

Supporting Information

**Cytotoxic Tetrahydroxanthone Dimers from the
Mangrove-Associated Fungus *Aspergillus versicolor*
HDN1009**

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List of Supporting Information

Figure S1. ¹ H NMR spectrum (500 MHz) of 5- <i>epi</i> -asperdichrome (1) in CDCl ₃	S3
Figure S2. ¹³ C NMR spectrum (125 MHz) of 5- <i>epi</i> -asperdichrome (1) in CDCl ₃	S3
Figure S3. HSQC spectrum of 5- <i>epi</i> -asperdichrome (1)	S4
Figure S4. ¹ H- ¹ H COSY spectrum of 5- <i>epi</i> -asperdichrome (1)	S4
Figure S5. HMBC spectrum of 5- <i>epi</i> -asperdichrome (1)	S5
Figure S6. NOE spectrum of 5- <i>epi</i> -asperdichrome (1)	S5
Figure S7. HRESIMS spectrum of 5- <i>epi</i> -asperdichrome (1)	S7
Figure S8. ¹ H NMR spectrum (500 MHz) of versixanthone N (2) in CDCl ₃	S8
Figure S9. ¹³ C NMR spectrum (125 MHz) of versixanthone N (2) in CDCl ₃	S8
Figure S10. HSQC spectrum of versixanthone N (2)	S9
Figure S11. ¹ H- ¹ H COSY spectrum of versixanthone N (2)	S9
Figure S12. HMBC spectrum of versixanthone N (2)	S10
Figure S13. NOE spectrum of versixanthone N (2)	S10
Figure S14. HRESIMS spectrum of versixanthone N (2)	S13
Figure S15. ¹ H NMR spectrum (500 MHz) of versixanthone O (3) in CDCl ₃	S13
Figure S16. ¹³ C NMR spectrum (125 MHz) of versixanthone O (3) in CDCl ₃	S14
Figure S17. HSQC spectrum of versixanthone O (3)	S14
Figure S18. ¹ H- ¹ H COSY spectrum of versixanthone O (3).....	S15
Figure S19. HMBC spectrum of versixanthone O (3)	S15
Figure S20. NOE spectrum of versixanthone O (3)	S16
Figure S21. HRESIMS spectrum of versixanthone O (3)	S18

Figure S1. ¹H NMR spectrum (500 MHz) of 5-*epi*-asperdichrome (**1**) in CDCl₃

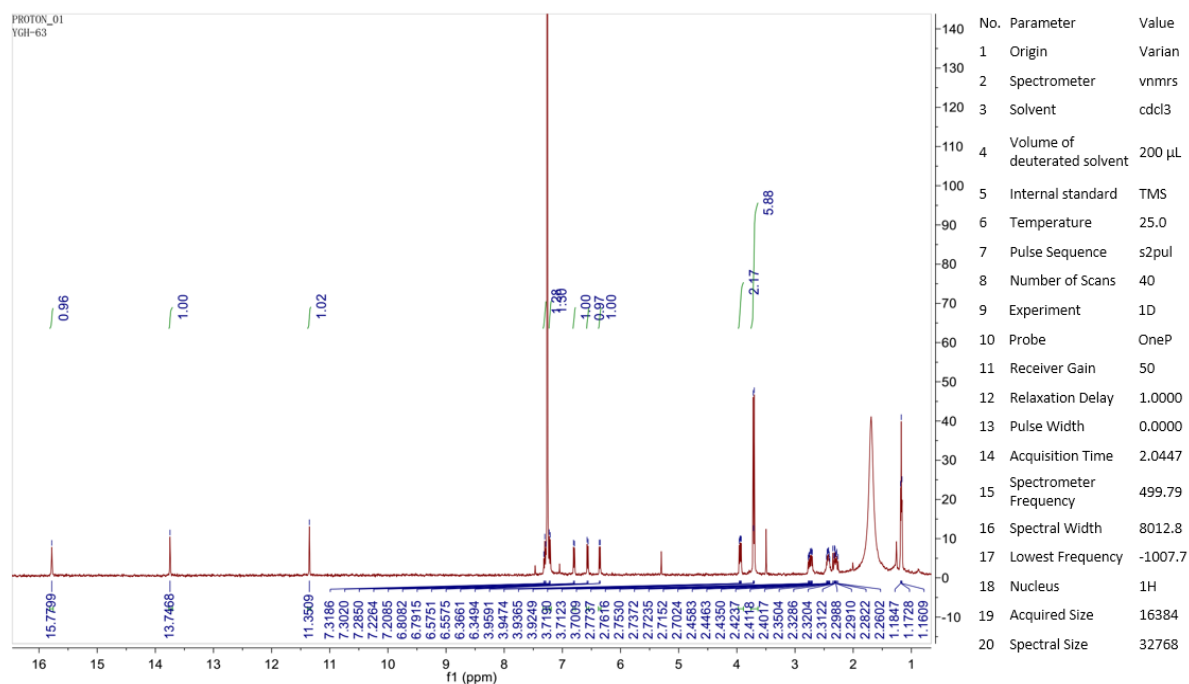


Figure S2. ¹³C NMR spectrum (125 MHz) of 5-*epi*-asperdichrome (**1**) in CDCl₃

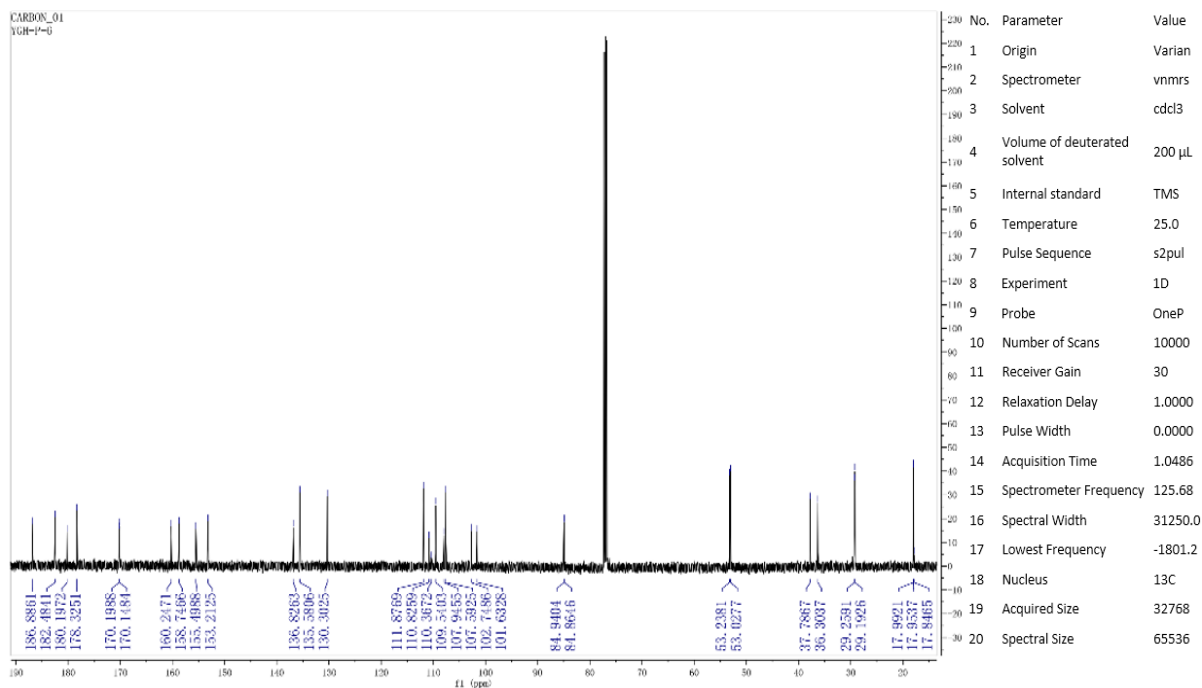


Figure S3. HSQC spectrum of 5-*epi*-asperdichrome (**1**)

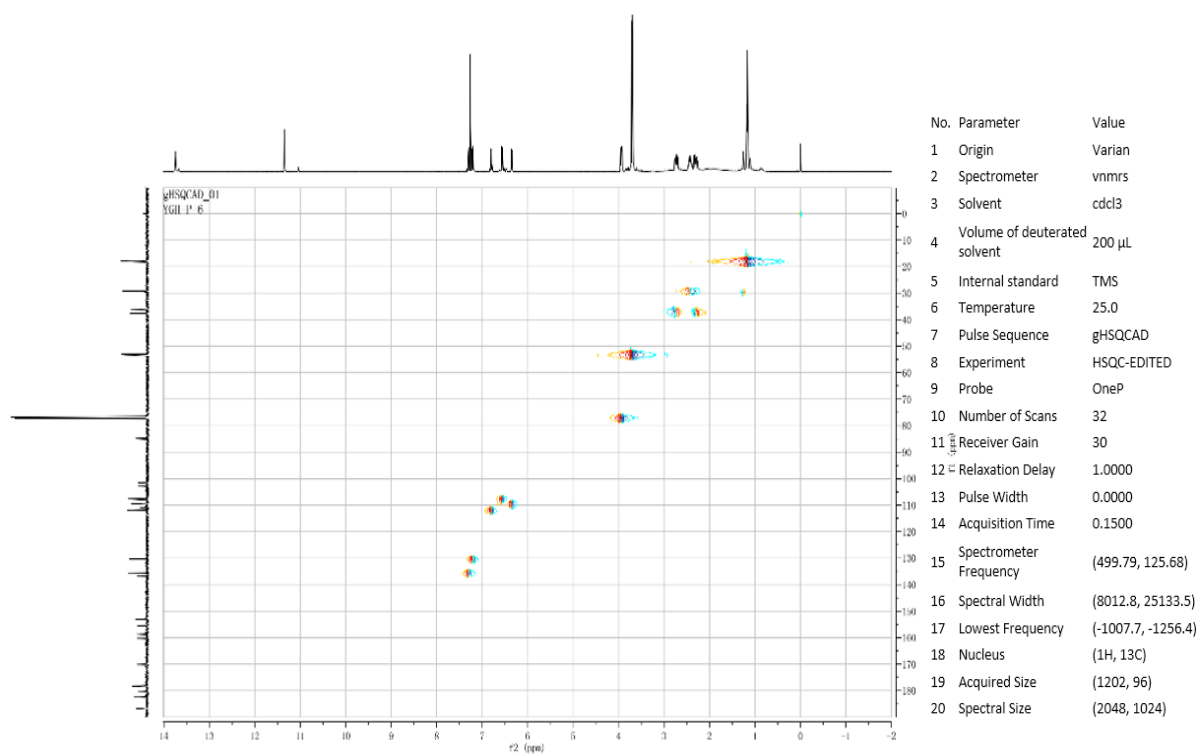


Figure S4. ¹H-¹H COSY spectrum of 5-*epi*-asperdichrome (**1**)

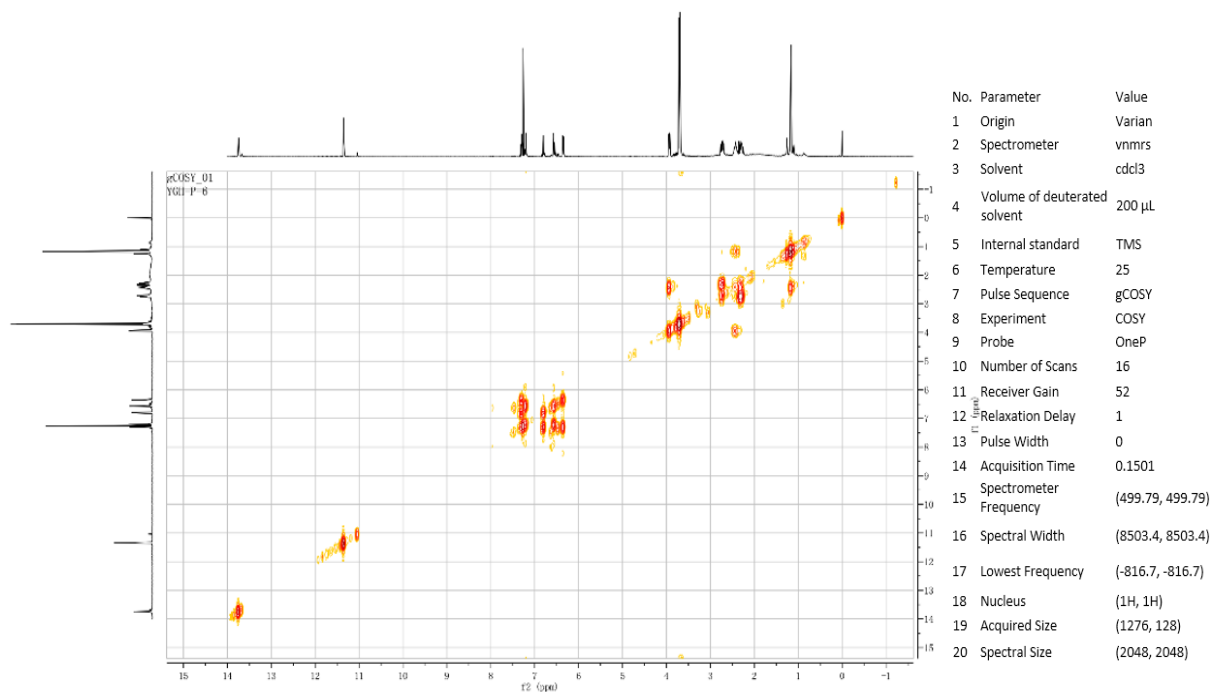


Figure S5. HMBC spectrum of 5-*epi*-asperdichrome (**1**)

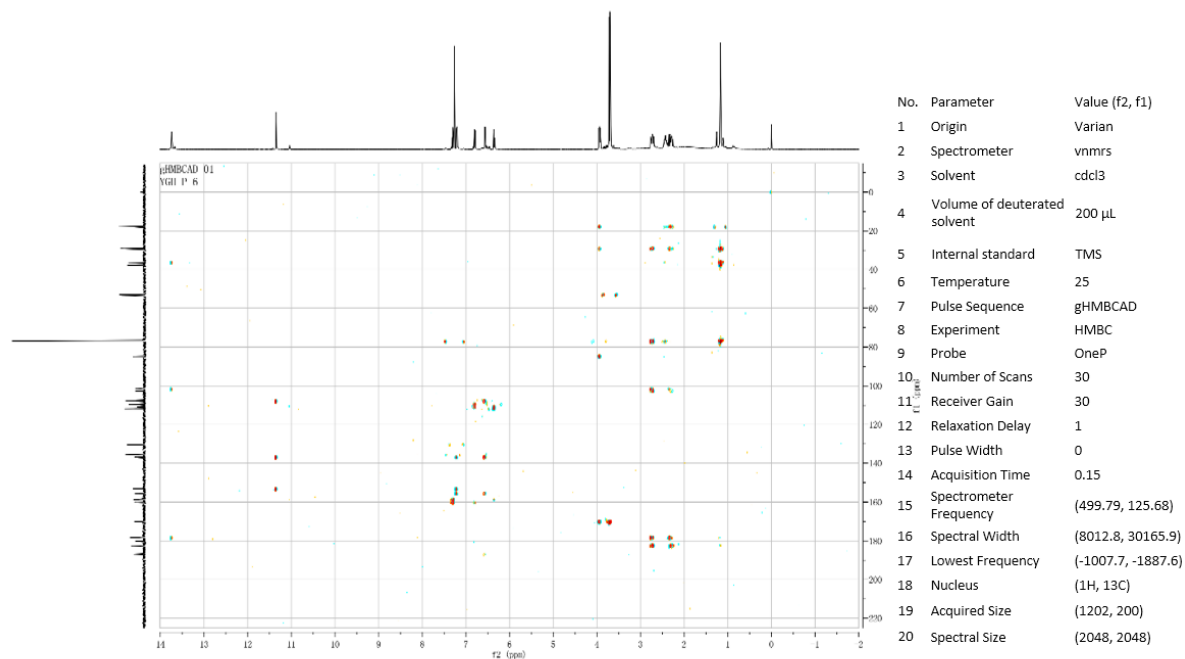
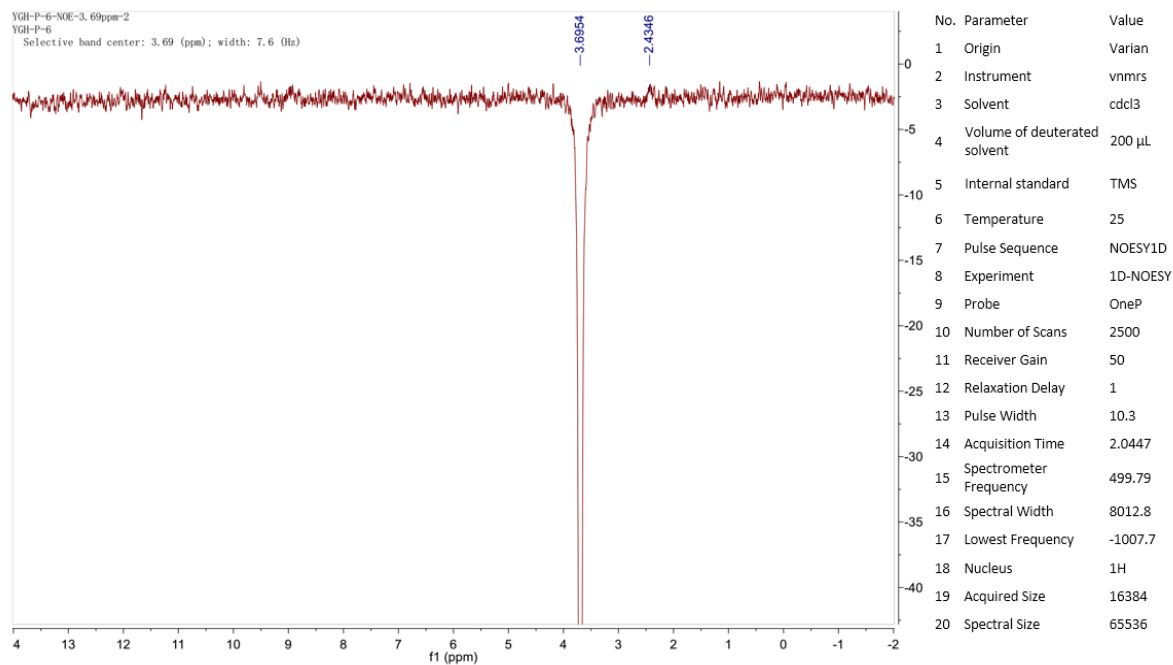
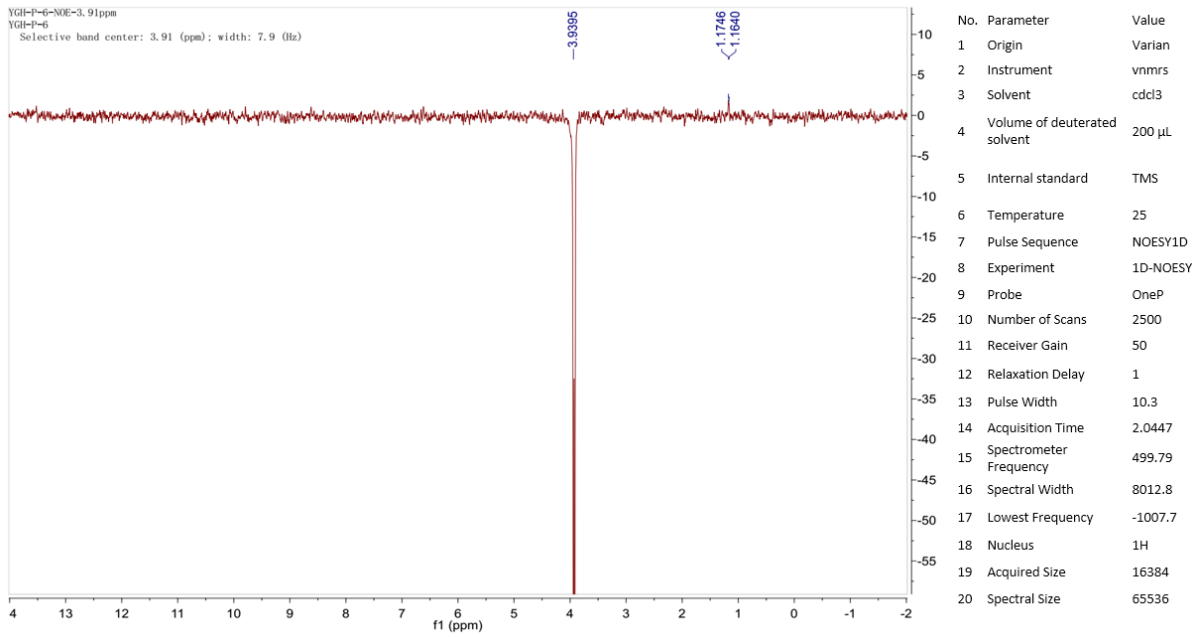
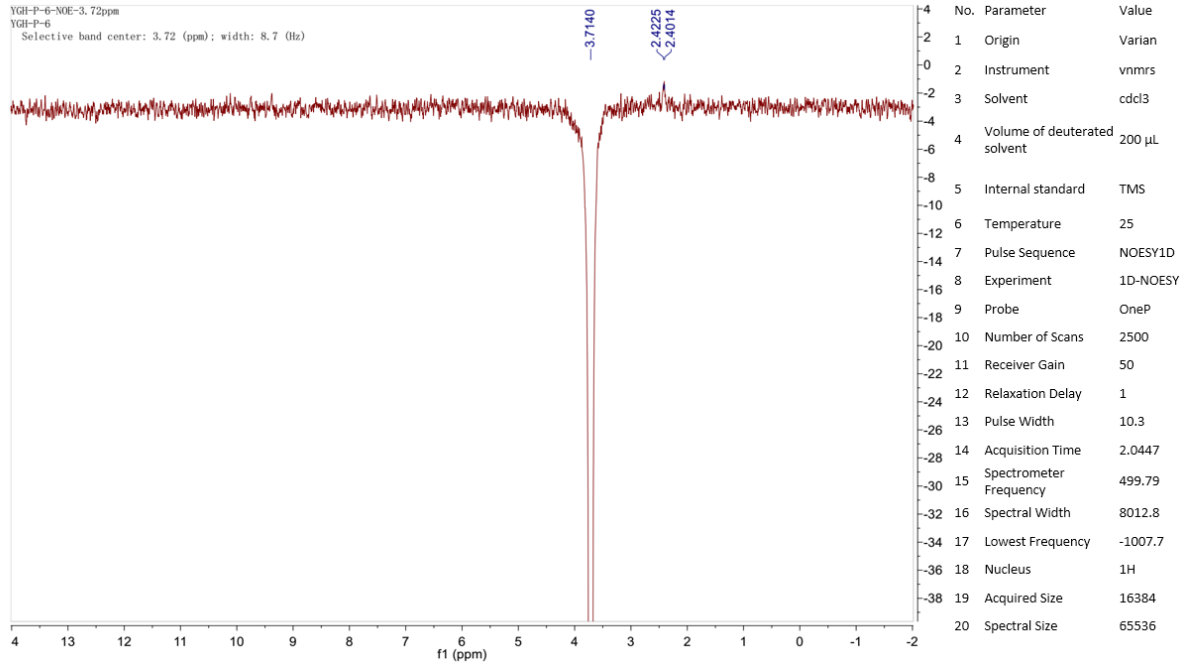


Figure S6. NOE spectrum of 5-*epi*-asperdichrome (**1**)





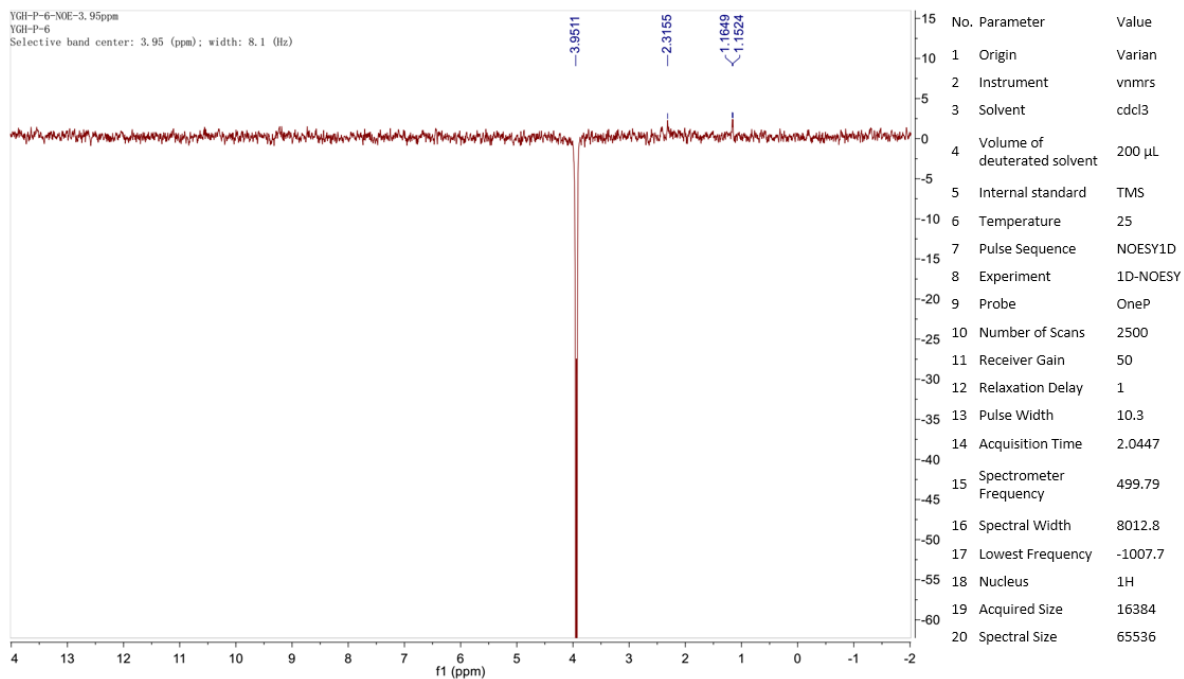


Figure S7. HRESIMS spectrum of 5-*epi*-asperdichrome (**1**)

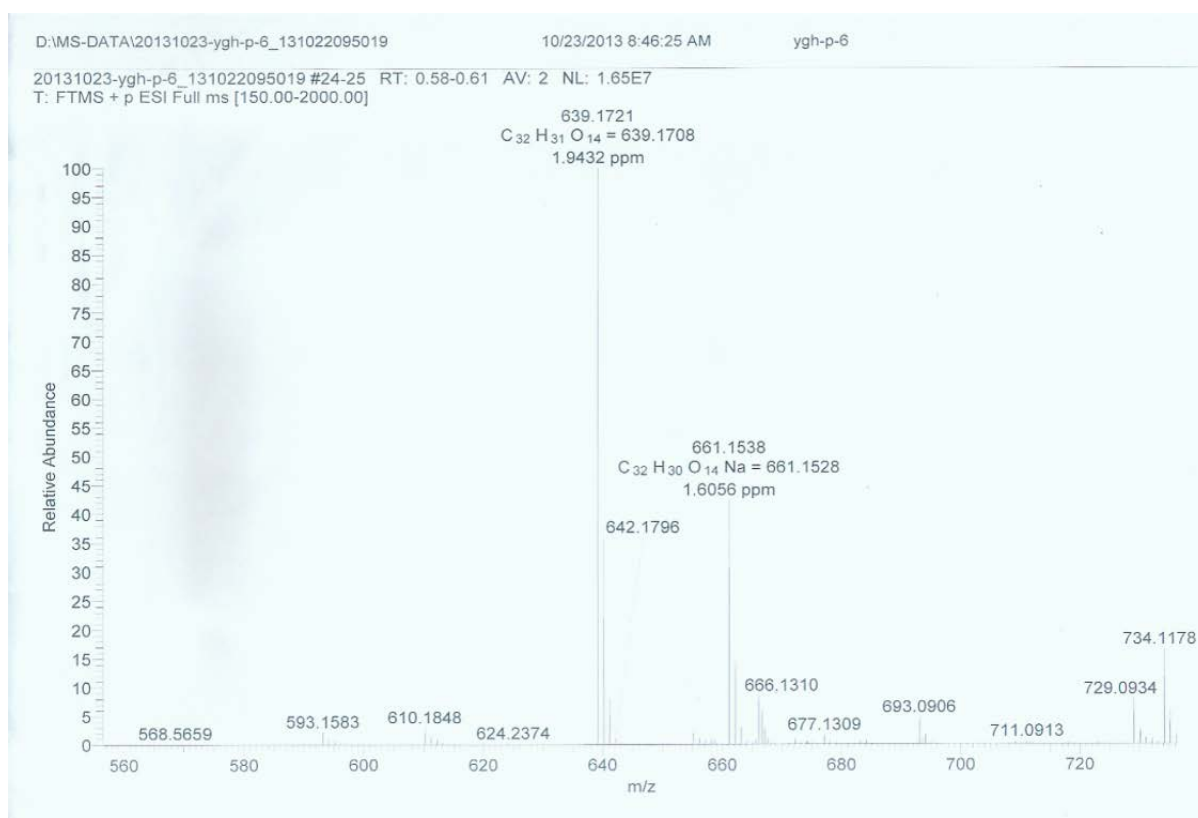


Figure S8. ¹H NMR spectrum (500 MHz) of versixanthone N (**2**) in CDCl₃

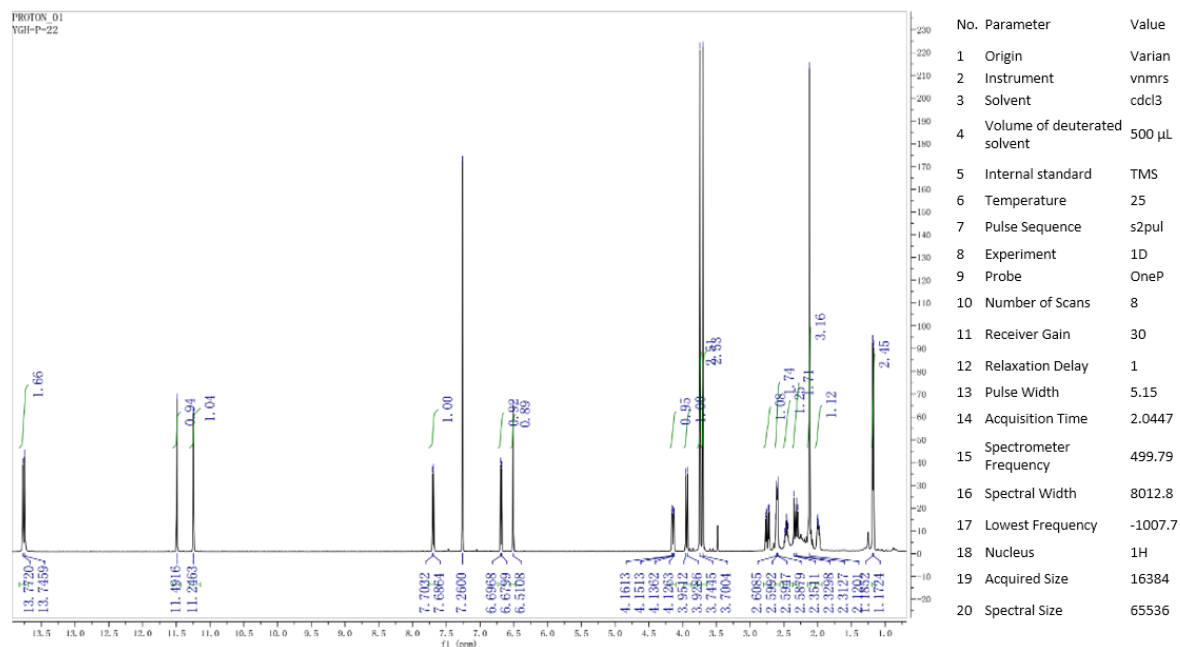


Figure S9. ¹³C NMR spectrum (125 MHz) of versixanthone N (**2**) in CDCl₃

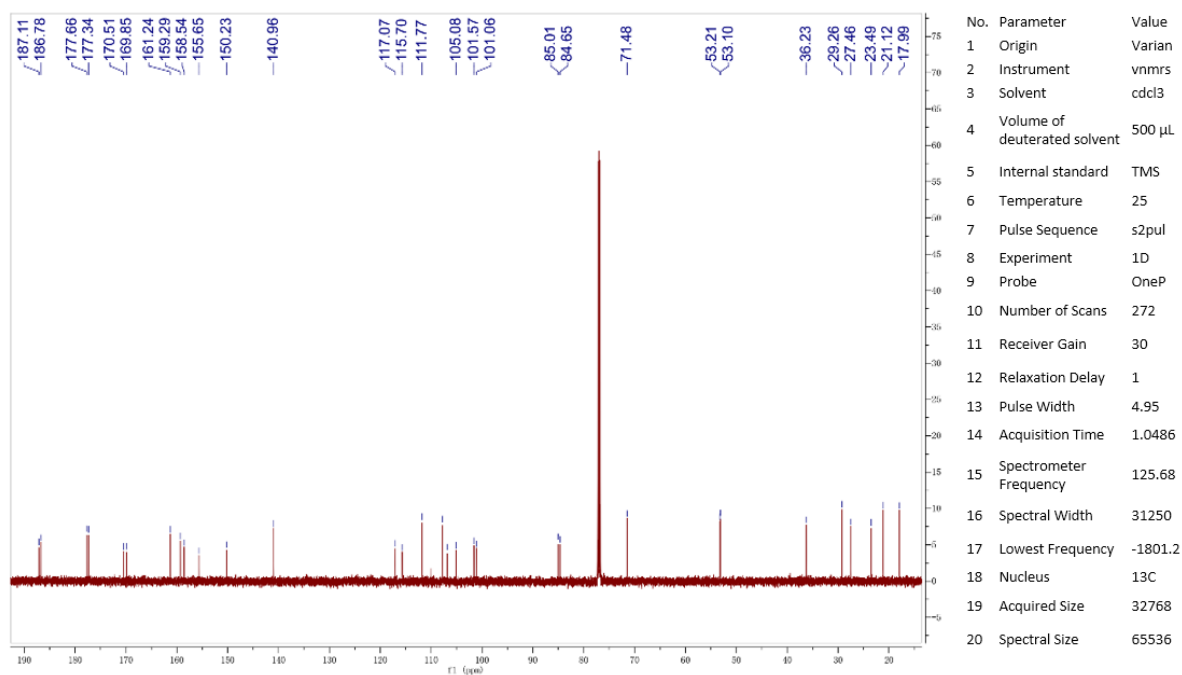


Figure S10. HSQC spectrum of versixanthone N (2)

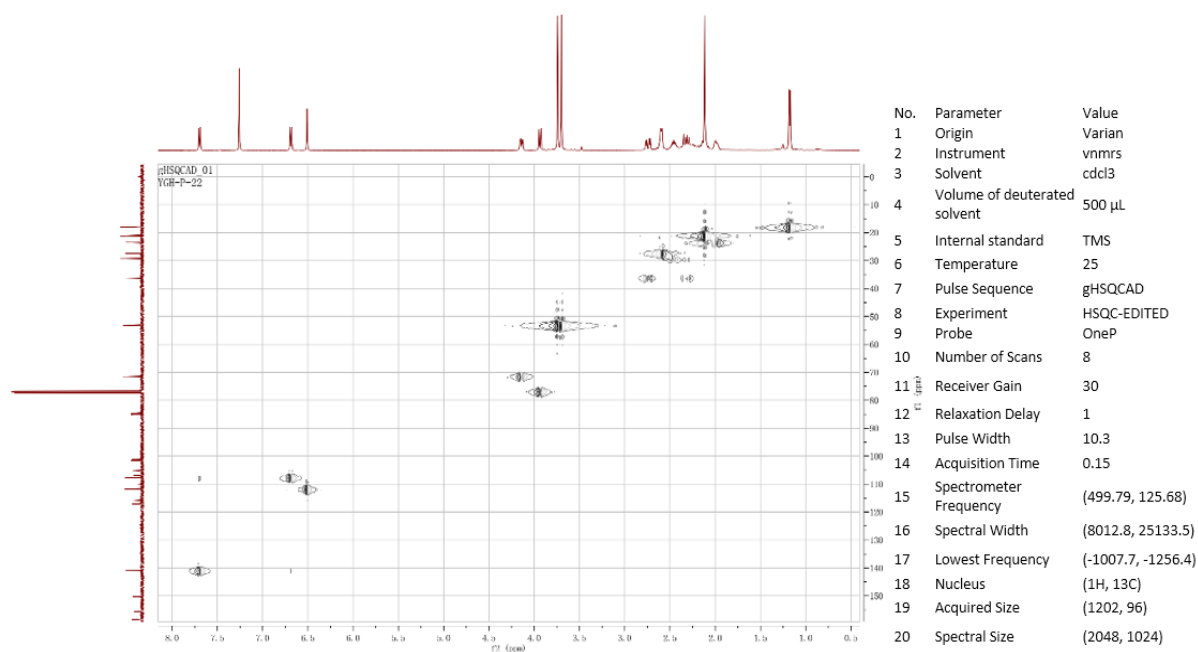


Figure S11. ¹H-¹H COSY spectrum of versixanthone N (2)

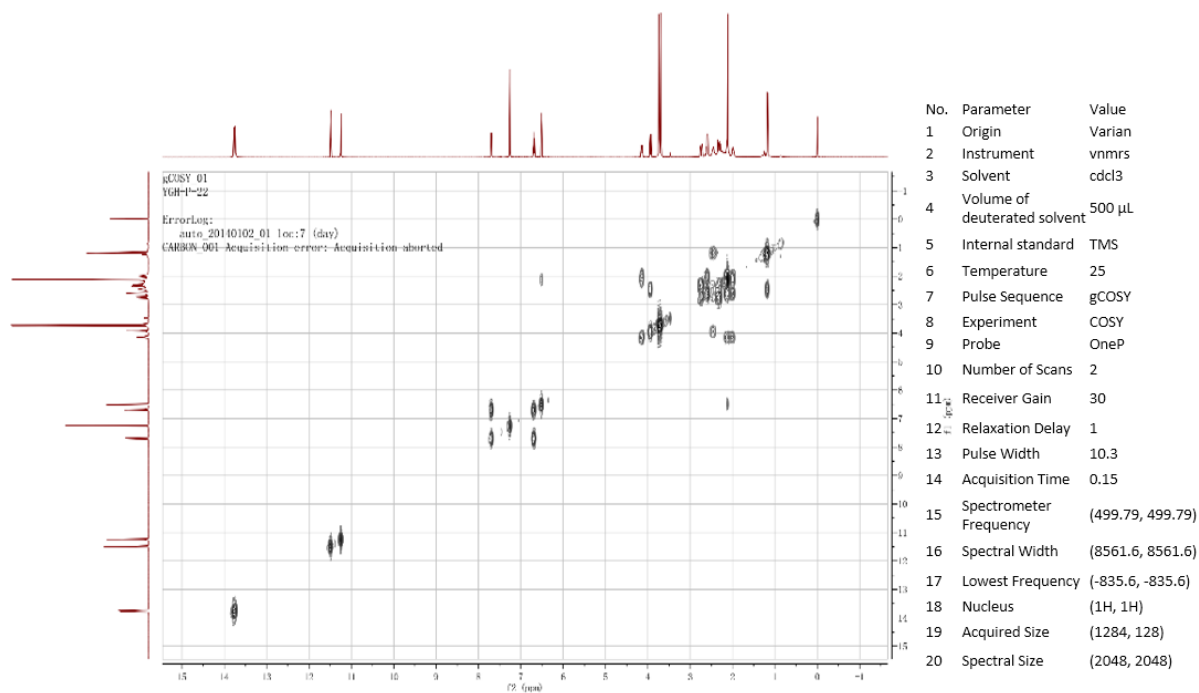


Figure S12. HMBC spectrum of versixanthone N (2)

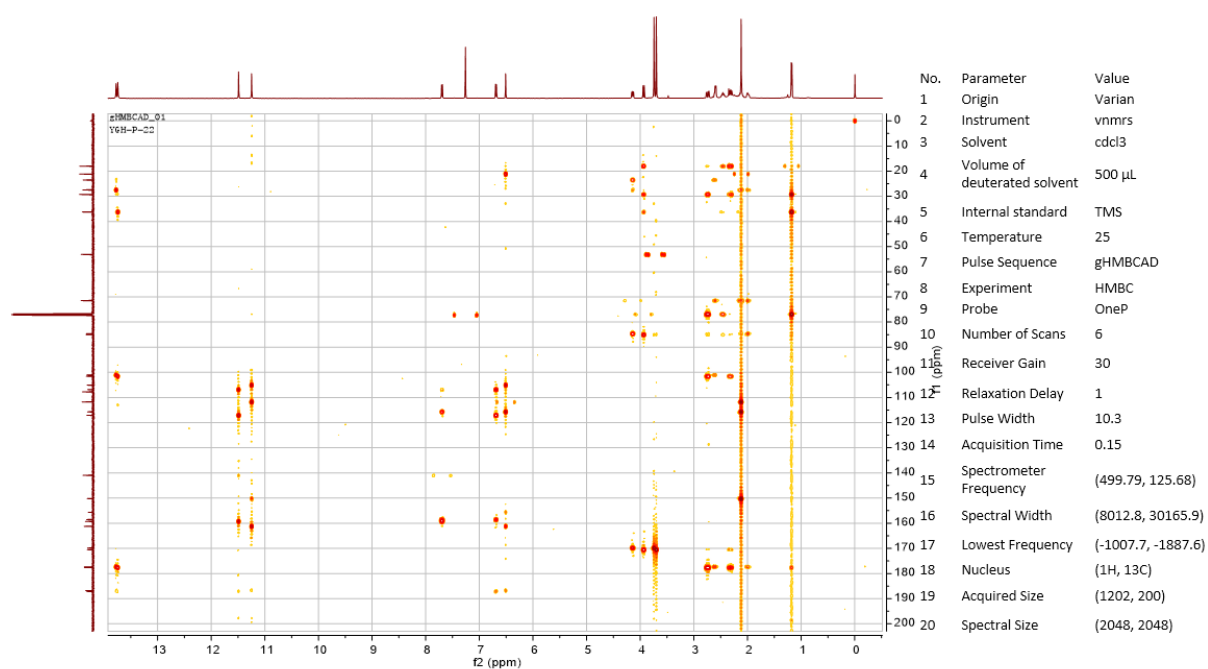
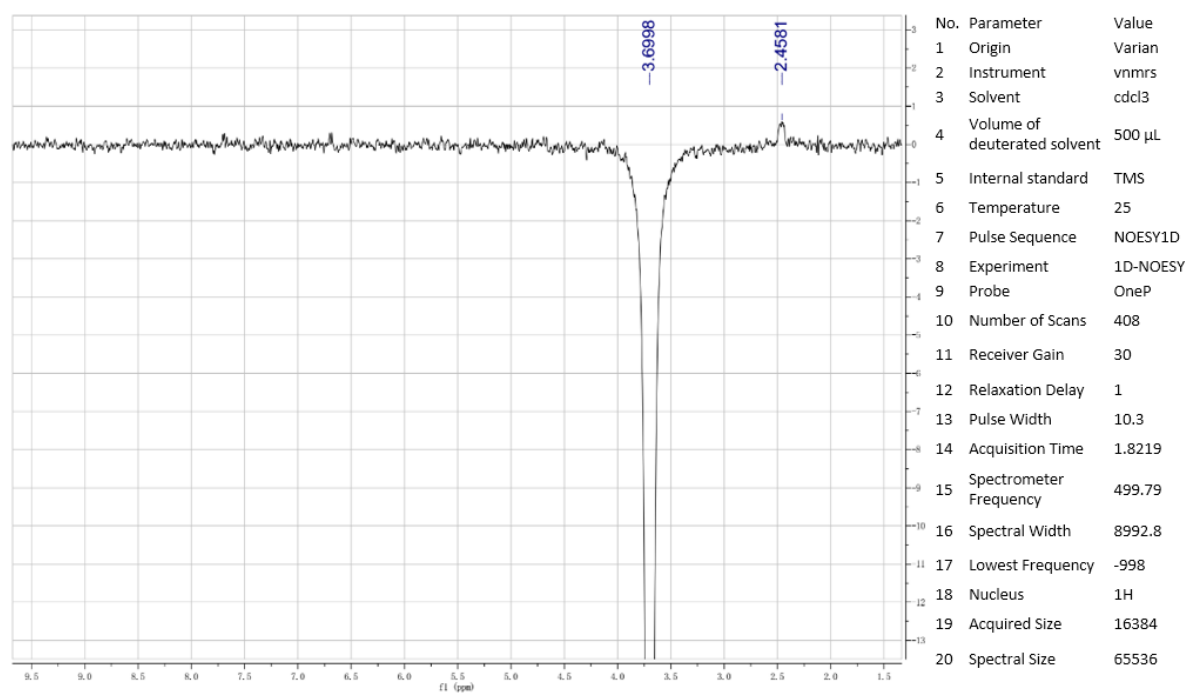
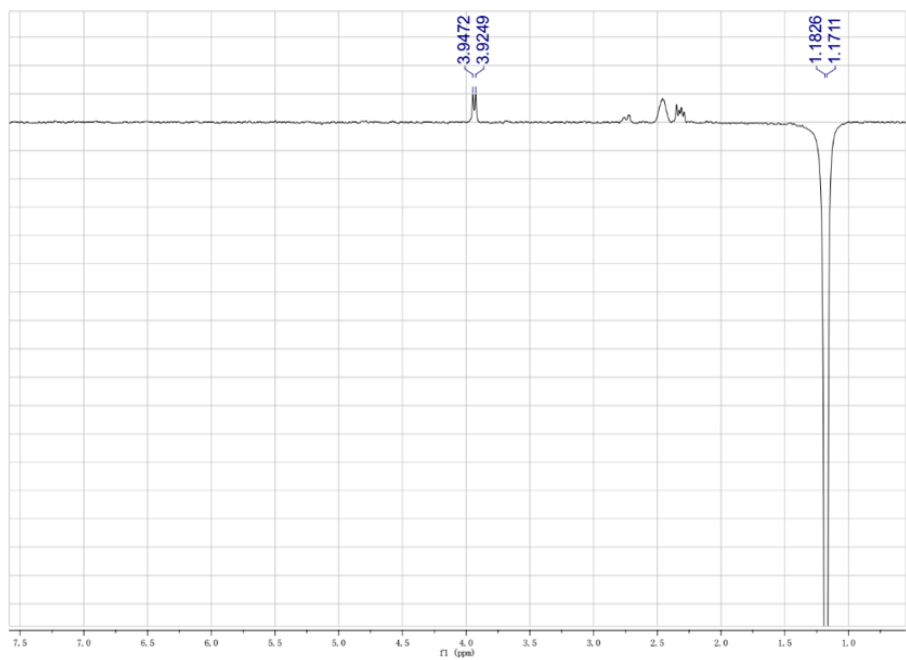
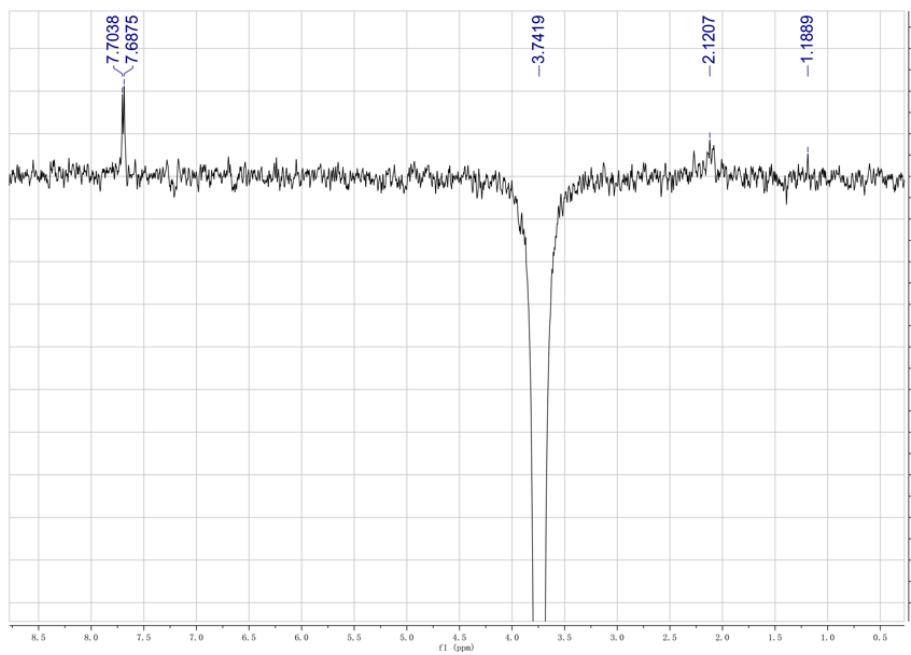


Figure S13. NOE spectrum of versixanthone N (2)

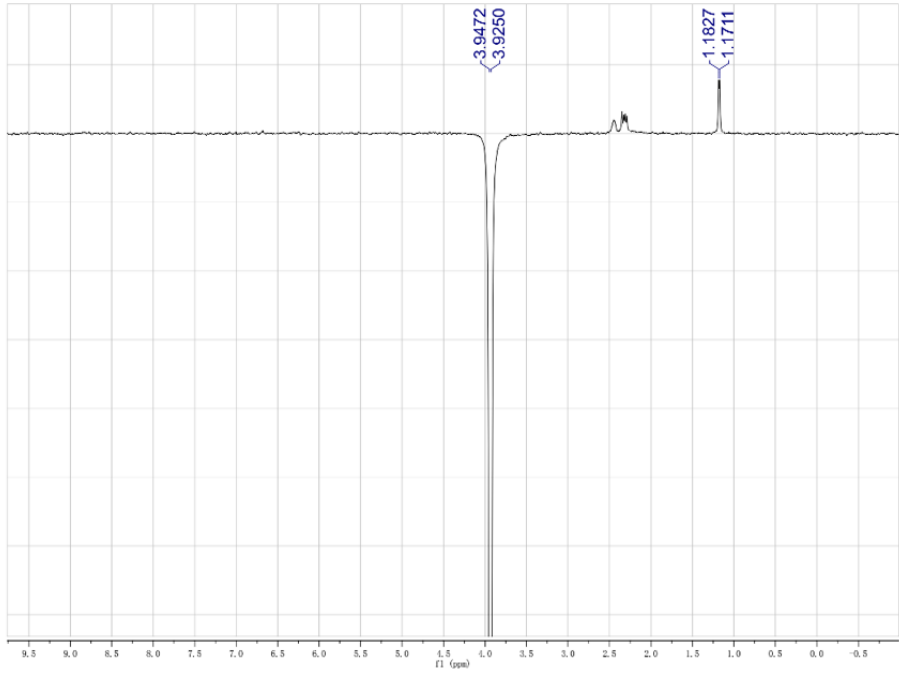




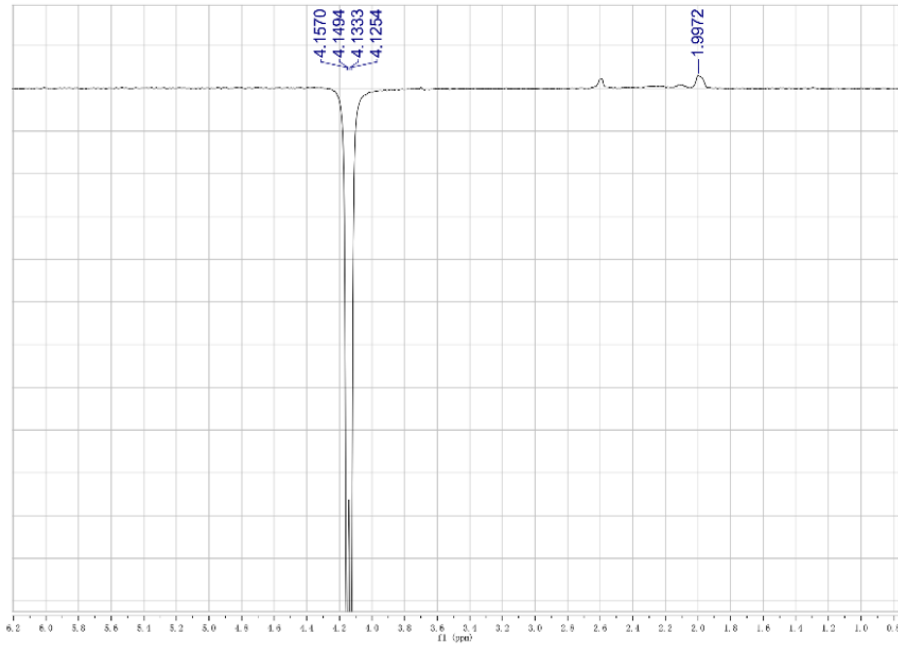
No.	Parameter	Value
1	Origin	Varian
2	Instrument	nmr5
3	Solvent	cdcl3
4	Volume of deuterated solvent	500 µL
5	Internal standard	TMS
6	Temperature	25
7	Pulse Sequence	NOESY1D
8	Experiment	1D-NOESY
9	Probe	OneP
10	Number of Scans	88
11	Receiver Gain	30
12	Relaxation Delay	1
13	Pulse Width	10.3
14	Acquisition Time	1.8219
15	Spectrometer Frequency	499.79
16	Spectral Width	8992.8
17	Lowest Frequency	-998
18	Nucleus	1H
19	Acquired Size	16384
20	Spectral Size	65536



Parameter	Value	
1	Origin	Varian
2	Instrument	nmr5
3	Solvent	cdcl3
4	Volume of deuterated solvent	500 µL
5	Internal standard	TMS
6	Temperature	25
7	Pulse Sequence	NOESY1D
8	Experiment	1D-NOESY
9	Probe	OneP
10	Number of Scans	216
11	Receiver Gain	30
12	Relaxation Delay	1
13	Pulse Width	10.3
14	Acquisition Time	1.8219
15	Spectrometer Frequency	499.79
16	Spectral Width	8992.8
17	Lowest Frequency	-998
18	Nucleus	1H
19	Acquired Size	16384
20	Spectral Size	65536



No.	Parameter	Value
1	Origin	Varian
2	Instrument	nmr3
3	Solvent	cdcl3
4	Volume of deuterated solvent	500 µL
5	Internal standard	TMS
6	Temperature	25
7	Pulse Sequence	NOESY1D
8	Experiment	1D-NOESY
9	Probe	OneP
10	Number of Scans	120
11	Receiver Gain	30
12	Relaxation Delay	1
13	Pulse Width	10.3
14	Acquisition Time	1.8219
15	Spectrometer Frequency	499.79
16	Spectral Width	8992.8
17	Lowest Frequency	-998
18	Nucleus	1H
19	Acquired Size	16384
20	Spectral Size	65536



No.	Parameter	Value
1	Origin	Varian
2	Instrument	nmr3
3	Solvent	cdcl3
4	Volume of deuterated solvent	500 µL
5	Internal standard	TMS
6	Temperature	25
7	Pulse Sequence	NOESY1D
8	Experiment	1D-NOESY
9	Probe	OneP
10	Number of Scans	64
11	Receiver Gain	30
12	Relaxation Delay	1
13	Pulse Width	10.3
14	Acquisition Time	1.8219
15	Spectrometer Frequency	499.79
16	Spectral Width	8992.8
17	Lowest Frequency	-998
18	Nucleus	1H
19	Acquired Size	16384
20	Spectral Size	65536

Figure S14. HRESIMS spectrum of versixanthone N (2)

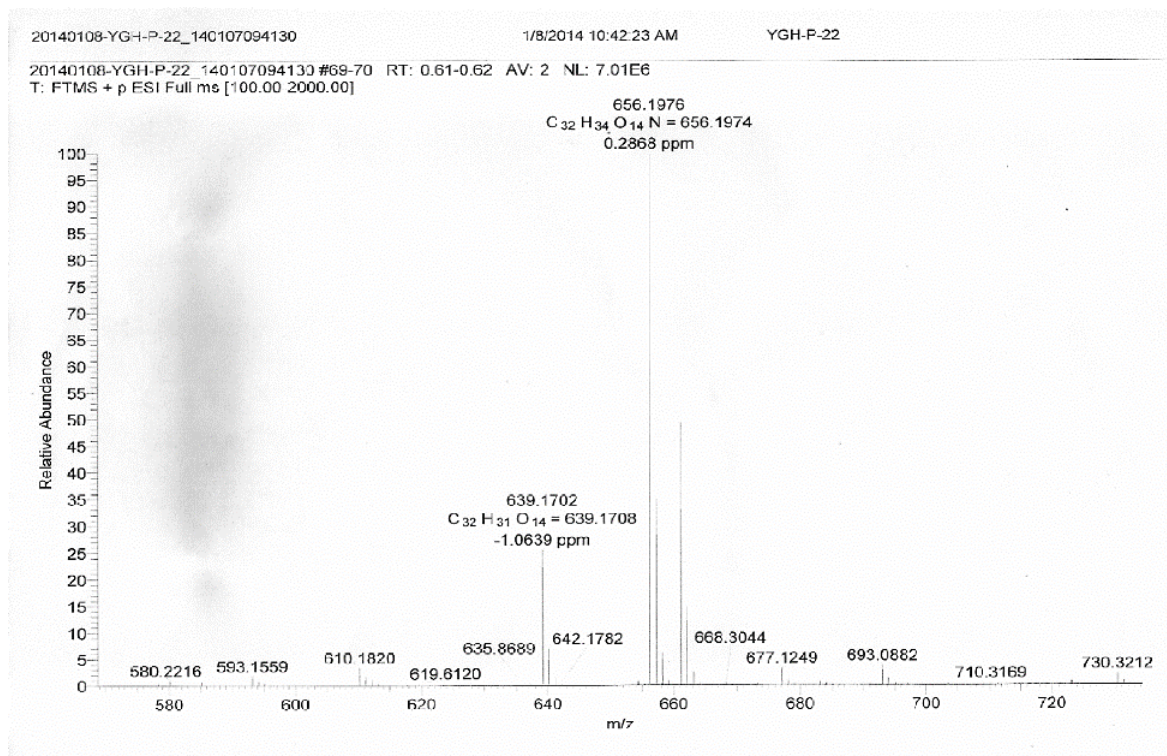


Figure S15. ¹H NMR spectrum (500 MHz) of versixanthone O (3) in CDCl₃

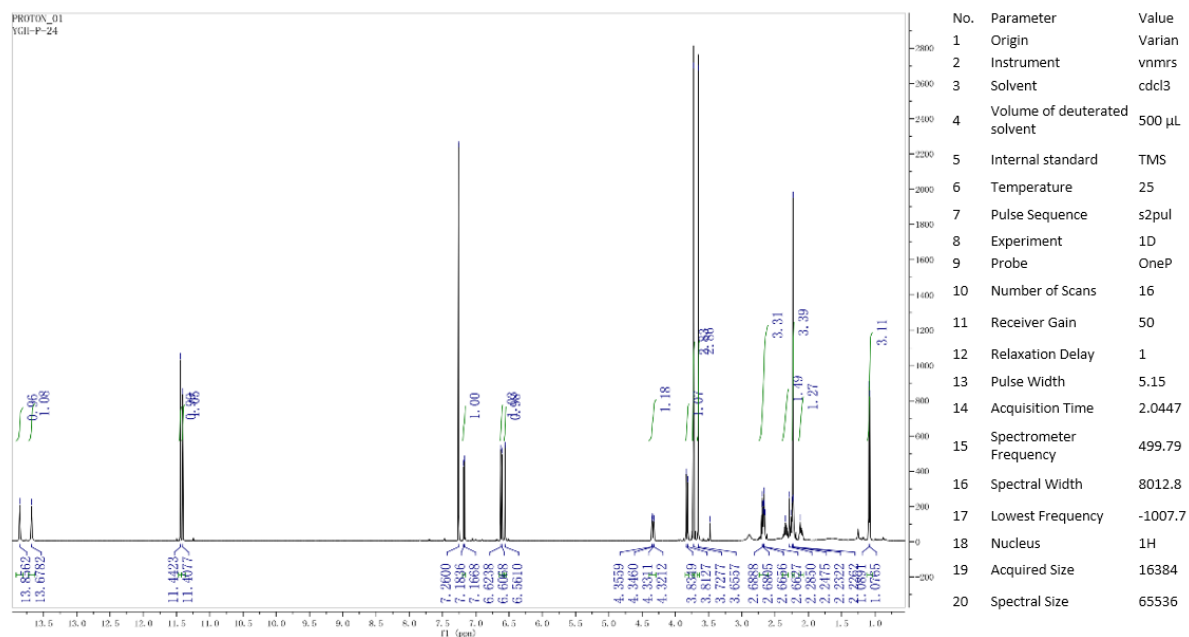


Figure S16. ^{13}C NMR spectrum (125 MHz) of versixanthone O (**3**) in CDCl_3

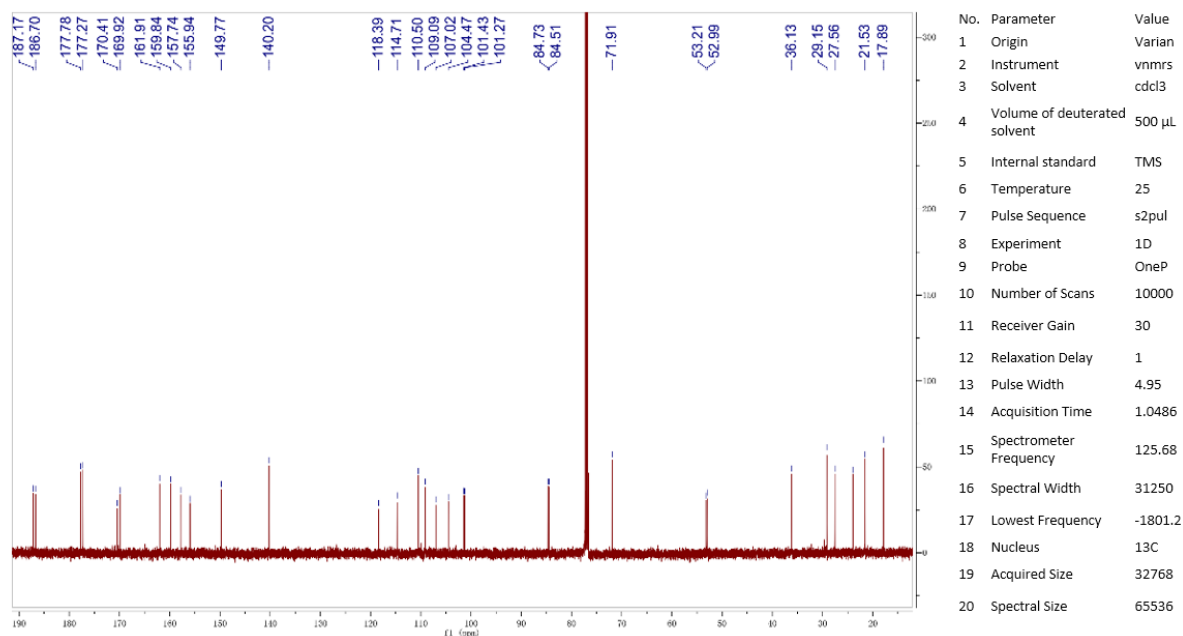


Figure S17. HSQC spectrum of versixanthone O (**3**)

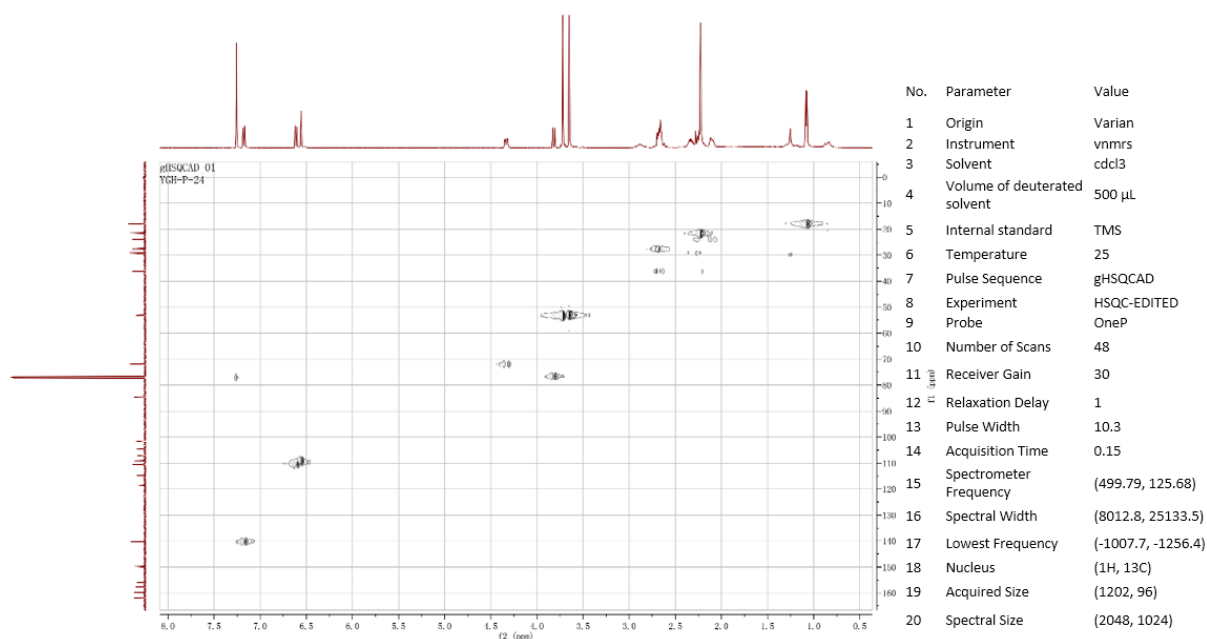


Figure S18. ^1H - ^1H COSY spectrum of versixanthone O (3)

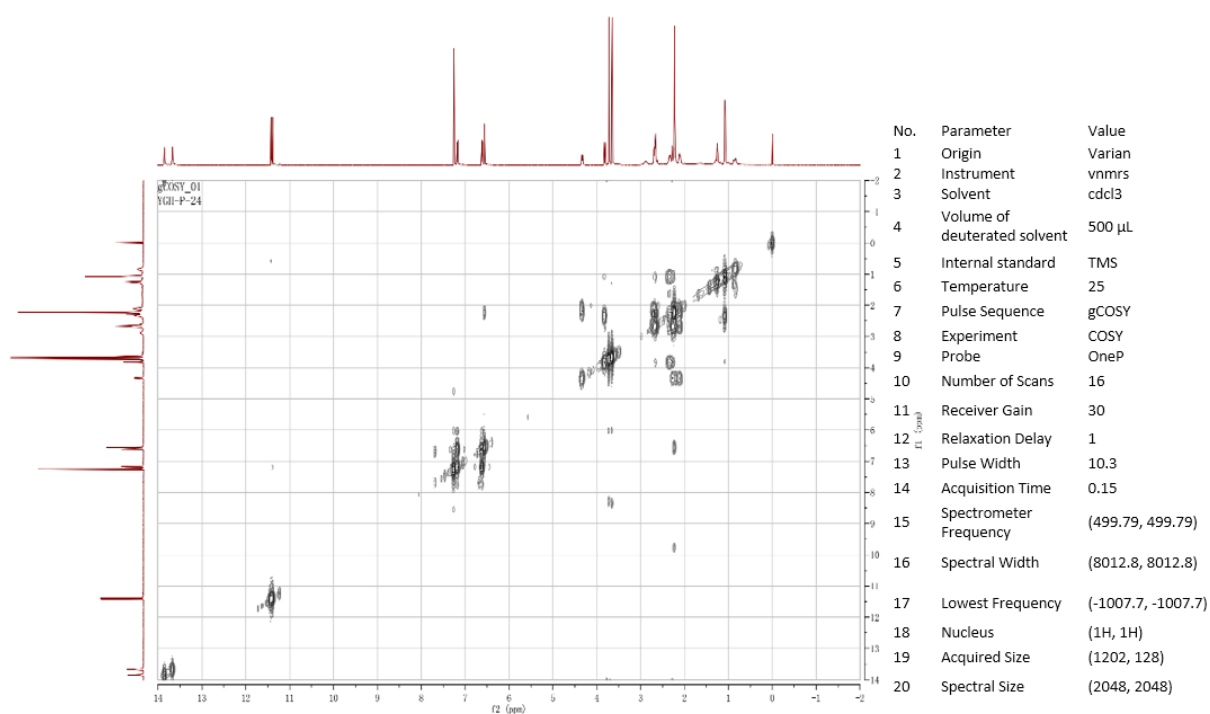


Figure S19. HMBC spectrum of versixanthone O (3)

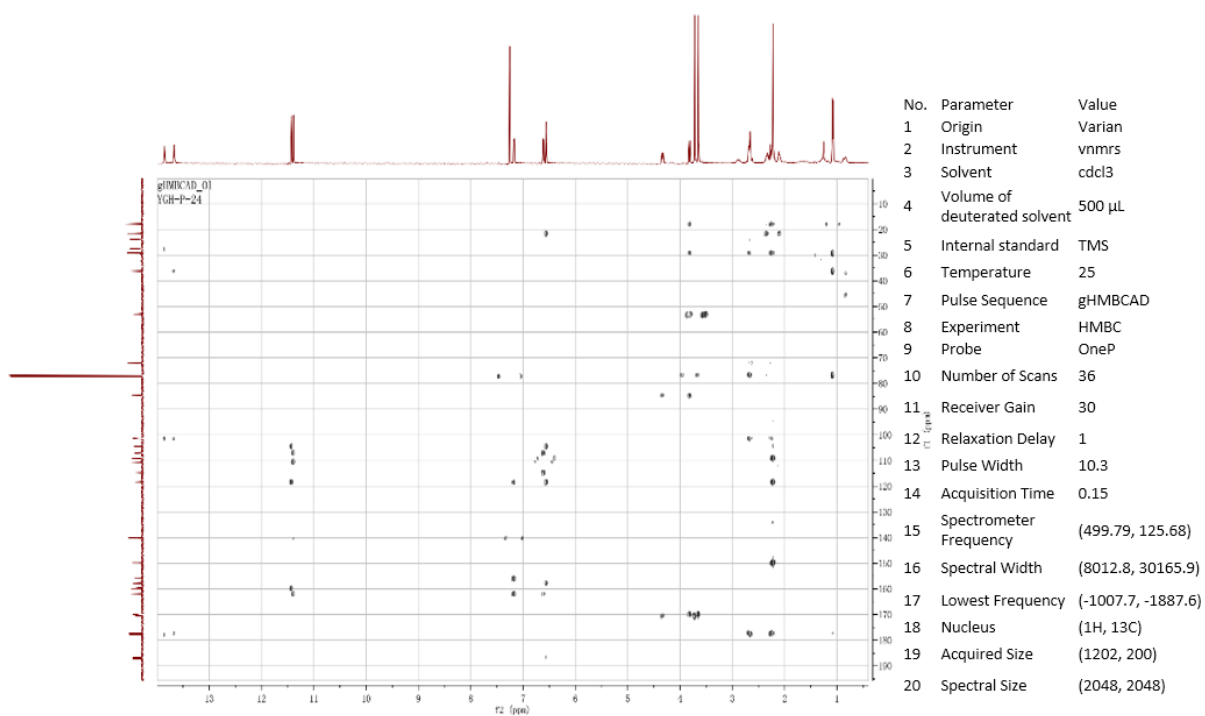
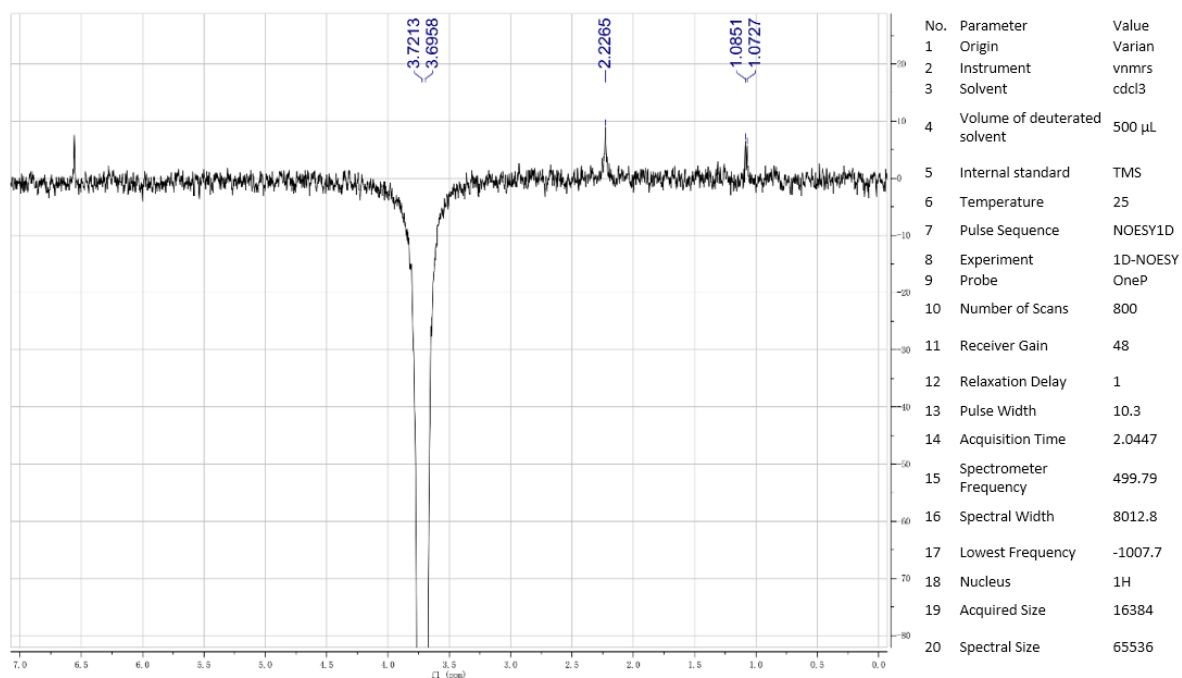
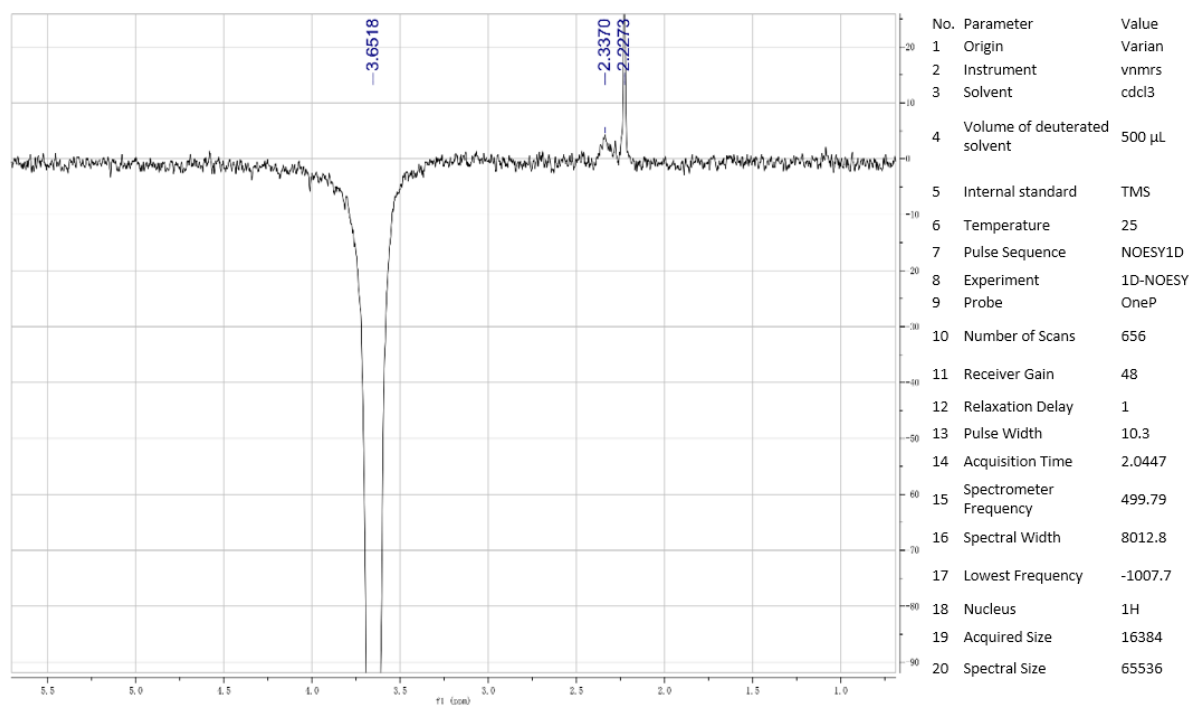
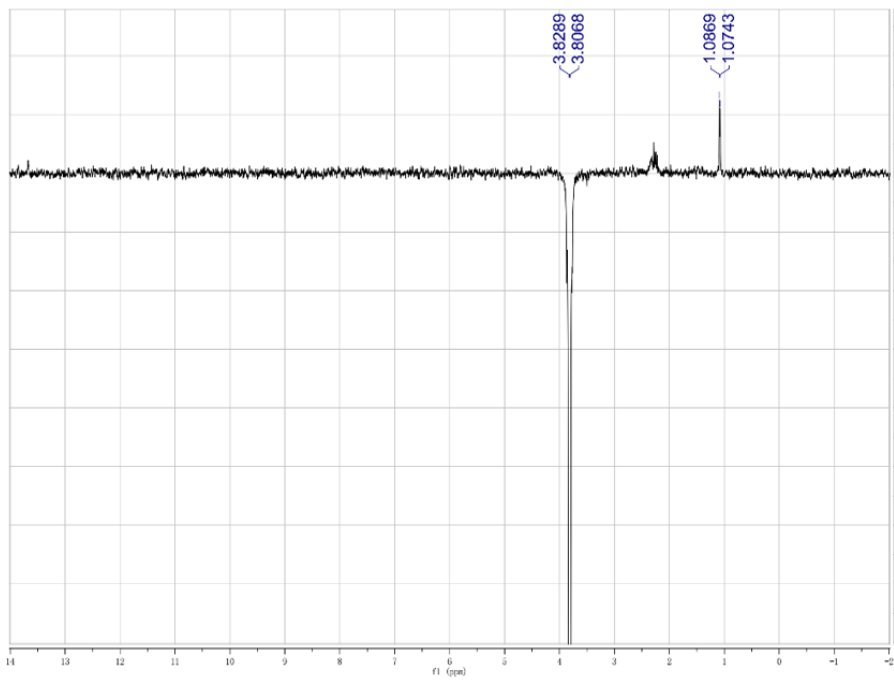
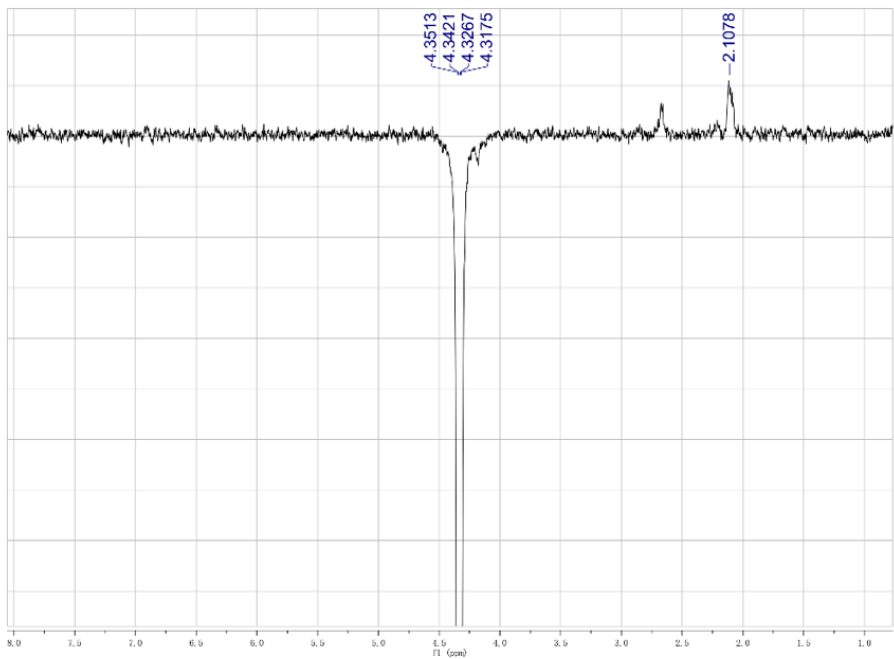


Figure S20. NOE spectrum of versixanthone O (3)





No.	Parameter	Value
1	Origin	Varian
2	Instrument	vnmrs
3	Solvent	cdcl3
4	Volume of deuterated solvent	500 µL
5	Internal standard	TMS
6	Temperature	25
7	Pulse Sequence	NOESY1D
8	Experiment	1D-NOESY
9	Probe	OneP
10	Number of Scans	136
11	Receiver Gain	50
12	Relaxation Delay	1
13	Pulse Width	10.3
14	Acquisition Time	2.0447
15	Spectrometer Frequency	499.79
16	Spectral Width	8012.8
17	Lowest Frequency	-1007.7
18	Nucleus	1H
19	Acquired Size	16384
20	Spectral Size	65536



No.	Parameter	Value
1	Origin	Varian
2	Instrument	vnmrs
3	Solvent	cdcl3
4	Volume of deuterated solvent	500 µL
5	Internal standard	TMS
6	Temperature	25
7	Pulse Sequence	NOESY1D
8	Experiment	1D-NOESY
9	Probe	OneP
10	Number of Scans	224
11	Receiver Gain	50
12	Relaxation Delay	1
13	Pulse Width	10.3
14	Acquisition Time	2.0447
15	Spectrometer Frequency	499.79
16	Spectral Width	8012.8
17	Lowest Frequency	-1007.7
18	Nucleus	1H
19	Acquired Size	16384
20	Spectral Size	65536

Figure S21. HRESIMS spectrum of versixanthone O (3)

