Supplementary Material

Anti-trypanosomatid elemanolide sesquiterpene lactones from *Vernonia lasiopus* O. Hoffm.

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Compound **1**

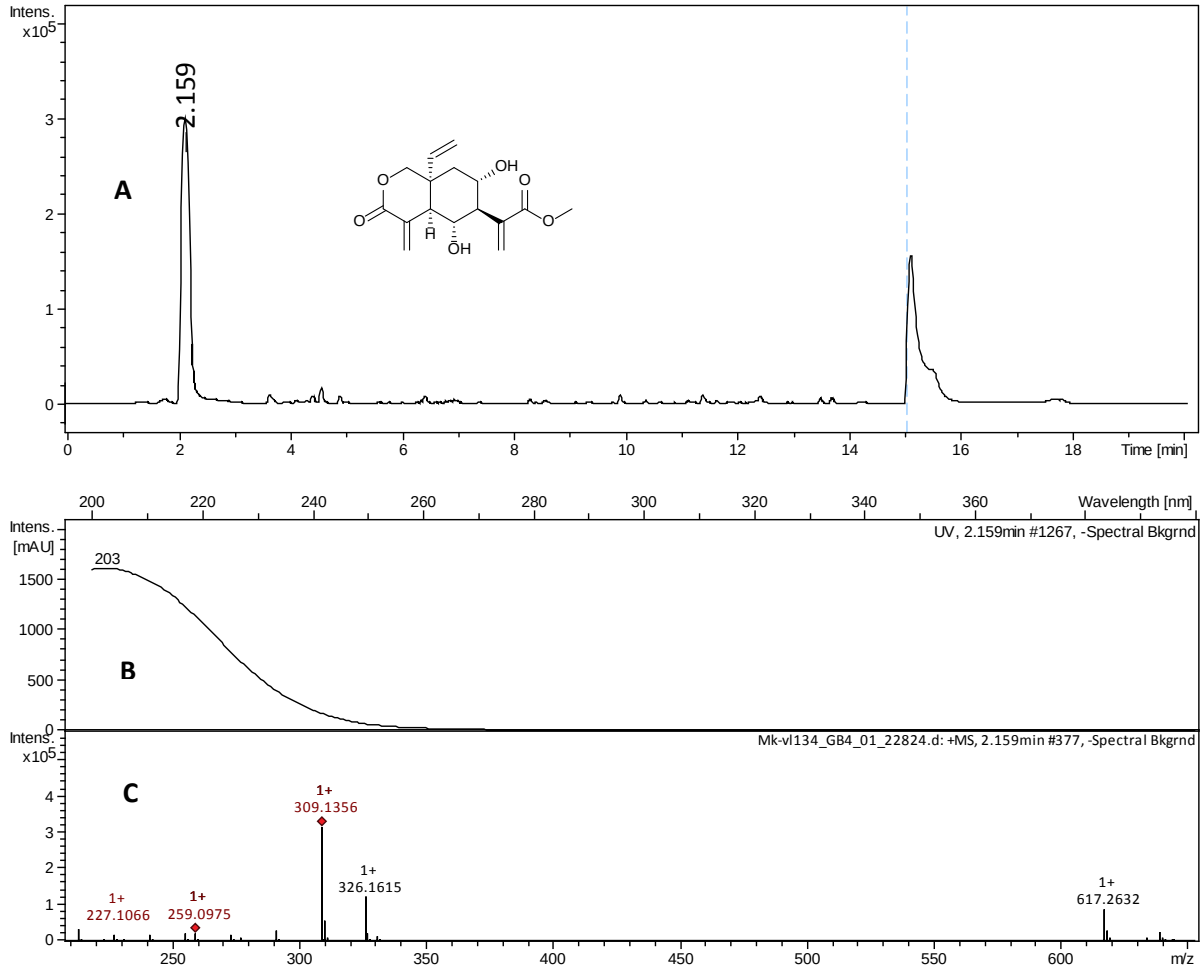

Figure S1: +ESI-QqTOF-MS chromatogram (**A**); UV spectrum (**B**) and +ESI-MS spectrum (**C**) of compound **1**, $[M + H]^+$: 309.1356 ($C_{16}H_{21}O_6$). Internal calibrant sodium formate: 15.106 min

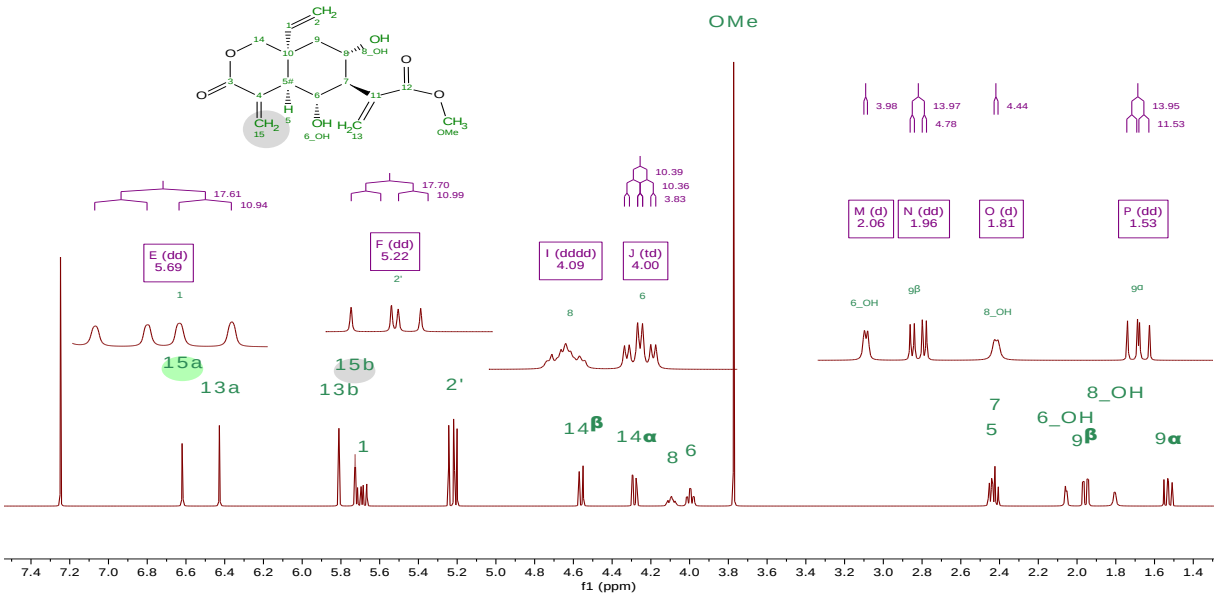

Figure S2: ^{1}H-NMR spectrum of compound **1** ($CDCl_3$, 600 MHz)

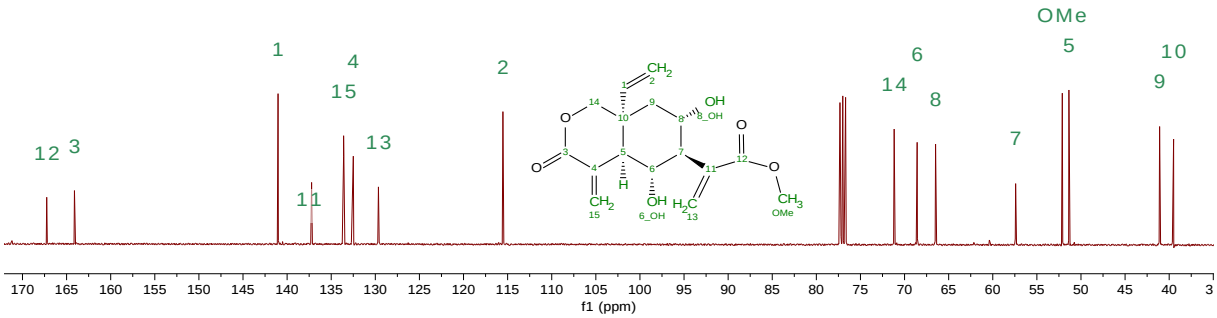

Figure 3: ^{13}C-NMR spectrum of compound **1** ($CDCl_3$, 150 MHz)

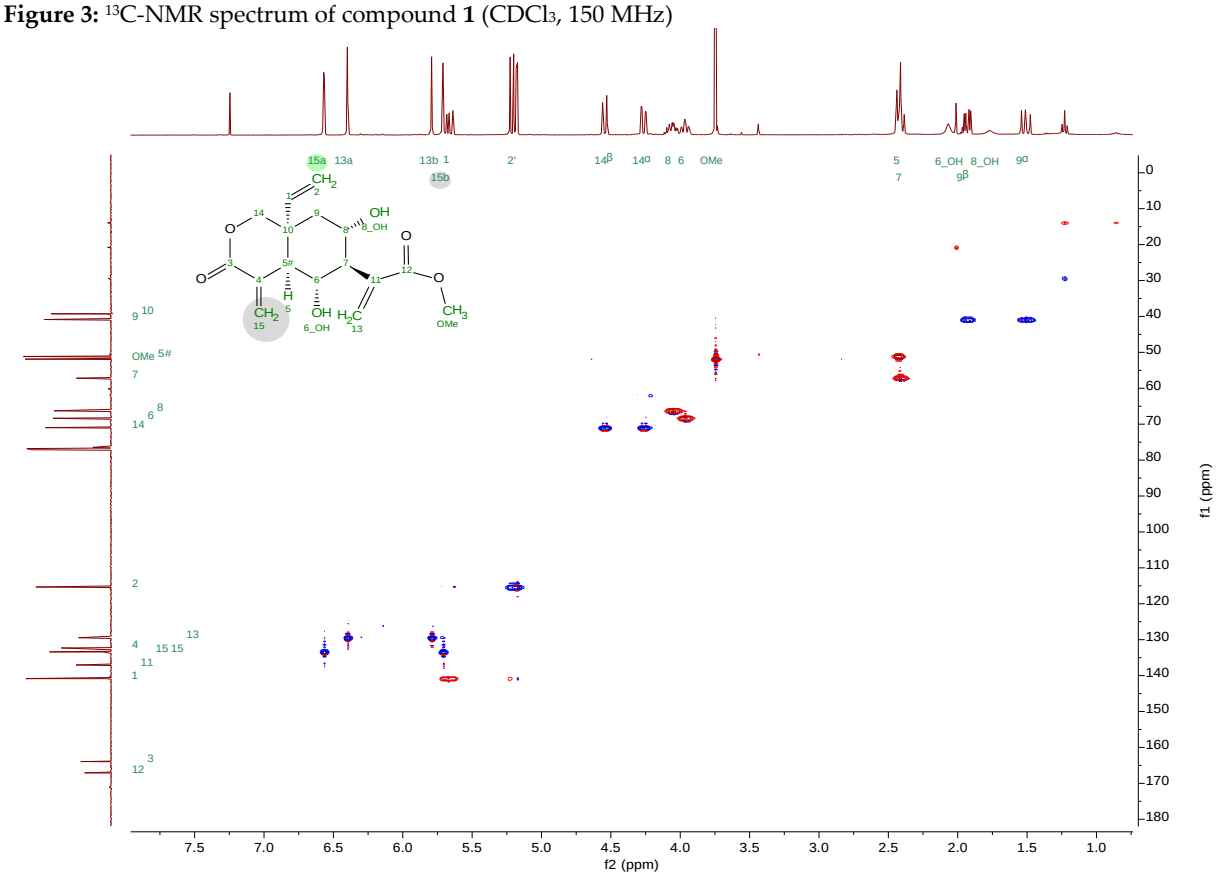

Figure S4: ^{1}H/^{13}C-HSQC spectrum of compound **1** ($CDCl_3$, 600MHz)

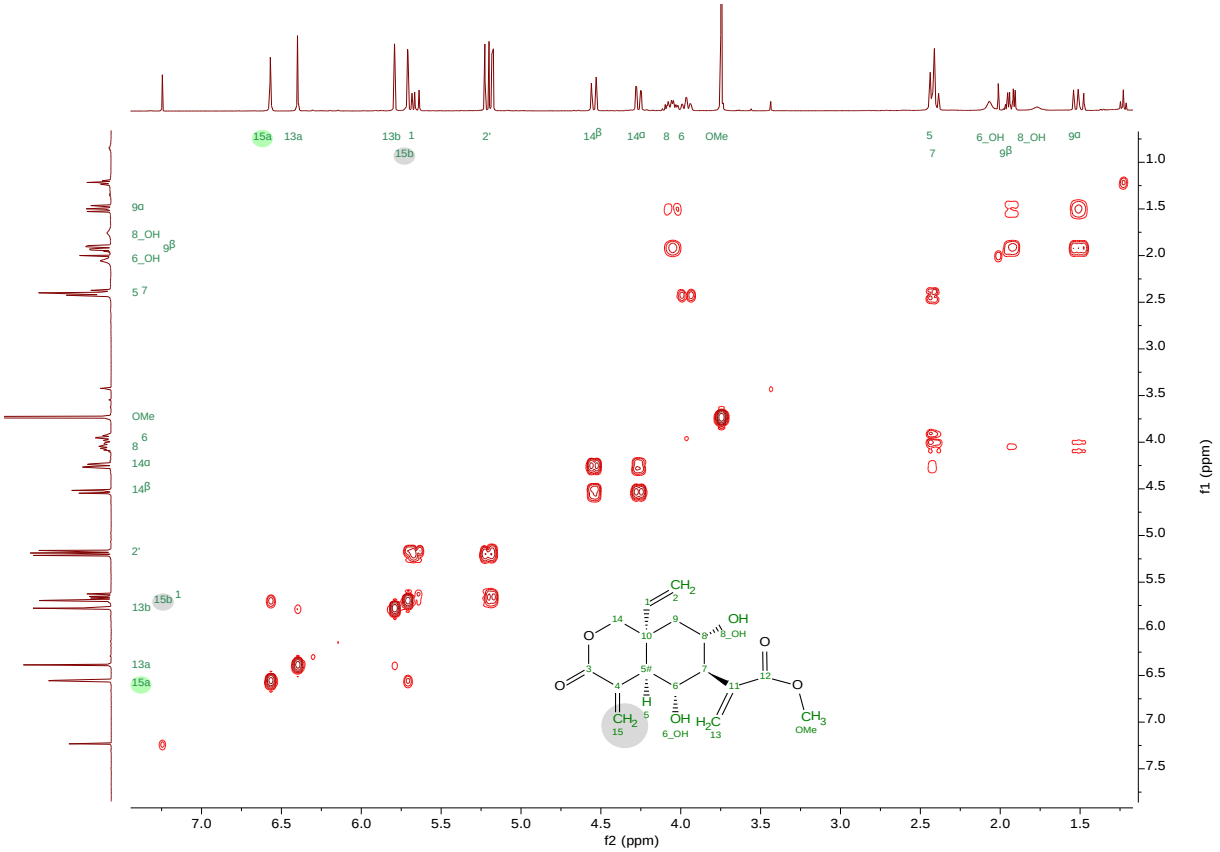

Figure S5: $^{1}H/^{1}H$- COSY spectrum of compound **1** ($CDCl_3$, 600MHz)

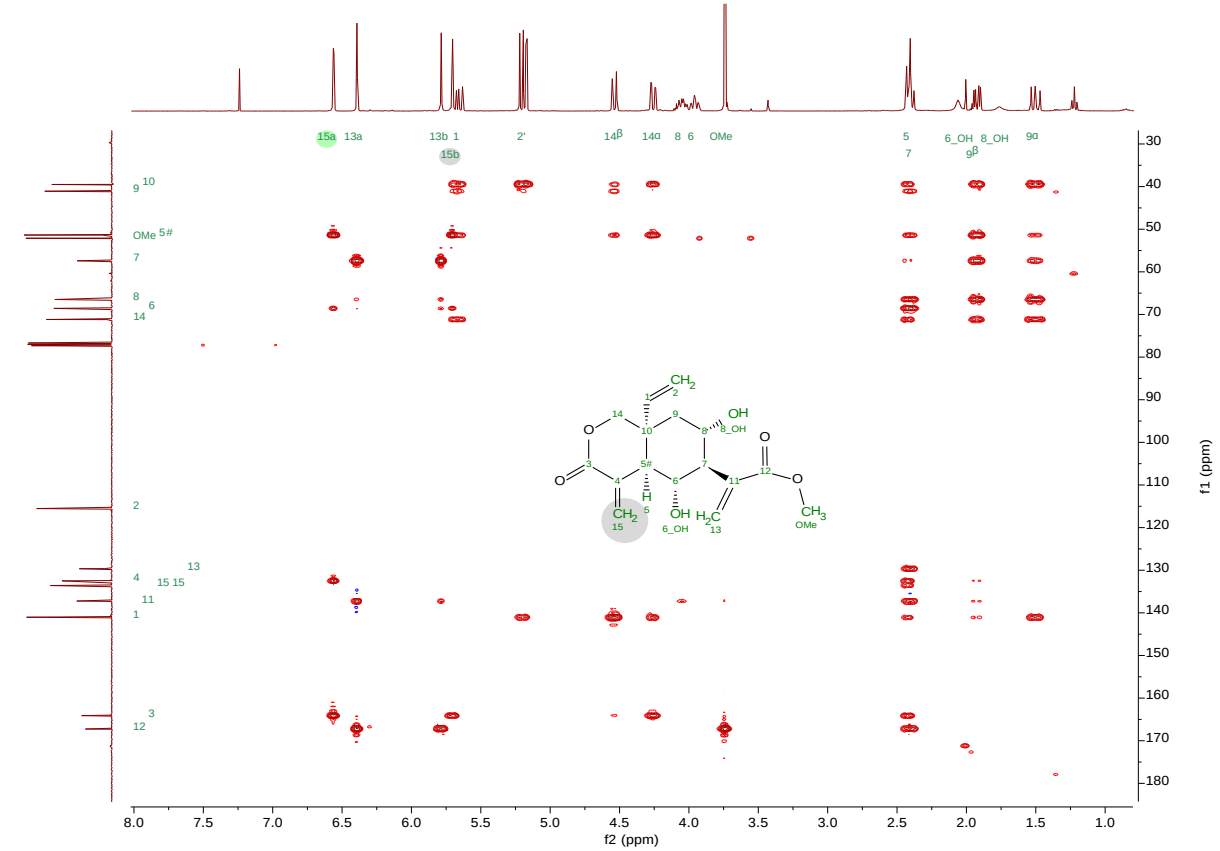

Figure S6: $^{1}H/^{13}C$- HMBC spectrum of compound **1** ($CDCl_3$, 600MHz)

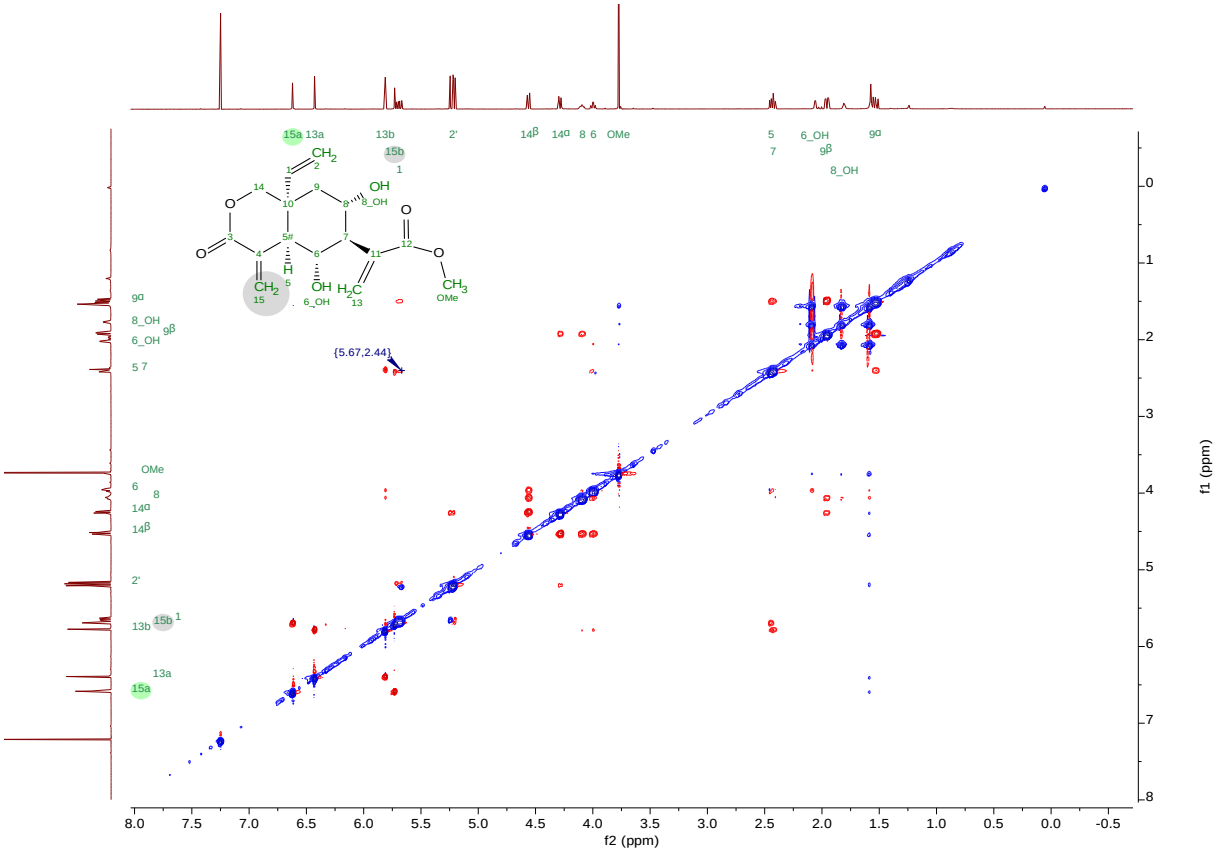

Figure S7: $^{1}H/^{1}H$- NOESY spectrum of compound **1** ($CDCl_3$, 600MHz)

Compound **2**

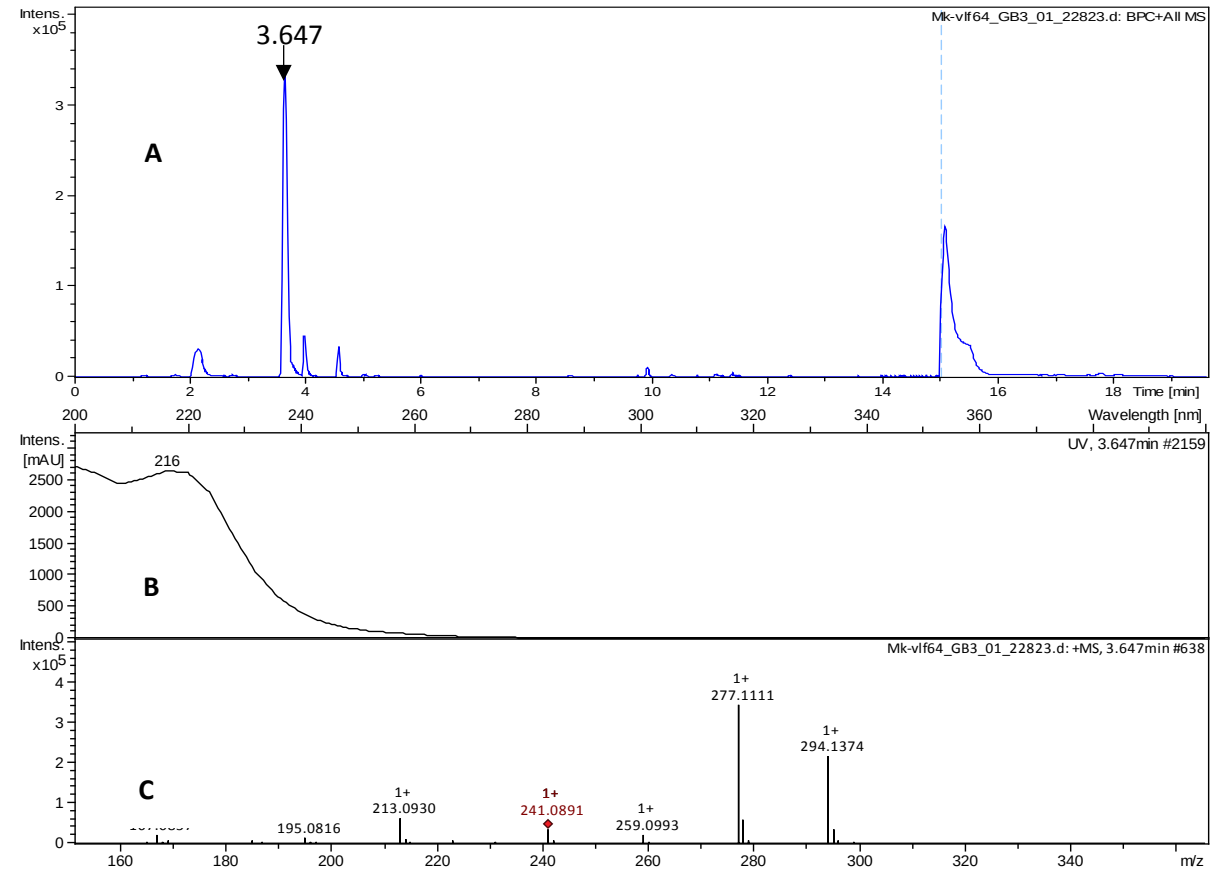

Figure S8: +ESI-QqTOF-MS chromatogram (**A**); UV spectrum (**B**) and +ESI-MS spectrum (**C**) of compound **2**, $[M + H]^+$: 277.1111 ($C_{15}H_{17}O_5$). Internal calibrant sodium formate: 15.106 min

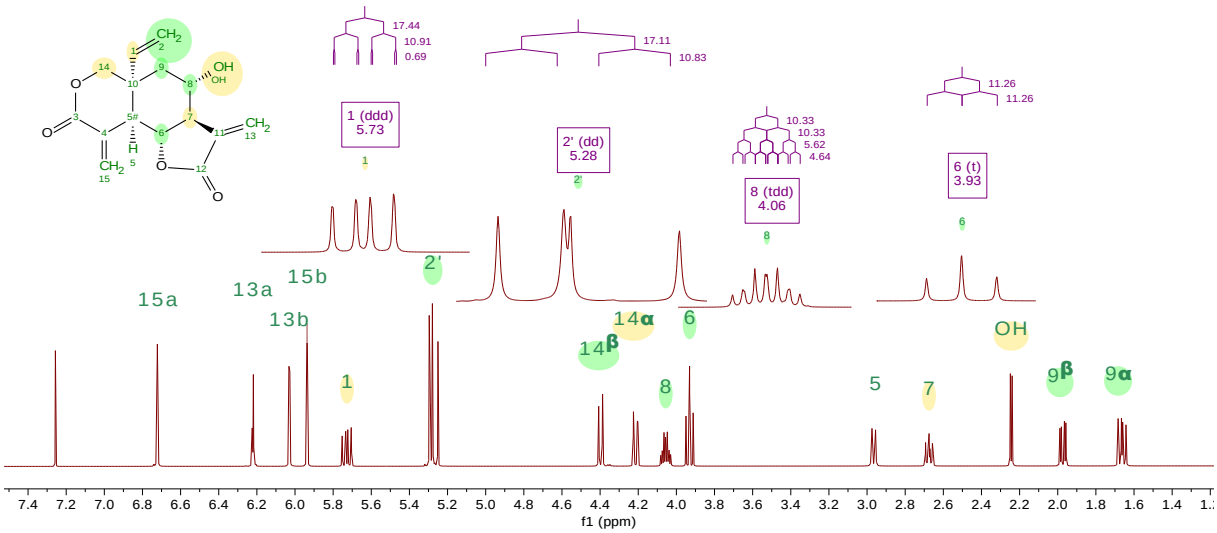

Figure S9: ^{1}H-NMR spectrum of compound **2** ($CDCl_3$, 600 MHz); *

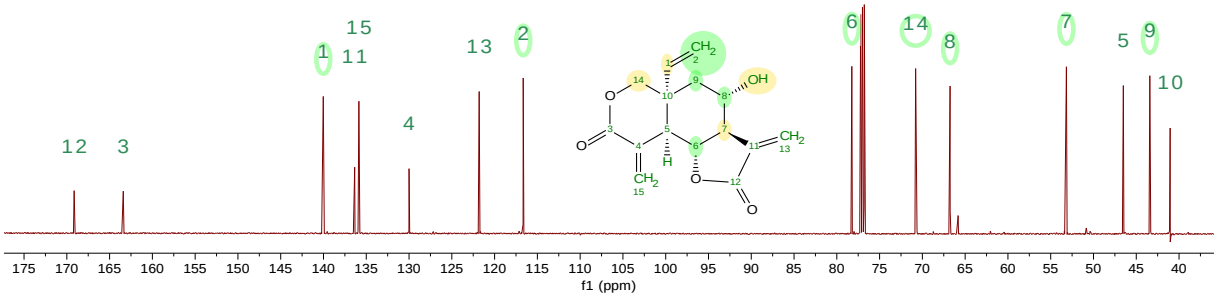

Figure S10*:* ^{13}C-NMR spectrum of compound **2** ($CDCl_3$, 600 MHz)

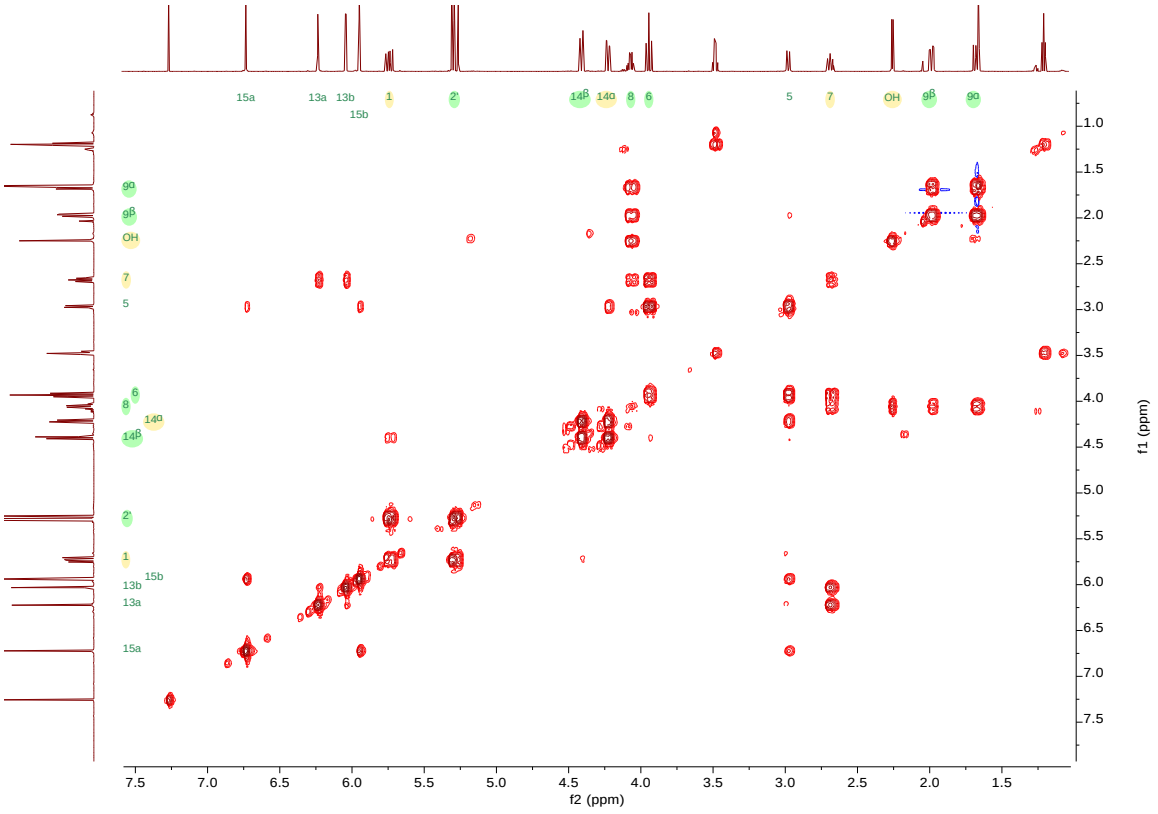

Figure S11: ^{1}H/^{1}H- COSY spectrum of compound **2** ($CDCl_3$, 600MHz)

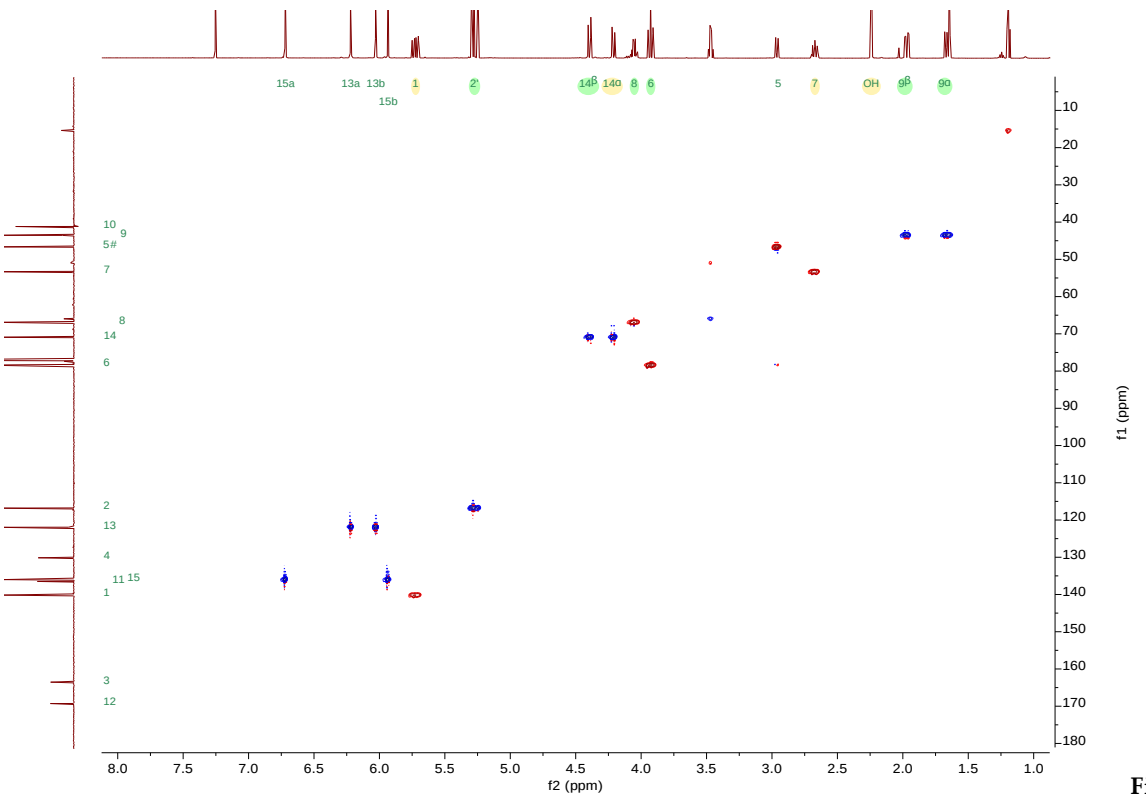

Figure S12: $^{1}H/^{13}C$- HSQC spectrum of compound **2** ($CDCl_3$, 600MHz)

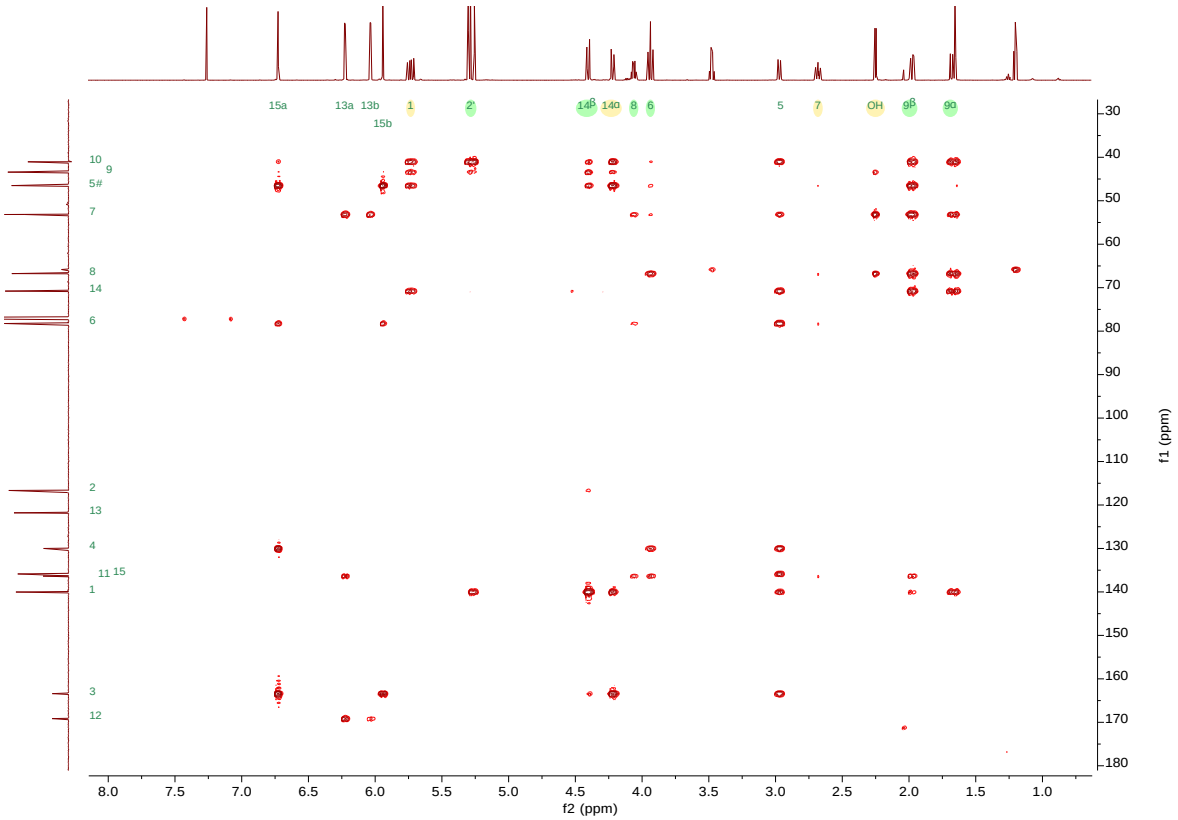

Figure S13: $^{1}H/^{13}C$- HMBC spectrum of compound **2** ($CDCl_3$, 600MHz)

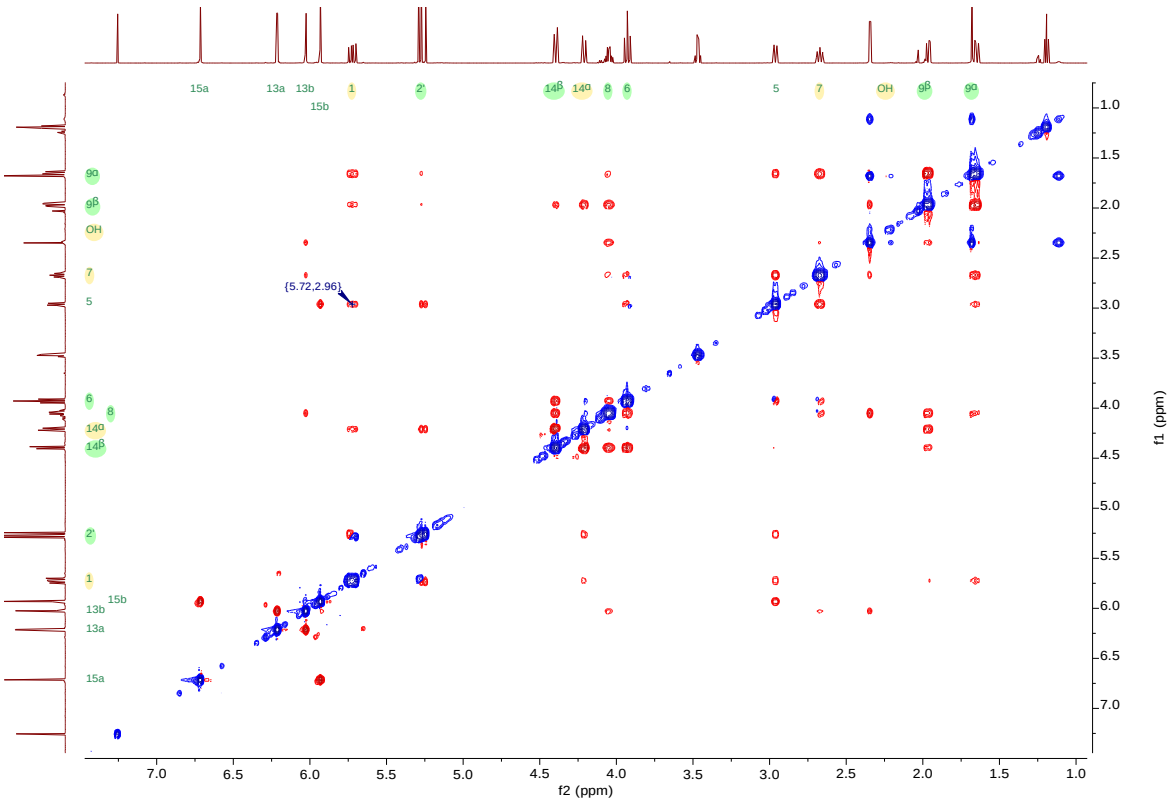

Figure S14: $^{1}H/^{1}H$- NOESY spectrum of compound **2** ($CDCl_3$, 600MHz)

Compound **3**

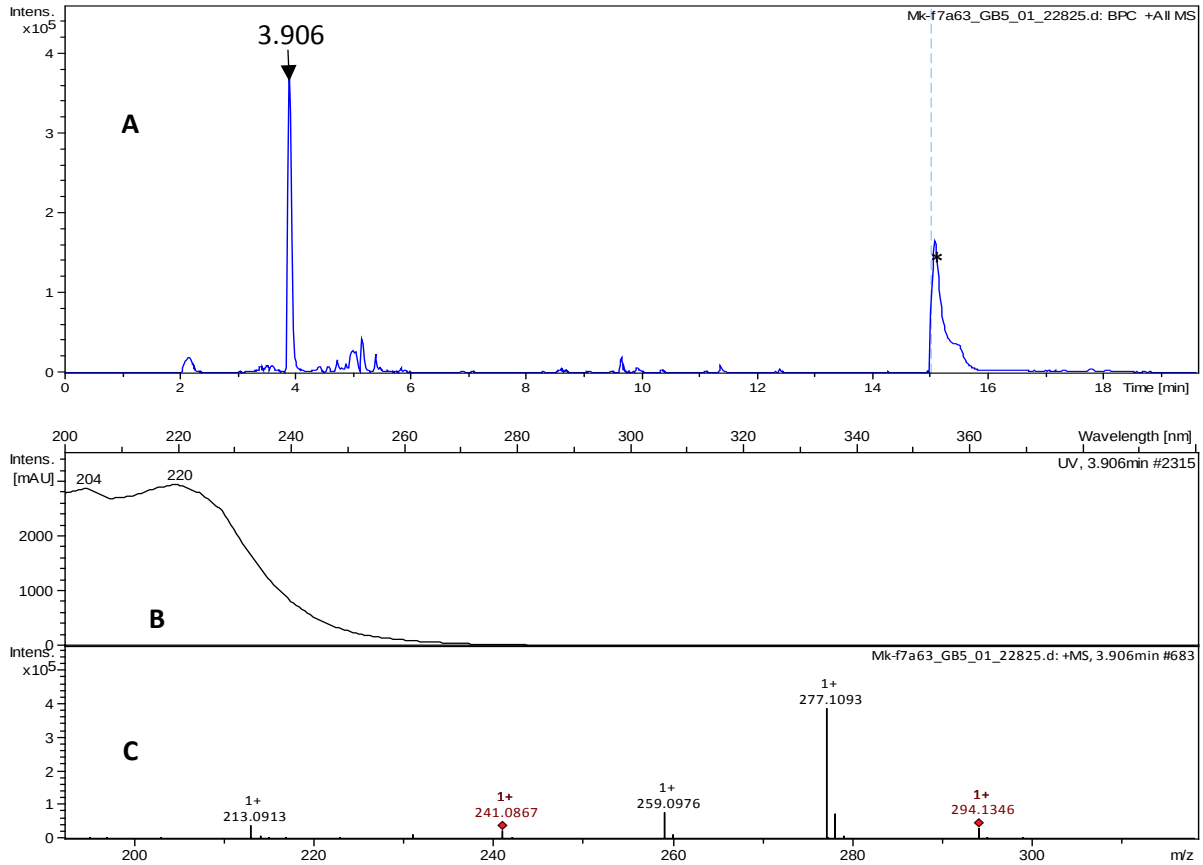

Figure S15: +ESI-QqTOF-MS chromatogram (**A**); UV spectrum (**B**) and +ESI-MS spectrum (**C**) of compound **3**, $[M + H]^+$: 277.1093 ($C_{15}H_{17}O_5$). Internal calibrant sodium formate: 15.106 min

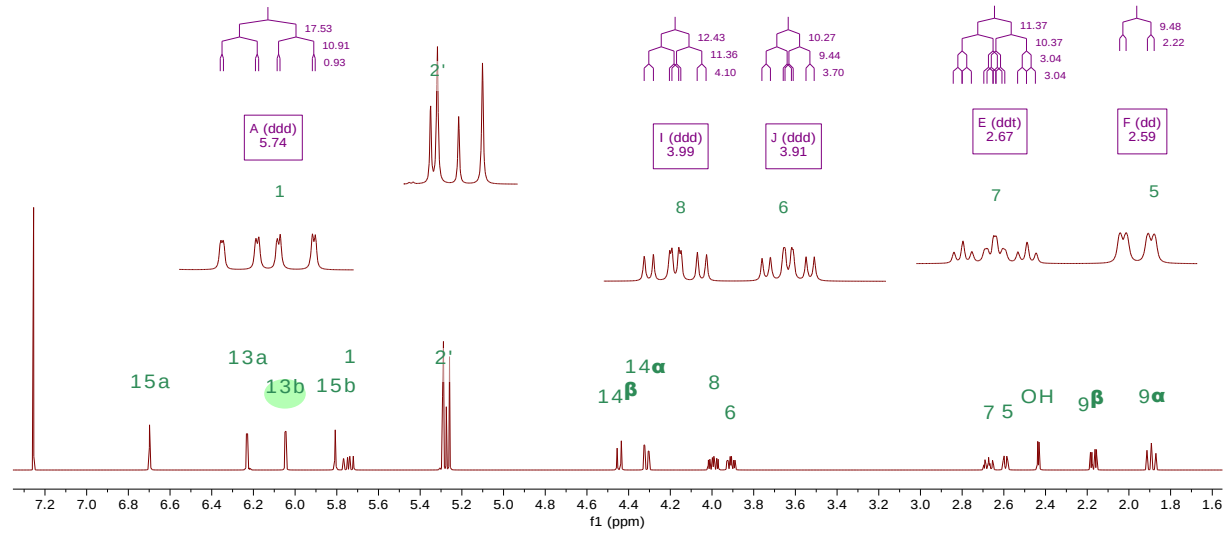

Figure S16: [1]H-NMR spectrum of compound **3** ($CDCl_3$, 600 MHz)

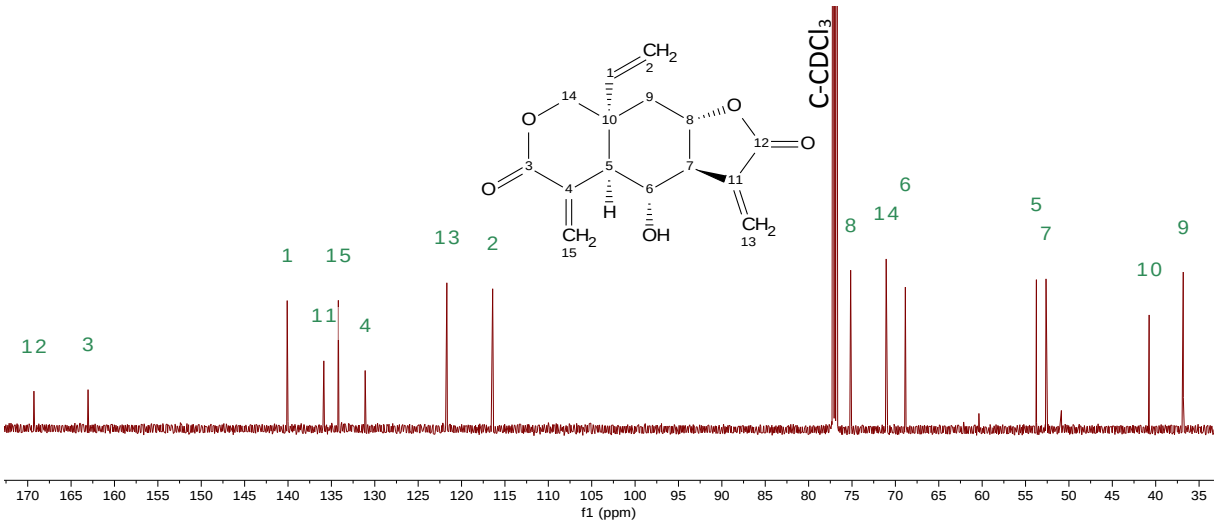

Figure S17: [13]C-NMR spectrum of compound 3 ($CDCl_3$, 600 MHz)

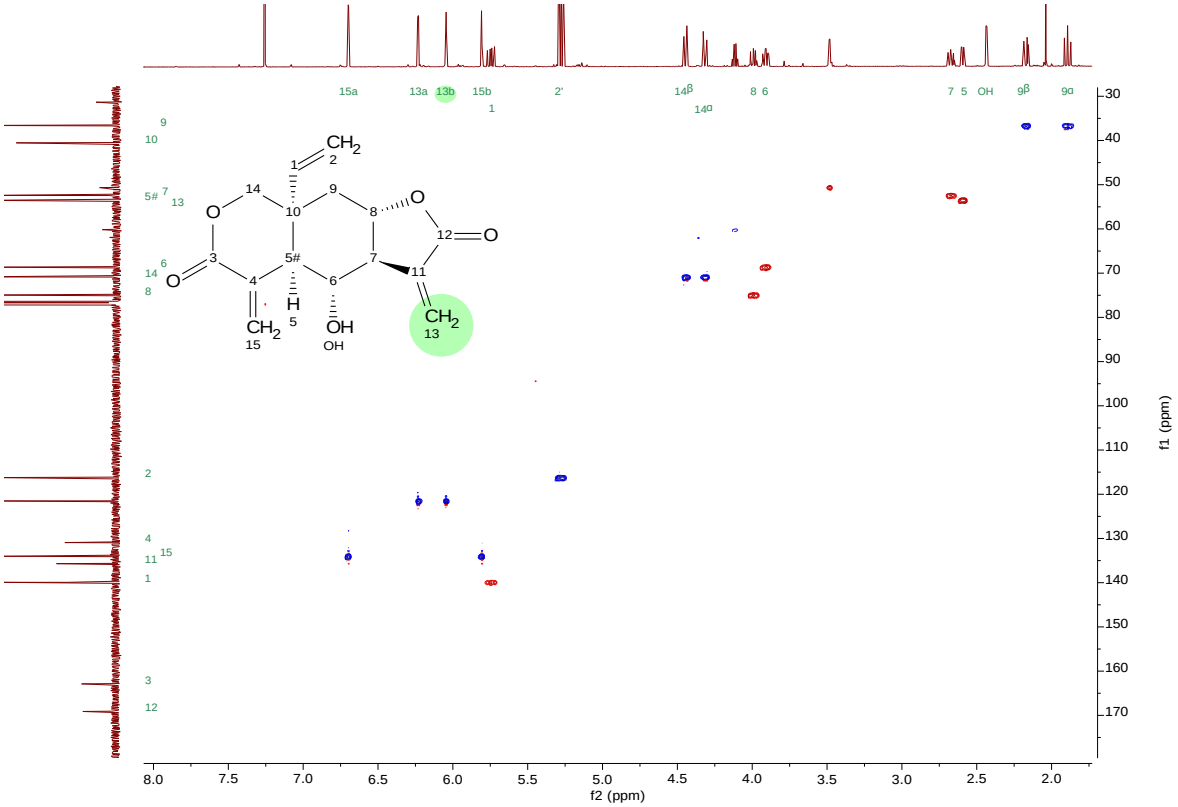

Figure S18: $^{1}H/^{13}C$- HSQC spectrum for compound **3** ($CDCl_3$, 600MHz)

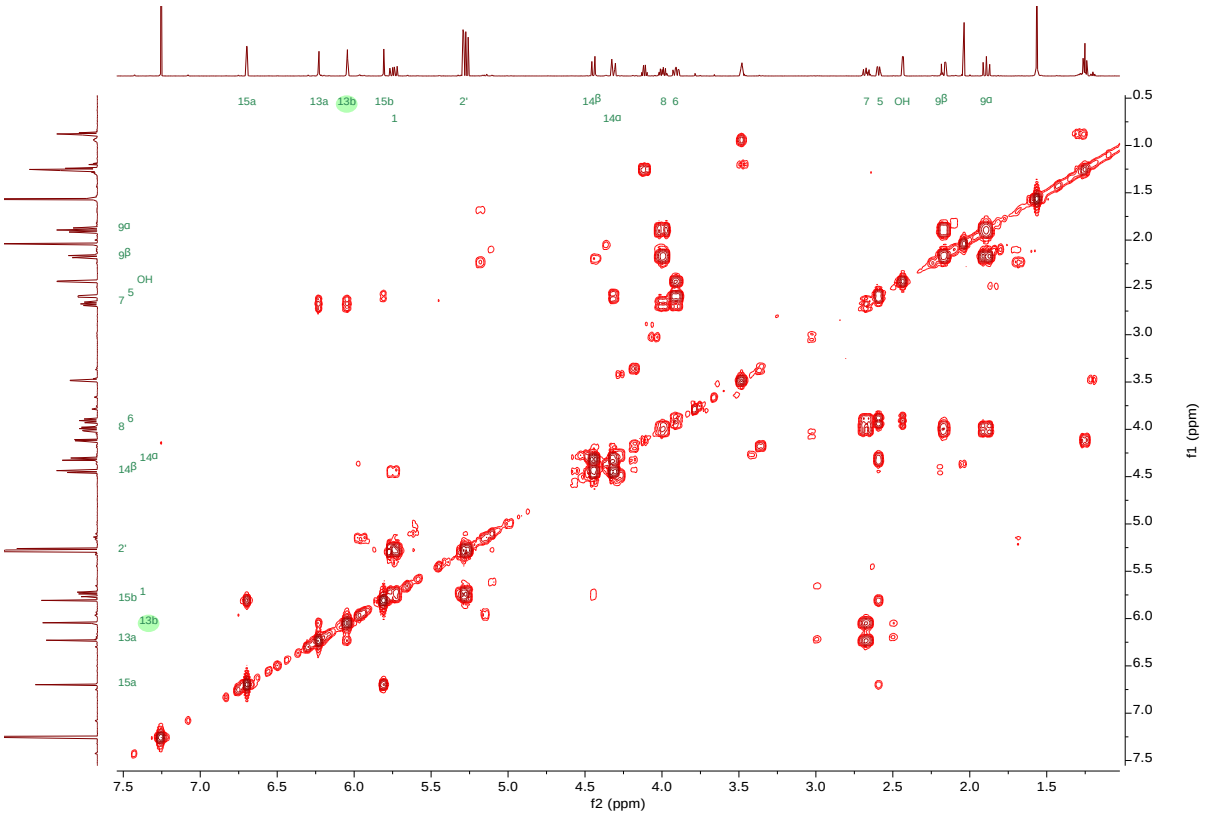

Figure S19: $^{1}H/^{1}H$- COSY spectrum for compound **3** ($CDCl_3$, 600MHz)

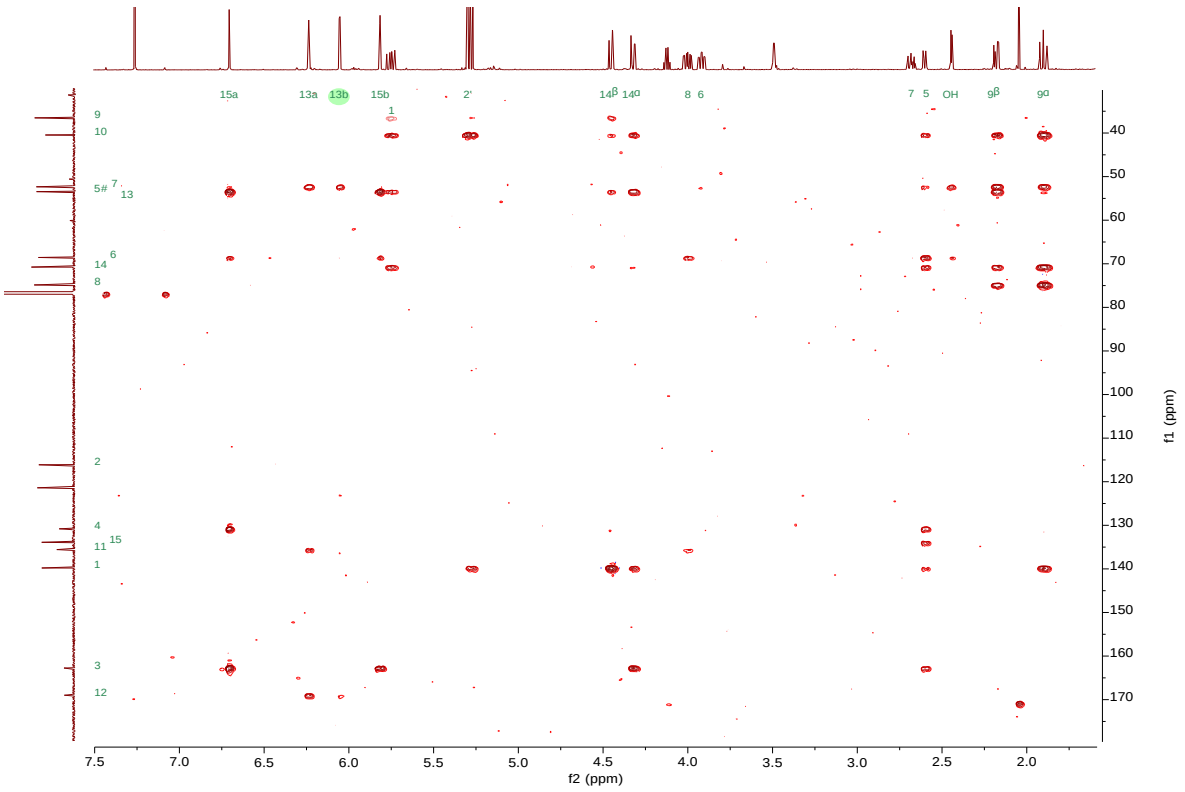

Figure S20: $^{1}H/^{13}C$- HMBC spectrum for compound **3** ($CDCl_3$, 600MHz)

Compound **4**

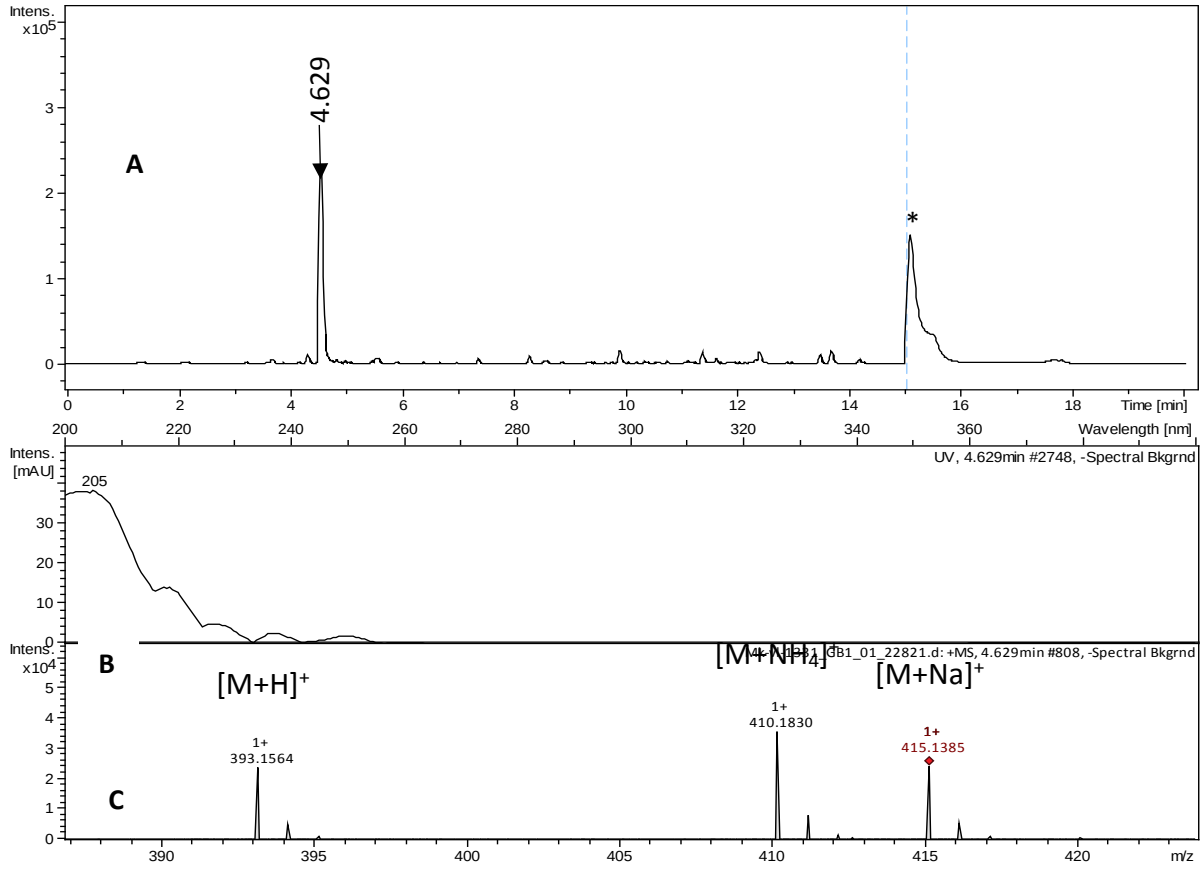

Figure S21: +ESI-QqTOF-MS chromatogram (**A**); UV spectrum (**B**) and +ESI-MS spectrum (**C**) of compound **4**, $[M + H]^+$: 393.1564($C_{20}H_{25}O_8$). Internal calibrant sodium formate: 15.106 min

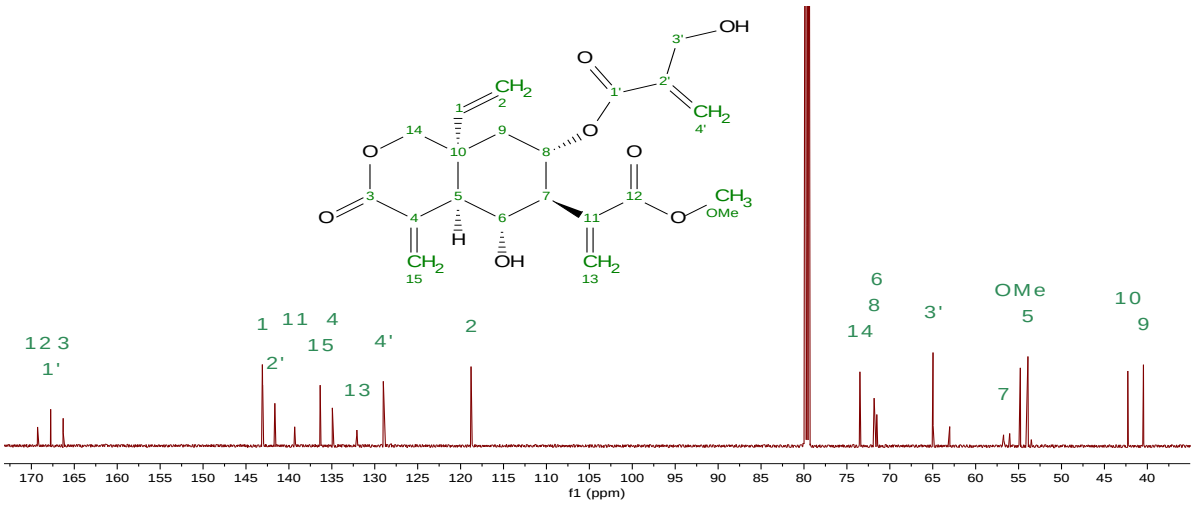

Figure S22: ^{13}C-NMR spectrum of compound **4** ($CDCl_3$, 600 MHz)

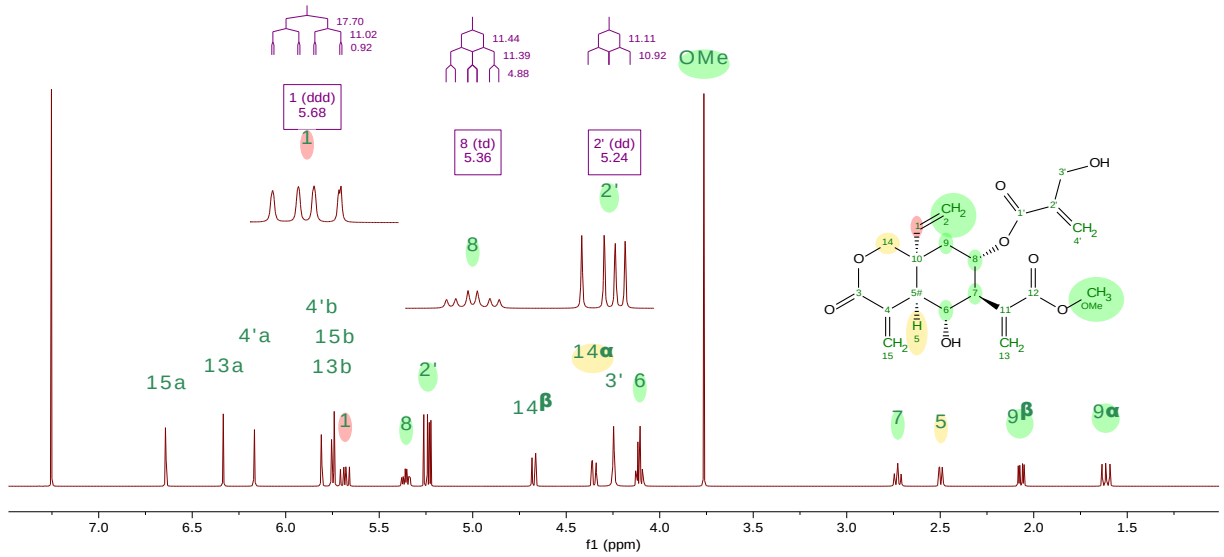

Figure S23: ^{1}H-NMR spectrum of compound **4** ($CDCl_3$, 600 MHz)

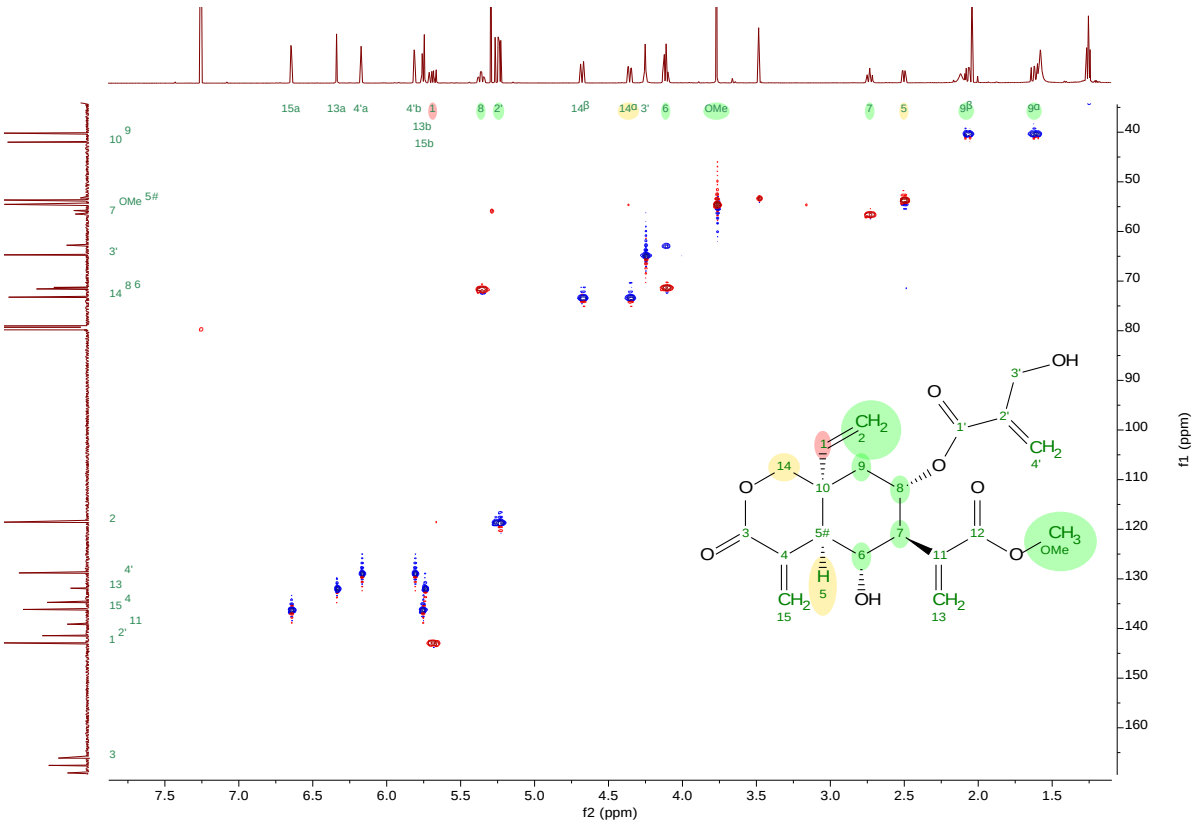

Figure S24: $^{1}H/^{13}C$- HSQC spectrum for compound **4** ($CDCl_3$, 600MHz)

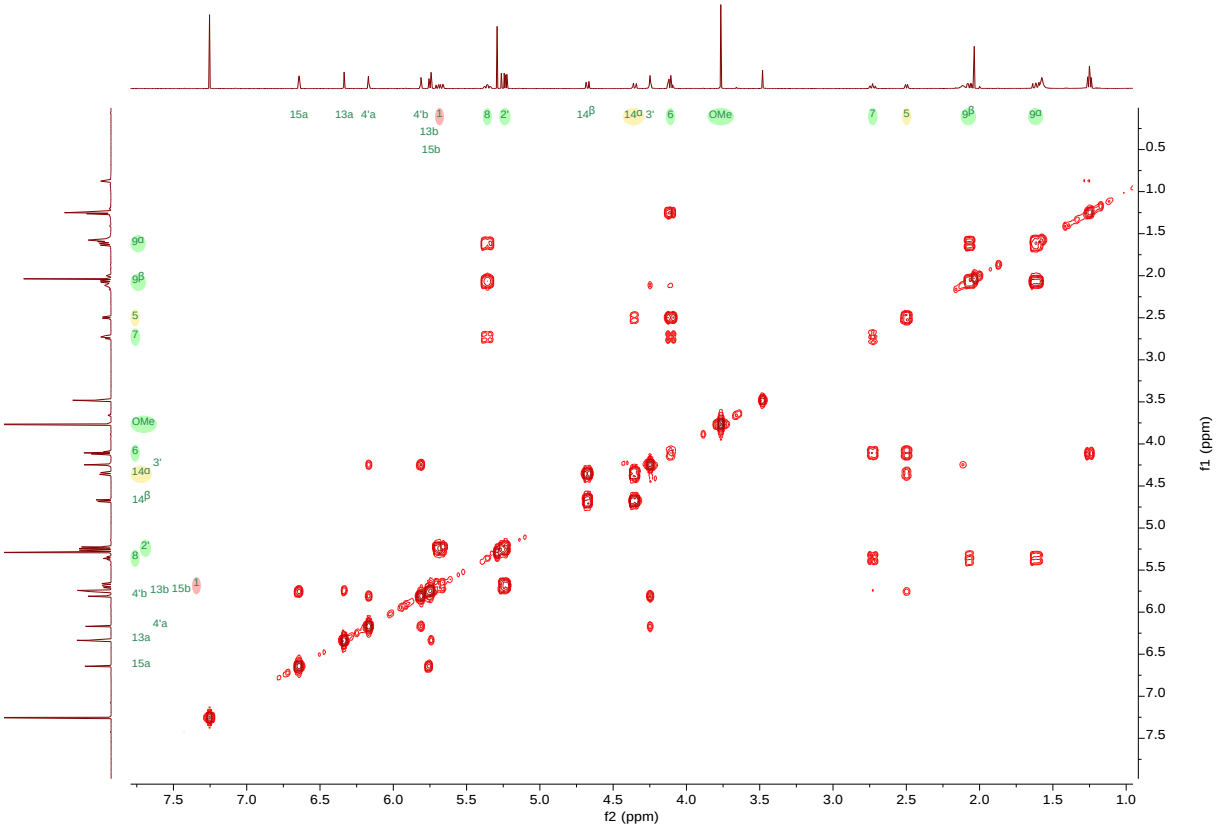

Figure S25: $^{1}H/^{1}H$- COSY spectrum for compound **4** ($CDCl_3$, 600MHz)

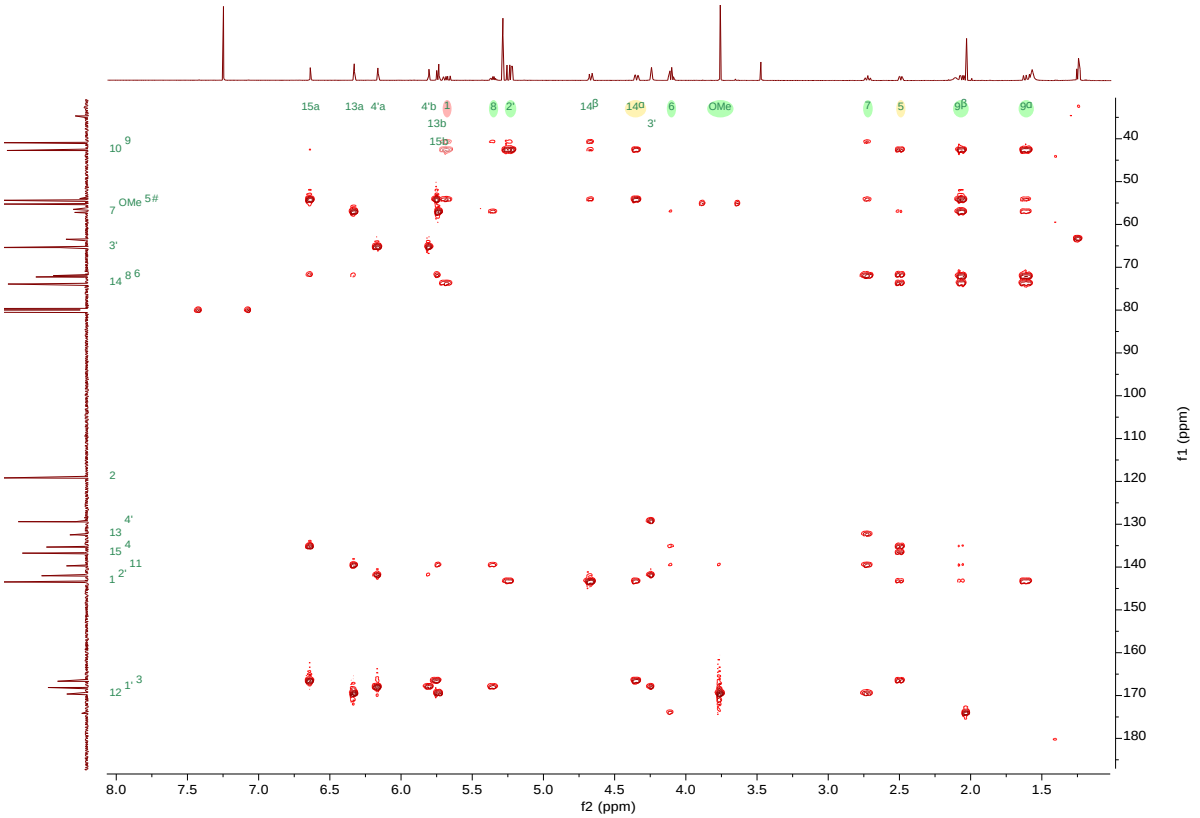

Figure S26: $^{1}H/^{13}C$- HMBC spectrum for compound **4** ($CDCl_3$, 600MHz)

Compounds **5+6**

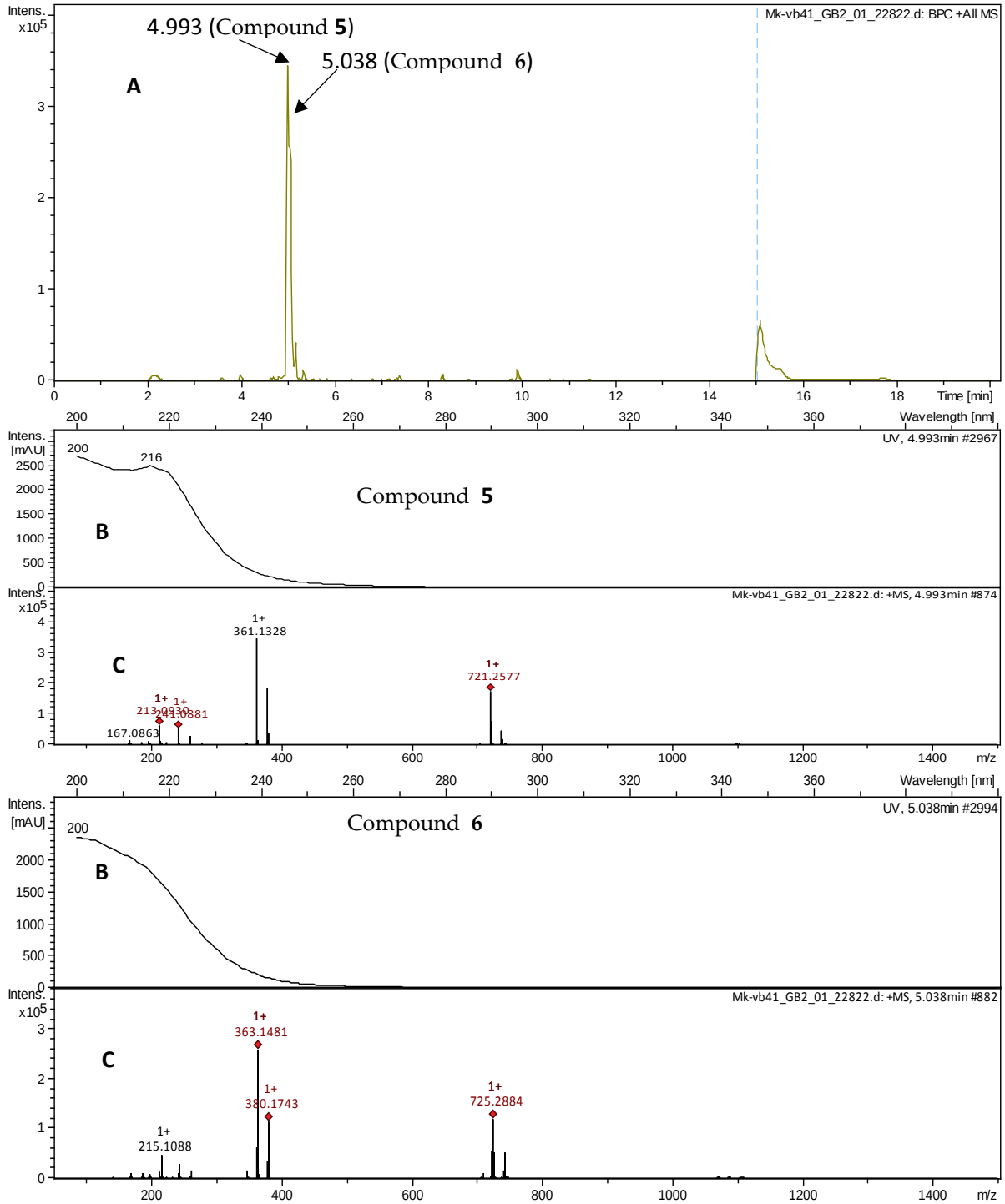

Figure S27: +ESI-QqTOF-MS chromatogram (**A**); UV spectra (**B**) and +ESI-MS spectra (**C**) of compounds **5** and **6**, $[M + H]^+$: 361.1328($C_{19}H_{21}O_7$) and $[M + H]^+$: 363.1481($C_{19}H_{23}O_7$) for Compound **5** and **6** respectively. Internal calibrant sodium formate: 15.106 min

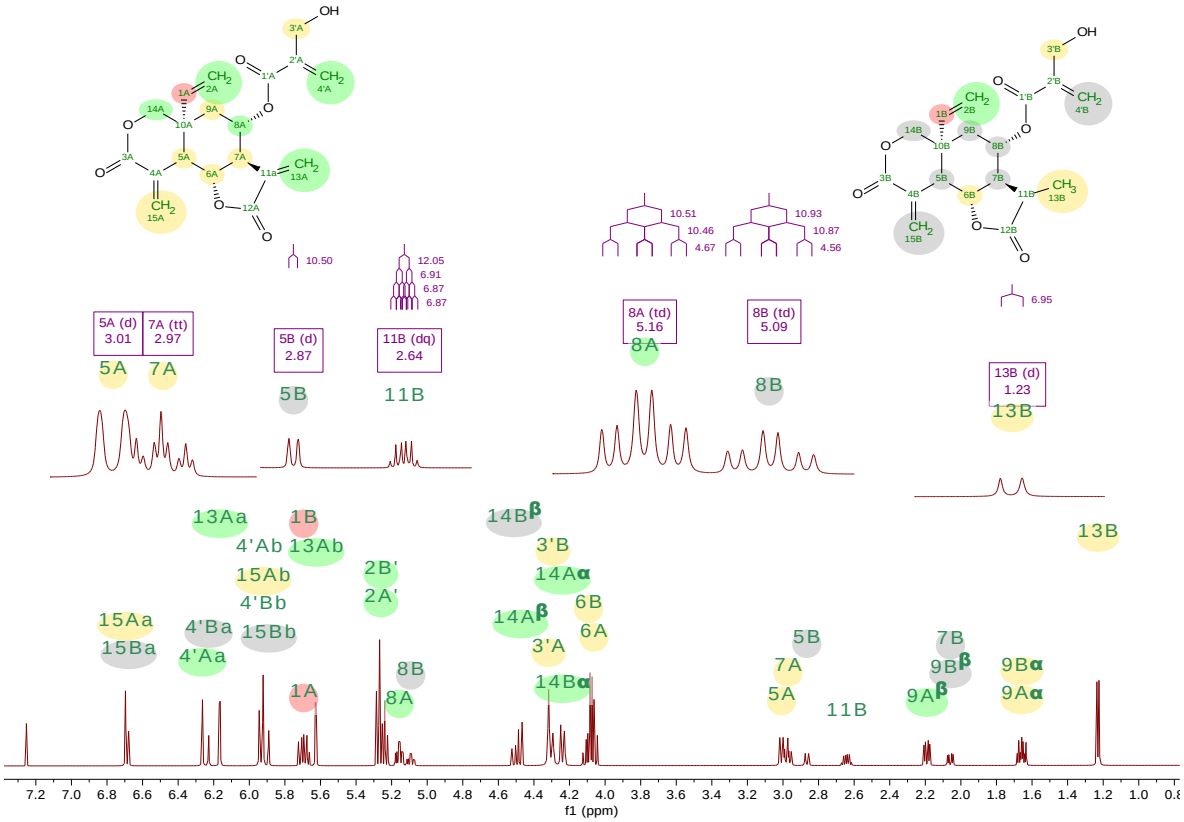

Figure S28: ^{1}H-NMR spectrum of compounds **5** (**A**) and **6 (B)** ($CDCl_3$, 600 MHz)

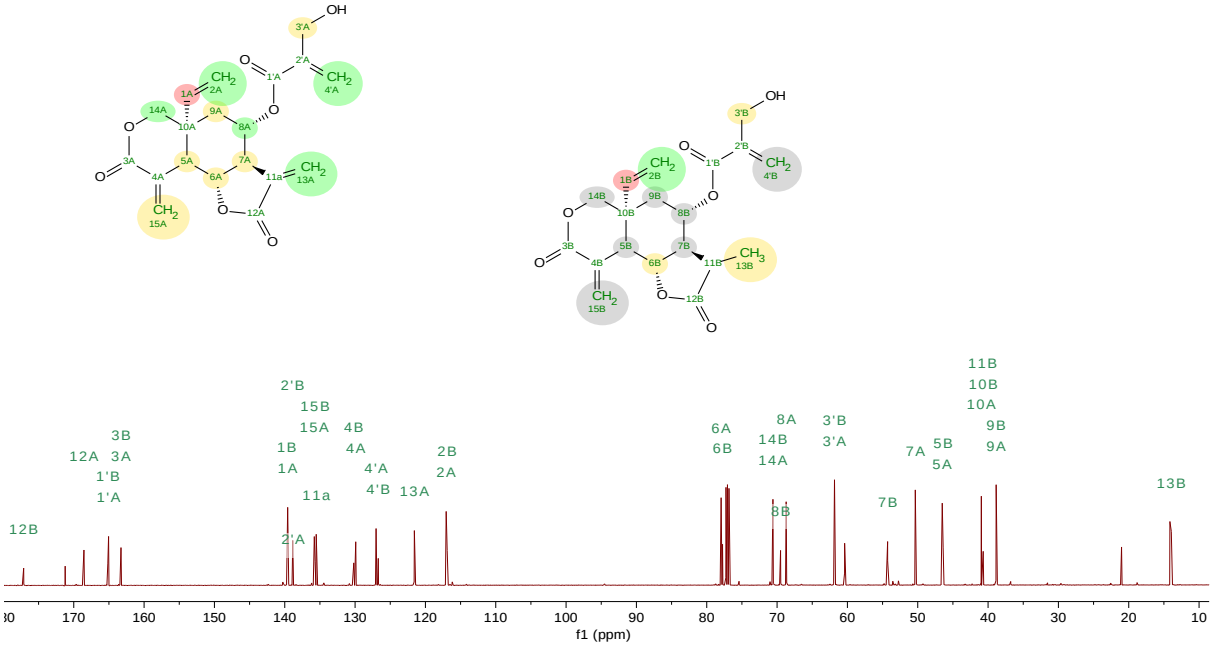

Figure S29: ^{13}C-NMR spectrum of compounds **5** (A) and **6** (B) ($CDCl_3$, 600 MHz)

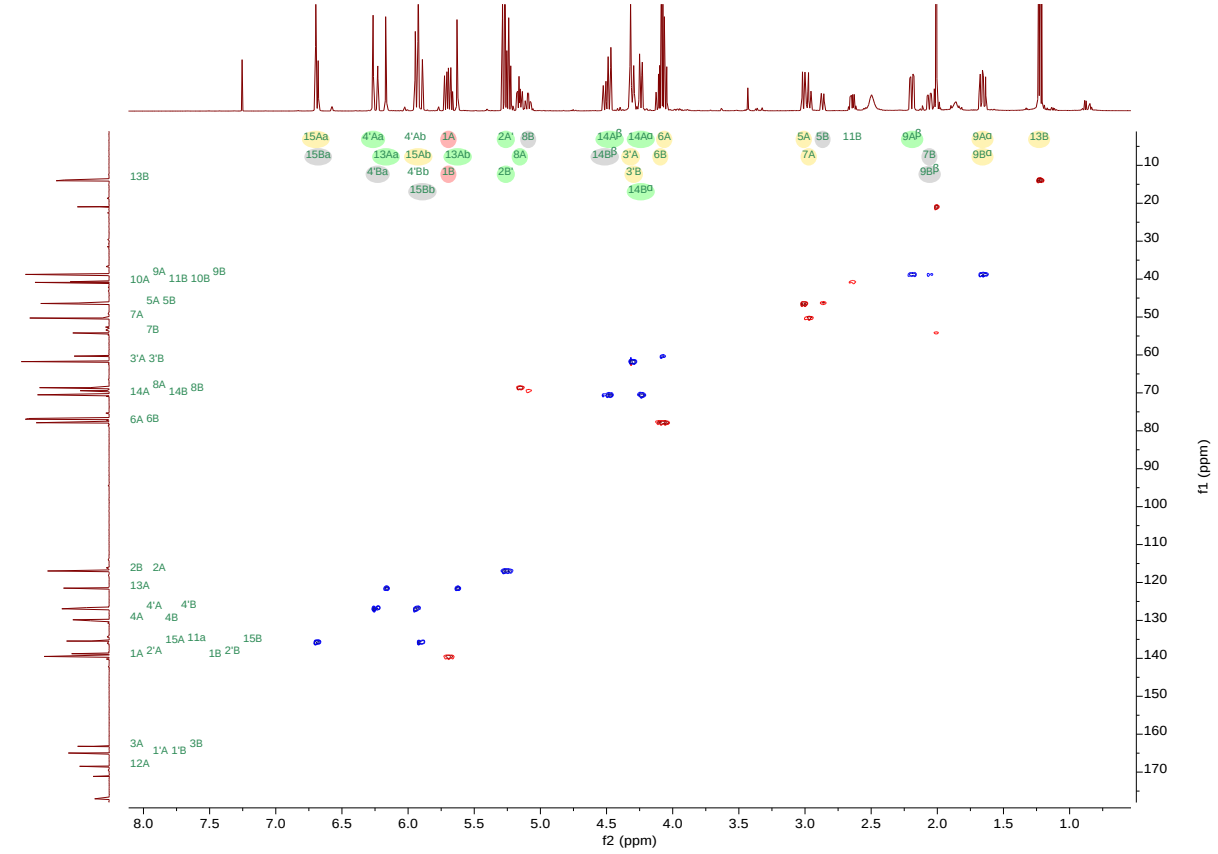

Figure S30: $^{1}H/^{13}C$- HSQC spectrum for compounds **5** (A) and **6** (B) ($CDCl_3$, 600 MHz)

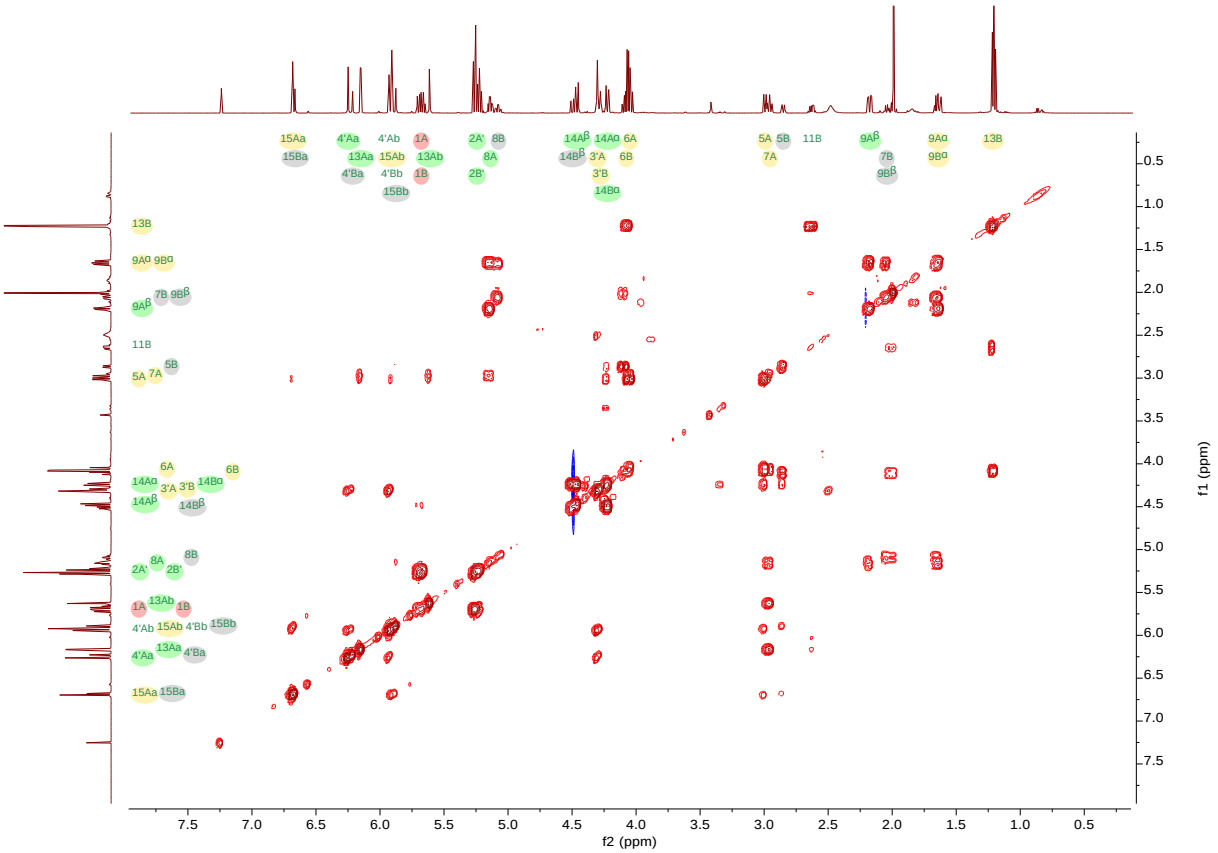

Figure S31: $^{1}H/^{1}H$- COSY spectrum for compounds **5** (A) and **6** (B) ($CDCl_3$, 600MHz)

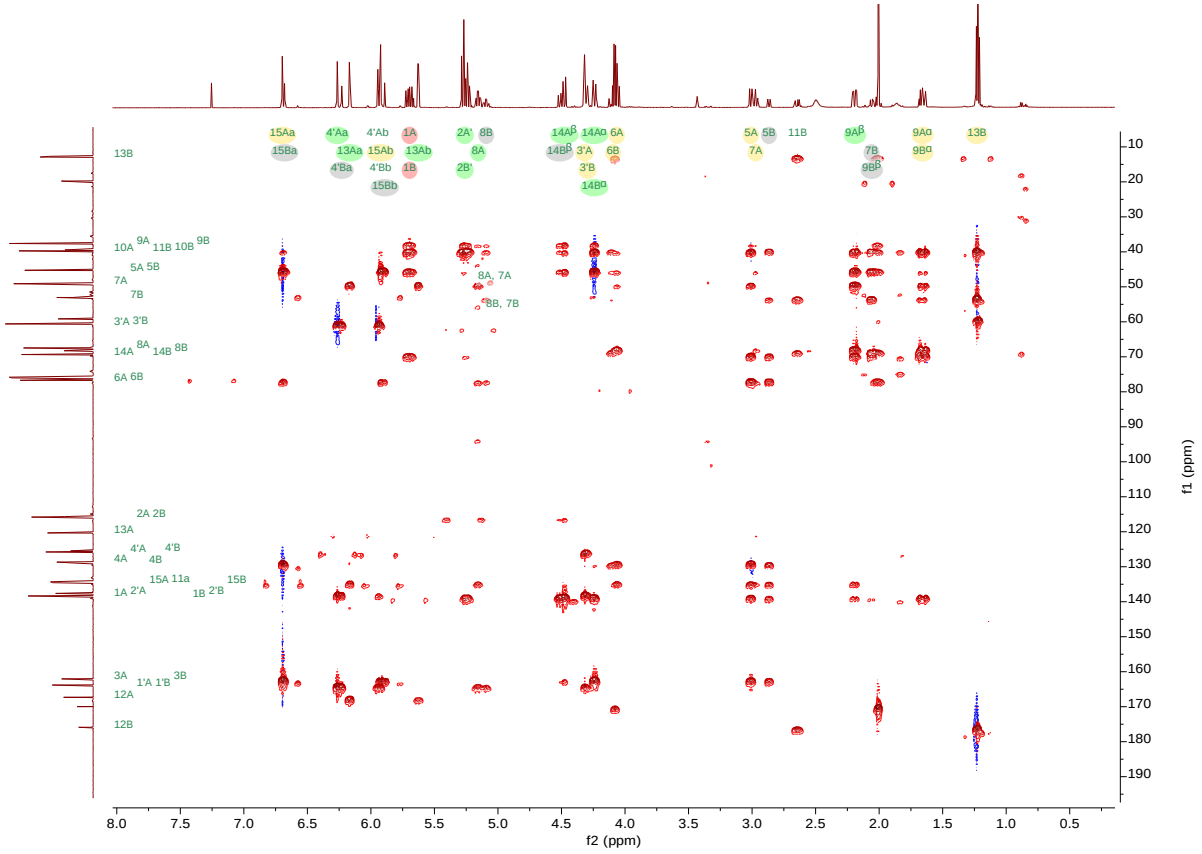

Figure S32: $^{1}H/^{13}C$- HMBC spectrum for compounds **5** (A) and **6** (B) ($CDCl_3$, 600MHz)