

Table S1 Summary of RNA-seq libraries

Library	Paired read (millions)		
	Raw read	Quality filtered	Symbiont removed
Red bacteriome_1	27.5	26.4	5.0
Yellow bacteriome_1	30.8	29.6	10.8
Body_1	27.4	24.3	24.3
Red bacteriome_2	65.4	64.0	12.4
Yellow bacteriome_2	42.1	40.7	16.8
Body_2	17.5	16.8	16.8
Red bacteriome_3	39.3	38.2	11.4
Yellow bacteriome_3	38.8	37.5	16.3
Body_3	17.8	17.3	17.3