

Comparison group 1: <i>Apis mellifera</i> vs. <i>Centris decolorata</i> (adults)		Comparison group 2: <i>Centris decolorata</i> females, males, larvae, and brood cell provisions	
PERMANOVA results		PERMANOVA results	
method name	PERMANOVA	method name	PERMANOVA
test statistic name	pseudo-F	test statistic name	pseudo-F
sample size	16	sample size	19
number of groups	2	number of groups	4
test statistic	8.971008	test statistic	3.832448
p-value	0.001	p-value	0.001
number of permutations	999	number of permutations	999
PERMDISP results		PERMDISP results	
method name	PERMDISP	method name	PERMDISP
test statistic name	F-value	test statistic name	F-value
sample size	16	sample size	19
number of groups	2	number of groups	4
test statistic	1.140257	test statistic	1.664951
p-value	0.112	p-value	0.190
number of permutations	999	number of permutations	999
ANOSIM results		ANOSIM results	
method name	ANOSIM	method name	ANOSIM
test statistic name	R	test statistic name	R
sample size	16	sample size	19
number of groups	2	number of groups	4
test statistic	0.964167	test statistic	0.720022
p-value	0.001	p-value	0.001
number of permutations	999	number of permutations	999

Supplementary Table 2. Results of beta diversity differences analyses using Permanova, Permdisp, and Anosim. In bold are shown the significant results. The beta diversity of comparison group 1 (*Apis mellifera* vs. *Centris decolorata*), as well as that of comparison group 2 (*Centris decolorata* categories) show significant differences using Permanova (both p-value=0.001), but Permdisp test shows that the observed differences in beta diversity could be explained by the difference in dispersion of Bray-Curtis distances (p-value=0.112 and p-value=0.190, respectively). Anosim however confirms significant differences in beta diversity between adults of both species, and between *Centris decolorata* categories (both p-value=0.001).