

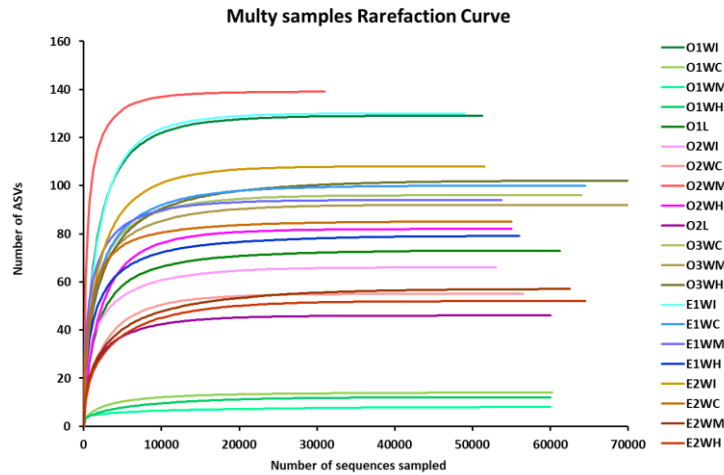


Figure S1 Rarefaction curves of bacterial ASVs for all samples

Table S1 Diversity indices of bacterial communities between the two ponerine ant species

Ant species	Chao1 (mean±SE)	Shannon(mean±SE)
<i>O. formosae</i>	77.82±6.47	2.02±0.19
<i>E. javanus</i>	108.82±10.01	3.60±0.39

Table S2 Diversity indices of bacterial communities in the infrabuccal pockets and guts of workers and larvae

Samples	Chao1 (mean±SE)	Shannon(mean±SE)
O1WI	132.00±6.81	3.15±0.18
O1WC	9.76±2.33	0.19±0.06
O1WM	8.33±0.88	0.26±0.10
O1WH	28.00±8.50	0.90±0.12
O1L	81.00±8.00	1.16±0.26
O2WI	87.33±13.38	2.73 ±0.34
O2WC	88.00±16.62	2.51±1.05
O2WM	116.33±14.62	3.40±0.34
O2WH	94.67±15.24	1.79±0.71
O2L	79.33±16.68	2.06±0.50
O3WC	88.67±3.71	2.65±0.16
O3WM	94.33±1.20	2.77±0.17
O3WH	104.00±1.15	2.69±0.08
E1WI	175.00±22.50	4.64±1.74
E1WC	99.00±2.08	3.47±0.16
E1WM	88.00±4.16	3.46±0.52
E1WH	98.33±9.94	4.23±0.80
E2WI	154.33±27.45	4.35±1.22
E2WC	91.00±3.06	3.70±0.22
E2WM	50.00±4.04	1.14±0.19
E2WH	68.33±8.99	2.05±0.37

Table S3 ANOSIM analysis of bacterial communities across infrabuccal pockets, guts of workers, and larvae (*p*-values)

		O1			O2			O3	E1		E2	
Samples		infrabuccal pockets	guts	larvae	infrabuccal pockets	guts	larvae	guts	infrabuccal pockets	guts	infrabuccal pockets	guts
O1	infrabuccal pockets	/	/	/	/	/	/	/	/	/	/	/
	guts	0.005**	/	/	/	/	/	/	/	/	/	/
	larvae	0.100	0.007**	/	/	/	/	/	/	/	/	/
O2	infrabuccal pockets	0.200	0.003**	0.100	/	/	/	/	/	/	/	/
	guts	0.129	0.001**	0.221	0.043*	/	/	/	/	/	/	/
	larvae	0.400	0.002**	0.900	0.200	0.046*	/	/	/	/	/	/
O3	guts	0.005**	0.001**	0.008**	0.005**	0.001**	0.007**	/	/	/	/	/
E1	infrabuccal pockets	0.100	0.008**	0.100	0.100	0.006**	0.100	0.006**	/	/	/	/
	guts	0.005**	0.001**	0.010*	0.009**	0.001**	0.003**	0.001**	0.002**	/	/	/
E2	infrabuccal pockets	0.100	0.008**	0.100	0.100	0.007**	0.100	0.010*	0.300	0.001**	/	/
	guts	0.003**	0.001**	0.007**	0.006**	0.001**	0.007**	0.001**	0.004**	0.001**	0.009**	/

Statistical significance: ***p*<0.01, **p*<0.05.