

Supplementary Materials

Table S1. Antibacterial activity (zone of inhibition in mm) of various concentrations of the different honeys against *Enterobacter cloacae* subsp *dissolvens* assessed by the well diffusion method.

Honey type	Inhibition zone (in mm)				
	75%	50%	25%	12.5%	6.25%
<i>Cotton</i>	16.15±3.55	13.95±2.51	11.7±1.48	10.03±1.5 (n=2)	9.4 (n=1)
<i>Arbutus</i>	18.46±4.19	15.26±2.41	12.28±2.11	11.00±1.62 (n=3)	9.2 (n=1)
<i>Chestnut</i>	15.44±1.63	13.32±1.80	11.48±1.19	9.25±0.21 (n=2)	0
<i>Thyme</i>	15.19±1.09	12.14±1.76	7.80±4.45	7.7 (n=1)	0
<i>Orange</i>	16.65±0.36	12.35±0.76	10.01±0.25	0	0
<i>Oregano</i>	14.38±0.61	13.15±1.60	11.53±1.70	9.8±1.27 (n=2)	0
<i>Fir</i>	15.79±1.28	14.17±1.00	12.44±1.24	10.46±1.67 (n=5)	9.05±0.15 (n=2)
<i>Sunflower</i>	13.67±0.39	11.90±0.31	8.75±3.94	0	0
<i>Heath</i>	15.88±2.84	13.12±2.44	10.16±2.72	9.7±2.12 (n=2)	8.7 (n=1)
<i>Manuka</i>	21.3	15.2	11.3	0	0
<i>Artificial honey</i>	6.2	0	0	0	0
<i>Significance (One way ANOVA)</i>	F=6.321064 P<0.0001	F=2.571789 P<0.05	F=3.343586 P<0.05	-	-

Table S2. Geometrical means of the antibacterial activity of the different honeys against *Enterobacter cloacae* subsp *dissolvens* assessed by the MIC method as crude sample, with the addition of catalase and protease.

Honey type	MIC ₉₅ values (% v/v)		
	Crude samples	Catalase addition	Protease addition
<i>Cotton</i>	5.26	8.84	7.43
<i>Arbutus</i>	4.74	6.25	6.25
<i>Chestnut</i>	4.74	8.25	8.25
<i>Thyme</i>	6.25	9.47	10.88
<i>Orange</i>	12.5	21.02	14.87
<i>Oregano</i>	7.43	8.84	8.84
<i>Fir</i>	5.13	6.90	6.90
<i>sunflower</i>	9.92	19.84	15.75
<i>Heath</i>	6.25	12.16	10.88
<i>Manuka</i>	6.25	25	12.50
<i>Artificial honey</i>	-	-	-
	-	F=12.035046 P<0.0001	-

Table S3. Antibacterial activity (zone of inhibition in mm) of various concentrations of the different honeys against *P. aeruginosa* assessed by the well diffusion method.

Honey type	Inhibition zone (in mm)				
	75%	50%	25%	12.5%	6.25%
<i>Cotton</i>	16.58±1.21	13.1±1.72	8.28±4.86 (n=4)	0	0
<i>Arbutus</i>	16.44±3.93	12.88±2.64	11.16±2.05	10.13±0.4 (n=3)	0
<i>Chestnut</i>	15.04±3.09	13.46±1.59	10.64±2.06	9.8±0.42 (n=2)	0
<i>Thyme</i>	15.72±3.75	13.40±1.75	11.92±1.93	13.4 (n=1)	0
<i>Orange</i>	13.38±0.52	11.85±0.43	5.3±5.3 (n=3)	0	0

<i>Oregano</i>	13.05±0.98	11.33±1.29	2.8±4.8 (n=2)	0	0
<i>Fir</i>	14.66±2.21	13.01±1.27	8.37±5.88 (n=5)	11.8 (n=1)	0
<i>sunflower</i>	13.23±0.73	11.73±0.74	3.23±3.96 ((n=3)	0	0
<i>Heath</i>	15.30±2.56	12.92±2.42	11.66±1.98	10.55±1.2 (n=2)	0
<i>Manuka</i>	18.2	14.4	14.4	0	0
<i>Artificial honey</i>	6.2	0	0	0	0
<i>Significance (One way ANOVA)</i>	F=2.590381 P=0.017902	-	F=4.058618 P=0.000805	-	-

Table S4. Geometrical means of the antibacterial activity of the different honeys against *P. aeruginosa* assessed by the MIC method as crude sample, with the addition of catalase and protease.

Honey type	MIC ₉₅ values (% v/v)		
	Crude samples	Catalase addition	Protease addition
Cotton	6.25	7.43	6.25
Arbutus	7.18	10.88	9.47
Chestnut	6.25	12.5	9.47
Thyme	6.25	8.25	8.84
Orange	8.84	42.04	12.5
Oregano	8.84	10.51	9.92
Fir	6.25	7.62	9.29
Sunflower	9.92	9.92	9.92
Heath	7.18	7.18	9.47
Manuka	6.25	6.25	6.25
Artificial honey	-	-	-
		F=16.369898	
		P<0.001	

Table S5. Antibacterial activity (zone of inhibition in mm) of various concentrations of the different honeys against *Klebsiella pneumoniae* subsp *pneumoniae* (1) assessed by the well diffusion metho.

Honey type	Inhibition zone (in mm)				
	75%	50%	25%	12.5%	6.25%
<i>Cotton</i>	15.15±2.88	12.58±0.70	10.63±1.03	0	0
<i>Arbutus</i>	14.96±3.22	12.90±2.82	9.14±5.47	10.60±1.56 (n=2)	0
<i>Chestnut</i>	14.44±2.78	13.28±2.52	11.66±1.82	10.75±1.91 (n=2)	0
<i>Thyme</i>	13.88±0.76	12.46±0.54	10.24±1.33	9.4 (n=1)	0
<i>Orange</i>	13.63±0.90	11.80±1.22	4.98±4.98	0	0
<i>Oregano</i>	14.3±0.96	12.30±0.55	8.18±4.78	9.00±0.99 (n=2)	0
<i>Fir</i>	15.81±1.88	13.99±2.22	10.00±1.98	10.04±0.42 (n=2)	0
<i>Sunflower</i>	13.90±0.93	12.43±1.70	9.67±1.08	0	0
<i>Heath</i>	14.32±2.21	12.30±2.07	8.74±5.1	9.4 (n=1)	0
<i>Manuka</i>	17.40	13.10	9.1	0	0
<i>Artificial honey</i>	6.4	0	0	0	0
<i>Significance (One way ANOVA)</i>	-	-	-	-	-

Table S6. Geometrical means of the antibacterial activity of the different honeys against *Klebsiella pneumoniae* subsp *pneumoniae* (1) assessed by the MIC method as crude sample, with the addition of catalase and protease.

Honey type	MIC ₉₅ values (% v/v)		
	Crude samples	Catalase addition	Protease addition

Cotton	7.43	12.5	10.51
Arbutus	7.18	10.88	12.5
Chestnut	8.25	21.76	10.51
Thyme	7.18	9.47	9.47
Orange	8.84	14.86	10.51
Oregano	6.25	8.84	8.84
Fir	5.13	6.90	6.90
Sunflower	9.92	19.84	12.5
Heath	8.25	10.88	14.36
Manuka	6.25	25	12.5
Artificial honey	-	F=4.380606	
		P=0.000448	

Table S7. Antibacterial activity (zone of inhibition in mm) of various concentrations of the different honeys against *Klebsiella pneumoniae* subsp *pneumoniae* (2) assessed by the well diffusion method.

<i>Honey type</i>	Inhibition zone (in mm)				
	75%	50%	25%	12.5%	6.25%
<i>Cotton</i>	15.48±2.44	13.73±1.45	11.58±0.39	9.05±0.91 (n=2)	0
<i>Arbutus</i>	15.44 ±1.84	13.96±1.13	12.12±1.10	10.03±0.12 (n=3)	0
<i>Chestnut</i>	14.64±1.64	13.46±1.80	12.13±1.87	9.77±0.81 (n=3)	9.1 (n=1)
<i>Thyme</i>	13.96±0.23	12.26±0.56	10.46±0.27	8.60±0.71 (n=2)	0
<i>Orange</i>	13.83±0.33	12.30±0.24	10.75±0.68	0	0
<i>Oregano</i>	14.10±0.66	11.83±1.04	9.53±0.60	8.10±0.328 (n=2)	0
<i>Fir</i>	15.50±1.17	13.12±1.21	10.39±1.16	9.27±0.06 (n=3)	7.4 (n=1)
<i>Sunflower</i>	14.43±0.59	11.60±0.91	8.93±0.93	0	0
<i>Heath</i>	15.08±1.75	12.06±1.31	9.40±1.91	8.7 (n=1)	0
<i>Manuka</i>	16.5	12.80	9.3	8.4	0
<i>Artificial honey</i>	6.4	0	0	0	0
<i>Significance (One way ANOVA)</i>	F=2.157406 P=0.045356	F=2.919213 P=0.00887	F=5.205593 P<0.001	-	-

Table S8. Geometrical means of the antibacterial activity of the different honeys against *Klebsiella pneumoniae* subsp *pneumoniae* (2) assessed by the MIC method as crude sample, with the addition of catalase and protease.

Honey type	MIC₉₅ values (% v/v)		
	Crude samples	Catalase addition	Protease addition
Cotton	7.43	12.50	7.43
Arbutus	6.25	10.51	8.25
Chestnut	7.18	16.49	10.88
Thyme	9.47	10.88	12.50
Orange	8.84	35.35	12.50
Oregano	7.43	12.50	6.90
Fir	5.13	7.62	12.50
Sunflower	9.92	19.84	12.50
Heath	8.25	10.88	10.51

Manuka	6.25	25.00	12.50
Artificial honey	-	-	-
		F=8.053138	
	-	P<0.0001	-

Table S9. Geometrical means of the MICs values of the honeys' extracts by different solvents against *P. aeruginosa*.

Honey type	Solvent			
	n-hexane	diethylether	chloroform	ethylacetate
Cotton	11.18	2.5	10.62	3.15
Arbutus	5	1.65	9.36	3.59
Chestnut	9.21	4.51	8.80	3.97
Thyme	8.59	3.37	7.09	5
Orange	2.5	9.84	8.55	10
Oregano	8.41	2.1	6.12	4.45
Fir	3.71	1.38	2.5	3.36
Sunflower	9.09	3.96	0	4.54
Heath	9.31	3.74	7.07	2.66
STATISTICAL SIGNIFICANCE	F=7.501293 P<0.001	F=5.758054 P<0.001	F=6.828794 P<0.001	F=2.92929 P=0.011617

Table S10. Geometrical means of the MICs values of the honeys' extracts by different solvents against *K. pneumoniae* subsp *pneumoniae* (1).

Honey type	Solvent			
	n-hexane	diethylether	chloroform	ethylacetate
Cotton	8.25	0.99	0.88	2.5
Arbutus	5.42	0.79	1.65	1.25
Chestnut	2.5	1.05	1.49	1.25
Thyme	2.22	1.89	3.30	3.30
Orange	6.69	1.25	2.5	2.5
Oregano	1.77	0.74	1.50	2.10
Fir	1.91	0.67	1.03	2.26
Sunflower	3.54	1.57	3.15	1.98
Heath	2.66	0.50	1.49	3.15
STATISTICAL SIGNIFICANCE	F=3.317438 P=0.005681	NS P=0.461486	NS P=0.0698	NS P=0.113214

Table S11. Geometrical means of the MICs of the honeys' extracts by different solvents against *E. cloacae* subsp *dissolvens*.

Honey type	Solvent			
	n-hexane	diethylether	chloroform	ethylacetate
Cotton	3.97	0.99	6.30	2.5
Arbutus	1.09	1.09	2.5	1.25
Chestnut	1.77	0.44	1.77	1.25
Thyme	2.18	0.88	4.72	1.25
Orange	5.15	1.25	5.72	2.97
Oregano	4.22	0.63	2.5	3.54
Fir	1.13	0.62	1.99	1.52
Sunflower	2.5	0.63	0.99	1.57

Heath	4.65	0.95	1.09	3.67
STATISTICAL SIG-NIFICANCE	F=4.75301 P<0.001	NS P=0.475181	NS P=0.193689	F=4.345257 P<0.001

Table S12. Geometrical means of the MICs values of the honeys' extracts by different solvents against *K. pneumoniae* subsp *pneumoniae* (2).

Honey type	Solvent			
	n-hexane	diethylether	chloroform	ethylacetate
Cotton	1.25	0.25	3.54	1.25
Arbutus	1.89	0.63	1.89	1.44
Chestnut	1.25	0.63	1.25	1.25
Thyme	0.99	0.35	3.27	2.81
Orange	3.15	0.31	8.27	2.5
Oregano	2.97	0.26	7.28	2.10
Fir	1.38	0.46	2.5	2.5
Sunflower	1.25	0.79	7.77	3.15
Heath	1.65	2.18	4.55	2.87
STATISTICAL SIG-NIFICANCE	F=3.086028 P=0.012178	F=8.249112 P<0.001	F=5.99412 P<0.001	NS P=0.068691