

SUPPLEMENTARY MATERIAL**A new quinolinone from freshwater lake derived fungus *Myrothecium verrucaria***

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Abstract

One new quinolinone, 7-hydroxy-3-methoxyviridicatin (**1**), along with eight known compounds (**2–9**) were isolated from the fungus *Myrothecium verrucaria*, which was collected from lake water of Chenghai, Yunnan Province, China. Their structures were elucidated by detailed analysis of spectroscopic data and comparison with related known compounds. Compounds **1** and **2** exhibited weak antibacterial activity. To the best of our knowledge, this is the first report on quinolinones (**1–4**) as the secondary metabolites of *Myrothecium verrucaria*.

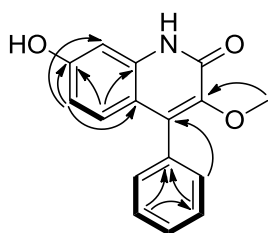
Keywords: *Myrothecium verrucaria*; quinolinone; benzodiazepine; antibacterial activity

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Table S1 ^1H -(600 MHz) and ^{13}C -(150 MHz) NMR spectral data of compound **1** in $\text{DMSO-}d_6$

No.	^{13}C NMR (ppm)	^1H NMR (ppm)
2	158.8, C	
3	142.2, C	
4	138.1, C	
4a	112.5, C	
5	127.2, CH	6.80 (d, $J = 8.9$, Hz, 1H)
6	111.8, CH	6.57 (dd, $J = 8.9$, 2.4 Hz, 1H)
7	158.2, C	
8	100.0, CH	6.77 (d, $J = 2.4$ Hz, 1H)
8a	137.5, C	
1'	133.9, C	
2'/6'	129.0, CH	7.31 (d, $J = 7.2$ Hz, 2H)
3'/5'	128.3, CH	7.52 (ddd, $J = 7.2$, 7.2, 1.2 Hz, 2H)
4'	127.8, CH	7.46 (m, 1H)
1-NH		11.89 (s)
3-OCH ₃	59.3, CH ₃	3.62 (s, 3H)
7-OH		9.99 (s)

Figure S1 ^1H - ^1H COSY (—) and Key HMBC (---) correlations for **1**

Top Spectrum (Full ^{13}C NMR):

- 138.07
- 137.47
- 133.67
- 129.04
- 128.28
- 127.85
- 127.15
- 142.24
- 137.47
- 133.87
- 129.04
- 128.28
- 127.85
- 127.15
- 112.53
- 111.77
- 99.97

Bottom Spectrum (Zoomed-in ^{13}C NMR):

- 138.07
- 137.47
- 133.67
- 129.04
- 128.28
- 127.85
- 127.15

MeOH residue peak at approximately 48 ppm.

Figure S3 ^{13}C -NMR in DMSO- d_6 for compound **1**

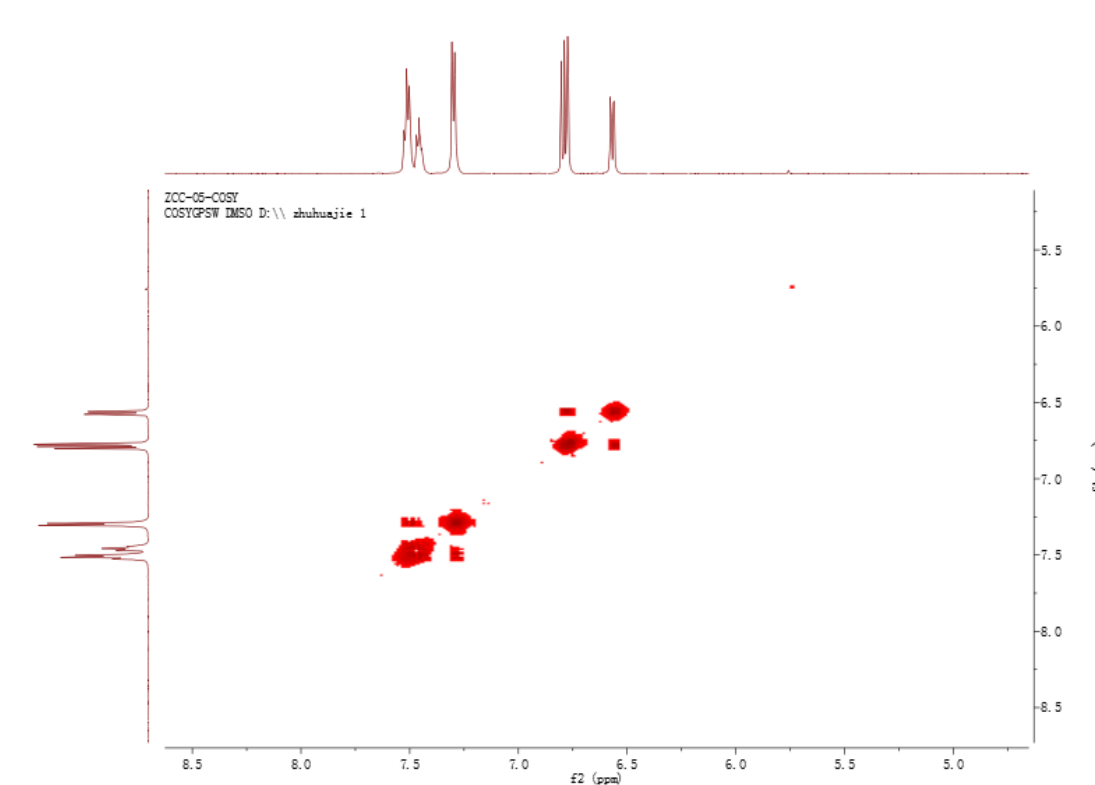


Figure S4 ^1H - ^1H COSY in $\text{DMSO}-d_6$ for compound **1**

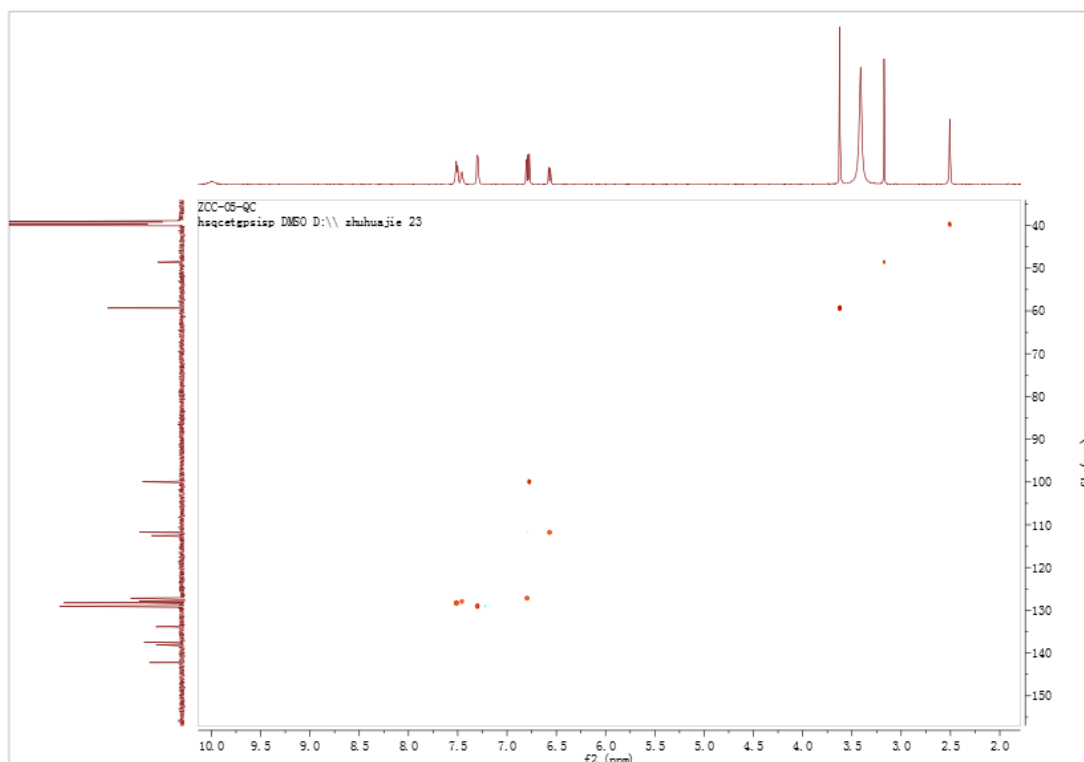
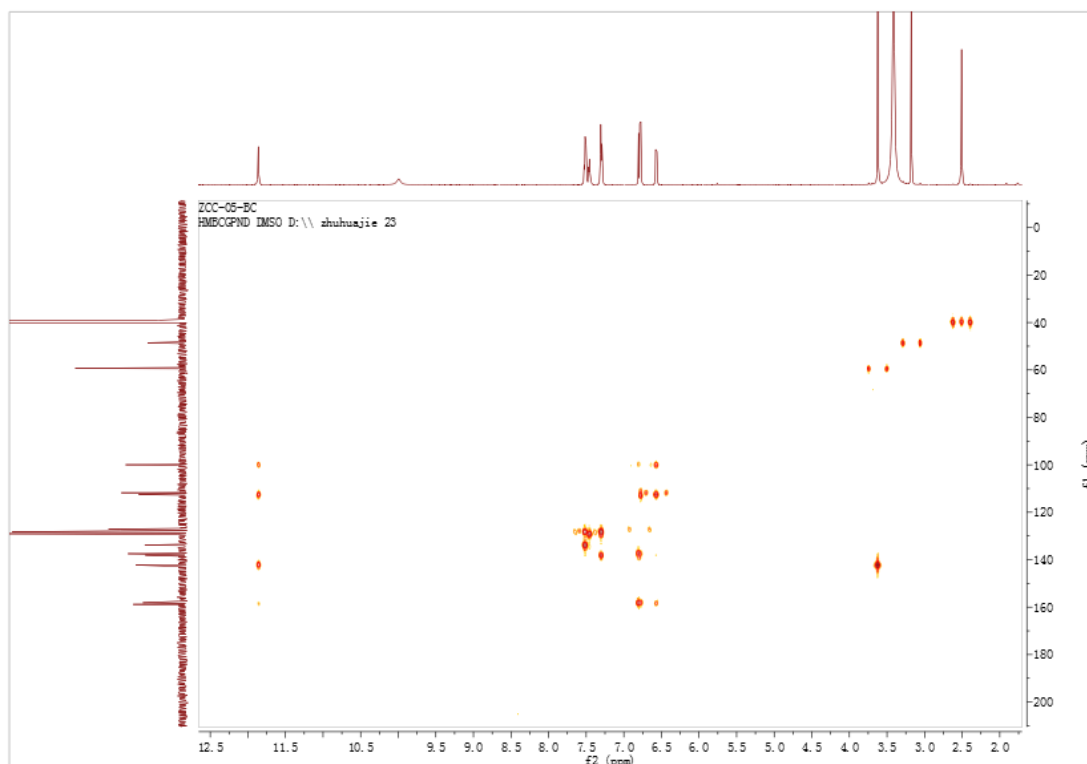
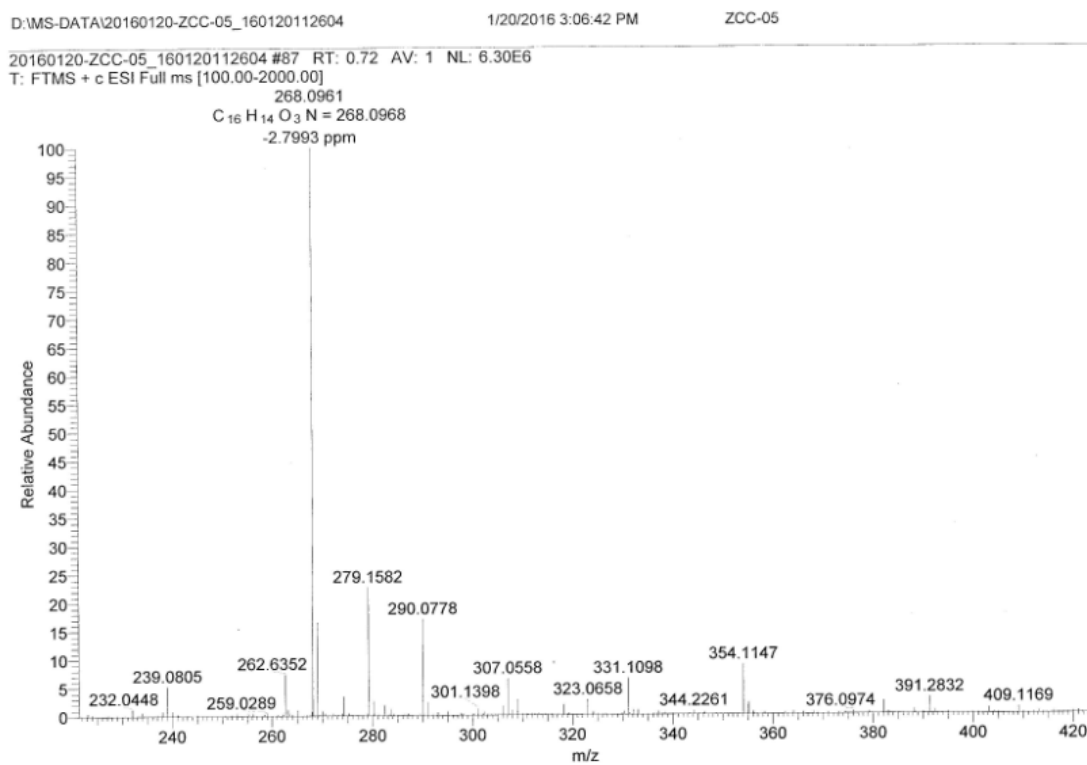


Figure S5 HSQC in $\text{DMSO}-d_6$ for compound **1**

Figure S6 HMBC in DMSO- d_6 for compound **1**Figure S7 HRESI-MS for compound **1**