Supplemental material

New Andrastin-type Meroterpenoids from the Marine-Derived Fungus *Penicillium* sp.

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† These authors contributed equally to this work.

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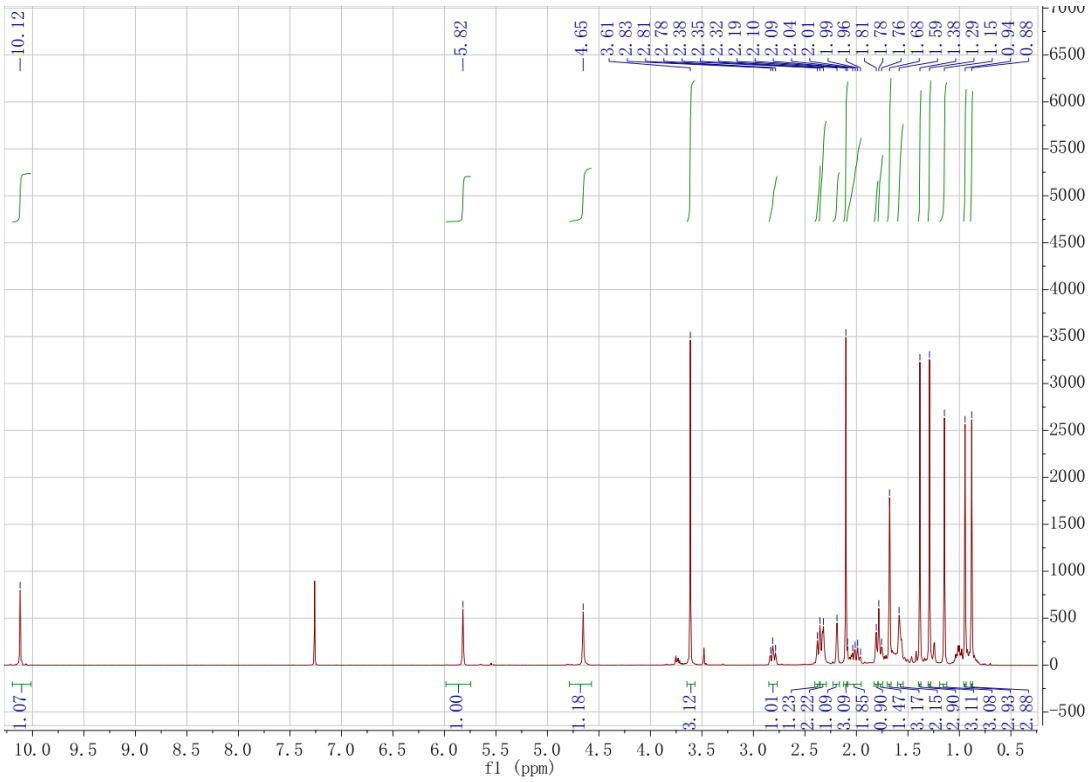


Figure S1. ^{1}H NMR spectrum of penimeroterpenoid A (**1**; 500 MHz, $CDCl_3$)

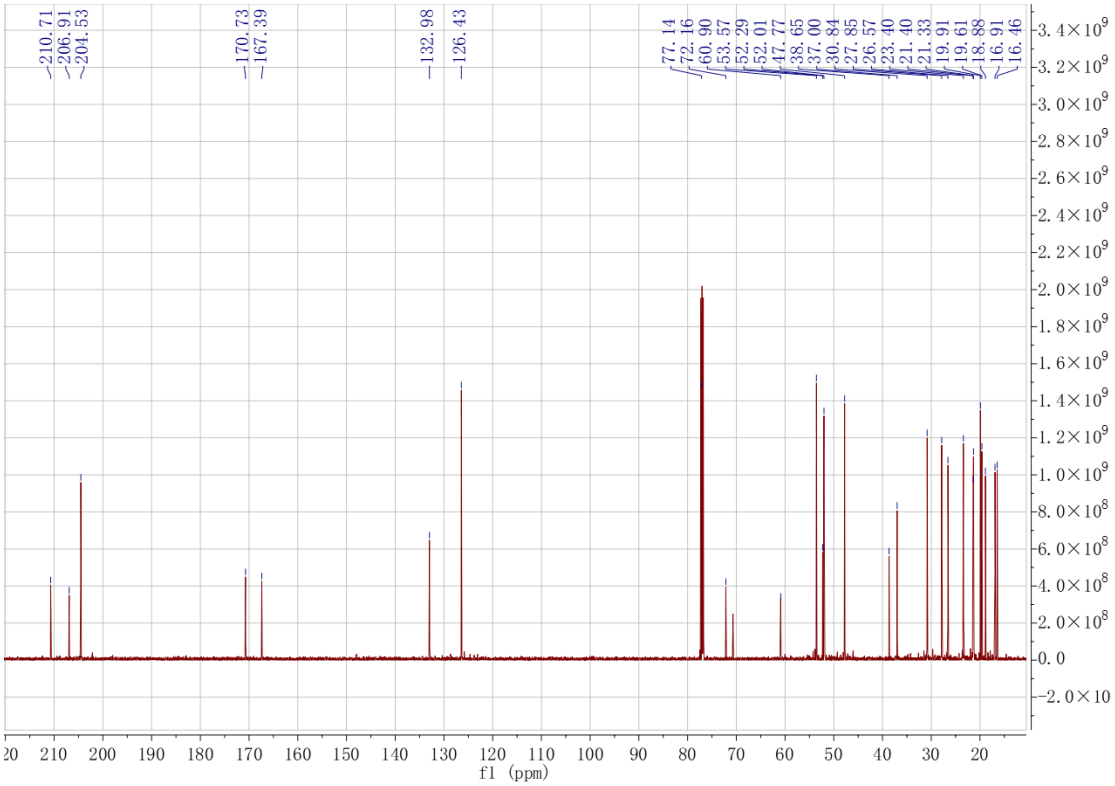


Figure S2. ^{13}C NMR spectrum of penimeroterpenoid A (**1**; 125 MHz, $CDCl_3$)

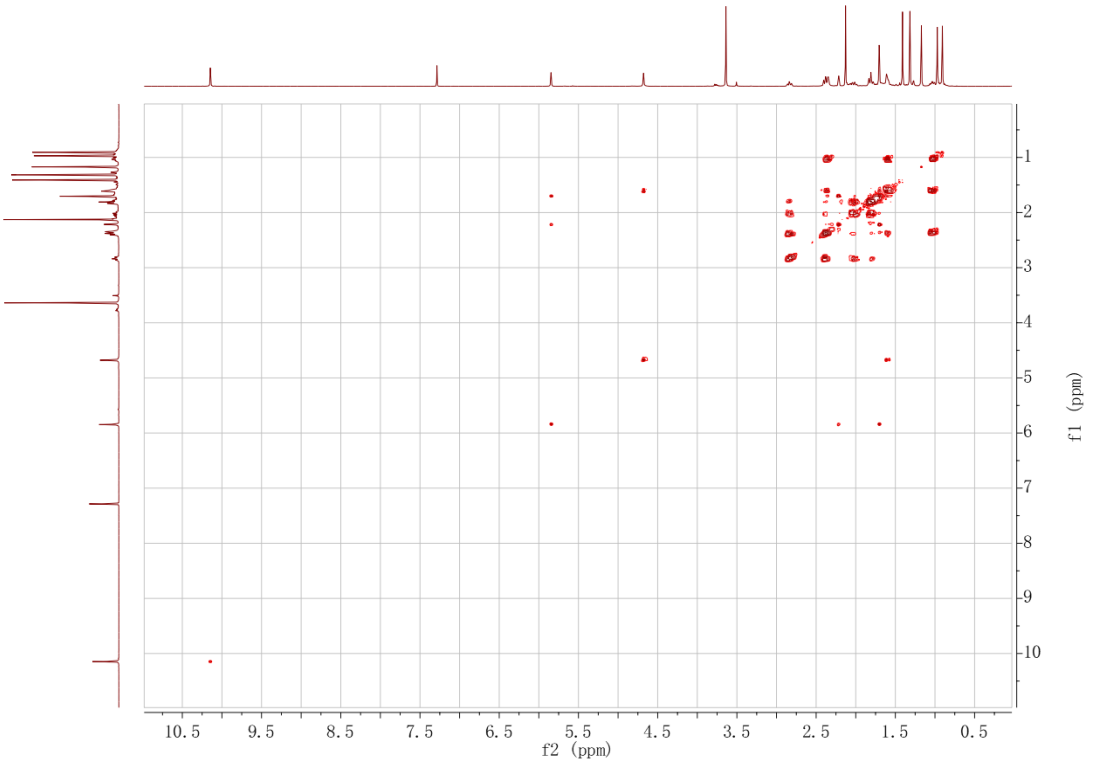


Figure S3. ^{1}H-^{1}H COSY spectrum of penimeroterpenoid A (**1**; 500 MHz, $CDCl_3$)

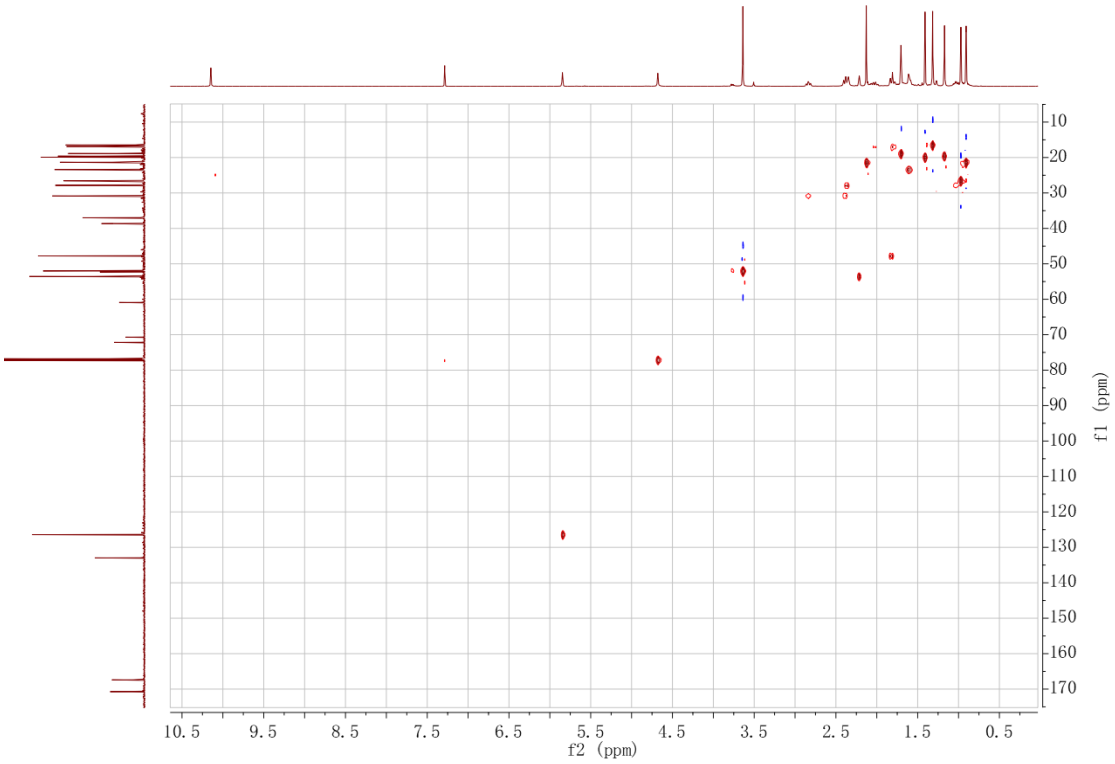


Figure S4. HSQC spectrum of penimeroterpenoid A (**1**; 500 MHz, $CDCl_3$)

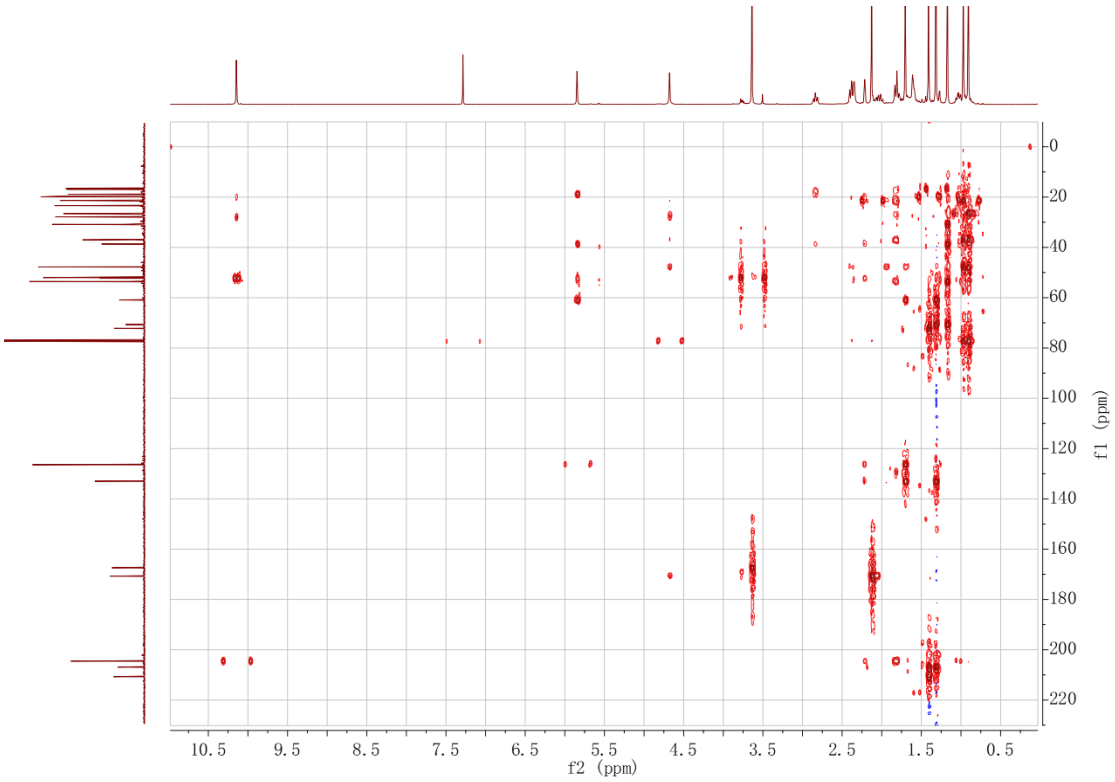


Figure S5. HMBC spectrum of penimeroterpenoid A (**1**; 500 MHz, $CDCl_3$)

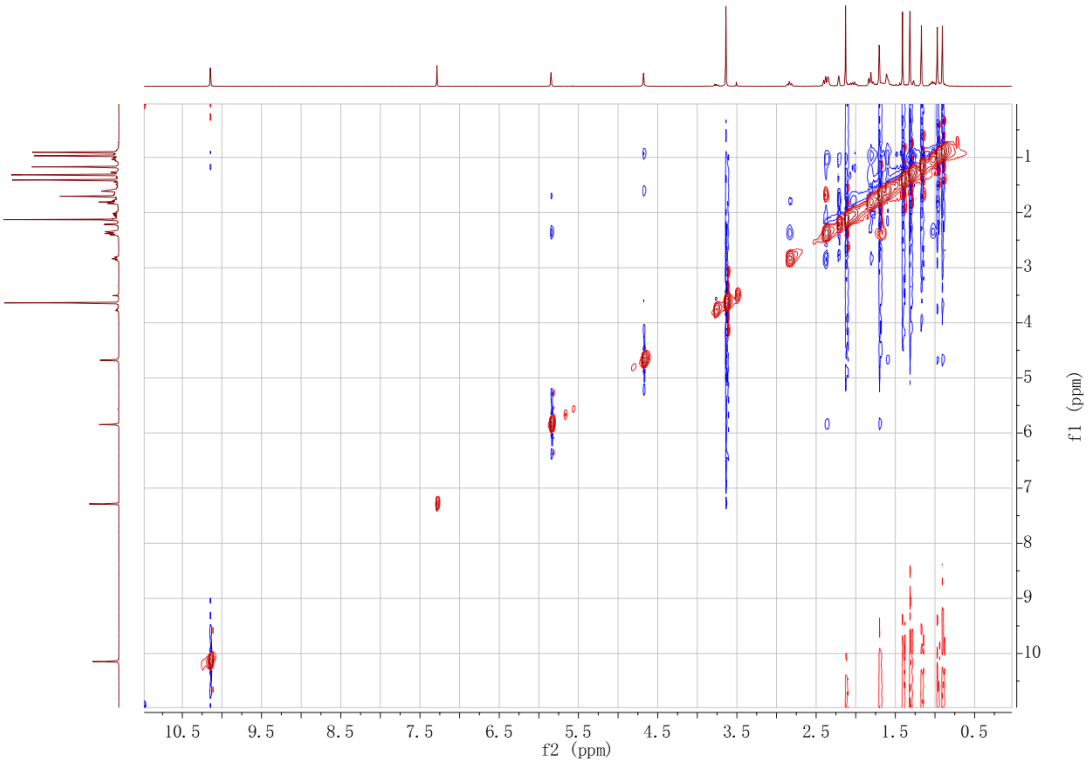


Figure S6. NOESY spectrum of penimeroterpenoid A (**1**; 500 MHz, $CDCl_3$)

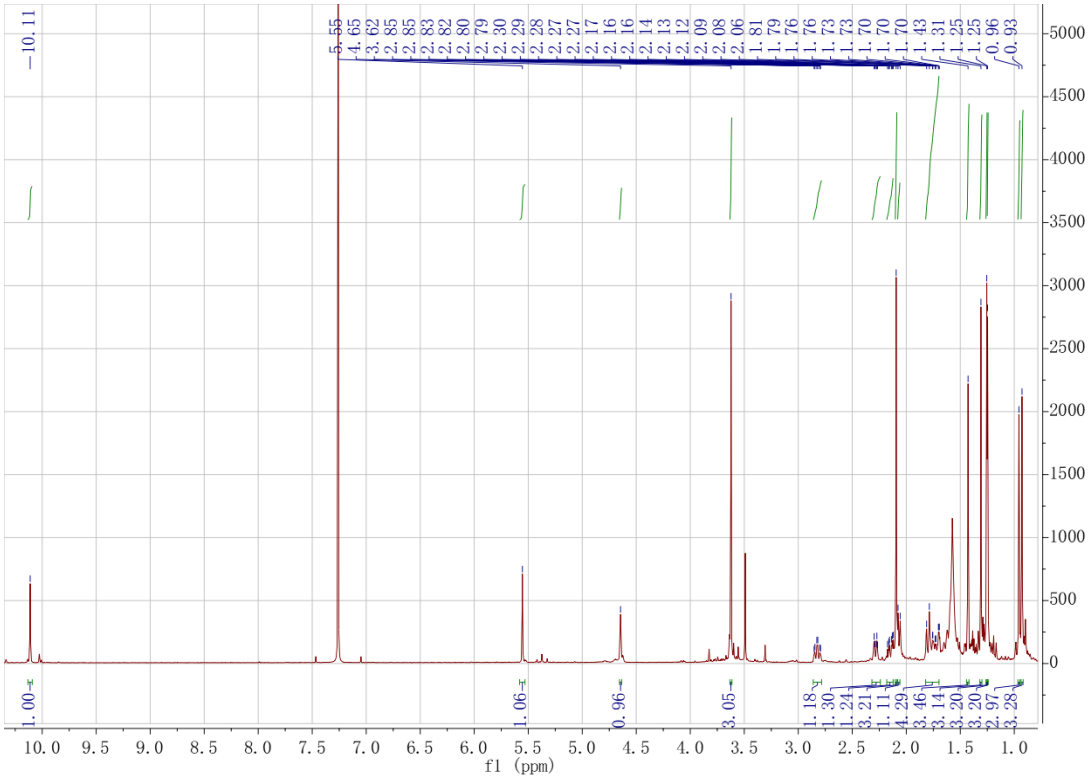


Figure S7. ^{1}H NMR spectrum of penimeroterpenoid B (**2**; 500 MHz, $CDCl_3$)

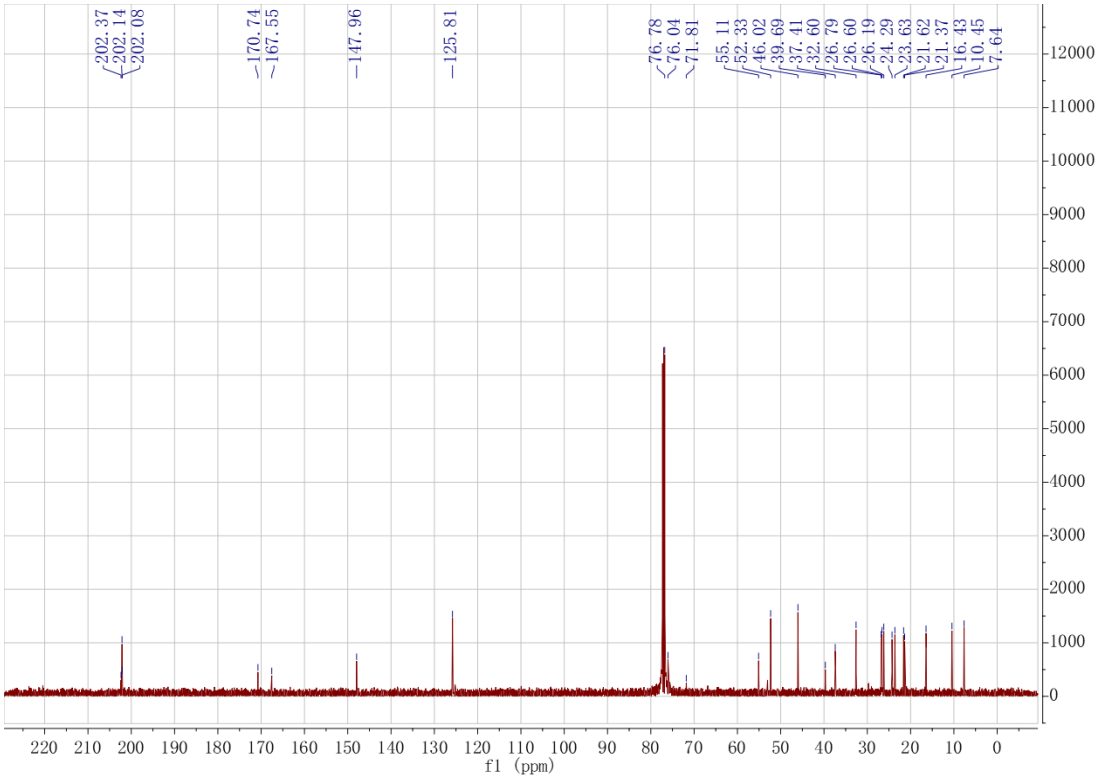


Figure S8. ^{13}C NMR spectrum of penimeroterpenoid B (**2**; 125 MHz, $CDCl_3$)

Figure S9. ^{1}H-^{1}H COSY spectrum of penimeroterpenoid B (**2**; 500 MHz, $CDCl_3$)

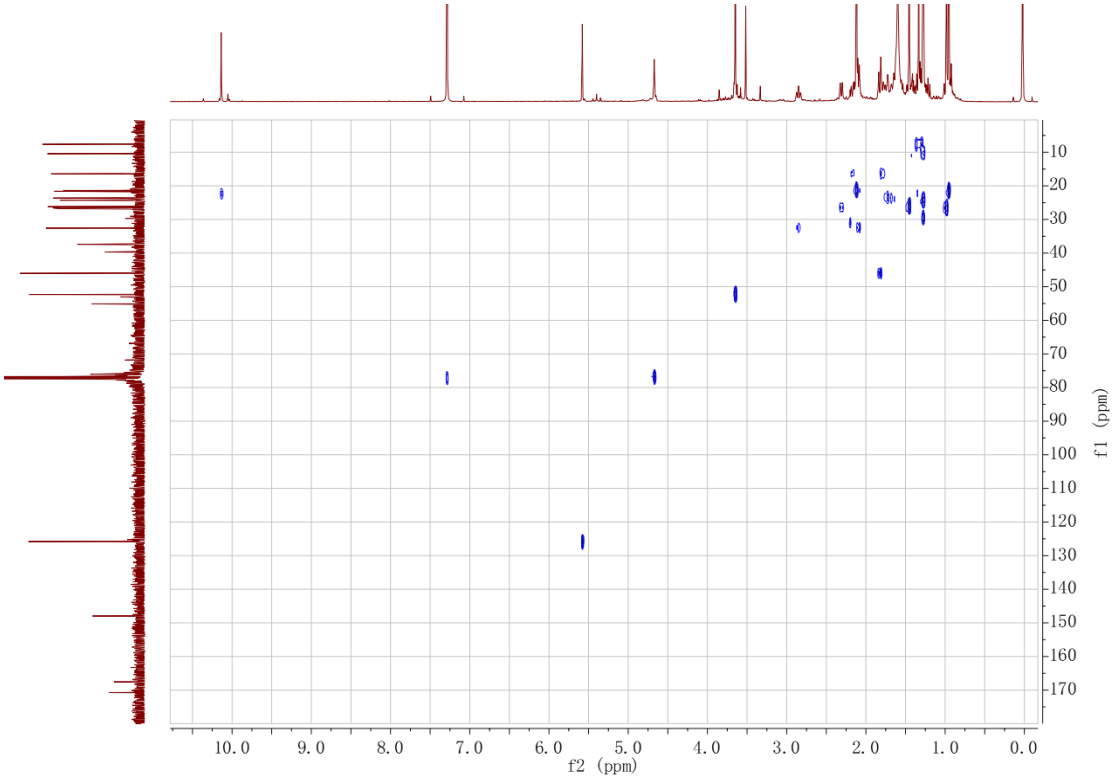


Figure S10. HSQC spectrum of penimeroterpenoid B (**2**; 500 MHz, $CDCl_3$)

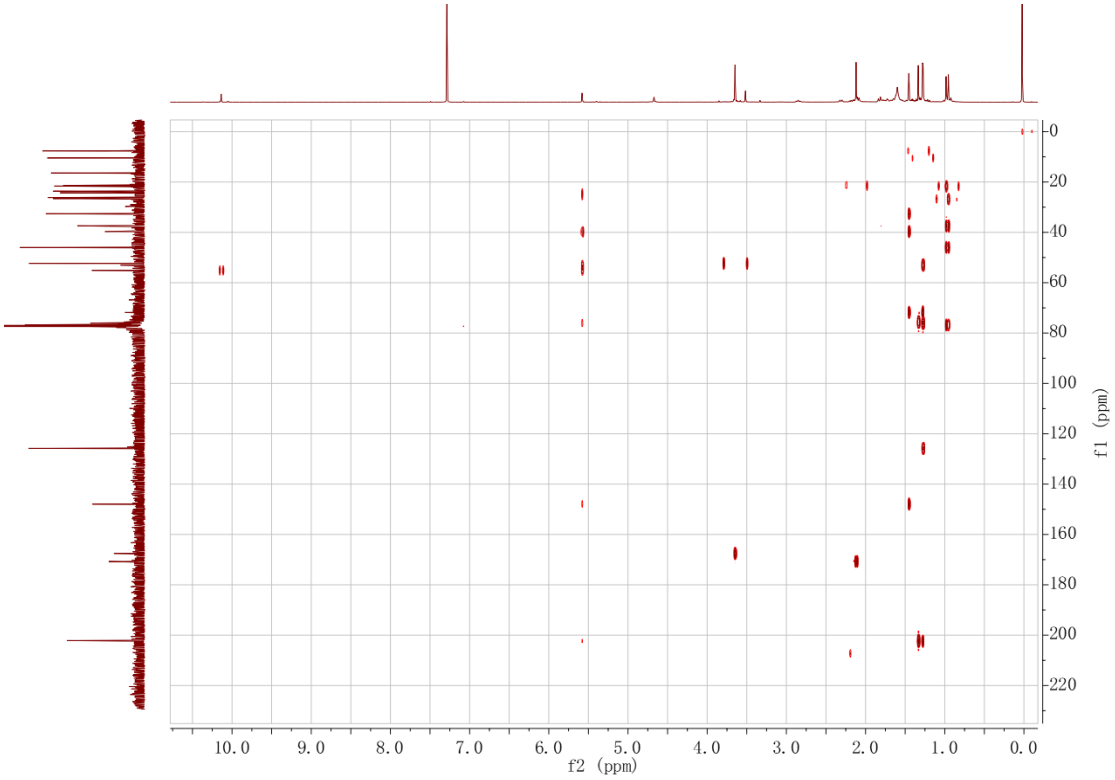


Figure S11. HMBC spectrum of penimeroterpenoid B (**2**; 500 MHz, $CDCl_3$)

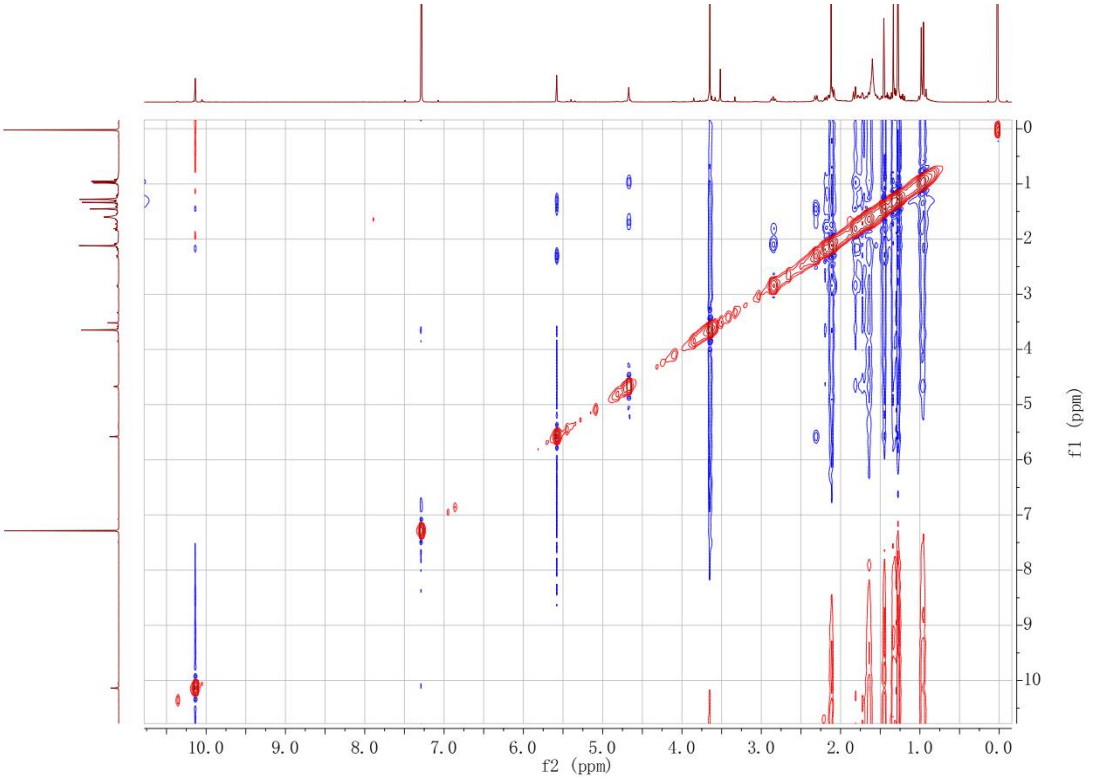


Figure S12. NOESY spectrum of penimeroterpenoid B (**2**; 500 MHz, $CDCl_3$)

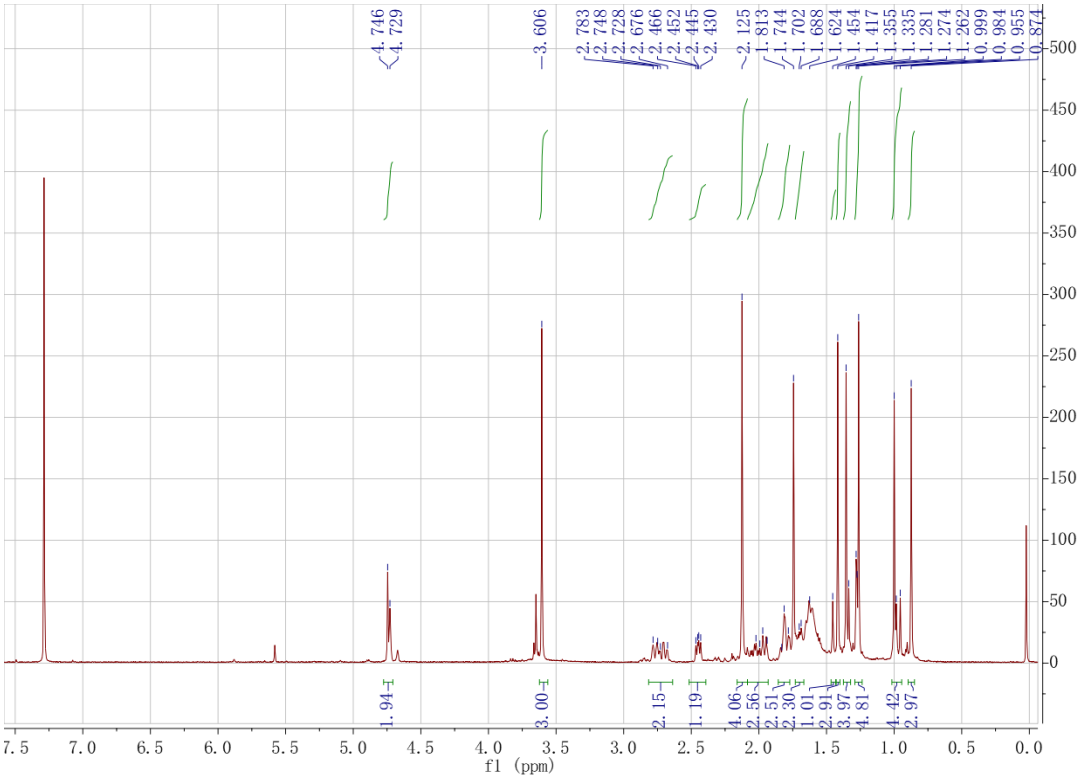


Figure S13. ^{1}H NMR spectrum of penimeroterpenoid C (**3**; 500 MHz, $CDCl_3$)

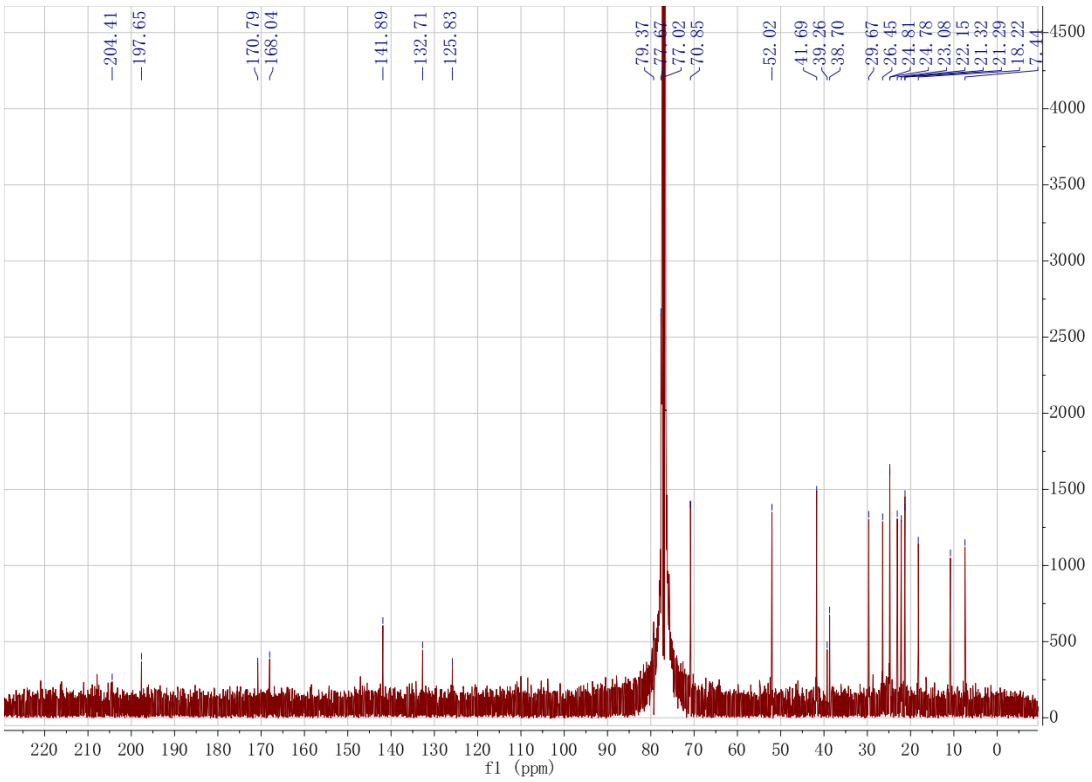


Figure S14. ^{13}C NMR spectrum of penimeroterpenoid C (**3**; 125 MHz, $CDCl_3$)

Figure S15. ^{1}H-^{1}H COSY spectrum of penimeroterpenoid C (**3**; 500 MHz, $CDCl_3$)

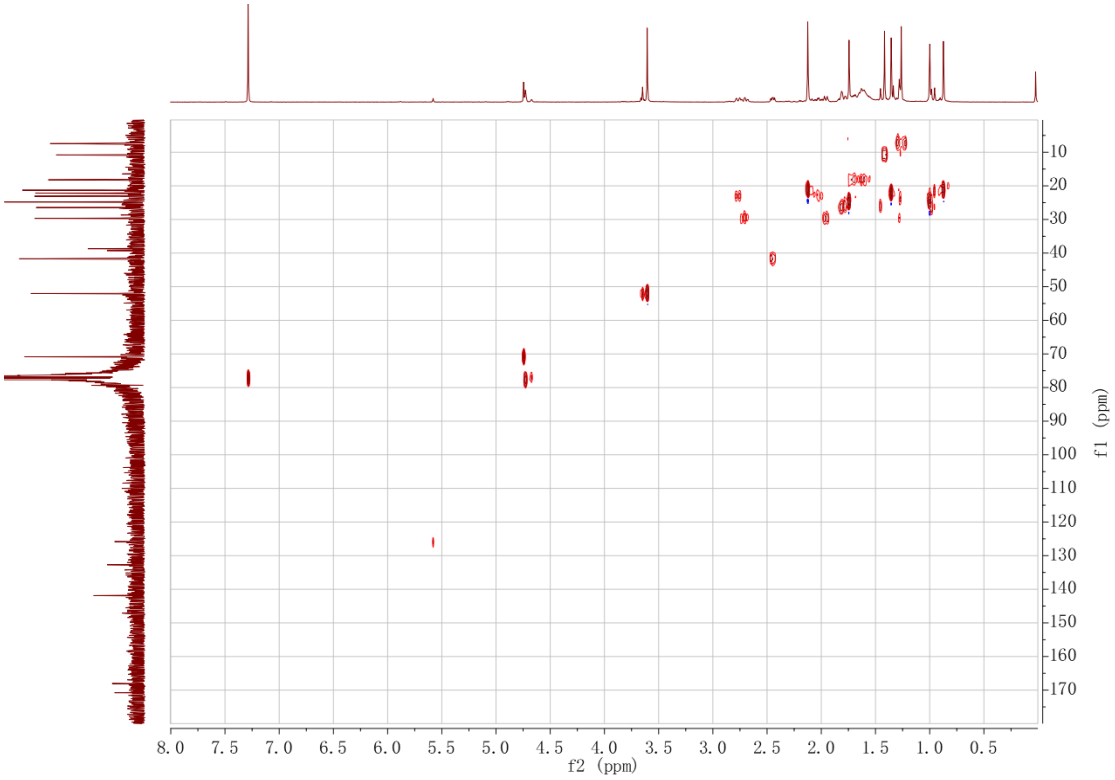
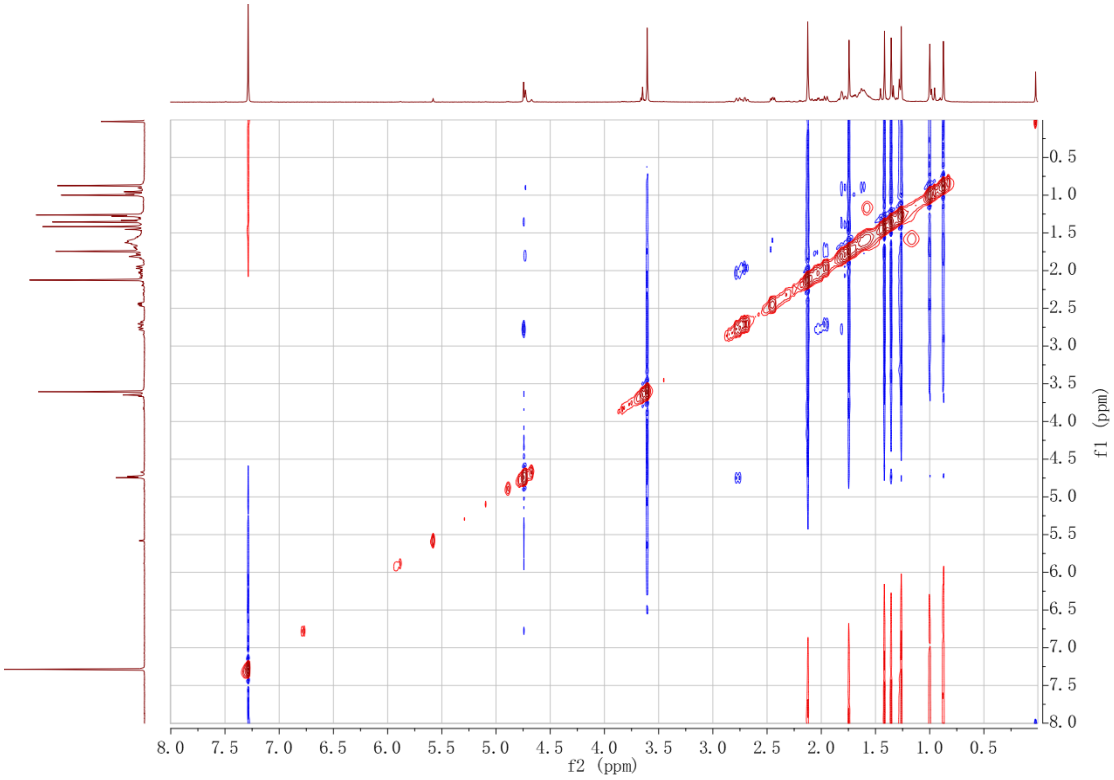


Figure S16. HSQC spectrum of penimeroterpenoid C (**3**; 500 MHz, $CDCl_3$)

Figure S17. HMBC spectrum of penimeroterpenoid C (**3**; 500 MHz, $CDCl_3$)



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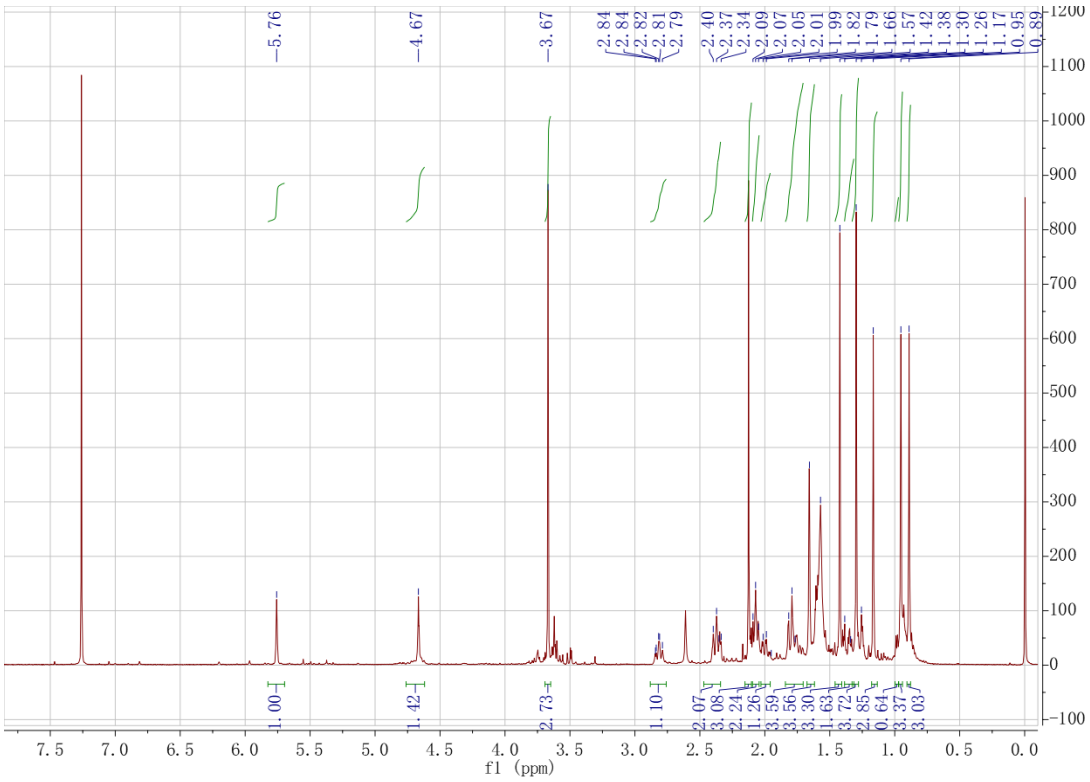


Figure S19. ^{1}H NMR spectrum of andrastone E (**4**; 500 MHz, $CDCl_3$)

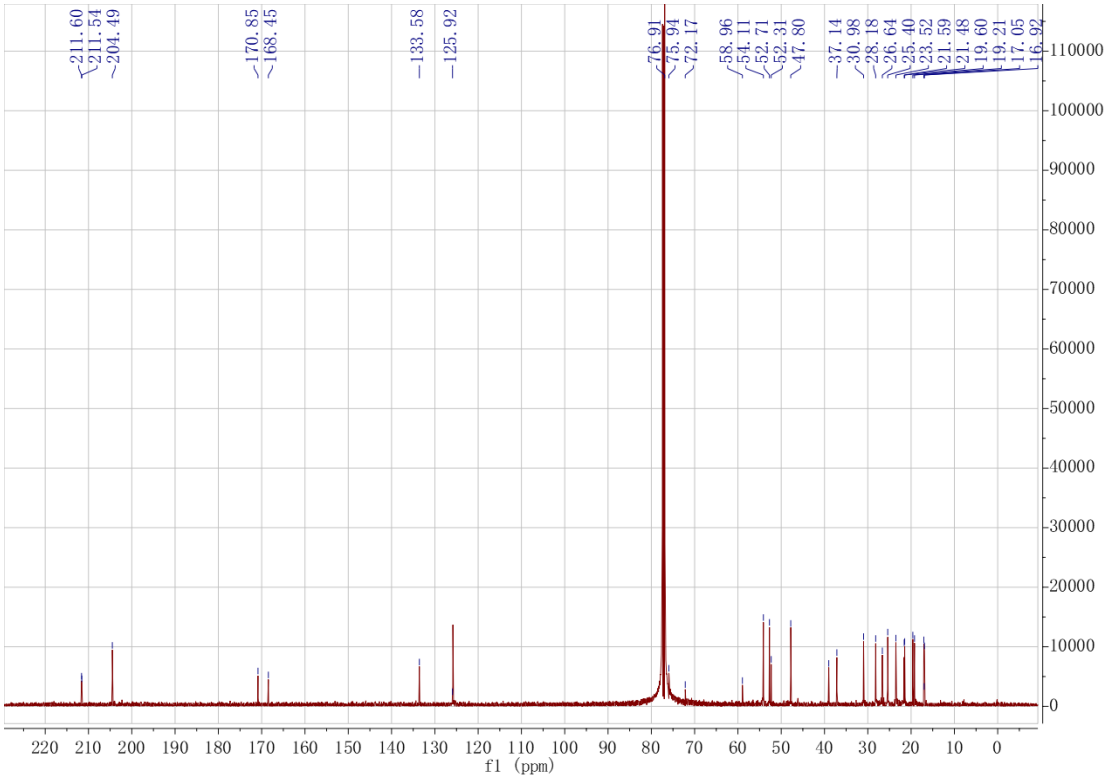


Figure S20. ^{13}C NMR spectrum of andrastone E (**4**; 125 MHz, $CDCl_3$)

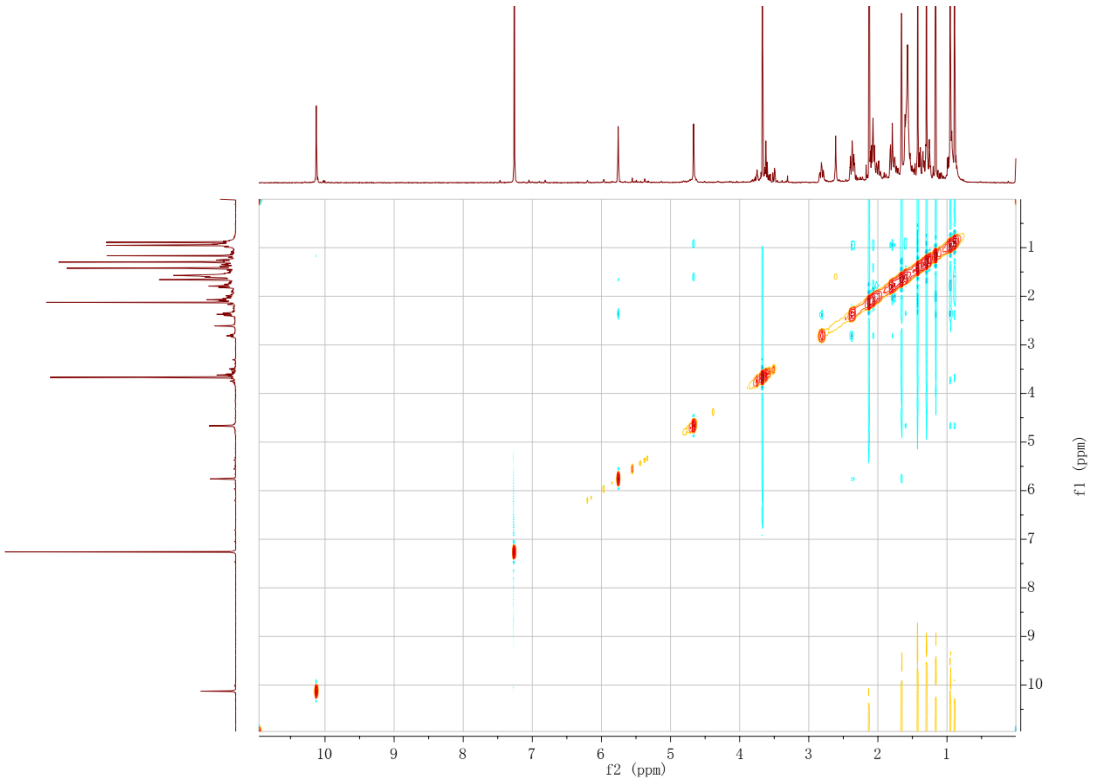
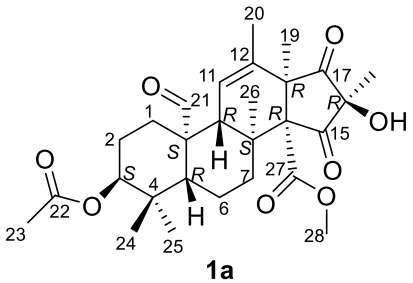
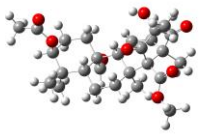
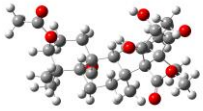
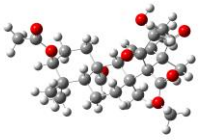
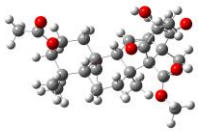
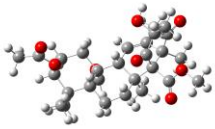
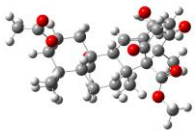
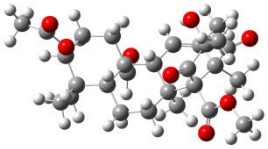
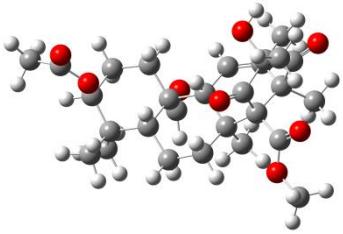
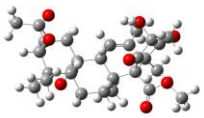


Figure S21. NOESY NMR spectrum of andrastone E (**4**; 500 MHz, $CDCl_3$)



1a

Conformers	Populations
	4.15 %
	37.49 %
	1.23 %
	4.05 %

	10.71 %
	1.82 %
	35.27 %
	1.20 %
	4.07 %

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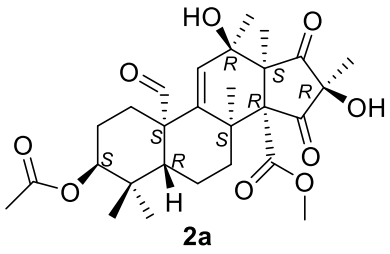
<tr><td colspan="2"> 

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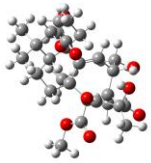
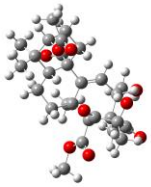
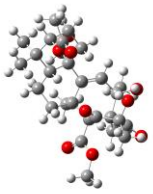
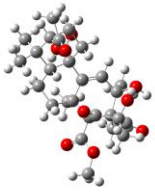
<tr><td>  </td><td>7.71 %</td></tr>
<tr><td>  </td><td>8.98 %</td></tr>
<tr><td>  </td><td>45.92 %</td></tr>
<tr><td>  </td><td>3.51 %</td></tr>
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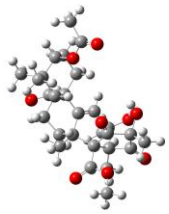
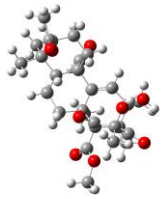
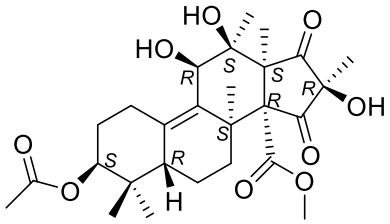
	30.35 %
	3.53 %
 **3a**	
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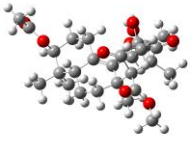	8.24 %

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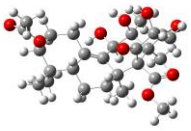	29.38 %
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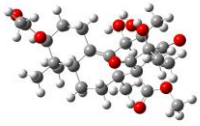
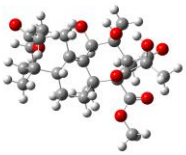
	8.00 %
	29.61 %

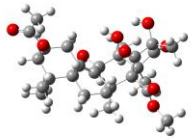
	3.99 %

Figure S22. ECD conformers of penimeroterpenoids A–C (**1**–**3**)