

Supplementary Information

Abietane Diterpenes from *Hyptis crassifolia* Mart. ex Benth. (Lamiaceae)

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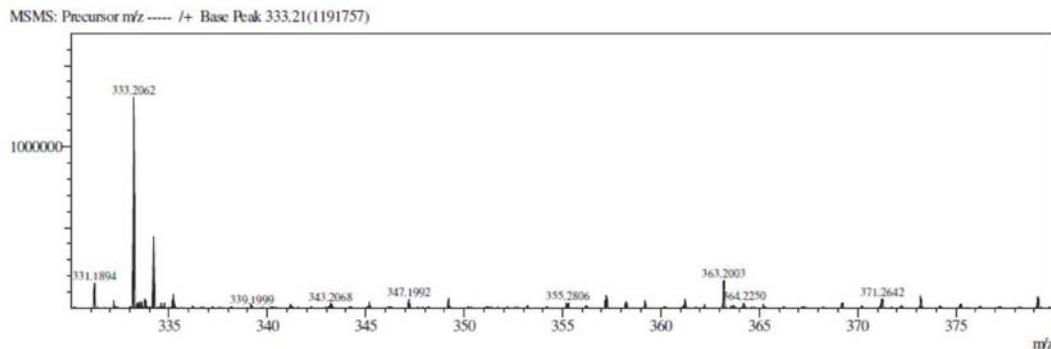


Figure S1. HR-ESI-MS spectrum (positive mode) of diterpene **1**.

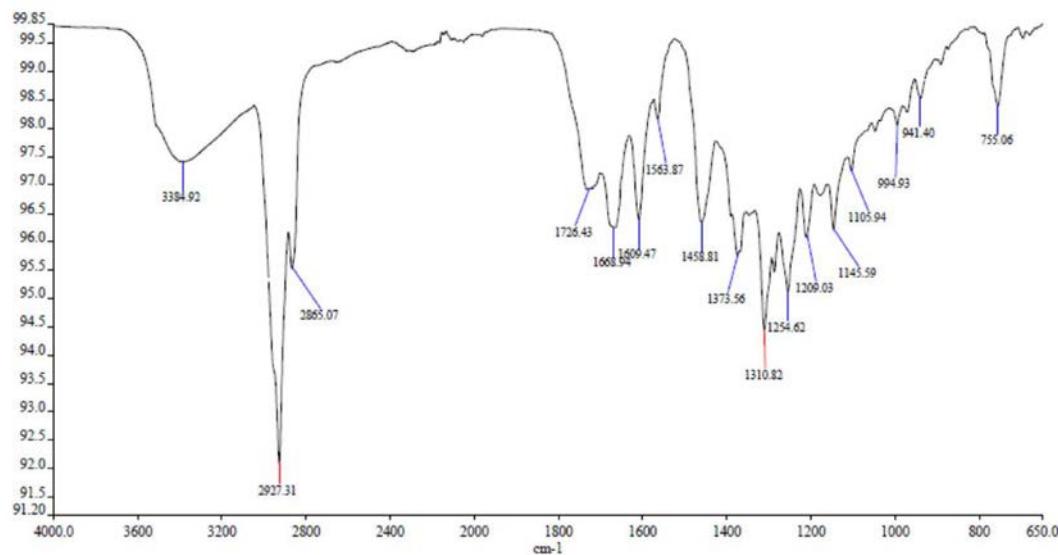


Figure S2. FT-IR spectrum with UATR of diterpene **1**.

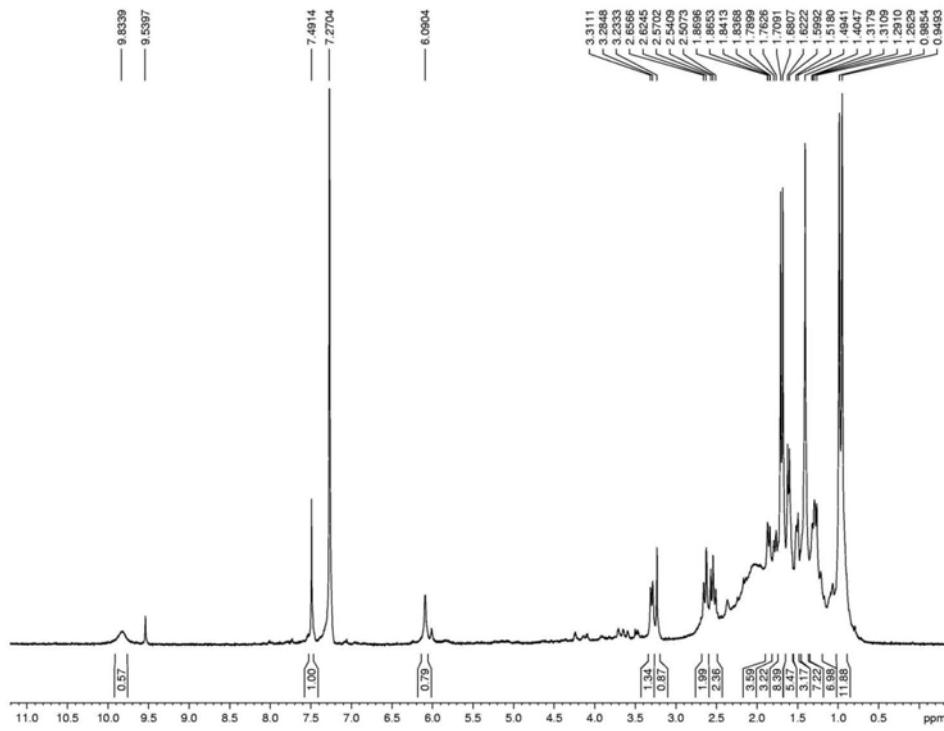


Figure S3. ¹H NMR spectrum (500 MHz, CDCl₃) of diterpene **1**.

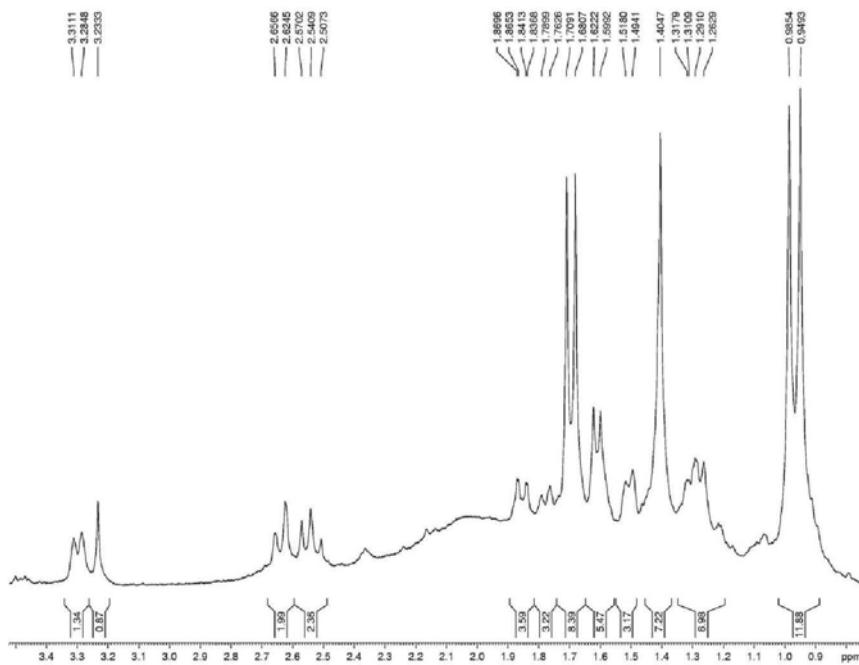


Figure S4. Expansion (δ_{H} 0.8–3.5) of the ¹H NMR spectrum (500 MHz, CDCl₃) of diterpene **1**.

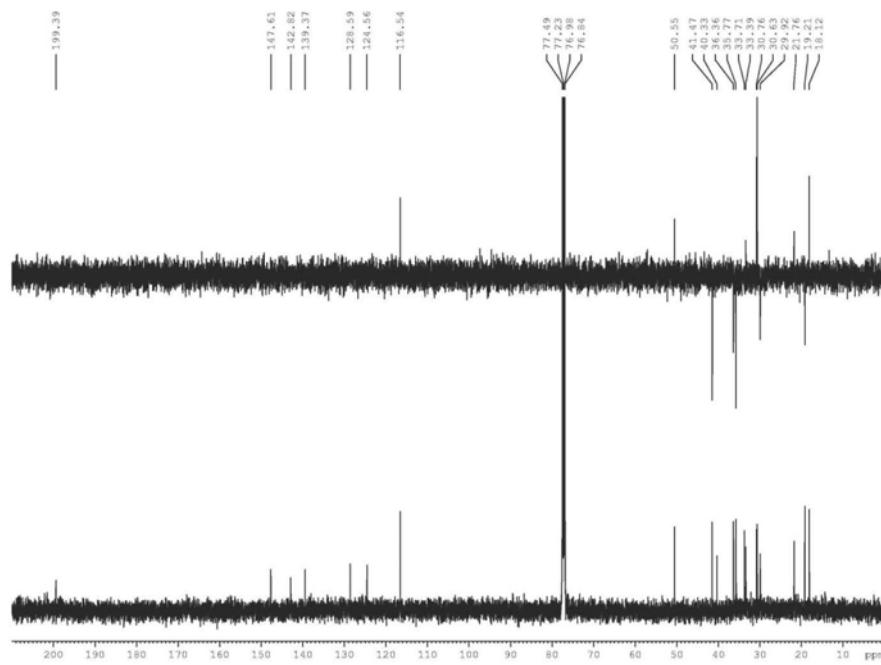


Figure S5. ^{13}C NMR spectra (125 MHz, CDCl_3) CPD (below) and DEPT 135 (above) of diterpene **1**.

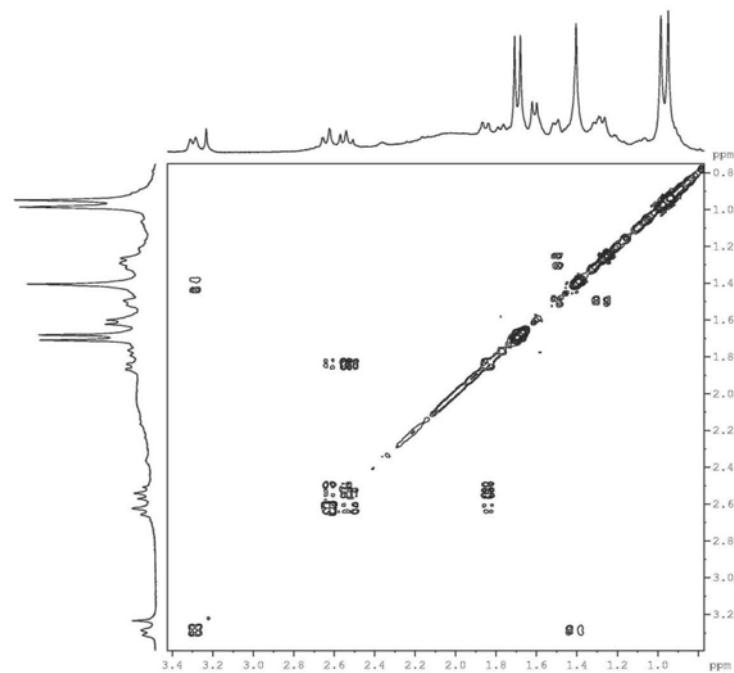


Figure S6. COSY spectrum (500 \times 500 MHz, CDCl_3) of diterpene **1**.

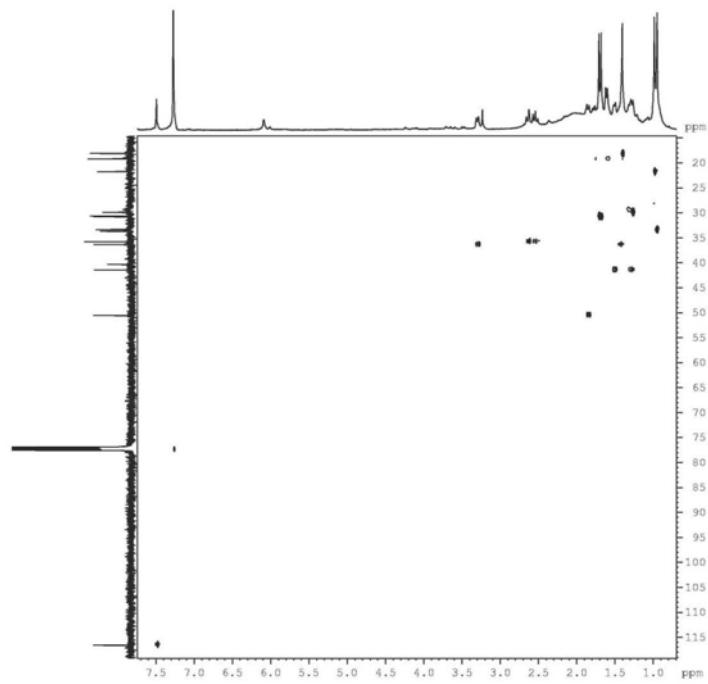


Figure S7. $^1\text{H},^{13}\text{C}$ -HSQC spectrum (500×125 MHz, CDCl_3) of diterpene **1**.

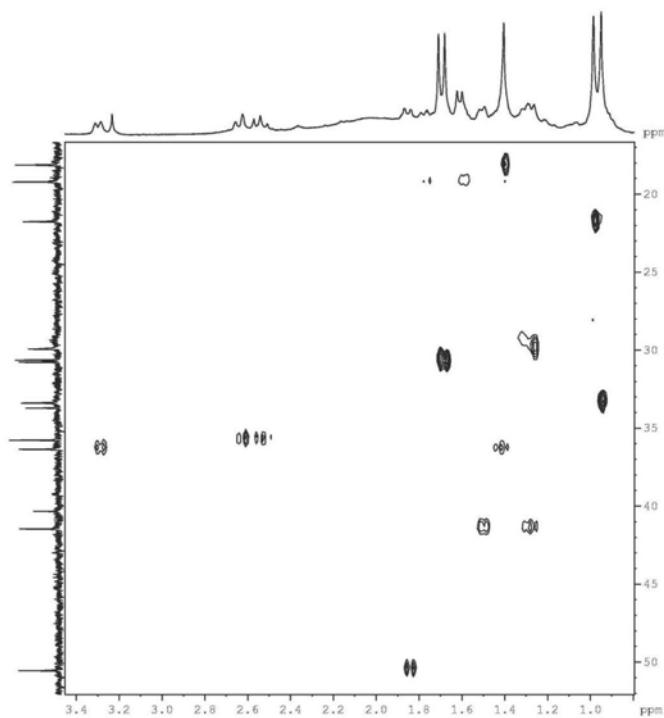


Figure S8. $^1\text{H},^{13}\text{C}$ -HSQC partial spectrum (δ_{H} 0.9-3.4 $\times \delta_{\text{C}}$ 17-52) of diterpene **1**.

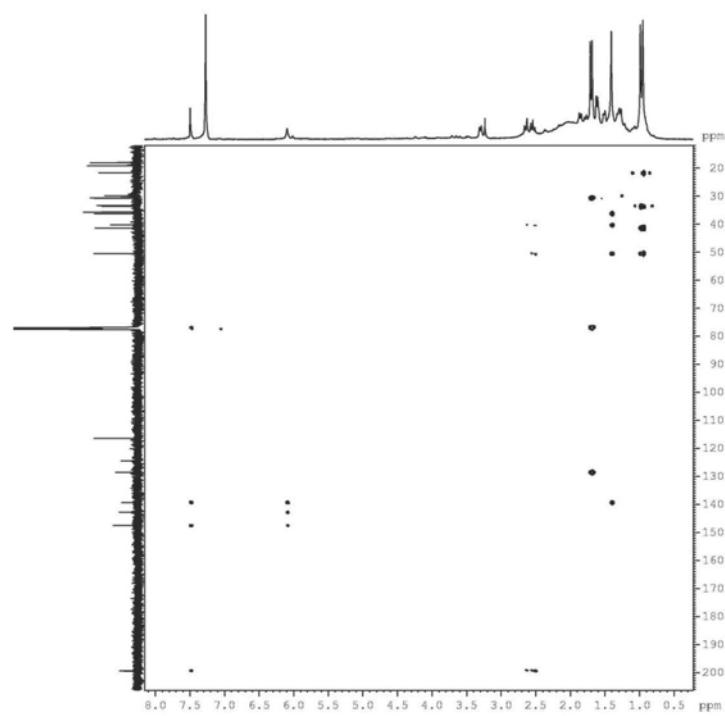


Figure S9. $^1\text{H},^{13}\text{C}$ -HMBC spectrum (500×125 MHz, CDCl_3) of diterpene **1**.

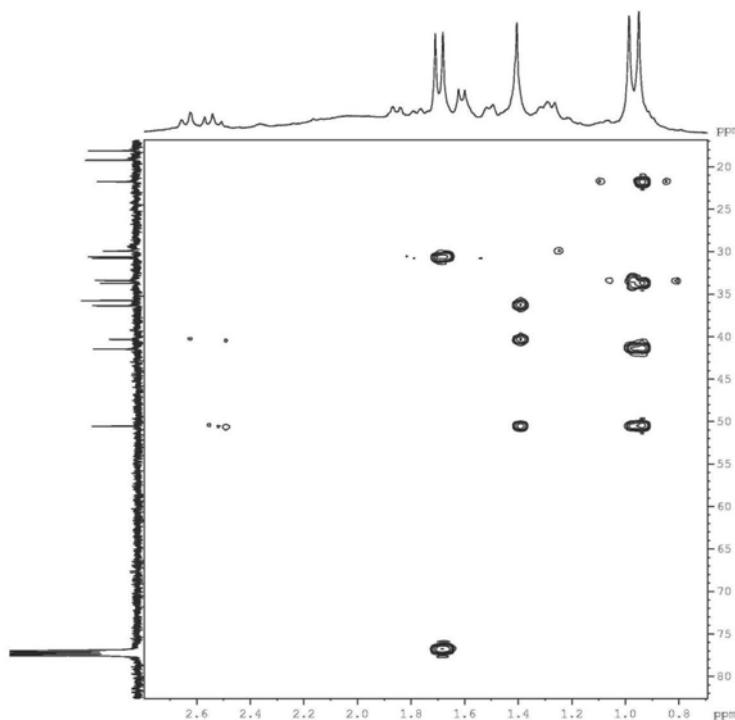


Figure S10. $^1\text{H},^{13}\text{C}$ -HMBC partial spectrum ($\delta_{\text{H}} 0.7\text{-}2.7 \times \delta_{\text{C}} 17\text{-}82$) of diterpene **1**.

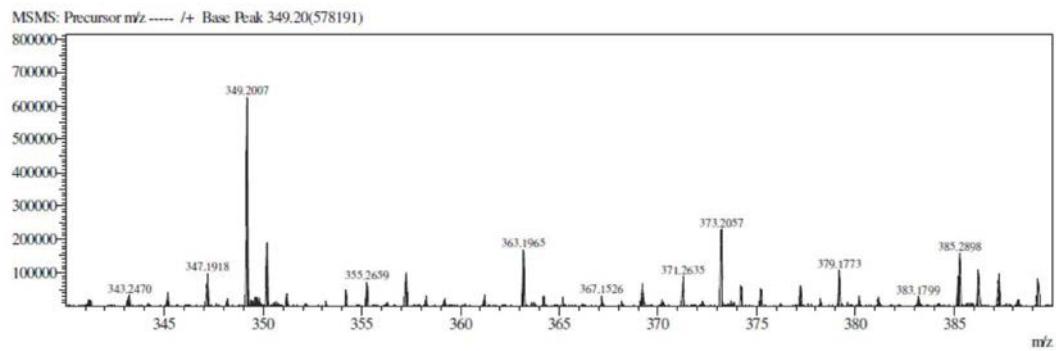


Figure S11. HR-ESI-MS spectrum (positive mode) of diterpene **2**.

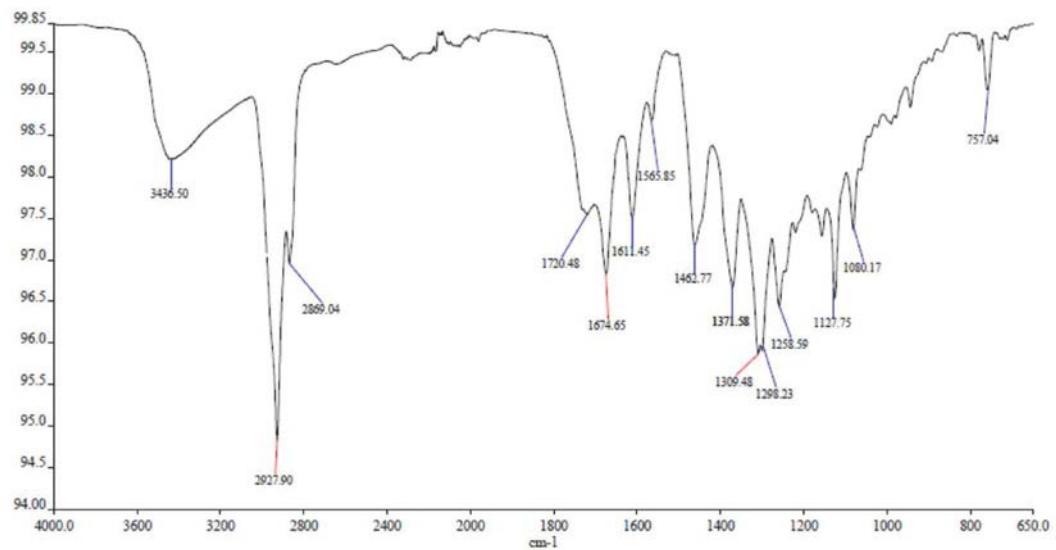
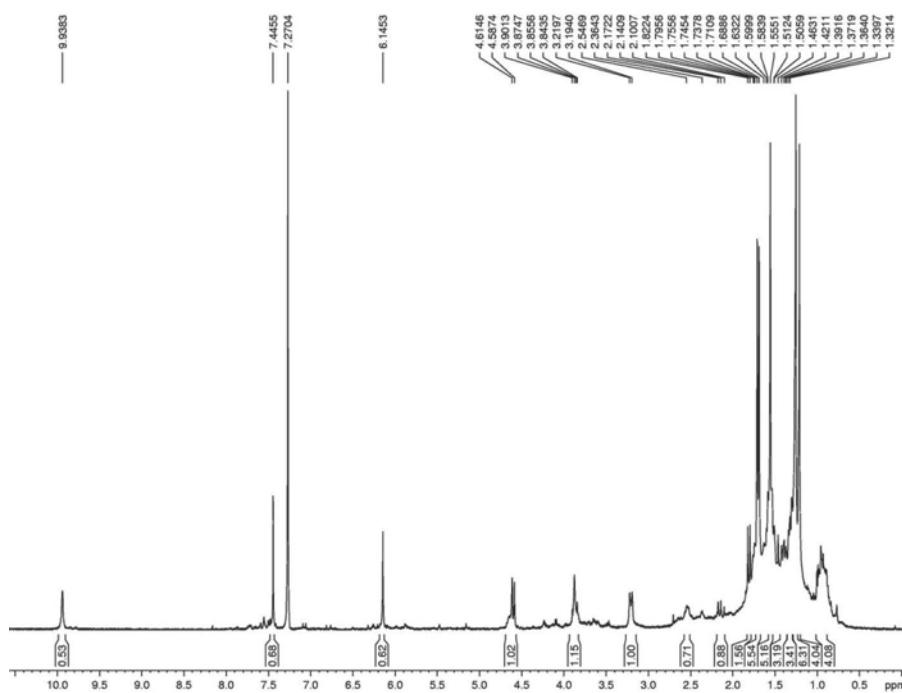
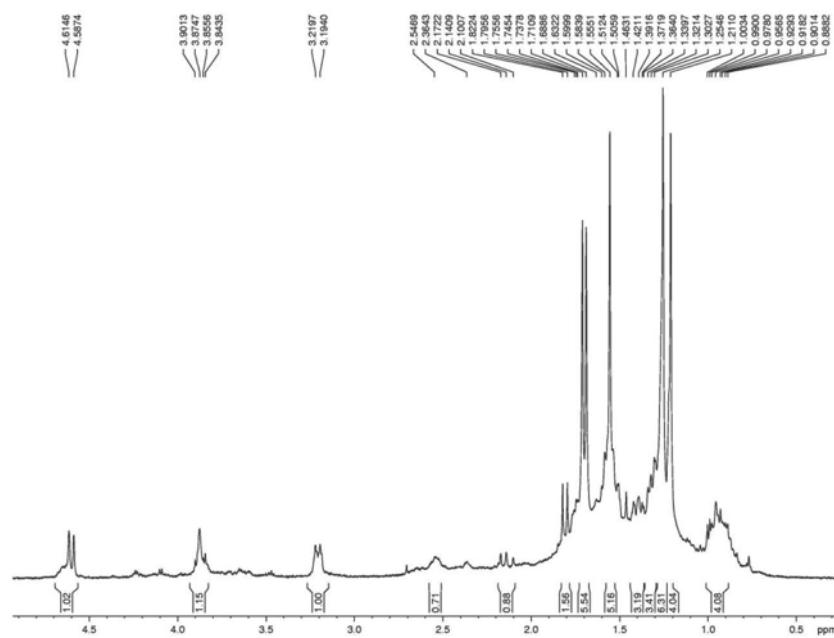


Figure S12. FT-IR spectrum with UATR of diterpene **2**.

**Figure S13.** ^1H NMR spectrum (500 MHz, CDCl_3) of diterpene **2**.**Figure S14.** Expansion (δ_{H} 0-5.0) of the ^1H NMR spectrum (500 MHz, CDCl_3) of diterpene **2**.

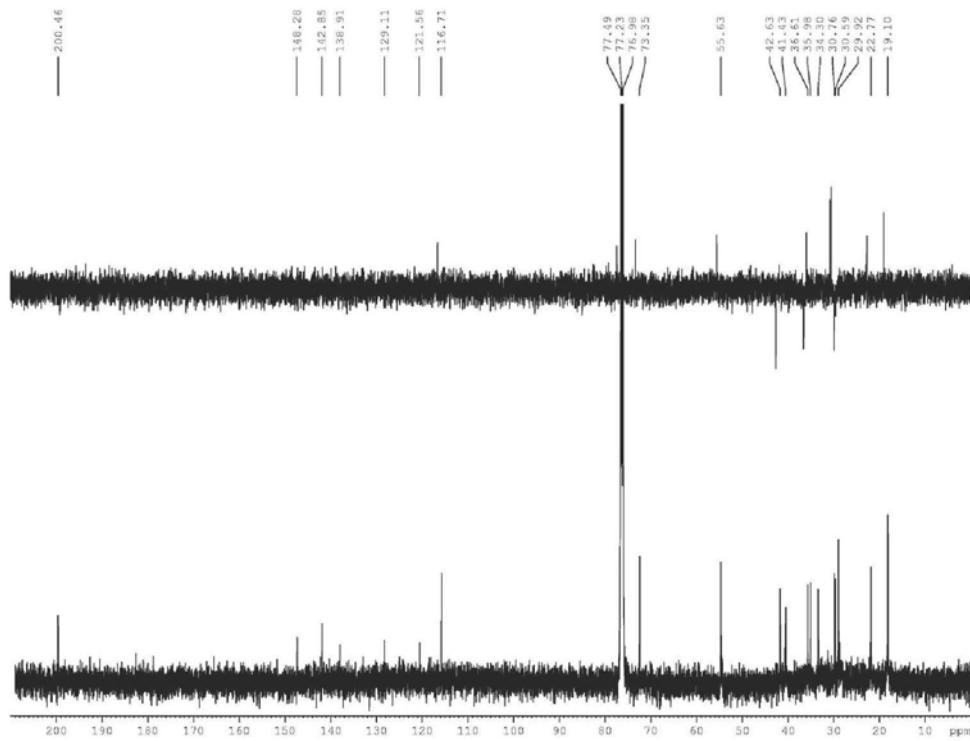


Figure S15. ^{13}C NMR spectra (500 MHz, CDCl_3) CPD (below) and DEPT 135 (above) of diterpene **2**.

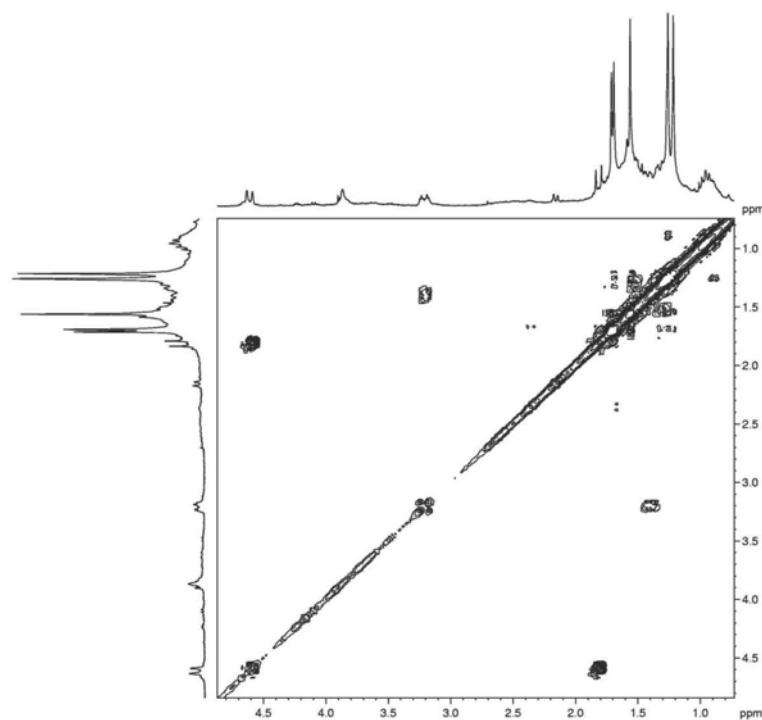


Figure S16. COSY spectrum (300 \times 300 MHz, CDCl_3) of diterpene **2**.

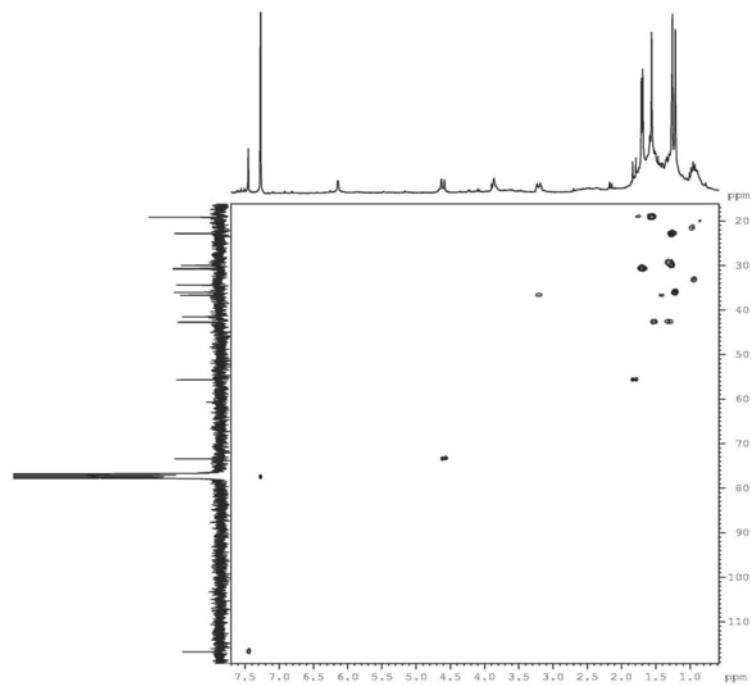


Figure S17. $^1\text{H}, ^{13}\text{C}$ -HSQC spectrum (300×75 MHz, CDCl_3) of diterpene **2**.

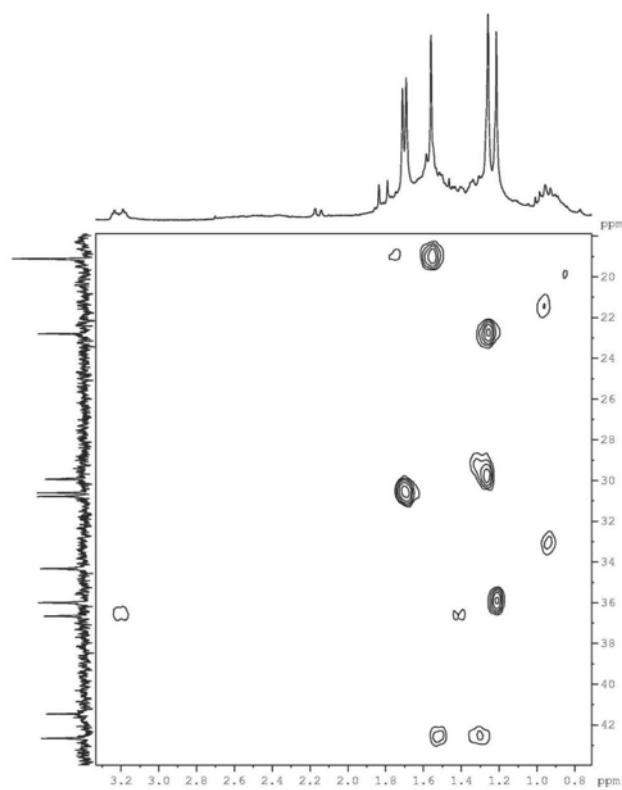


Figure S18. $^1\text{H}, ^{13}\text{C}$ -HSQC partial spectrum ($\delta_{\text{H}} 0.8\text{-}3.3 \times \delta_{\text{C}} 15\text{-}44$) of diterpene **2**.

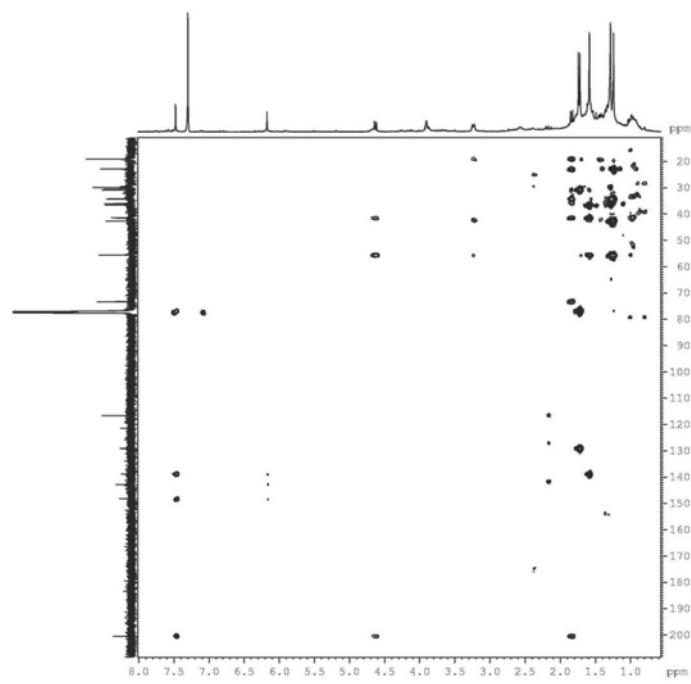


Figure S19. $^1\text{H}, ^{13}\text{C}$ -HMBC spectrum (500×125 MHz, CDCl_3) of diterpene **2**.

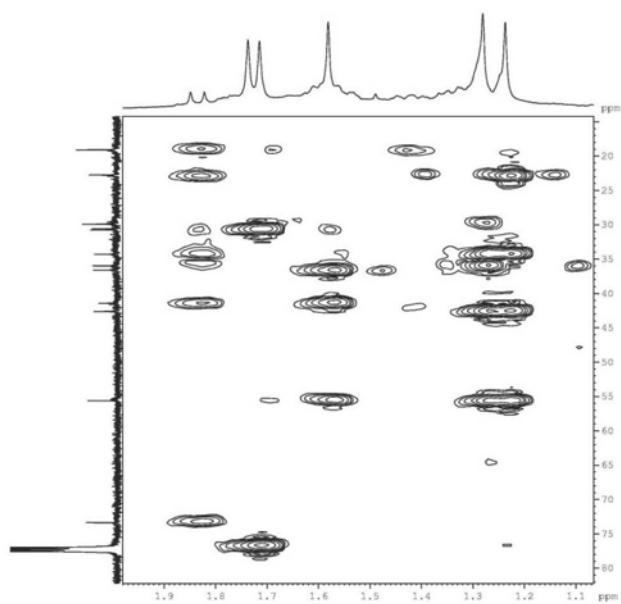


Figure S20. $^1\text{H}, ^{13}\text{C}$ -HMBC partial spectrum (δ_{H} 1.0-2.0 $\times \delta_{\text{C}}$ 15-82) of diterpene **2**.

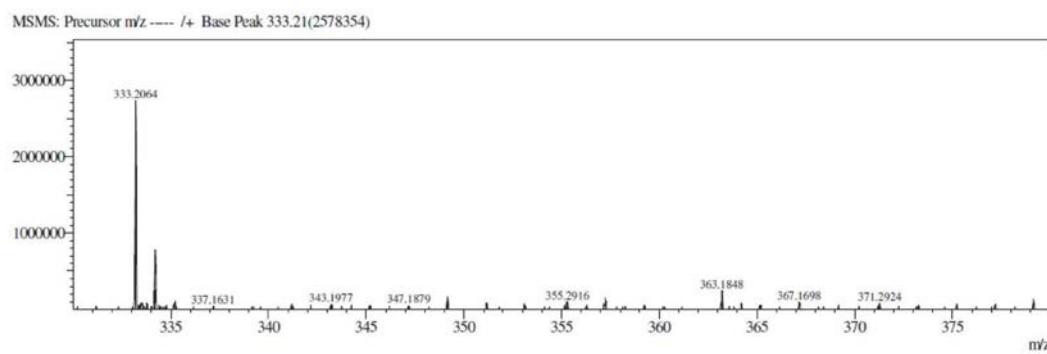


Figure S21. HR-ESI-MS spectrum (positive mode) of diterpene **3**.

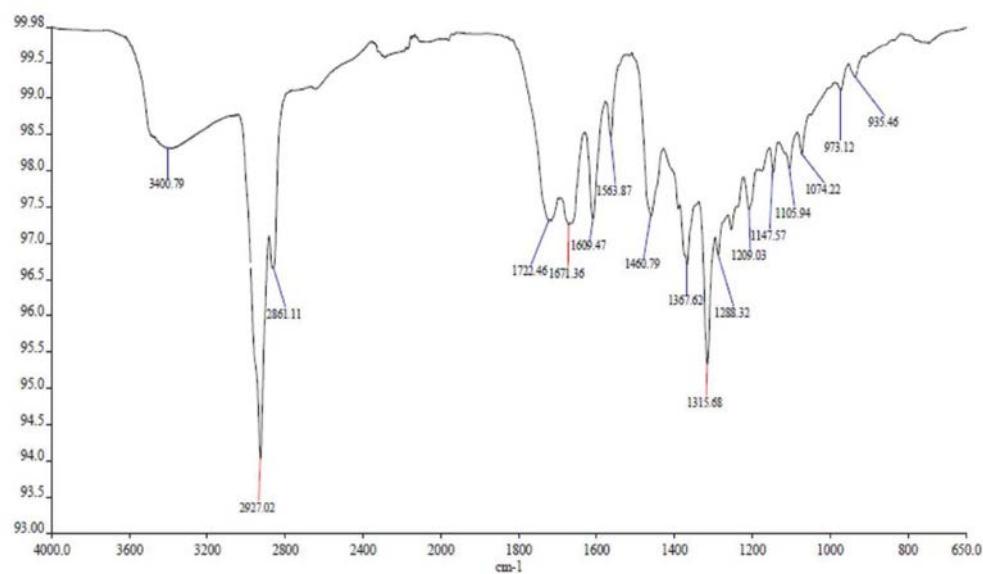


Figure S22. FT-IR spectrum with UATR of diterpene **3**.

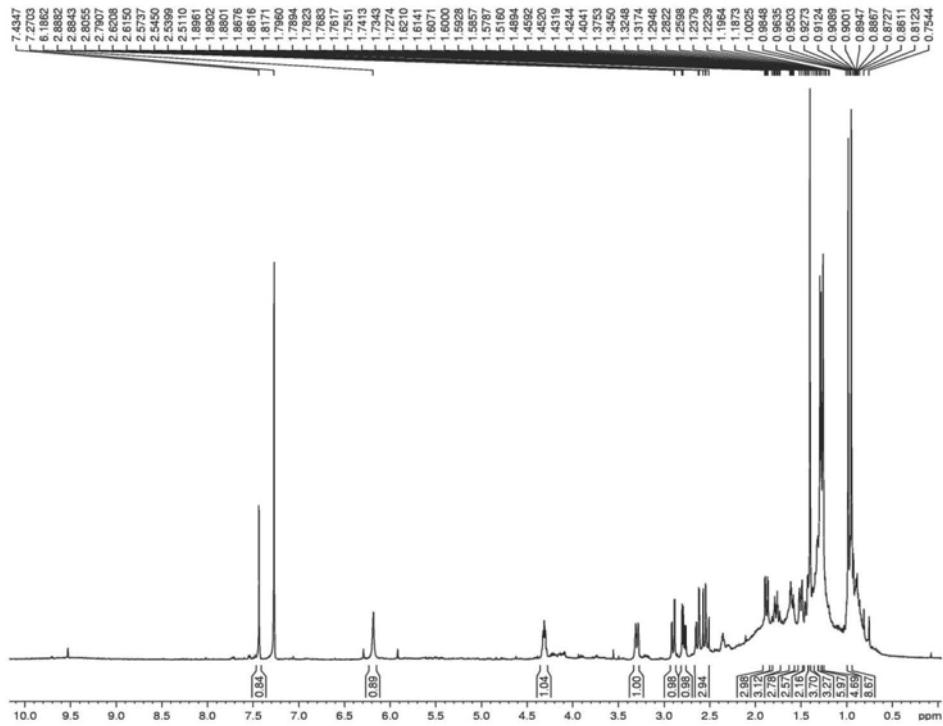


Figure S23. ^1H NMR spectrum (500 MHz, CDCl_3) of diterpene 3.

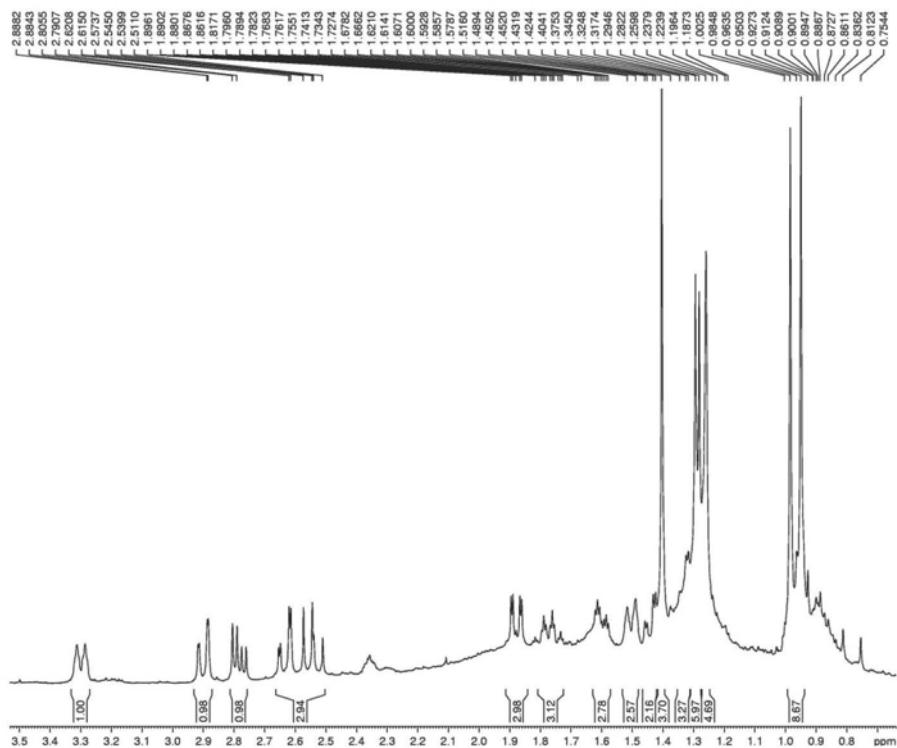


Figure S24. Expansion (δ_{H} 0.6–3.5) of the ^1H NMR spectrum (500 MHz, CDCl_3) of diterpene **3**.

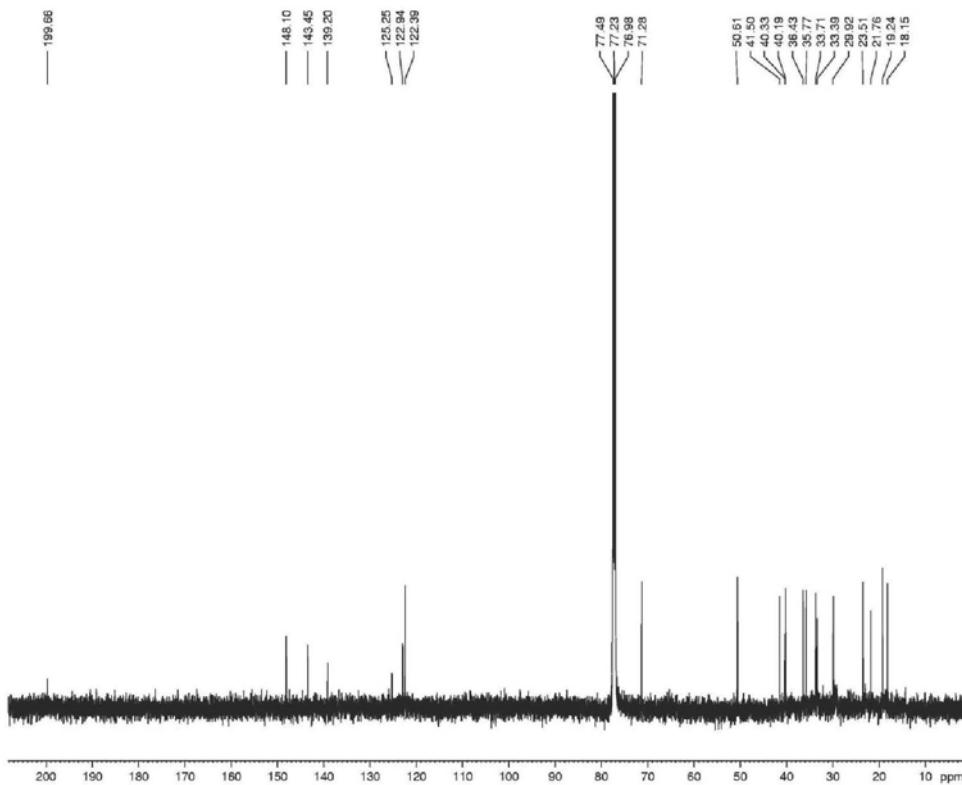


Figure S25. ¹³C NMR CPD spectrum (125 MHz, CDCl₃) of diterpene **3**.

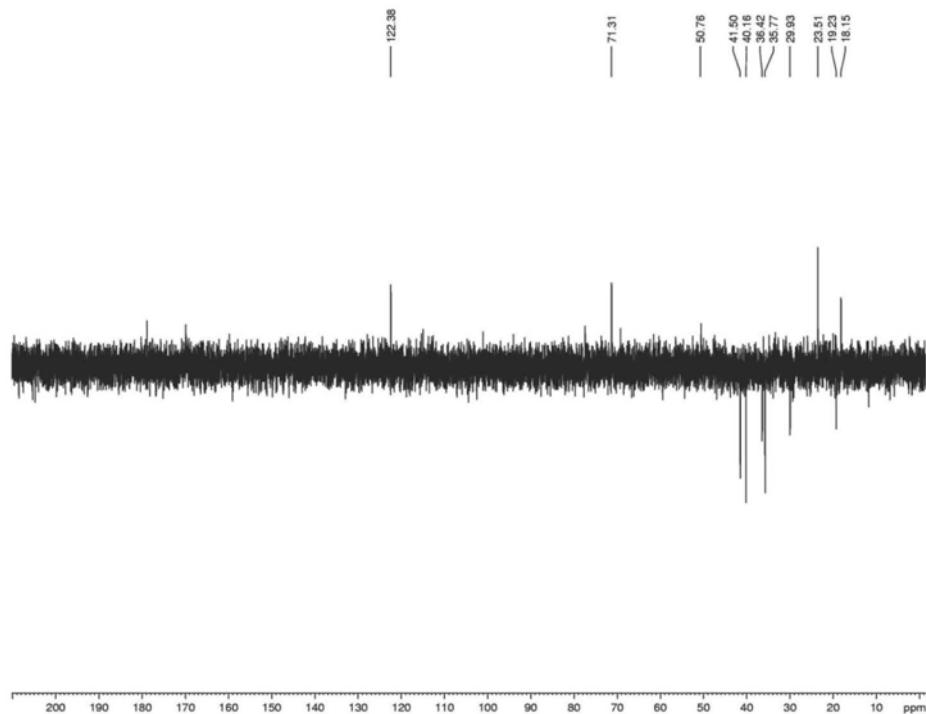


Figure S26. ¹³C NMR DEPT 135 spectrum (125 MHz, CDCl₃) of diterpene **3**.

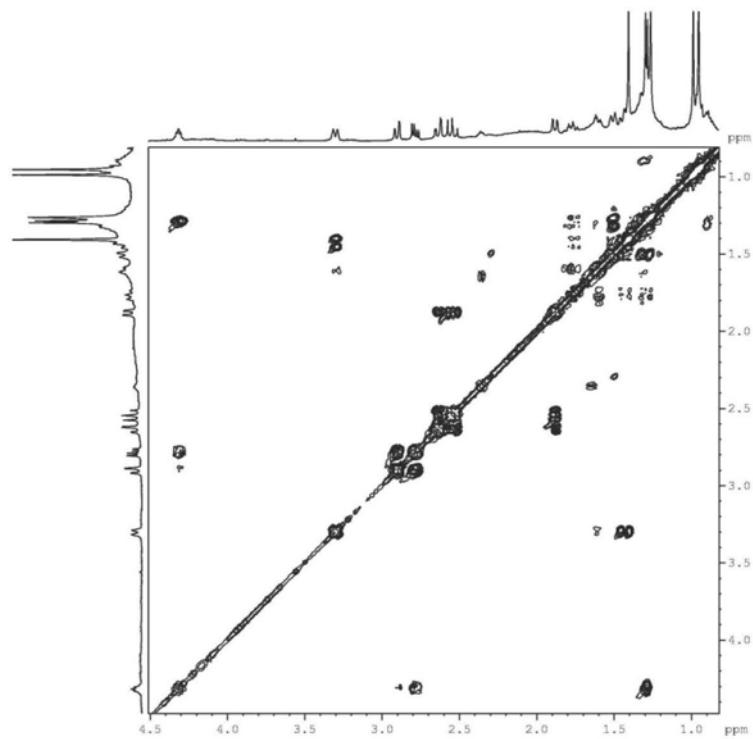


Figure S27. COSY spectrum (500 × 500 MHz, CDCl_3) of diterpene 3.

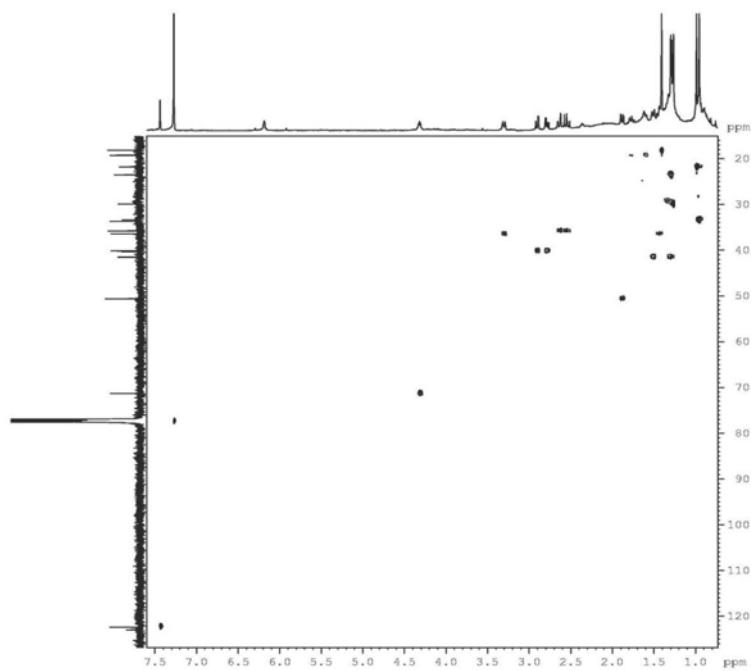


Figure S28. $^1\text{H},^{13}\text{C}$ -HSQC spectrum (500 × 125 MHz, CDCl_3) of diterpene 3.

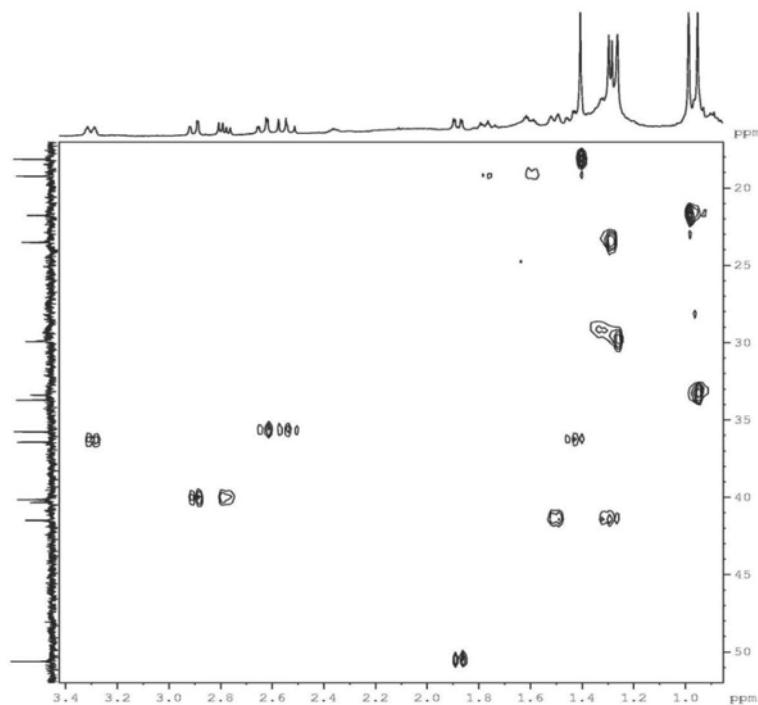


Figure S29. ¹H,¹³C-HSQC partial spectrum (δ_{H} 0.9–3.4 $\times \delta_{\text{C}}$ 17–52) of diterpene 3.

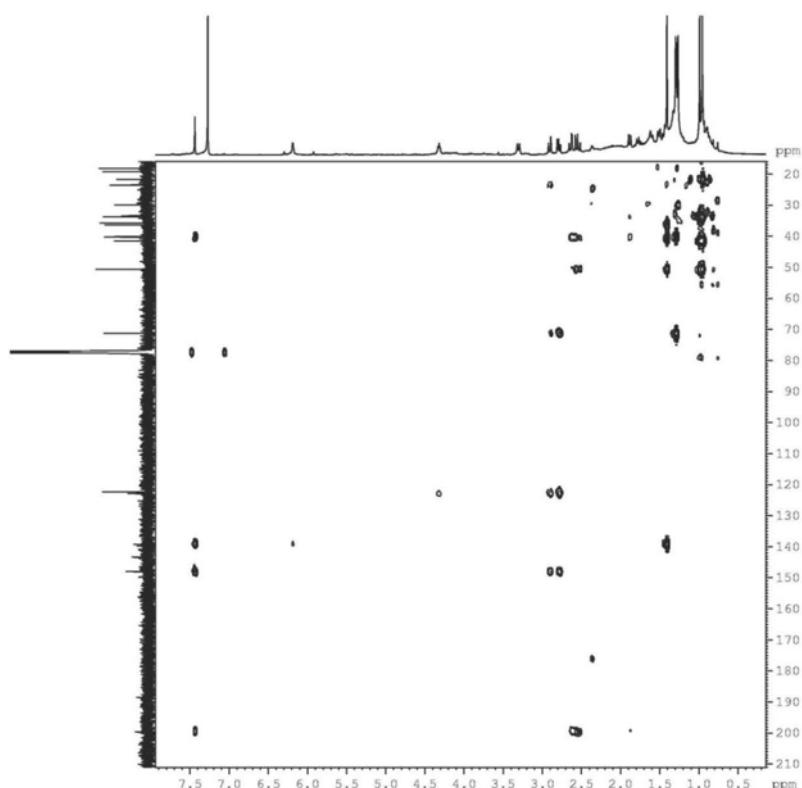


Figure S30. ¹H,¹³C-HMBC spectrum (500 \times 125 MHz, CDCl₃) of diterpene 3.

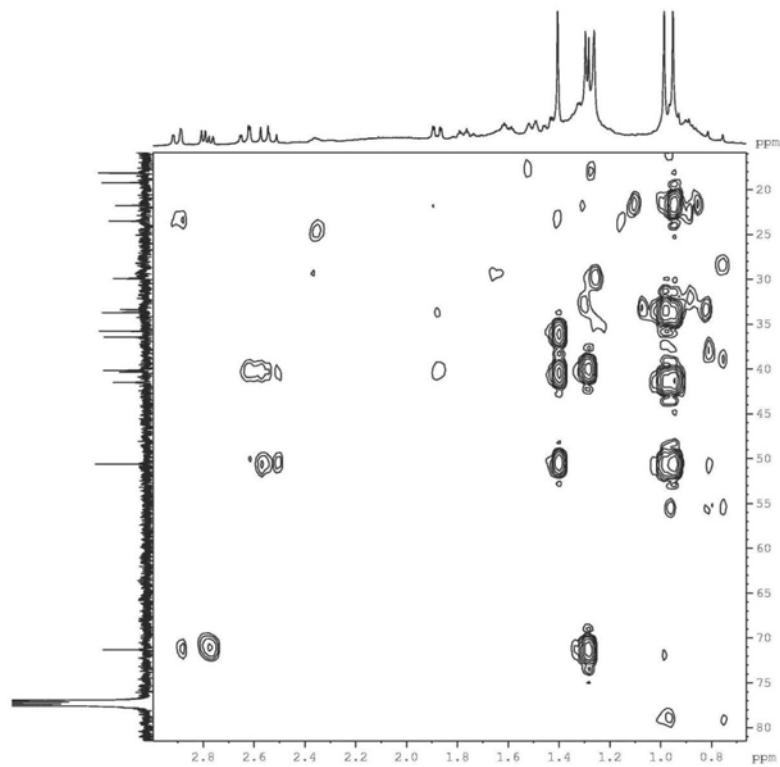


Figure S31. $^1\text{H}, ^{13}\text{C}$ -HMBC partial spectrum (δ_{H} 0.7-2.9 $\times \delta_{\text{C}}$ 19-80) of diterpene **3**.

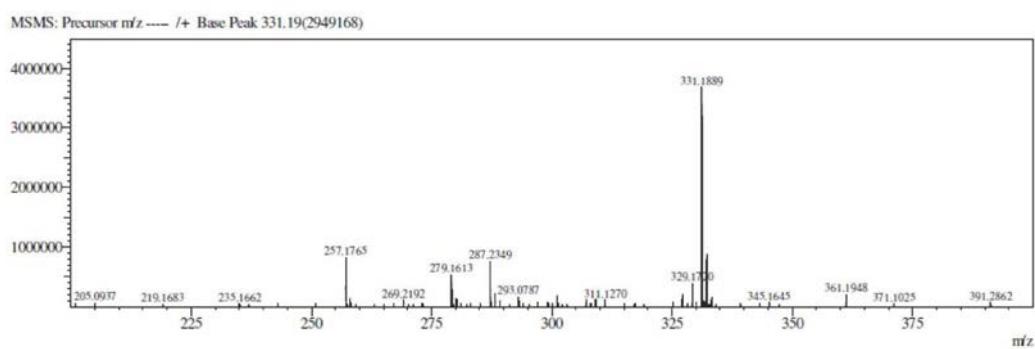


Figure S32. HRAPCIMS spectrum (positive mode) of diterpene **4**.

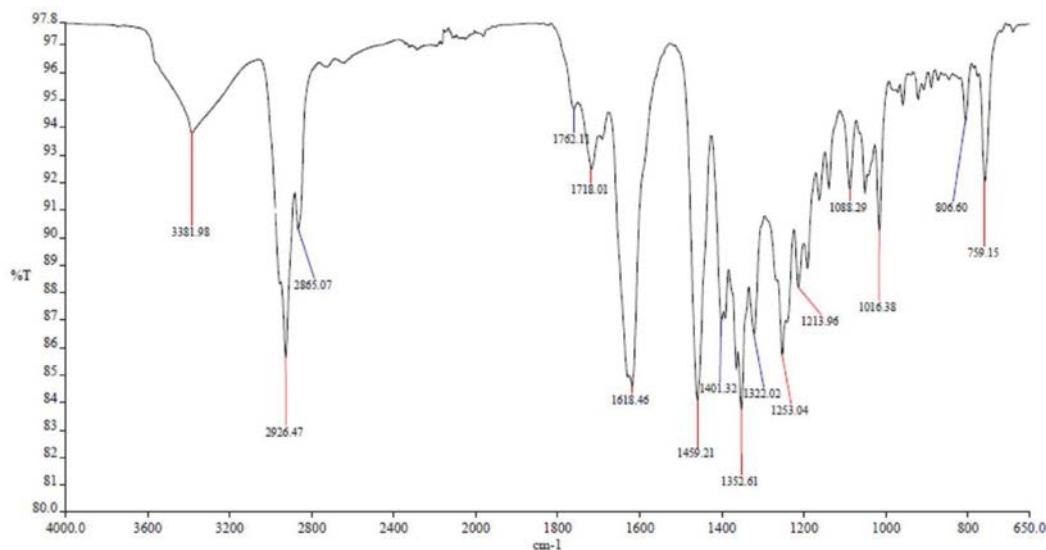


Figure S33. FT-IR spectrum with UATR of diterpene 4.

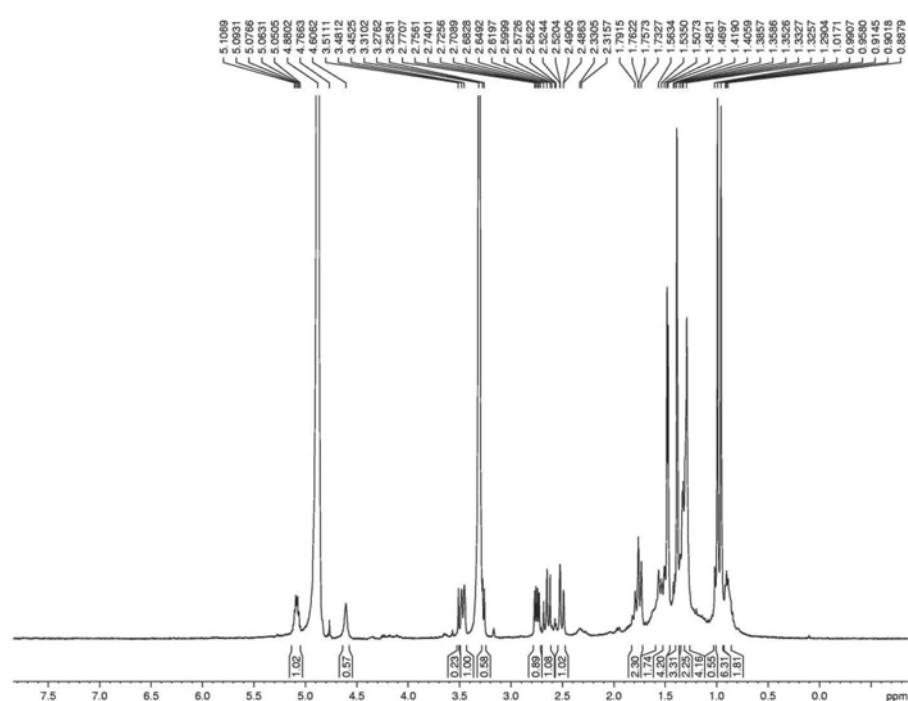


Figure S34. ^1H NMR spectrum (500 MHz, CD_3OD) of diterpene **4**.

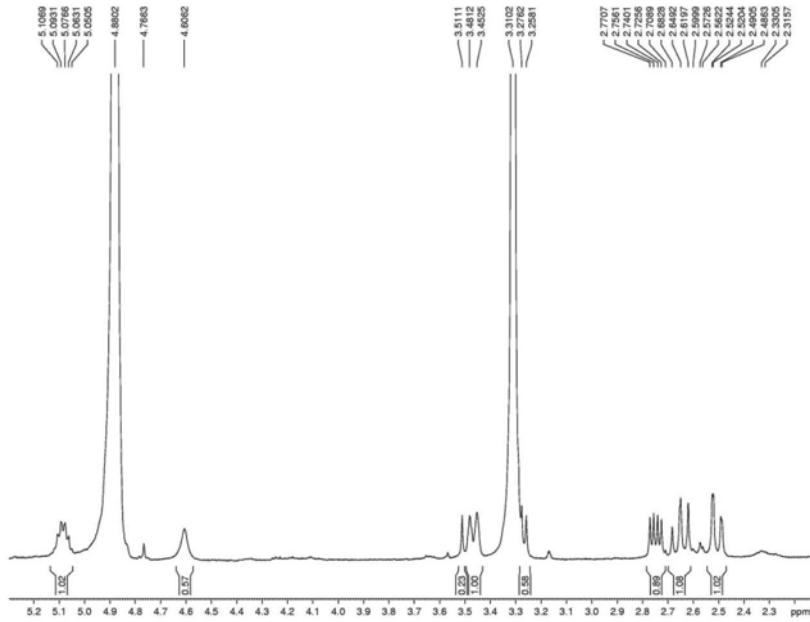


Figure S35. Expansion (δ_{H} 2.1-5.3) of the ^1H NMR spectrum (500 MHz, CD_3OD) of diterpene **4**.

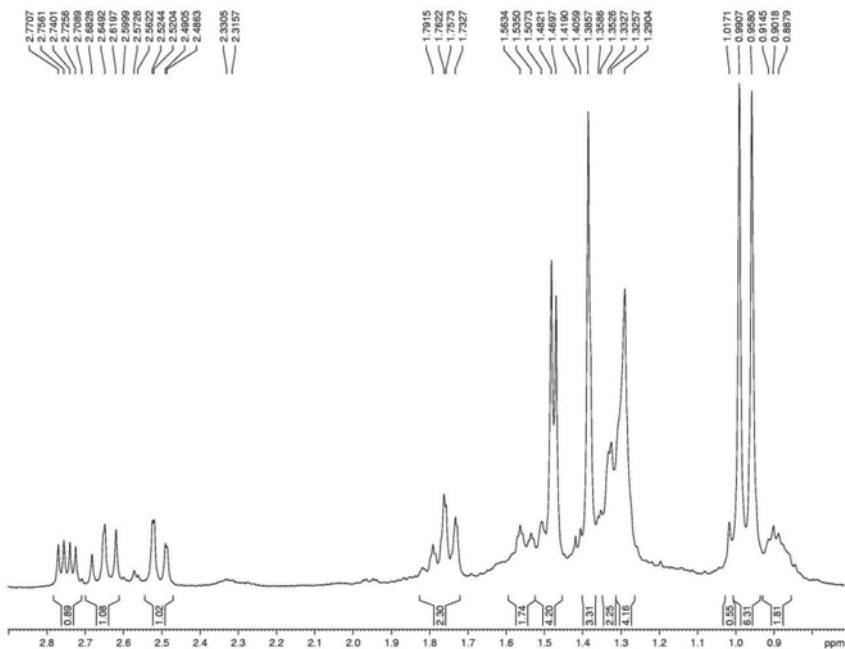


Figure S36. Expansion (δ_{H} 0.7-2.9) of the ^1H NMR spectrum (500 MHz, CD_3OD) of diterpene **4**.

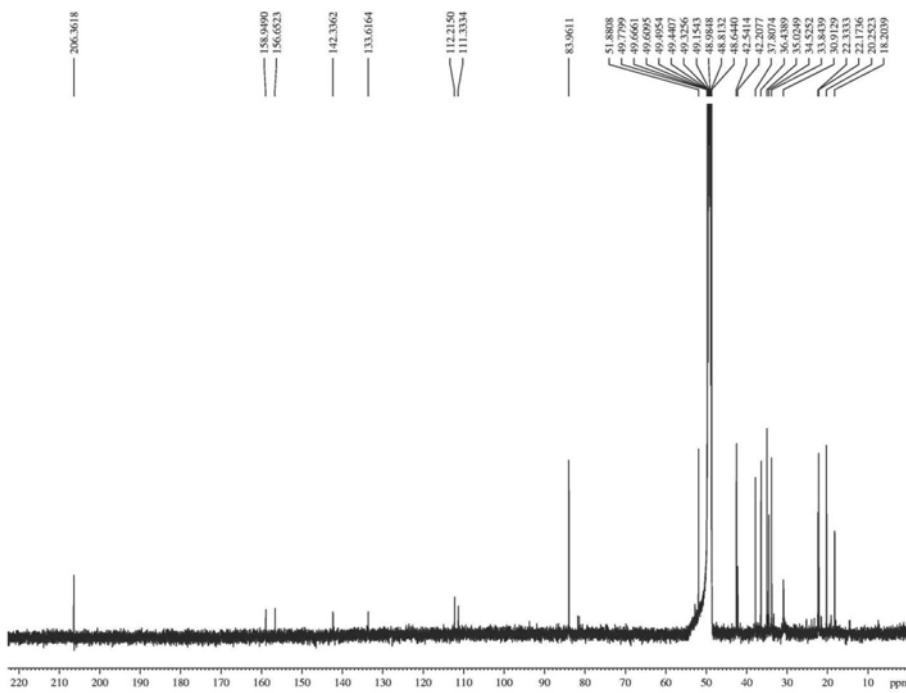


Figure S37. ¹³C NMR spectrum (125 MHz, CD₃OD) of diterpene 4.

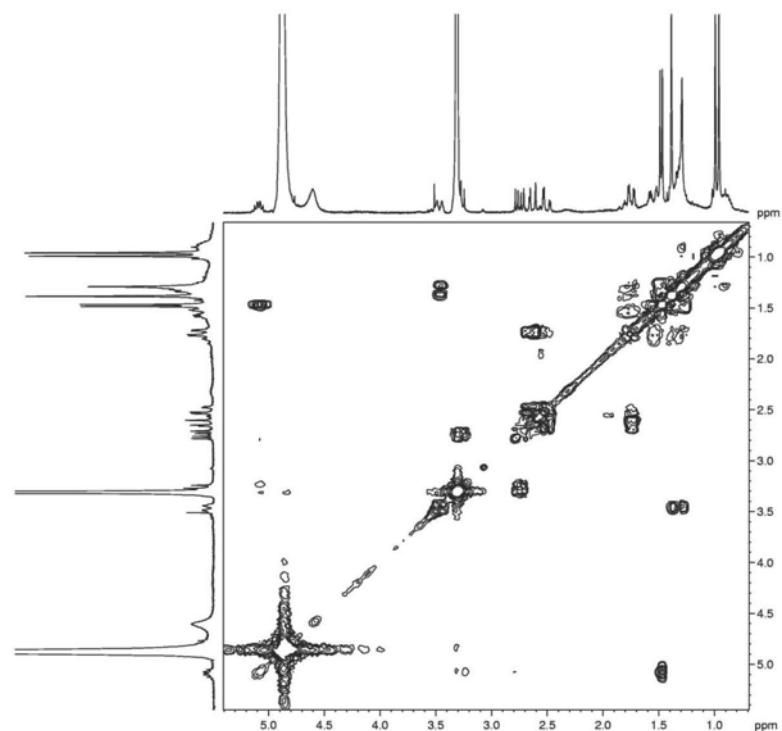


Figure S38. COSY spectrum (300 × 300 MHz, CD₃OD) of diterpene 4.

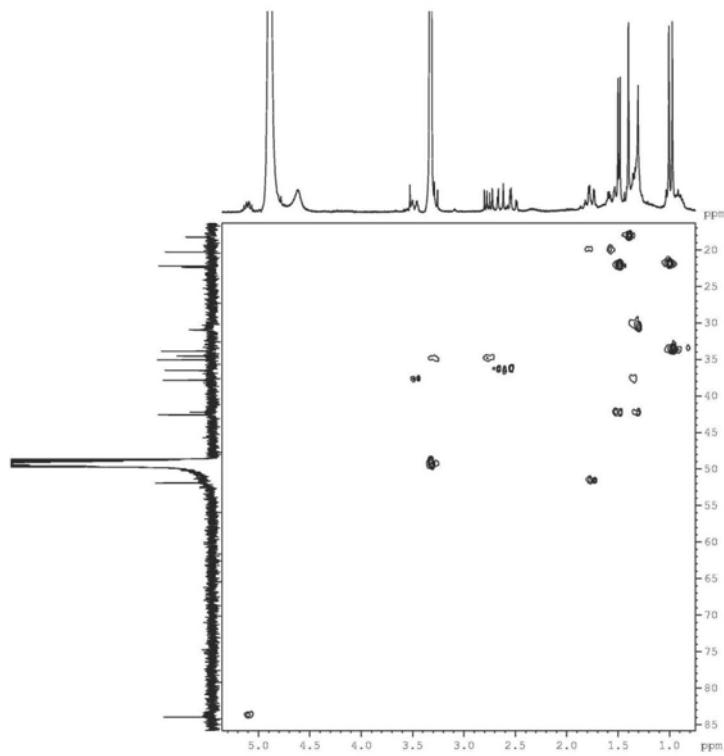


Figure S39. $^1\text{H}, ^{13}\text{C}$ -HSQC spectrum (300 × 75 MHz, CD_3OD) of diterpene 4.

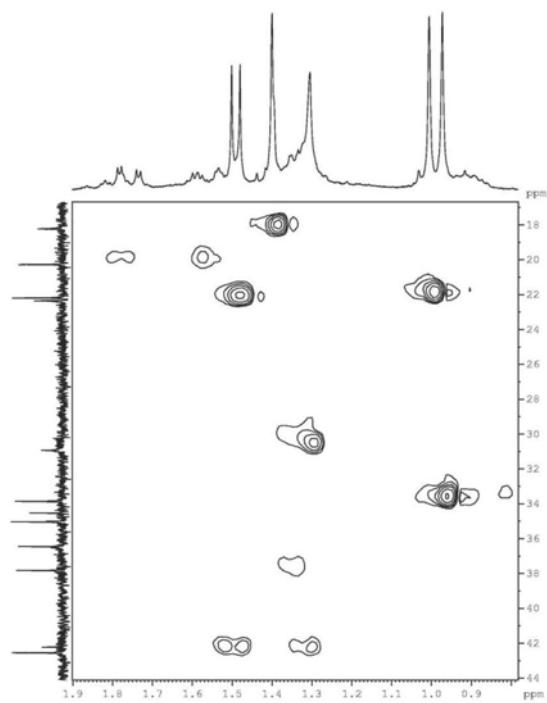


Figure S40. $^1\text{H}, ^{13}\text{C}$ -HSQC partial spectrum (δ_{H} 0.8–1.9 × δ_{C} 17–44) of diterpene 4.

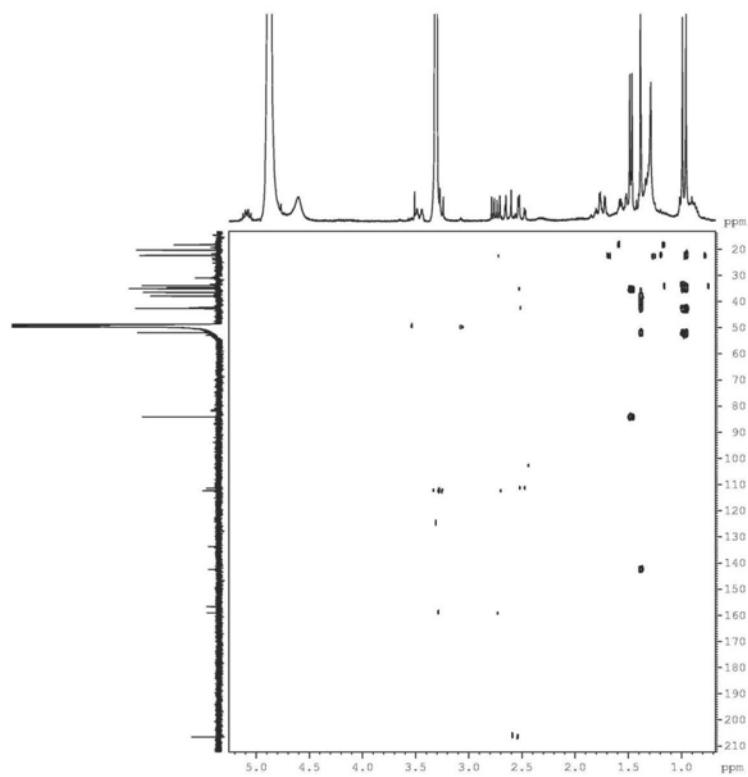


Figure S41. ¹H, ¹³C-HMBC spectrum (300 \times 75 MHz, CD₃OD) of diterpene **4**.

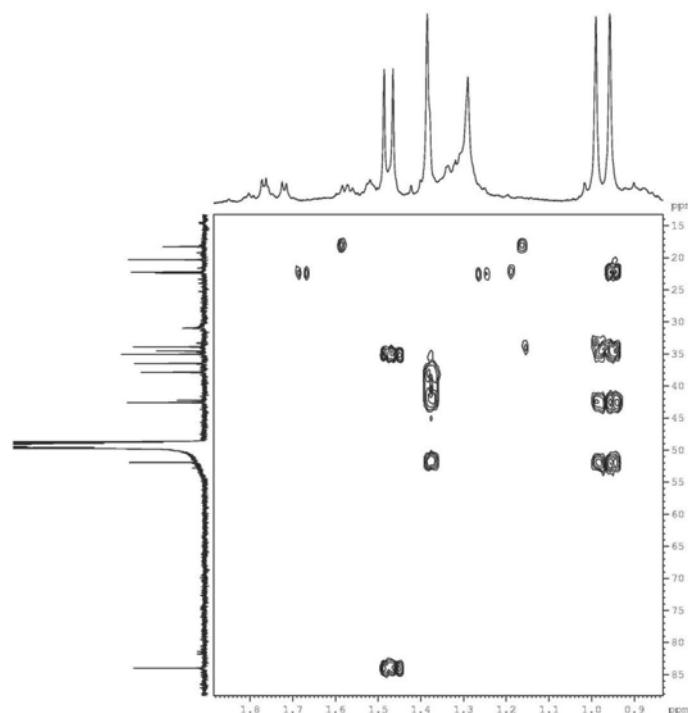


Figure S42. ¹H, ¹³C-HMBC partial spectrum (δ _H 0.8–1.9 \times δ _C 15–86) of diterpene **4**.

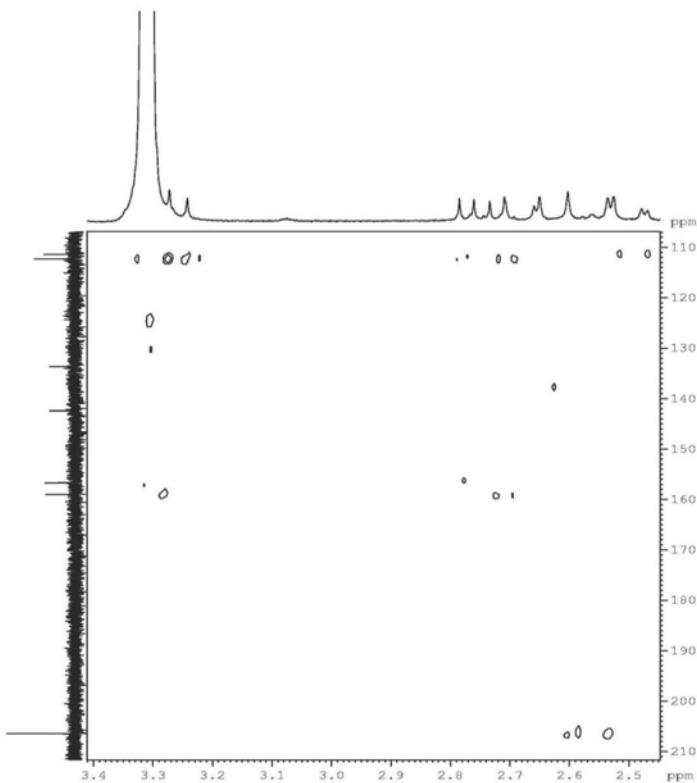


Figure S43. $^1\text{H}, ^{13}\text{C}$ -HMBC partial spectrum (δ_{H} 2.4-3.4 $\times \delta_{\text{C}}$ 109-210) of diterpene **4**.

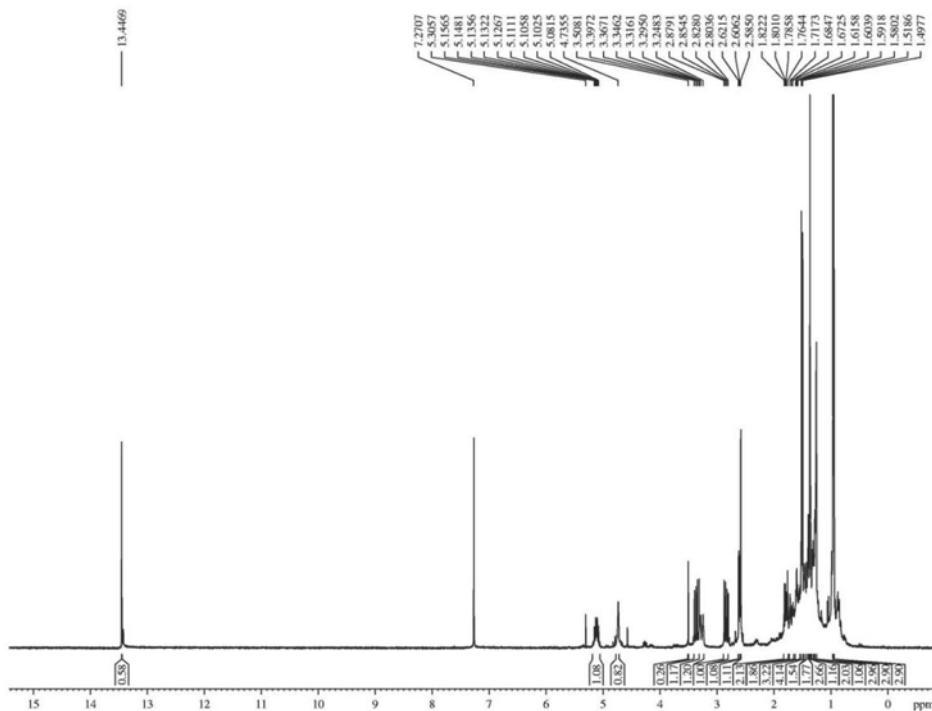


Figure S44. ^1H NMR spectrum (300 MHz, CDCl_3) of diterpene **4**.

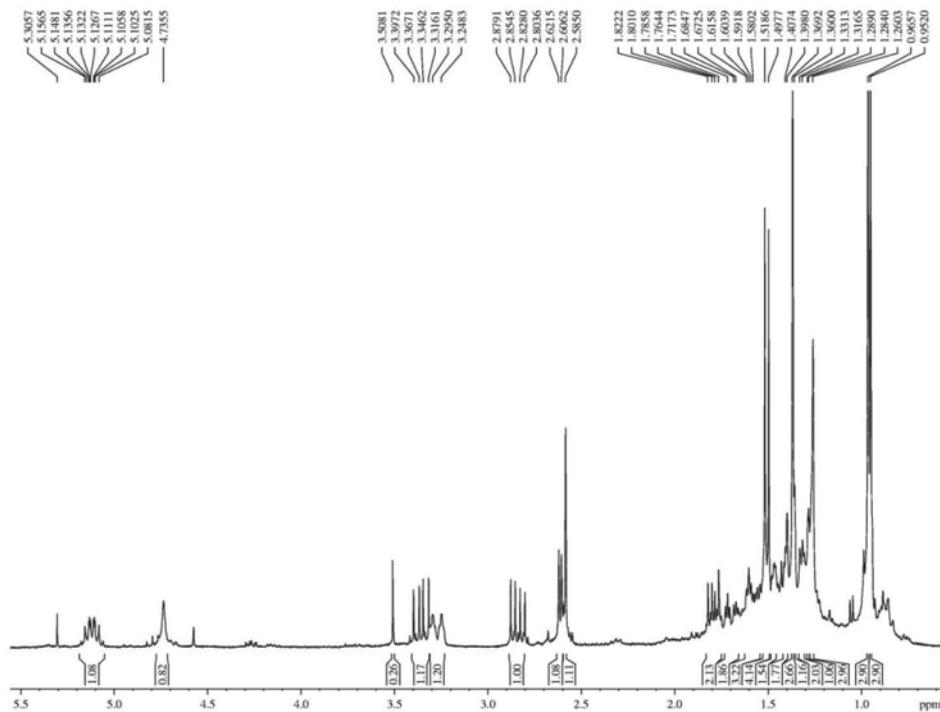


Figure S45. Expansion (δ_{H} 0.5–5.5) of the ^1H NMR spectrum (300 MHz, CDCl_3) of diterpene **4**.

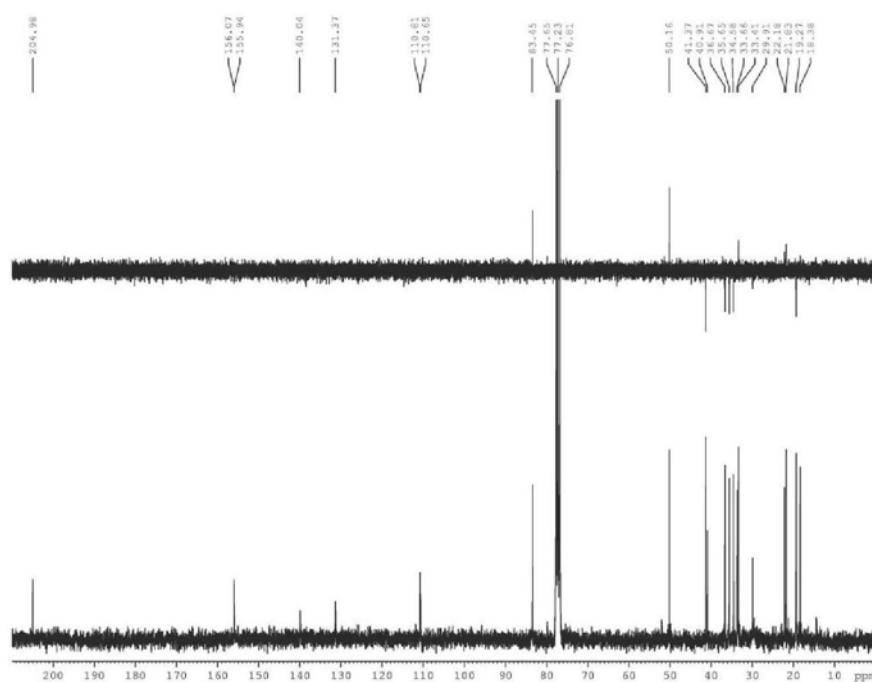


Figure S46. ^{13}C NMR spectra (75 MHz, CDCl_3) CPD (below) and DEPT 135 (above) of diterpene **4**.