

Supplemental Table S5. ¹H and ¹³C NMR spectroscopic data for F₁ and F₂ in CD₃OD

F ₁			F ₂		
Position	δc	δH(J in Hz)	Position	δc	δH(J in Hz)
Quercetin			kaempferol		
2	157.51	-	2	156.72	-
3	133.55	-	3	133.38	-
4	177.60	-	4	177.65	-
5	161.61	-	5	161.75	-
6	98.43	6.14, d (2.06)	6	98.49	6.19, d (2.1)
7	164.26	-	7	164.17	-
8	93.44	6.34, d (2.12)	8	93.51	6.35, d (2.11)
9	157.01	-	9	157.84	-
10	104.47	-	10	104.46	-
1'	122.08	-	1'	121.47	-
2'	116.15	7.60, d (2.22)	2'	130.94	8.01, d (8.8)
3'	145.91	-	3'	114.86	6.93, d (8.8)
4'	148.24	-	4'	157.84	-
5'	114.79	6.88, d (8.43)	5'	114.86	6.93, d (8.8)
6'	121.84	7.55, dd (8.47,2.21)	6'	130.94	8.01, d (8.8)
<i>p</i> -coumaric acid			<i>p</i> -coumaric acid		

1	125.94	-	1	125.93	-
2,6	129.94	7.46, d (8.62)	2,6	129.91	7.49, d (8.7)
3,5	115.37	6.80, d (8.39)	3,5	115.38	6.84, d (8.6)
4	159.84	-	4	159.88	-
α	113.77	6.39, d (15.88)	α	113.78	6.37, d (15.9)
β	144.48	7.68, d (15.94)	β	145.84	7.72, d (15.9)
C=O	167.35	-	C=O	167.21	-
Glc-1			Glc-1		
1	99.56	5.56, d (7.90)	1	99.45	5.61, d (7.90),
		5.23, dd			5.21, dd (9.5,
2	73.14	(9.46,7.94)	2	73.11	8.0)
3	83.06	3.87,s	3	83.05	3.87, s
4	68.76	3.50,s	4	68.83	3.50, s
5	75.38	3.55,d(2.0)	5	75.41	3.54, d,(2.0)
		3.87, td (4.27,			3.88, d (5.9)
6	67.06	10.35, 11.99)	6	67.09	3.55, s
		3.54, s			
Glc-2			Glc-2		
		4.45, d			
1	104.16	(7.7)	1	104.23	4.45, d (7.7)
		3.28, dd			
2	74.09	(10.6)	2	74.08	3.27, s

3	76.12	3.43, d (4.6)	3	76.14	3.43, d (4.2)
4	69.52	3.3, s	4	69.46	3.39, s
5	76.12 b	3.26, m	5	76.14 a	3.25, d (6.2)
6	60.70	3.73, d (4.2) 3.70, d (4.2)	6	60.67	3.73, dd (7.3, 3.2) 3.70, d (4.1)
Rha			Rha		
1	100.89	4.61, d (1.6)	1	100.84	4.62, d (1.7)
2	69.87	3.99, dd (3.3, 1.7)	2	69.86	4.00, dd (3.3, 1.7)
3	81.68	3.63, s	3	81.71	3.60, d (3.2)
4	71.16	3.45, s	4	71.14	3.45, s
5	68.09	3.52, m	5	68.09	3.52, d (6.0)
6	16.58	1.13, d (6.1)	6	16.58	1.12, d (6.1)
Ara			Ara		
1	103.88	4.34, d (7.0)	1	103.71	4.37, d (7.0)
2	70.83	3.55, dd	2	70.8	3.55

(6.8, 3.9)

3	72.49	3.48, s,	3	72.50	3.48, d (3.1)
4	68.09	3.75, m	4	68.09	3.76, d (6.4)
		3.86, s,			3.87, s
5	65.80		5	65.80	
		3.55, m			3.59, m
