

Supporting Information

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Pigment pattern of the Chilean mushroom

Dermocybe nahuelbutensis Garrido & E. Horak

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Table S1: NMR spectroscopic data of 7,7'-emodinphyscion (**1**).

Pos.	$\delta_C^{a,b}$	$\delta_H^{a,c}$ (J in Hz)	HMBC ^d	NOE ^e
1	161.46			
2	124.24	7.28 (br s-like)	1, 3, 4, 9 ^k , 9a	3-Me
3	148.61			
4	120.65	7.64 (br s-like)	1 ^k , 2, 3, 9 ^k , 9a, 10	3-Me
4a	132.91 ^f			
5	103.04	7.53 (br s)	6, 7, 8 ^k , 8a, 9 ^k , 10, 10a	6-OMe
6	163.97			
7	115.54 ^g			
8	161.22			
8a	110.37 ^g			
9	190.46			
9a	113.69			
10	181.25			
10a	134.53			
3-Me	21.53 ^h	2.513 (s)	2, 3, 4	2, 4
6-OMe	56.53	3.997 (s)	6	5
1'	161.32			
2'	124.04	7.24 (br s-like)	1', 3', 4', 9a'	3' -Me
3'	147.84			
4'	120.34	7.58 (br s-like)	1 ^k , 2', 3', 9a', 10'	3' -Me
4a'	132.85 ^f			
5'	n.d.	7.34 (very br s)	7', 8a', 10'	
6'	n.d.			
7'	112.63 ⁱ			
8'	162.37			
8a'	107.80 ⁱ			
9'	n.d.			
9a'	113.49			
10'	181.64			
10a'	134.14			
3' -Me	21.49 ^h	2.492 (s) 12.50 (br s);	2', 3', 4'	2', 4'
OH ^m		12.18 (br s); 11.99 (br s)		

^a Measured in DMSO-*d*₆, tetrametylsilane (TMS) ($\delta = 0$ ppm, ¹H) and DMSO-*d*₆ (TMS) ($\delta = 39.5$ ppm, ¹³C) were used as internal standards.

^b 150 MHz.

^c 600 MHz.

^d Correlation of H to C.

^e Correlation to H; mixing time 0.4 s.

^{f, g, h, i} Chemical shifts marked with same letter can be interchanged.

^k Weak HMBC correlation via ⁴J_{CH}.

^m Only three of five OH signals detected. Assignment due to lack of HMBC correlations not possible.
n.d. Not detected.

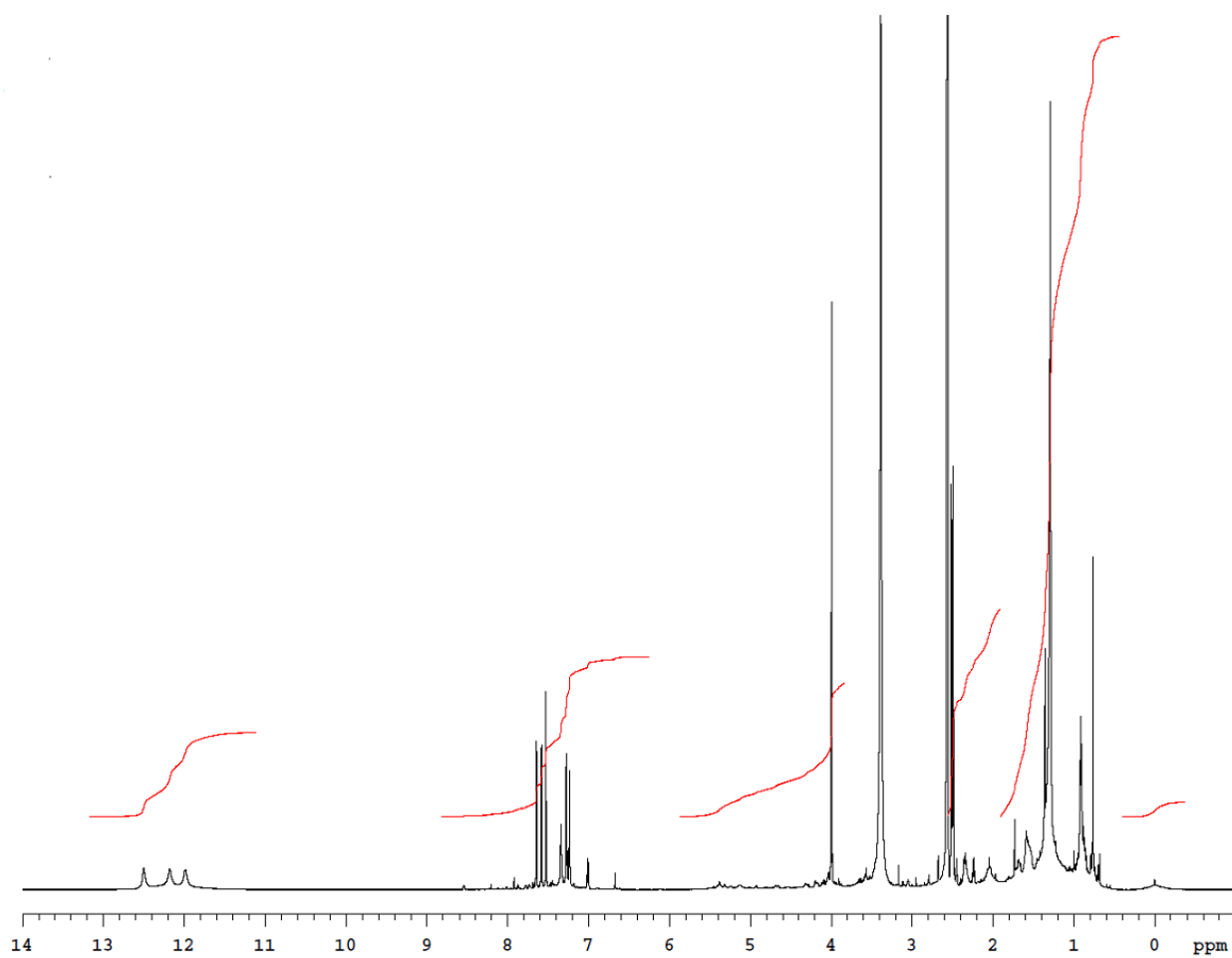


Figure S1: ^1H NMR spectrum of 7,7'-emodinphyscion (**1**) (600 MHz, $\text{DMSO-}d_6$, 25 °C).

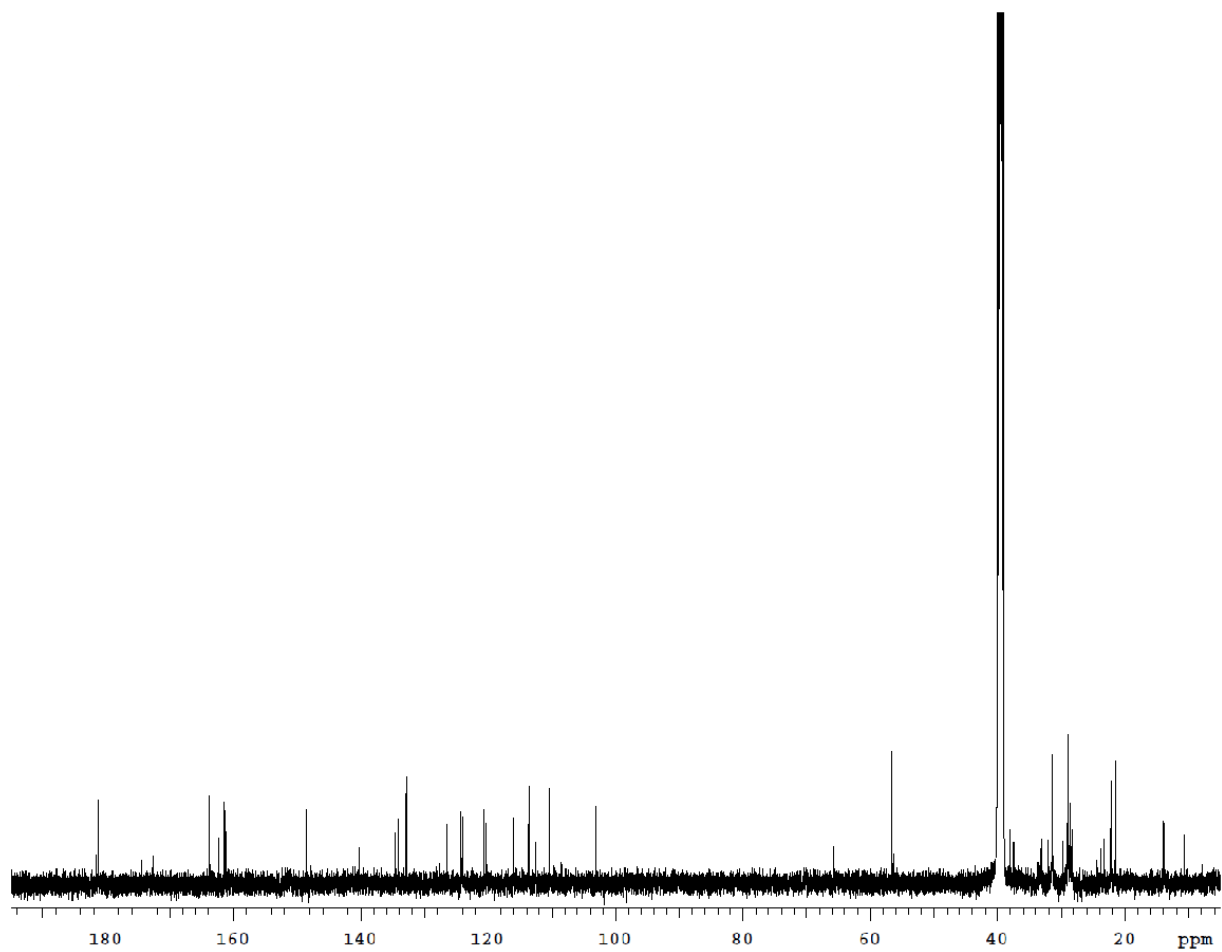


Figure S2: ^{13}C NMR spectrum of 7,7'-emodinphyscion (**1**) (150 MHz, $\text{DMSO-}d_6$, 25 °C).

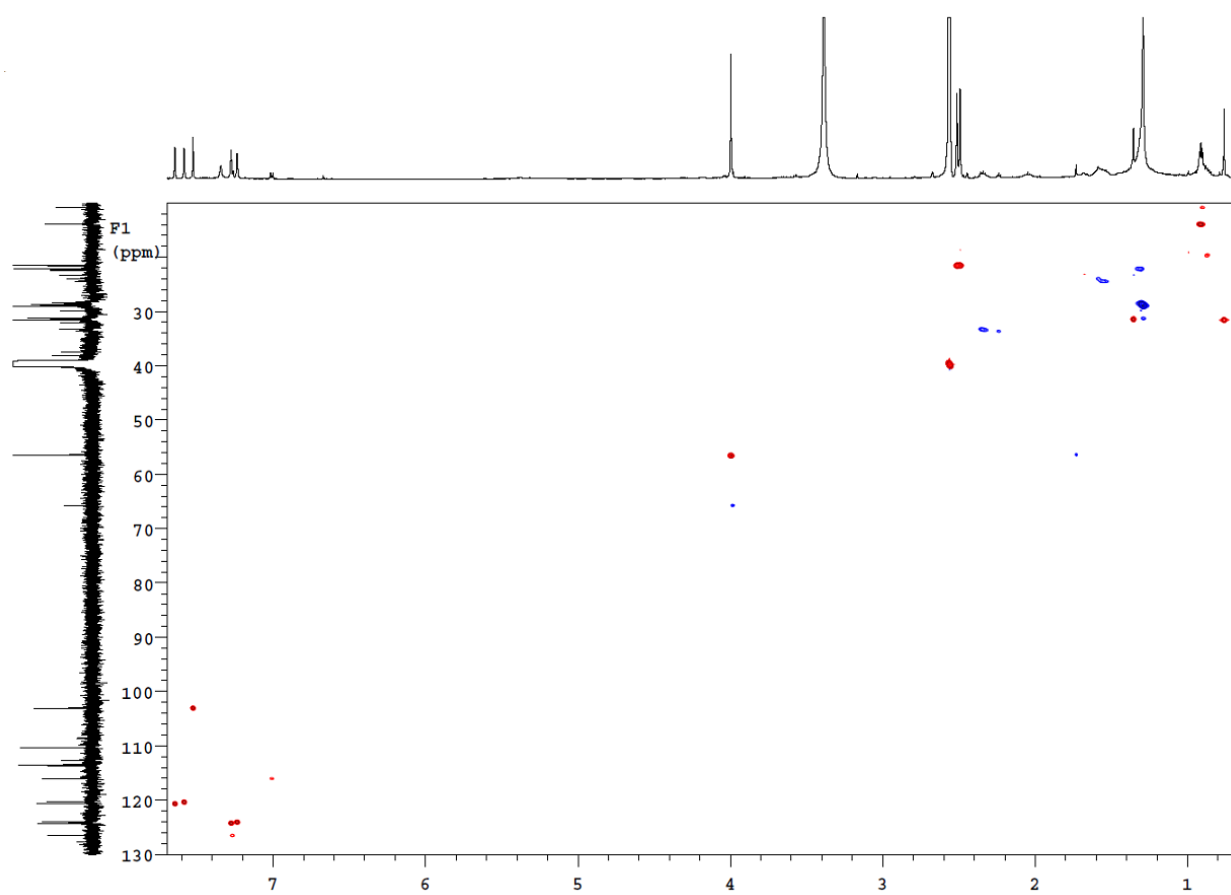


Figure S3: ^1H , ^{13}C HSQC spectrum of 7,7'-emodinphyscion (**1**) (600 MHz, $\text{DMSO-}d_6$, 25 $^\circ\text{C}$).

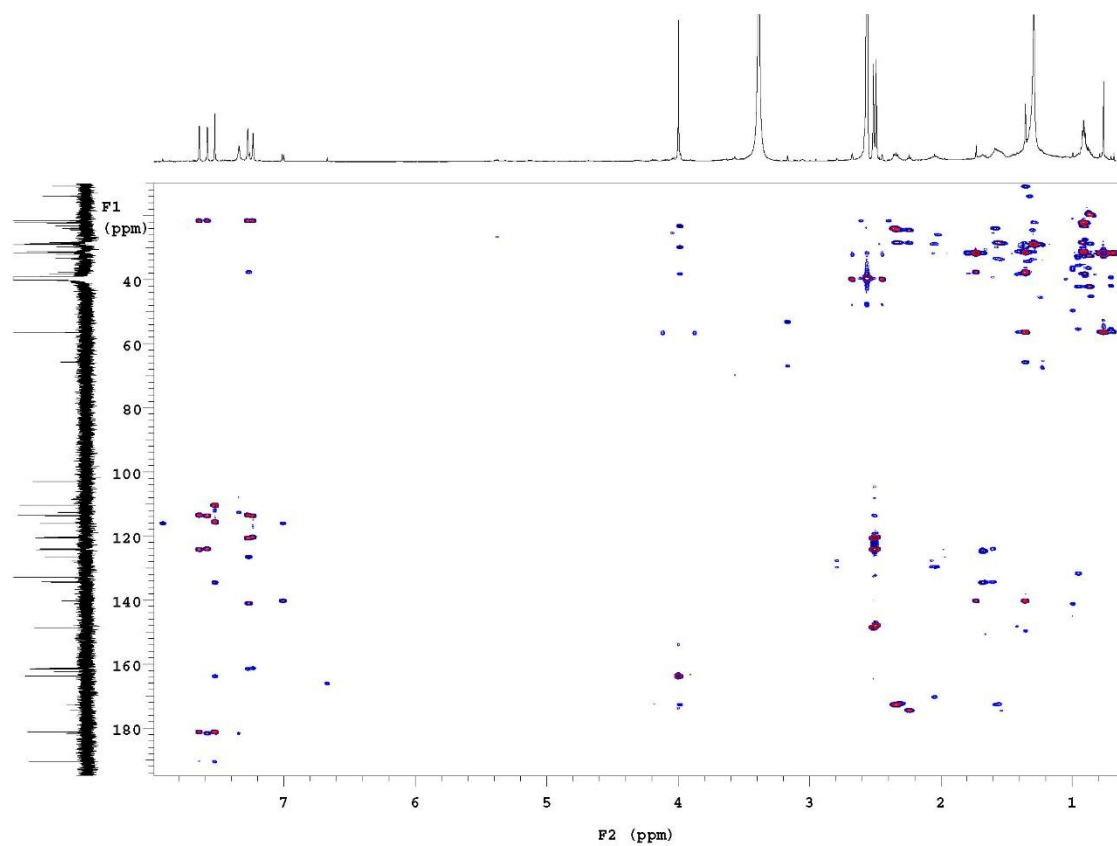


Figure S4: ^1H , ^{13}C HMBC spectrum of 7,7'-emodinphycion (**1**) (600 MHz, $\text{DMSO-}d_6$, 25 °C).

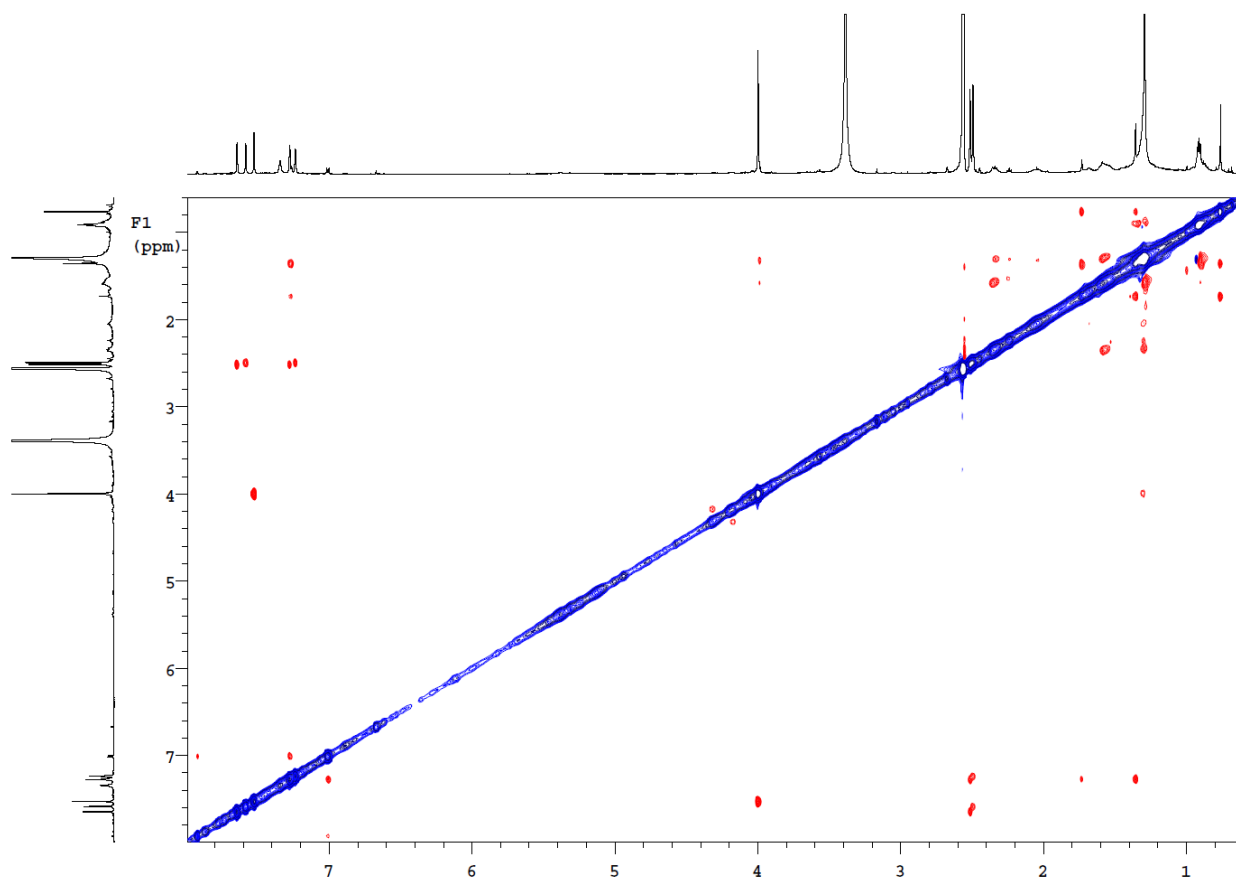


Figure S5: ^1H , ^1H ROESY spectrum of 7,7'-emodinphyscion (**1**) (600 MHz, $\text{DMSO-}d_6$, 25 °C, mixing time 0.4 s).

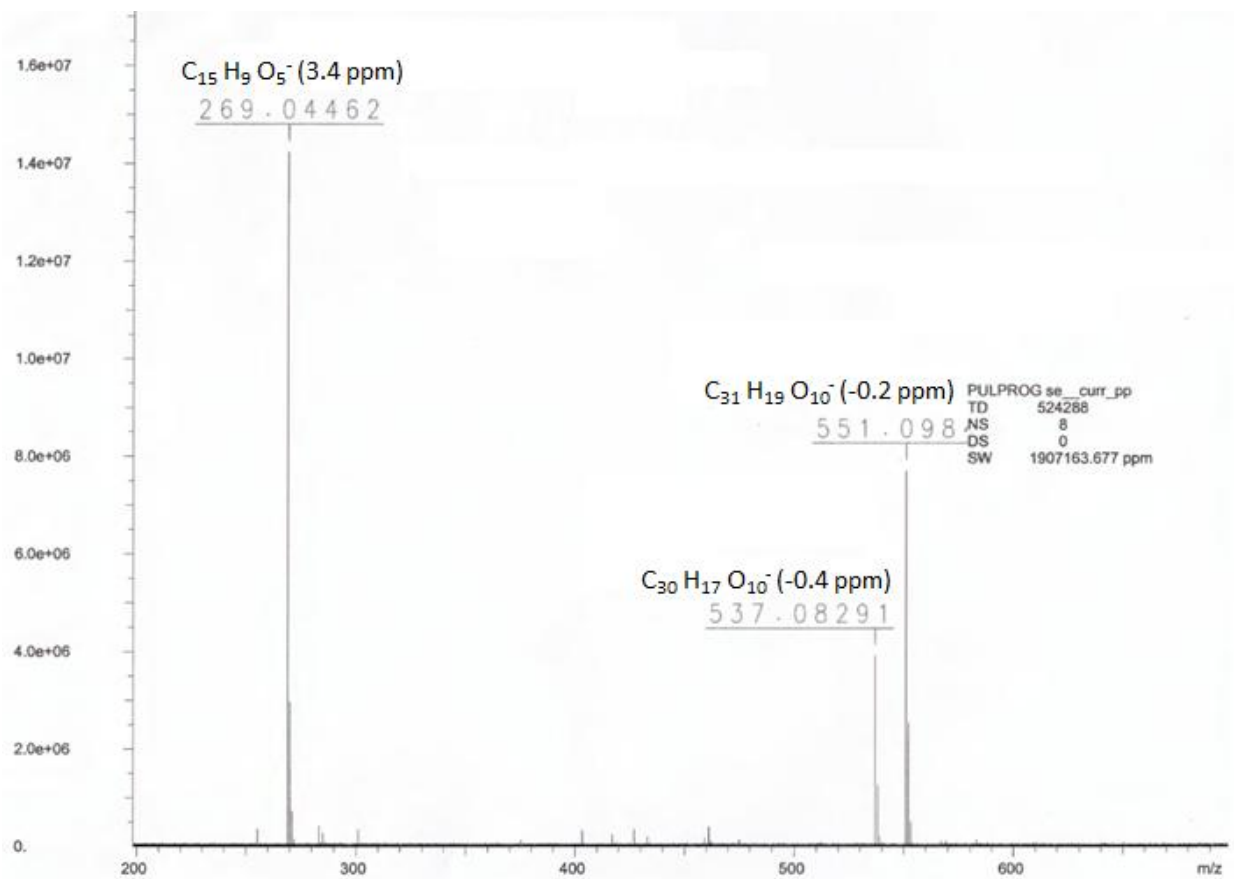


Figure S6 : Negative ion HR-ESI-MS spectrum of 7,7'-emodinphyscion (**1**).