Natural Product Communications

Supplementary Data

Phenolic Compounds as Potent Free Radical Scavenging and Enzyme Inhibitory Components from the Leaves of *Guiera senegalensis* J.F. Gmel.

Amina Ibrahim Dirar[a,b,c], Anjana Adhikari-Devkota[a], Md. Mahadi Hassan[a], Mikiyo Wada[a], Takashi Watanabe[a], Hari Prasad Devkota[a,d,*]

[a]*Graduate School of Pharmaceutical Sciences, Kumamoto University, Kumamoto, Japan*
[b]*Medicinal, Aromatic Plants and Traditional Medicine Research Institute, National Centre for Research, Khartoum, Sudan*
[c]*Faculty of Clinical and Industrial Pharmacy, National University, Khurtum, Sudan*
[d]*Program for Leading Graduate Schools, Health life science: Interdisciplinary and Glocal Oriented (HIGO) Program, Kumamoto University, Kumamoto, Japan*

devkotah@kumamoto-u.ac.jp

List of Supplementary figures:

Table S1. ^{1}H and ^{13}C -NMR Spectroscopic Data of Compounds **1**− **3** in CD_3OD

Position	Myricetin (**1**)		Myricitrin (**2**)		Quercetin (**3**)	
	^{1}H	^{13}C	^{1}H	^{13}C	^{1}H	^{13}C
2		148.05		159.50		148.07
3		137.37		136.36		137.24
4		177.31		179.72		177.35
5		162.50		163.23		162.49
6	6.18, d (2.0)	99.26	6.20, d (2.0)	99.85	6.18, d (2.0)	99.31
7		165.57		165.87		165.56
8	6.38, d (2.0)	94.42	6.37, d (2.0)	94.74	6.38, d (2.0)	94.50
9		158.23		158.55		158.26
10		104.53		105.94		104.58
1′		123.14		122.00		124.19
2′	7.34, s	108.59	6.95, s	109.66	7.73, d (2.6)	116.07
3′		146.74		146.88		146.23
4′		136.96		137.91		148.78
5′		146.74		146.88	6.88, d (8.4)	121.76
6′	7.34, s	108.59	6.95, s	109.66	7.63, dd (2.6, 8.4)	116.29
Rha-1			5.31, s	103.65		
Rha-2			4.22, s	71.92		
Rha-3			3.79, dd (3.29, 3.30)	72.18		
Rha-4			3.35, m	73.40		
Rha-5			3.51, m	72.07		
Rha-6			0.96, d (6.18)	17.69		

Table S2. ^{1}H and ^{13}C -NMR Spectroscopic Data of Compound **4** in CD_3OD

Position	^{1}H	^{13}C
2	4.52, d (7.1)	82.91
3	3.95, m	68.80
4	2.80, dd (16.1)	28.13
	2.50, dd (16.1)	
5		157.60
6	5.91, d (2.2)	96.39
7		157.82
8	5.85, d (2.2)	95.58
9	2.50, dd (16.1)	156.85
10	2.80, dd (16.1)	100.79
1′		131.63
2′	6.39, s	107.26
3′		146.89
4′		134.04
5′		146.89
6′	6.39, s	107.26

Table S3. ^{1}H and ^{13}C -NMR Spectroscopic Data of Compound **5** in CD_3OD

Position	^{1}H	^{13}C
Quinic acid moiety		
1		80.63
2	2.33-2.85, m	33.49
3	5.82, br, m	70.95
4	5.54, dd (3.5, 9.1)	72.78
5	5.97, brs	69.39
6	2.33-2.85, m	38.86
7		174.02
Galloyl moieties		
1		120.83
		120.86
		121.00
		121.23
2, 6	6.89, s	110.46
	6.98, s	110.56
	7.02, s	
	70.6, s	
3, 5		146.22
		146.40
		146.52
4		139.84
		140.14
		140.21
		140.28
7		167.33
		167.36
		167.60
		167.74

Table S4. ^{1}H- and ^{13}C-NMR Spectroscopic Data of Compounds **6-8** in CD_3OD

Position	Gallic acid (**6**)		Methyl gallate (**7**)		Ethyl gallate (**8**)	
	^{1}H	^{13}C	^{1}H	^{13}C	^{1}H	^{13}C
1		122.17		121.55		121.80
2	7.04, s	110.42	7.03, s	110.13	7.03, s	110.14
3		146.41		146.53		146.51
4		139.59		139.79		139.79
5		146.41		146.53		146.51
6	7.04, s	110.42	7.03, s	110.13	7.03, s	110.14
$\underline{C}O_2H$		170.56		169.07		168.61
$CO_2\underline{CH_3}$			3.80, s	52.28		
$CO_2\underline{CH_2}CH_3$					4.25, q (7.3)	61.69
$CO_2CH_2\underline{CH_3}$					1.33, t (7.3)	14.68