Supplementary data related to the article

Tab. S1. Bee pollen samples from different regions of India.

Number of samples (*n*)	Regions	Collection time	Name of state	Collection city	Location of beehives
6	South-western region	Jan, 2017	Karnataka	Shivamogga	13.9299° N/75.5681° E
		Jan/Feb, 2017		Tumakuru	13.3392° N/77.1140° E
		Jan, 2017		Chitradurga	14.2306° N/76.3985° E
		Jan, 2017		Hassan	13.0753° N/76.1784° E
		Jan, 2017		Mandya	12.5644° N/76.7337° E
9	North-western region	Jan/Feb, 2017	Rajasthan	Kota	25.2138° N/75.8648° E
		Jan, 2017		Bundi	25.4305° N/75.6499° E
		Jan/Feb, 2017		Jhalawar	24.5973° N/76.1610° E
		Feb/March, 2017		Baran	25.1011° N/76.5132° E
		Jan/Feb, 2017		Chittorgarh	24.8887° N/74.6269° E
10	Northern region	Feb, 2017	Punjab	Mansa	29.9995° N/75.3937° E
		Jan/Feb, 2017		Bathinda	30.2110° N/74.9455° E
		Feb/March, 2017	Rajasthan	Sriganganagar	29.9038° N/73.8772° E
		Jan/Feb, 2017		Alwar	27.5530° N/76.6346° E
		Jan, 2017		Sawai Madhopur	26.0378° N/76.3522° E
		Feb, 2017		Hanumangarh	29.5815° N/74.3294° E
		March, 2017	Haryana	Jhajjar	28.6176° N/76.6875° E

Number of samples (n)	Regions	Collection time	Name of state	Collection city	Location of beehives
10	North-western region	Aug, 2017	Rajasthan	Alwar	27.5530° N/76.6346° E
		Sept, 2017		Chittorgarh	24.8887° N/74.6269° E
		Aug/Sept, 2017		Bhilwara	25.3214° N/74.5870° E
		Aug/Sept, 2017		Rajsamand	25.2235° N/73.7478° E
		Aug/Sept, 2017	Haryana	Hisar	29.1492° N/75.7217° E
		Aug, 2017		Bhiwani	28.7752° N/75.9928° E
		Sept, 2017		Sirsa	29.5336° N/75.0177° E

Tab. S2. Pearson correlation by studied variables in Indian bee pollen from four botanical origins.

Variables	Moisture	Carbohydrates	Protein	Lipids	Ash	Fibre	pH	Water activity	SFA	MUFA	PUFA	ω-3 FA	ω-6 FA	TEAA	Total minerals
Moisture	1.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbohydrates	0.09	1.00	-	-	-	-	-	-	-	-	-	-	-	-	-
Protein	0.09	0.11	1.00	-	-	-	-	-	-	-	-	-	-	-	-
Lipids	-0.39*	-0.04	-0.14	1.00	-	-	-	-	-	-	-	-	-	-	-
Ash	0.07	-0.08	-0.25	0.23	1.00	-	-	-	-	-	-	-	-	-	-
Fiber	0.19	-0.07	-0.19	0.21	0.53*	1.00	-	-	-	-	-	-	-	-	-
pH	0.24	-0.06	0.59*	-0.64*	-0.20	-0.15	1.00	-	-	-	-	-	-	-	-
Water activity	0.15	-0.17	-0.22	0.20	0.55*	0.80*	-0.12	1.00	-	-	-	-	-	-	-
SFA	0.13	0.17	-0.68*	0.10	0.03	-0.02	-0.75*	-0.13	1.00	-	-	-	-	-	-
MUFA	0.32	0.20	0.13	-0.58*	-0.41*	-0.48*	0.33	-0.72*	0.21	1.00	-	-	-	-	-
PUFA	-0.15	-0.20	0.55*	0.02	0.11	0.19	0.65*	0.32	-0.96*	-0.40*	1.00	-	-	-	-
ω-3 FA	-0.01	-0.20	0.49*	-0.09	0.18	0.32	0.68*	0.50*	-0.91*	-0.41*	0.96*	1.00	-	-	-
ω-6 FA	-0.09	0.20	-0.40*	0.18	-0.23	-0.42*	-0.67*	-0.60*	0.83*	0.40*	-0.89*	-0.98*	1.00	-	-
TEAA	-0.16	0.00	-0.20	0.32	0.17	0.43*	-0.47*	0.21	0.31	-0.32	-0.20	-0.20	0.17	1.00	-
Total minerals	0.47*	-0.05	0.34*	-0.68*	0.02	0.20	0.83*	0.31	-0.54*	0.13	0.50*	0.66*	-0.74*	-0.33	1.00

* – significant ($p < 0.05$).

SFA – saturated fatty acids, MUFA – monosaturated fatty acids, PUFA – polyunsaturated fatty acids, ω-3 FA – omega-3 fatty acids, ω-6 FA – omega-6 fatty acids, TEAA – total essential amino acids.

Tab. S3. Loadings of the first four principal components based on factor analysis.

Factor loadings	Principal components			
	1	2	3	4
Moisture	0.266	0.459	-0.500	-0.257
Carbohydrates	0.240	0.031	0.090	-0.839
Protein	-0.413	0.475	0.429	-0.393
Lipids	-0.277	-0.822	0.158	-0.108
Ash	-0.266	-0.276	-0.542	-0.029
Fibre	-0.354	-0.228	-0.740	-0.217
pH	-0.364	0.913	0.106	0.017
Water activity	-0.523	-0.222	-0.795	-0.002
Saturated fatty acids	0.845	-0.455	-0.253	0.003
Monosaturated fatty acids	0.666	0.584	0.279	-0.048
Polyunsaturated fatty acids	-0.934	0.317	0.109	-0.005
Omega-3 fatty acids	-0.906	0.394	-0.131	-0.004
Omega-6 fatty acids	0.840	-0.434	0.305	-0.010
Total essential amino acids	0.033	-0.523	-0.234	-0.258
Ca	0.294	0.904	0.070	0.074
K	0.007	0.858	-0.490	-0.009
Mg	-0.478	-0.722	-0.319	0.010
P	-0.547	0.725	-0.401	0.003
Na	0.222	0.053	0.933	-0.084
Fe	0.943	-0.302	-0.123	0.009
Cu	-0.570	-0.812	0.006	-0.020
Mn	-0.792	0.132	0.585	-0.010
Zn	-0.732	-0.295	0.600	-0.022
Cr	0.649	0.630	-0.406	-0.010
Eigenvalue	8.01	7.26	4.54	1.07
Total variance [%]	33.4	30.2	18.9	4.5
Cumulative variance [%]	33.4	63.6	82.5	86.9

Tab. S4. Linear discriminant analysis of Indian bee pollen from four botanical origins.

From/to	Coconut bee pollen ($n = 6$)	Coriander bee pollen ($n = 9$)	Rapeseed bee pollen ($n = 10$)	Multi-floral bee pollen ($n = 10$)	Total	Percentage of correctly classified
Coconut bee pollen ($n = 6$)	11	0	0	0	11	100.0
Coriander bee pollen ($n = 9$)	0	13	0	0	13	100.0
Rapeseed bee pollen ($n = 10$)	0	0	11	0	11	100.0
Multi-floral bee pollen ($n = 10$)	0	0	0	9	9	100.0
Total	11	13	11	9	44	100.0

n – number of samples.