

Physical and Microbiological Characteristics and Antioxidant Activity of Honey Bee Pollen

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Table S1. Colour of bee pollen samples.

Bee pollen sample		Colour components		
		L*	a*	b*
Monofloral	AR	73.57 ± 1.24b	-1.00 ± 0.27d	19.57 ± 1.85g
	CL	59.67 ± 1.46f	5.85 ± 0.69b	34.09 ± 1.42e
	DA	60.05 ± 1.61f	14.00 ± 1.03a	61.18 ± 2.74a
	FB	66.50 ± 0.93e	-2.90 ± 0.49d	17.88 ± 01.16g
	PHA	45.57 ± 1.61g	2.34 ± 0.89c	-1.55 ± 0.44h
	RF	73.12 ± 1.61b	2.00 ± 0.69c	26.74 ± 2.10f
	RS	77.52 ± 1.25a	-4.30 ± 1.17e	53.56 ± 1.83b
	WI	70.46 ± 0.25c	-1.45 ± 0.55d	49.61 ± 0.70c
Multifloral	MF1	78.42 ± 0.94a	-4.92 ± 0.28e	48.51 ± 1.60c
	MF2	68.75 ± 0.60d	1.90 ± 0.78c	46.93 ± 2.25c
	MF3	66.03 ± 1.25e	2.27 ± 0.80c	51.35 ± 1.83bc
	MF4	71.40 ± 0.94bc	-1.78 ± 0.91d	48.06 ± 2.16c
	MF5	65.31 ± 1.08e	-1.89 ± 0.89d	43.12 ± 2.15d

Monofloral pollen origin plants: AR – autumn raspberry, CL – clover, DA – dandelion, FB – fava beans, PHA – phacelia, RF – rye flower, RS – rapeseed, WI – willow; Multifloral pollen: MF1 – Broceni; MF2 – Bene; MF 3– Tervete; MF 4– Saldus; MF5 – Kuldiga.

Table S2. Diversity of microorganisms isolated from bee pollen samples.

Isolated microorganisms	Samples													Total
	AR	CL	DA	FB	PHA	RF	RS	WI	MF1	MF2	MF3	MF4	MF5	
<i>Bacillus altitudinis/pumilus</i>			x		x	x	x		x	x	x			7
<i>Bacillus cereus</i>		x			x						x	x		4
<i>Bacillus megaterium</i>												x		1
<i>Bacillus oleronius</i>		x									x			2
<i>Enterococcus faecalis</i>												x		1
<i>Lysinibacillus fusiformis</i>	x	x								x	x		x	5
<i>Micrococcus luteus</i>							x	x						2
<i>Pantoea agglomerans</i>				x										1
<i>Solibacillus silvestris</i>						x								1
<i>Staphylococcus capitis</i>					x									1
<i>Staphylococcus cohnii</i>			x			x								2
<i>ssp. cohnii</i>														
<i>Staphylococcus epidermidis</i>	x	x							x				x	4
<i>Staphylococcus pasteurii</i>				x										1
<i>Staphylococcus warneri</i>						x		x						2
Total	2	4	2	2	3	4	2	2	2	2	4	3	2	

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Table S3. Antimicrobial resistance detected in pollen samples.

Samples	Antibiotic						Total cases
	AMP	CN	CIP	Te	P	SXT	
AR	<i>Staphylococcus epidermidis</i>				<i>Staphylococcus epidermidis</i>		2
CL							0
DA							0
FB	<i>Staphylococcus pasteurii</i>				<i>Pantoea agglomerans</i> <i>Staphylococcus pasteurii</i>		3
PHA	<i>Staphylococcus capitis</i>				<i>Staphylococcus capitis</i>		2
RF	<i>Staphylococcus warneri</i>				<i>Staphylococcus warneri</i>		2
RS							0
WI	<i>Staphylococcus warneri</i>				<i>Staphylococcus warneri</i>		2
MF1							0
MF2							0
MF3							0
MF4		<i>Enterococcus faecalis</i>	<i>Enterococcus faecalis</i>				2
MF5	<i>Lysinibacillus fusiformis</i> <i>Staphylococcus epidermidis</i>				<i>Lysinibacillus fusiformis</i> <i>Staphylococcus epidermidis</i>	<i>Staphylococcus epidermidis</i>	5
Total cases	7	1	1	0	7	2	18

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