### **Supporting Information**

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# A New 2,3-Dioxygenated Flavanone and Other Constituents from

### Dysosma difformis

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Figure S1: The <sup>1</sup>H-NMR spectrum of the compound (2) in CD<sub>3</sub>OD



Figure S2: The extended <sup>1</sup>H-NMR spectrum of the compound (2) in CD<sub>3</sub>OD



Figure S3: The <sup>13</sup>C-NMR spectrum of the compound (2) in CD<sub>3</sub>OD



Figure S4: HSQC spectrum of the compound (2) in CD<sub>3</sub>OD



Figure S5: HMBC spectrum of the compound (2) in CD<sub>3</sub>OD

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Figure S7: The extended <sup>1</sup>H-NMR spectrum of the compound (2) in DMSO- $d_6$ 



**Figure S8:** The <sup>13</sup>C-NMR spectrum of the compound (2) in DMSO- $d_6$ 



Figure S9: HSQC spectrum of the compound (2) in DMSO- $d_6$ 



Figure S10: COSY spectrum of the compound (2) in DMSO- $d_6$ 



Figure S11: HMBC spectrum of the compound (2) in DMSO- $d_6$ 



Figure S12: NOESY spectrum of the compound (2) in DMSO- $d_6$ 



Figure S14: IR spectrum of the compound (2)



Figure S15: UV-Vis spectrum of the compound (2)

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Structure Match	O Sub	stances	5 (5)		+	4th	sort: Relevance - View: Full
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Substructure (5)	0 1				Searc	h Patent Markush	
Similarity (19K)	2212305-0	)1-4		Key Physical Pro	perties	Value	Condition
Analyze Structure Precision	$C_{20}H_{20}O_9$ 4/-1-Benzopyran-4-one, 2-(3,4-dihydrox yphenyl)-2-ethoxy-2,3-dihydro-3,5,7-trihyd			Molecular Weigh	t	404.37	
Chemscape Analysis				Boiling Point (Pre	dicted)	716.3±60.0 °C	Press: 760 Torr
Visually explore structure				Density (Predicte	d)	1.59±0.1 g/cm <sup>3</sup>	Temp: 20 °C; Press: 760 Torr
similarity with a powerful new tool. Learn more about Chemscape.				pKa (Predicted)		7.17±0.60	Most Acidic Temp: 25 °C
Create Chemscape Analysis							
Filter by	References		F 4 Suppliers				

Figure S16: The Scifinder search for the new compound (2)

		HO HO	HO T T T T T T T T			
		Dysosmaflavanone	Cepaflava B			
Position	δc	δ <sub>H</sub>	$\delta_{\rm C}$	$\delta_{\rm H}$		
2	108.9		109.4			
3	79.8		80.0			
4	196.5		199.0			
4a	100.8		101.9			
5	165.5		164.4			
6	97.5	5.99 (1H, d, <i>J</i> = 2.5 Hz)	97.8	5.95 (1H, brs)		
7	168.3		168.3			
8	96.7	6.01 (1H, d, <i>J</i> = 2.5 Hz)	97.1	6.00 (1H, brs)		
8a	160.1		158.8			
1'	126.6		126.3			
2'	131.0	7.43 (1H, d, <i>J</i> = 8.5 Hz)	117.1	7.11 (1H, s)		
3'	115.5	6.84 (1H, d, <i>J</i> = 8.5 Hz)	145.8			
4'	159.5		147.5			
5'	115.5	6.84 (1H, d, <i>J</i> = 8.5 Hz)	115.6	6.80 (1H, d, <i>J</i> = 7.8 Hz)		
6'	131.0	7.43 (1H, d, <i>J</i> = 8.5 Hz)	121.6	7.02 (1H, d, <i>J</i> = 7.8 Hz)		
1"	60.3	3.37 (1H, dq, overlap) 3.52 (1H, dq, <i>J</i> = 7.5, 2.5 Hz)	51.4	3.88 (3H, s)		
2"	15.1	1.04 (3H, t, J = 7.5 Hz)	-	-		
		2.25 (1H, d, <i>J</i> = 15.5 Hz)		2.56 (1H, d, <i>J</i> = 13.5 Hz)		
1'''	41.7	3.08 (1H, d, <i>J</i> = 15.5 Hz)	41.3	2.42 (1H, d, <i>J</i> = 13.5 Hz)		
2'''	213.9		209.3			
3'''	31.8	2.28 (3H, s)	32.3	1.98 (3H, s)		

Table S1: NMR data in  $CD_3OD$  for the compound (2) and the reference Cepaflava B