

## Supporting Information

*Rec. Nat. Prod.* 17:1 (2023) 151-156

### Two New Disaccharide Glycosides from the Root Cortex of *Paeonia ostii*

Lei Sun<sup>1,2</sup>, Chuihao Kong<sup>1</sup>, Huan Zhao<sup>1</sup>, Deling Wu<sup>1,3</sup>

and Fengqing Xu<sup>1,3</sup>

<sup>1</sup>Anhui University of Chinese Medicine, Hefei 230012, P. R. China

<sup>2</sup>Zhejiang CONBA pharmaceutical Co. LTD., Hangzhou 310052, P. R. China

<sup>3</sup>Anhui Province Key Laboratory of Research & Development of Chinese Medicine, Hefei 230012, P. R. China

#### Table of Contents

	Page
<b>Figure S1:</b> HR-ESI-MS Spectrum of <b>1</b> (suffruticoside F)	2
<b>Figure S2:</b> <sup>1</sup> H-NMR (500 MHz, CDCl <sub>3</sub> ) Spectrum of <b>1</b> (suffruticoside F)	3
<b>Figure S3:</b> <sup>1</sup> H-NMR (500 MHz, CDCl <sub>3</sub> ) Spectrum of <b>1</b> ( $\delta$ 3.15-4.05 ppm) (suffruticoside F)	4
<b>Figure S4:</b> HSQC Spectrum of <b>1</b> (suffruticoside F)	5
<b>Figure S5:</b> HMBC Spectrum of <b>1</b> (suffruticoside F)	6
<b>Figure S6:</b> <sup>1</sup> H- <sup>1</sup> H COSY Spectrum of <b>1</b> (suffruticoside F)	7
<b>Figure S7:</b> HR-ESI-MS Spectrum of <b>2</b> (suffruticoside G)	8
<b>Figure S8:</b> <sup>1</sup> H-NMR (500 MHz, CDCl <sub>3</sub> ) Spectrum of <b>2</b> (suffruticoside G)	9
<b>Figure S9:</b> <sup>13</sup> C-NMR (125 MHz, CDCl <sub>3</sub> ) Spectrum of <b>2</b> (suffruticoside G)	10
<b>Figure S10:</b> <sup>1</sup> H- <sup>1</sup> H COSY Spectrum of <b>2</b> (suffruticoside G)	11
<b>Table S1:</b> The Table of 2D-NMR data	12

Data File: E:\DATA\2021\0128\xff-11.lcd

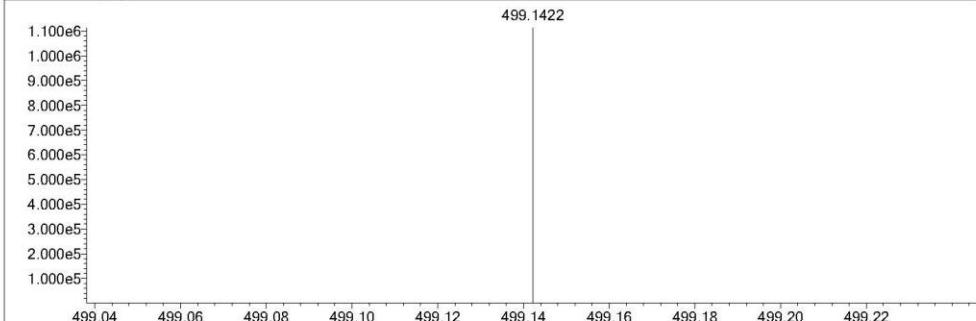
Elmt	Val.	Min	Max	Use Adduct												
H	1	10	100	F	1	0	0	S	2	0	0	Br	1	0	2	H
2H	1	0	0	Na	1	0	0	Cl	1	0	0	Pd	2	0	0	Na
C	4	5	50	Mg	2	0	0	Co	2	0	0	Ag	1	0	0	
N	3	0	0	Si	4	0	0	Cu	2	0	0	I	3	0	0	
O	2	0	30	P	3	0	0	Se	2	0	0					

Error Margin (ppm): 5  
HC Ratio: unlimited  
Max Isotopes: all  
MSn Iso RI (%): 75.00

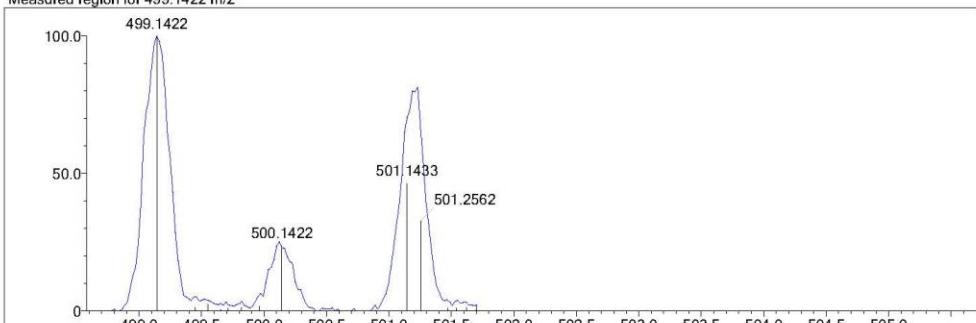
DBE Range: -2.0 - 100.0  
Apply N Rule: yes  
Isotope RI (%): 1.00  
MSn Logic Mode: OR

Electron Ions: both  
Use MSn Info: yes  
Isotope Res: 10000  
Max Results: 20

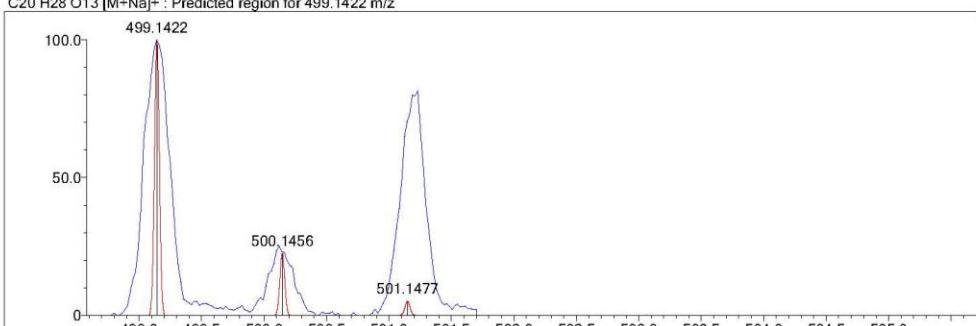
Event#: 1 MS(E+) Ret. Time : 0.480 &gt; 0.493 Scan# : 73 &gt; 75



Measured region for 499.1422 m/z

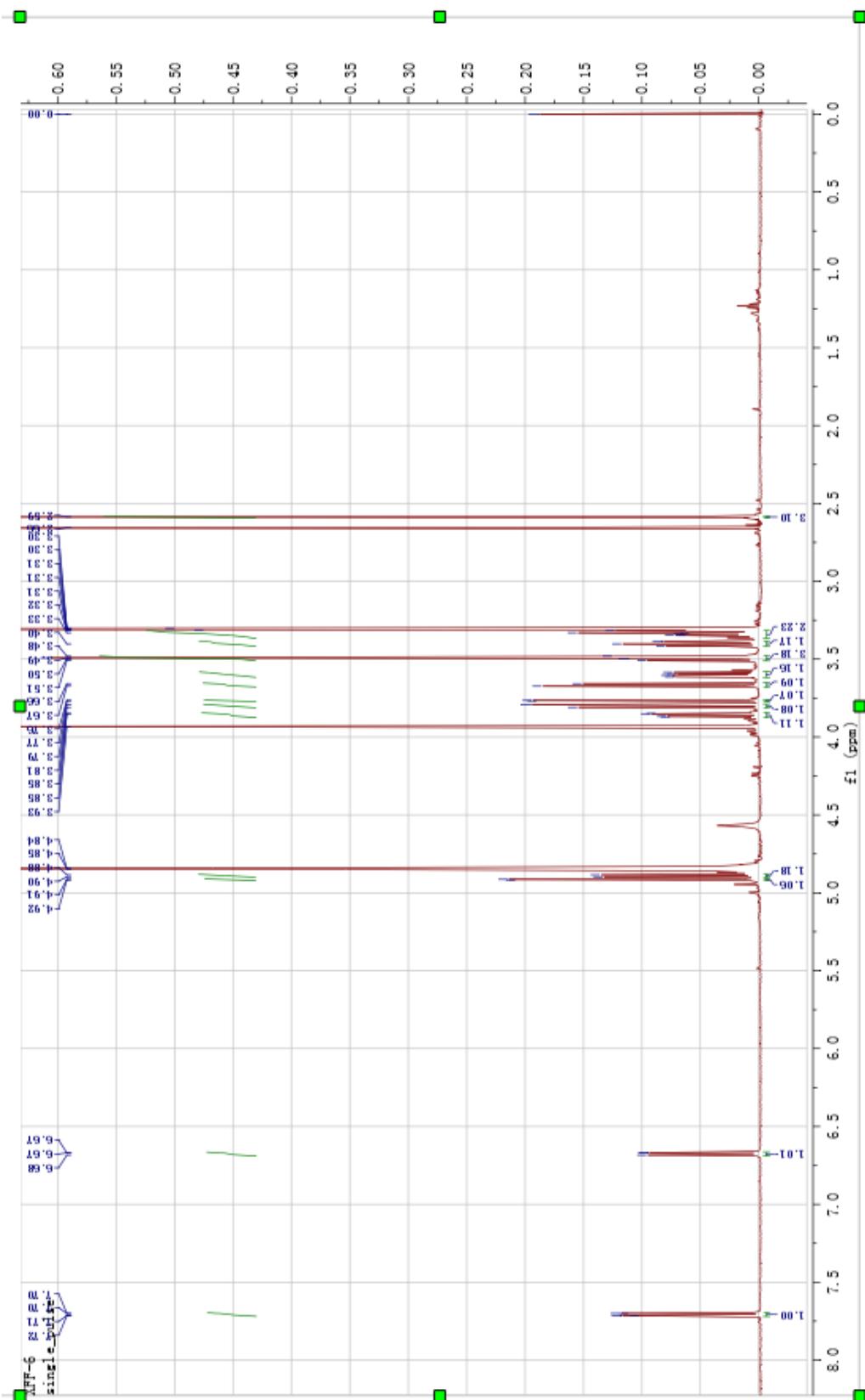


C20 H28 O13 [M+Na]+ : Predicted region for 499.1422 m/z

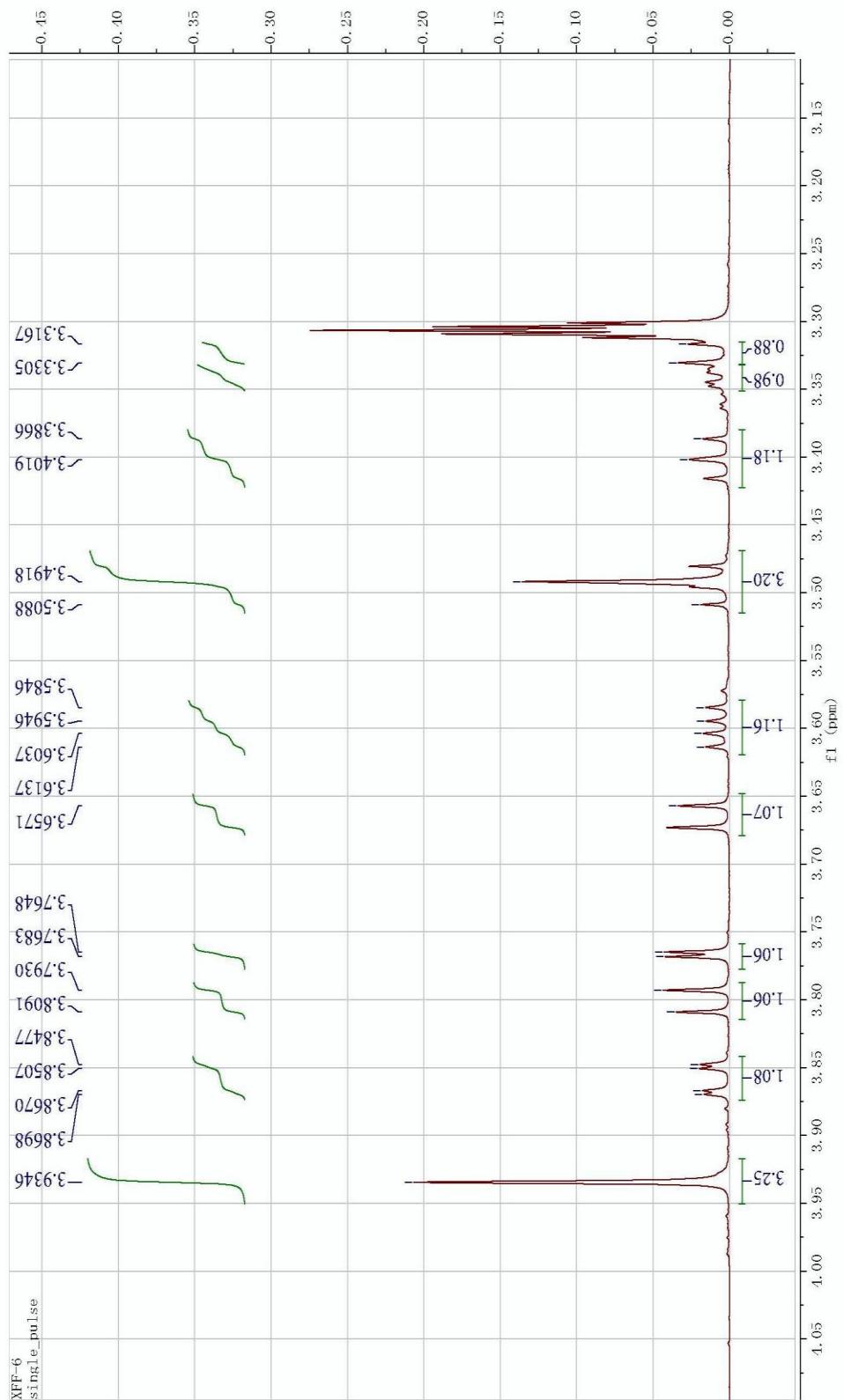


Formula (M)	Ion	Meas. m/z	Pred. m/z	Df. (mDa)	Df. (ppm)	DBE
C20 H28 O13	[M+Na]+	499.1422	499.1422	-0.0	0.00	7.0

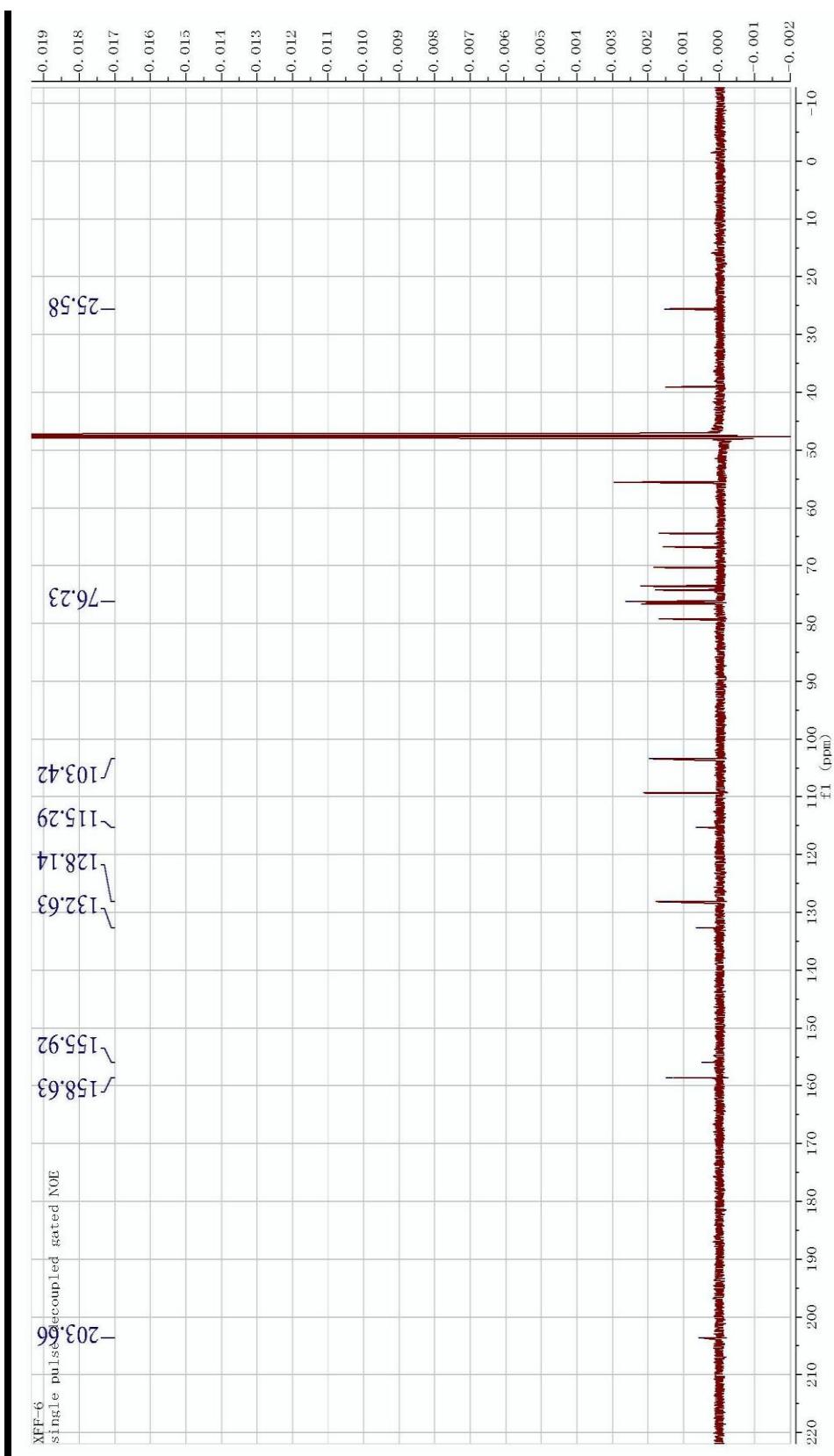
**Figure S1:** HR-ESI-MS Spectrum of **1** (suffruticoside F)



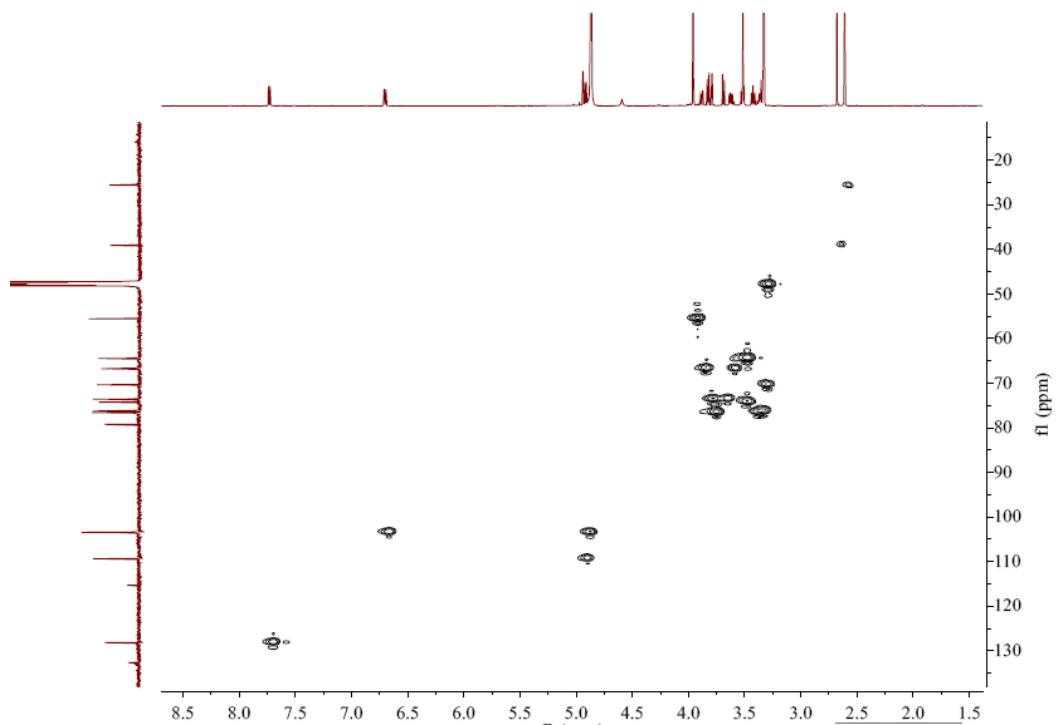
**Figure S2:**  $^1\text{H}$ -NMR (500 MHz, MeOD) Spectrum of **1**(suffruticoside F)



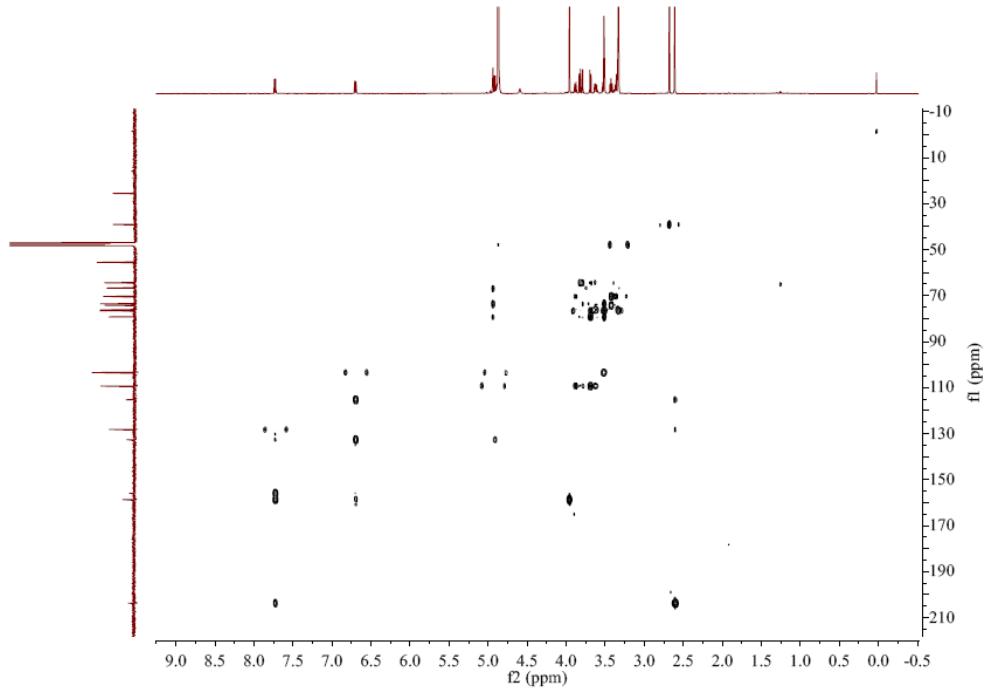
**Figure S3:**  $^1\text{H}$ -NMR (500 MHz, MeOD) Spectrum of **1**(suffruticoside F) ( $\delta$  3.00-4.10 ppm)



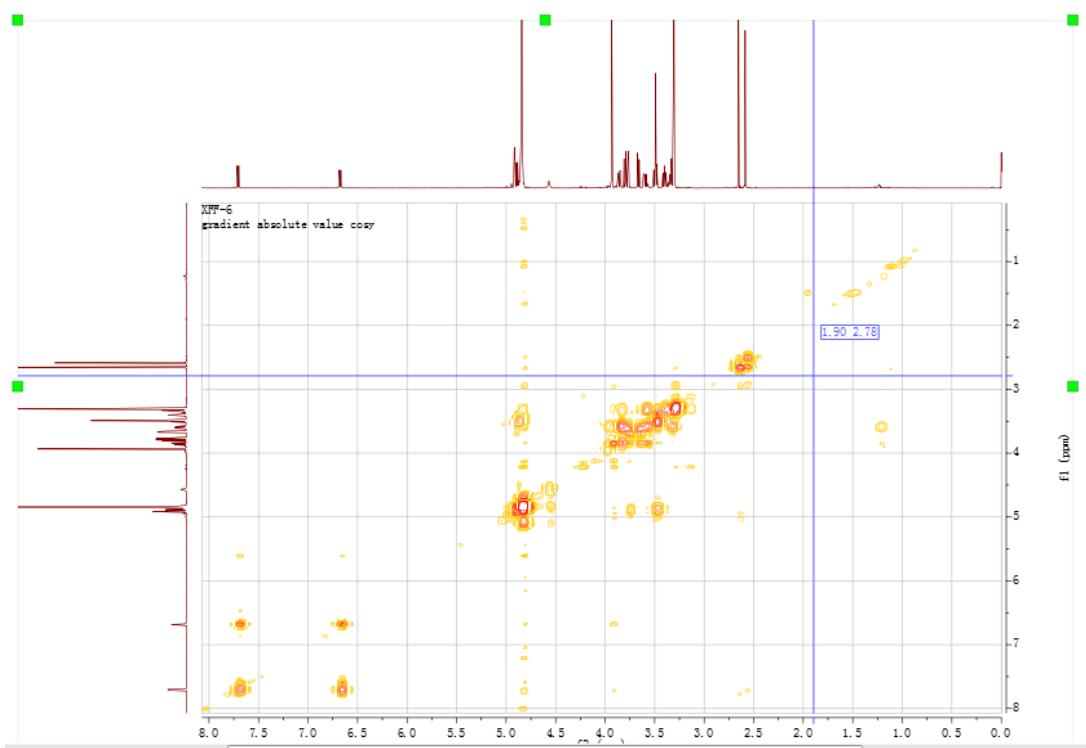
**Figure S3:**  $^{13}\text{C}$ -NMR (150 MHz, MeOD) Spectrum of **1**(suffruticoside F)



**Figure S4:** HSQC Spectrum of **1** (suffruticoside F)



**Figure S5:** HMBC Spectrum of **1** (suffruticoside F)

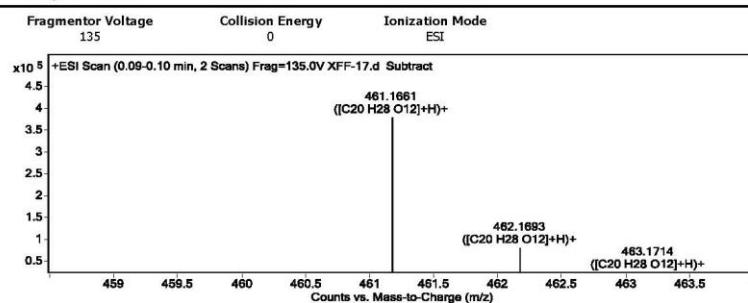


**Figure S6:**  $^1\text{H}$ - $^1\text{H}$  COSY Spectrum of **1** (suffruticoside F)

## Qualitative Analysis Report

Data Filename	XFF-17.d	Sample Name	XFF-17
Sample Type	Sample	Position	P1-D6
Instrument Name	Instrument 1	User Name	
Acq Method	s.m	Acquired Time	4/7/2021 1:58:23 PM
IRM Calibration Status	Success	DA Method	Default.m
Comment			
Sample Group	Info.		
Acquisition SW	6200 series TOF/6500 series		
Version	Q-TOF B.05.01 (B5125.2)		

### User Spectra



### Peak List

m/z	z	Abund	Formula	Ion
153.0543	1	99436.89		
274.2741	1	49544.93		
315.1081	1	35117.43		
449.1636	1	49153.59		
461.1661	1	381992.34	C <sub>20</sub> H <sub>28</sub> O <sub>12</sub>	(M+H) <sup>+</sup>
462.1693	1	82304.79	C <sub>20</sub> H <sub>28</sub> O <sub>12</sub>	(M+H) <sup>+</sup>
483.1481	1	170172.06		
484.1514	1	35939.64		
943.3062	1	177757.41		
944.3091	1	78329.53		

### Formula Calculator Element Limits

Element	Min	Max
C	3	60
H	0	120
O	0	30

### Formula Calculator Results

Formula	CalculatedMass	CalculatedMz	Mz	Diff. (mDa)	Diff. (ppm)	DBE
C <sub>20</sub> H <sub>28</sub> O <sub>12</sub>	460.1581	461.1654	461.1661	-0.70	-1.52	7.0000

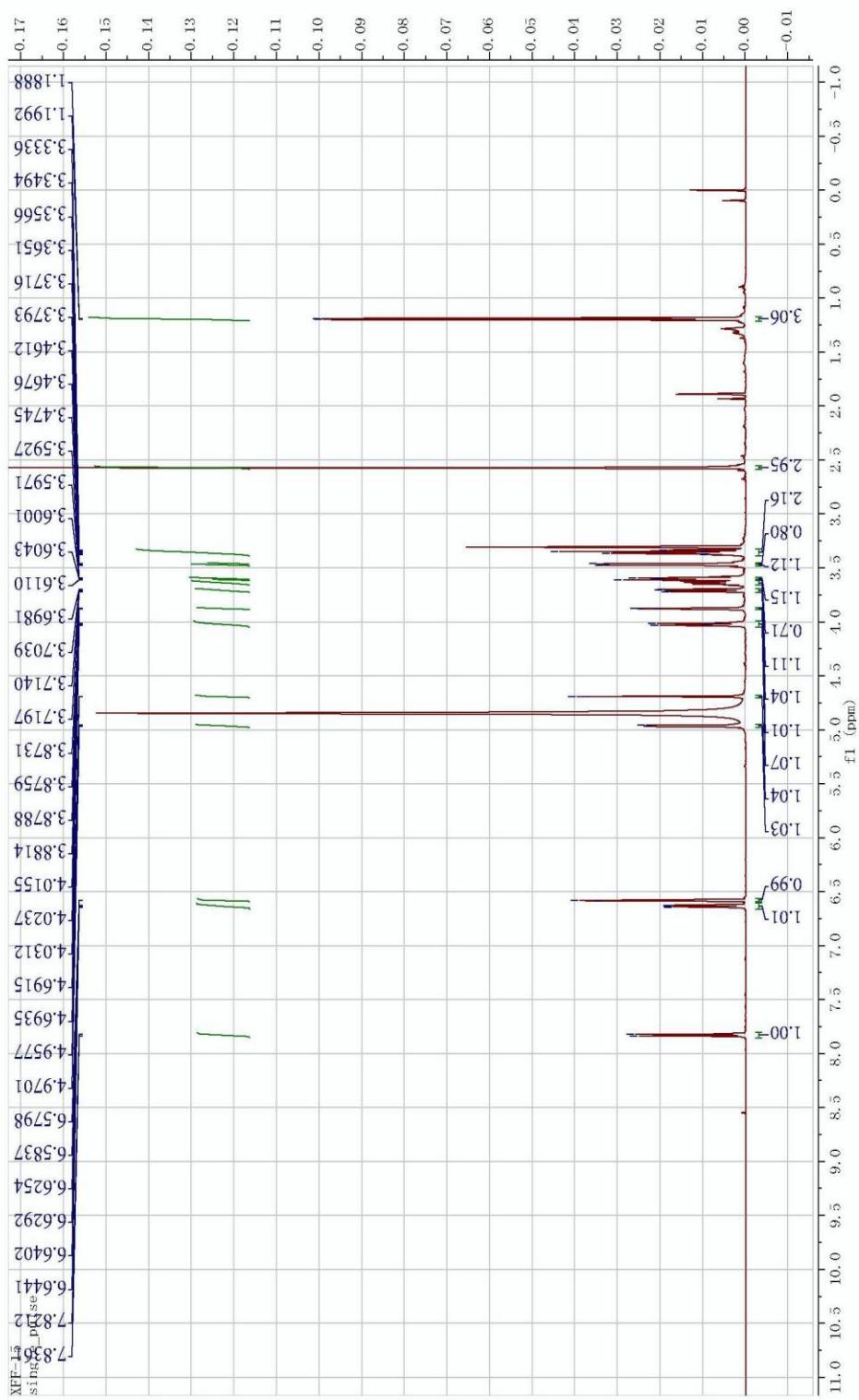
--- End Of Report ---

 Agilent Technologies

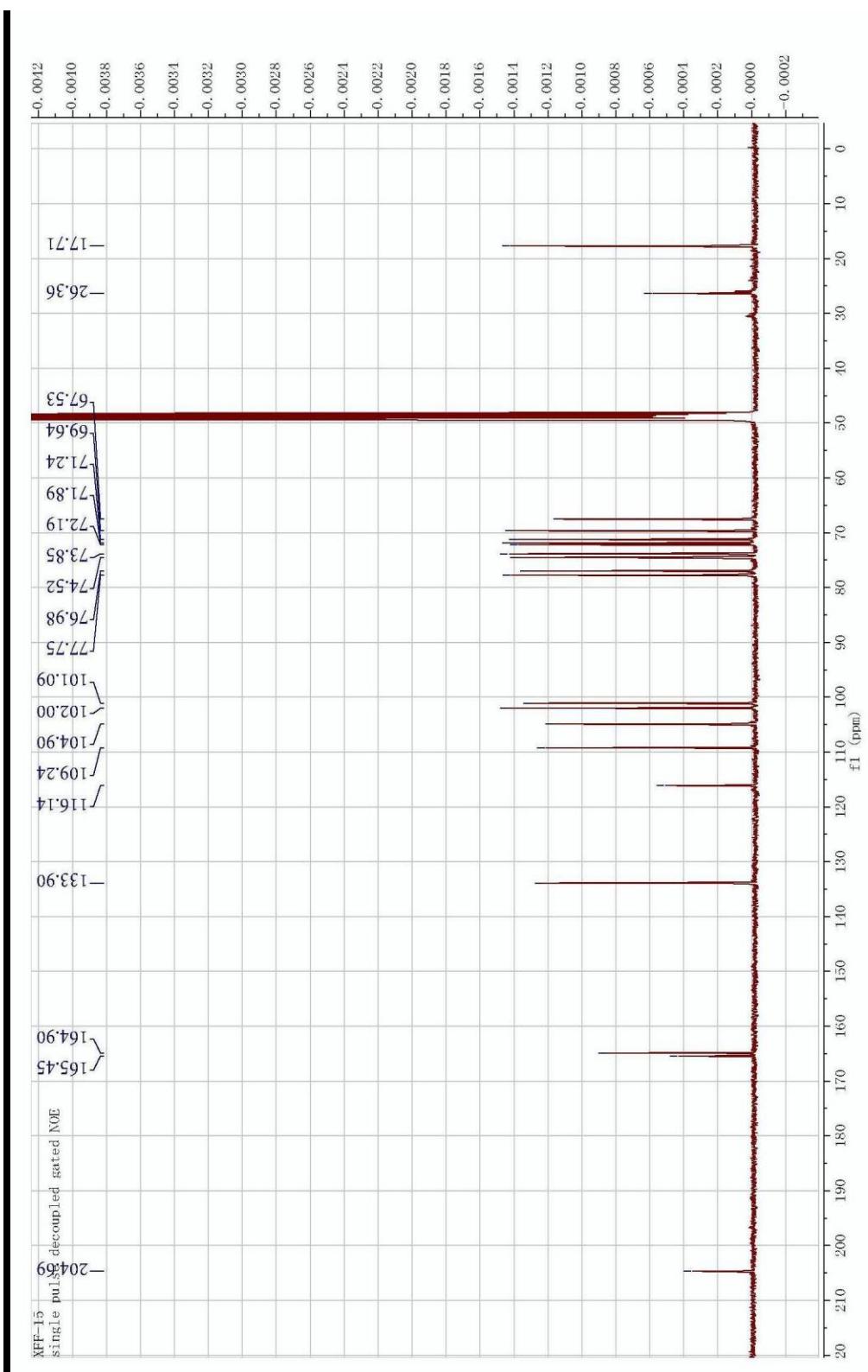
Page 1 of 1

Printed at: 11:03 AM on: 4/9/2021

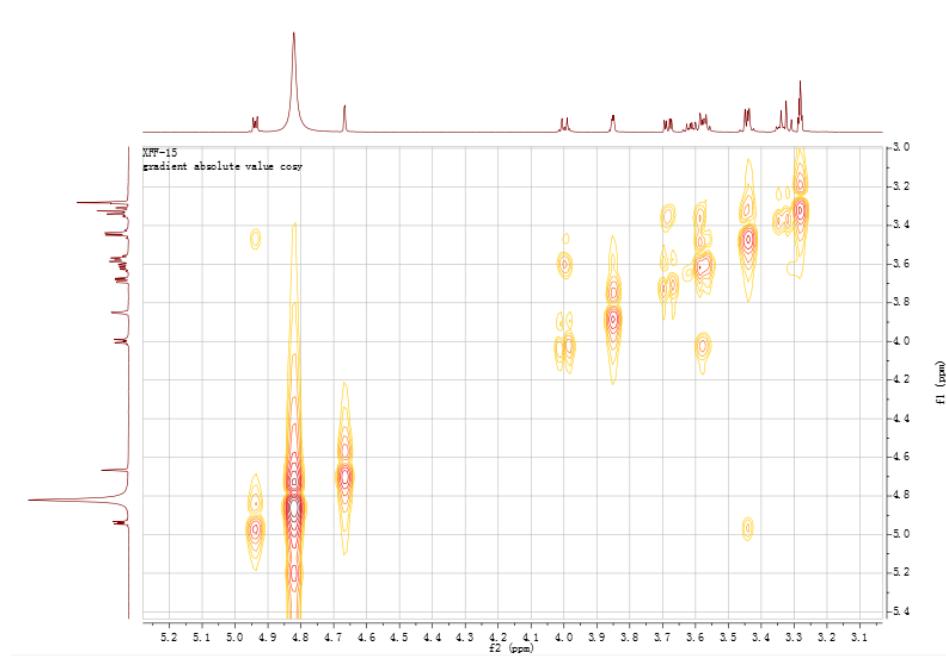
**Figure S7:** HR-ESI-MS Spectrum of **2** (suffruticoside G)



**Figure S8:** <sup>1</sup>H-NMR (500 MHz, MeOD) Spectrum of **2** (suffruticoside G)



**Figure S9:**  $^{13}\text{C}$ -NMR (125 MHz,  $\text{MeOD}$ ) Spectrum of **2** (suffruticoside G)



**Figure S10:** <sup>1</sup>H-<sup>1</sup>H COSY Spectrum of **2** (suffruticoside G)

**Table S1 :** The  $^1\text{H}$ - and  $^{13}\text{C}$ -NMR date of compound **1** ( $\text{CD}_3\text{OD}$ , 600/150MHz)

Position	$\delta_{\text{C}}$	$\delta_{\text{H}}$	HMBC (H→C)
1	115.3	-	
2	155.9	-	
3	132.6	-	
4	158.6	-	
5	103.4	6.67 (1H, <i>d</i> , 9.0)	C-1, C-3, C-4
6	128.1	7.70 (1H, <i>d</i> , 9.0)	C-2, C-4, C-7
7	203.7	-	
8	25.6	2.59 (3H, <i>s</i> )	C-1, C-7
$\text{OCH}_3$	55.6	3.93 (3H, <i>s</i> )	C-4
1'	103.4	4.89 (1H, <i>d</i> , 7.8)	C-3
2'	74.2	3.49 (1H, <i>dd</i> , 9.2, 7.8)	C-1'
3'	76.5	3.40 (1H, <i>t</i> , 9.2)	C-2', C-4'
4'	70.3	3.32 (1H, <i>t</i> , 8.0)	C-3'
5'	76.2	3.34 (1H, <i>ddd</i> , 9.6, 6.0, 1.8)	C-4'
6'	66.7	3.59 (1H, <i>dd</i> , 11.2, 6.0)	C-1'', C-5'
		3.86 (1H, <i>dd</i> , 11.2, 1.8)	C-1''
1''	109.3	4.92 (1H, <i>d</i> , 2.1)	C-6', C-3'', C-5''
2''	76.6	3.76 (1H, <i>d</i> , 2.1)	C-4''
3''	79.2	-	
4''	64.3	3.50 (2H, <i>s</i> )	C-2'', C-3'', C-5''
5''	73.6	3.79 (1H, <i>d</i> , 9.6)	C-4''
		3.66 (1H, <i>d</i> , 9.6)	C-2'', C-3'', C-1''