

Supplementary Materials

# The way of water: unravelling white spot syndrome virus (WSSV) transmission dynamics in *Litopenaeus vannamei* shrimp

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**Table S1.** Infectious titers (SID<sub>50</sub> g<sup>-1</sup>) of two solid inoculum stocks through i.m. injection of *Litopenaeus vannamei* postlarvae. The experiments were terminated when no mortalities occurred for 48 hours.

Stock 1	Dilution	N	Dead animals	Infectious titer (SID <sub>50</sub> g <sup>-1</sup> )	$\bar{x}$ infectious titer (SID <sub>50</sub> g <sup>-1</sup> )
Replicate 1 (PL75, 2.4g)	10 <sup>-3</sup>	5	5/5	10 <sup>7.3</sup>	10 <sup>7.7</sup>
	10 <sup>-4</sup>	5	5/5		
	10 <sup>-5</sup>	5	1/5		
	10 <sup>-6</sup>	5	0/5		
	10 <sup>-7</sup>	5	0/5		
Replicate 2 (PL73, 1.5g)	10 <sup>-3</sup>	5	5/5	10 <sup>7.9</sup>	
	10 <sup>-4</sup>	5	5/5		
	10 <sup>-5</sup>	5	3/5		
	10 <sup>-6</sup>	5	0/5		
	10 <sup>-7</sup>	5	0/5		
Replicate 3 (PL69, 2.0g)	10 <sup>-3</sup>	5	5/5	10 <sup>7.9</sup>	
	10 <sup>-4</sup>	5	5/5		
	10 <sup>-5</sup>	5	3/5		
	10 <sup>-6</sup>	5	0/5		
	10 <sup>-7</sup>	5	0/5		
Stock 2	Dilution	N	Dead animals	Infectious titer (SID <sub>50</sub> g <sup>-1</sup> )	$\bar{x}$ infectious titer (SID <sub>50</sub> g <sup>-1</sup> )
Replicate 1 (PL80, 7.1g)	10 <sup>-3</sup>	5	5/5	10 <sup>8.8</sup>	10 <sup>8.6</sup>
	10 <sup>-4</sup>	5	5/5		
	10 <sup>-5</sup>	5	5/5		
	10 <sup>-6</sup>	5	4/5		
	10 <sup>-7</sup>	5	1/5		
Replicate 2 (PL80, 7.1g)	10 <sup>-3</sup>	5	5/5	10 <sup>8.5</sup>	
	10 <sup>-4</sup>	5	5/5		
	10 <sup>-5</sup>	5	5/5		
	10 <sup>-6</sup>	5	3/5		
	10 <sup>-7</sup>	5	0/5		
Replicate 3 (PL80, 7.1g)	10 <sup>-3</sup>	5	5/5	10 <sup>8.5</sup>	
	10 <sup>-4</sup>	5	5/5		
	10 <sup>-5</sup>	5	5/5		
	10 <sup>-6</sup>	5	3/5		
	10 <sup>-7</sup>	5	0/5		

**Table S2.** Concentration of *vp19* in water samples taken at 0, 24, 30, 48, 54, and 72hpi from tanks housing a *L. vannamei* shrimp suffering from WSD. Shrimp were removed from the tank shortly after their death. ND: Not detected.

Shrimp	Onset of anorexia (hpi)	Time of death (hpi)	Sample time (hpi)	<i>vp19</i> copy number/mL
1	24	54	0	ND
			24	ND
			30	8.93x10 <sup>6</sup>
			48	1.38x10 <sup>7</sup>
			54	2.43x10 <sup>7</sup>
			72	7.84x10 <sup>6</sup>
2	24	42	0	ND
			24	ND
			30	1.71x10 <sup>7</sup>
			48	5.63x10 <sup>6</sup>
			54	ND
			72	ND
3	24	48	0	ND
			24	ND
			30	1.40x10 <sup>7</sup>
			48	2.48x10 <sup>7</sup>
			54	4.83x10 <sup>6</sup>
			72	ND
4	24	42	0	ND
			24	1.20x10 <sup>6</sup>
			30	5.93x10 <sup>6</sup>
			48	6.02x10 <sup>7</sup>
			54	5.47x10 <sup>7</sup>
			72	2.40x10 <sup>7</sup>
5	24	66	0	ND
			24	1.10x10 <sup>6</sup>
			30	7.66x10 <sup>6</sup>
			48	7.53x10 <sup>6</sup>
			54	1.97x10 <sup>7</sup>
			72	1.87x10 <sup>8</sup>
6	24	42	0	ND
			24	ND
			30	2.28x10 <sup>7</sup>
			48	1.38x10 <sup>7</sup>
			54	2.96x10 <sup>6</sup>
			72	ND
7	48	60	0	ND
			24	5.52x10 <sup>6</sup>
			30	ND
			48	1.17x10 <sup>7</sup>
			54	1.86x10 <sup>7</sup>
			72	4.62x10 <sup>9</sup>
8	24	66	0	ND
			24	6.16x10 <sup>6</sup>
			30	ND

			48	2.63x10 <sup>7</sup>
			54	7.46x10 <sup>7</sup>
			72	1.05x10 <sup>7</sup>
9	48	66	0	ND
			24	ND
			30	ND
			48	ND
			54	ND
			72	9.22x10 <sup>6</sup>
10	24	48	0	ND
			24	ND
			30	5.26x10 <sup>6</sup>
			48	6.98x10 <sup>7</sup>
			54	1.56x10 <sup>8</sup>
			72	2.63x10 <sup>7</sup>
11	24	42	0	ND
			24	1.31x10 <sup>7</sup>
			30	7.04x10 <sup>6</sup>
			48	1.58x10 <sup>7</sup>
			54	1.47x10 <sup>7</sup>
			72	ND

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