

## Supporting Information

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### Protective Effect of *Syzygium jambos* L. Leaf Extract and Its Constituents Against LPS-induced Oxidative Stress

Kim Yen Huynh <sup>1,2</sup>, Thanh Men Tran <sup>3</sup>, Trong Tuan Nguyen <sup>2\*</sup>  
and Thanh Q. C. Nguyen <sup>2\*</sup>

<sup>1</sup>Department of Applied Biology, College of Agriculture and Rural Development, Kien Giang, Vietnam

<sup>2</sup>Department of Chemistry, College of Natural Sciences, Can Tho University, Can Tho, Vietnam

<sup>3</sup>Department of Biology, College of Natural Sciences, Can Tho University, Can Tho, Vietnam

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**Table S1:** List of primers and primer sequences.

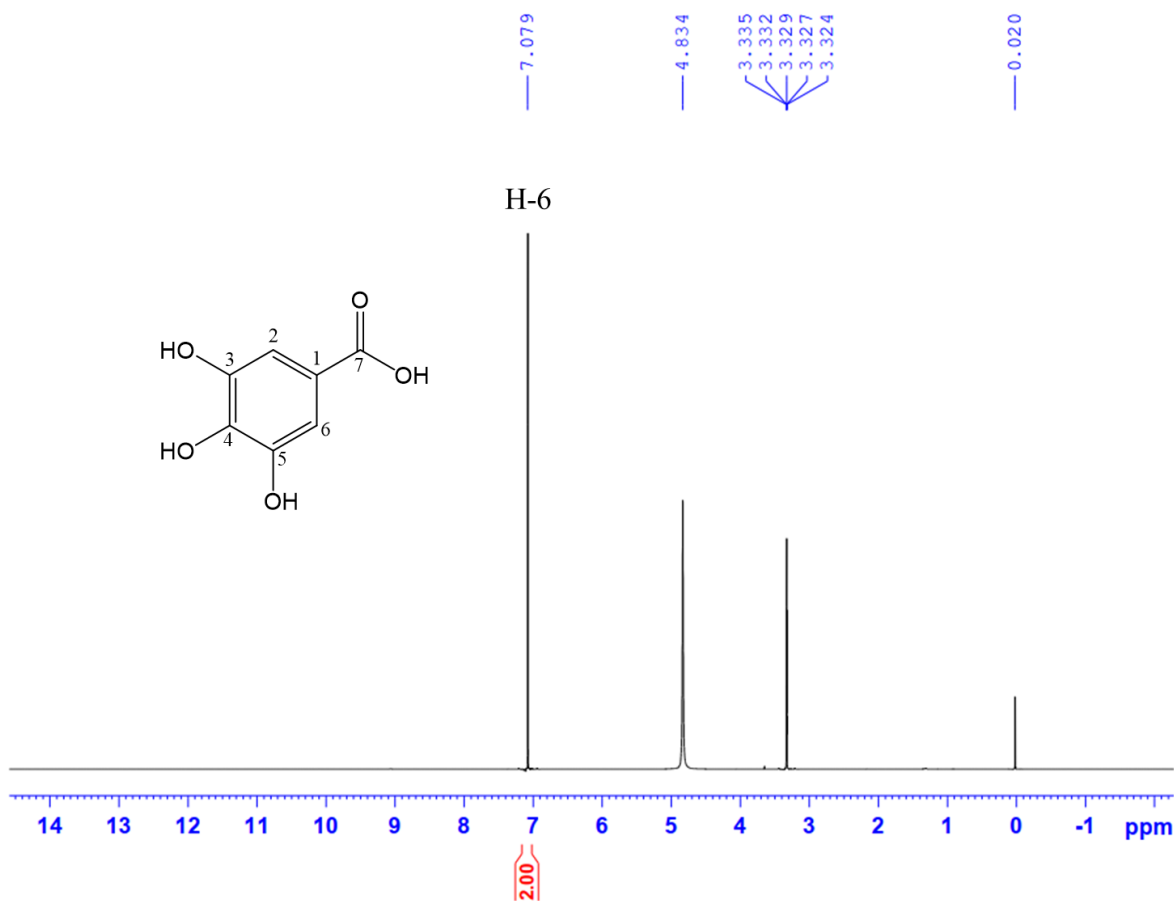
No.	Gene name	Primer probes	Sequence
1	<i>iNOS</i>	Forward	5'- GGAGCCTTTAGACCTCAACAGA-3'
		Reverse	5'-AAGGTGAGCTGAACGAGGAG-3'
2	<i>COX-2</i>	Forward	5'-GATGCTCTTCCGAGCTGTG-3'
		Reverse	5'-GGATTGGAACAGCAAGGATTT-3'
3	<i>HO-1</i>	Forward	5'-AGGGTCAGGTGTCCAGAGAA-3'
		Reverse	5'-CTTCCAGGGCCGTGTAGATA-3'
4	<i><math>\beta</math>-actin</i>	Forward	5'-CCTGAGCGCAAGTACTCTGTGT-3'
		Reverse	5'-GCTGATCCACATCTGCTGGAA-3'

*iNOS*; inducible nitric oxide synthase, *COX-2*; cyclooxygenase-2, *HO-1*; heme oxygenase-1

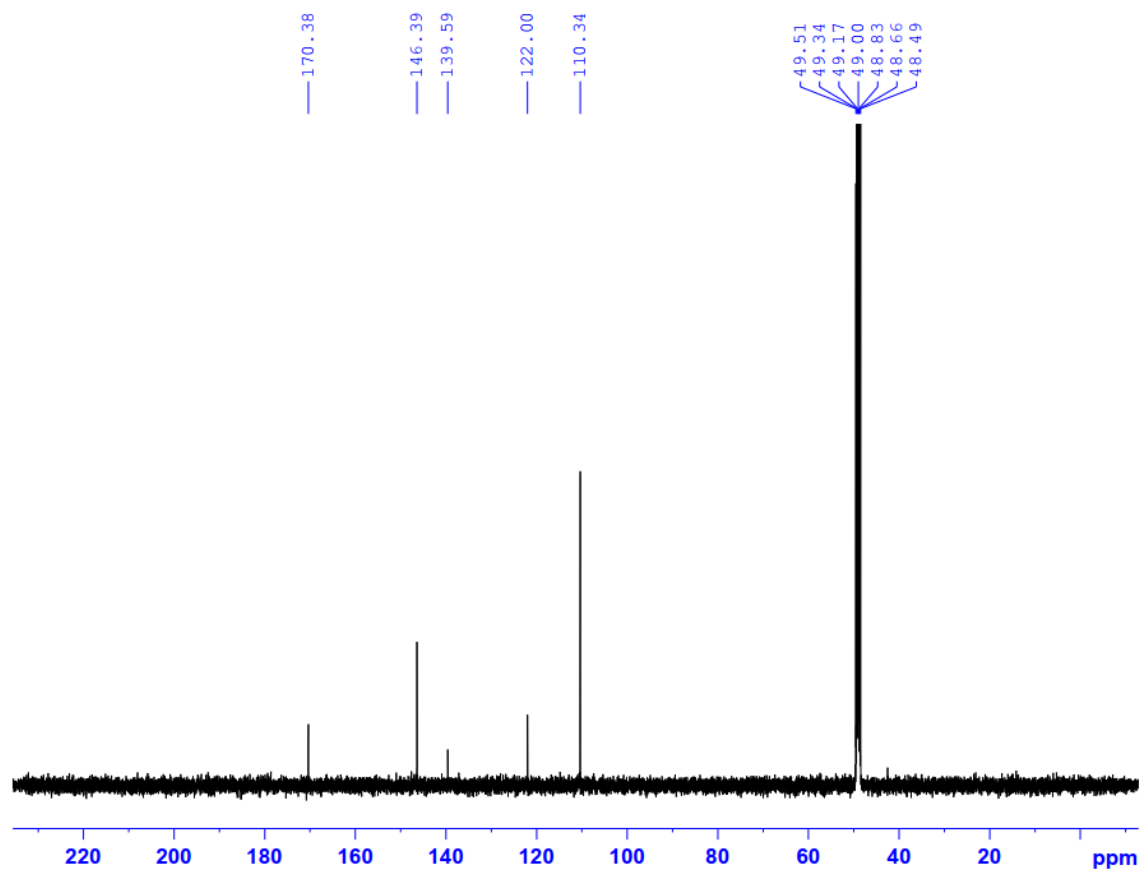
## 1. Supplementary spectroscopic data of compound 1

**Table S2:** The comparison of NMR data of compound 1 with a similar compound (Gallic acid).

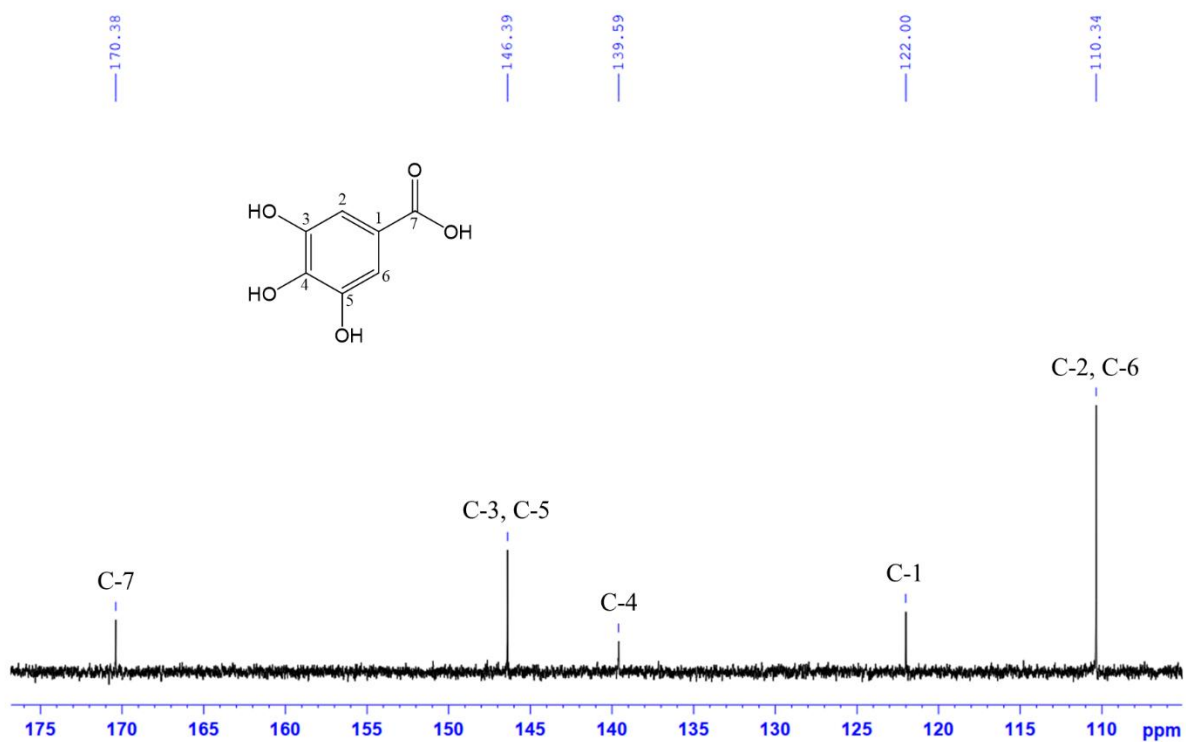
Position	Compound 1 (CD <sub>3</sub> OD)		Gallic acid (DMSO- <i>d</i> <sub>6</sub> ) [1]	
	<sup>13</sup> C-NMR (150 MHz) δ <sub>C</sub> ppm	<sup>1</sup> H-NMR (600 MHz) δ <sub>H</sub> ppm	<sup>13</sup> C-NMR (75 MHz) δ <sub>C</sub> ppm	<sup>1</sup> H-NMR (300 MHz) δ <sub>H</sub> ppm
1	122.0	-	121.0	-
2, 6	110.3	7.08 (2H, s)	109.0	6.91 (2H, s)
3, 5	146.4	-	145.9	-
4	139.6	-	138.3	-
7	170.4	-	168.0	-



**Figure S1:** Complete assignment <sup>1</sup>H-NMR spectrum of compound 1



**Figure S2:** Complete assignment  $^{13}\text{C}$ -NMR spectrum of compound 1

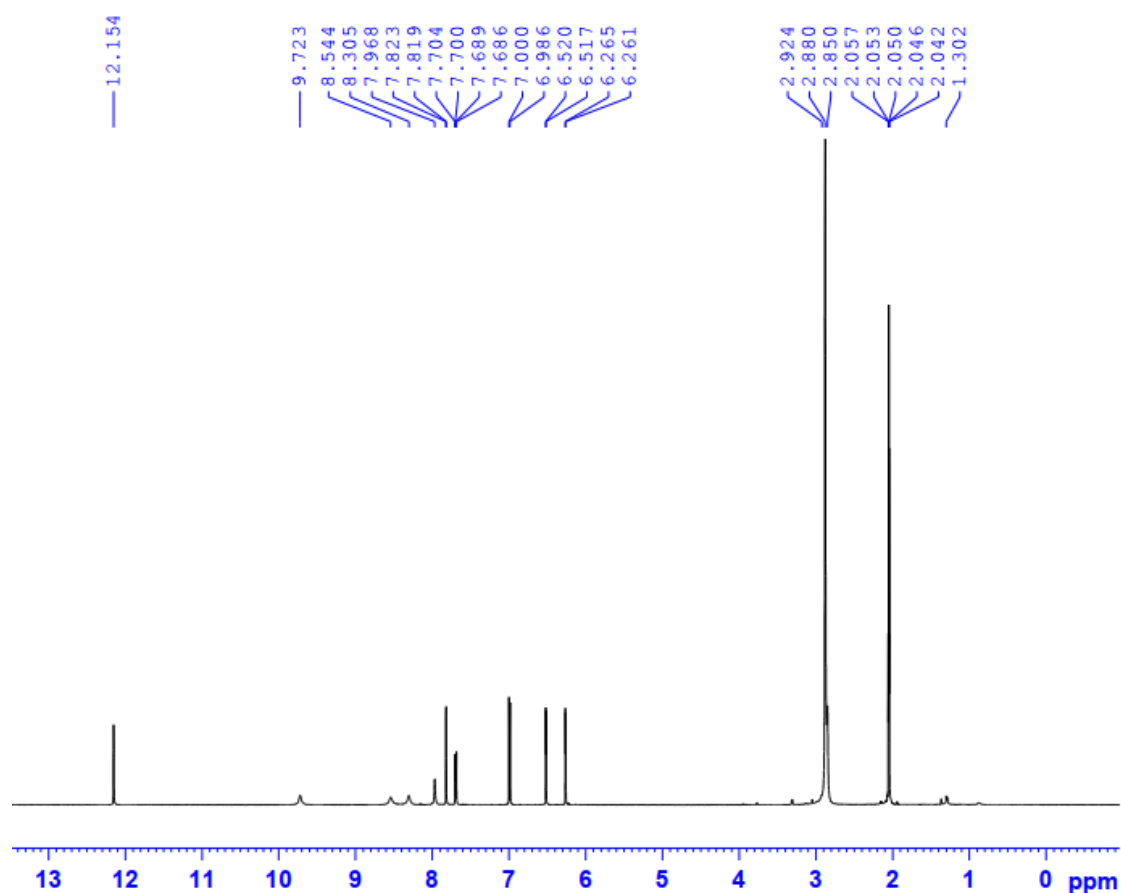


**Figure S3:** Expanded  $^{13}\text{C}$ -NMR spectrum of compound 1

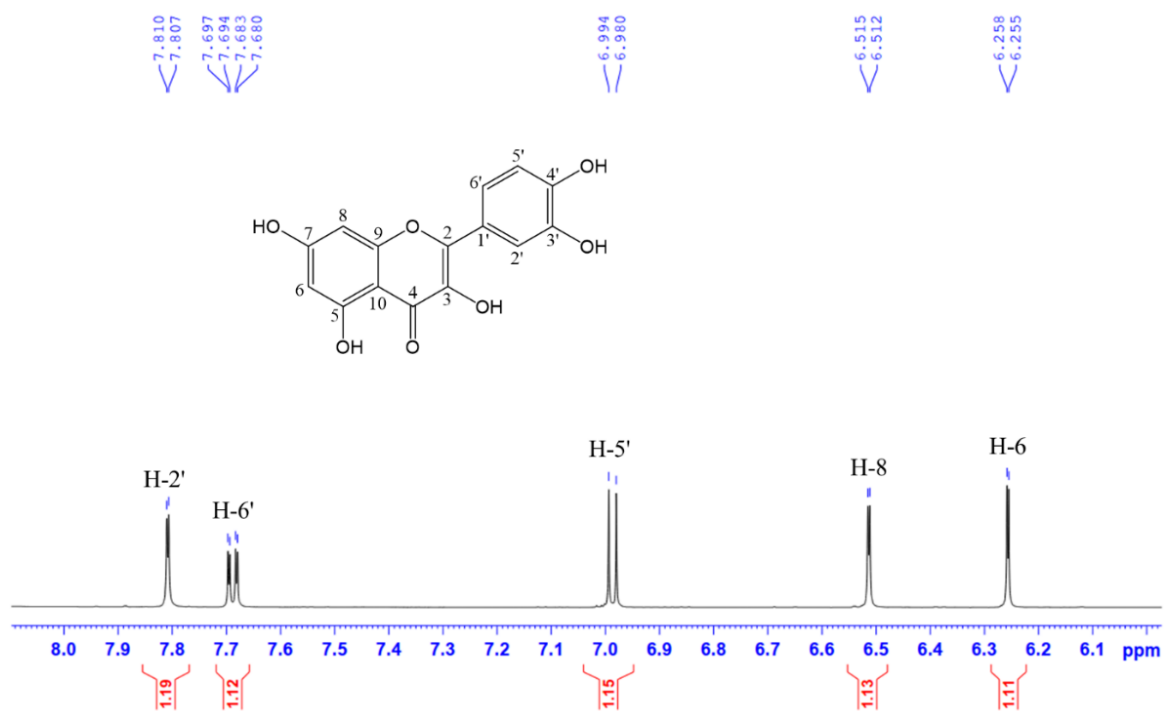
## 2. Supplementary spectroscopic data of compound 2.

**Table S3:** The comparison of NMR data of compound 2 with a similar compound (Quercetin).

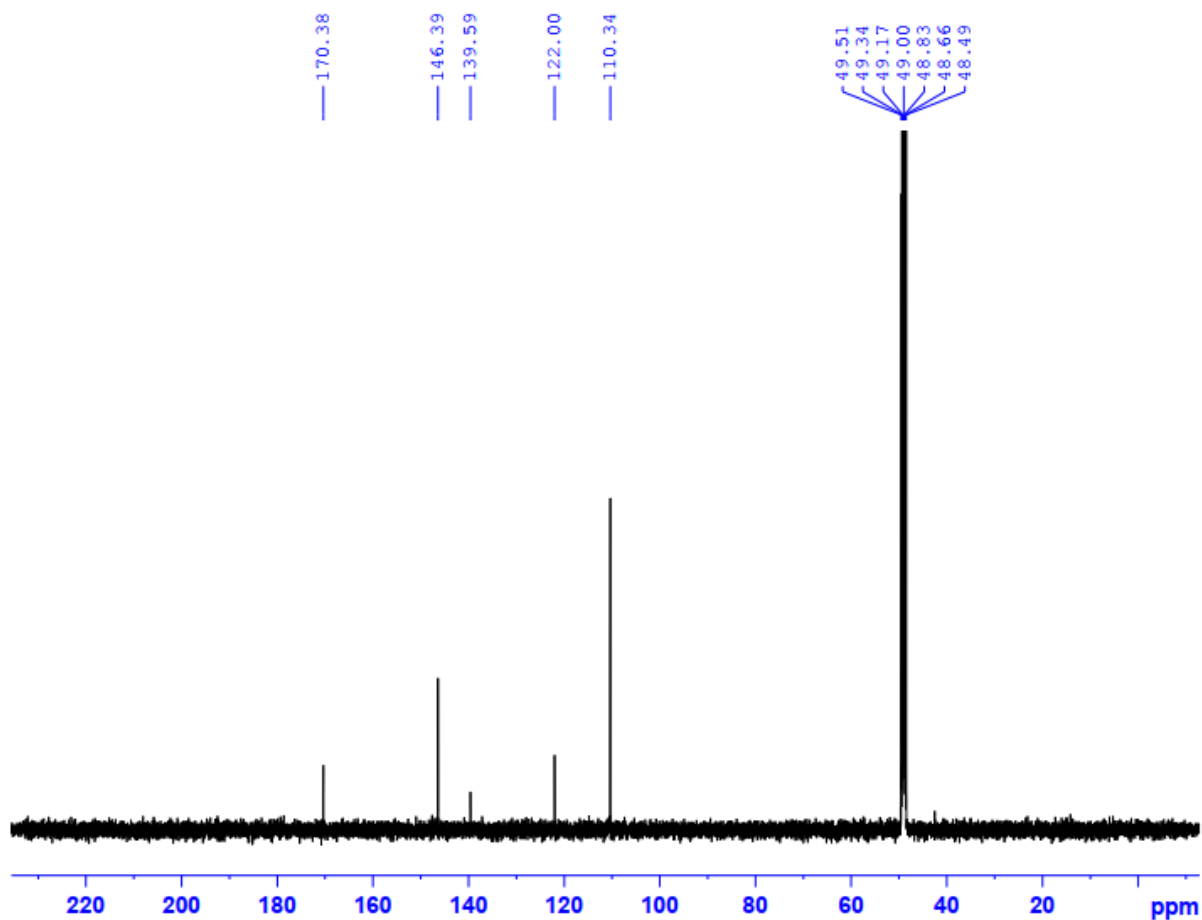
Position	Compound 2 (Acetone- $d_6$ )		Quercetin (DMSO- $d_6$ ) [2]	
	$^{13}\text{C-NMR}$ (150 MHz)	$^1\text{H-NMR}$ (600 MHz)	$^{13}\text{C-NMR}$ (125 MHz)	$^1\text{H-NMR}$ (500 MHz)
	$\delta_{\text{C}}$ ppm	$\delta_{\text{H}}$ ppm	$\delta_{\text{C}}$ ppm	$\delta_{\text{H}}$ ppm
2	148.4	-	147.9	-
3	136.7	-	135.9	-
4	176.6	-	176.0	-
5	162.3	-	160.9	-
6	99.2	6.26 (1H, d, 1.8 Hz)	98.4	6.17 (1H, d, 2.0 Hz)
7	165.1	-	164.1	-
8	94.4	6.51 (1H, d, 1.8 Hz)	93.5	6.39 (1H, d, 2.0 Hz)
9	157.8	-	156.3	-
10	104.1	-	103.2	-
1'	123.7	-	122.1	-
2'	115.7	7.81 (1H, d, 1.8 Hz)	115.2	7.66 (1H, d, 2.0 Hz)
3'	145.9	-	145.2	-
4'	147.0	-	147.0	-
5'	116.2	6.98 (1H, d, 8.4 Hz)	115.8	6.87 (1H, d, 8.5 Hz)
6'	121.4	7.68 (1H, dd, 1.8, 8.4 Hz)	120.2	7.53 (1H, dd, 2.0, 8.0 Hz)



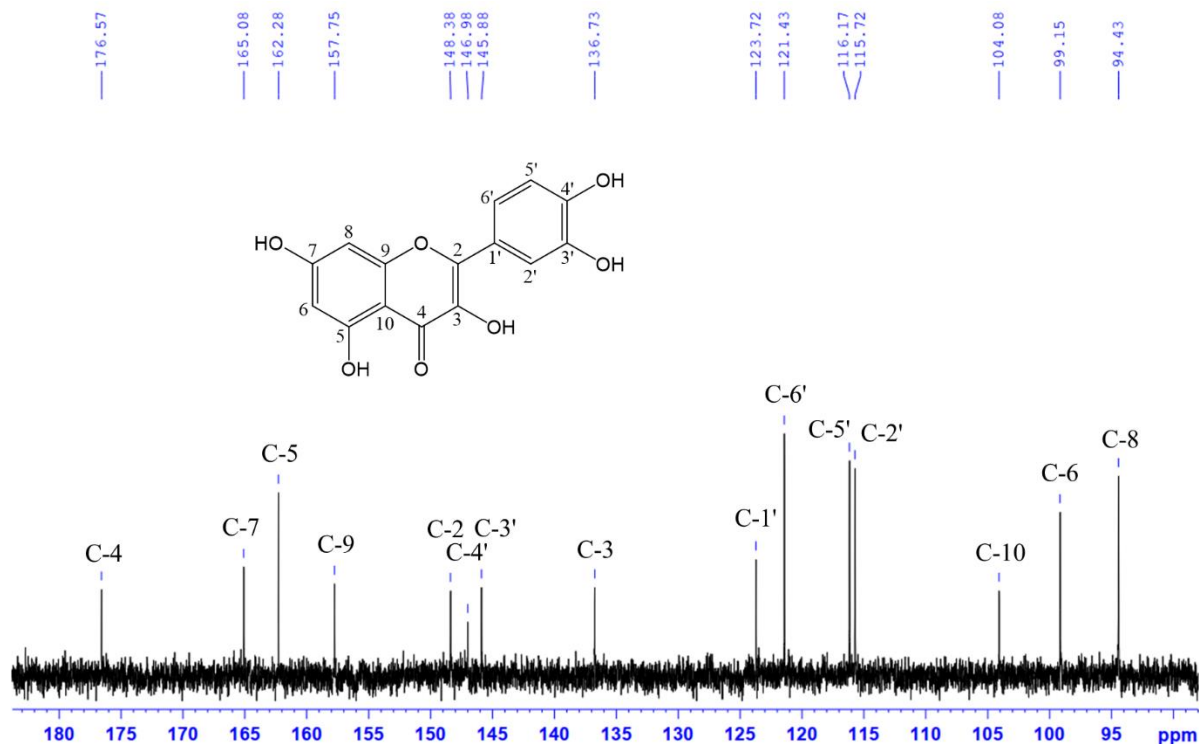
**Figure S4:** Complete assignment  $^1\text{H-NMR}$  spectrum of compound 2



**Figure S5:** Expanded  $^1\text{H}$ -NMR spectrum of compound 2



**Figure S6:** Complete assignment  $^{13}\text{C}$ -NMR spectrum of compound 2

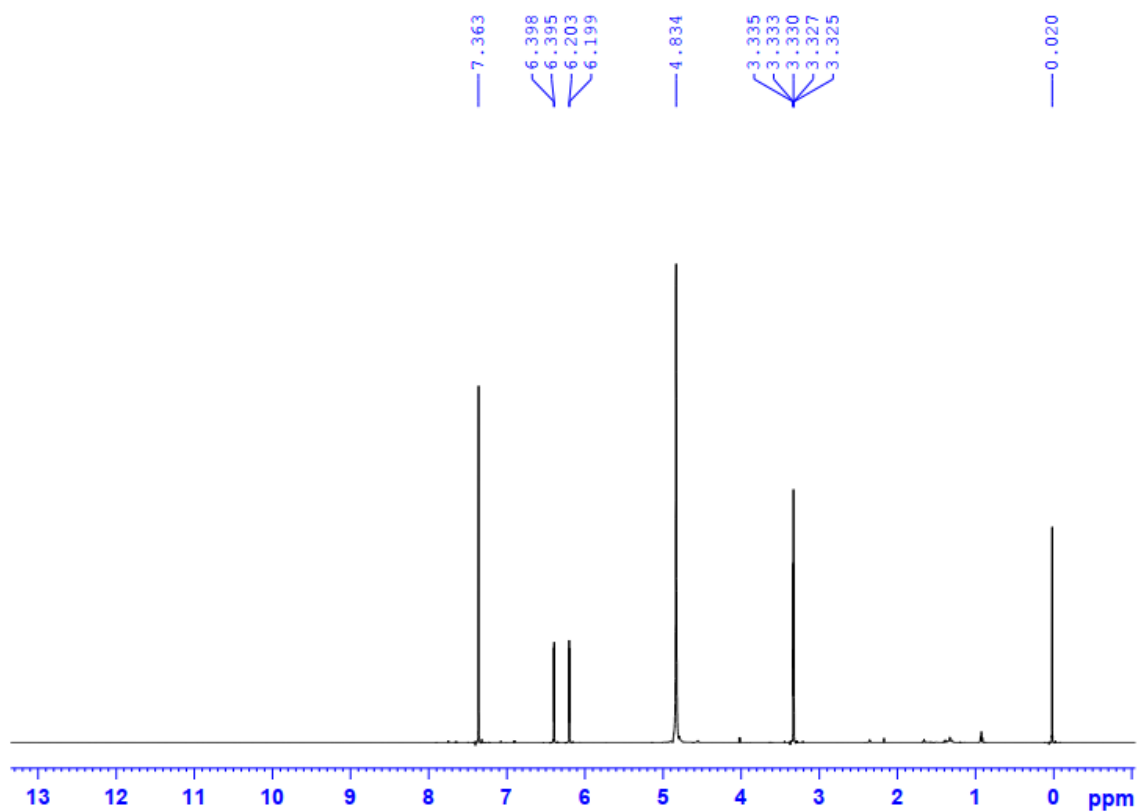


**Figure S7:** Expanded  $^{13}\text{C}$ -NMR spectrum of compound 2

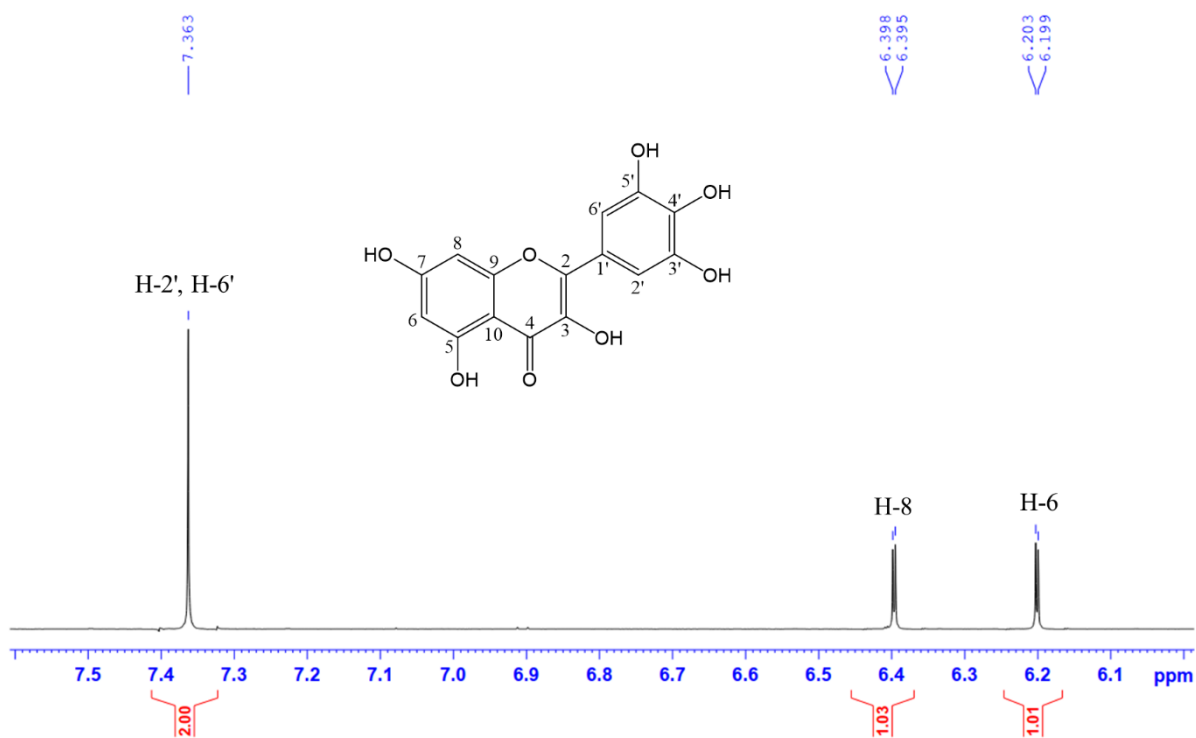
### 3. Supplementary spectroscopic data of compound 3.

**Table S4:** The comparison of NMR data of compound 3 with a similar compound (Myricetin)

Position	Compound 3 ( $\text{CD}_3\text{OD}$ )		Myricetin ( $\text{DMSO}-d_6$ ) [3]	
	$^{13}\text{C}$ -NMR (150 MHz) $\delta_{\text{C}}$ ppm	$^1\text{H}$ -NMR (600 MHz) $\delta_{\text{H}}$ ppm	$^{13}\text{C}$ -NMR (150 MHz) $\delta_{\text{C}}$ ppm	$^1\text{H}$ -NMR (600 MHz) $\delta_{\text{H}}$ ppm
2	148.0	-	146.8	-
3	136.9	-	135.9	-
4	177.3	-	175.7	-
5	162.5	-	160.7	-
6	99.2	6.20 (1H, d, 1.8 Hz)	98.2	6.18 (1H, d, 1.8 Hz)
7	165.6	-	164.1	-
8	94.4	6.40 (1H, d, 1.8 Hz)	93.2	6.37 (1H, d, 1.8 Hz)
9	158.2	-	156.1	-
10	104.5	-	102.9	-
1'	123.1	-	120.7	-
2', 6'	108.5	7.36 (1H, s)	107.1	7.24 (2H, s)
3', 5'	146.7	-	145.7	-
4'	137.3	-	135.8	-



**Figure S8:** Complete assignment <sup>1</sup>H-NMR spectrum of compound 3



**Figure S9:** Expanded <sup>1</sup>H-NMR spectrum of compound 3



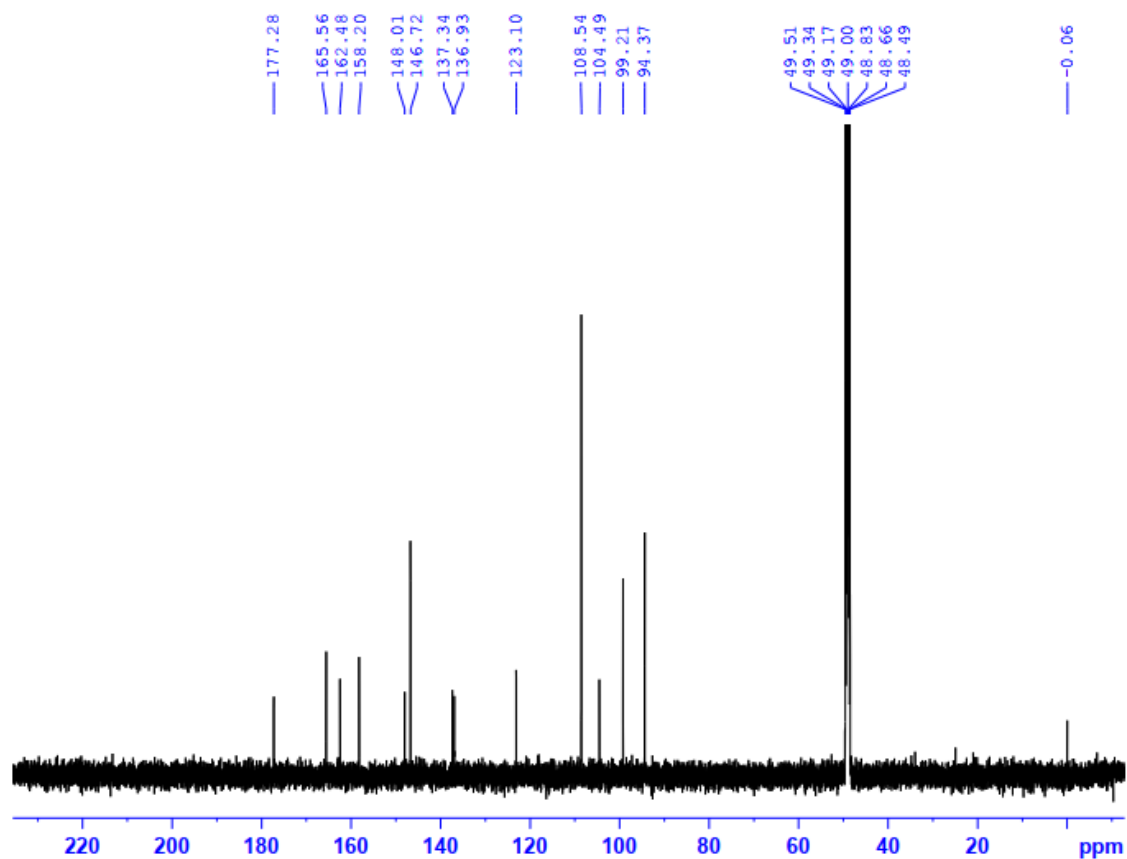


Figure S10: Complete assignment  $^{13}\text{C}$ -NMR spectrum of compound 3

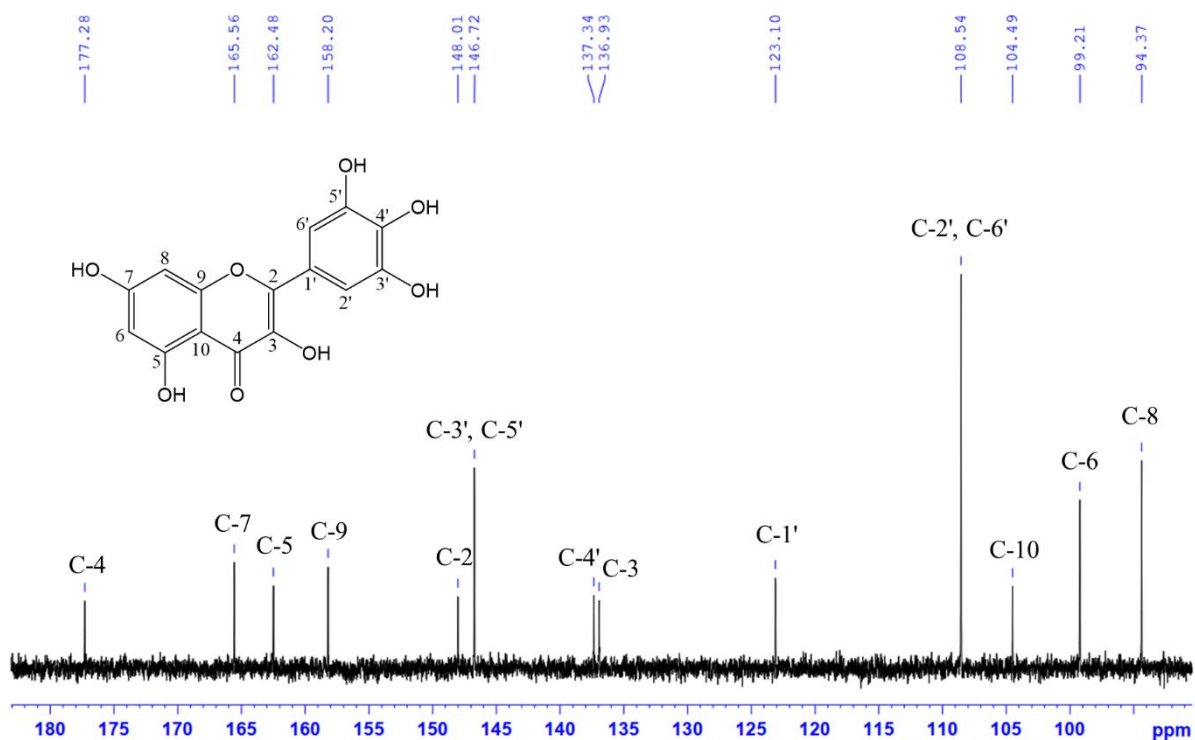
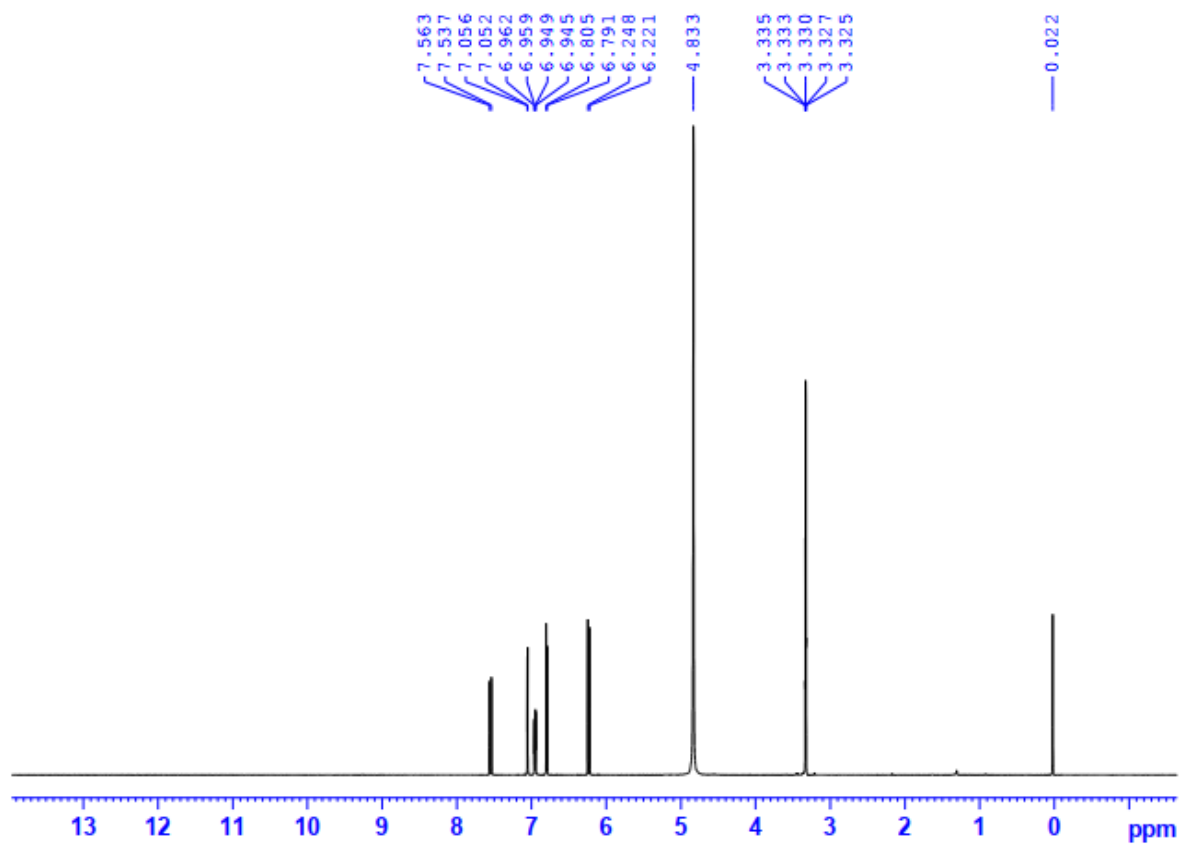


Figure S11: Expanded  $^{13}\text{C}$ -NMR spectrum of compound 3

#### 4. Supplementary spectroscopic data of compound 4.

**Table S5:** The comparison of NMR data of compound 4 with a similar compound (Caffeic acid).

Position	Compound 3 (CD <sub>3</sub> OD)		Caffeic acid (CD <sub>3</sub> OD) [4]	
	<sup>13</sup> C-NMR (150 MHz) δ <sub>C</sub> ppm	<sup>1</sup> H-NMR (600 MHz) δ <sub>H</sub> ppm	<sup>13</sup> C-NMR (125 MHz) δ <sub>C</sub> ppm	<sup>1</sup> H-NMR (500 MHz) δ <sub>H</sub> ppm
1	127.8	-	128.3	-
2	115.1	7.05 (1H, d, 2.4 Hz)	115.7	7.07 (1H, d, 2.0 Hz)
3	147.0	-	147.2	-
4	149.5	-	149.8	-
5	116.5	6.79 (1H, d, 8.4 Hz)	117.0	6.81 (1H, d, 8.2 Hz)
6	122.8	6.94 (1H, dd, 2.4, 8.4 Hz)	123.4	6.95 (1H, dd, 8.2, 2.0 Hz)
7	146.8	7.54 (1H, d, 16.2 Hz)	147.6	7.55 (1H, d, 15.9 Hz)
8	115.6	6.22 (1H, d, 16.2 Hz)	116.0	6.24 (1H, d, 15.9 Hz)
9	171.0	-	171.6	-



**Figure S12:** Complete assignment <sup>1</sup>H-NMR spectrum of compound 4

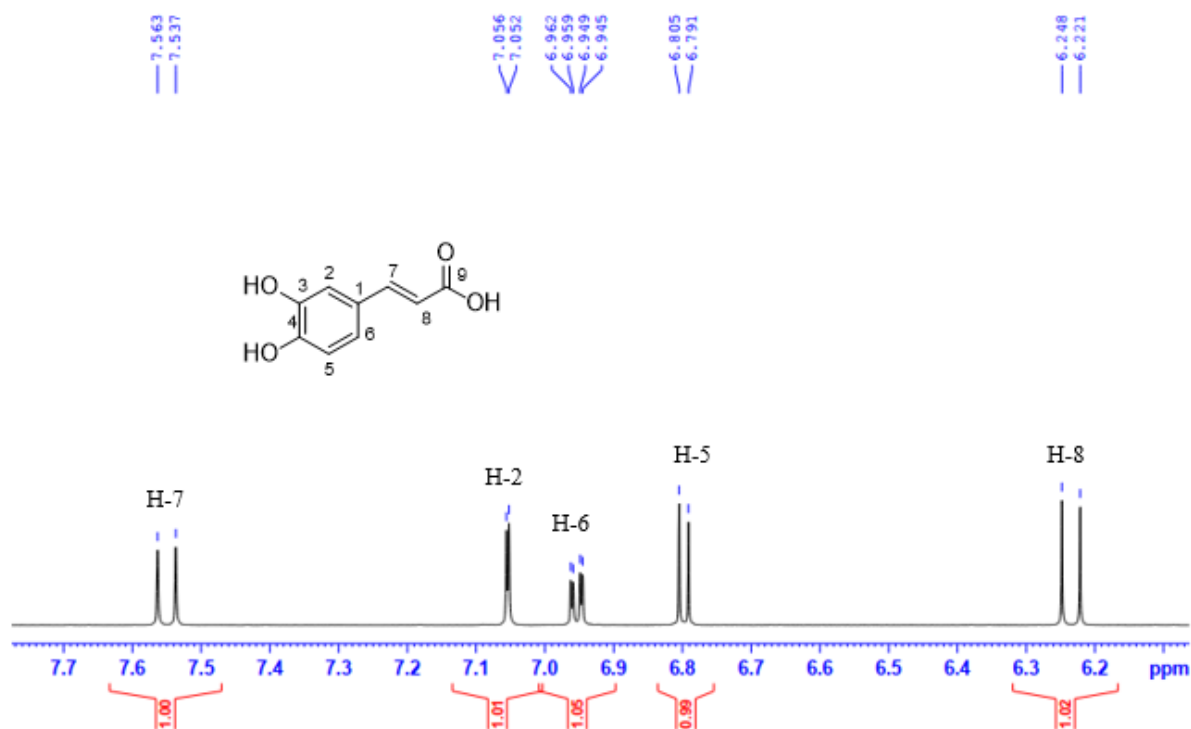


Figure S13: Expanded  $^1\text{H}$ -NMR spectrum of compound 4

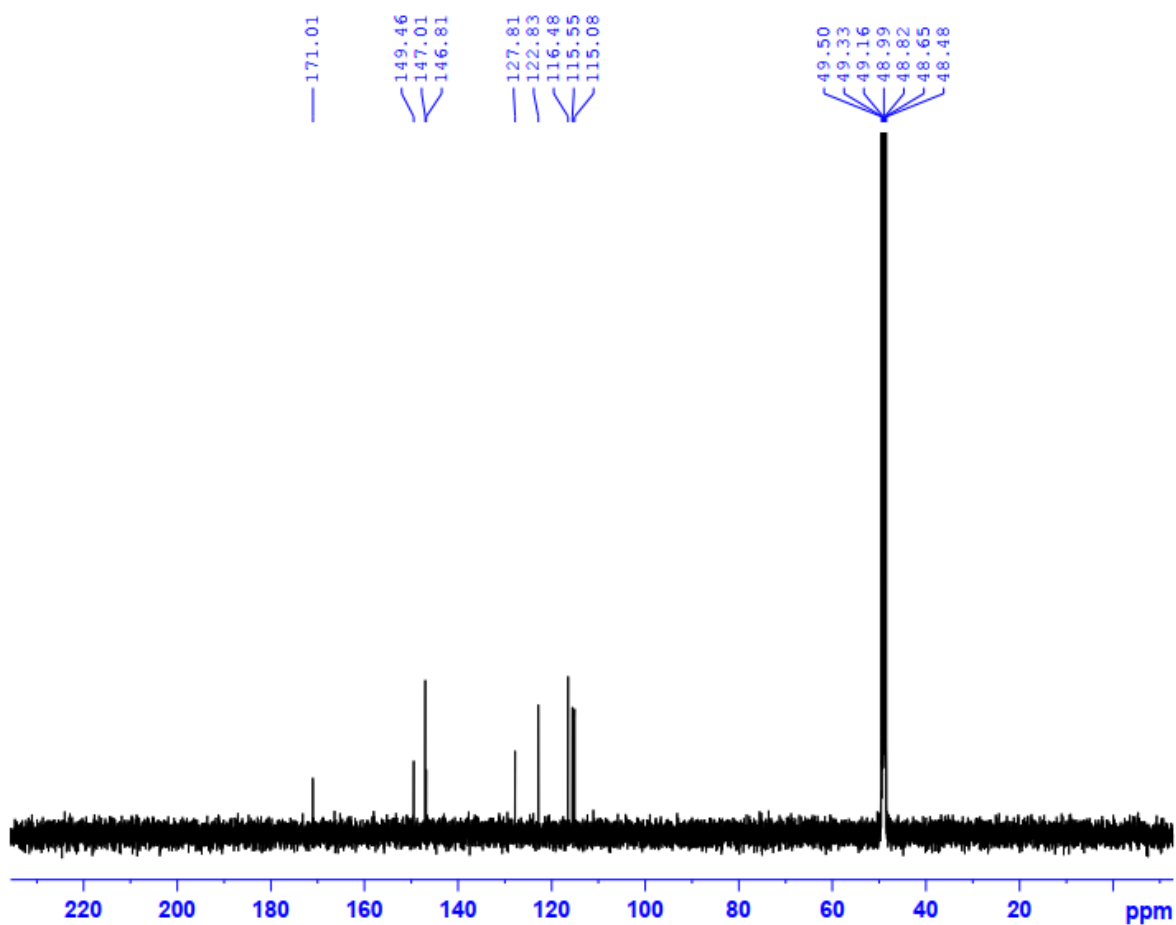
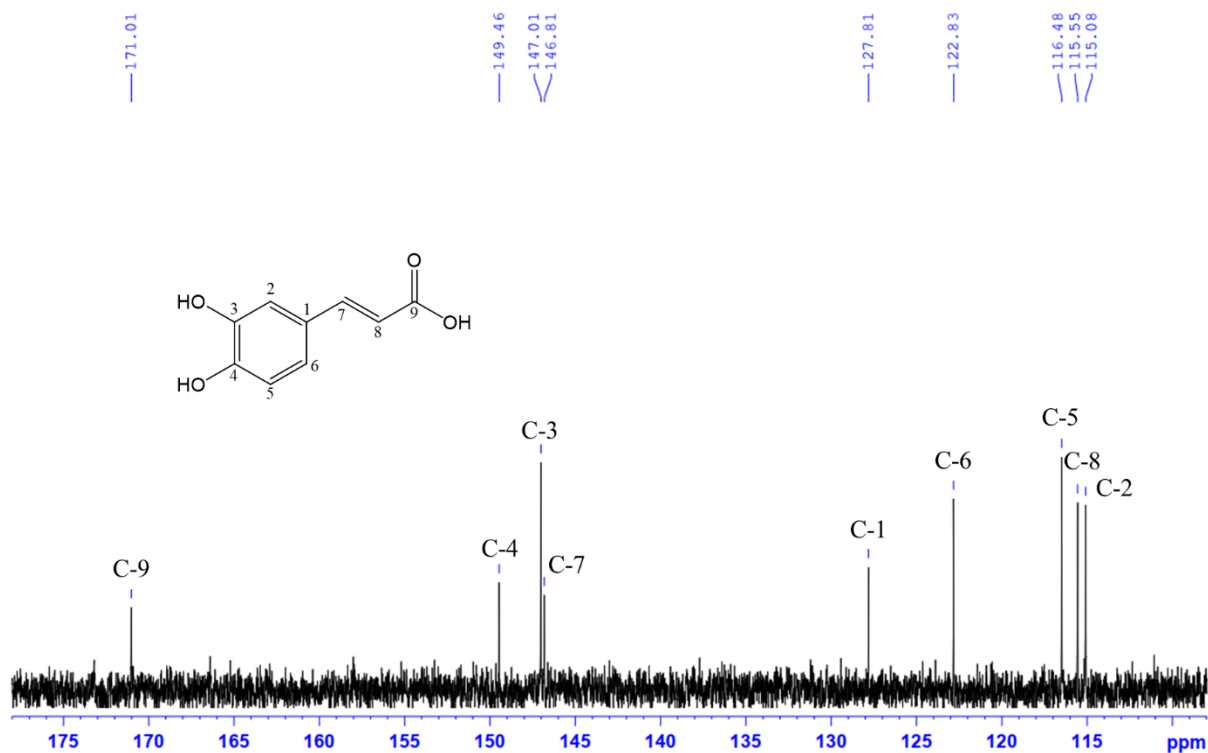


Figure S14: Complete assignment  $^{13}\text{C}$ -NMR spectrum of compound 4



**Figure S15:** Expanded  $^{13}\text{C}$ -NMR spectrum of compound 4

### References

- [1] O. Eldahshan (2011). Isolation and structure elucidation of phenolic compounds of *Carob* leaves grown in Egypt, *Curr. Res. J. Biol. Sci.* **3**, 52-55
- [2] H. Liu, Y. Mou, J. Zhao, J. Wang, L. Zhou, M. Wang, D. Wang, J. Han, Z. Yu and F. Yang (2010). Flavonoids from *Halostachys caspica* and their antimicrobial and antioxidant activities, *Molecules* **15**, 7933–7945.
- [3] D. He, D. Gu, Y. Huang, A. Ayupbek, Y. Yang, H. A. Aisa and Y. Ito (2009). Separation and purification of phenolic acids and myricetin from *Black currant* by high speed countercurrent chromatography, *J. Liq. Chromatogr. Relat. Technol.* **32**, 3077–3088.
- [4] C. Jeong, H. R. Jeong, G. N. Choi, D. Kim, U. Lee and H. J. Heo (2011). Neuroprotective and anti-oxidant effects of caffeic acid isolated from *Erigeron annuus* leaf, *Chin. Med.* **6**, 25.