

**Supplementary Table S1.** Total proteins (TP), apolipophorin-I (ApoLp-I), vitellogenin (Vg), apolipophorin-II (ApoLp-II), transferrin (Tf) and hexamerin 70a (Hex-70a) determined in haemolymph of honeybees sampled from colonies of four apiaries located in the province of Bologna (A, B, C, and D) in different months (April, May, July, a November). Data are expressed in mg/mL and are reported as mean  $\pm$  SD (n = 3).

		April	May	July	November
TP mg/mL	A	12.7 $\pm$ 6.23a	23.3 $\pm$ 4.49b,c,d *	19.6 $\pm$ 1.70a,c	53.8 $\pm$ 12.2b,d
	B	12.6 $\pm$ 3.94a	13.3 $\pm$ 1.53a,b *	20.4 $\pm$ 5.95a,b	49.7 $\pm$ 8.53b
	C	13.5 $\pm$ 0.36a	44.5 $\pm$ 7.50a,b†	21.7 $\pm$ 3.58a,b	63.1 $\pm$ 3.49b
	D	13.6 $\pm$ 3.75a	24.6 $\pm$ 9.36a,b *	21.6 $\pm$ 9.46a	51.1 $\pm$ 10.5b
ApoLp-I mg/mL	A	2.18 $\pm$ 0.51	2.03 $\pm$ 3.51	7.16 $\pm$ 8.36	8.18 $\pm$ 1.97
	B	2.37 $\pm$ 2.55a,b	0.00 $\pm$ 0.00a	3.30 $\pm$ 3.26a,b	11.4 $\pm$ 0.57b
	C	0.67 $\pm$ 0.82	10.0 $\pm$ 0.75	5.23 $\pm$ 2.50	8.24 $\pm$ 1.60
	D	6.56 $\pm$ 5.82	2.49 $\pm$ 2.98	3.12 $\pm$ 7.14	8.73 $\pm$ 7.01
Vg mg/mL	A	0.69 $\pm$ 0.60a	3.44 $\pm$ 5.95a,b	11.9 $\pm$ 11.9a,b	33.9 $\pm$ 7.13b
	B	0.54 $\pm$ 0.66a	0.00 $\pm$ 0.00a,b	5.70 $\pm$ 5.59a,b	41.5 $\pm$ 10.9b
	C	0.39 $\pm$ 0.67a	17.5 $\pm$ 1.25a	12.2 $\pm$ 6.75a,b	38.8 $\pm$ 6.95b
	D	3.45 $\pm$ 3.51	1.05 $\pm$ 0.36	9.33 $\pm$ 16.2	35.4 $\pm$ 26.6
ApoLp-II mg/mL	A	1.97 $\pm$ 0.45	0.29 $\pm$ 0.50	2.40 $\pm$ 0.62	1.94 $\pm$ 0.54
	B	0.82 $\pm$ 0.49a,b	0.25 $\pm$ 0.03a,b	0.81 $\pm$ 0.36a	2.06 $\pm$ 0.18b
	C	0.79 $\pm$ 0.39	1.68 $\pm$ 0.17	2.02 $\pm$ 0.83	1.79 $\pm$ 0.21
	D	2.39 $\pm$ 0.82	1.05 $\pm$ 0.36	1.41 $\pm$ 2.44	1.21 $\pm$ 0.74
Tf mg/mL	A	0.39 $\pm$ 0.25a,b	0.29 $\pm$ 0.50a	1.24 $\pm$ 0.37a,b	2.58 $\pm$ 0.51b
	B	0.18 $\pm$ 0.08a,b,c	0.07 $\pm$ 0.01a	0.56 $\pm$ 0.13b	2.32 $\pm$ 0.56c
	C	0.21 $\pm$ 0.1	2.50 $\pm$ 1.29	0.99 $\pm$ 0.31	3.18 $\pm$ 0.54
	D	0.57 $\pm$ 0.49	1.10 $\pm$ 0.27	0.74 $\pm$ 1.29	2.25 $\pm$ 0.72
Hex-70a mg/mL	A	1.55 $\pm$ 1.25	0.56 $\pm$ 0.97	2.63 $\pm$ 1.36	5.36 $\pm$ 1.31
	B	0.71 $\pm$ 0.33a	0.24 $\pm$ 0.02a	1.21 $\pm$ 0.74a	4.46 $\pm$ 1.14b
	C	0.54 $\pm$ 0.27	4.40 $\pm$ 0.14	2.37 $\pm$ 1.14	6.11 $\pm$ 0.40
	D	1.42 $\pm$ 1.32	1.70 $\pm$ 1.13	1.41 $\pm$ 2.44	4.72 $\pm$ 0.49

For each analyte, different lower-case letters within rows indicates significant differences (p<0.05) among time-points within each apiary.

For each analyte, the different symbols (\*; †) within columns indicates significant differences (p<0.05) among apiaries within each time-point.