

Supplementary Material

Table S1. *cox1* (199bp) with h1-h21 sequence identity matrix.

ID	COX1	h1	h2	h3	h4	h5	h6	h7	h8	h9	h10	h11	h12	h13	h14	h15	h16	h17	h18	h19	h20	h21
COX1																						
AM042549.1 h1 (Europe)	0.974																					
AM042550.1 h2 (China)	0.989	0.964																				
AM042551.1 h3 (China)	1	0.974	0.989																			
AM042552.1 h4 (China)	0.984	0.979	0.974	0.984																		
AM042553.1 h5 (korea)	0.994	0.969	0.984	0.994	0.979																	
AM042554.1 h6 (korea)	0.989	0.964	0.979	0.989	0.974	0.984																
AM042555.1 h7 (korea)	1	0.974	0.989	1	0.984	0.994	0.989															
AM042556.1 h8 (korea)	0.989	0.964	0.979	0.989	0.974	0.984	0.989	0.989														
AB852543.1 h9 (korea)	0.994	0.969	0.984	0.994	0.979	1	0.984	0.994	0.984													
AB852550.1 h10 (korea)	0.994	0.969	0.984	0.994	0.979	1	0.984	0.994	0.984	1												
AB852544.1 h11 (korea)	0.974	0.949	0.964	0.974	0.959	0.969	0.964	0.974	0.964	0.969	0.969											
AB852545.1 h12 (korea)	0.974	0.949	0.964	0.974	0.959	0.969	0.964	0.974	0.964	0.969	0.969	1										
MF795664.1 h13 (China)	0.989	0.974	0.989	0.989	0.984	0.984	0.979	0.989	0.979	0.984	0.984	0.964	0.964									
MF795670.1 h14 (China)	0.994	0.969	0.984	0.994	0.979	0.989	0.994	0.994	0.994	0.989	0.989	0.969	0.969	0.984								

MF795691.1 h15 (China)	1	0.974	0.989	1	0.984	0.994	0.989	1	0.989	0.994	0.994	0.974	0.974	0.989	0.994				
MF795675.1 h16 (China)	1	0.974	0.989	1	0.984	0.994	0.989	1	0.989	0.994	0.994	0.974	0.974	0.989	0.994	1			
MF795678.1 h17 (China)	0.994	0.979	0.984	0.994	0.989	0.989	0.984	0.994	0.984	0.989	0.989	0.969	0.969	0.994	0.989	0.994	0.994		
MF795680.1 h18 (China)	1	0.974	0.989	1	0.984	0.994	0.989	1	0.989	0.994	0.994	0.974	0.974	0.989	0.994	1	1	0.994	
MF795686.1 h19 (China)	1	0.974	0.989	1	0.984	0.994	0.989	1	0.989	0.994	0.994	0.974	0.974	0.989	0.994	1	1	0.994	1
MF795689.1 h20 (China)	1	0.974	0.989	1	0.984	0.994	0.989	1	0.989	0.994	0.994	0.974	0.974	0.989	0.994	1	1	0.994	1 1
MF795694.1 h21 (China)	1	0.974	0.989	1	0.984	0.994	0.989	1	0.989	0.994	0.994	0.974	0.974	0.989	0.994	1	1	0.994	1 1 1

Table S2. Number and percentage of *Phortica okadai* (female-F/male-M, Live-L/Death-D) that were experimentally infected and found positive of *Thelazia callipaeda* at dissection on different days post-infection

Days post-infection	Number of flies	Flies collected				Dissected flies positive for L3			
		Live		Death		Live		Death	
		Male	Female	Male	Female	Male	Female	Male	Female
18	6	2	1	2	1	0	0	0	1
20	6	1	1	2	2	0	0	2	0
22	8	2	1	2	3	0	0	1	1
24	6	1	2	2	1	0	0	1	0
26	8	1	2	3	2	0	0	2	0
28	8	2	2	2	2	0	0	2	0
30	14	5	6	2	1	0	0	1	0
Total	56	14	15	15	12	0	0	8	2
Infection rate		17.9%							