

Supplementary Table S1. GC–MS constituents detected at levels below 1% in the essential oils of *Eucalyptus camaldulensis* collected from four locations in Khuzestan Province

Compound	Molecular formula	Ahvaz	Dezful	Bostan	Abadan
Cyclosativene	C ₁₅ H ₂₄	0.16	ND	ND	ND
1a,2,3,4,6,7,7a,7b-Octahydro-1,1,4,7-tetramethyl-1H-cycloprop[e]azulene	C ₁₅ H ₂₄	ND	ND	0.86	ND
1,2,5,6-Tetramethylbicyclo[3.3.0]octan-3-ol	C ₁₅ H ₂₂ O	ND	ND	0.88	ND
1,5,7-Octatrien-3-ol, 2,6-dimethyl-	C ₁₀ H ₁₆ O	ND	ND	ND	0.13
1-Methoxy-1,4-cyclohexadiene	C ₇ H ₁₀ O	ND	0.11	ND	ND
1H-Cycloprop[e]azulene, decahydro-1,1,7-trimethyl-4-methylene-	C ₁₅ H ₂₄	0.85	ND	0.11	ND
1H-Cyclopropa[a]naphthalene, 1a,2,3,5,6,7,7a,7b-octahydro-1,1,7,7a-	C ₁₅ H ₂₄	ND	ND	ND	0.52
1H-Cyclopropa[a]naphthalene, 1a,2,3,5,6,7,7a,7b-octahydro-1,1,7,7a-tetramethyl-	C ₁₅ H ₂₄	0.12	ND	ND	ND
1H-Cyclopropa[a]naphthalene, decahydro-1,1,3a-trimethyl-7-methylene-	C ₁₅ H ₂₄	ND	0.95	0.97	0.29
1H-Indene, 1-ethylideneoctahydro-7a-methyl-	C ₁₂ H ₂₀	ND	ND	0.27	ND
Calamenene	C ₁₅ H ₂₂	ND	ND	ND	0.19
2-Butenal, 3-methyl-	C ₅ H ₈ O	ND	ND	ND	0.15
2-Cyclohexen-1-one, 2-methyl-5-(1-methylethenyl)-	C ₁₀ H ₁₆ O	ND	0.15	0.15	0.19
2-Hexenal	C ₆ H ₁₀ O	ND	0.11	ND	ND
2-Methyl-4,5-dihydrofuran	C ₅ H ₈ O	ND	0.25	0.19	ND
2-Naphthalenemethanol, 2,3,4,4a,5,6,7,8-octahydro- $\alpha,\alpha,4a,8$ -tetramethyl-	C ₁₅ H ₂₆ O	ND	0.24	ND	ND
2-Naphthalenemethanol, decahydro- $\alpha,\alpha,4a$ -trimethyl-8-methylene-	C ₁₅ H ₂₆ O	ND	ND	ND	0.74
2H-Inden-2-one, 1,4,5,6,7,7a-hexahydro-7a-methyl-	C ₁₀ H ₁₄ O	0.28	ND	ND	ND
3-Methylbutanal	C ₅ H ₁₀ O	ND	ND	0.73	0.93
4-Terpineol	C ₁₀ H ₁₈ O	0.76	ND	ND	0.77
5,9-Undecadien-1-yne, 6,10-dimethyl-	C ₁₃ H ₂₀	ND	0.11	ND	ND
7-Tetracyclo[6.2.1.0(3.8)0(3.9)]undecanol, 4,4,11,11-tetramethyl-	C ₁₅ H ₂₂ O	0.95	ND	ND	ND
9,10-Dehydro-isolongifolene	C ₁₅ H ₂₂	ND	ND	0.17	0.12

Alloaromadendrene	C ₁₅ H ₂₄	ND	ND	0.23	ND
Alloaromadendrene oxide-(1)	C ₁₅ H ₂₄ O	ND	0.41	0.23	ND
Azulene, 1,2,3,3a,4,5,6,7-octahydro-1,4-dimethyl-7-(1-methylethenyl)-	C ₁₅ H ₂₄	ND	0.12	0.13	0.17
Bicyclo[2.2.1]heptan-2-ol, 1,3,3-trimethyl-	C ₁₃ H ₂₂ O ₂	ND	ND	ND	0.46
Bicyclo[3.1.0]hex-2-ene, 2-methyl-5-(1-methylethyl)-	C ₁₀ H ₁₆	ND	ND	0.12	ND
Bicyclo[3.1.1]hept-2-ene-2-methanol, 6,6-dimethyl-	C ₁₀ H ₁₆ O	ND	0.13	0.21	ND
Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-methylene-	C ₁₀ H ₁₆	ND	0.21	ND	ND
Bis(2-ethylhexyl) phthalate	C ₂₄ H ₃₈ O ₄	ND	0.22	ND	ND
Borneol	C ₁₀ H ₁₈ O	0.21	0.45	0.39	0.83
Camphene	C ₁₀ H ₁₆	ND	0.12	0.15	0.25
Campholaldehyde	C ₁₀ H ₁₆ O	ND	ND	ND	0.21
Carvacrol	C ₁₀ H ₁₄ O	0.33	0.73	0.16	ND
Carveol	C ₁₀ H ₁₆ O	ND	ND	ND	0.81
Carvol	C ₁₀ H ₁₆ O	0.19	ND	ND	ND
3a,4,5,6,7,7a-hexahydro-3-methyl-1H-inden-1-one	C ₁₀ H ₁₄ O	ND	0.48	0.46	ND
p-Mentha-1(7),8-dien-2-ol	C ₁₀ H ₁₆ O	0.72	ND	ND	ND
p-Mentha-2,8-dienol (isomer 1)	C ₁₀ H ₁₆ O	ND	ND	0.17	ND
Salvene	C ₉ H ₁₆	ND	ND	0.15	ND
Copaene	C ₁₅ H ₂₄	ND	0.11	ND	ND
Cyclopentanol, 1-(methylenecyclopropyl)-	C ₆ H ₁₂ O	0.68	ND	ND	ND
Cyclopentene, 3-ethylidene-1-methyl-	C ₈ H ₁₂	ND	ND	0.25	ND
Fenchyl alcohol	C ₁₀ H ₁₈ O	ND	0.22	0.22	ND
Dehydro-aromadendrene	C ₁₅ H ₂₂	ND	0.18	ND	ND
Eremophilene	C ₁₅ H ₂₄	ND	ND	ND	0.77
Exo-2-Hydroxycineole acetate	C ₁₀ H ₁₈ O ₂	ND	ND	ND	0.11
Fencholenic aldehyde	C ₁₀ H ₁₆ O	ND	ND	ND	0.24
Geraniol	C ₁₀ H ₁₈ O	ND	0.16	0.18	ND
Isoamyl isovalerate	C ₁₀ H ₂₀ O ₂	ND	0.64	ND	ND
Isodene	C ₁₅ H ₂₄	ND	0.31	0.24	0.13
Isopentyl isovalerate	C ₁₀ H ₂₀ O ₂	ND	ND	0.75	ND

Isospathulenol	C ₁₅ H ₂₄ O	0.49	ND	0.22	ND
Isovaleric acid, isopentyl ester	C ₁₀ H ₂₀ O ₂	ND	ND	ND	0.57
Ledol	C ₁₅ H ₂₆ O	ND	ND	0.79	ND
Lepidozienal	C ₁₅ H ₂₄	ND	ND	ND	0.41
Myristicin	C ₁₁ H ₁₂ O ₃	0.16	ND	ND	ND
Myrtenol	C ₁₀ H ₁₆ O	ND	ND	ND	0.25
Naphthalene, 1,2,3,4,4a,5,6,8a-octahydro-7-methyl-4-methylene-1-(1-methylethyl)-	C ₁₅ H ₂₄	0.12	ND	0.18	0.29
Naphthalene, 1,2,3,5,6,7,8,8a-octahydro-1,8a-dimethyl-7-(1-methylethenyl)-	C ₁₅ H ₂₄	ND	ND	0.41	ND
Naphthalene, 1,2,3,5,6,8a-hexahydro-4,7-dimethyl-1-(1-methylethyl)-	C ₁₅ H ₂₄	ND	ND	0.18	ND
Naphthalene, decahydro-4a-methyl-1-methylene-7-(1-methylethenyl)-	C ₁₅ H ₂₄	ND	ND	ND	0.98
Nortricyclane	C ₇ H ₁₀	ND	0.11	ND	ND
p-Cymen-8-ol	C ₁₀ H ₁₄ O	ND	0.35	0.22	ND
p-Cymene	C ₁₀ H ₁₄	ND	ND	0.48	ND
Phellandral	C ₁₀ H ₁₆ O	ND	0.14	ND	ND
Phytol	C ₂₀ H ₄₀ O	ND	0.21	ND	0.29
Pinocarvone	C ₁₀ H ₁₆	0.23	0.45	0.89	ND
T-Muurolol	C ₁₅ H ₂₆ O	ND	0.49	ND	ND
Terpinen-4-ol	C ₁₀ H ₁₈ O	ND	ND	0.83	ND
Tetradecane	C ₁₄ H ₃₀	ND	0.34	ND	ND
Thymol	C ₁₀ H ₁₄ O	0.14	0.33	ND	ND
Carveol	C ₁₀ H ₁₆ O	0.27	0.52	0.49	ND
p-Mentha-2,8-dienol (isomer 2)	C ₁₀ H ₁₆ O	ND	0.52	0.21	ND
α-Bisabolene epoxide	C ₁₅ H ₂₄ O	ND	ND	0.32	ND
Tricyclo[4.3.0.0(7,9)]non-3-ene, 2,2,5,5,8,8-hexamethyl-	C ₁₅ H ₂₆	ND	0.11	0.14	ND
Tricyclo[6.3.0.1(2,3)]undec-7-ene, 6,10,11,11-tetramethyl-	C ₁₅ H ₂₄	ND	0.74	ND	0.84
α-Amorphene	C ₁₅ H ₂₄	ND	0.23	0.19	ND
α-Cubebene	C ₁₅ H ₂₄	ND	ND	ND	0.17
α-Guaiene	C ₁₅ H ₂₄	0.31	ND	ND	ND

α -Phellandrene	C ₁₀ H ₁₆	ND	0.81	0.33	ND
α -Terpinene	C ₁₀ H ₁₆	ND	0.18	ND	ND
α -Terpineol	C ₁₀ H ₁₈ O	ND	ND	0.97	ND
β -Elemene	C ₁₅ H ₂₄	ND	ND	ND	0.26
β -Humulene	C ₁₅ H ₂₄	0.26	ND	ND	ND
β -Myrcene	C ₁₀ H ₁₆	0.13	0.86	0.53	ND
β -Pinene	C ₁₀ H ₁₆	0.27	0.83	0.66	0.62
β -Selinene	C ₁₅ H ₂₄	ND	0.61	0.53	ND
β -Selinenol	C ₁₅ H ₂₆ O	ND	0.36	ND	ND
γ -Gurjunene	C ₁₅ H ₂₄	0.53	ND	0.53	ND
γ -Terpinene	C ₁₀ H ₁₆	0.34	ND	0.18	ND
δ -Cadinene	C ₁₅ H ₂₄	ND	0.81	ND	ND
Total identified compounds (%)		8.5	15.41	17.65	12.69

ND: indicates not detected

Supplementary Table S2. Individual MIC and MBC endpoint values obtained from three independent experiments for the essential oils of *Eucalyptus camaldulensis* against *Escherichia coli* ATCC 25922 and *Staphylococcus aureus* ATCC 25923.

Essential oil	Microorganism	MIC-1	MIC-2	MIC-3	MBC-1	MBC-2	MBC-3
Dezful	<i>E. coli</i>	7.81	15.62	15.62	125	125	125
Dezful	<i>S. aureus</i>	125	125	125	125	250	250
Abadan	<i>E. coli</i>	7.81	7.81	7.81	31.25	31.25	31.25
Abadan	<i>S. aureus</i>	15.62	31.25	31.25	62.5	125	125
Bostan	<i>E. coli</i>	15.62	31.25	31.25	125	125	125
Bostan	<i>S. aureus</i>	15.62	31.25	31.25	62.5	125	125
Ahvaz	<i>E. coli</i>	62.5	62.5	62.5	125	250	250
Ahvaz	<i>S. aureus</i>	31.25	62.5	62.5	125	250	250