

# Supporting information

## **Azukisapogenol Triterpene Glycosides from *Oxytropis chiliophylla* Royle**

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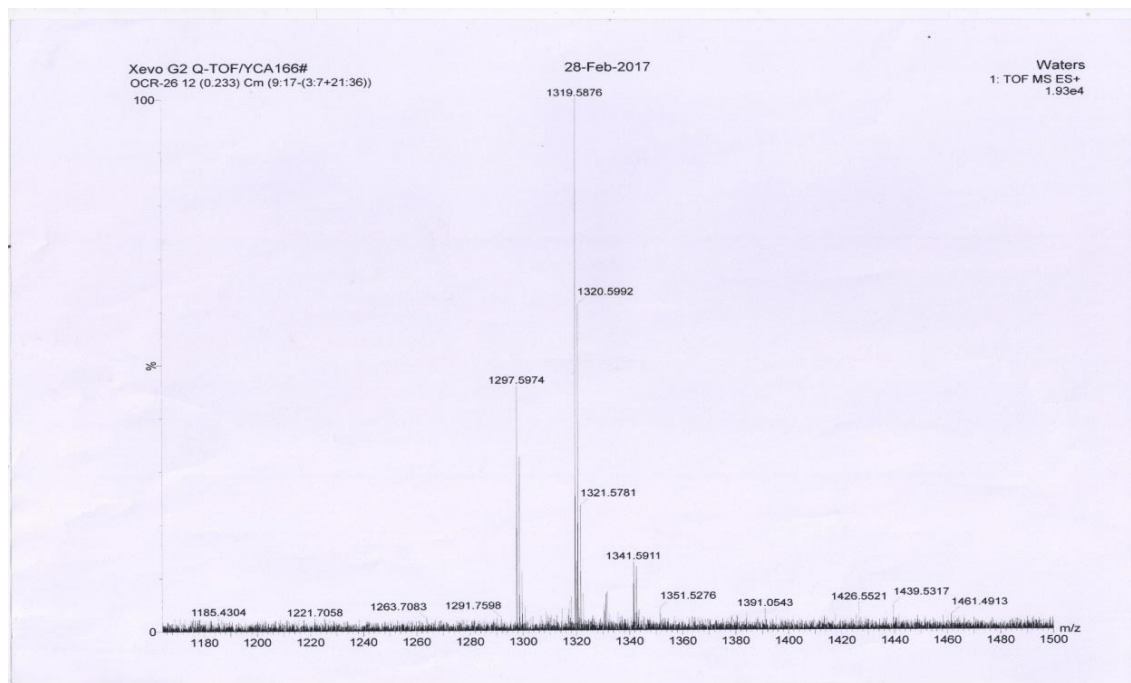
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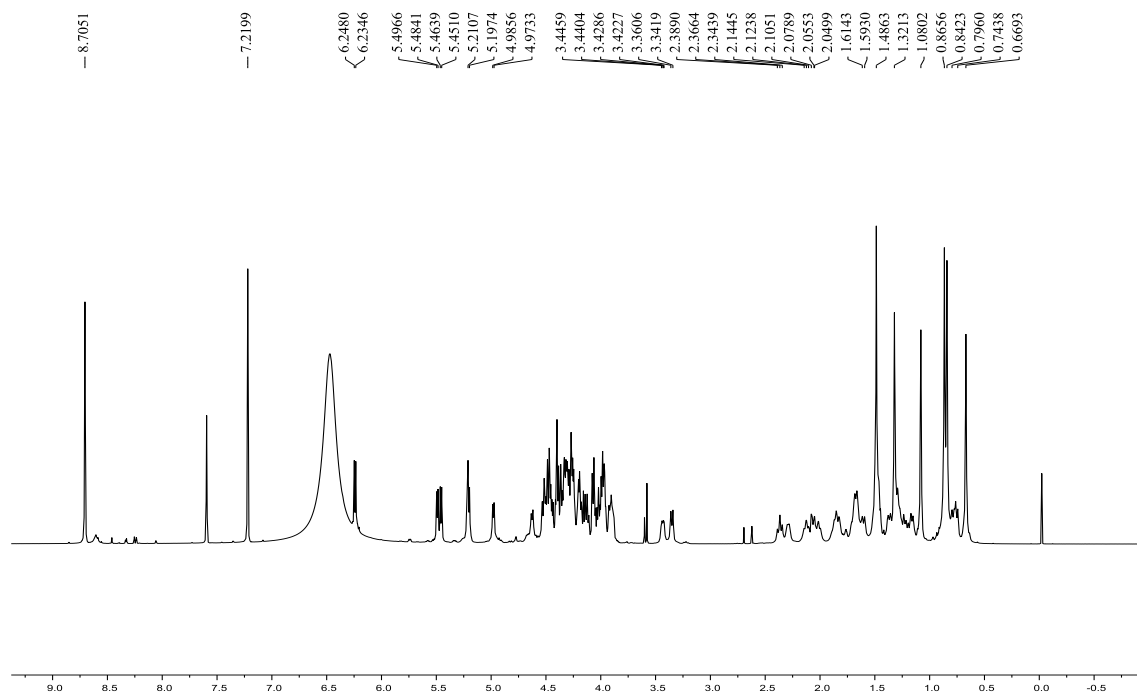
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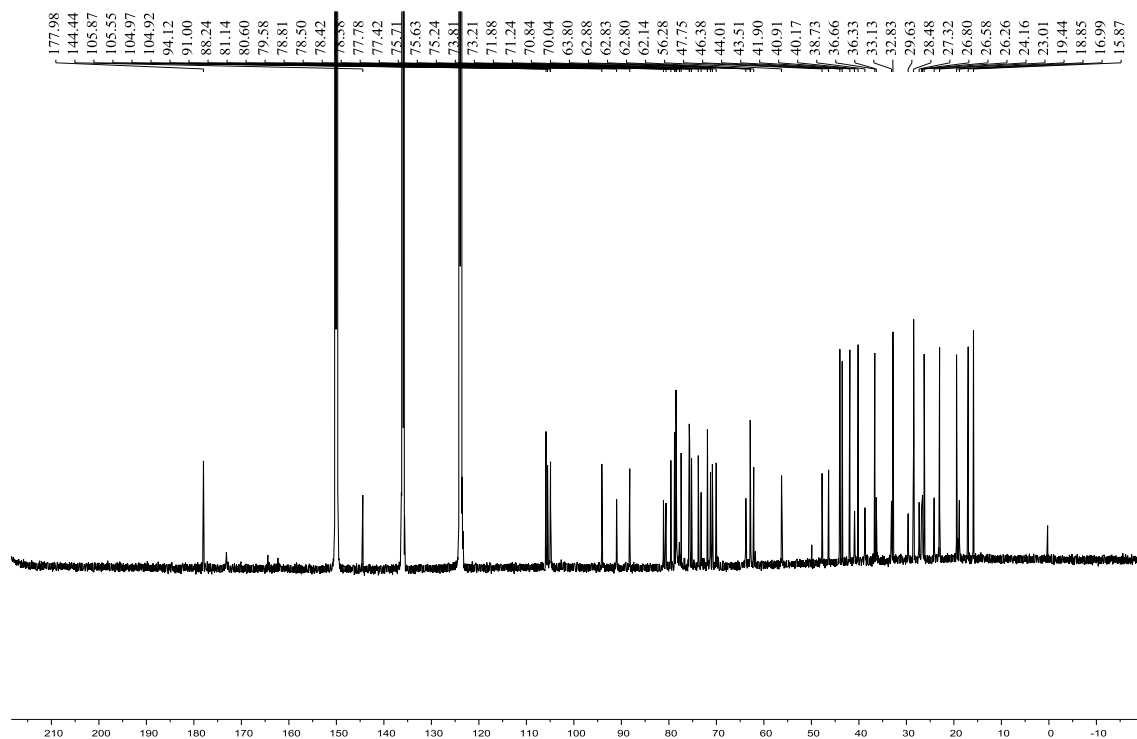
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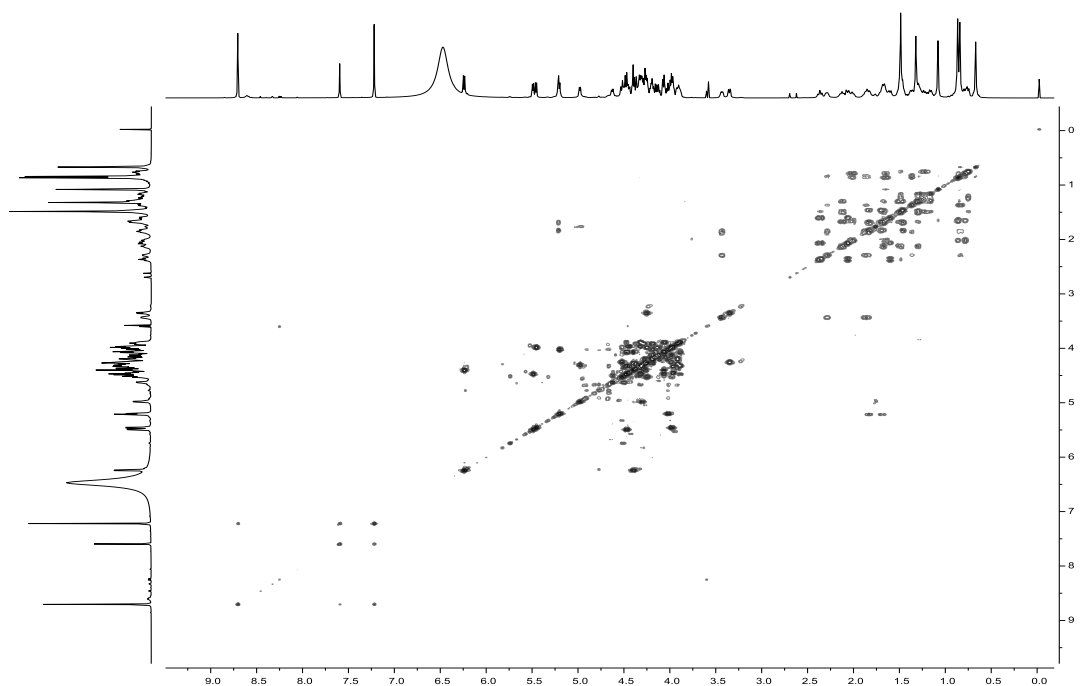
**Figure S1.** HRESIMS spectrum of oxychiliotriterpenoside A (**1**)



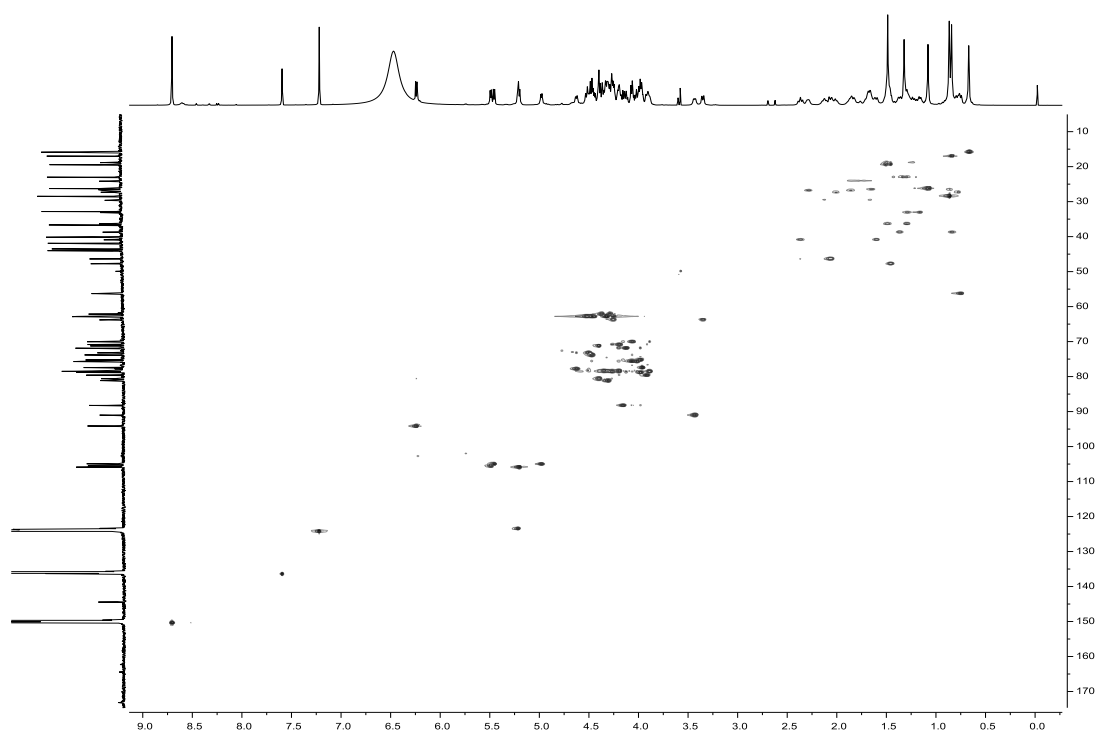
**Figure S2.**  $^1\text{H}$  NMR spectrum of oxychiliotriterpenoside A (**1**) in  $\text{Pyr-}d_5$



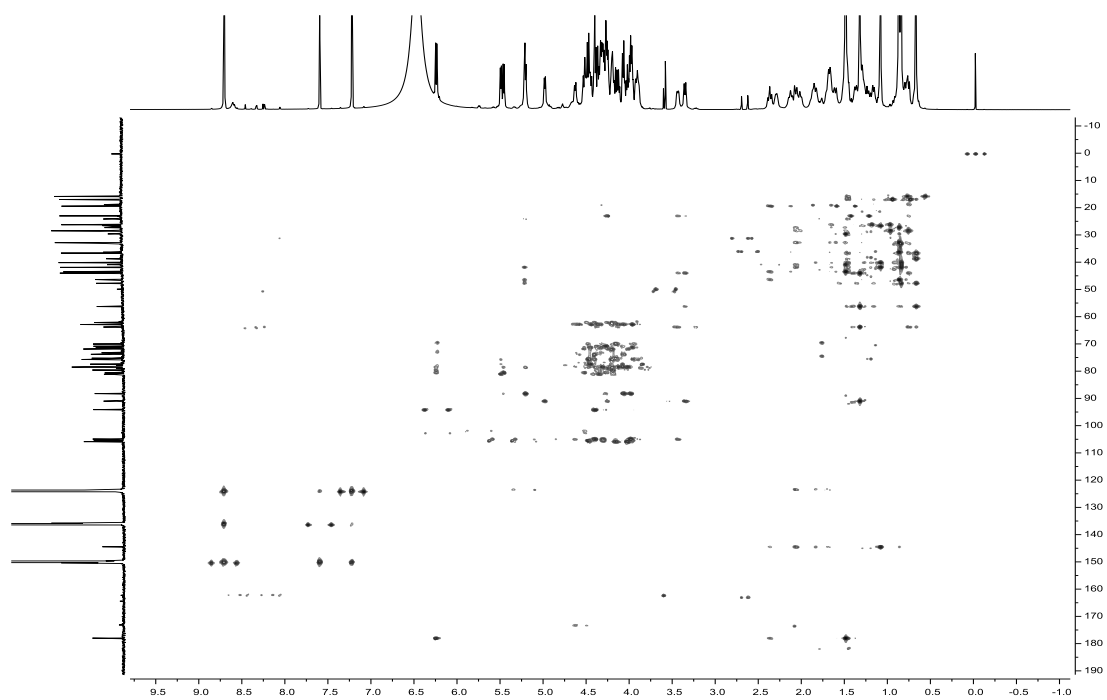
**Figure S3.**  $^{13}\text{C}$  NMR spectrum of oxychiliotriterpenoside A (**1**) in  $\text{Pyr-}d_5$



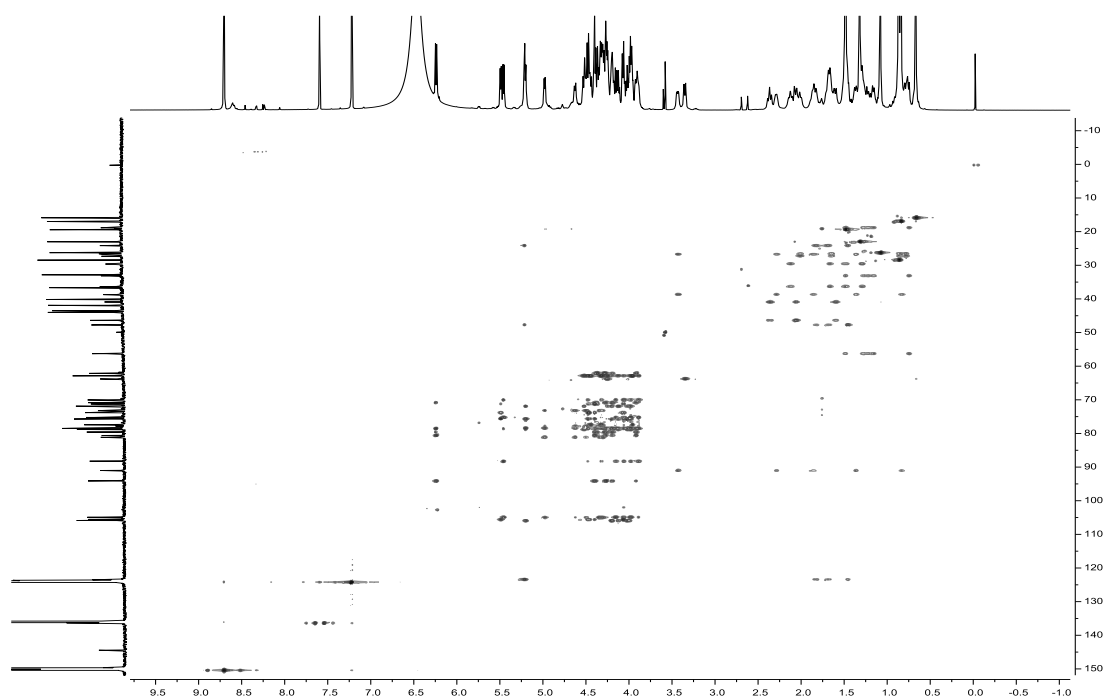
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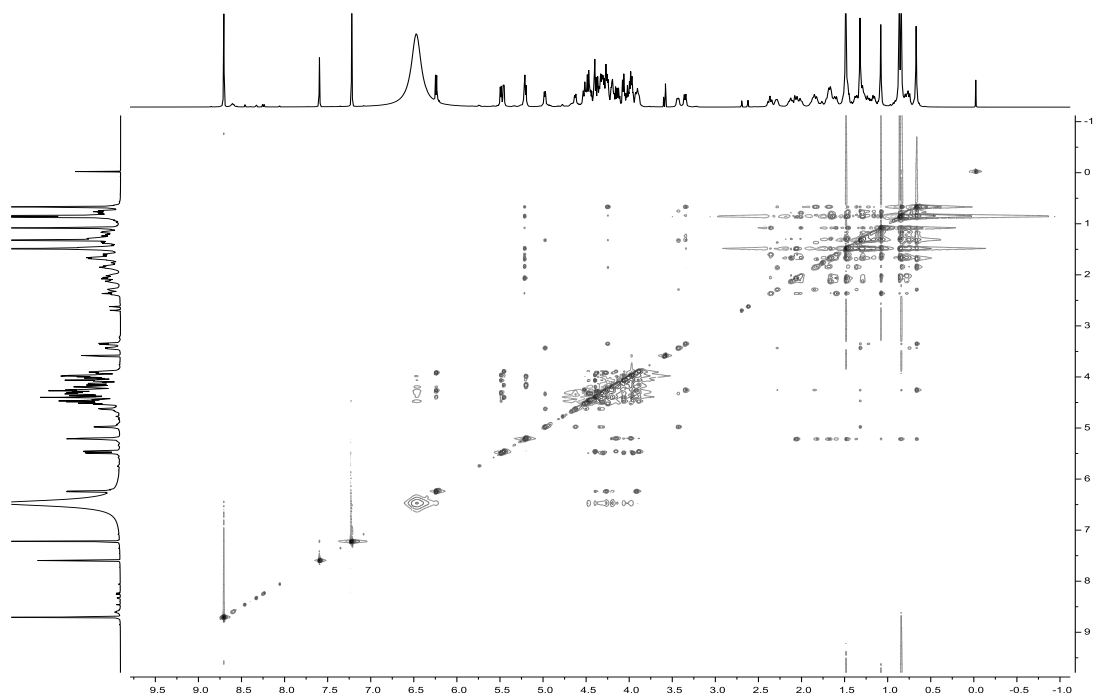
**Figure S5.** HSQC spectrum of oxychiliotriterpenoside A (**1**) in  $\text{Pyr-}d_5$



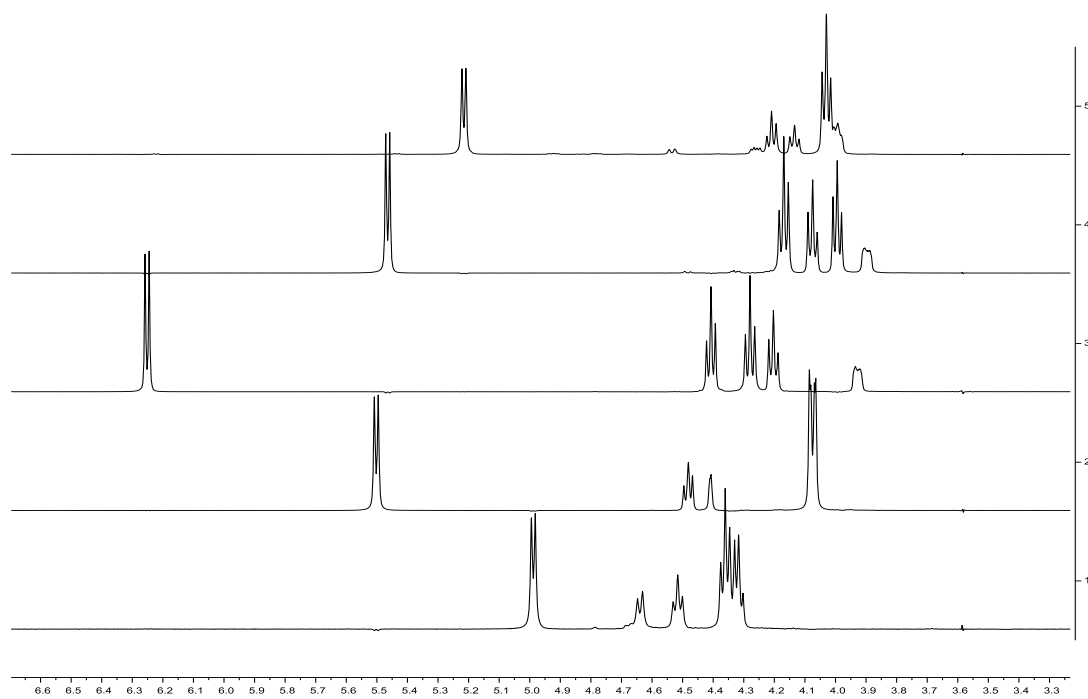
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**Figure S7.** HSQC-TOCSY spectrum of oxychiliotriterpenoside A (**1**) in Pyr- $d_5$

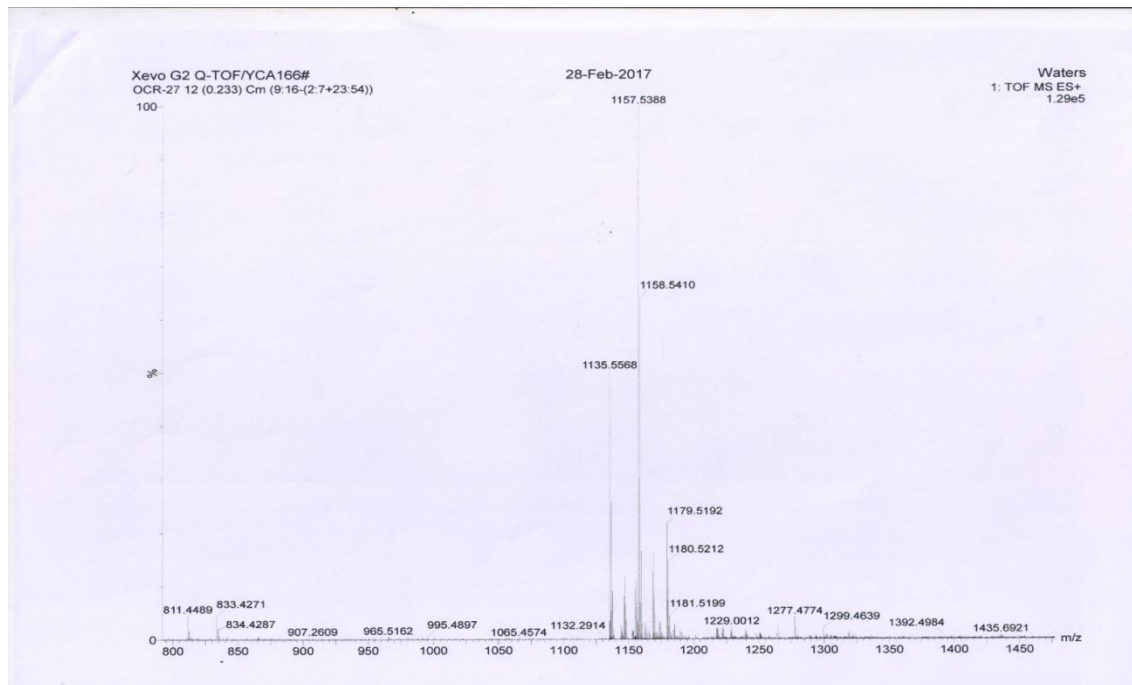


**Figure S8.** NOESY spectrum of oxychiliotriterpenoside A (**1**) in Pyr- $d_5$



**Figure S9.** Selected 1D TOCSY spectrum of oxychiliotriterpenoside A (**1**) in Pyr- $d_5$





**Figure S10.** HRESIMS spectrum of oxychiliotriterpenoid B (2)

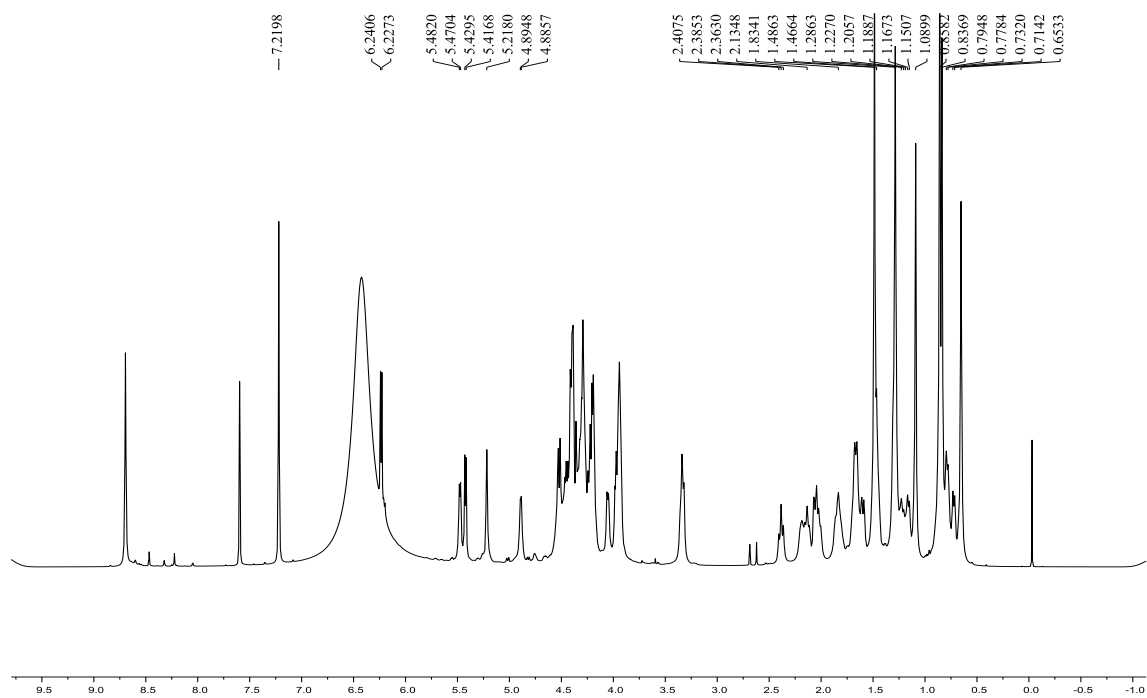


Figure S11.  $^1\text{H}$  NMR spectrum of oxychiliotriterpenoid B (**2**) in  $\text{Pyr-}d_5$

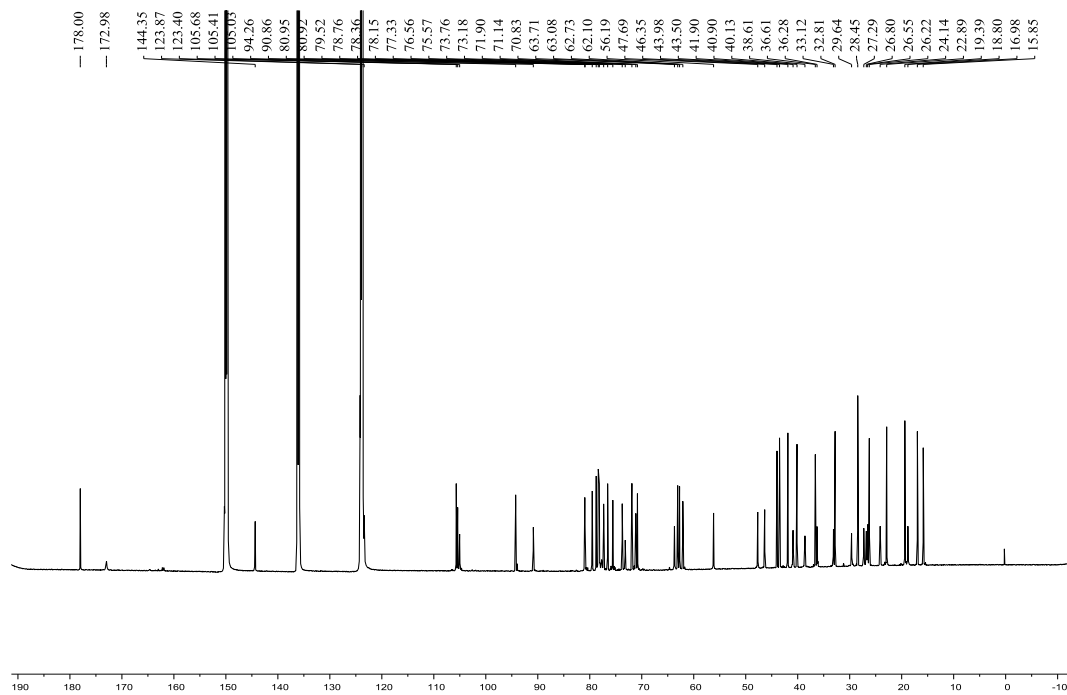
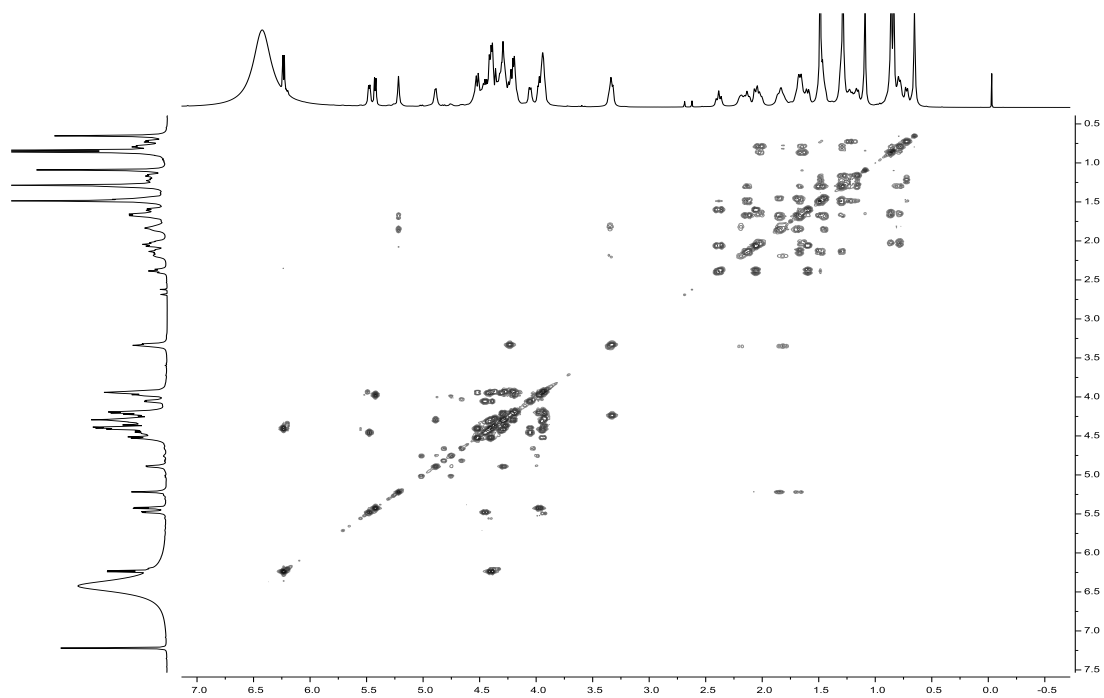
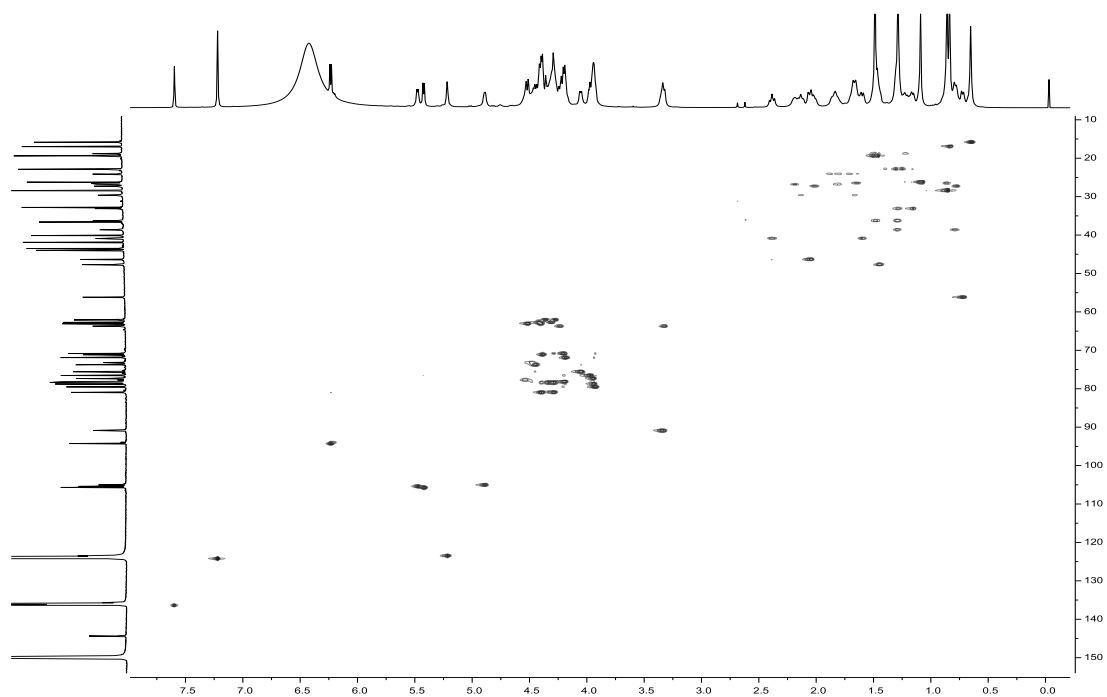


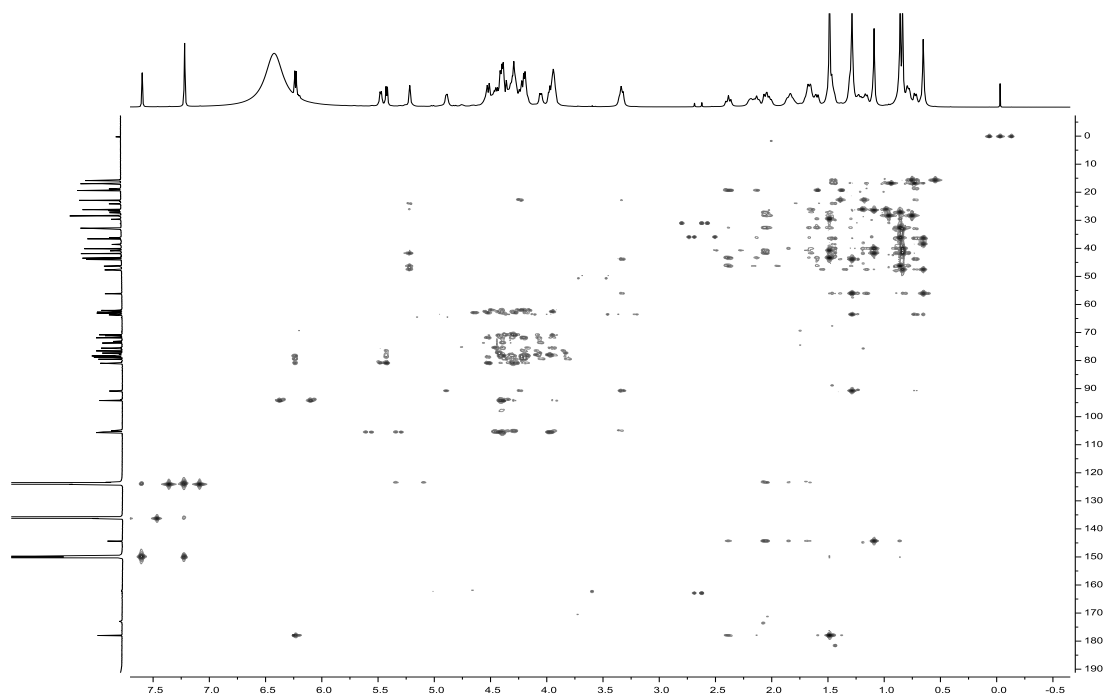
Figure S12.  $^{13}\text{C}$  NMR spectrum of oxychiliotriterpenoid B (**2**) in  $\text{Pyr-}d_5$



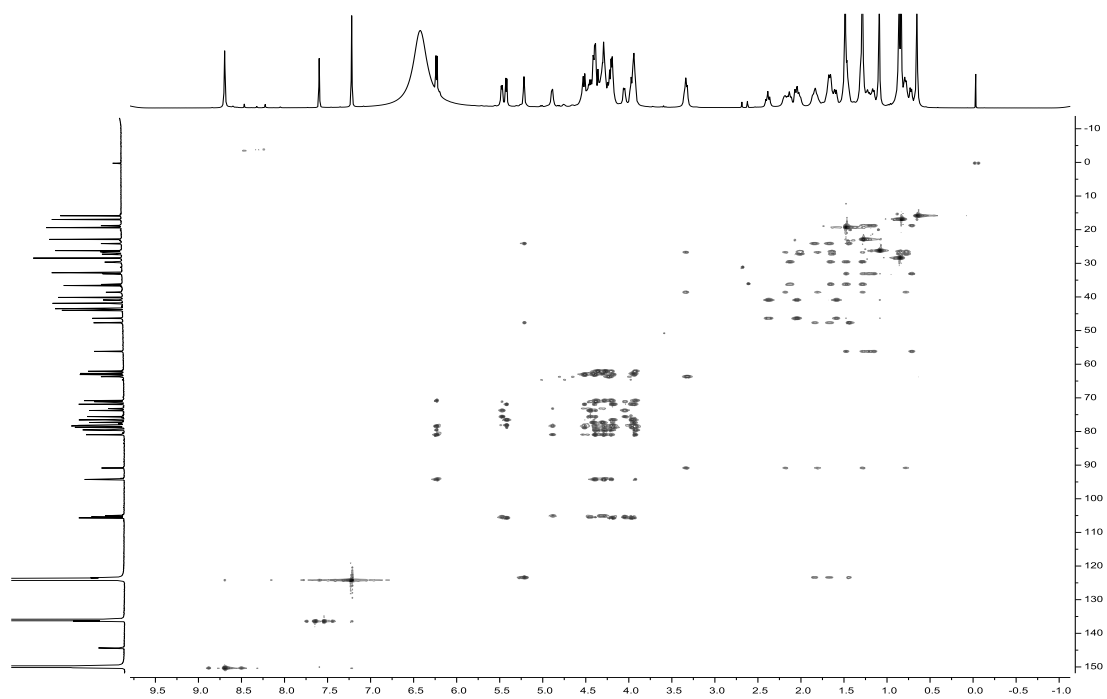
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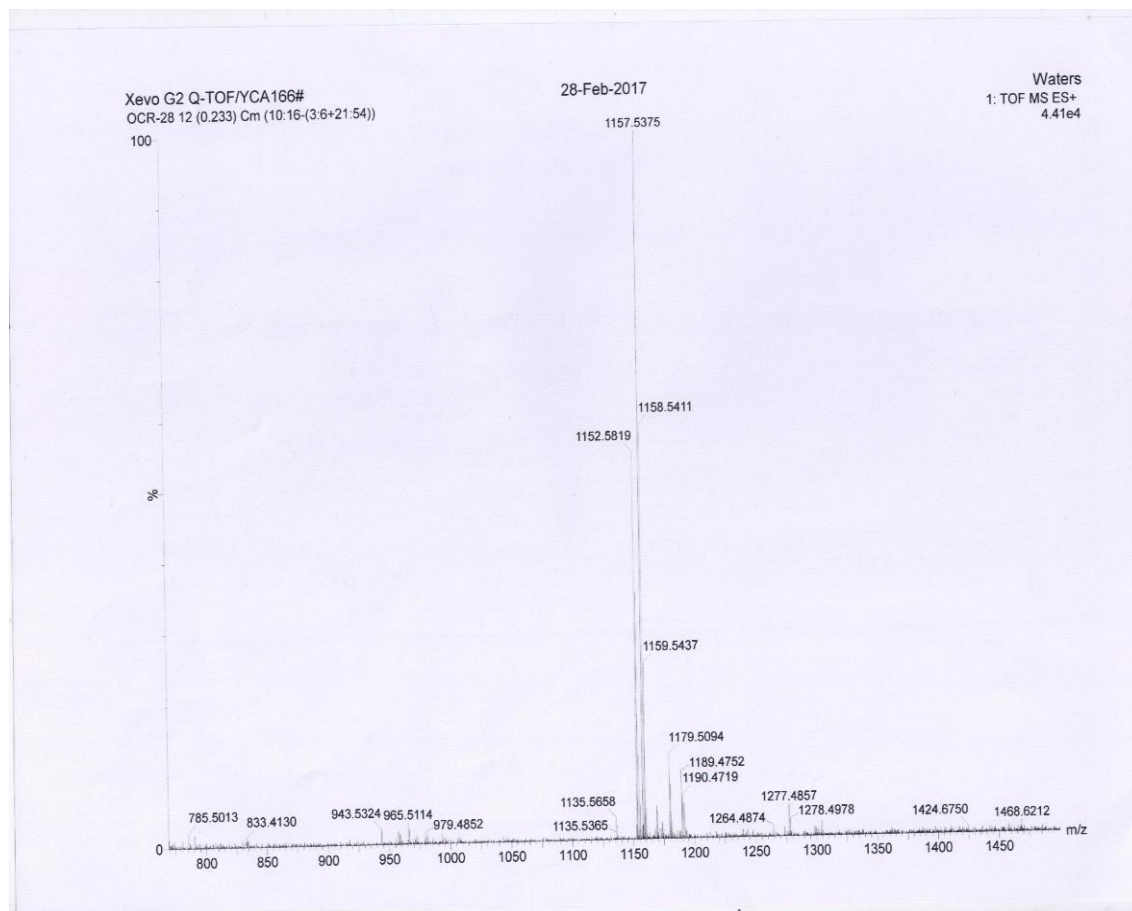
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**Figure S16.** HSQC-TOCSY spectrum of oxychiliotriterpenoside B (**2**) in Pyr- $d_5$



**Figure S17.** HRESIMS spectrum of oxychiliotriterpenoside C (**3**)

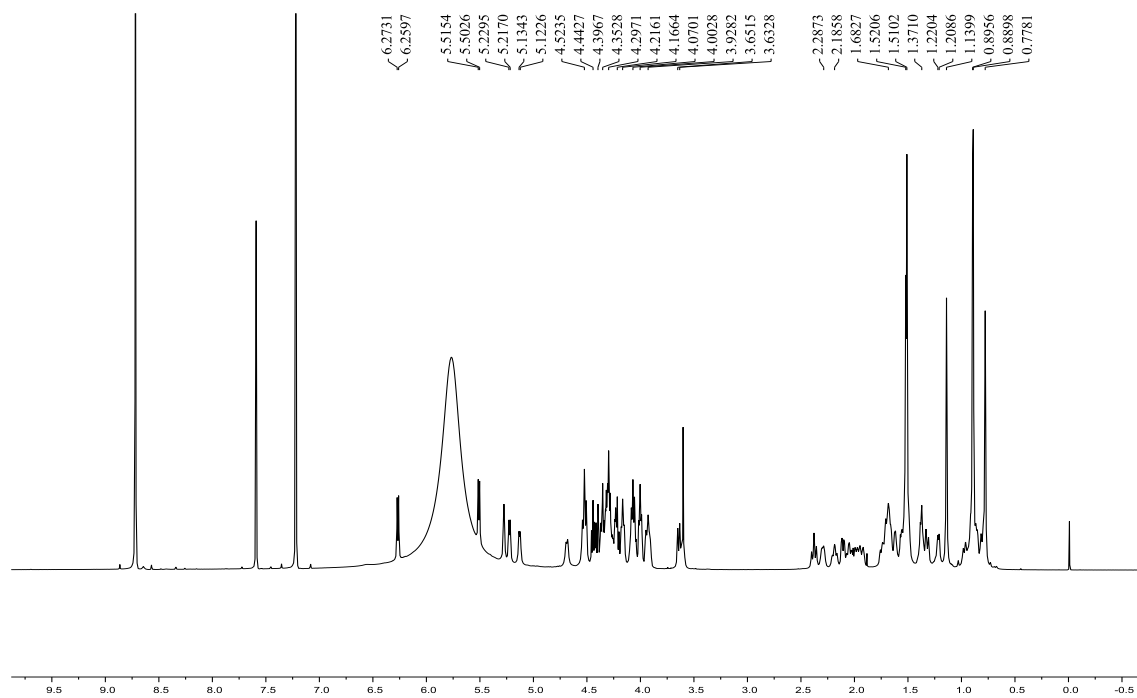


Figure S18.  $^1\text{H}$  NMR spectrum of oxychiliotriterpenoid C (**3**) in Pyr- $d_5$

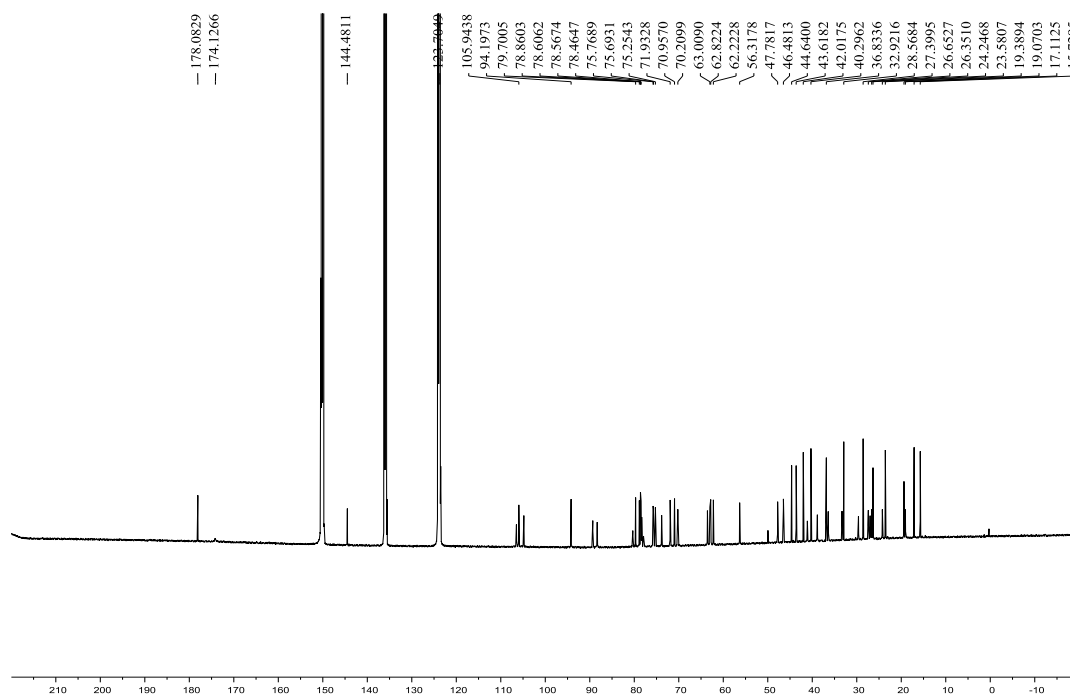
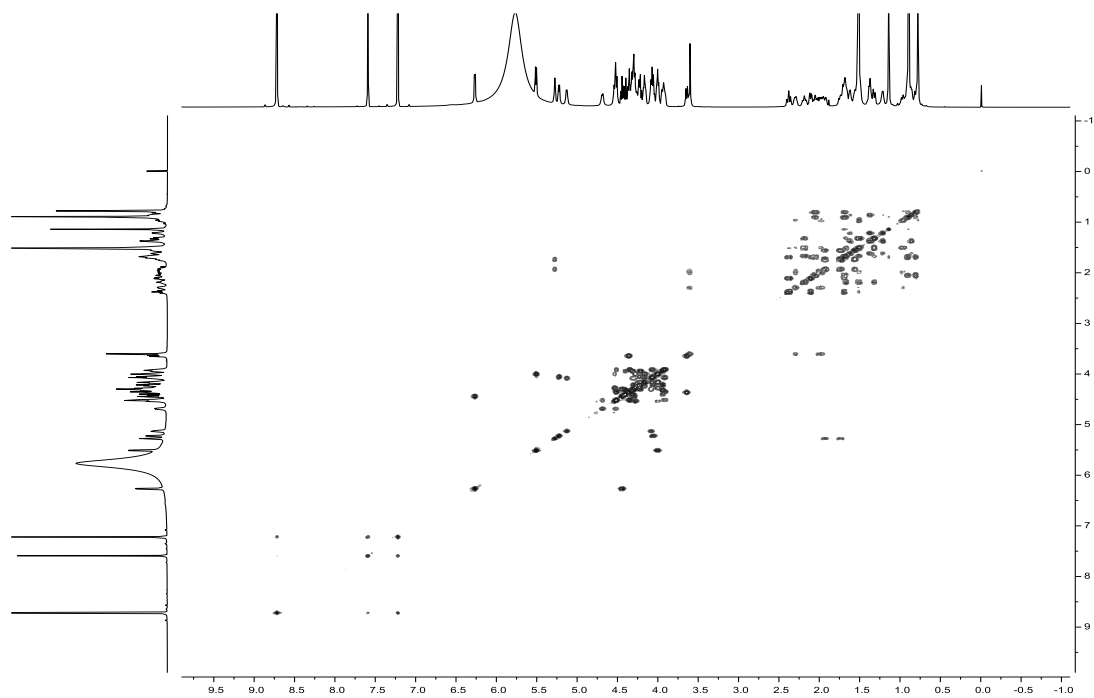
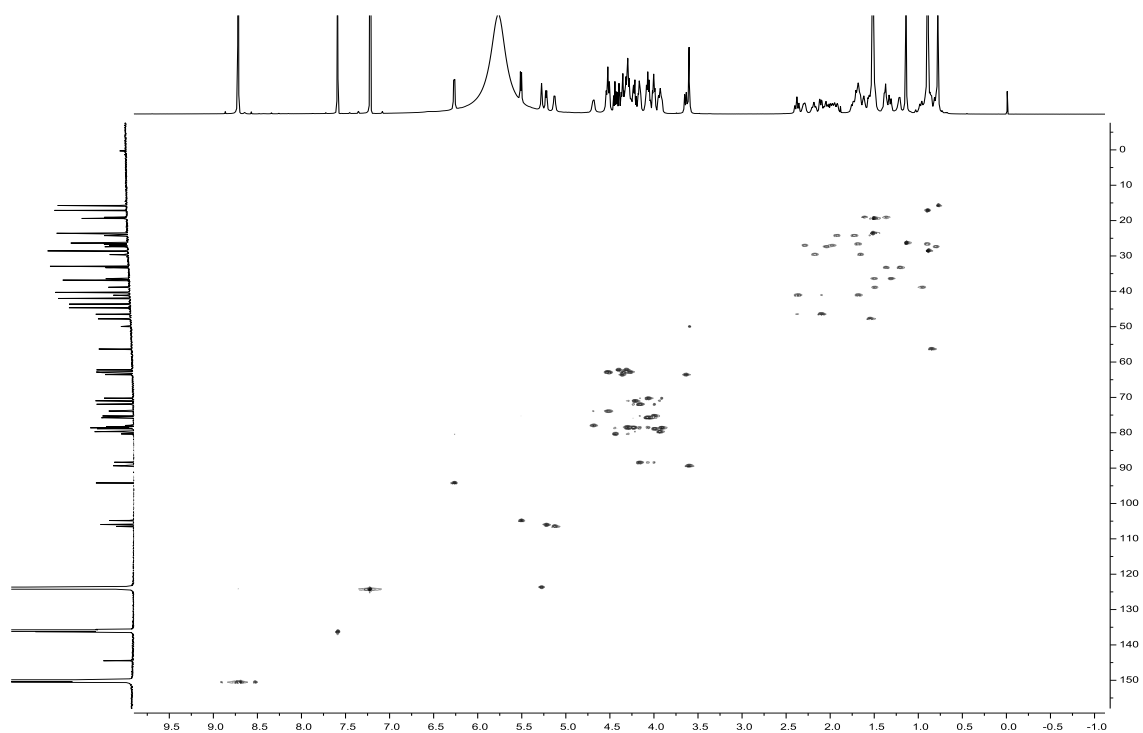


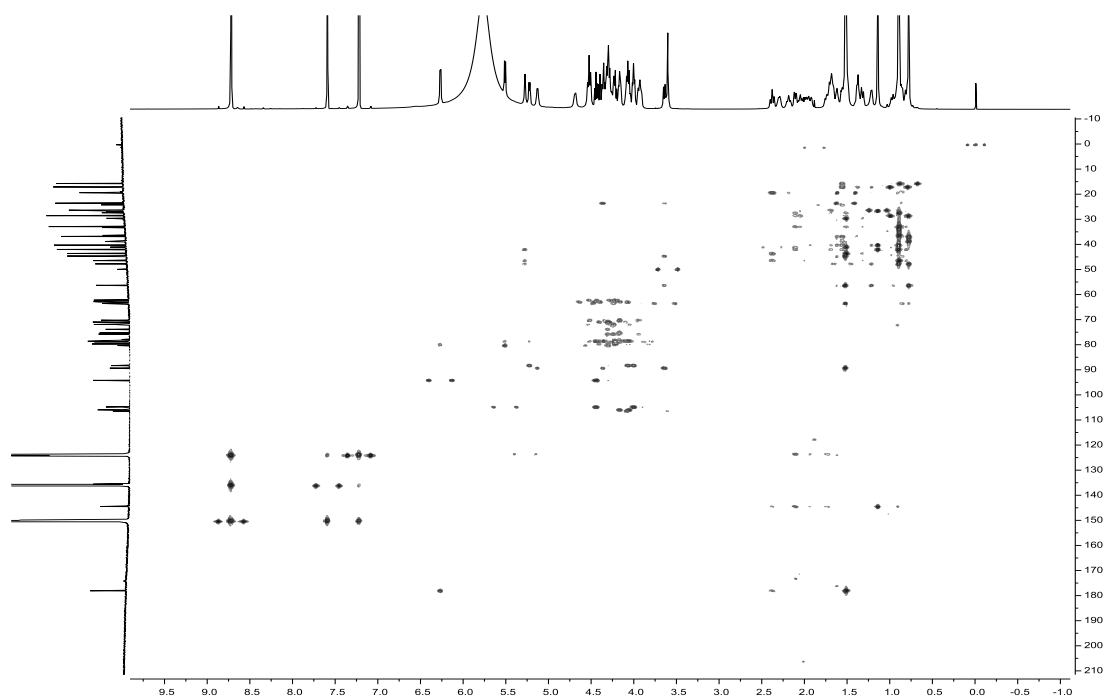
Figure S19.  $^{13}\text{C}$  NMR spectrum of oxychiliotriterpenoid C (**3**) in Pyr- $d_5$



**Figure S20.**  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of oxychiliotriterpenoside C (**3**) in  $\text{Pyr-}d_5$

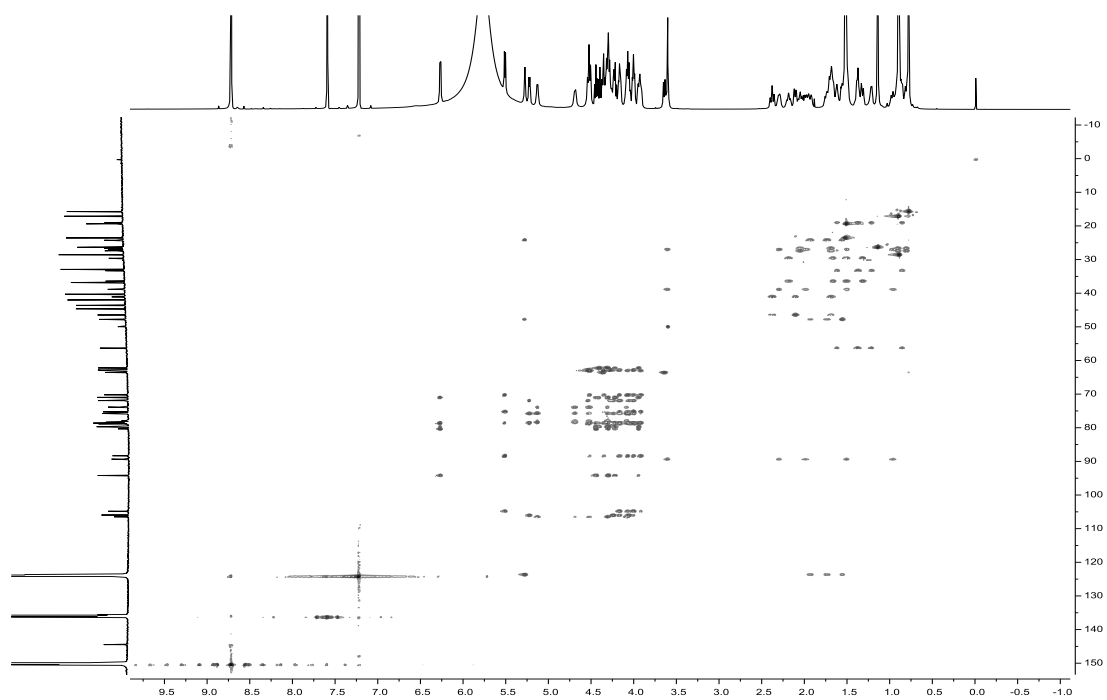


**Figure S21.** HSQC spectrum of oxychiliotriterpenoside C (**3**) in  $\text{Pyr-}d_5$

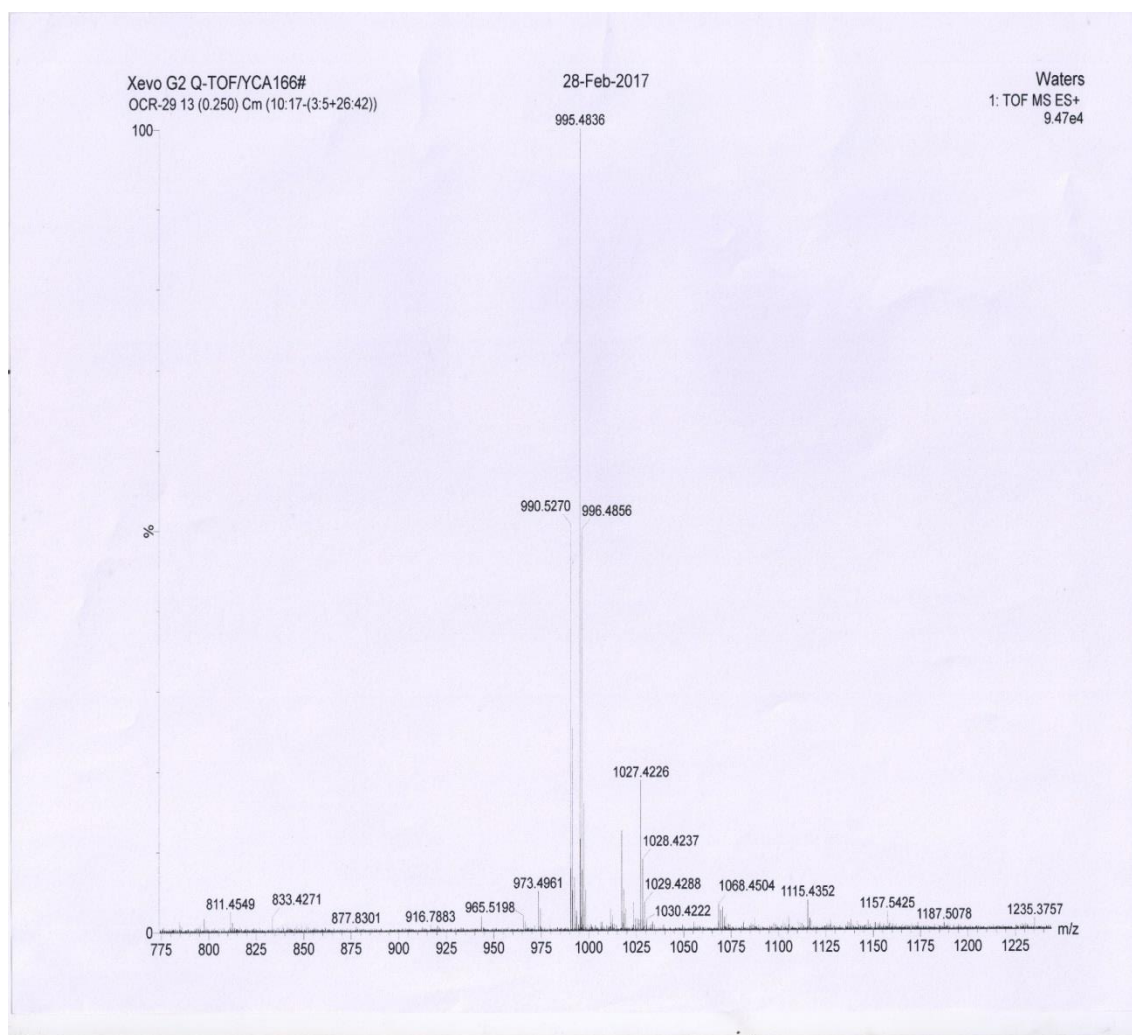


**Figure S22.** HMBC spectrum of oxychiliotriterpenosideC (**3**) in Pyr-*d*<sub>5</sub>





**Figure S23.** HSQC-TOCSY spectrum of oxychiliotriterpenoside C (**3**) in Pyr- $d_5$



**Figure S24.** HRESIMS spectrum of oxchiliotriterpenoside D (**4**)

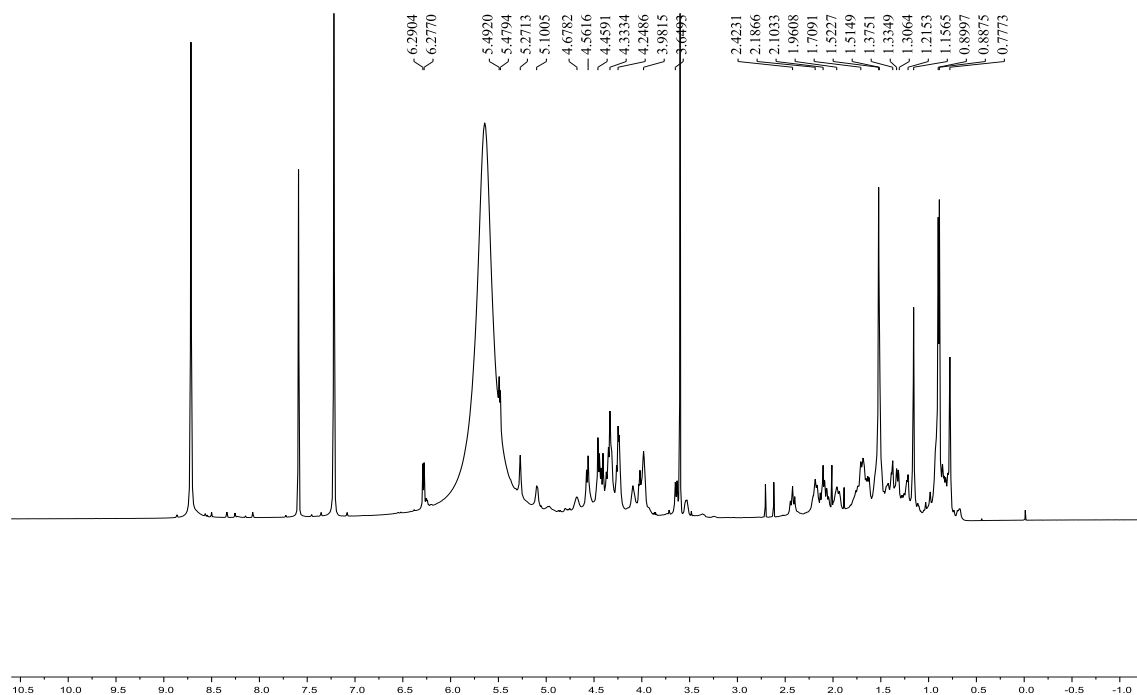


Figure S25.  $^1\text{H}$  NMR spectrum of oxychiliotriterpenoid D (**4**) in  $\text{Pyr-}d_5$

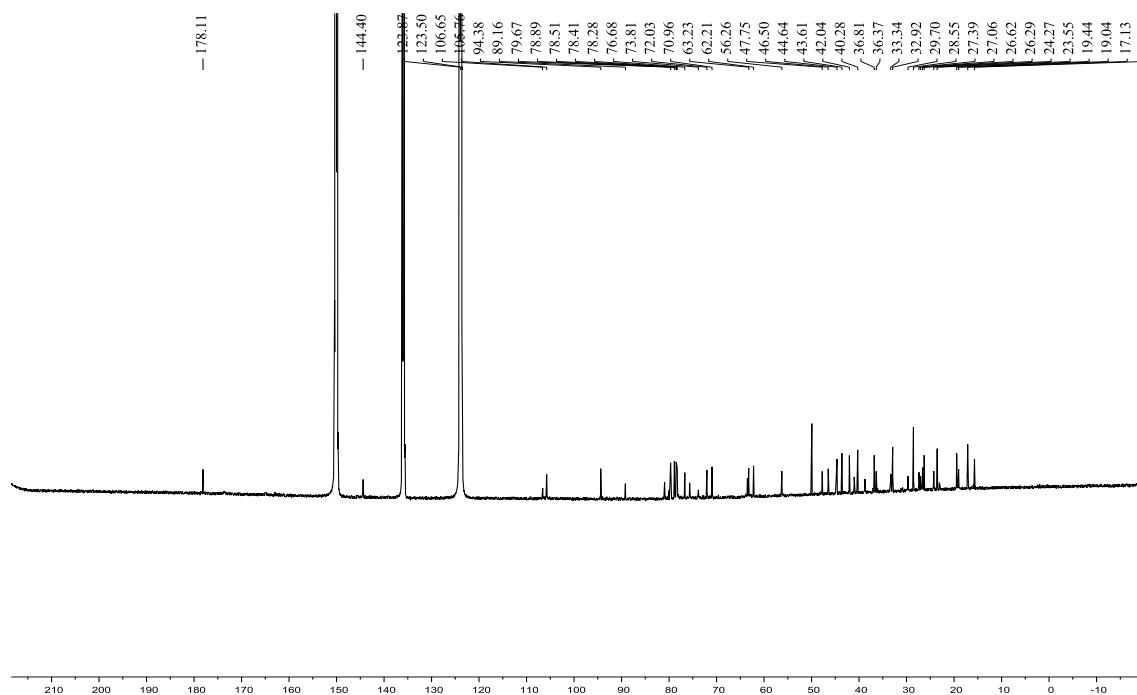
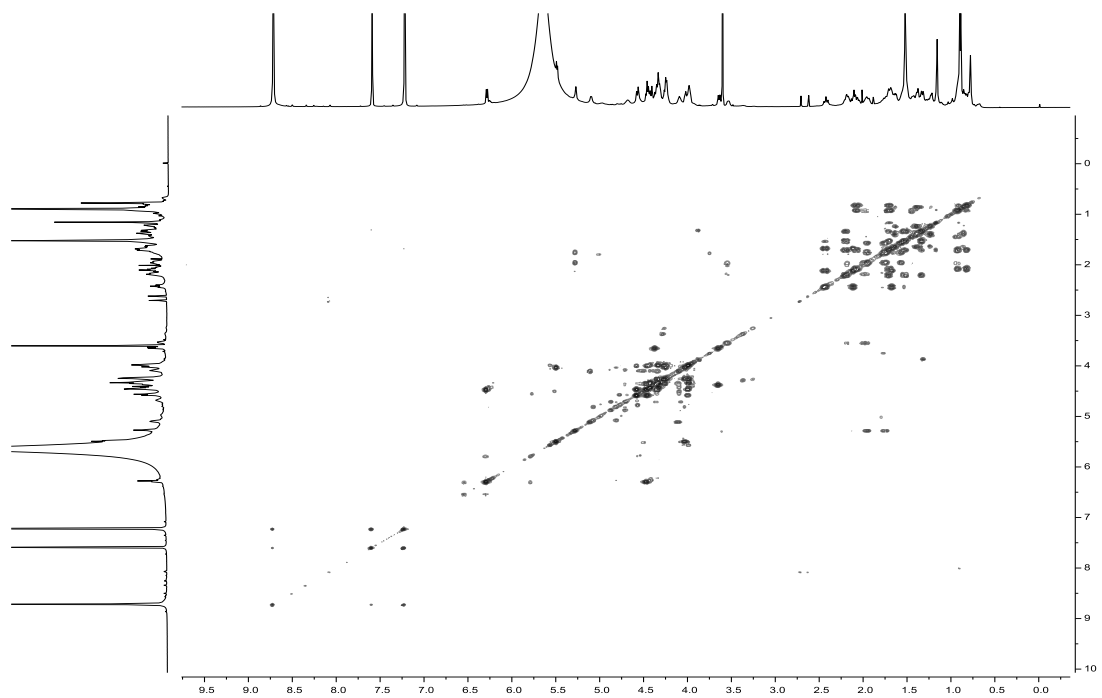
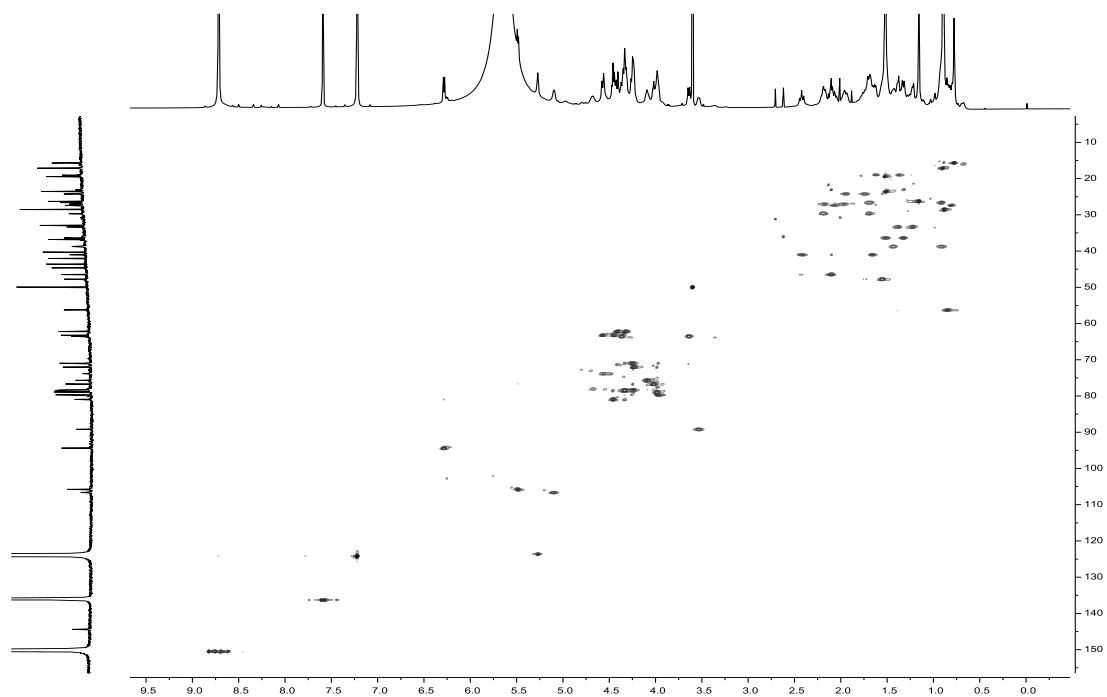


Figure S26.  $^{13}\text{C}$  NMR spectrum of oxychiliotriterpenoid D (**4**) in  $\text{Pyr-}d_5$



**Figure S27.**  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of oxychiliotriterpenoside D (**4**) in  $\text{Pyr-}d_5$



**Figure S28.** HSQC spectrum of oxychiliotriterpenoside D (**4**) in  $\text{Pyr-}d_5$

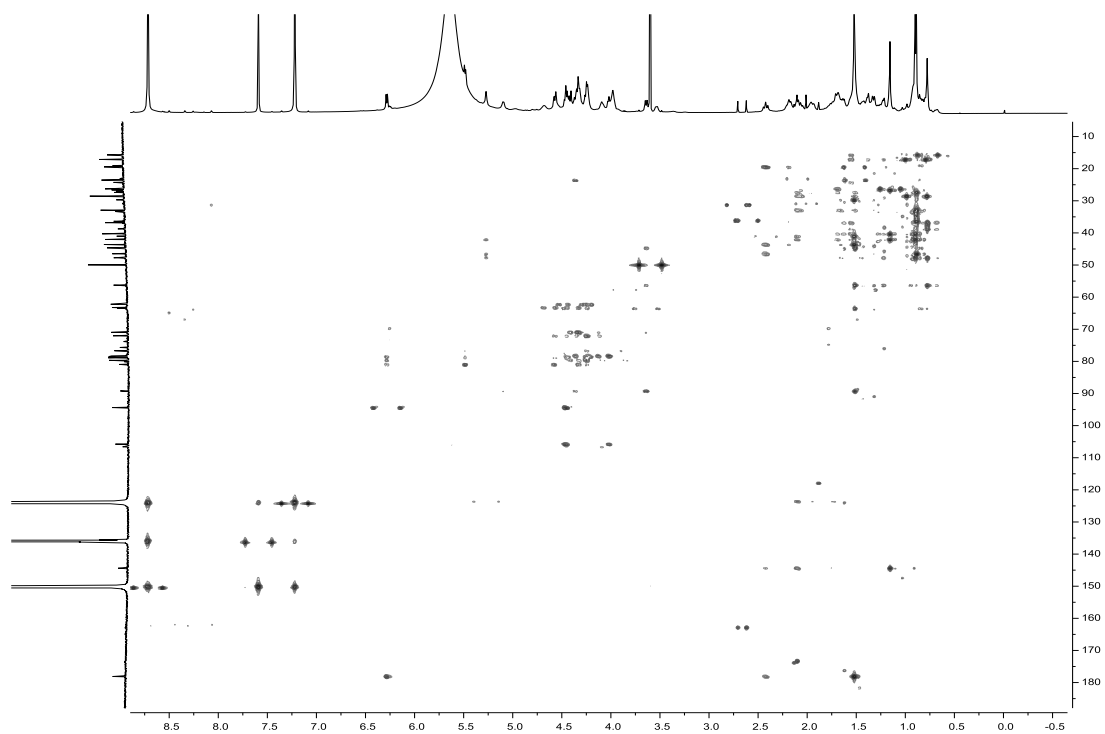


Figure S29. HMBC spectrum of oxychiliotriterpenoside D (4) in Pyr-*d*<sub>5</sub>

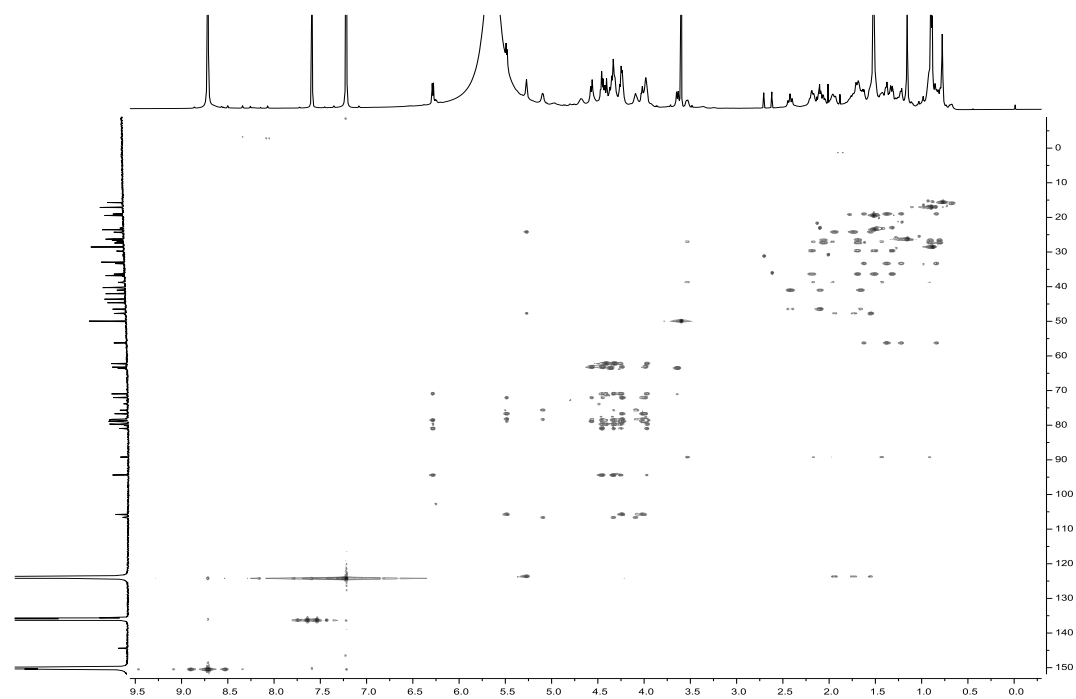


Figure S30. HSQC-TOCSY spectrum of oxychiliotriterpenoside D (4) in Pyr-*d*<sub>5</sub>

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28-Feb-2017

Waters  
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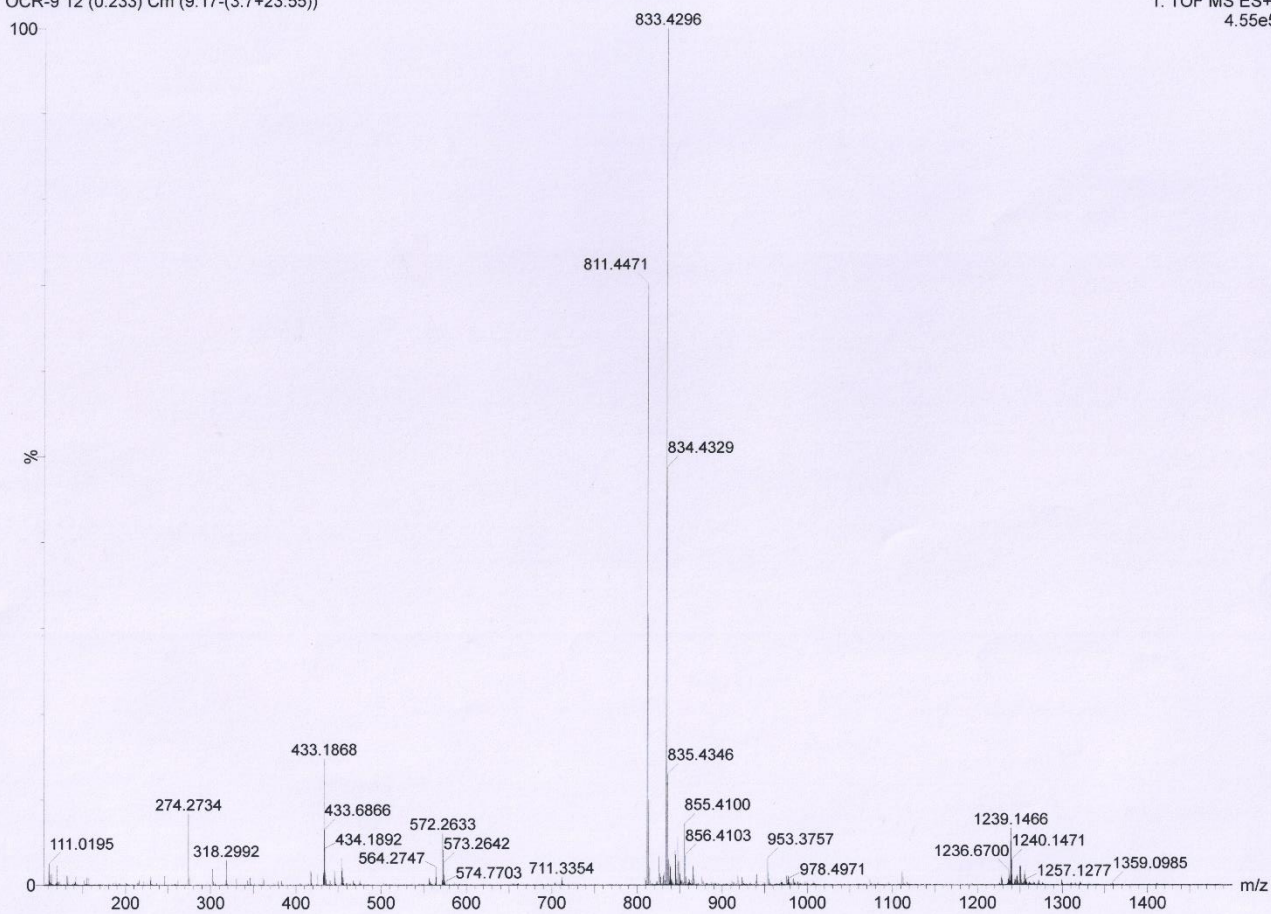


Figure S31. HRESIMS spectrum of oxychiliotriterpenoside E (5)

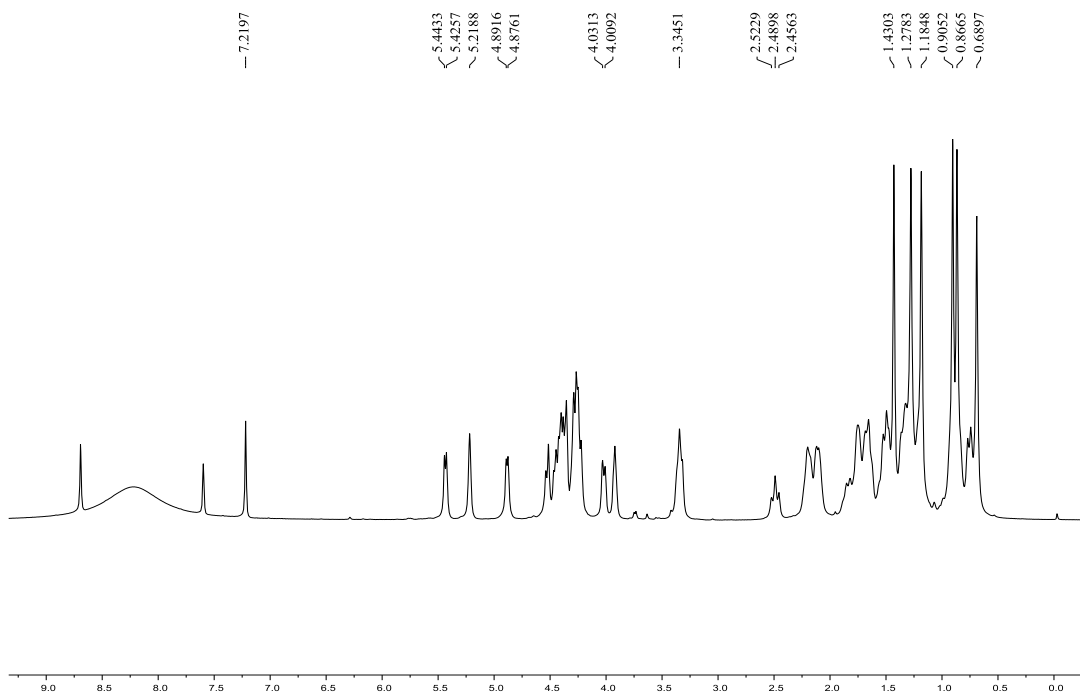


Figure S32.  $^1\text{H}$  NMR spectrum of oxychiliotriterpenoside E (**5**) in  $\text{Pyr-}d_5$

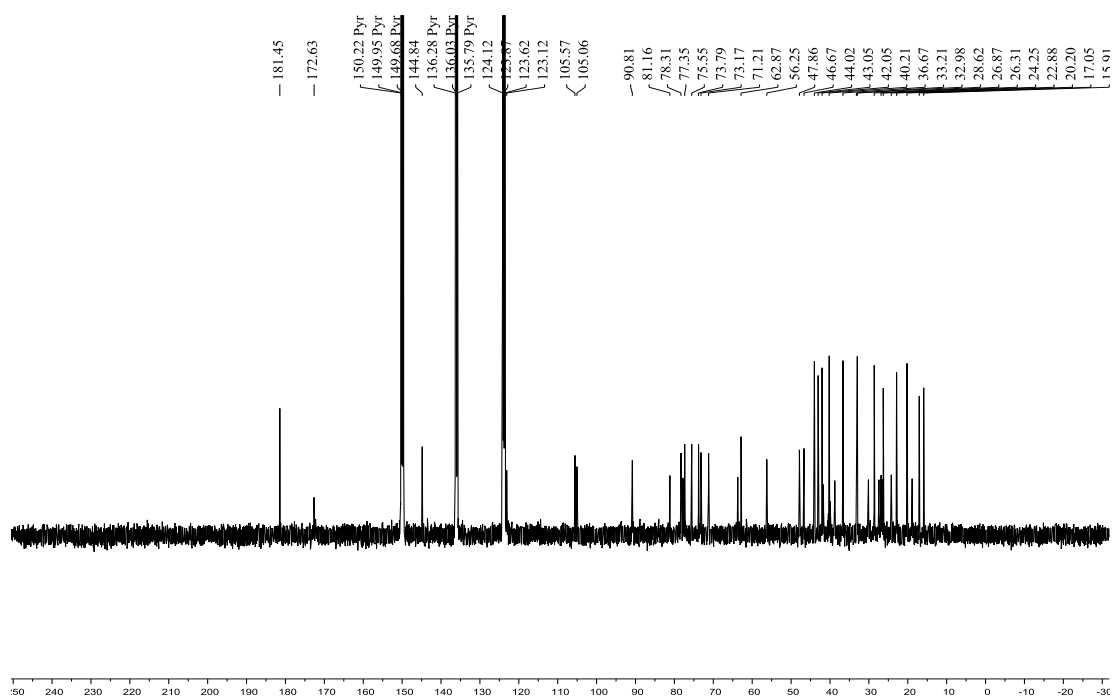


Figure S33.  $^{13}\text{C}$  NMR spectrum of oxychiliotriterpenoside E (**5**) in  $\text{Pyr-}d_5$

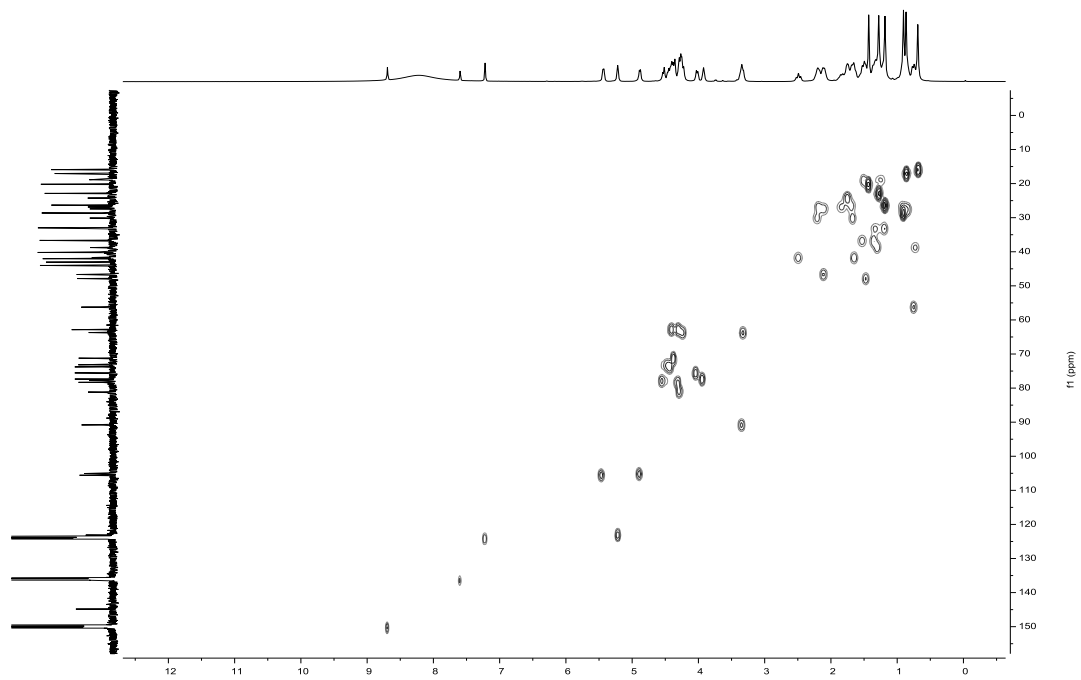


Figure S35. HSQC spectrum of oxychiliotriterpenoside E (5) in Pyr- $d_5$

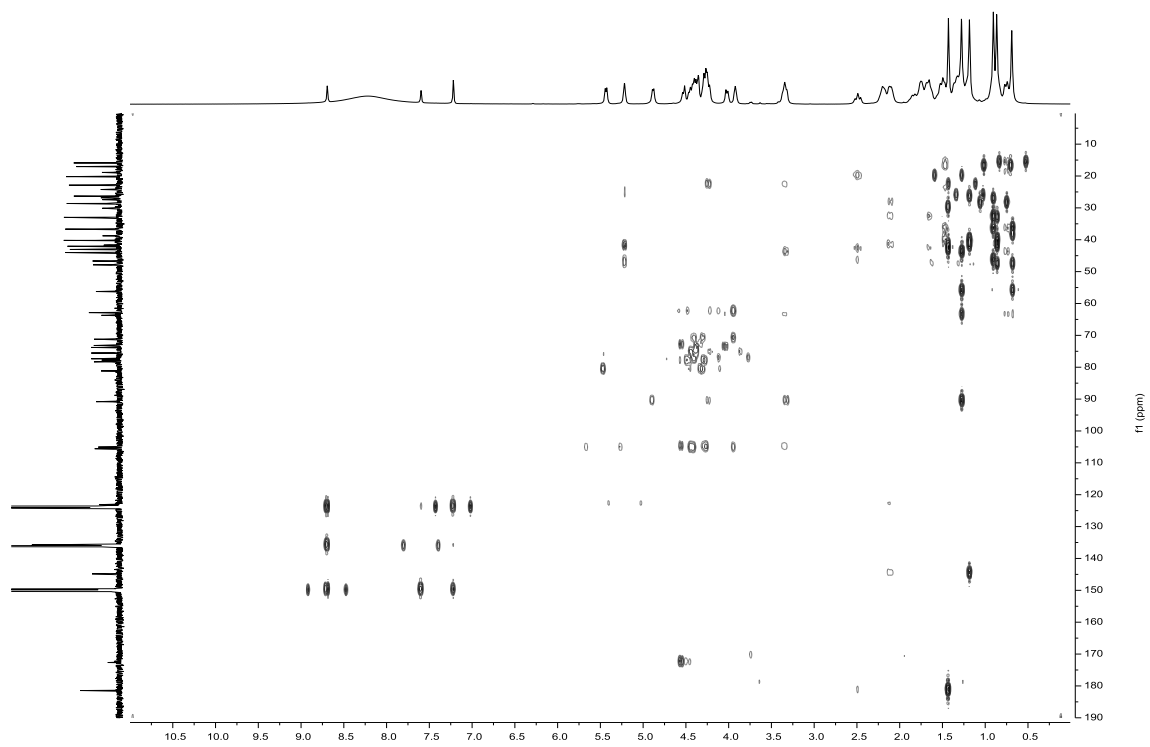
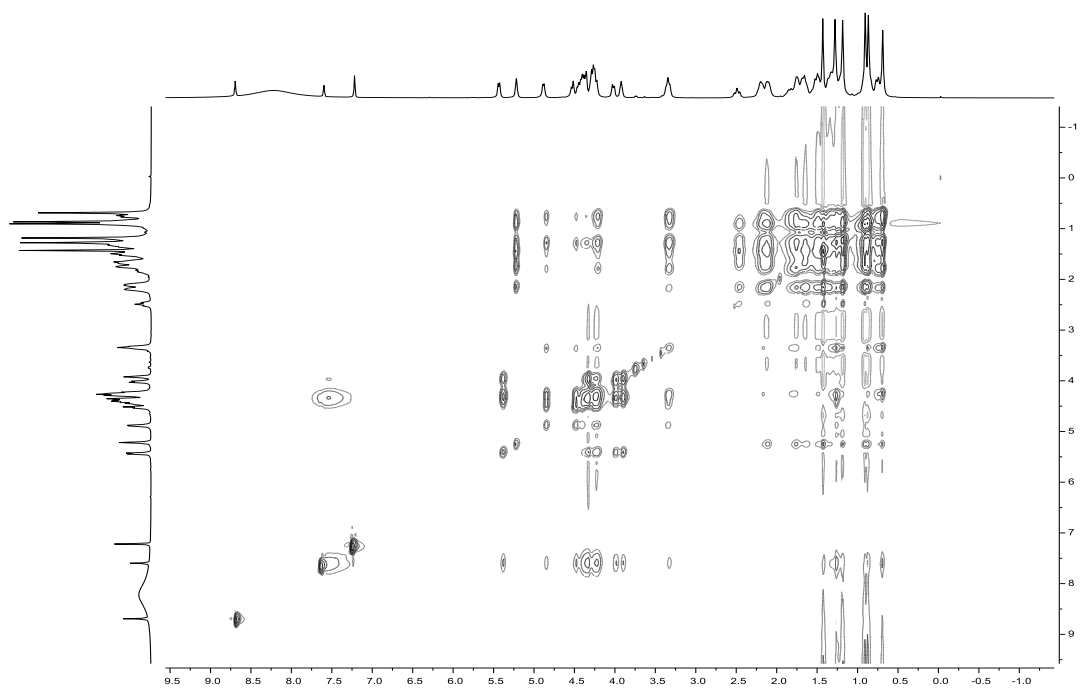
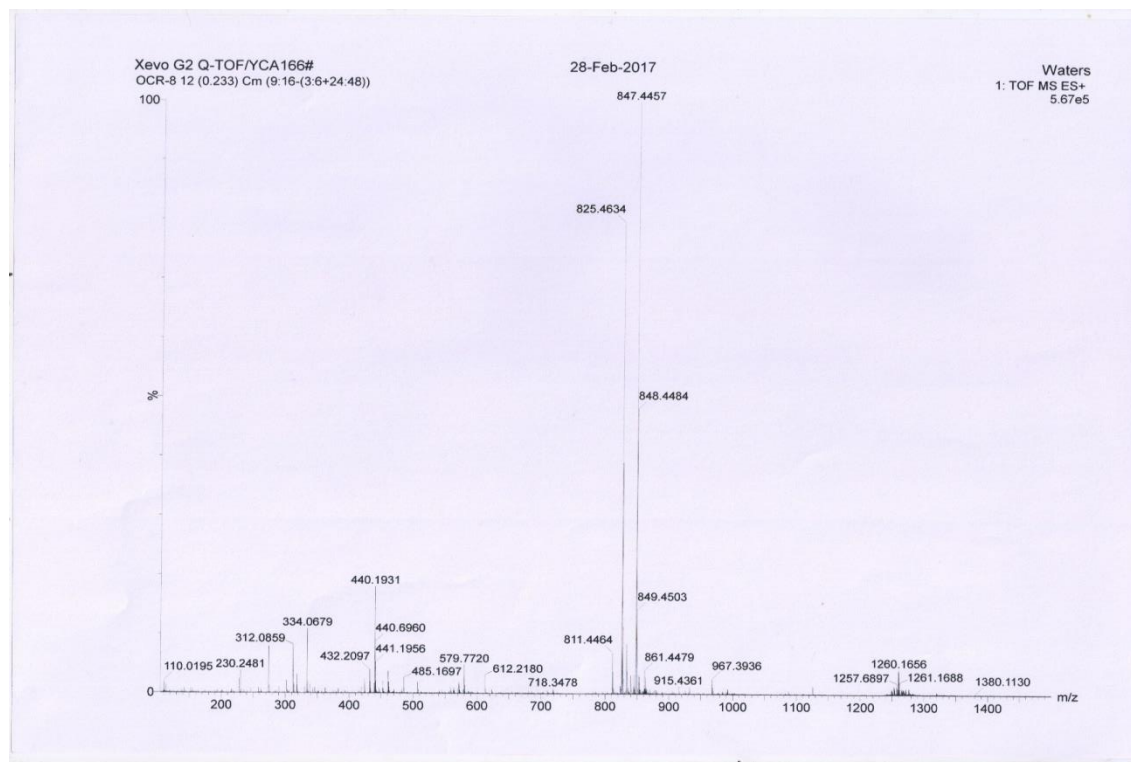


Figure S36. HMBC spectrum of oxychiliotriterpenoside E (5) in Pyr- $d_5$

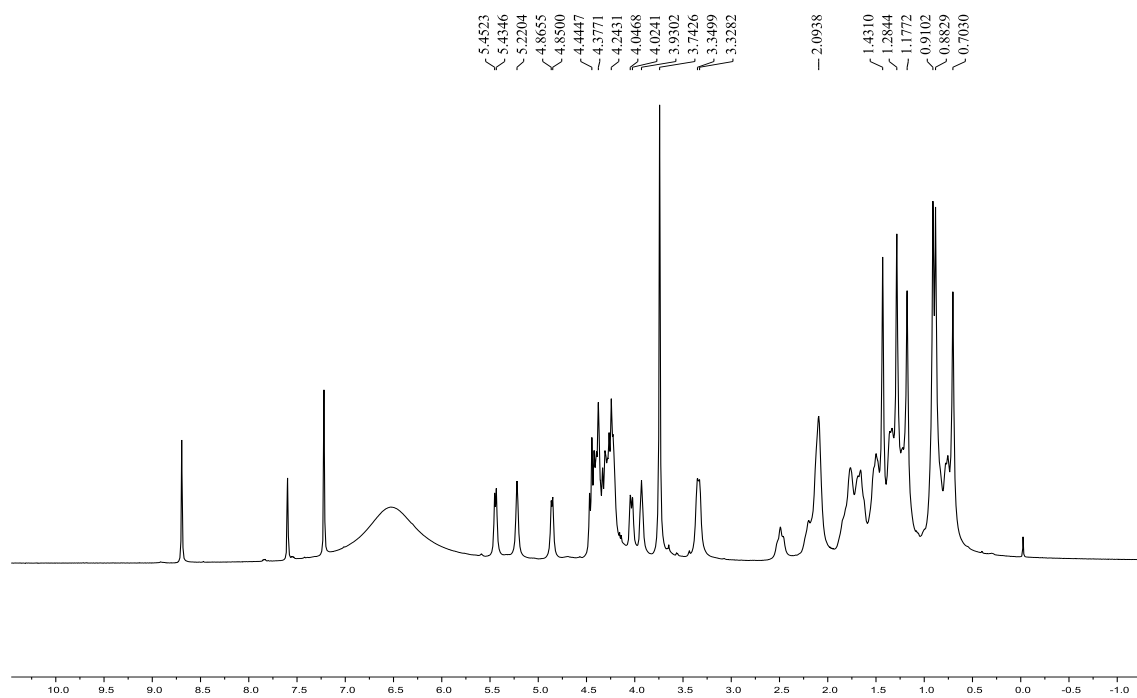




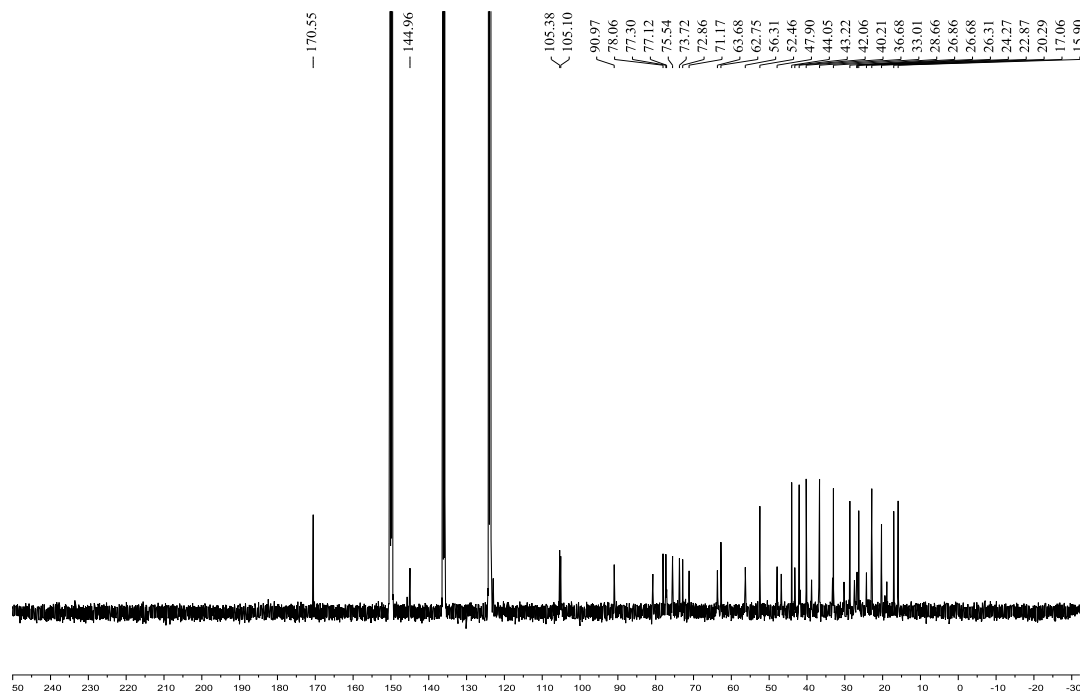
**Figure S37.** NOESY spectrum of oxchiliotriterpenoside E (**5**) in Pyr- $d_5$



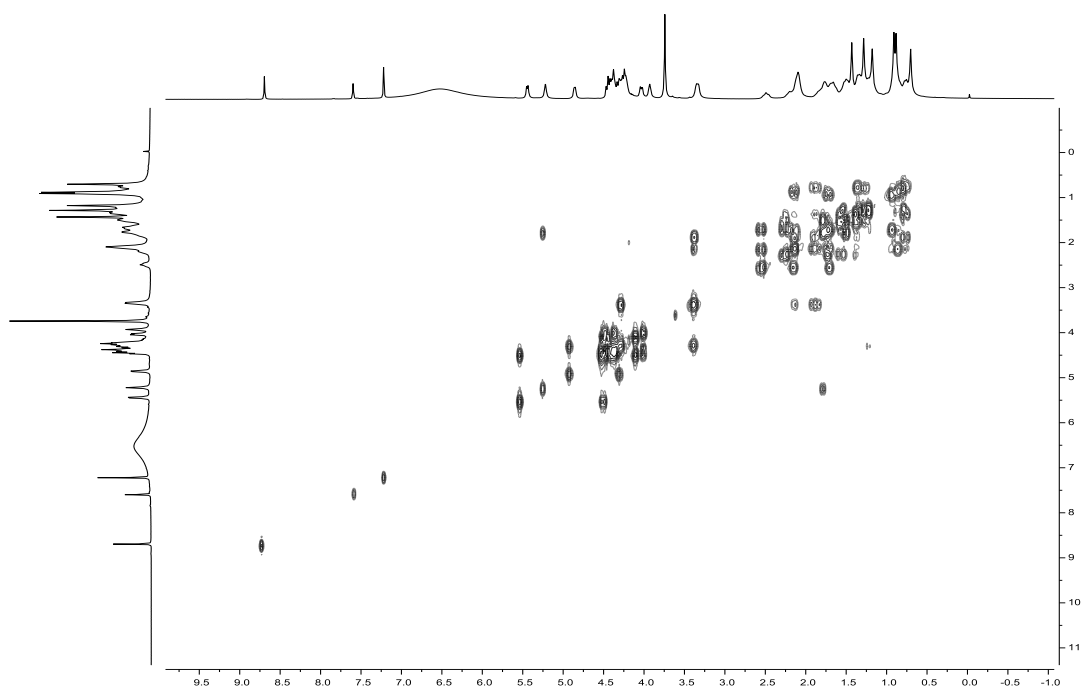
**Figure S38.** HRESIMS spectrum of oxychiliotriterpenoside E 6'-methyl ester (**6**)



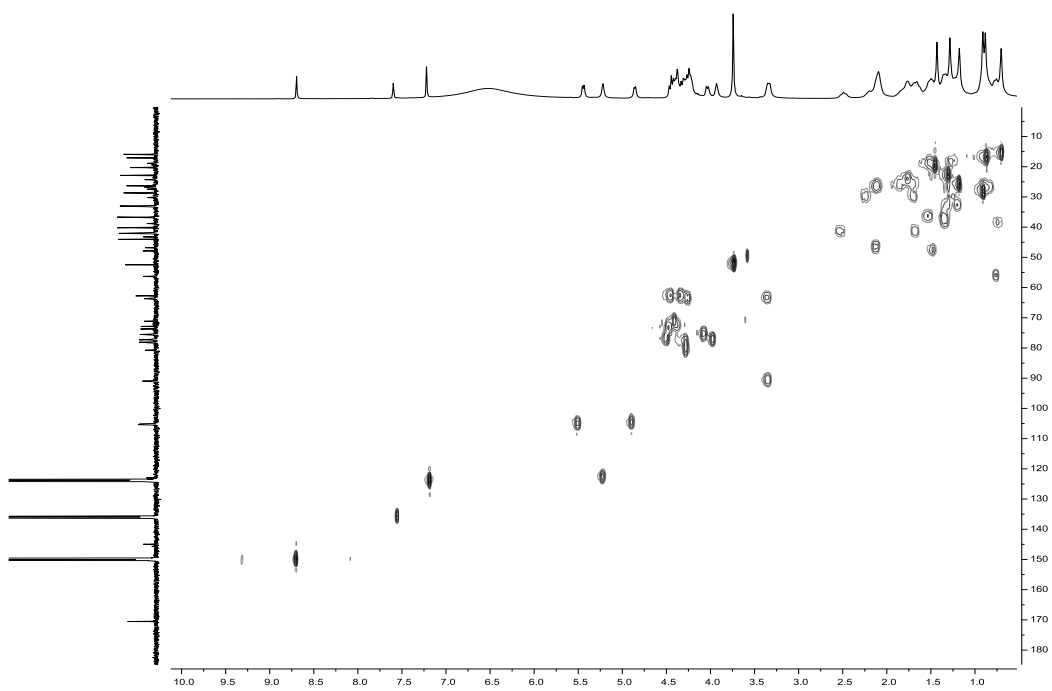
**Figure S39.**  $^1\text{H}$  NMR spectrum of oxychiliotriterpenoside E 6'-methyl ester (**6**) in  $\text{Pyr-}d_5$



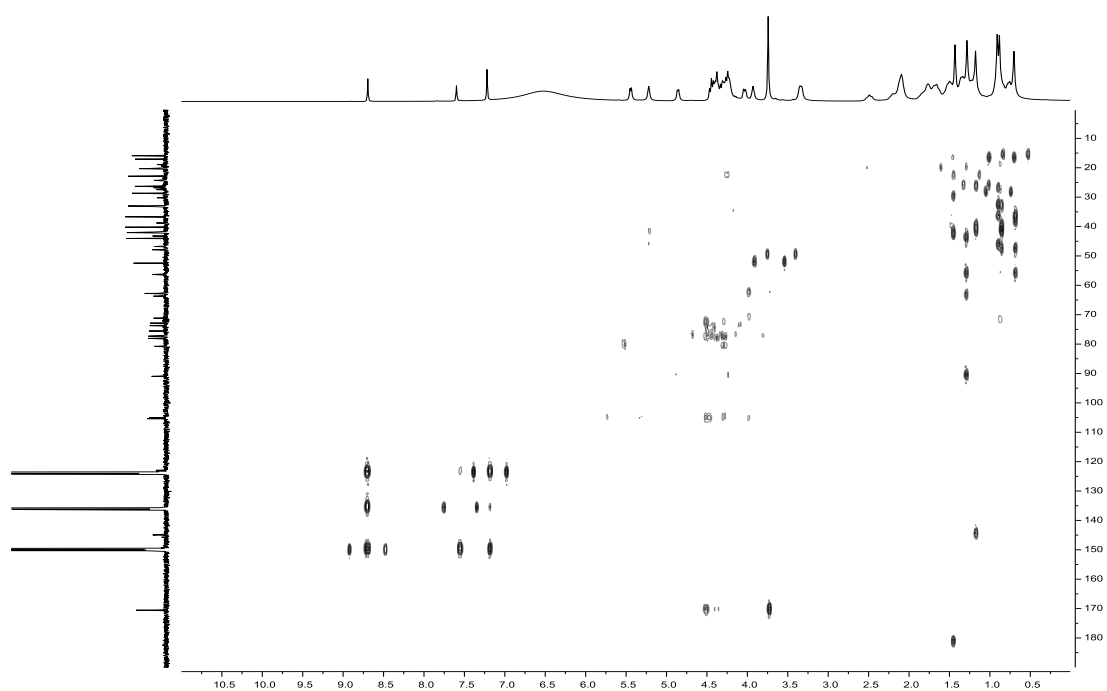
**Figure S40.**  $^{13}\text{C}$  NMR spectrum of oxychiliotriterpenoside E 6'-methyl ester (**6**) in  $\text{Pyr-}d_5$



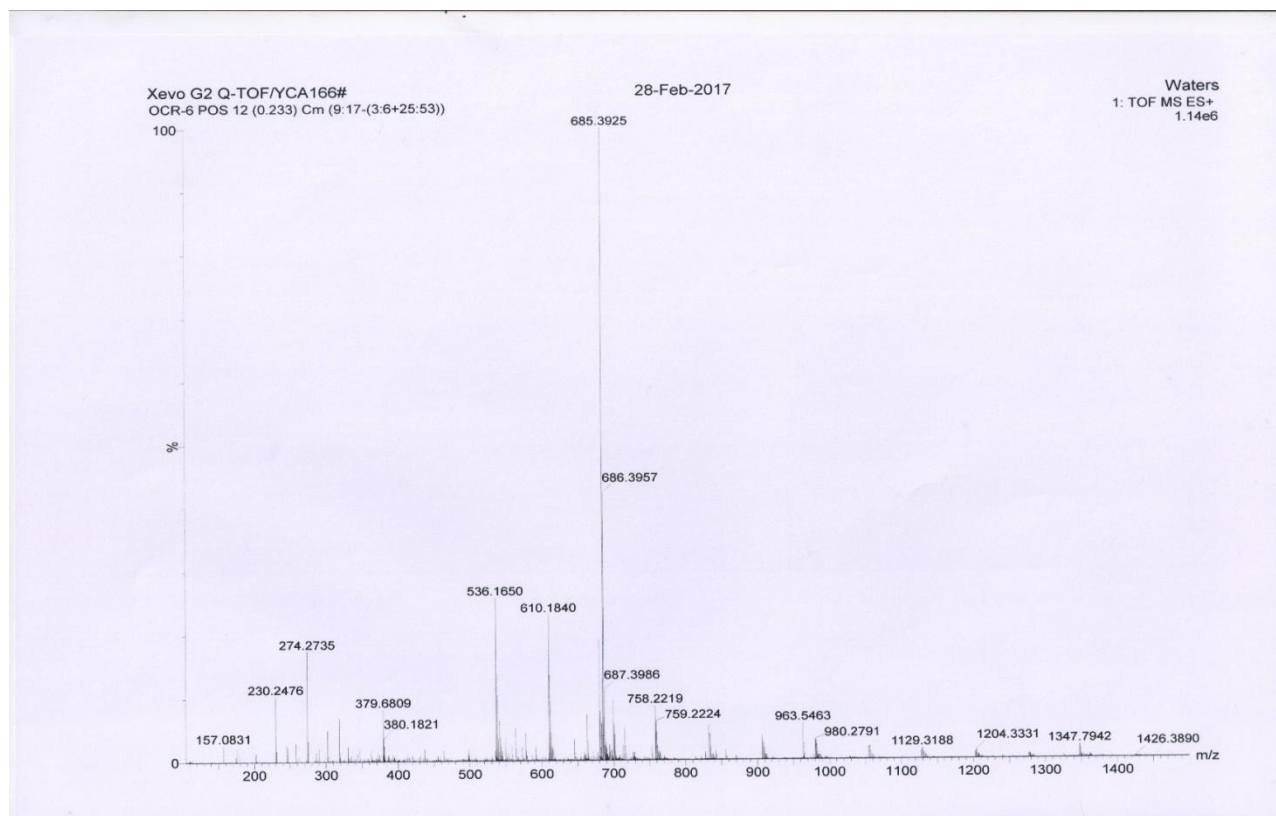
**Figure S41.**  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of oxychiliotriterpenoside E 6'-methyl ester (**6**) in  $\text{Pyr-}d_5$



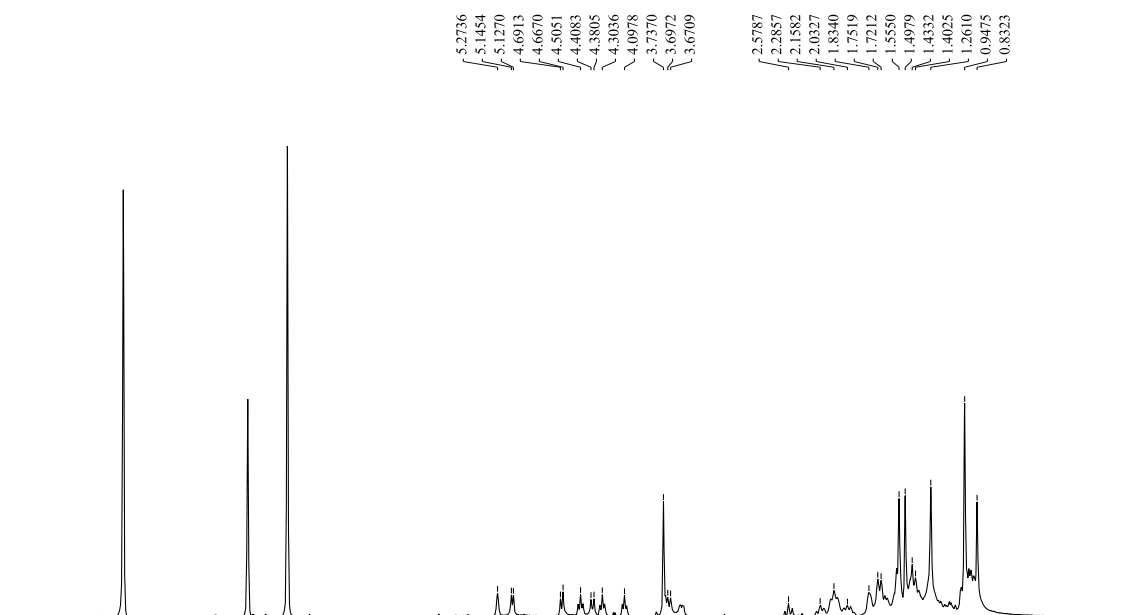
**Figure S42.** HSQC spectrum of oxychiliotriterpenoside E 6'-methyl ester (**6**) in  $\text{Pyr-}d_5$



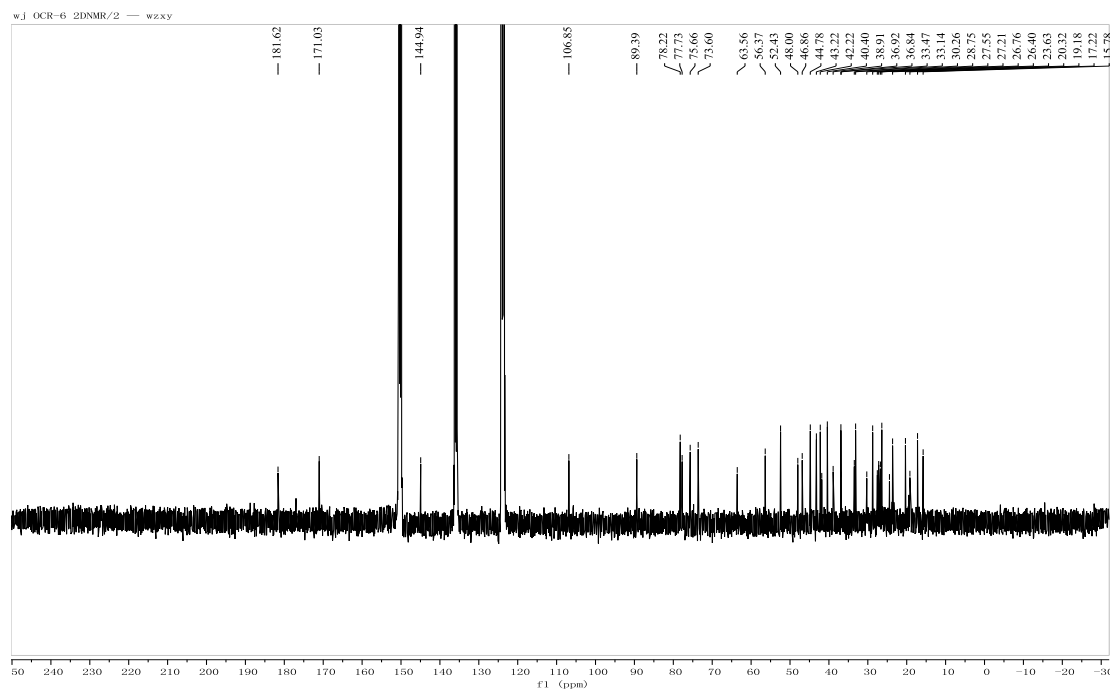
**Figure S43.** HMBC spectrum of oxychiliotriterpenoside E 6'-methyl ester (**6**) in Pyr-*d*<sub>5</sub>



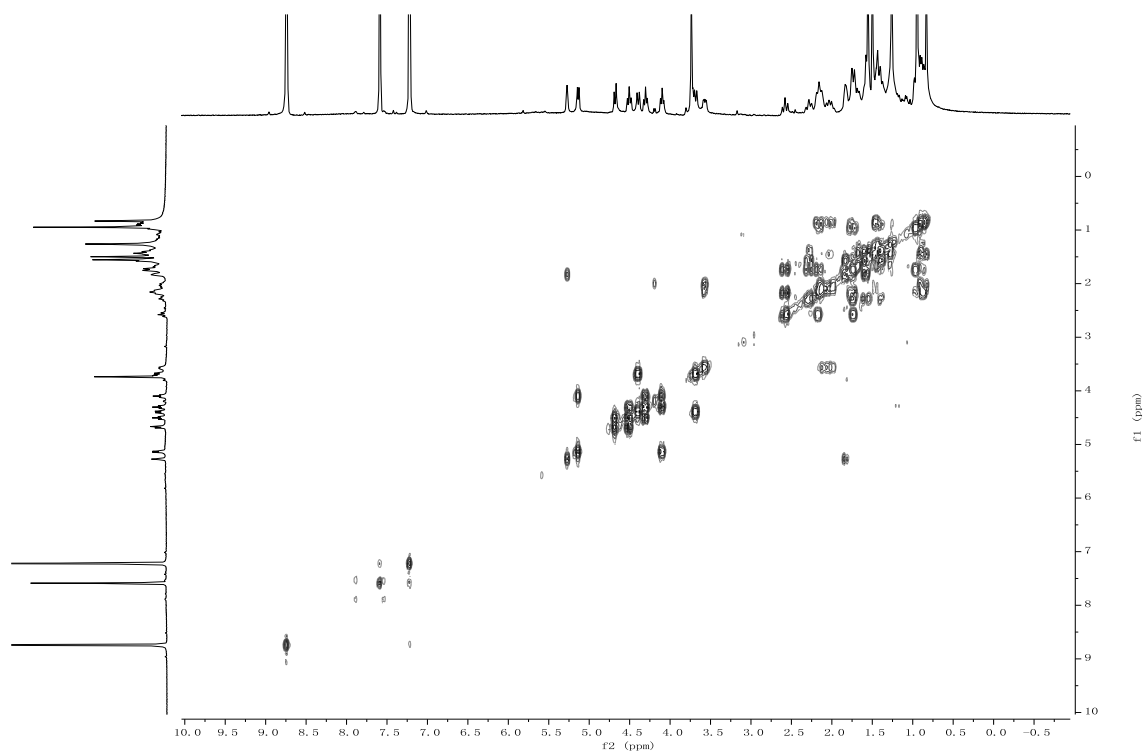
**Figure S44.** HRESIMS spectrum of myrioside B 6'-methyl ester (**7**)



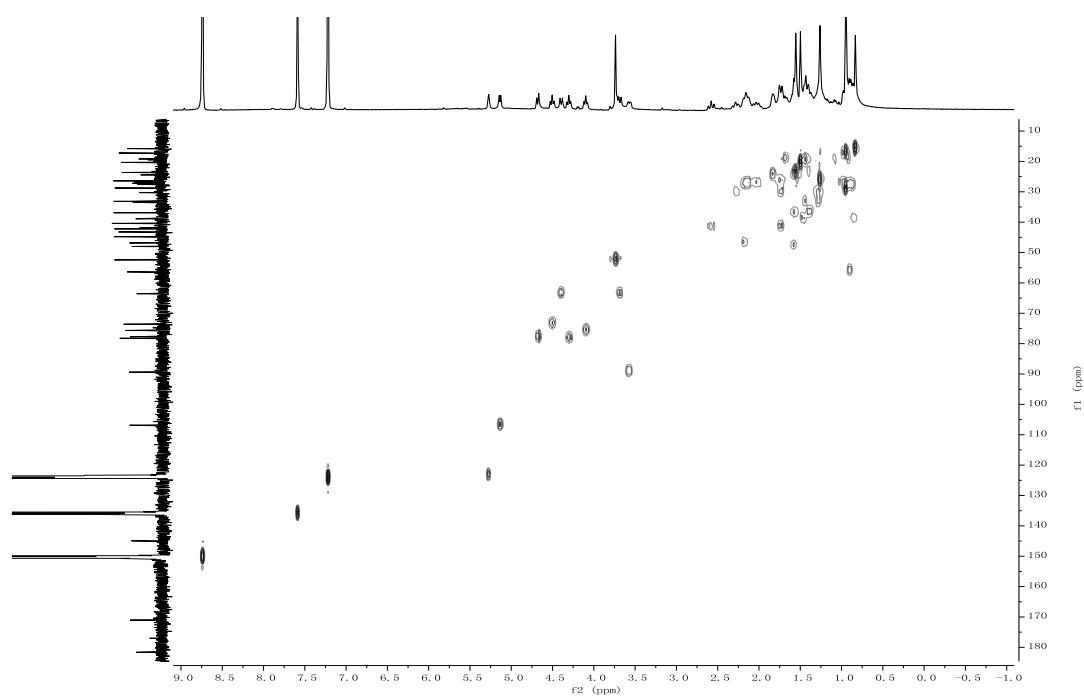
**Figure S45.**  $^1\text{H}$  NMR spectrum of myrioside B 6'-methyl ester (**7**) in  $\text{Pyr-}d_5$



**Figure S46.**  $^{13}\text{C}$  NMR spectrum of myrioside B 6'-methyl ester (**7**) in  $\text{Pyr-}d_5$



**Figure S47.**  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of myrioside B 6'-methyl ester (**7**) in  $\text{Pyr-}d_5$



**Figure S48.** HSQC spectrum of myrioside B 6'-methyl ester (**7**) in  $\text{Pyr-}d_5$



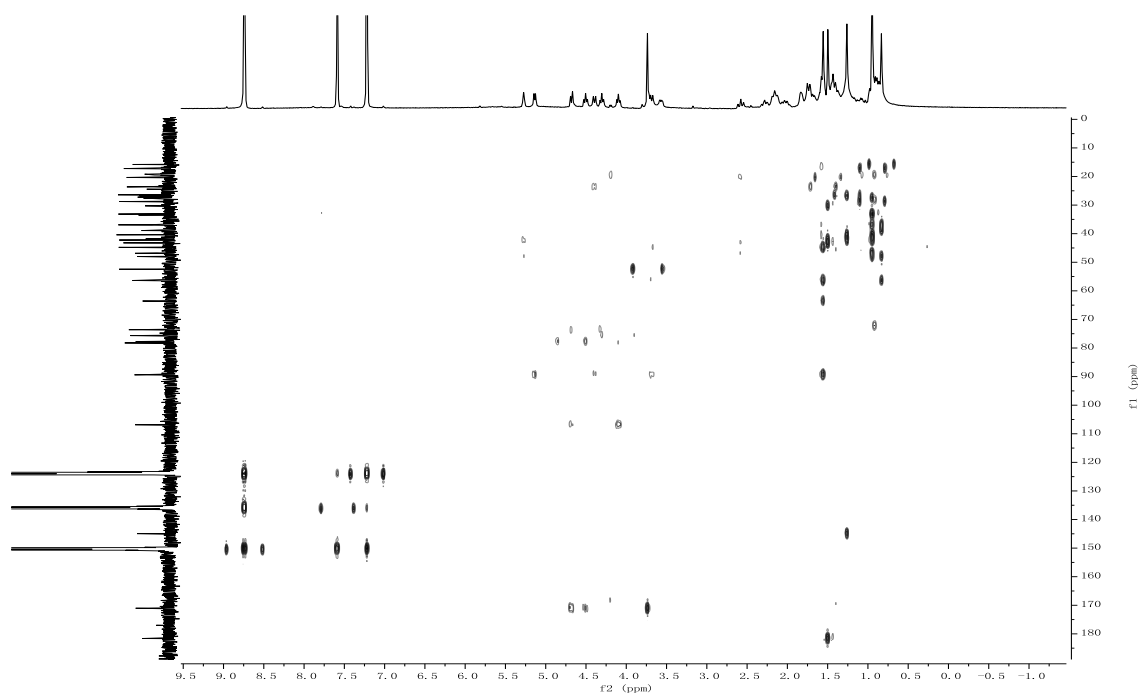


Figure S49. HMBC spectrum of myrioside B 6'-methyl ester (**7**) in Pyr-*d*<sub>5</sub>