

Supplementary Data

Impact of different extraction solvents and concentrations on the total phenolics content and bioactivity of the Algerian lemongrass (*Cymbopogon citratus*) extracts

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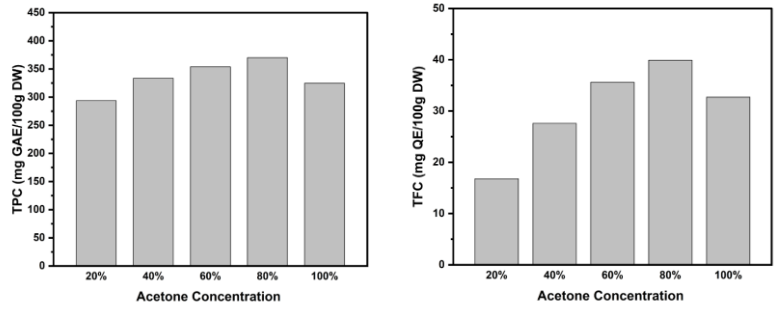


Figure S1. Total phenolic (mg GAE/100 g) and flavonoid content (mg QE/100 g) of acetone extract of *Cymbopogon citratus*

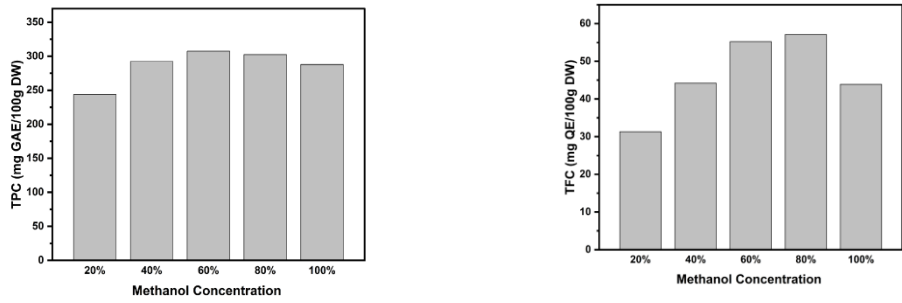


Figure S2. Total phenolic (mg GAE/100 g) and flavonoid content (mg QE/100 g) of methanol extract of *Cymbopogon citratus*

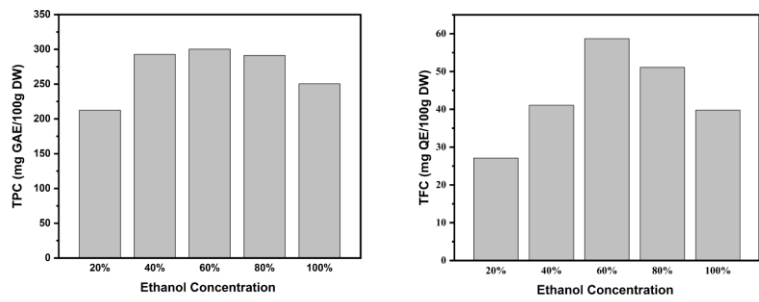


Figure S3. Total phenolic mg (GAE/100 g) and flavonoid content (mg QE/100 g) of ethanol extract of *Cymbopogon citratus*

Table S1. Antibacterial activity of *Cymbopogon citratus* extracts

Bacterial strains	Solvent extract	Inhibition zone diameters (mm)									
		Acetone			Ethanol			Methanol			
		1	5	10	1	5	10	1	5	10	
Gram (-)	<i>E. coli</i> (ATCC 25922)	100	7.17±0.29 ^{bcd}	10.17±0.76 ^{bcd}	13.17±0.29 ^{bcd}	9.90±0.36 ^{bcd}	13.00±1.00 ^{bcd}	13.17±0.29 ^{bcd}	9.00±0.00 ^{bcd}	10.57±0.40 ^{bcd}	12.80±0.53 ^{bcd}
		80	8.97±0.75 ^a	12.07±0.60 ^a	14.07±0.40 ^a	12.13±0.51 ^a	13.40±0.66 ^a	14.83±0.29 ^a	11.07±0.12 ^a	12.80±0.36 ^a	14.57±0.40 ^a
		60	8.00±0.00 ^{ab}	10.23±0.25 ^{ab}	12.83±0.29 ^{ab}	11.00±0.50 ^{ab}	14.00±1.00 ^{ab}	15.23±0.40 ^{ab}	10.23±0.68 ^{ab}	10.83±0.29 ^{ab}	13.13±0.51 ^{ab}
		40	6.73±0.46 ^{de}	10.23±0.40 ^{de}	12.07±0.40 ^{de}	8.83±0.29 ^{de}	10.07±0.60 ^{de}	11.00±0.00 ^{de}	6.83±0.29 ^{de}	9.23±0.40 ^{de}	9.90±0.36 ^{de}
		20	7.23±0.40 ^{ef}	8.00±0.00 ^{ef}	10.17±0.29 ^{ef}	8.17±0.76 ^{ef}	9.07±0.12 ^{ef}	10.00±0.50 ^{ef}	6.07±0.40 ^{ef}	7.80±0.53 ^{ef}	8.33±0.29 ^{ef}
	<i>P. aeruginosa</i> (ATCC 9027)	100	11.90±0.17 ^{bcd}	12.97±0.25 ^{bcd}	13.90±0.66 ^{bcd}	10.90±0.85 ^{bcd}	12.83±0.29 ^{bcd}	13.90±0.66 ^{bcd}	10.90±0.17 ^{bcd}	13.07±0.40 ^{bcd}	15.07±0.60 ^{bcd}
		80	12.90±0.36 ^a	13.90±0.36 ^a	15.67±0.58 ^a	13.07±0.40 ^a	15.00±0.00 ^a	15.97±0.25 ^a	12.90±0.85 ^a	15.17±0.29 ^a	17.07±0.40 ^a
		60	10.73±0.64 ^{ab}	13.07±0.60 ^{ab}	13.83±1.26 ^{ab}	12.07±0.40 ^{ab}	14.57±0.60 ^{ab}	14.90±0.66 ^{ab}	11.90±0.17 ^{ab}	14.07±0.40 ^{ab}	16.13±0.51 ^{ab}
		40	9.97±0.25 ^{de}	11.07±0.12 ^{de}	11.83±0.76 ^{de}	8.90±0.17 ^{de}	10.90±0.85 ^{de}	11.47±0.25 ^{de}	9.00±0.00 ^{de}	11.40±0.66 ^{de}	13.90±0.17 ^{de}
		20	8.17±0.29 ^{ef}	9.13±0.51 ^{ef}	10.90±0.66 ^{ef}	9.00±0.50 ^{ef}	10.57±0.12 ^{ef}	10.80±0.53 ^{ef}	8.90±0.36 ^{ef}	11.40±0.36 ^{ef}	12.97±0.25 ^{ef}
Gram (+)	<i>B. subtilis</i> (ATCC 6633)	100	6.50±0.50 ^{bcd}	7.90±0.36 ^{bcd}	8.40±0.17 ^{bcd}	7.07±0.40 ^{bcd}	8.47±0.25 ^{bcd}	11.17±0.29 ^{bcd}	7.40±0.36 ^{bcd}	9.00±0.50 ^{bcd}	9.73±0.25 ^{bcd}
		80	7.90±0.36 ^a	9.40±0.36 ^a	10.97±0.25 ^a	8.90±0.85 ^a	10.50±0.50 ^a	12.90±0.36 ^a	9.40±0.17 ^a	10.97±0.25 ^a	11.57±0.12 ^a
		60	8.07±0.40 ^{ab}	9.40±0.17 ^{ab}	10.17±0.29 ^{ab}	8.40±0.66 ^{ab}	10.23±0.25 ^{ab}	12.07±0.40 ^{ab}	9.07±0.12 ^{ab}	10.17±0.29 ^{ab}	10.57±0.40 ^{ab}
		40	5.40±0.17 ^{de}	7.23±0.40 ^{de}	7.57±0.60 ^{de}	8.07±0.12 ^{de}	9.07±0.12 ^{de}	9.57±0.40 ^{de}	6.57±0.12 ^{de}	7.57±0.12 ^{de}	8.47±0.25 ^{de}
		20	4.07±0.12 ^{ef}	3.97±0.25 ^{ef}	5.57±0.40 ^{ef}	6.40±0.36 ^{ef}	7.50±0.50 ^{ef}	8.90±0.36 ^{ef}	5.00±0.00 ^{ef}	5.90±0.36 ^{ef}	6.90±0.36 ^{ef}
	<i>S. aureus</i> (ATCC6538)	100	7.97±0.25 ^{bcd}	8.67±0.29 ^{bcd}	9.47±0.25 ^{bcd}	7.97±0.25 ^{bcd}	9.83±0.76 ^{bcd}	10.57±0.40 ^{bcd}	8.07±0.40 ^{bcd}	8.90±0.36 ^{bcd}	10.90±0.36 ^{bcd}
		80	10.07±0.12 ^a	11.07±0.12 ^a	11.50±0.50 ^a	8.90±0.36 ^a	11.07±0.40 ^a	11.50±0.50 ^a	10.90±0.85 ^a	13.07±0.40 ^a	13.63±0.51 ^a
		60	8.57±0.40 ^{ab}	9.40±0.36 ^{ab}	10.57±0.40 ^{ab}	8.57±0.40 ^{ab}	10.90±0.36 ^{ab}	11.40±0.36 ^{ab}	8.40±0.17 ^{ab}	9.57±0.40 ^{ab}	11.57±0.60 ^{ab}
		40	6.90±0.36 ^{de}	7.40±0.36 ^{de}	8.40±0.17 ^{de}	7.17±0.29 ^{de}	8.90±0.36 ^{de}	9.00±0.50 ^{de}	7.23±0.40 ^{de}	8.07±0.60 ^{de}	8.73±0.46 ^{de}
		20	4.40±0.17 ^{ef}	5.63±0.51 ^{ef}	7.57±0.40 ^{ef}	4.33±0.58 ^{ef}	4.97±0.25 ^{ef}	5.90±0.17	6.40±0.36 ^{ef}	7.40±0.66 ^{ef}	8.07±0.60 ^{ef}

Values are mean ± standard deviation of triplicate experiments.

Means with different superscript letters indicate significant differences (p < 0.05) according to Tukey test.

Table S2. Antifungal activity of *Cymbopogon citratus* extracts

Fungal strains	Solvent extract	Inhibition zone diameters (mm)								
		Acetone			Ethanol			Methanol		
		1	5	10	1	5	10	1	5	10
<i>Candida albicans</i> (ATCC 14,053)	100	11.23±0.40	12.33±0.58	14.23±0.25	8.07±0.12	11.13±0.51	12.07±0.60	9.40±0.17	11.07±0.12	12.17±0.29
	80	11.40±1.22	13.07±2.06	13.90±2.08	11.23±0.40	13.47±0.25	15.57±0.12	11.90±0.17	14.00±0.00	15.07±0.12
	60	9.57±1.79	10.33±1.61	11.23±1.97	9.33±0.29	10.97±0.25	13.23±0.40	10.90±0.36	12.00±1.00	14.47±0.25
	40	7.23±1.50	8.57±1.40	9.80±1.51	7.90±0.36	9.40±0.69	10.07±0.90	8.57±0.60	9.57±0.40	10.90±0.17
	20	6.10±0.14	7.25±0.35	8.75±0.35	7.57±0.40	8.57±0.12	9.17±0.29	6.33±0.58	7.90±0.17	9.07±0.90
<i>S. cerevisiae</i> (ATCC 24657)	100	11.90±0.36	13.90±0.36	17.40±0.36	8.50±0.50	11.00±0.00	12.67±0.58	9.07±0.40	11.07±0.12	13.40±0.17
	80	13.47±0.25	16.23±0.25	18.07±0.40	11.17±0.76	14.07±0.12	15.07±0.90	11.90±0.17	13.40±0.17	16.07±0.40
	60	13.07±0.60	14.90±0.17	16.23±0.25	10.57±0.40	12.90±0.36	14.40±0.17	11.47±0.25	12.90±1.15	15.00±0.00
	40	11.90±0.36	13.07±0.40	15.07±0.12	7.67±0.58	8.90±0.36	10.90±0.17	9.00±0.00	10.57±0.12	11.67±0.29
	20	9.13±0.51	10.57±0.40	12.00±0.50	8.13±0.51	8.67±0.29	9.83±0.76	8.50±0.50	9.83±0.29	11.47±0.75