

Additional file 1

**Fine-scale succession patterns and assembly mechanisms of bacterial community of
Litopenaeus vannamei larvae across the developmental cycle**

Yanting Wang^{1,2#}, Kai Wang^{1,2##}, Lei Huang^{1,2}, Pengsheng Dong^{1,2}, Sipeng Wang², Heping
Chen^{2,3}, Zheng Lu⁴, Dandi Hou^{1,2}, Demin Zhang^{1,2*}

#These authors contributed equally to this work.

*Correspondence: wangkai@nbu.edu.cn (K.W.), zhangdemin@nbu.edu.cn (D.Z.)

Supplementary Tables

Table S1 Pairwise similarity test of bacterial communities between larval shrimp developmental stages. One-way Analysis of Similarity (ANOSIM) based on Bray-Curtis dissimilarity and weighted UniFrac distance for pairwise comparison on bacterial community composition of shrimp larvae or rearing water between host developmental stages (Data present R values with ** $P < 0.01$, *** $P < 0.001$).

		Bray-Curtis dissimilarity				
	Stage	<i>Zoea</i> I	<i>Zoea</i> II	<i>Zoea</i> III	<i>Mysis</i>	<i>Postlarvae</i>
Larvae	<i>Nauplius</i>	0.684***	0.845***	0.939***	0.939***	0.662***
	<i>Zoea</i> I		0.449***	0.996***	1.000***	0.997***
	<i>Zoea</i> II			0.825***	0.993***	0.993***
	<i>Zoea</i> III				0.844***	0.986***
	<i>Mysis</i>					0.649***
Water	<i>Nauplius</i>	0.768***	0.993***	0.973***	1.000***	1.000***
	<i>Zoea</i> I		0.289***	0.676***	0.997***	1.000***
	<i>Zoea</i> II			0.538***	1.000***	1.000***
	<i>Zoea</i> III				0.548***	0.955***
	<i>Mysis</i>					0.931**
		weighted UniFrac distance				
	Stage	<i>Zoea</i> I	<i>Zoea</i> II	<i>Zoea</i> III	<i>Mysis</i>	<i>Postlarvae</i>
Larvae	<i>Nauplius</i>	0.493***	0.729***	0.768***	0.536***	0.342***
	<i>Zoea</i> I		0.196***	0.344***	0.389***	0.592***
	<i>Zoea</i> II			0.319***	0.521***	0.763***
	<i>Zoea</i> III				0.516***	0.802***
	<i>Mysis</i>					0.382***
Water	<i>Nauplius</i>	0.822***	0.994***	0.784***	0.998***	1.000***
	<i>Zoea</i> I		0.147***	0.629***	0.910***	0.934***
	<i>Zoea</i> II			0.704***	1.000***	1.000***
	<i>Zoea</i> III				0.520***	0.780***
	<i>Mysis</i>					0.470**

Table S2 Analysis of Similarity (ANOSIM) testing the differences between larval shrimp and rearing water bacterial communities.

	Bray-Curtis dissimilarity		weighted UniFrac distance	
	R	<i>P</i>	R	<i>P</i>
<i>Nauplius</i>	0.713	0.001	0.619	0.001
<i>Zoea I</i>	0.753	0.001	0.615	0.001
<i>Zoea II</i>	0.933	0.001	0.803	0.001
<i>Zoea III</i>	0.935	0.001	0.579	0.001
<i>Mysis</i>	1.000	0.002	0.993	0.001
<i>Postlarvae</i>	0.967	0.001	0.834	0.001