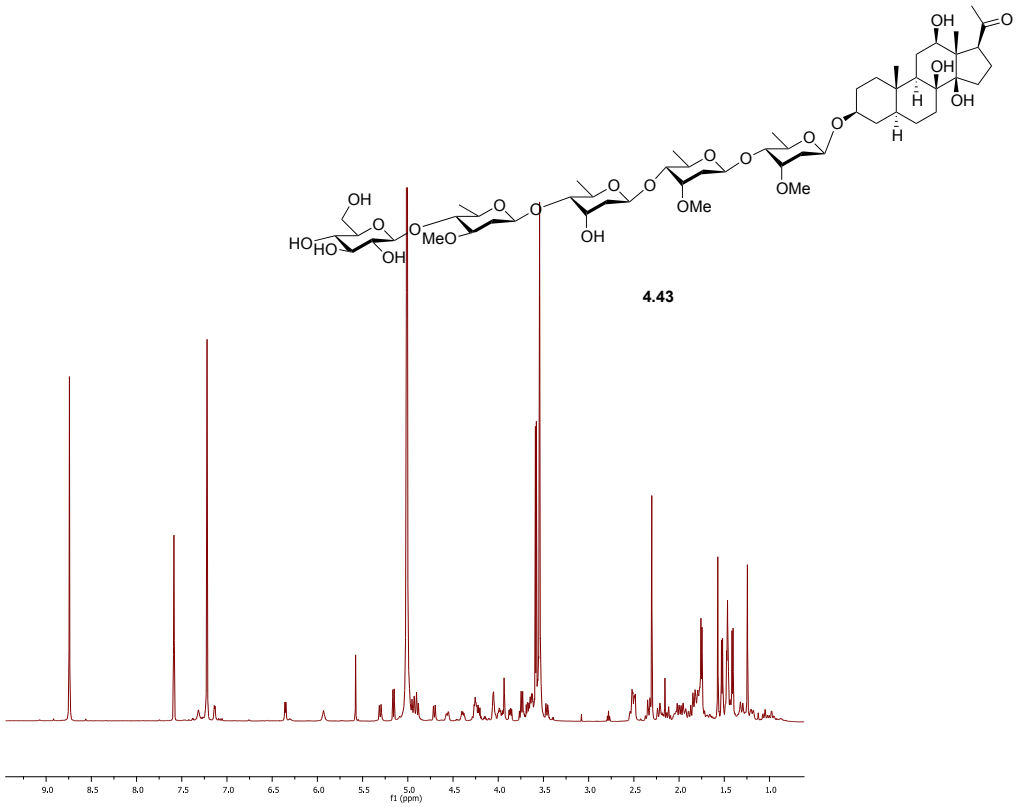


Figure A65. ^{1}H-NMR spectrum of **4.43** (500 MHz, C_5D_5N)

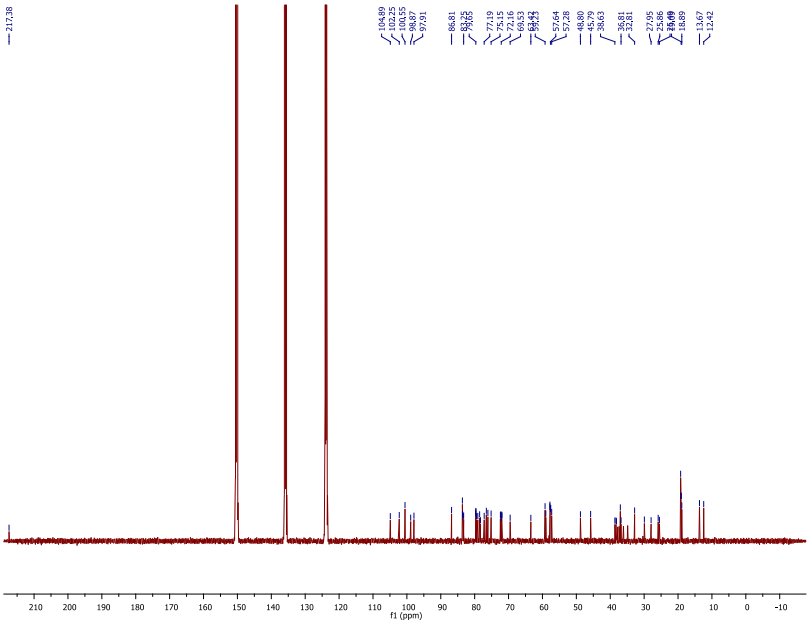


Figure A66 ^{13}C-NMR spectrum of **4.43** (500 MHz, C_5D_5N)

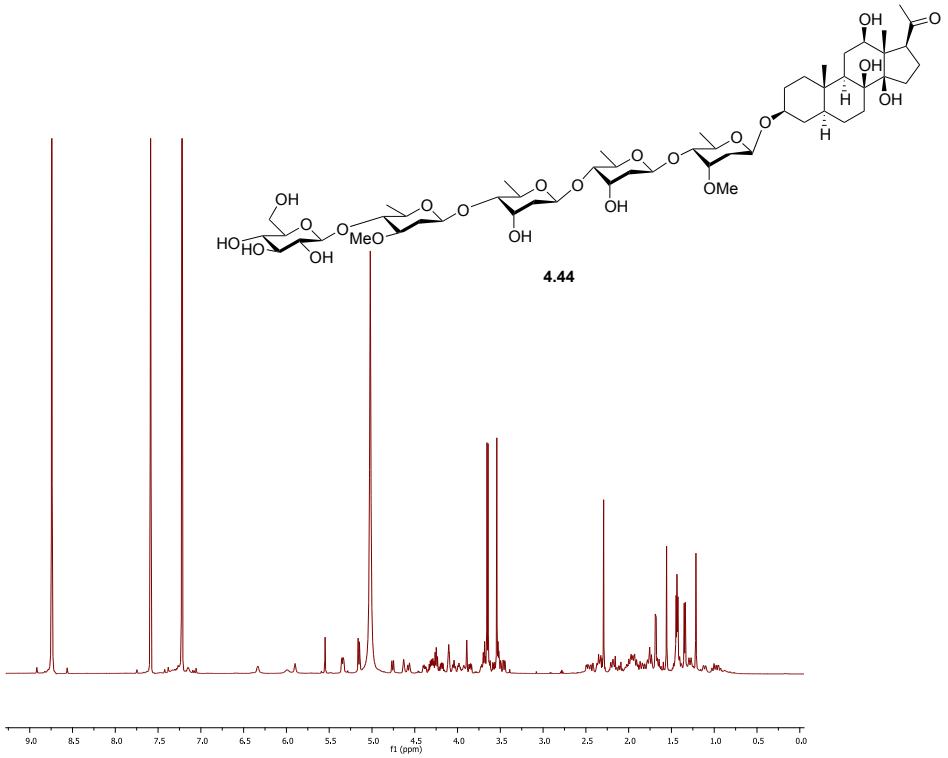


Figure A67. ^{1}H-NMR spectrum of **4.44** (500 MHz, C_5D_5N)

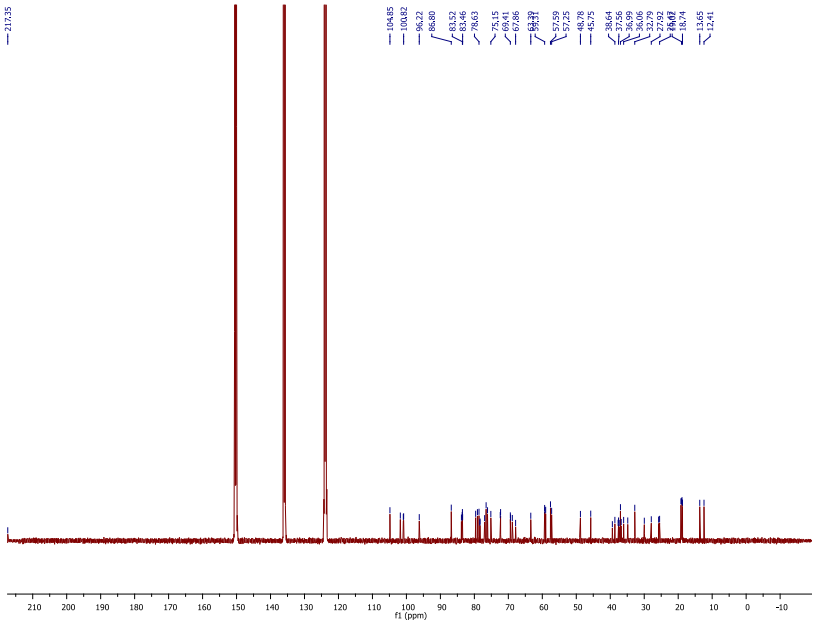


Figure A68 ^{13}C-NMR spectrum of **4.44** (500 MHz, C_5D_5N)

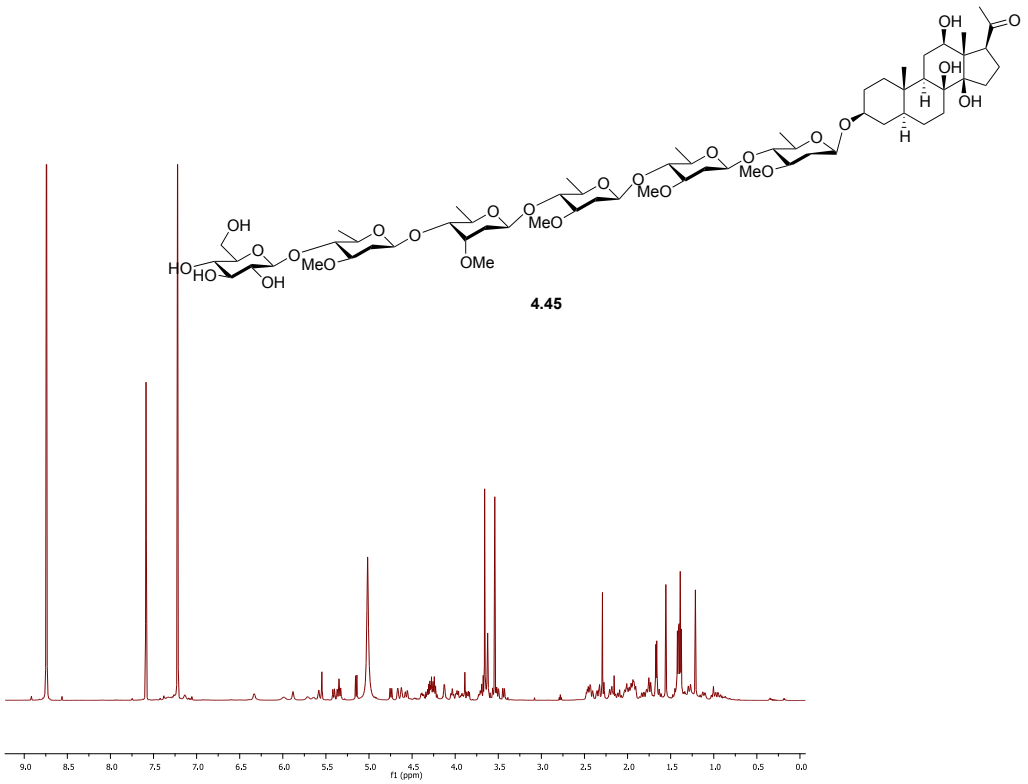


Figure A69. ^{1}H-NMR spectrum of **4.45** (500 MHz, C_5D_5N)

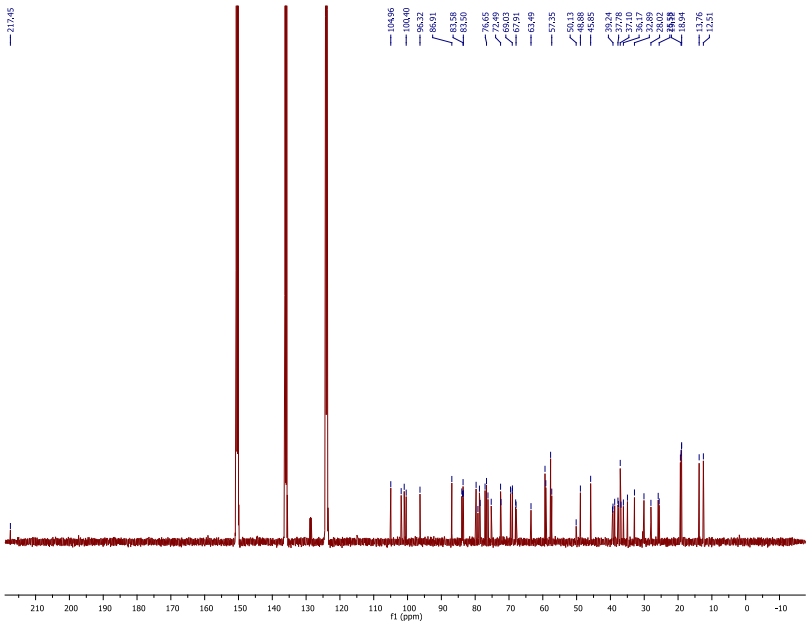


Figure A70 ^{13}C-NMR spectrum of **4.45** (500 MHz, C_5D_5N)

Figure A71 ^{1}H-NMR spectrum of **5.2** (500 MHz, C_5D_5N)

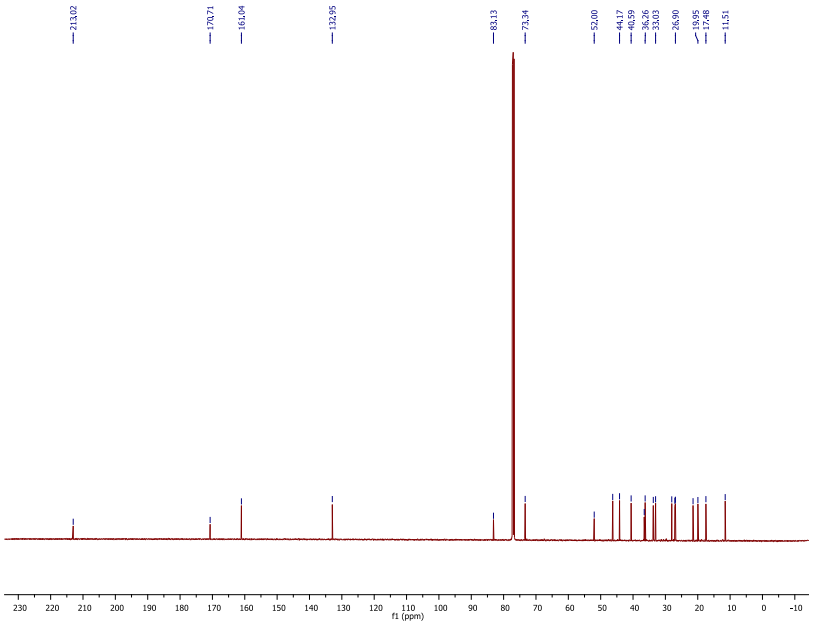
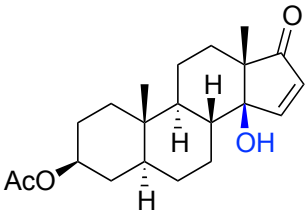


Figure A72^{13}C-NMR spectrum of **5.2** (500 MHz, C_5D_5N)



5.3

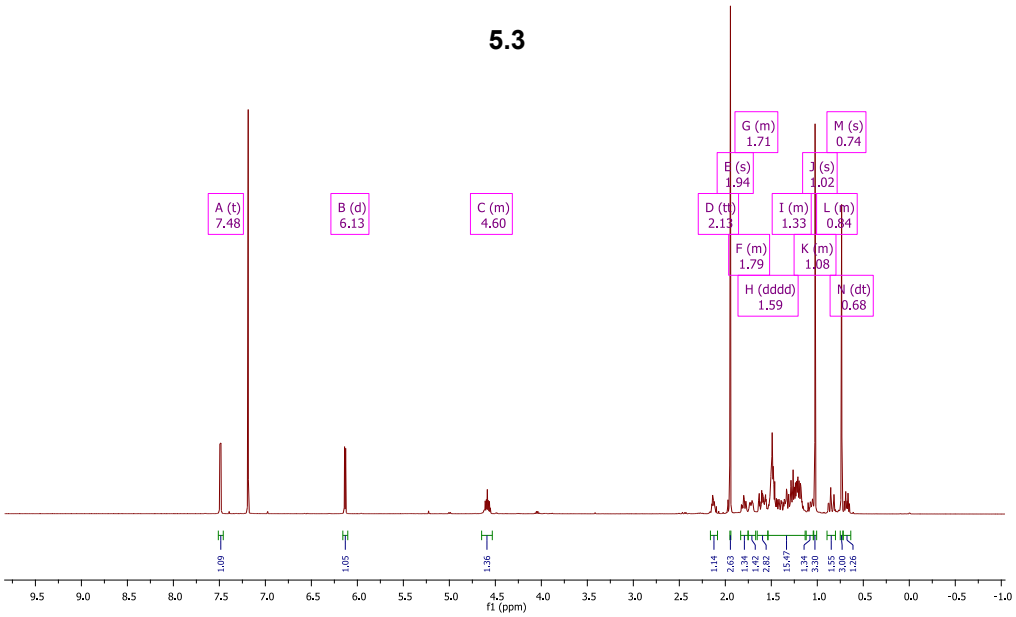


Figure A73 ^{1}H-NMR spectrum of **5.3** (500 MHz, C_5D_5N)

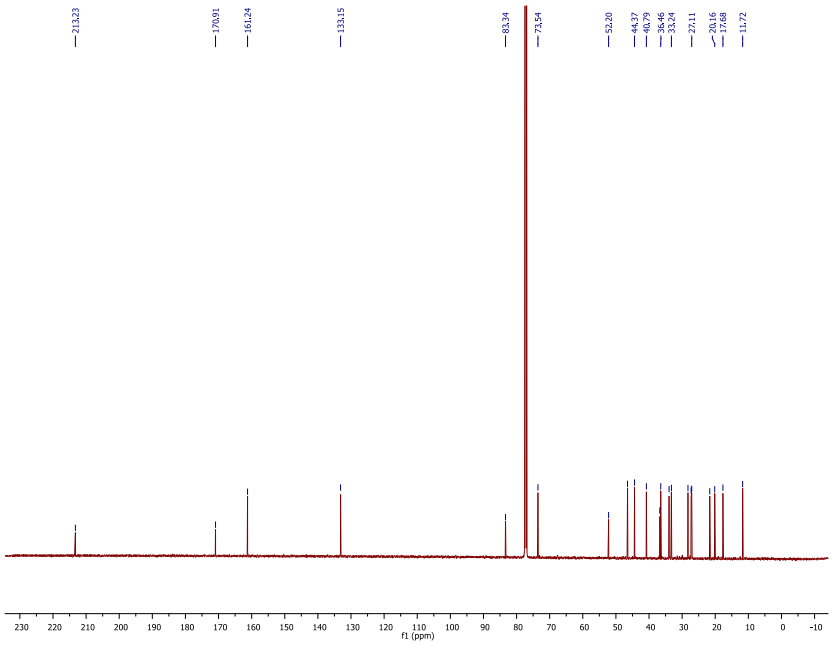
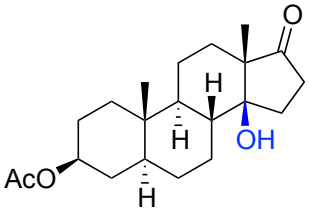


Figure A74 ^{13}C-NMR spectrum of **5.3** (500 MHz, C_5D_5N)



5.4

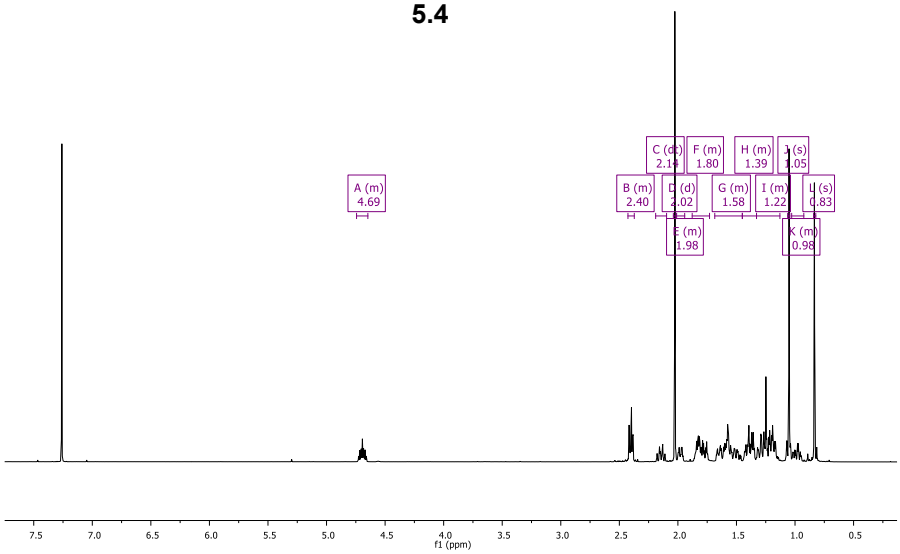


Figure A75 ^{1}H-NMR spectrum of **5.4** (500 MHz, C_5D_5N)

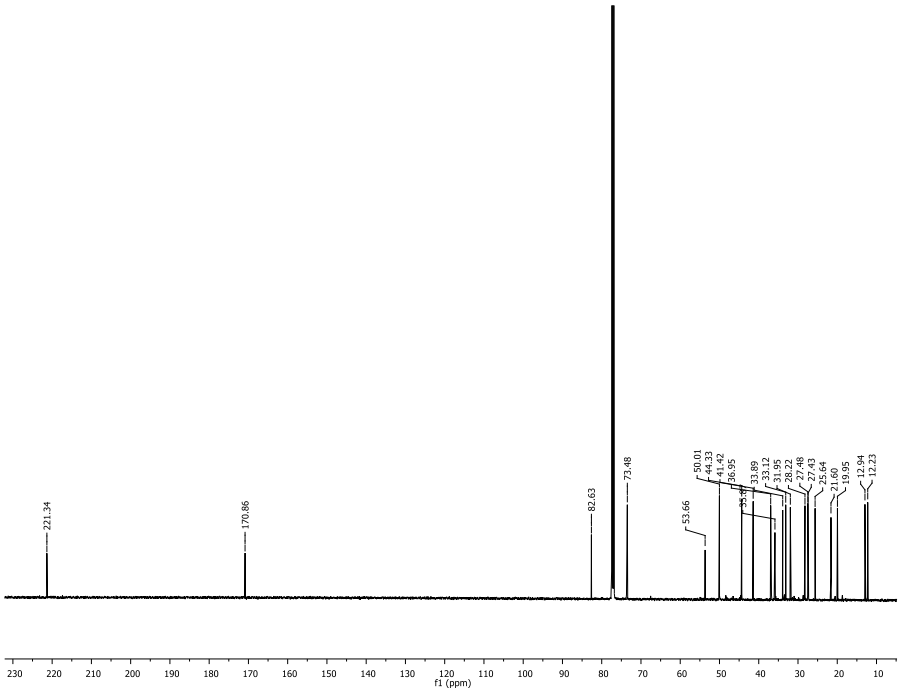


Figure A76 ^{13}C-NMR spectrum of **5.4** (500 MHz, C_5D_5N)

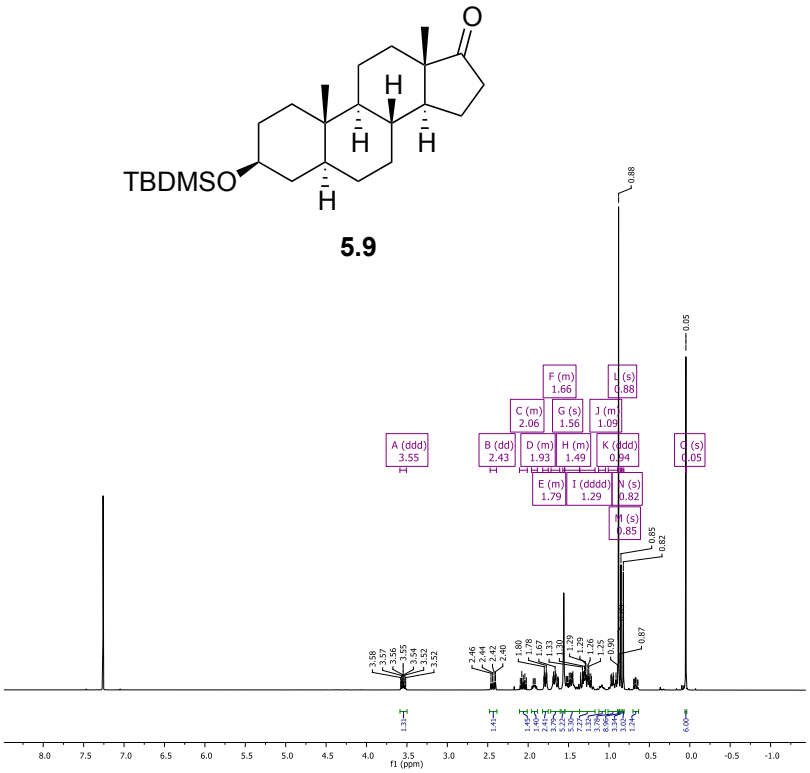


Figure A77 ^{1}H-NMR spectrum of **5.9** (500 MHz, C_5D_5N)

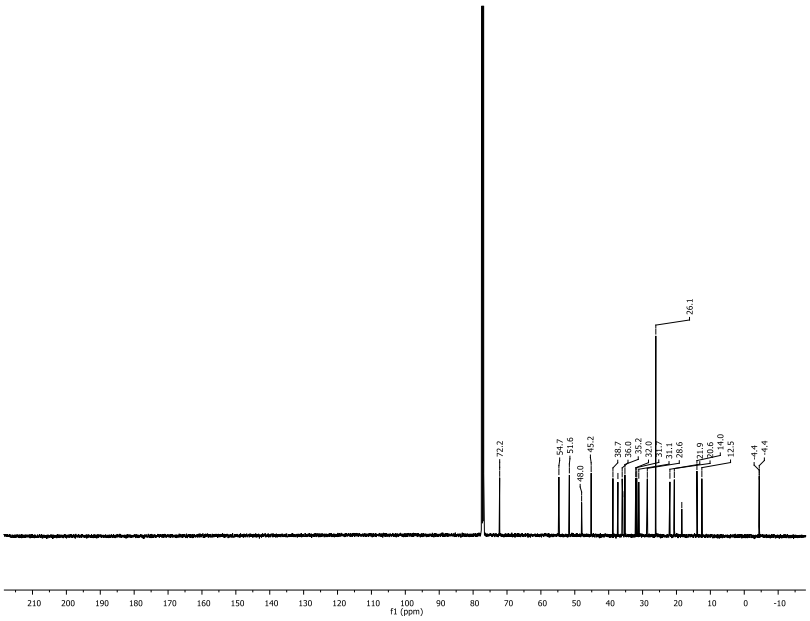
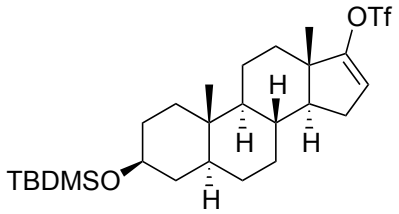


Figure A78 ^{13}C-NMR spectrum of **5.9** (500 MHz, C_5D_5N)



5.10

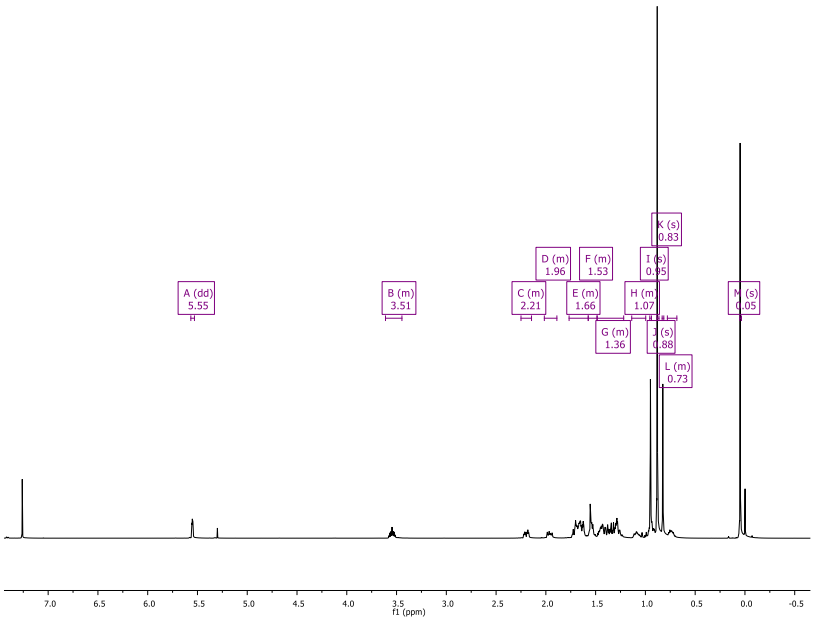


Figure A79 ^{1}H-NMR spectrum of **5.10** (500 MHz, C_5D_5N)

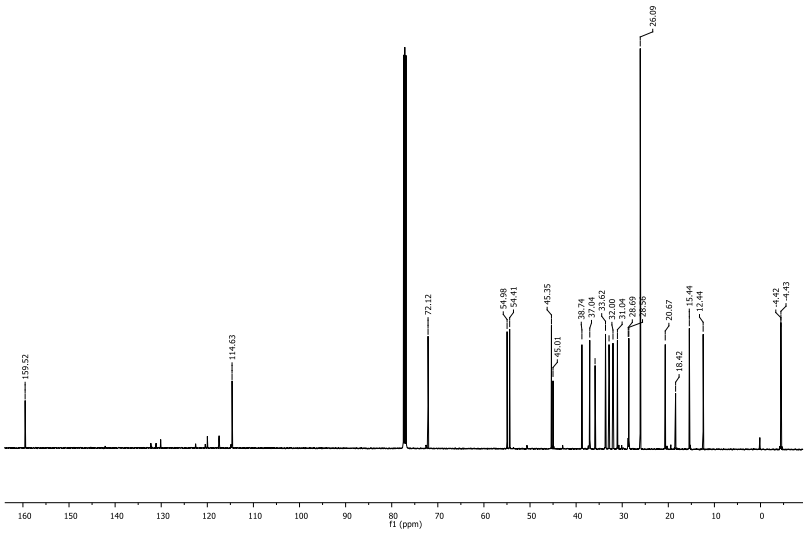


Figure A80 ^{13}C-NMR spectrum of **5.10** (500 MHz, C_5D_5N)

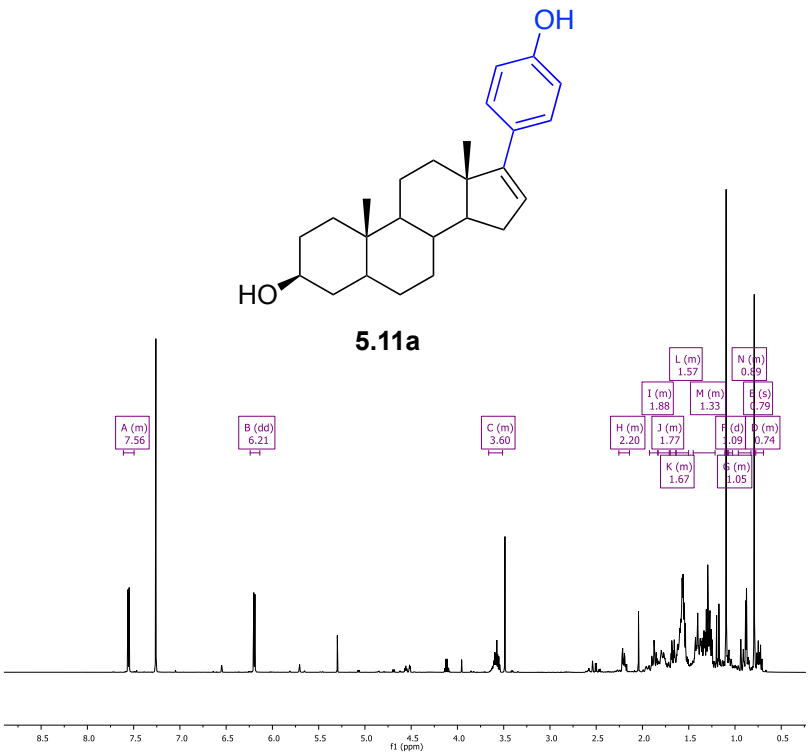


Figure A81 ^{1}H-NMR spectrum of **5.11a** (500 MHz, C_5D_5N)

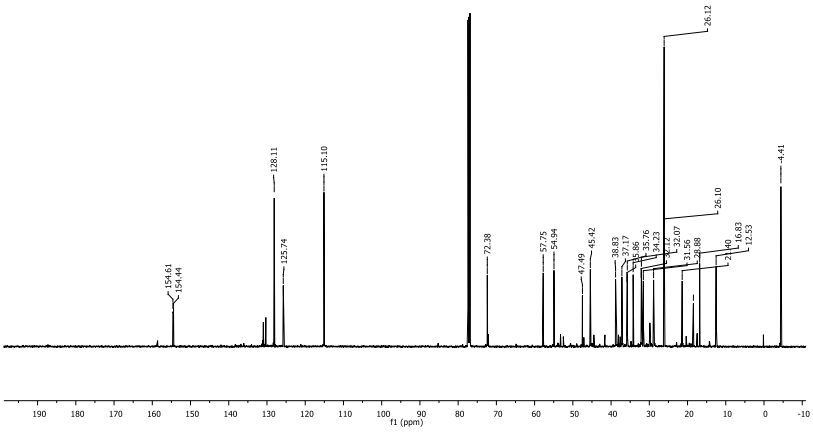


Figure A82 ^{13}C-NMR spectrum of **5.11a** (500 MHz, C_5D_5N)

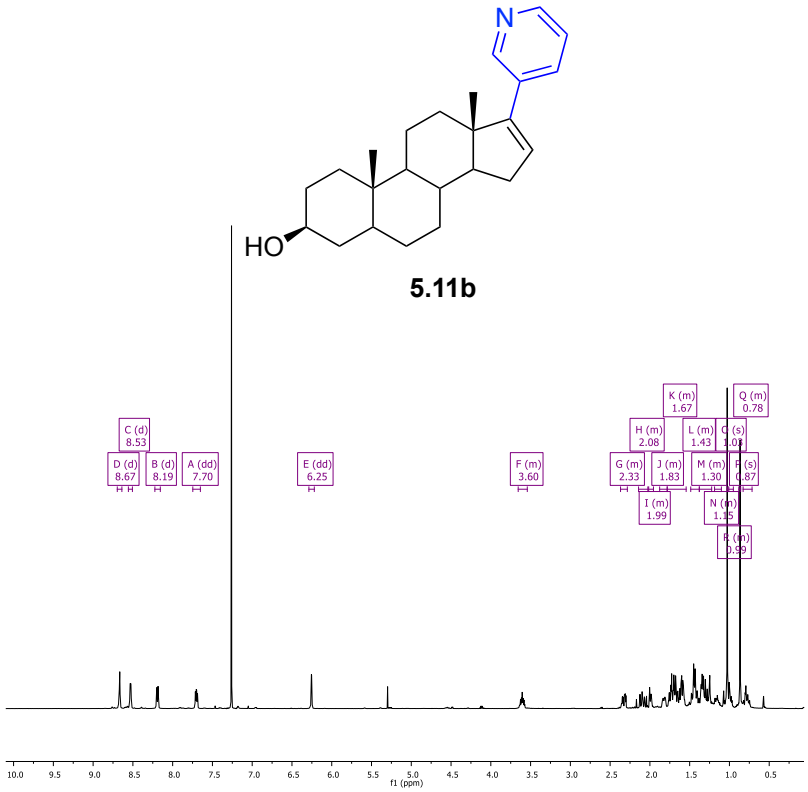


Figure A83 ^{1}H-NMR spectrum of **5.11b** (500 MHz, C_5D_5N)

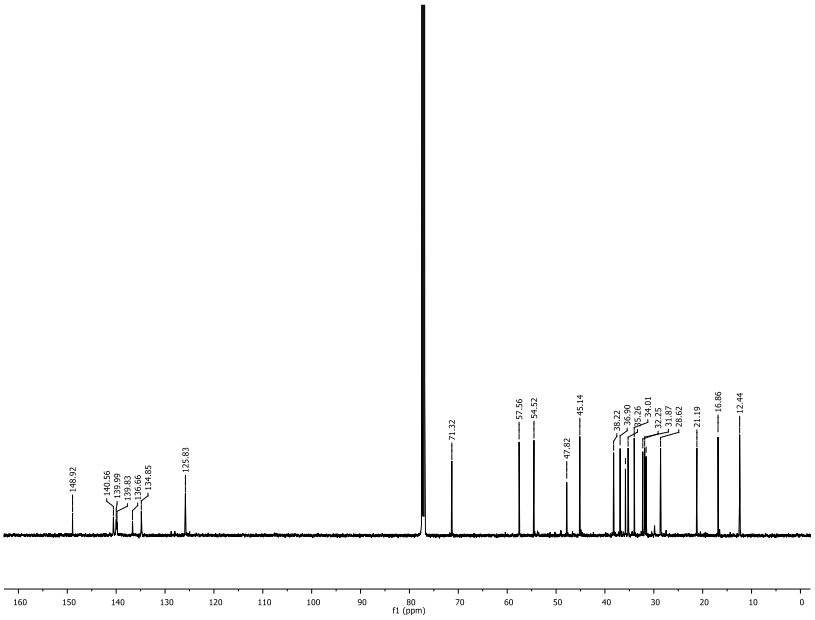
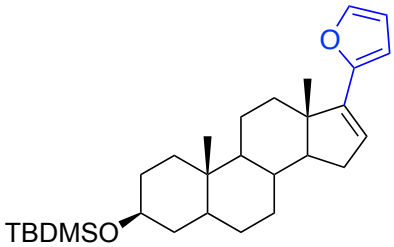


Figure A84 ^{13}C-NMR spectrum of **5.11b** (500 MHz, C_5D_5N)



5.11c

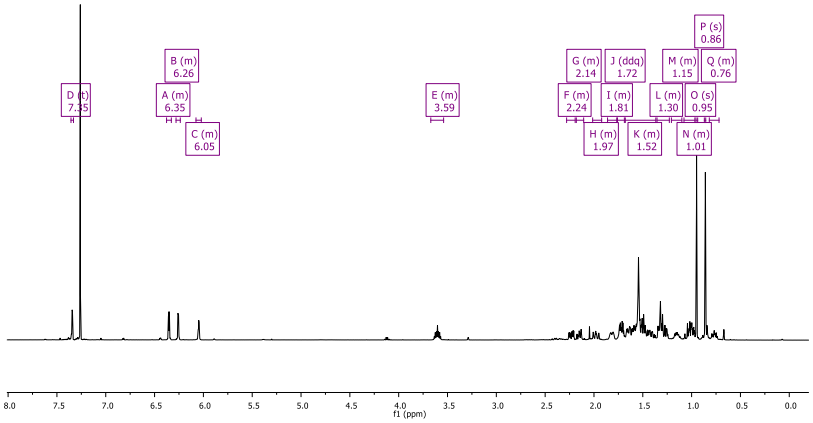


Figure A85 ^{1}H-NMR spectrum of **5.11c** (500 MHz, C_5D_5N)

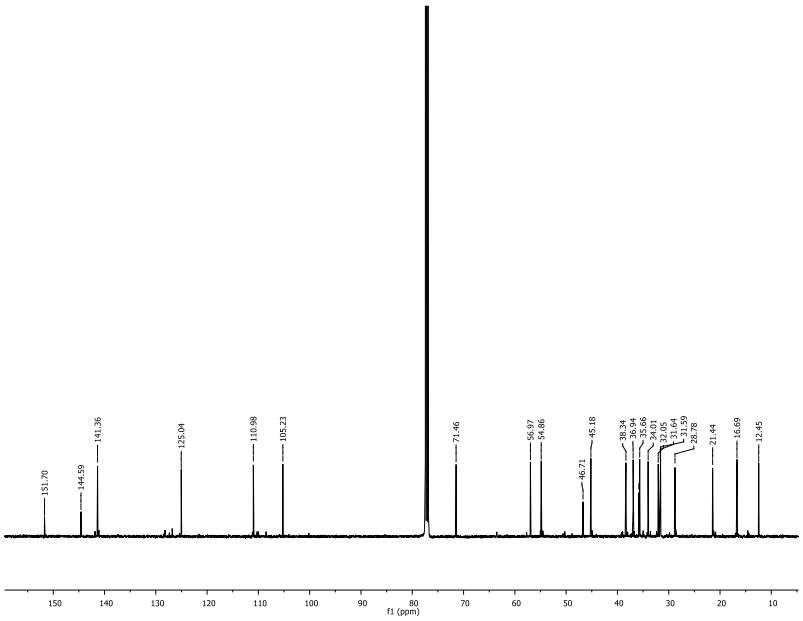


Figure A86 ^{13}C-NMR spectrum of **5.11c** (500 MHz, C_5D_5N)

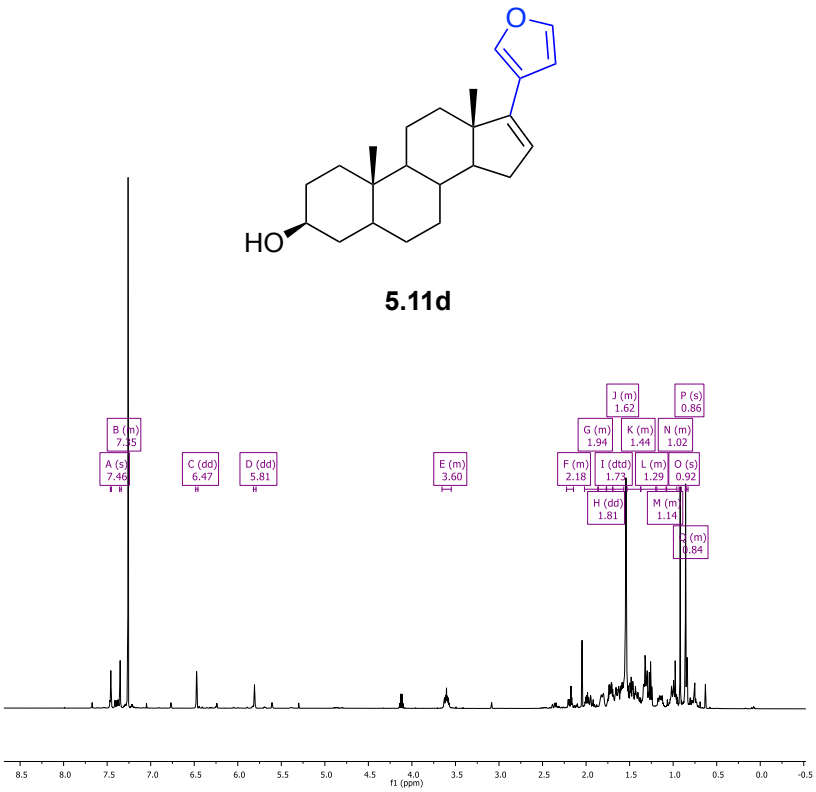


Figure A87 ^{1}H-NMR spectrum of **5.11d** (500 MHz, C_5D_5N)

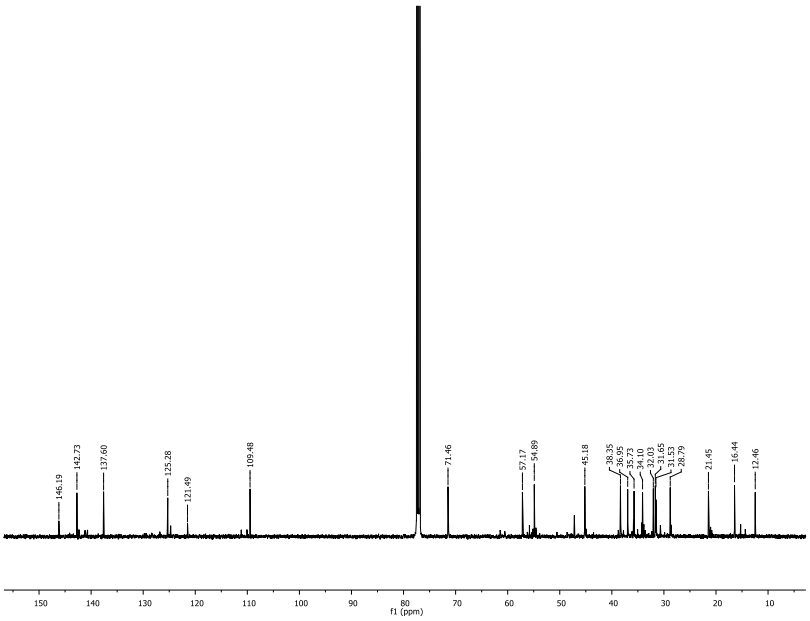


Figure A88 ^{13}C-NMR spectrum of **5.11d** (500 MHz, C_5D_5N)

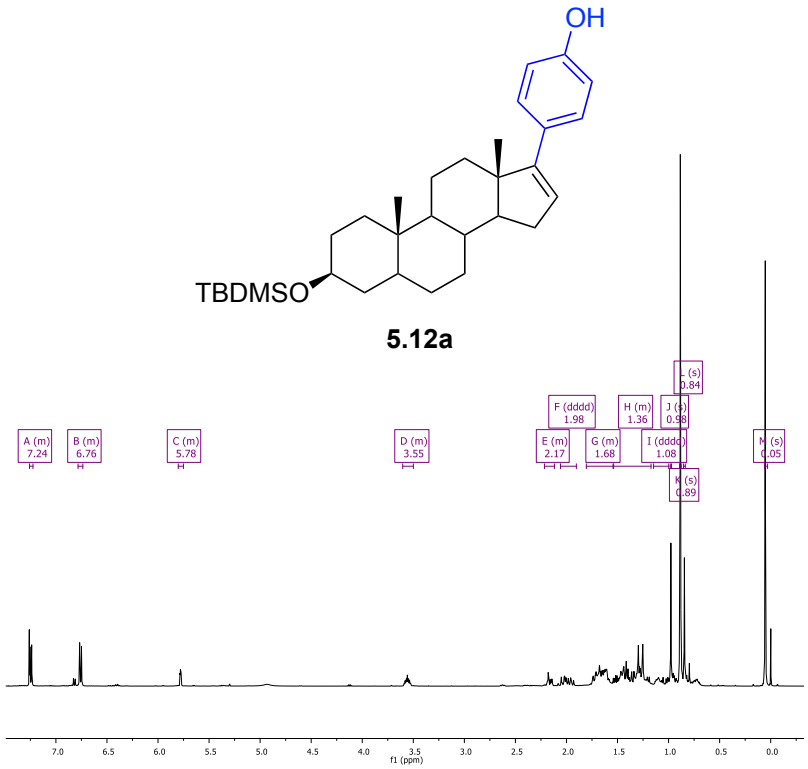


Figure A89 ^{1}H-NMR spectrum of **5.12a** (500 MHz, C_5D_5N)

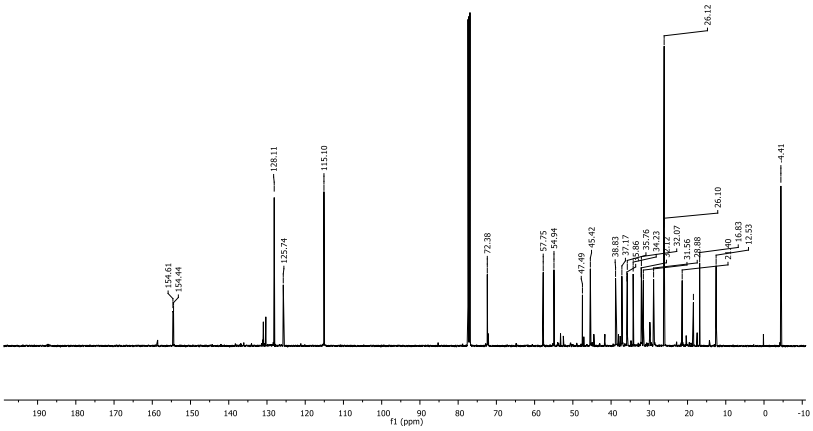
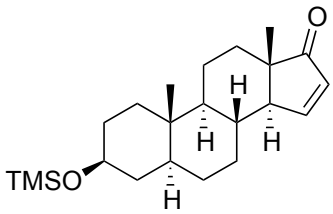


Figure A90 ^{13}C-NMR spectrum of **5.12a** (500 MHz, C_5D_5N)



5.13

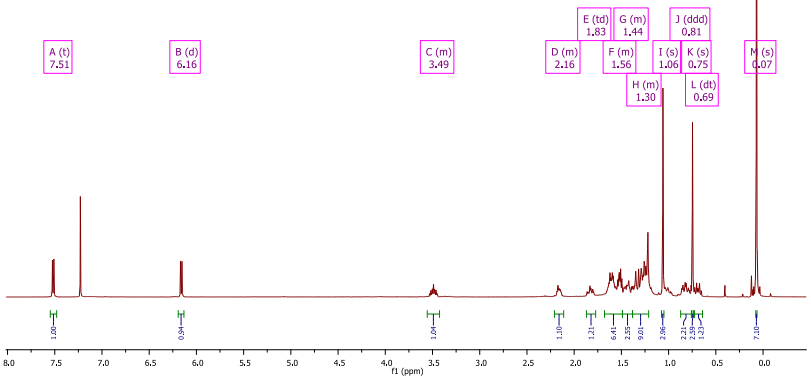
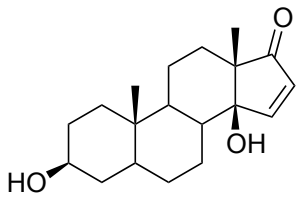


Figure A91 ^{1}H-NMR spectrum of **5.13** (500 MHz, C_5D_5N)

Figure A92 ^{13}C-NMR spectrum of **5.13** (500 MHz, C_5D_5N)



5.14a

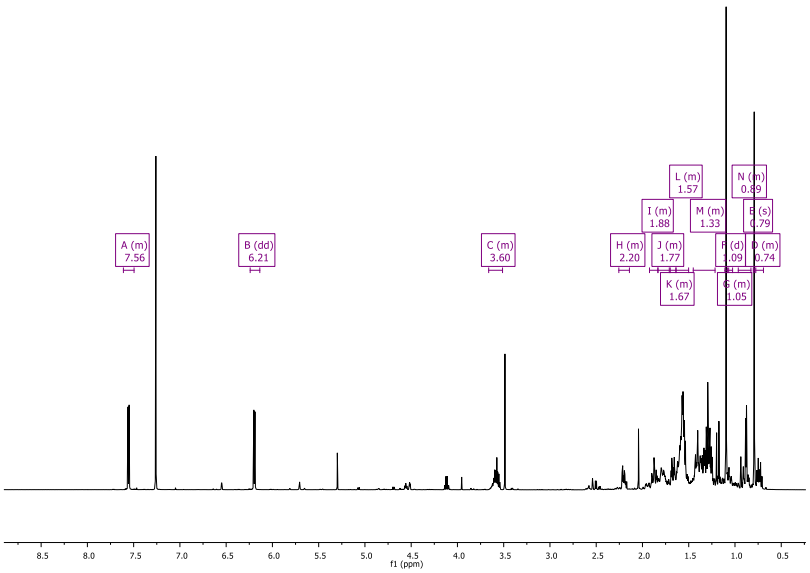


Figure A93 ^{1}H-NMR spectrum of **5.14a** (500 MHz, C_5D_5N)

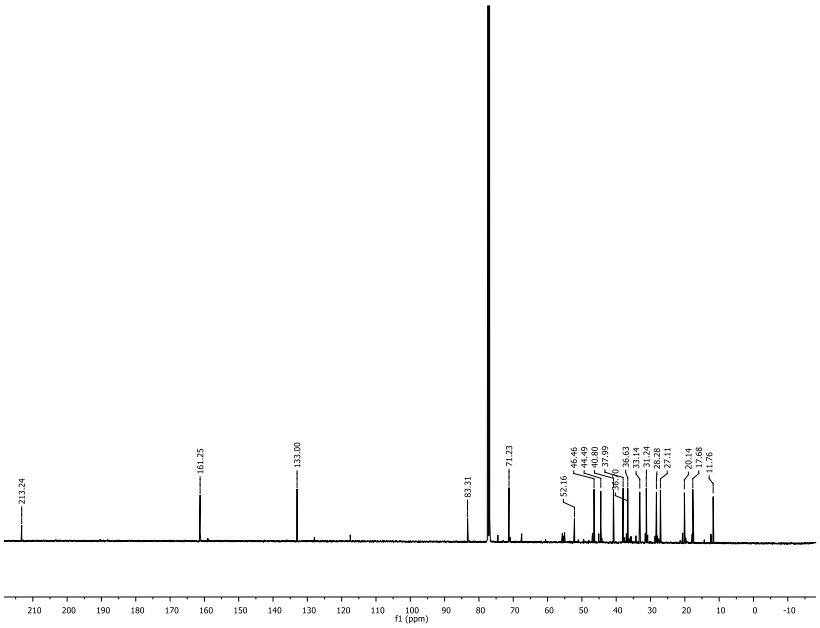
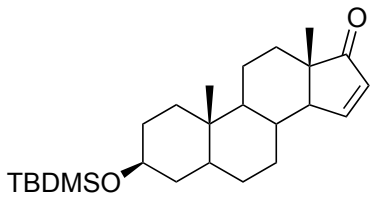


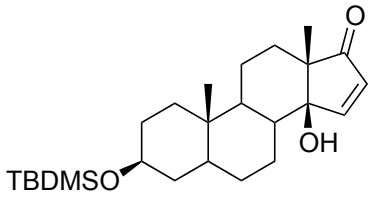
Figure A94 ^{13}C-NMR spectrum of **5.14a** (500 MHz, C_5D_5N)



5.15

Figure A95 ^{1}H-NMR spectrum of **5.15** (500 MHz, C_5D_5N)

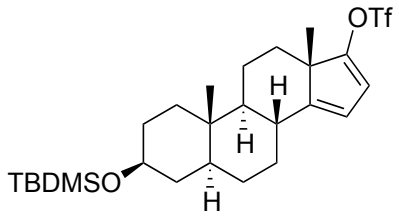
Figure A96 ^{13}C-NMR spectrum of **5.15** (500 MHz, C_5D_5N)



5.15a

Figure A97 ^{1}H-NMR spectrum of **5.15a** (500 MHz, C_5D_5N)

Figure A98 ^{13}C-NMR spectrum of **5.15a** (500 MHz, C_5D_5N)



5.15a'

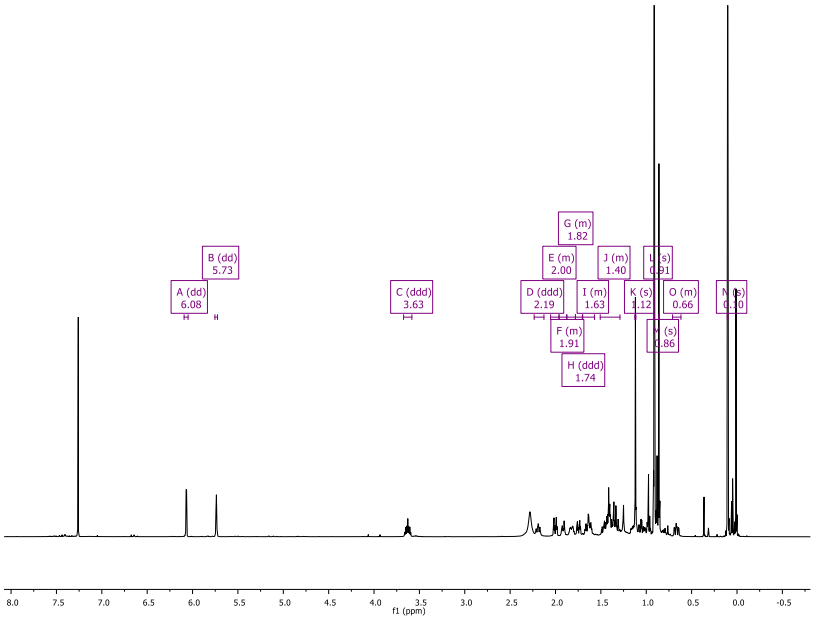


Figure A99 ^{1}H-NMR spectrum of **5.12a** (500 MHz, C_5D_5N)

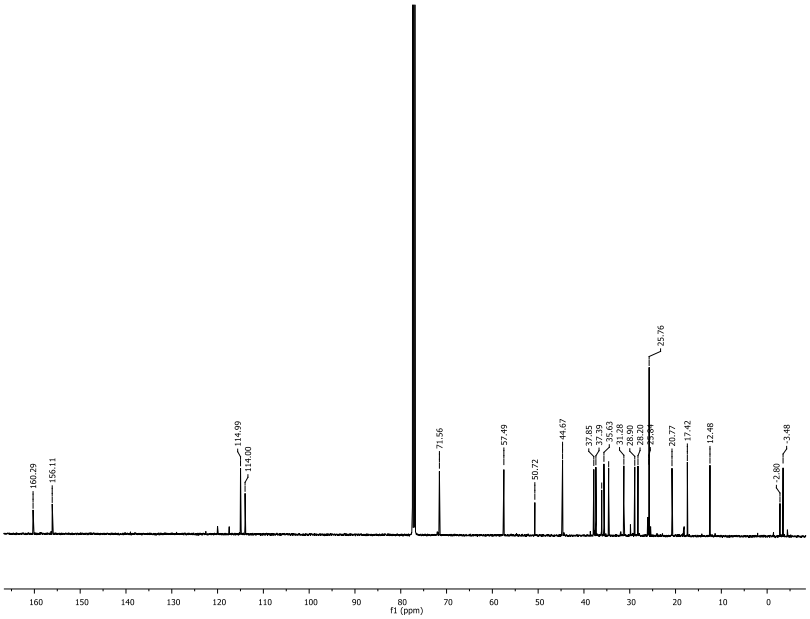
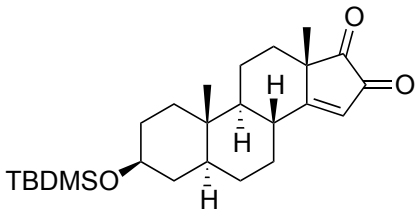


Figure A100 ^{13}C-NMR spectrum of **5.12a** (500 MHz, C_5D_5N)



5.16

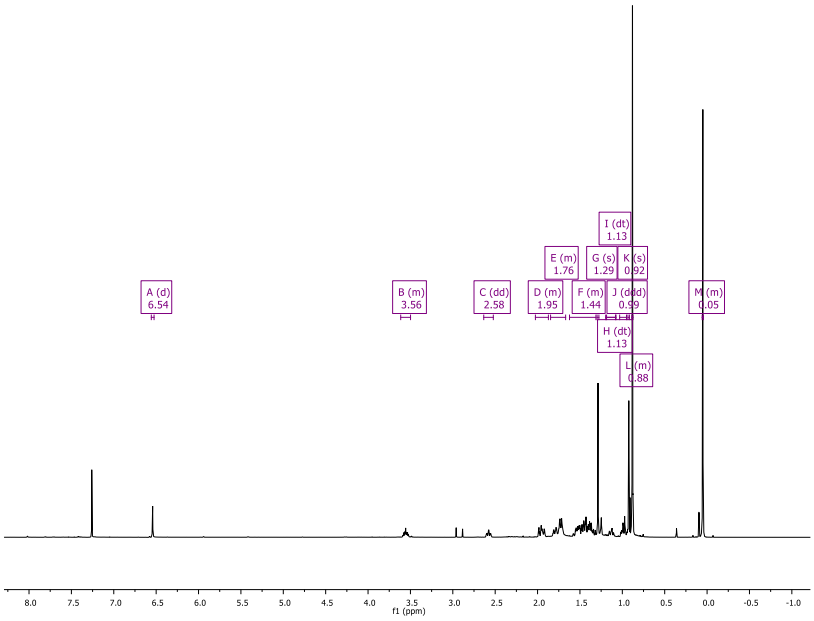


Figure A101 ^{1}H-NMR spectrum of **5.12a** (500 MHz, C_5D_5N)

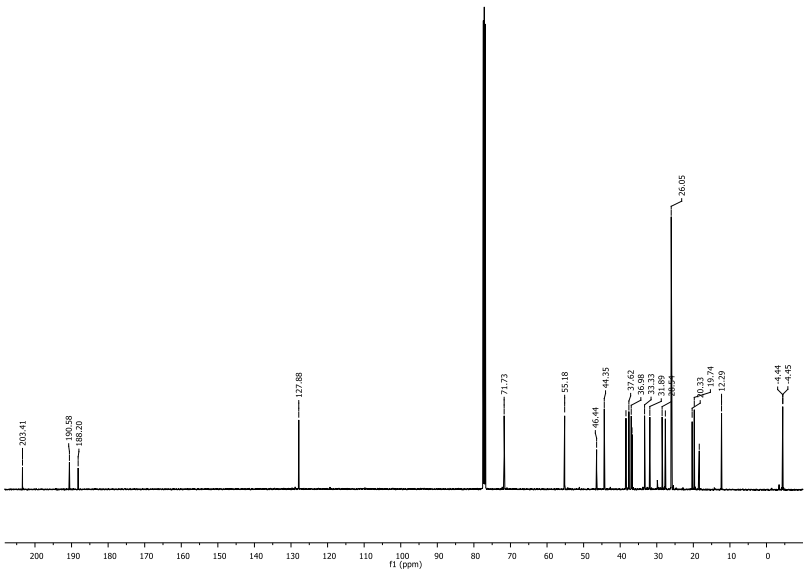


Figure A102 ^{13}C-NMR spectrum of **5.12a** (500 MHz, C_5D_5N)