

Chemical Composition and Bioactivity of Essential Oil of Ten *Labiatae* Species

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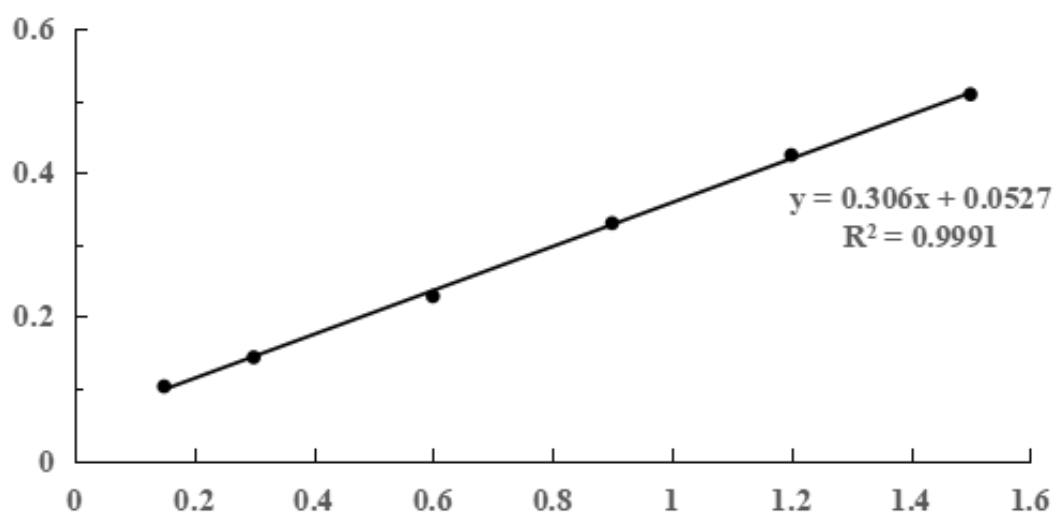


Figure S1. standard curve of FeSO

Table S1 IZD of essential oil under different pH

	<i>S.a.</i>			<i>E.coli</i>			<i>B.s.</i>			<i>S.e.</i>		
	pH			pH			pH			pH		
	6	7	8	6	7	8	6	7	8	6	7	8
TmEO	31.23 ±0.02	30.77 ±0.06	31.24 ±0.02	18.68 ±0.05	12.35 ±0.73	12.61 ±0.04	20.08 ±0.04	11.59 ±0.49	16.79 ±0.04	12.41 ±0.06	11.11 ±0.19	18.00 ±0.06
McEO	30.71 ±0.02	32.32 ±0.07	30.45 ±0.45	20.07 ±0.02	13.26 ±0.45	16.99 ±0.09	30.71 ±0.53	14.72 ±0.19	30.71 ±0.04	11.27 ±0.04	14.81 ±1.55	26.34 ±0.04
OvEO	32.25 ±0.02	31.82 ±0.03	32.23 ±0.04	14.81 ±0.03	10.78 ±0.49	11.08 ±0.02	17.92 ±0.05	10.52 ±0.29	15.8± 0.03	8.58± 0.04	10.71 ±0.17	18.13 ±0.14
RoEO	6.00	6.00	6.00	6.69± 0.04	6.65± 0.14	6.00	6.85± 0.02	6.46± 0.12	6.70± 0.04	6.71± 0.03	6.67± 0.21	7.84± 0.03

ObEO	21.37 ±0.11	12.98 ±0.01	20.10 ±0.03	7.06± 0.02	8.25± 0.17	6.00	7.99± 0.02	6.82± 0.31	6.59± 0.05	6.00	7.19± 0.50	6.00
MhEO	6.00	7.96± 0.34	30.31 ±0.16	6.00	8.20± 0.36	6.00	7.54± 0.49	7.75± 0.20	7.66± 0.02	6.00	7.94± 0.04	8.76± 0.02
PcEO	24.80 ±0.06	12.02 ±0.02	13.8± 0.04	6.00	6.00	6.00	6.00	6.00	6.00	7.02± 0.05	6.00	6.00
MsEO	10.47 ±1.66	9.78± 0.16	16.08 ±0.03	6.00	7.10± 0.08	6.80± 0.06	6.00	6.93± 0.07	7.14± 0.04	6.70± 0.05	7.22± 0.04	8.95± 0.02
SoEO	7.60± 0.04	7.68± 0.39	9.88± 0.05	6.00	6.00	6.00	6.00	6.00	6.00	7.22± 0.03	6.00	6.00
PfEO	15.02 ±0.12	7.81± 0.46	21.25 ±0.05	6.38± 0.01	6.00	6.00	8.52± 0.04	6.00	7.22± 0.05	8.00± 0.04	6.44± 0.04	7.77± 0.04

Table S2 The size of bacteriostatic circle of essential oil at different temperature.

	<i>S.a.</i>				<i>E.coli</i>				<i>B.s.</i>				<i>S.e.</i>			
	37 °C	50 °C	70 °C	90 °C	37 °C	50 °C	70 °C	90 °C	37 °C	50 °C	70 °C	90 °C	37 °C	50 °C	70 °C	90 °C
TmEO	31.24 ±0.02	32.27 ±0.04	32.76 ±0.04	32.76 ±0.04	12.35 ±0.85	11.46 ±0.02	12.10 ±0.03	11.18 ±0.02	11.59 ±0.56	19.83 ±0.04	31.30 ±0.16	20.07 ±0.03	11.11 ±0.22	20.05 ±0.02	20.90 ±0.03	20.16 ±0.03
McEO	30.45 ±0.45	31.21 ±0.06	31.22 ±0.07	31.22 ±0.07	13.26 ±0.52	16.61 ±0.03	14.86 ±0.01	18.90 ±0.03	14.72 ±0.22	30.40 ±0.21	30.43 ±0.23	30.30 ±0.16	14.81 ±1.79	30.29 ±0.11	30.34 ±0.25	30.34 ±0.13
OvEO	32.23 ±0.04	31.27 ±0.11	31.69 ±0.03	31.69 ±0.03	10.78 ±0.56	11.82 ±0.04	10.09 ±0.02	12.22 ±0.02	10.52 ±0.34	14.95 ±0.02	17.13 ±0.03	17.87 ±0.04	10.71 ±0.2	19.33 ±0.03	21.34 ±0.04	18.14 ±0.01
RoEO	7.91± 0.04	8.75± 0.02	9.84± 0.01	9.84± 0.01	6.65± 0.17	6.29± 0.02	6.00	6.27± 0.02	6.46± 0.14	6.85± 0.02	6.50± 0.03	7.87± 0.02	6.67± 0.24	6.00	8.98± 0.03	8.95± 0.02
ObEO	20.10 ±0.03	30.04 ±0.03	31.11 ±0.03	31.11 ±0.03	8.25± 0.19	6.46± 0.02	6.00	6.00	6.82± 0.36	7.15± 0.02	7.14± 0.02	7.20± 0.03	7.19± 0.57	7.14± 0.01	9.07± 0.02	8.94± 0.01
MhEO	32.12 ±0.15	32.85 ±0.13	33.13 ±0.02	33.13 ±0.02	8.2±0. 41	6.00	6.00	6.00	7.75± 0.23	6.49± 0.03	6.00	7.04± 0.01	7.94± 0.05	8.56± 0.02	8.55± 0.02	8.46± 0.03
PcEO	17.51 ±0.04	20.25 ±0.02	21.93 ±0.03	21.93 ±0.03	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
MsEO	33.20 ±0.05	33.04 ±0.05	33.55 ±0.01	33.55 ±0.01	7.1±0. 1	6.85± 0.02	6.00	6.45± 0.02	6.93± 0.08	7.44± 0.01	8.05± 0.02	8.33± 0.02	7.22± 0.05	9.39± 0.02	11.12 ±0.02	11.05 ±0.02
SoEO	16.40 ±0.03	14.33 ±0.03	15.88 ±0.03	15.88 ±0.03	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
PfEO	21.25 ±0.04	17.51 ±0.04	21.32 ±0.04	21.32 ±0.04	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.44± 0.04	9.17± 0.02	14.30 ±0.03	14.08 ±0.02

Table S3 IZD of essential oil under different UV irradiation time

	<i>S.a.</i>				<i>E.coli</i>				<i>B.s.</i>				<i>S.e.</i>			
	duration(min)				duration(min)				duration(min)				duration(min)			
	0	10	20	30	0	10	20	30	0	10	20	30	0	10	20	30
TmEO	30.77	31.46	31.45	32.26	12.35	12.27	16.98	11.13	12.35	16.69	17.44	25.67	12.35	22.06	21.45	21.54
	±0.07	±0.39	±0.29	±0.05	±0.85	±0.03	±0.03	±0.02	±0.85	±0.03	±0.04	±0.02	±0.85	±0.02	±0.02	±0.01
McEO	32.32	32.54	32.43	31.26	13.26	15.14	21.09	18.33	13.26	24.83	30.31	31.31	13.26	31.84	32.40	24.84
	±0.08	±0.16	±0.21	±0.14	±0.52	±0.04	±0.03	±0.03	±0.52	±0.03	±0.16	±0.05	±0.52	±0.05	±0.16	±0.01
OvEO	31.82	32.66	33.03	30.34	10.78	11.34	15.06	10.06	10.78	15.84	18.67	19.45	10.78	18.14	18.86	17.56
	±0.03	±0.53	±0.47	±0.12	±0.56	±0.02	±0.05	±0.01	±0.56	±0.04	±0.04	±0.02	±0.56	±0.01	±0.01	±0.01
RoEO		9.94±	8.86±	7.26±	6.65±	6.34±	6.56±		6.65±	7.55±	6.94±	7.58±	6.65±	8.56±	8.66±	6.65±
	6±0	0.04	0.01	0.02	0.17	0.04	0.04	6.00	0.17	0.02	0.02	0.01	0.17	0.02	0.01	0.02
ObEO	12.98	21.58	21.24	19.72	8.25±		7.07±	6.55±	8.25±	6.95±	8.14±	7.84±	8.25±	8.23±	8.05±	6.96±
	±0.02	±0.04	±0.02	±0.03	0.19	6.00	0.04	0.02	0.19	0.02	0.01	0.01	0.19	0.03	0.02	0.01
MhEO	7.96±	27.32	31.49	31.13	8.2±0.				8.2±0.	8.26±	7.50±	6.83±	8.2±0.	8.23±	9.55±	8.54±
	0.39	±0.03	±0.25	±0.07	41	6.00	6.00	6.00	41	0.01	0.03	0.02	41	0.02	0.02	0.01
PcEO	12.02	16.83	15.05	15.96		6.00	6.00	6.00		6.00	6.00	6.00		6.00	6.00	6.00
	±0.03	±0.03	±0.02	±0.01	6.00				6.00				6.00			
MsEO	9.78±	26.18	18.83	25.85	7.1±0.	7.09±	6.96±	6.64±	7.1±0.	7.85±	7.79±	7.14±	7.1±0.	9.94±	12.25	7.96±
	0.18	±0.04	±0.04	±0.02	1	0.03	0.02	0.01	1	0.02	0.02	0.01	1	0.01	±0.02	0.01
SoEO	7.68±	7.88±	9.96±	9.14±										6.84±	6.96±	
	0.45	0.05	0.01	0.02	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	0.01	0.01	6.00
PfEO	7.81±	22.84	24.70	18.34						8.03±	8.36±	8.39±		10.06	11.13	8.94±
	0.53	±0.05	±0.05	±0.03	6.00	6.00	6.00	6.00	6.00	0.03	0.02	0.02	6.00	±0.02	±0.02	0.01

Table S4 Diverse cycles for the analyses of essential oils of 10 plants.

	It	Rt	Tp	Rt	Tp	Rt	Tp	Rt	Tp	Rt	Dt
TmEO	40 °C	2 min	3 °C/min,130 °C	1 min	5 °C/min,240 °C	2 min	-	-			57 min
McEO	40 °C	2 min	2 °C/min,120 °C	1 min	5 °C/min,200 °C	2 min	-	-			61 min
OvEO	60 °C	2 min	3 °C/min,100 °C	2 min	1 °C/min,110 °C	1 min	3 °C/min,190 °C	2 min			57 min
RoEO	40 °C	2 min	3 °C/min,100 °C	1 min	2 °C/min,110 °C	1 min	4 °C/min,220 °C	2 min			58.5 min
ObEO	40 °C	2 min	2 °C/min,100 °C	1 min	0.5 °C/min,108 °C	1 min	6 °C/min,150 °C	1 min	3 °C/min,240 °C	2 min	90 min
MhEO	40 °C	2 min	2 °C/min,110 °C	1 min	4 °C/min,200 °C	2 min					62.5 min
PcEO	60 °C	1 min	10 °C/min,100 °C	1 min	2 °C/min,150 °C	1 min	1 °C/min,160 °C	1 min	4 °C/min,220 °C	2 min	60 min
MsEO	40 °C	2 min	2 °C/min,110 °C	1 min	4 °C/min,200 °C	2 min					62.5 min
SoEO	40 °C	2 min	3 °C/min,130 °C	1 min	5 °C/min,240 °C	2 min					57 min
PfEO	60 °C	2 min	5 °C/min,100 °C	1 min	2 °C/min,160 °C	2 min	4 °C/min,200 °C	2 min			55 min

It: Initial temperature; Rt: Retention time; Tp: Temperature-raising program; Dt: detection time