

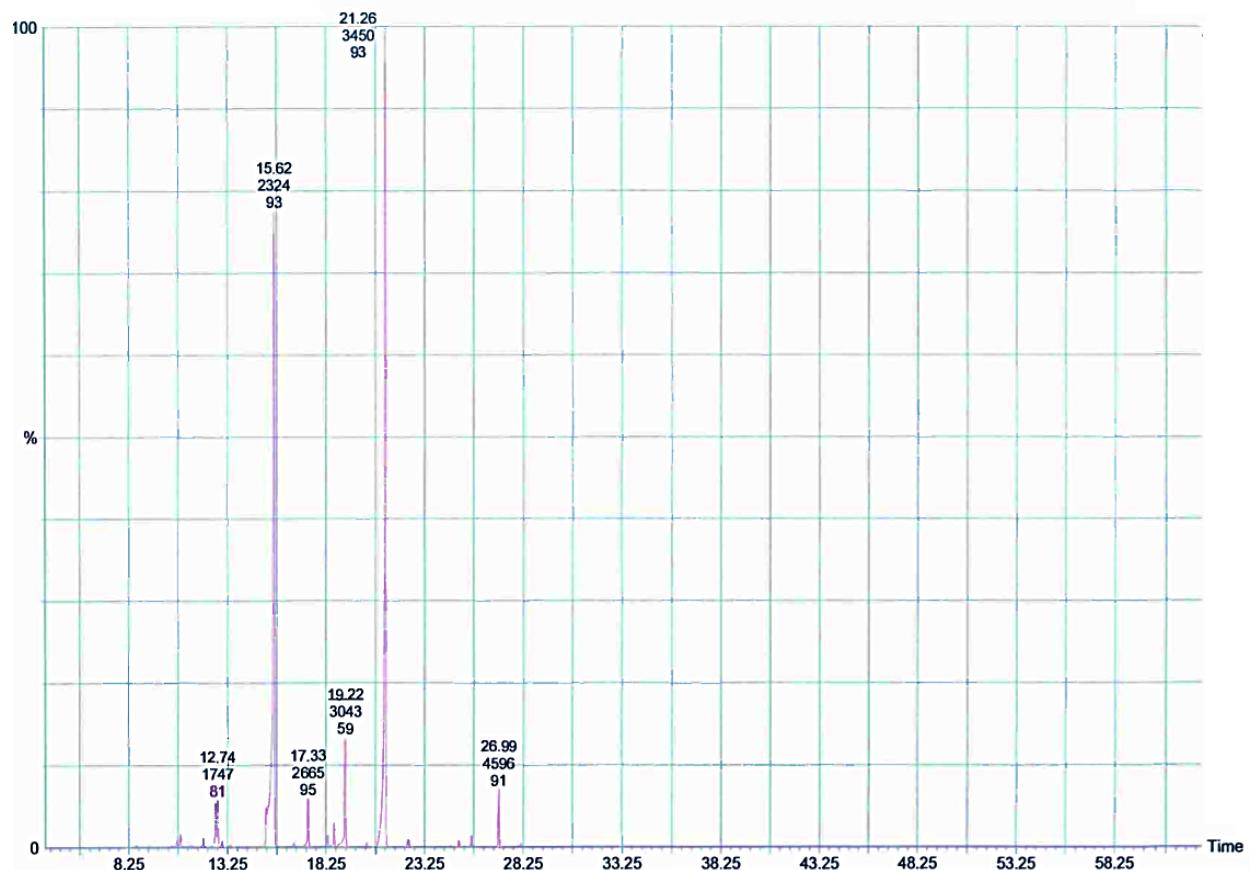
## **Supplemental Information**

### **The Neuroprotective Role of *Origanum syriacum L.* and *Lavandula dentata L.* Essential Oils through their Effects on AMPA Receptors**

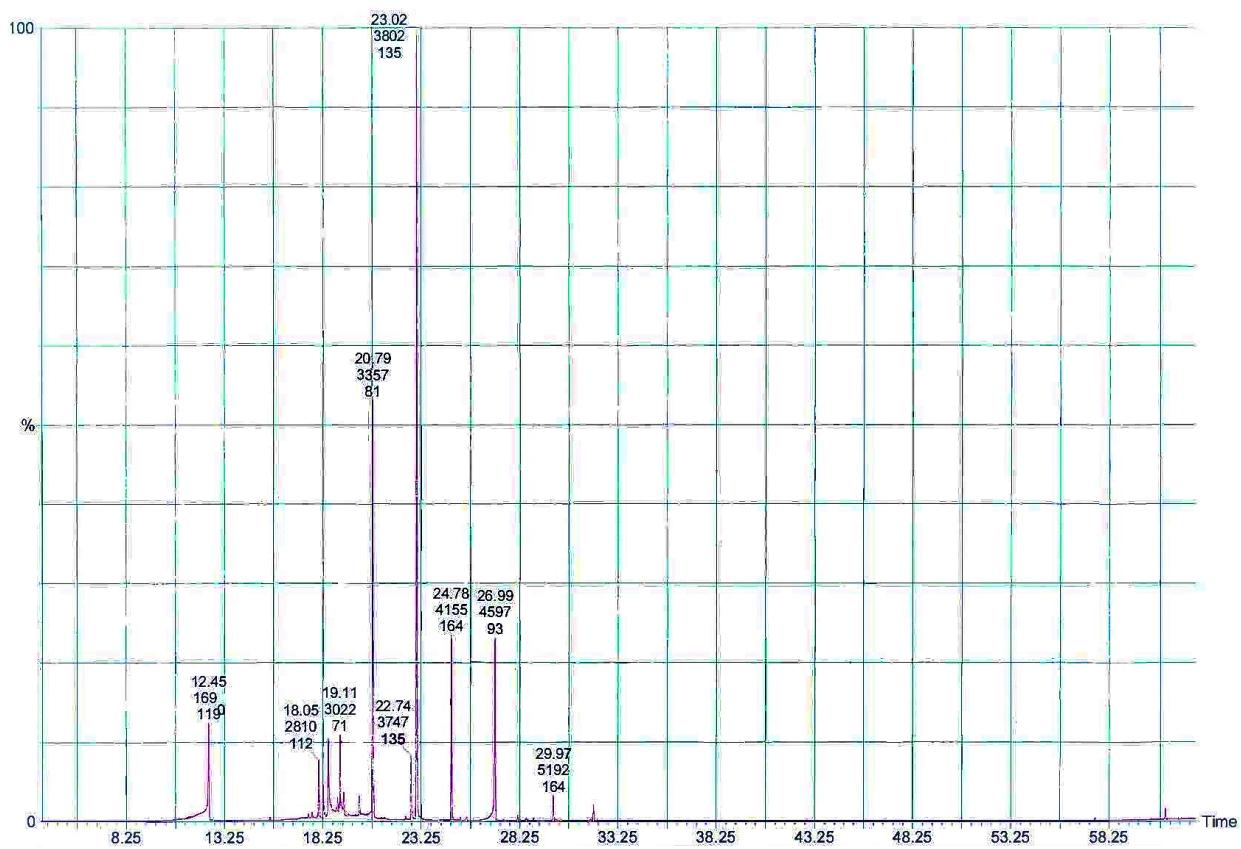
Mohammad Qneibi<sup>1,\*</sup>, Nidal Jaradat<sup>2</sup>, Mohammed Hawash<sup>2</sup>, Abdel Naser Zaid<sup>2</sup>, Abdel- Razzak Natsheh<sup>3</sup>, Remah Yousef<sup>1</sup>, Qais Abuhasan<sup>1</sup>

## SUPPLEMENTAL FIGURES AND LEGENDS

**Figure S1.** GC/MS chromatogram of *L. dentata* essential oil



**Figure S2.** GC/MS chromatogram of *O. syriacum* essential oil



**Table S1.** Data analysis for the whole cell recordings.

	GluA1	n	<u>Plus thyme oil</u>	n	<u>Plus Lavendar</u>	n
Amplitude (pA)	724±101	16	710±74 <sup>ns</sup>	20	732±186 <sup>ns</sup>	20
$\tau_{\infty}$ deact (ms)	2.4±0.1	12	4.5±0.2***	12	7.2±0.9	12
$\tau_{\infty}$ des (ms)	3.2±0.1	16	5.6±0.7***	20	9.2±0.9	20
	GluA1/2	n	<u>Plus thyme oil</u>	n	<u>Plus Lavendar</u>	n
Amplitude (pA)	278±48	12	280±73 <sup>ns</sup>	12	207±40 <sup>ns</sup>	20
$\tau_{\infty}$ deact (ms)	2.3±0.1	12	4.8±0.5***	12	8.1±0.8***	10
$\tau_{\infty}$ des (ms)	5.6±0.6	12	5.3±0.5 <sup>ns</sup>	12	28.8±3.2***	20
	GluA2	n	<u>Plus thyme oil</u>	n	<u>Plus Lavendar</u>	n
Amplitude (pA)	935±67	15	920±56 <sup>ns</sup>	20	955±143 <sup>ns</sup>	20
$\tau_{\infty}$ deact (ms)	2.2±0.1	12	3.8±0.6***	12	5.6±0.3***	12
$\tau_{\infty}$ des (ms)	2.5±0.1	15	4.7±0.5***	20	8.4±0.9***	20

Significance compared with AMPAR expressed alone (\*); p-value (one-way ANOVA): \* < 0.05, \*\* < 0.01, \*\*\* < 0.001, ns – not significant.