

Supporting Information

Rec. Nat. Prod. X:X (202X) XX-XX

Two New Trienoic Acid Derivatives from Marine-derived Fungus

Penicillium oxalicum BTBU20213011

Xinyu Liu ¹, Yifei Dong ¹, Xinwan Zhang ², Xinjun Zhang ³, Caixia Chen ⁴,
Xiuli Xu ^{2*} and Fuhang Song ^{1*}

¹ Key Laboratory of Geriatric Nutrition and Health, Ministry of Education of China; School of Light Industry, Beijing Technology and Business University, Beijing, 100048, P. R.

² School of Ocean Sciences, China University of Geosciences, Beijing, 100083, P. R. China

³ Institute of Tibet Plateau Ecology, Key Laboratory of Forest Ecology in Tibet Plateau (Ministry of Education), Tibet Agriculture & Animal Husbandry University, Nyingchi, Tibet 860000, P. R. China

⁴ School of Medicine, University of Pittsburgh, Pittsburgh, PA 15213, USA

Table of Contents	Page
Figure S1: HR-ESI-MS spectrum of 1 (penioxa acid A)	2
Figure S2: ¹ H-NMR (500 MHz, CD ₃ OD) spectrum of 1 (penioxa acid A)	2
Figure S3: ¹³ C-NMR (125 MHz, CD ₃ OD) spectrum of 1 (penioxa acid A)	3
Figure S4: HSQC spectrum of 1 (penioxa acid A)	3
Figure S5: Expanded HSQC spectrum of 1 (penioxa acid A)	4
Figure S6: ¹ H- ¹ H COSY spectrum of 1 (penioxa acid A)	4
Figure S7: HMBC spectrum of 1 (penioxa acid A)	5
Figure S8: Expanded HMBC spectrum of 1 (penioxa acid A)	5
Figure S9: Expanded HMBC spectrum of 1 (penioxa acid A)	6
Figure S10: ROESY spectrum of 1 (penioxa acid A)	6
Figure S11: HR-ESI-MS spectrum of 2 (penioxa acid B)	7
Figure S12: ¹ H-NMR (500 MHz, CD ₃ OD) spectrum of 2 (penioxa acid B)	7
Figure S13: ¹³ C-NMR (125 MHz, CD ₃ OD) spectrum of 2 (penioxa acid B)	8
Figure S14: HSQC spectrum of 2 (penioxa acid B)	8
Figure S15: H- ¹ H COSY spectrum of 2 (penioxa acid B)	9
Figure S16: HMBC spectrum of 2 (penioxa acid B)	9
Figure S17: Expanded HMBC spectrum of 2 (penioxa acid B)	10
Figure S18: Expanded HMBC spectrum of 2 (penioxa acid B)	10
Figure S19: ROESY spectrum of 2 (penioxa acid B)	11
Figure S20: SciFinder search report for compounds 1 and 2	11
Figure S21: Similarities and structures of SciFinder searched for 1	12

* Corresponding author: E-Mail: xuxl@cugb.edu.cn; songfuhang@btbu.edu.cn

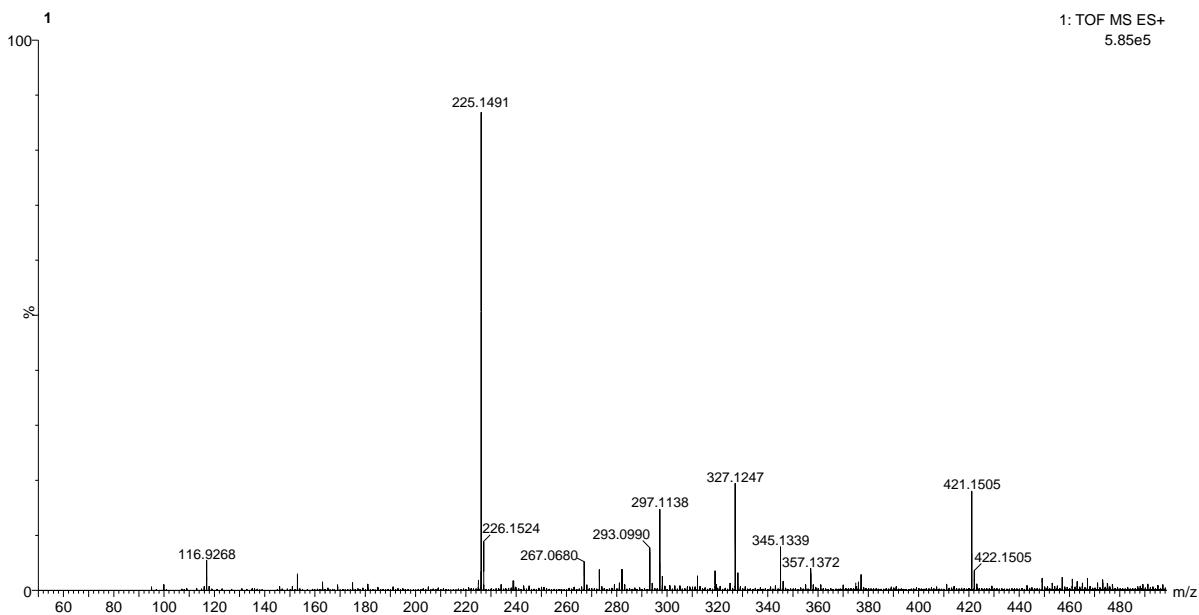


Figure S1: HR-ESI-MS spectrum of **1** (penioxa acid A)

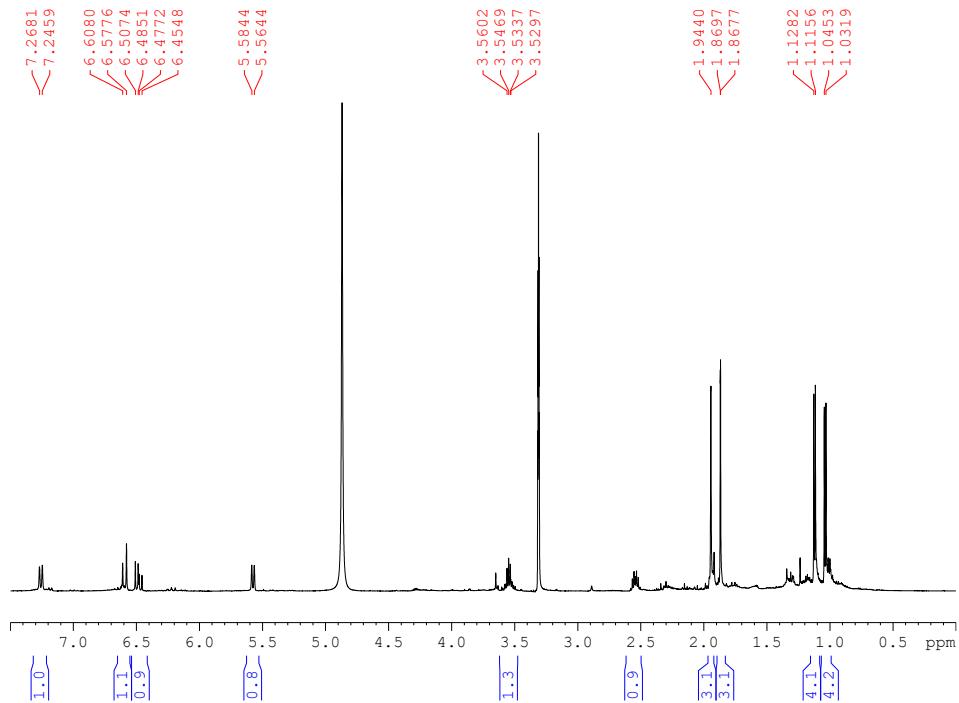


Figure S2: ^1H -NMR (500 MHz, CD_3OD) spectrum of **1** (penioxa acid A)

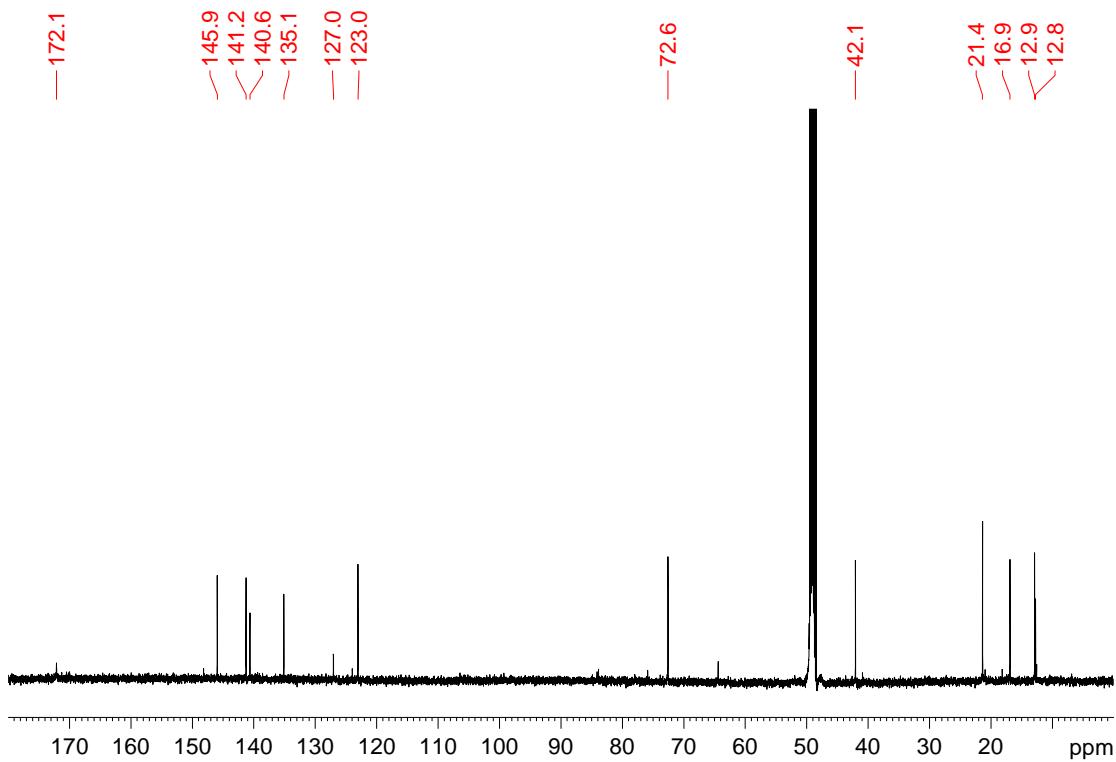


Figure S3: ^{13}C -NMR (125 MHz, CD_3OD) spectrum of **1** (penioxa acid A)

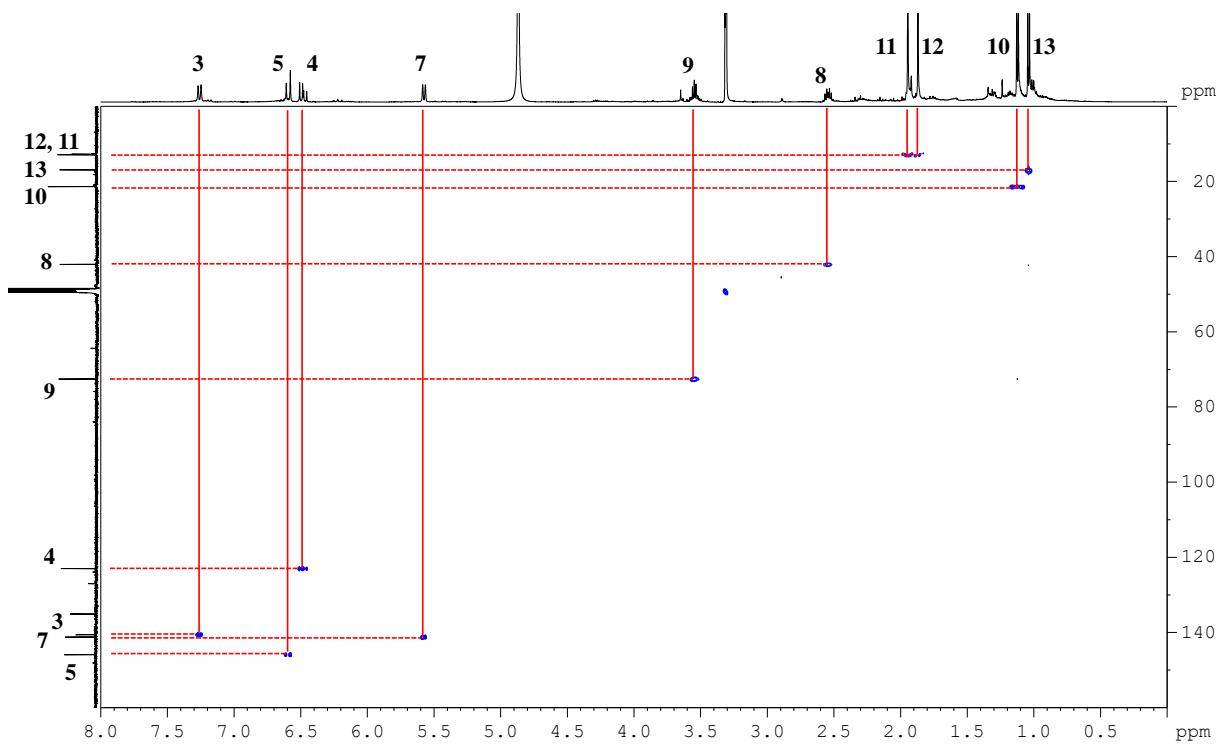


Figure S4: HSQC spectrum of **1** (penioxa acid A)

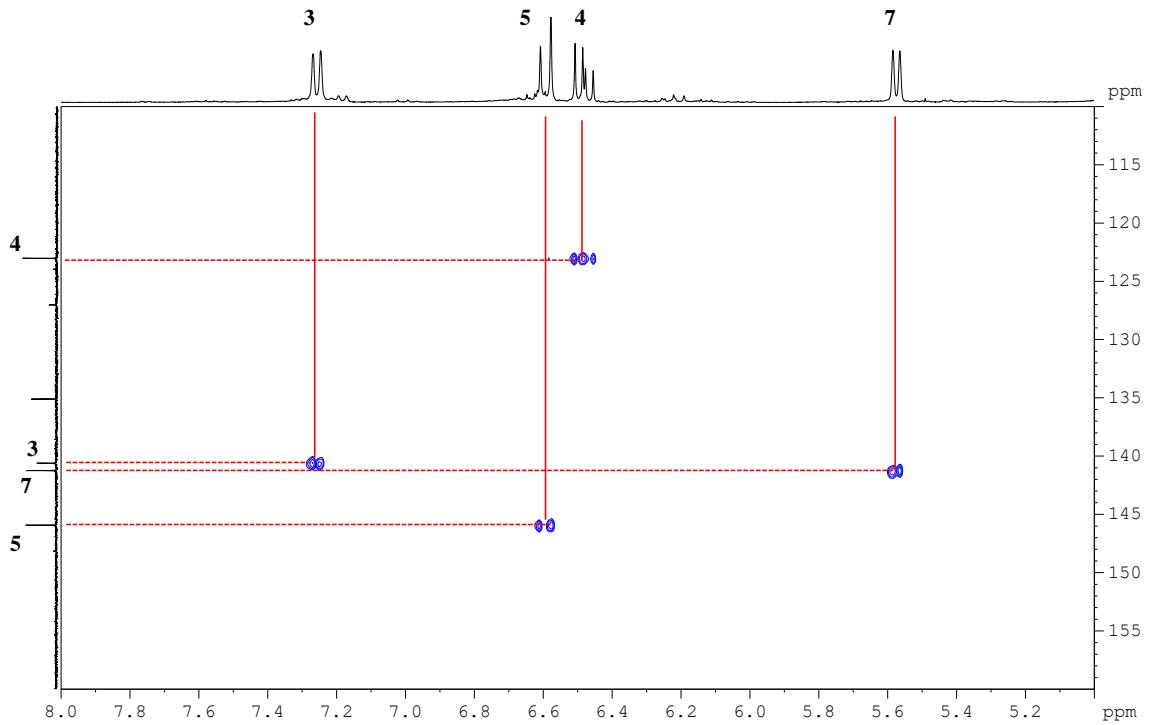


Figure S5: Expanded HSQC spectrum of **1** (penioxa acid A)

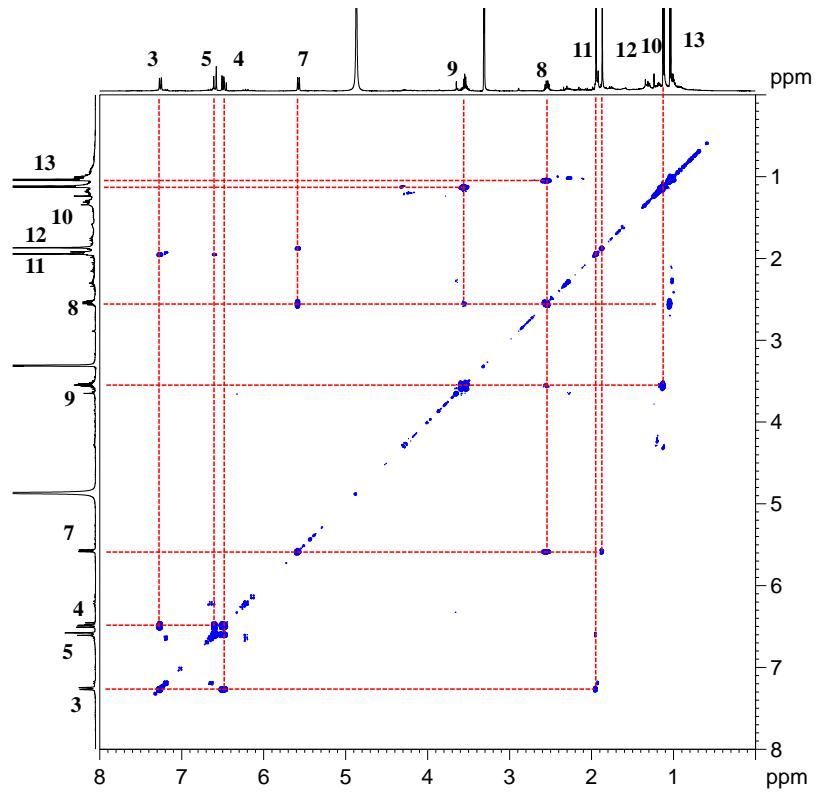


Figure S6: ¹H-¹H COSY spectrum of **1** (penioxa acid A)

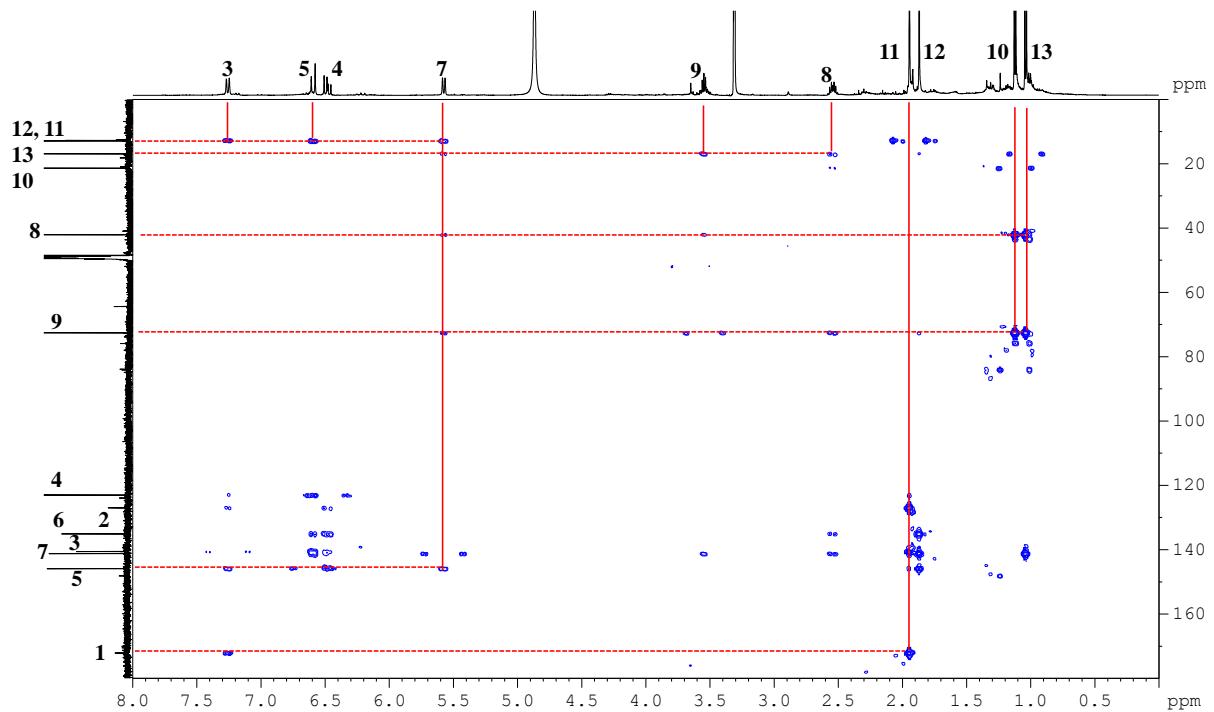


Figure S7: HMBC spectrum of **1** (penioxa acid A)

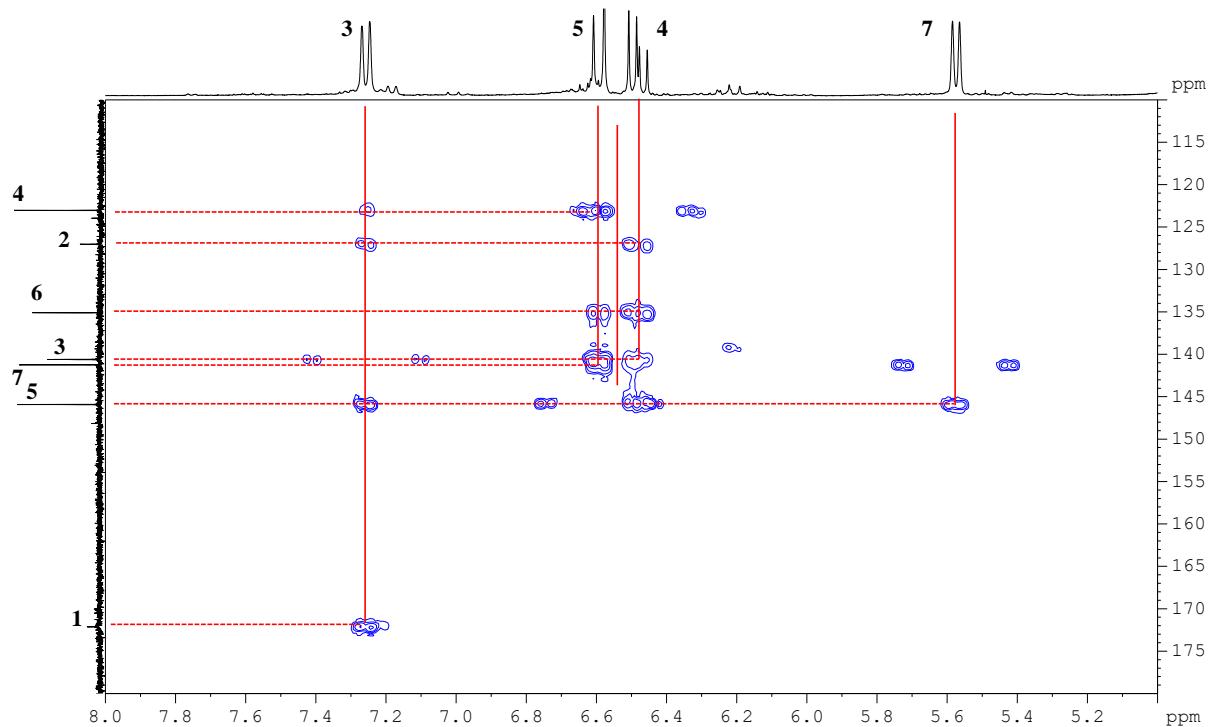


Figure S8: Expanded HMBC spectrum of **1** (penioxa acid A)

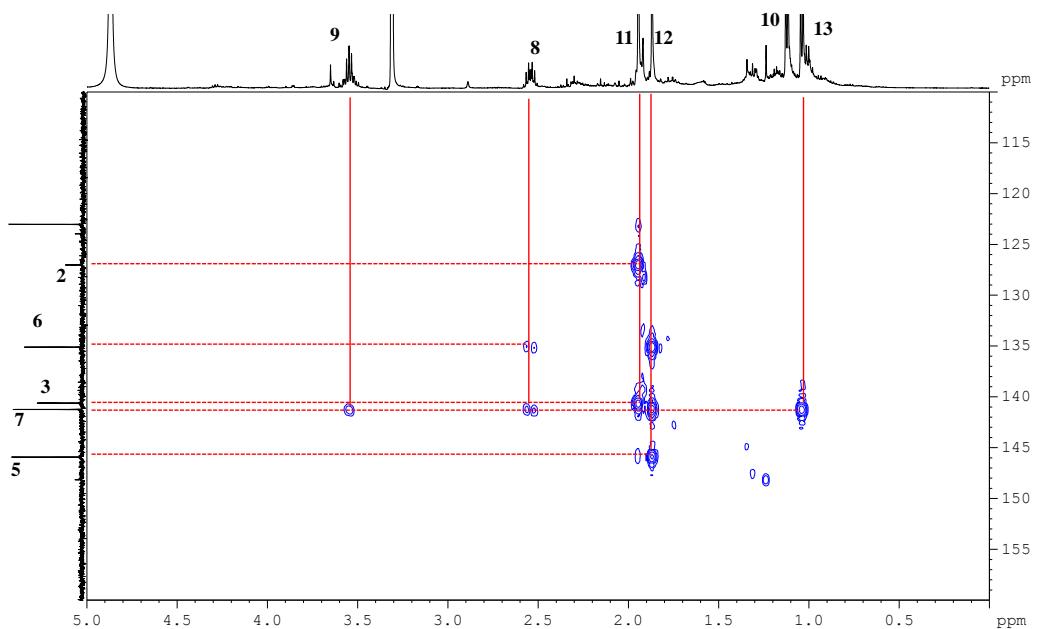


Figure S9: Expanded HMBC spectrum of **1** (penioxa acid A)

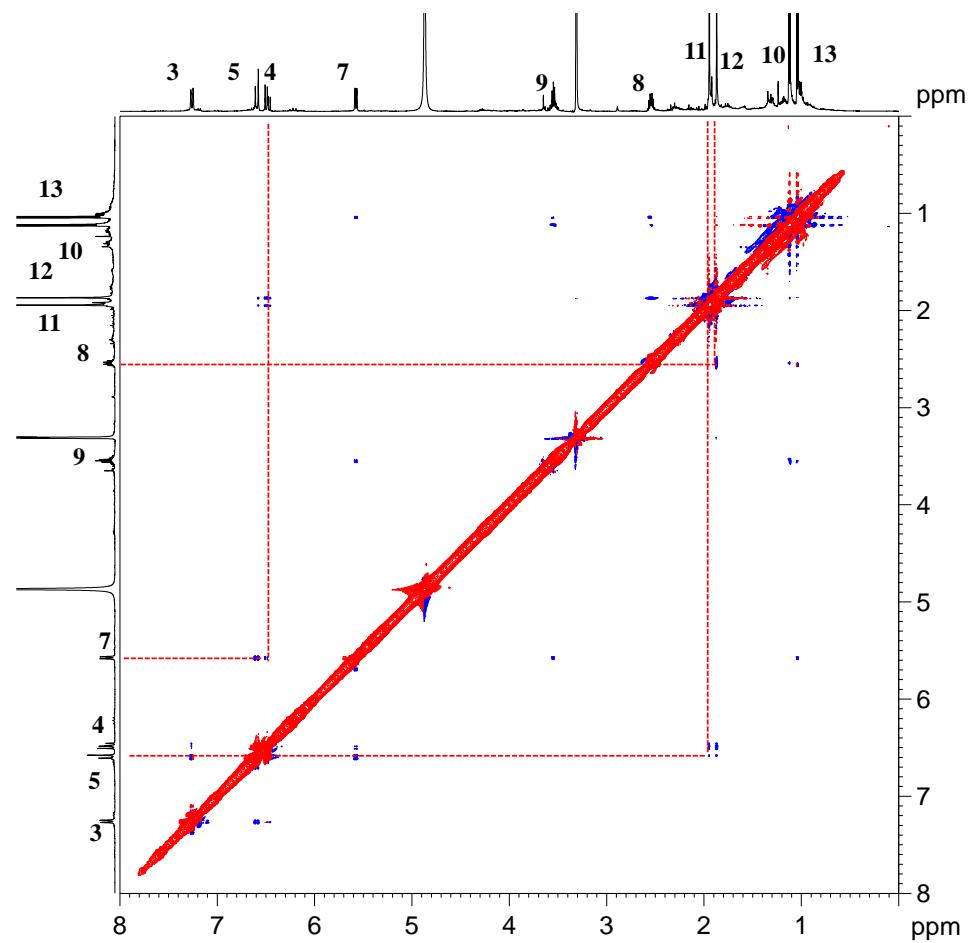


Figure S10: ROESY spectrum of **1** (penioxa acid A)

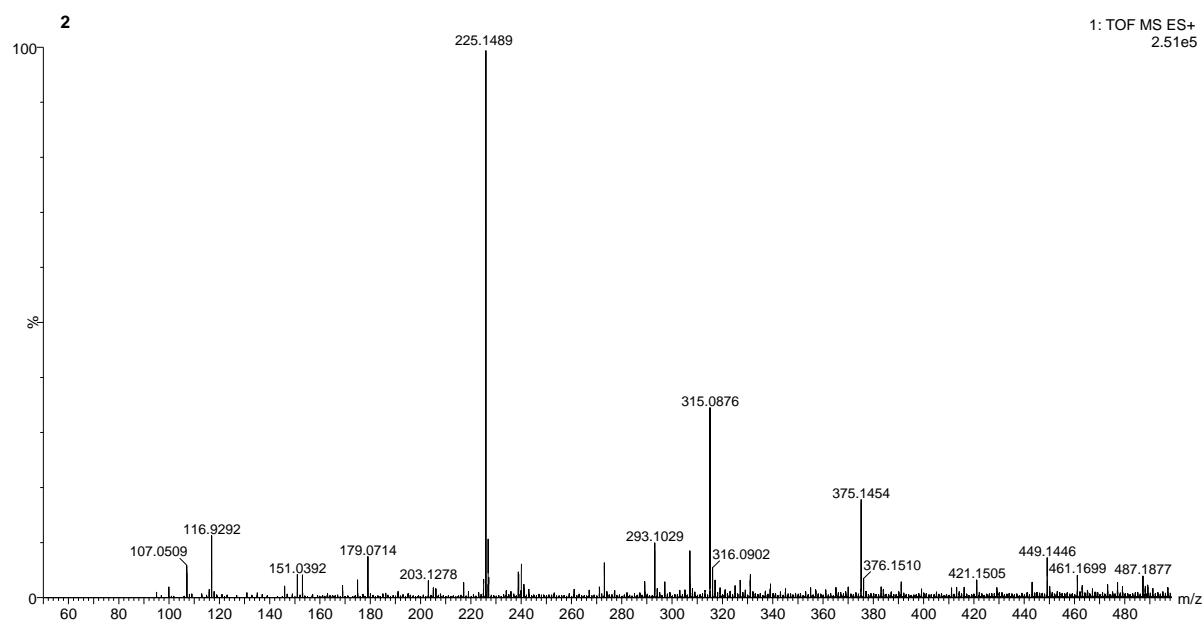


Figure S11: HR-ESI-MS spectrum of **2** (penioxa acid B)

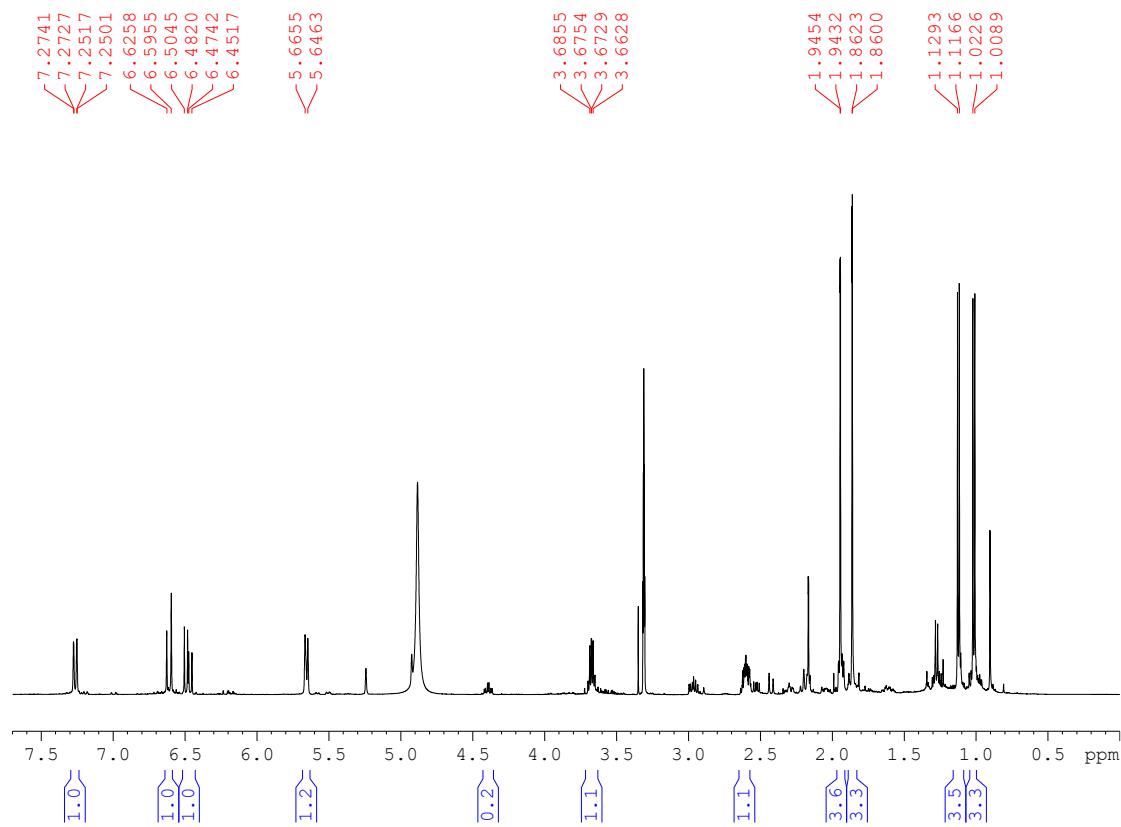


Figure S12: ^1H -NMR (500 MHz, CD_3OD) spectrum of **2** (penioxa acid B)

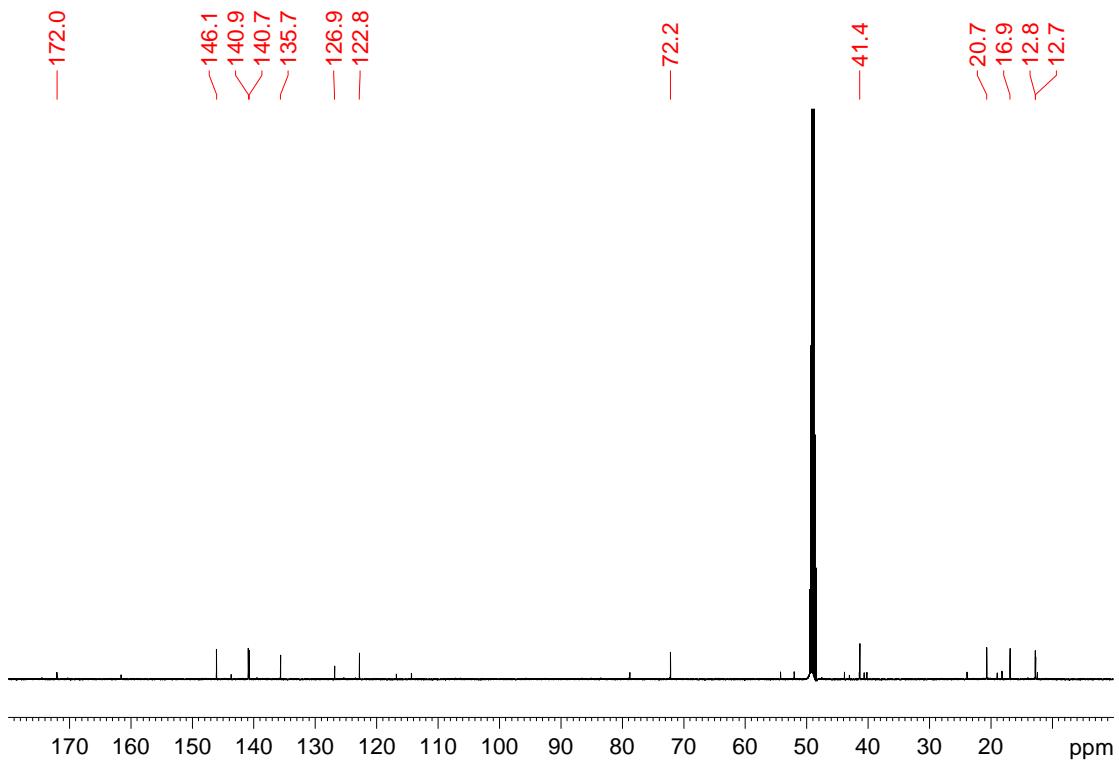


Figure S13: ^{13}C -NMR (125 MHz, CD_3OD) spectrum of **2** (penioxa acid B)

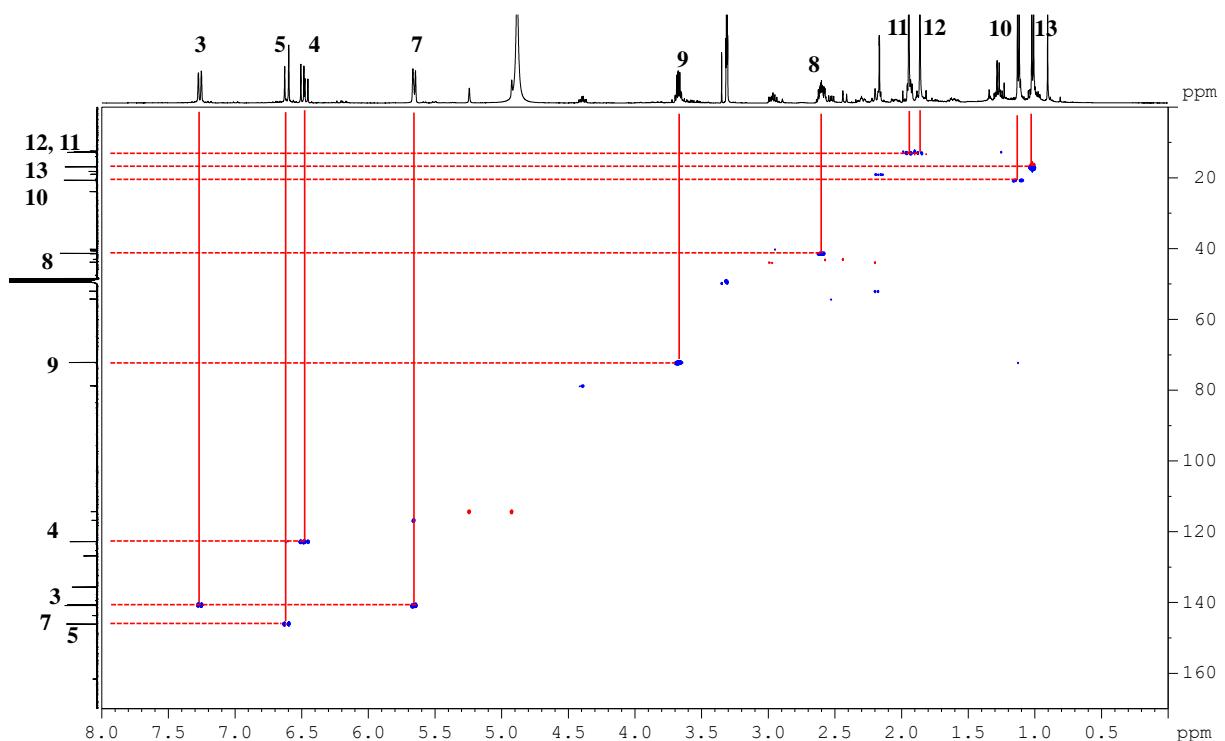


Figure S14: HSQC spectrum of **1** (penioxa acid B)

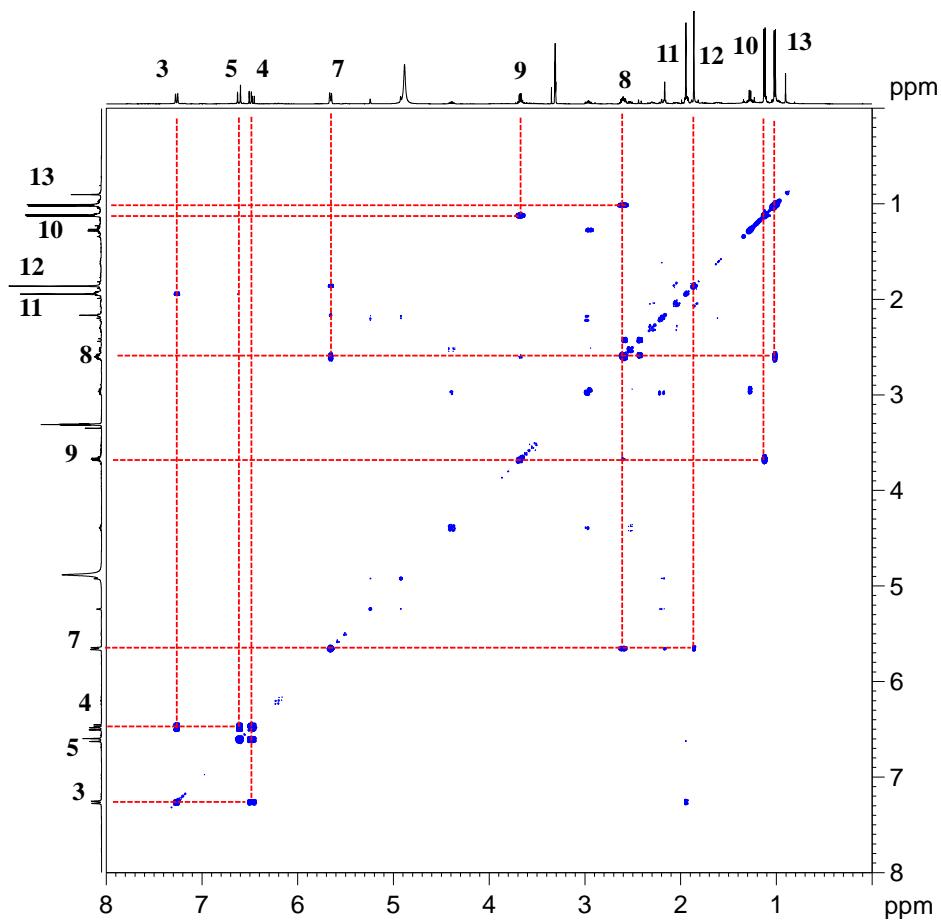


Figure S15: ¹H-¹H COSY spectrum of **2** (penioxa acid B)

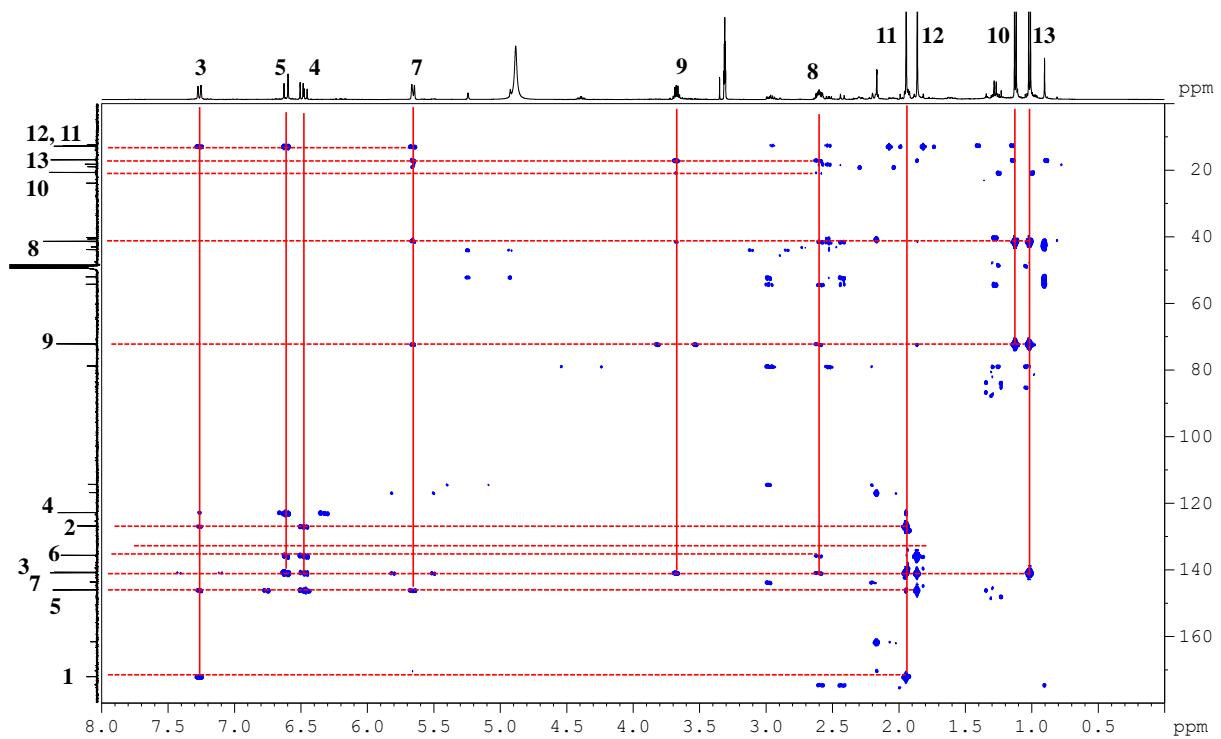


Figure S16: HMBC spectrum of **2** (penioxa acid B)

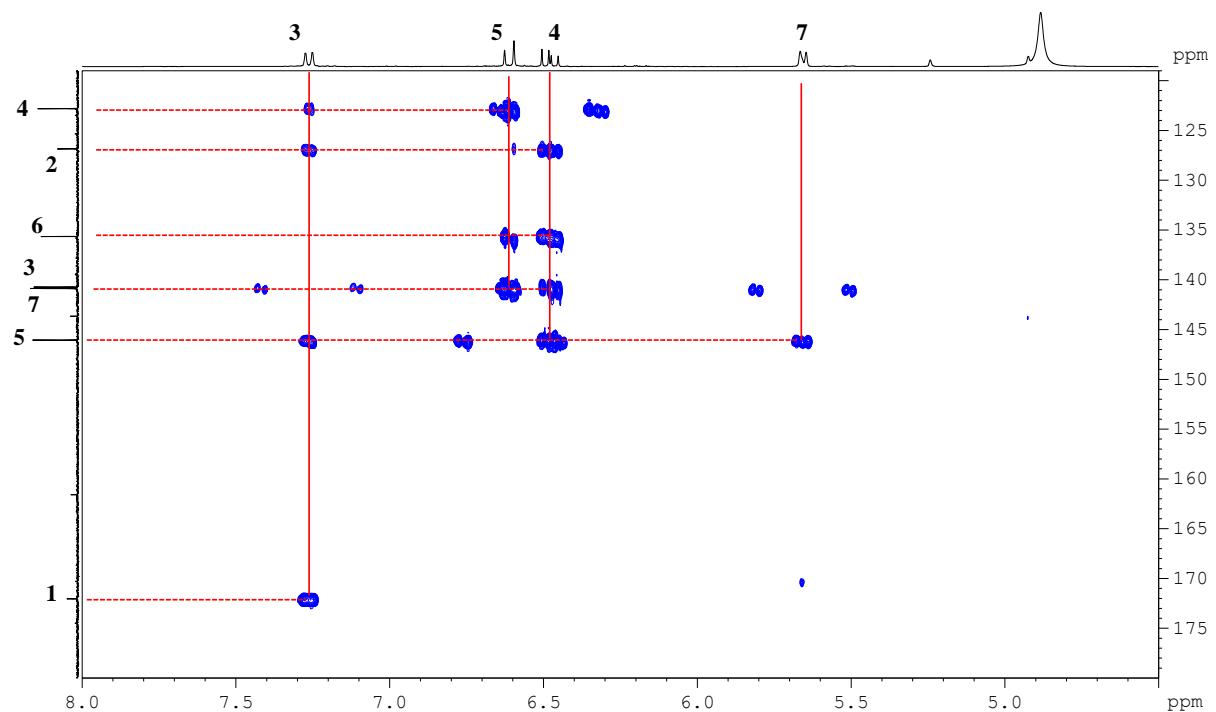


Figure S17: Expanded HMBC spectrum of **2** (penioxa acid B)

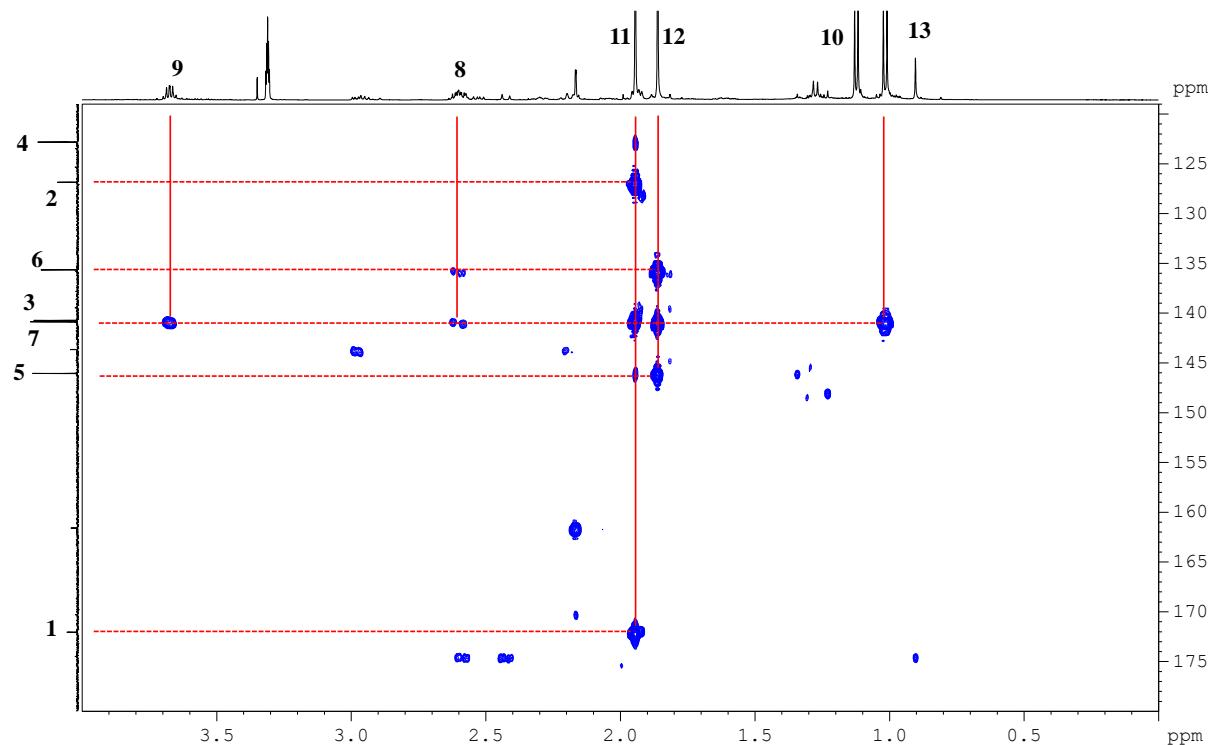


Figure S18: Expanded HMBC spectrum of **2** (penioxa acid B)

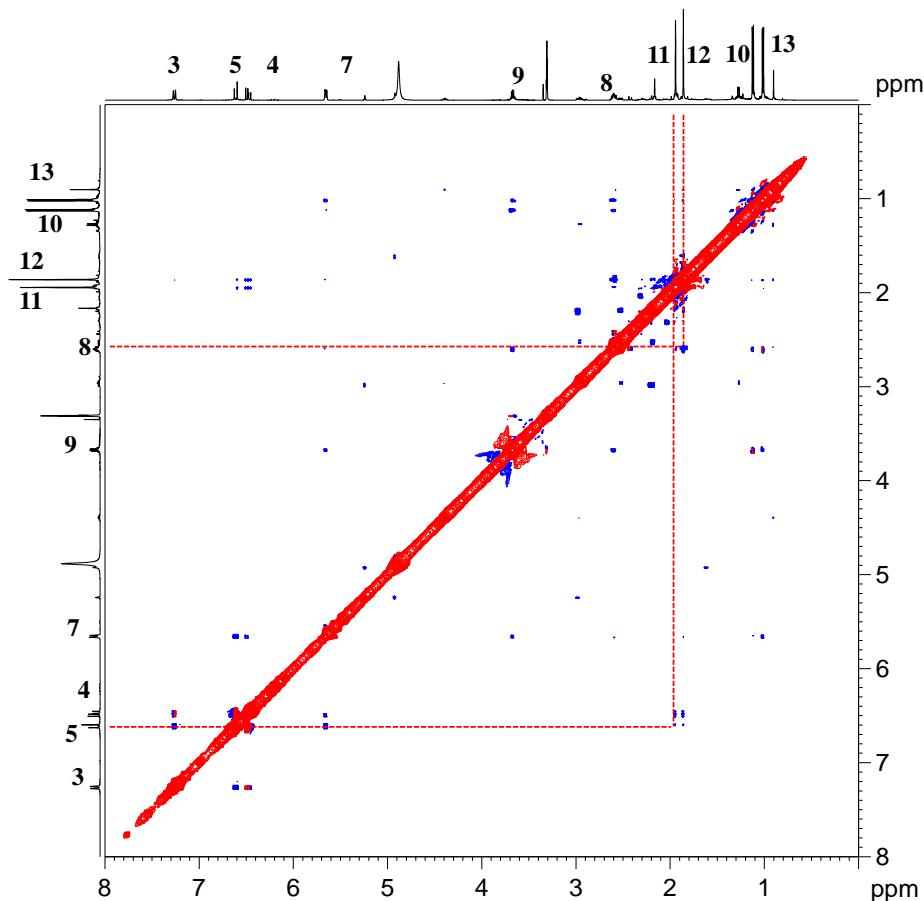


Figure S19: ROESY spectrum of **2** (penioxa acid B)

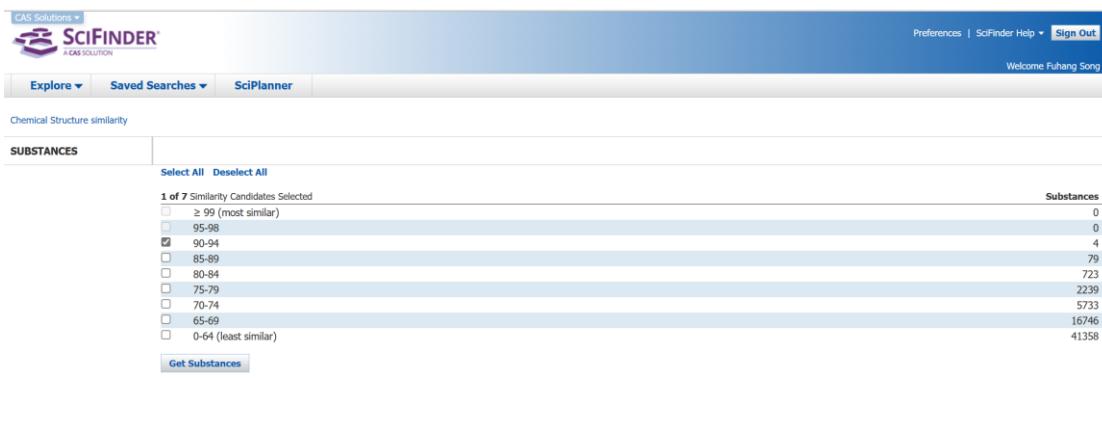


Figure S20: SciFinder search report for compound **1**

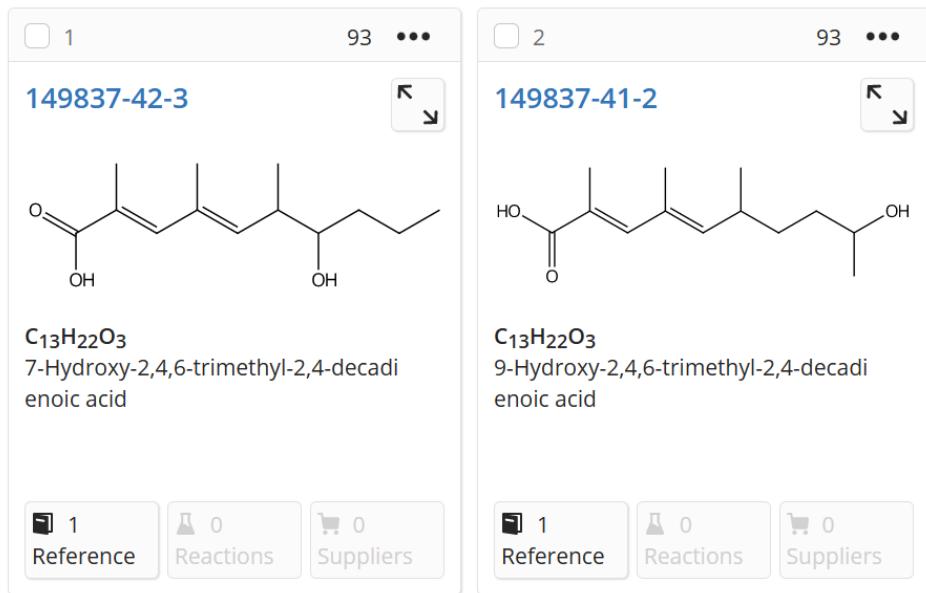


Figure S21: Similarities and structures of SciFinder searched structures with compound 1