

## Supplementary Materials

# Bee Pollen and Bread as a Super-Food: A Comparative Review of Their Metabolome Composition and Quality Assessment in the Context of Best Recovery Conditions

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Table S1. Flavonoids identified in bee bread and bee pollen														
Sample/compounds	Isorhamnetin	Myricetin	Quercetin	Epicatechin	Naringenin	Hesperitin	Kaempferol	catechin	Apigenin	Luteolin	Tyrosol	Rutin	Naringenin	Ref.
Bee pollen sample	---	--	29.648 µg/g	--	21.92 µg/g	3.0 µg/g	7.8µg/g	--	--	--	--	--	--	[1]
Commercial Bee pollen	--	--	22.02 mg/kg	--	--	--	--	22.1 mg/kg		--	--	--	----	[2]
Indian bee pollen	--	--	3.14–15.94 mg/100 g	--	--	--	9.35 mg/100g	0.9–19.1 mg/100 g	0.4–3.0 mg/100 g	1.0–5.8 mg/100 g	--	4.8–24.8 mg/100 g	--	[3]
Bee pollen samples	--	20.4–244.7mg/100g	--	--	--	--	--	--	--	--	--	--	--	[4]
Bee bread samples	1227.9 mg/100 g	--	381.1–3918.1 mg/100g	--	--	--	112.94–2681.2mg/100g	--	--	21.9–3490.8 mg/100 g	--	--	--	
<i>Rhododendron ponticum</i> BP	--	3744.3 µg/100 g	--	1350.4 µg/100 g	--	--	--	1207.0 µg/100	--	--	1137.6 µg/1	--	--	[5]

								g			00 g			
Mixture of pollen samples	--	--	24.0–529.8 µg/g	--	--	--	--	--	--	--	--	156.2 – 955.7 µg/g	3.1– 43.6 µg/g	[6]
Mixture of pollen samples	--	2220.70 µg/kg	7849.8 µg/kg	--	--	--	9870.7µ g/kg	--	--	--	--	115,4 42.25 µg/k g	--	[7]

Table S2. Phenolic acids reported in bee bread and bee pollen											
Sample/ acids	Gall c	Caffe c	Ferul c	o-, p- coumaric	Cinnami c	Protocatech uic	Chlorogenic	2,5- dihydroxyb enzoic	2- Hydroxy cinnamic	Ferulic	Ref.
Bee pollen sample	---	--	149.10 4 µg/g	36.688 µg/g	23.456 µg/g	--	--	--	--	--	[1]
Commercial Bee pollen	--	--	--	11.62 mg/kg	3.70 mg/kg	--	--	--	--	--	[2]
Indian bee pollen	--		--	--	--	--	--	--	--	--	[3]
Bee pollen samples	0.04- 3.14 mg/1 00g	12.46- 56.17 mg/10 0g	23.23- 107.68 mg/10 0g	--	--	--	--	--	--	--	[4]
Bee bread samples	34.65 – 347.3 7 mg/1 00g	--	--	28.70– 142.44 mg/100 g	--	166.61 mg/100g	3.89–36.09 mg/100g	2.69–35.09 mg/100g	--	--	
Mixture of pollen samples	3.0- 32.3 µg/g	8.5- 20.6 µg/g	--	--	--	--	--	--	43.4– 179.9 µg/g	14.6 - 68.6 µg/g	[6]

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