

Supporting data

Bioactivity-Guided Isolation of Potential Antidiabetic and Antihyperlipidemic Compounds from *Trigonella stellata*

Safa M. Shams Eldin, Mohamed M. Radwan, Amira S. Wanas, Abdel-Azim M. Habib, Fahima F. Kassem, Hala M. Hammada, Shabana I.Khan, Michael L. Klein, Khaled M. Elokely and Mahmoud A. ElSohly^{1,7*}.

Fig. 1S: ^1H NMR spectrum for compound 1 (CDCl_3 , 500 MHz).

Fig. 2S: ^{13}C NMR spectrum for compound 1 (CDCl_3 , 125 MHz).

Fig. 3S: DEPT-135 spectrum for compound 1 (CDCl_3 , 125 MHz).

Fig. 4S: HMQC spectrum for compound 1 (CDCl_3 , 500 MHz).

Fig. 5S: ^1H NMR spectrum for compound 2 ($\text{DMSO}-d_6$, 400 MHz).

Fig. 6S: ^{13}C NMR spectrum for compound 2 ($\text{DMSO}-d_6$, 100 MHz).

Fig. 7S: ROESY spectrum for compound 2 ($\text{DMSO}-d_6$, 400 MHz).

Fig. 8S: ^1H NMR spectrum for compound 3 ($\text{DMSO}-d_6$, 600 MHz).

Fig. 9S: ^{13}C NMR spectrum for compound 3 ($\text{DMSO}-d_6$, 150 MHz).

Fig. 10S: DEPT-135 spectrum for compound 3 ($\text{DMSO}-d_6$, 150 MHz).

Fig. 11S: HMQC spectrum for compound 3 ($\text{DMSO}-d_6$, 600 MHz).

Table S1: . PPAR α and γ Binding Assay for the Alcoholic Extract and Fractions of *Trigonella stellata*

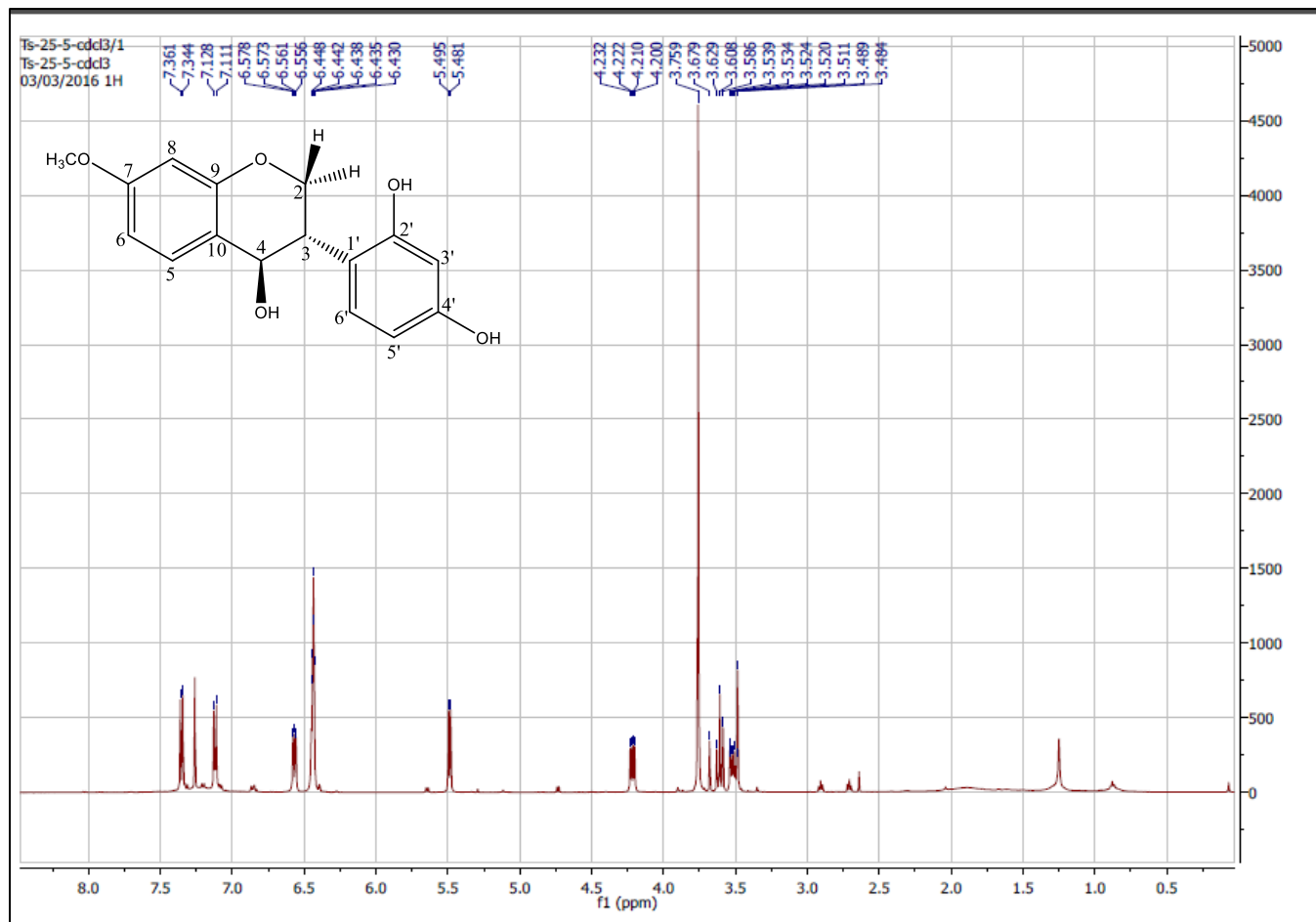


Figure 1S: ^1H NMR spectrum for compound 1 (CDCl_3 , 500 MHz).

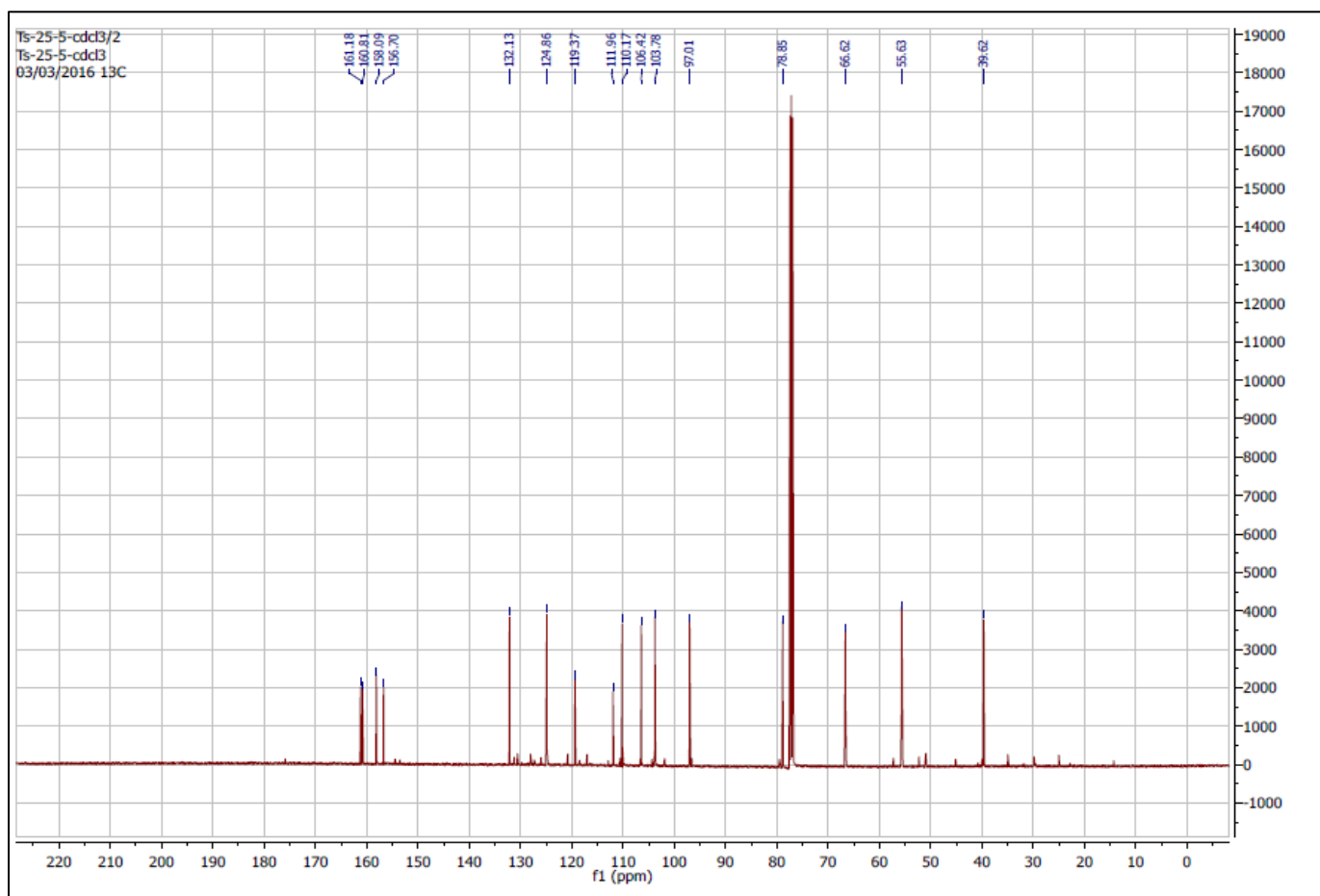


Figure 2S: ^{13}C NMR spectrum for compound 1 (CDCl_3 , 125 MHz).

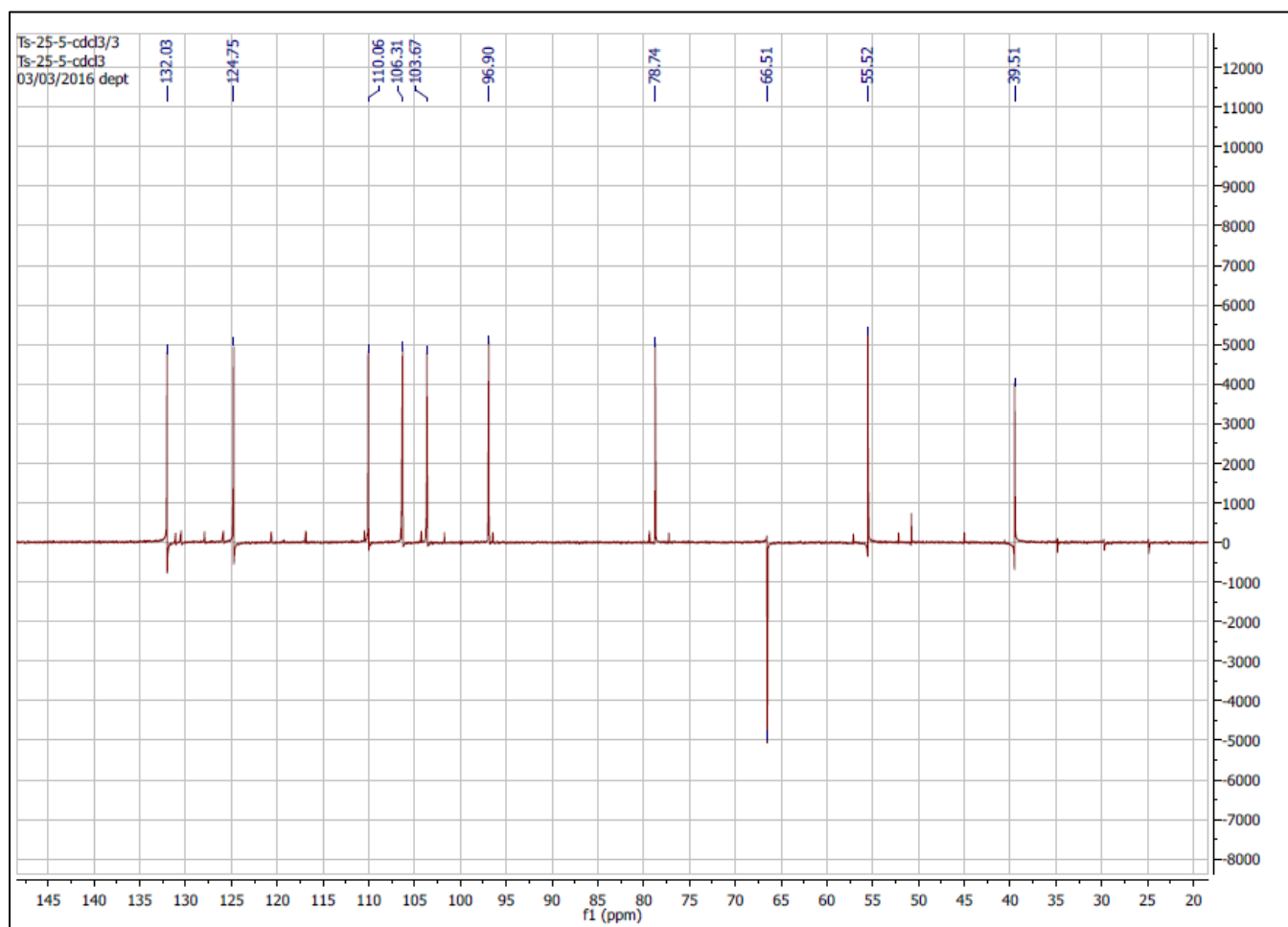


Figure 3S: DEPT-135 NMR spectrum for compound 1 (CDCl₃, 125 MHz).

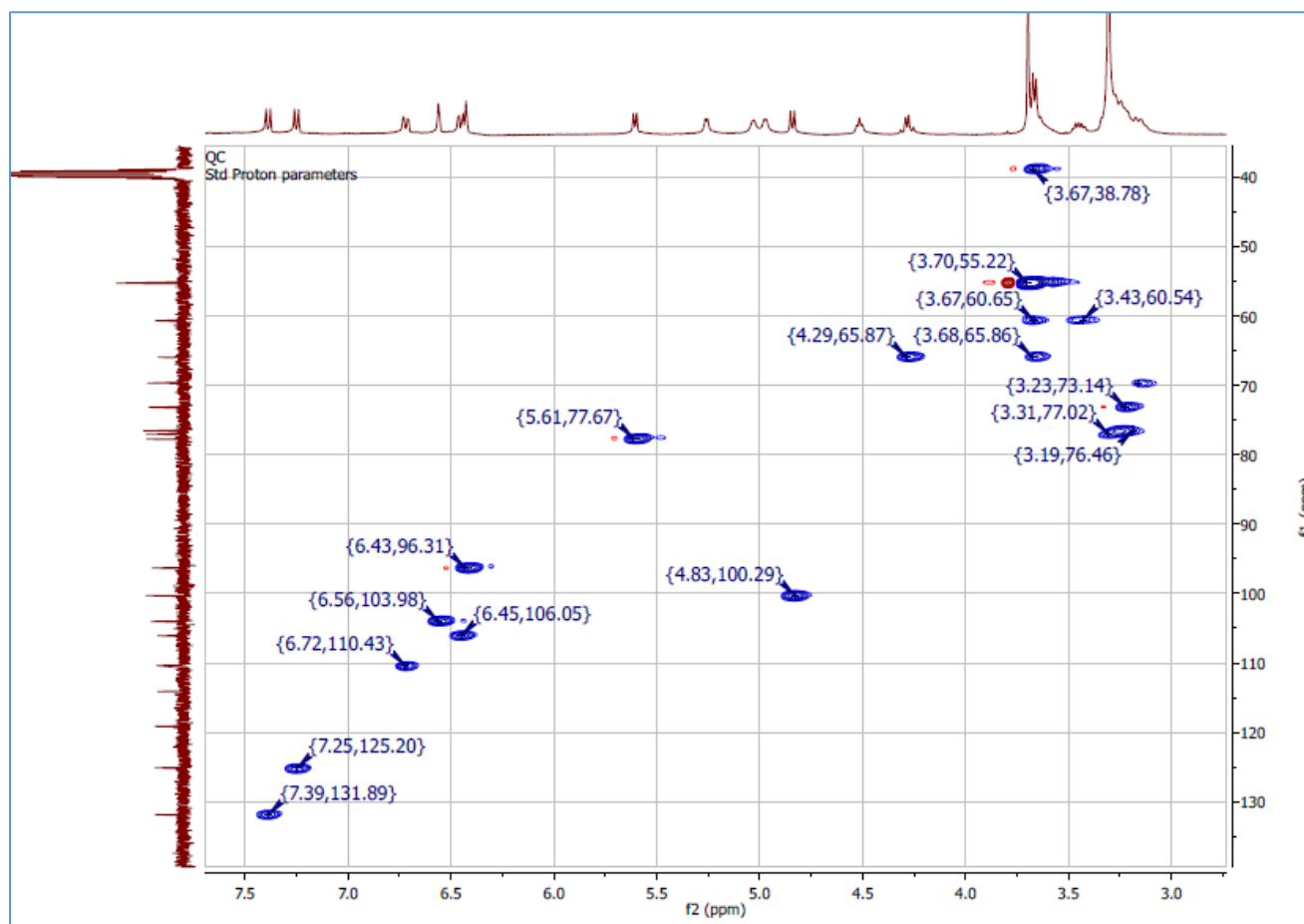


Figure 4S: HMQC NMR spectrum for compound 1.

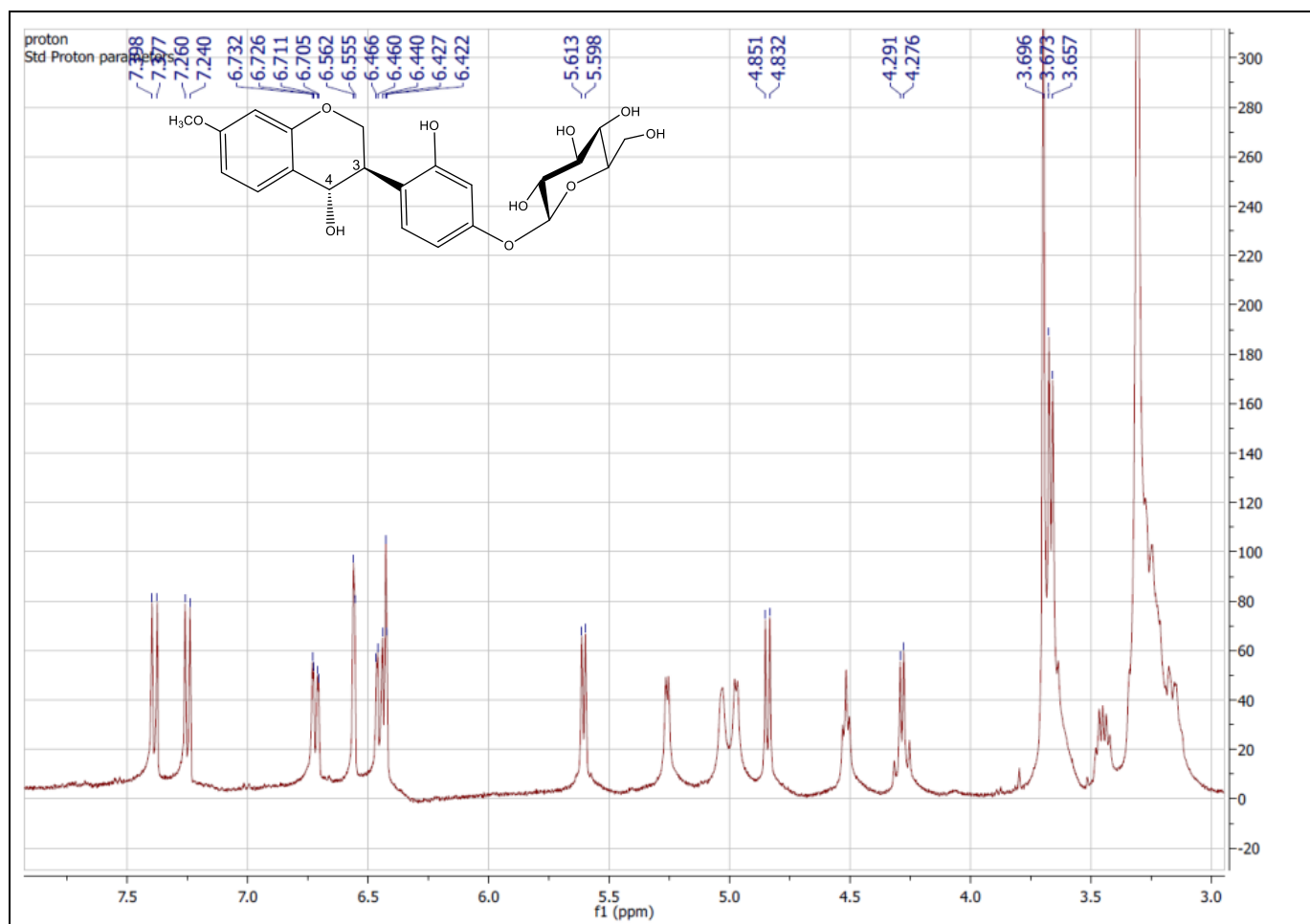


Figure 5S: ^1H -NMR spectrum for compound 2 (DMSO- d_6 , 400 MHz)

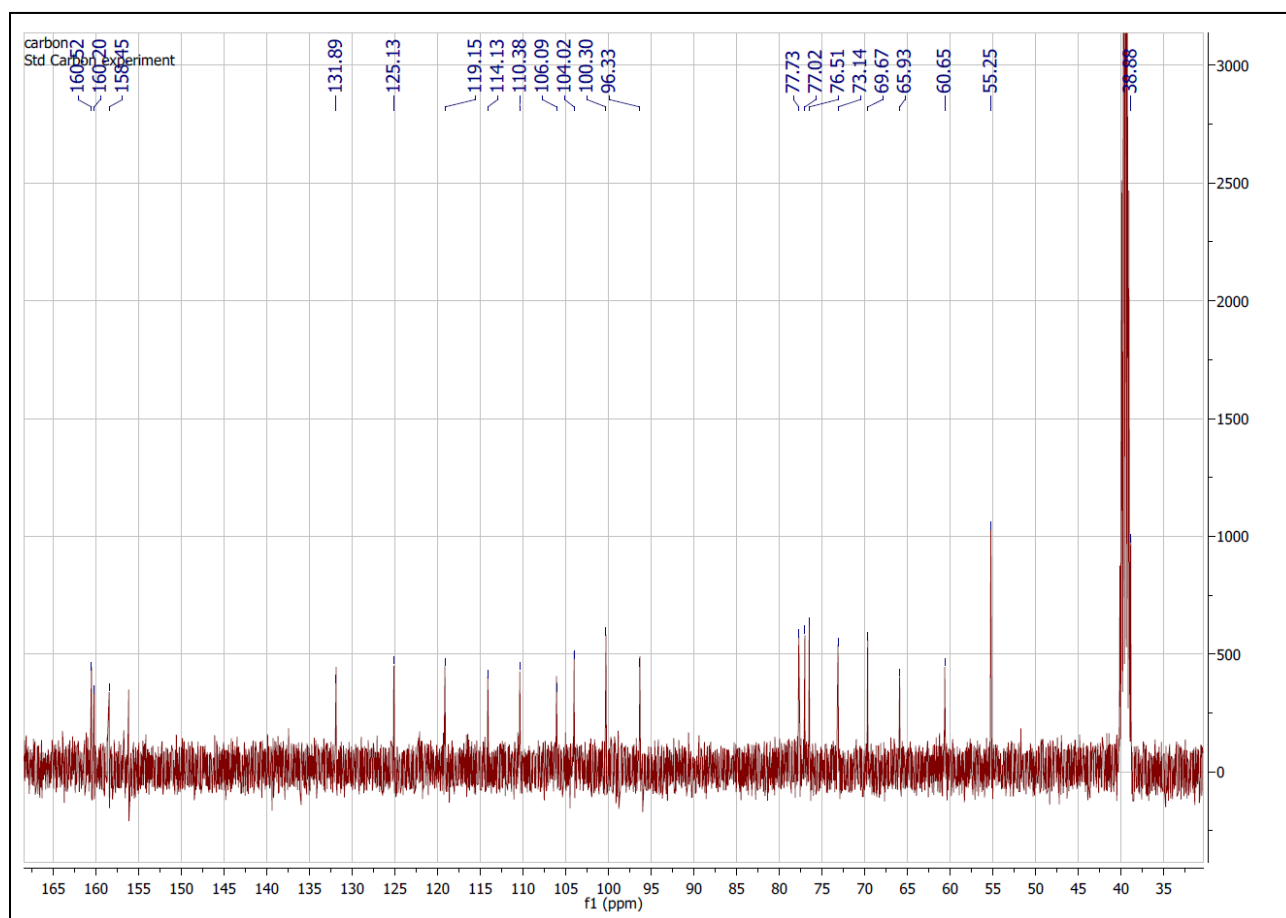


Figure 6S: ^{13}C NMR spectrum for compound 2 (DMSO- d_6 , 100 MHz)

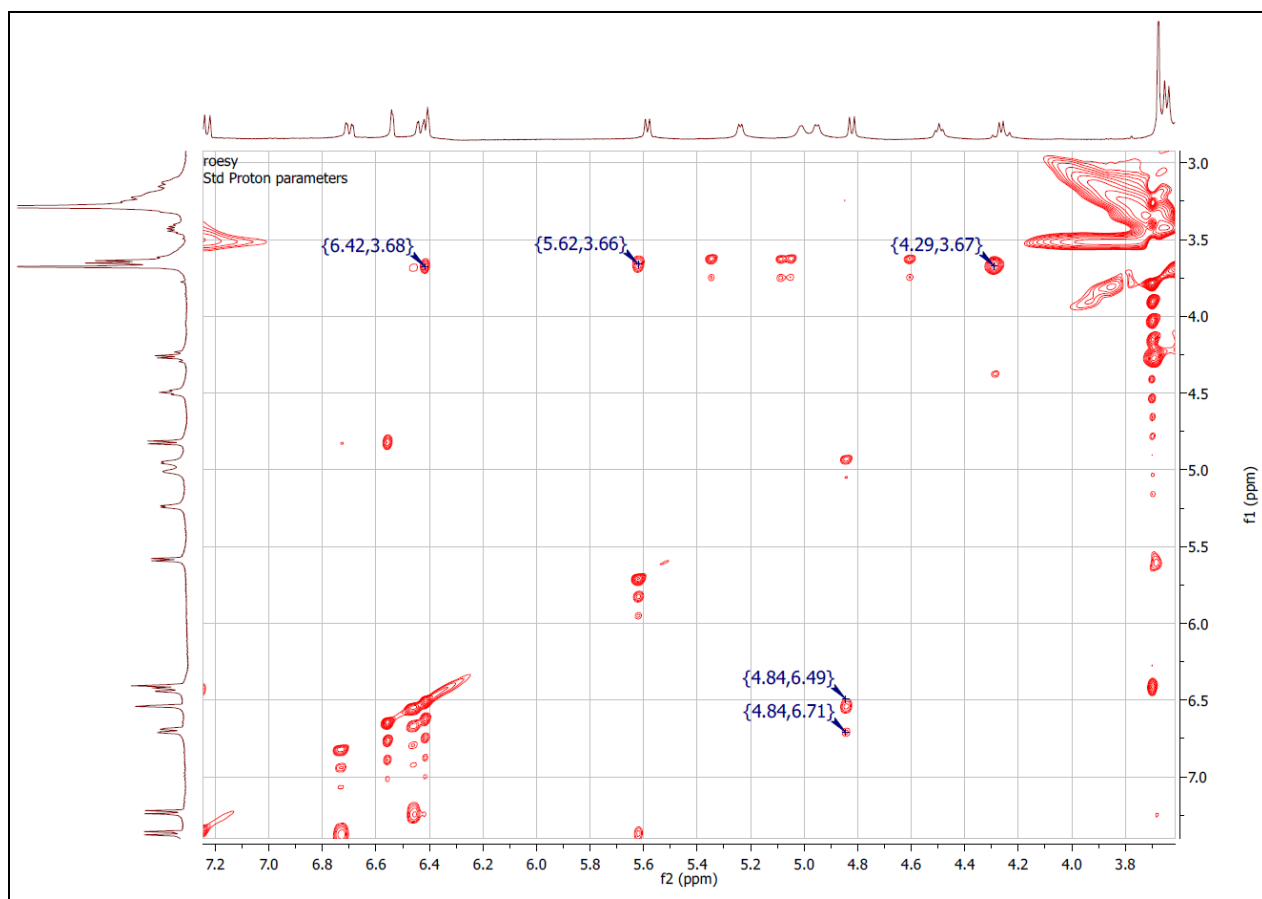


Figure 7S: ROESY spectrum for compound 2 (DMSO-*d*6, 100 MHz)

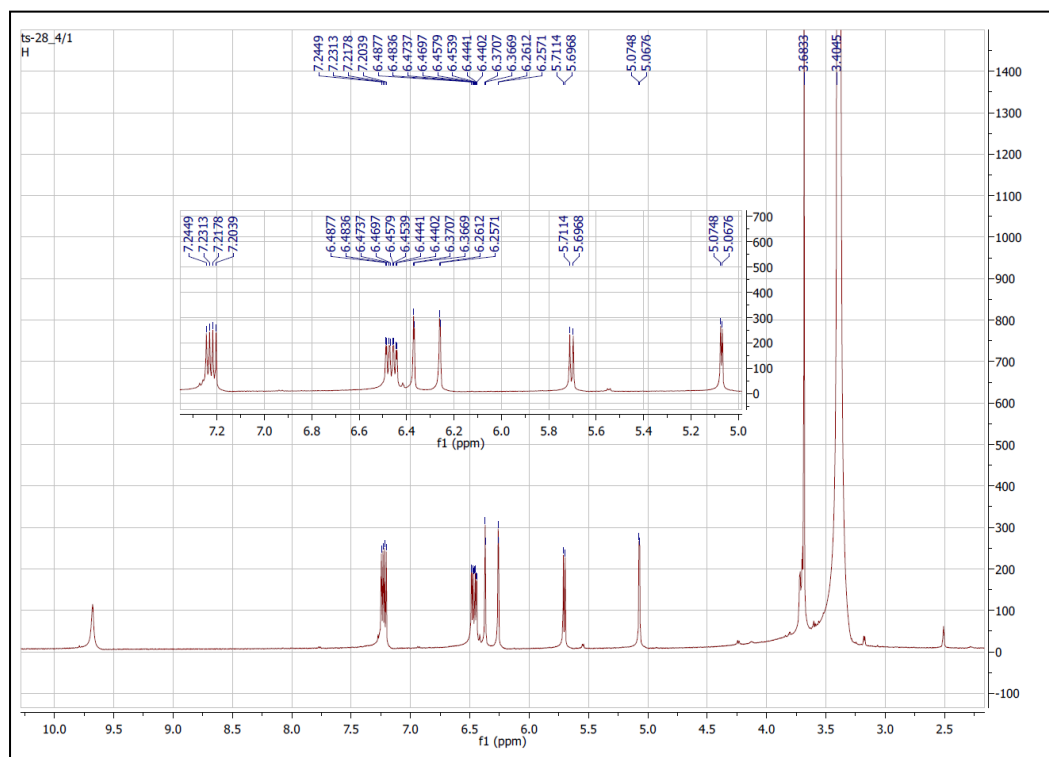
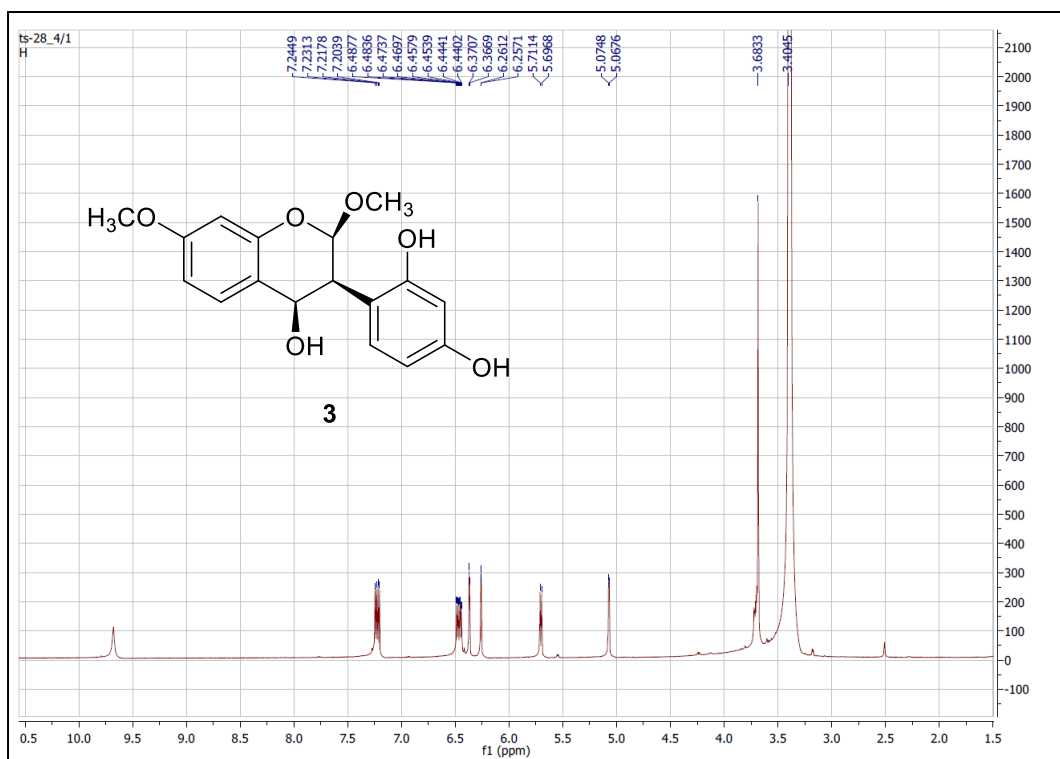


Figure 8S: ^1H -NMR spectrum of compound 3 (DMSO- d_6 , 600 MHz)

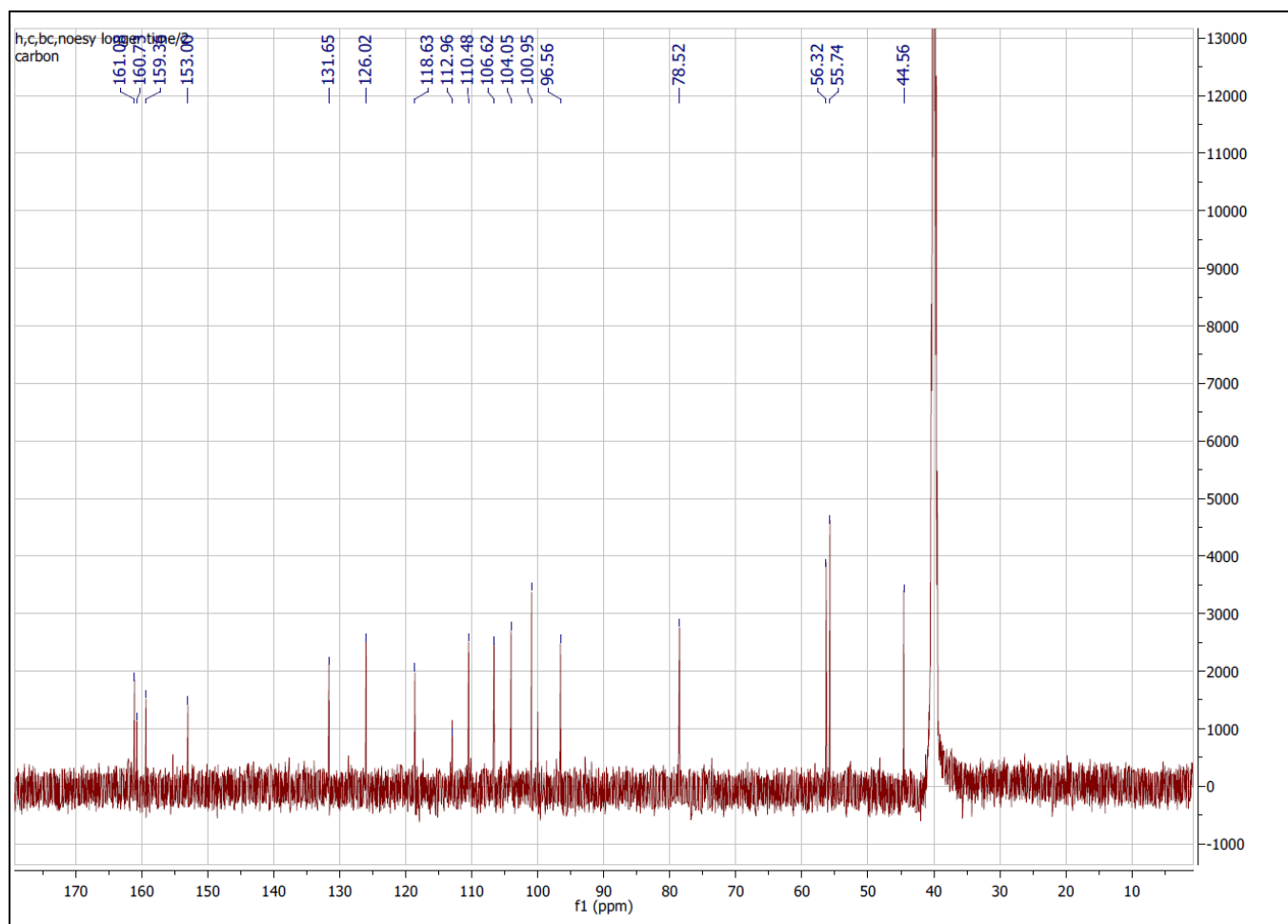


Figure 9S: ^{13}C -NMR spectrum of compound 3 (DMSO-*d*₆, 150 MHz).

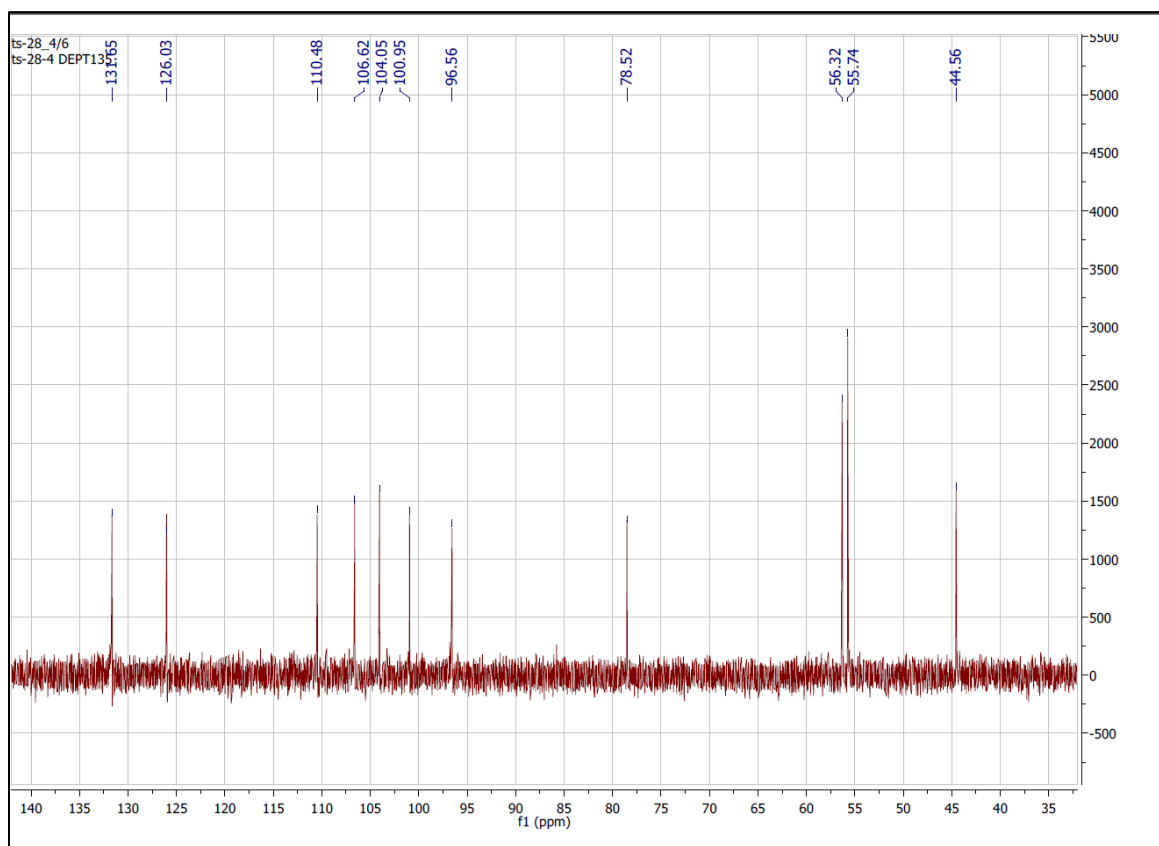


Figure 10S: DEPT-135 spectrum of compound 3 (DMSO-*d*6, 150 MHz).

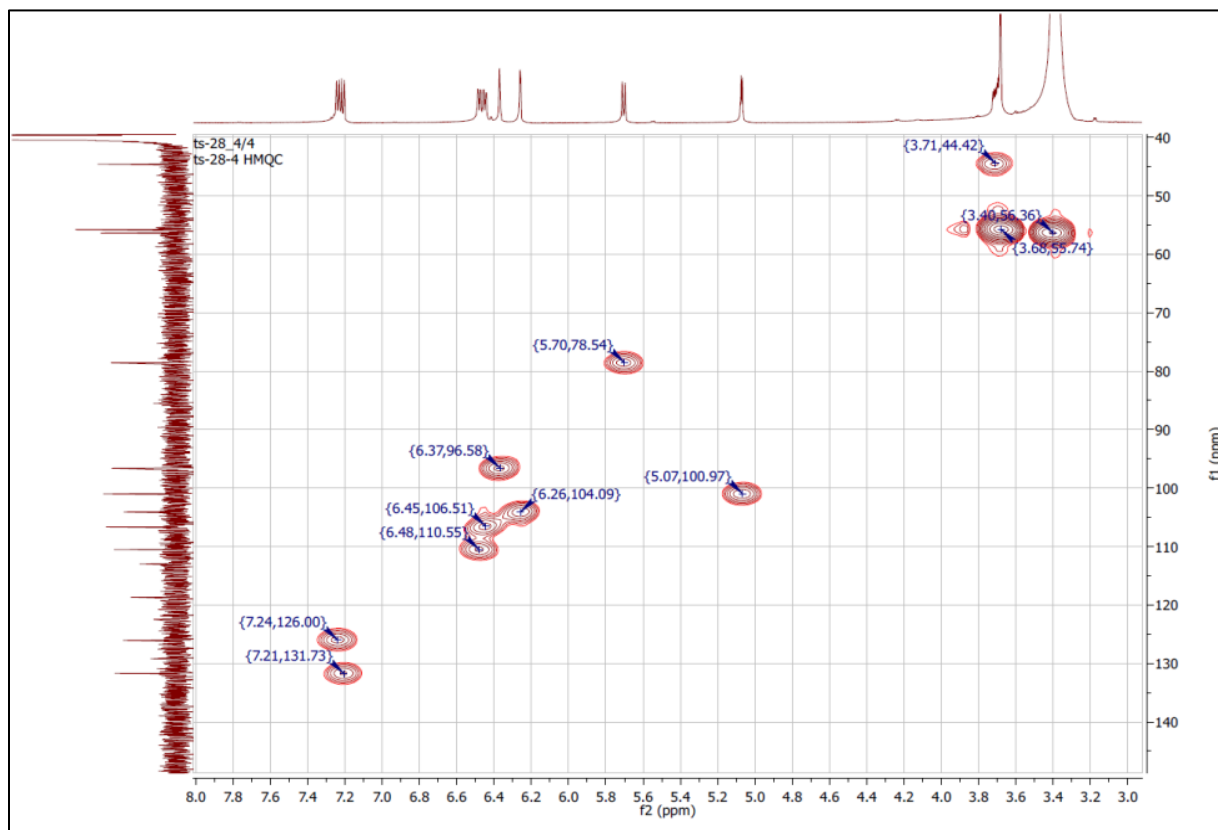


Figure 11S: HMQC spectrum of compound 3 (DMSO-*d*₆, 600 MHz).

Table S1. PPAR α and γ Binding Assay for the Alcoholic Extract and Fractions of *Trigonella stellata*

Sample/ $\mu\text{g/ml}$	PPAR α fold induction			PPAR γ fold induction		
	100 $\mu\text{g/mL}$	50 $\mu\text{g/mL}$	25 $\mu\text{g/mL}$	100 $\mu\text{g/mL}$	50 $\mu\text{g/mL}$	25 $\mu\text{g/mL}$
<i>T. stellata</i> Alcoholic extract	1.24	1.30	1.29	0.91	1.35	0.82
<i>T. stellata</i> light petrol fraction	1.49	1.75	1.74	0.83	1.40	1.27
<i>T. stellata</i> Methylene Chloride fraction	0.23	0.22	0.42	0.30	0.25	0.35
<i>T. stellata</i> Ethyl acetate fraction	1.90	1.54	1.35	1.28	1.76	1.17
<i>T. stellata</i> Butanol fraction	0.73	0.93	1.30	1.45	1.30	1.26