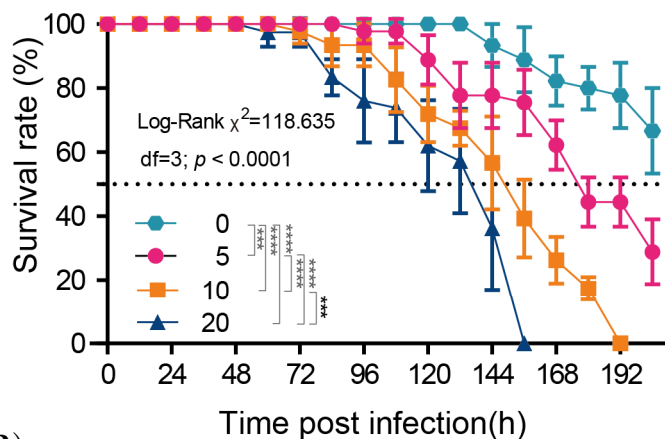


Supplemental Tables and figures

(A) *dsLuc*-treated *P. puparum* exposed to different concentration of *B. bassiana*



(B)

CONC (Conidia/mm ²)	Total number	Percent survival (%)	Std. Deviation	LT50 (h)	Std. Error
0	45	66.67	13.33	/	/
5	45	28.89	10.18	180.00	5.00
10	46	0.00	0.00	156.00	4.97
20	43	0.00	0.00	144.00	4.23

Figure S1. Virulence of *B. bassiana* to *dsLuc* injected *P. puparum*. The number of dead parasitoids was counted every 12 hours. (A) Survival rate of *dsLuc* treated *P. puparum* in response to different dose (conidia/mm²) of *B. bassiana* at different time points. Log-rank test was used to assess different in survival between treatments. Significant differences were represented by definite p value and asterisk (***) $p < 0.001$; **** $p < 0.0001$). (B) Median lethal time (LT50) and percent survival rate of fungal-treated parasitoids.

Table S1. The FPKM values of Toll-like genes in the adult stage of *P. puparum*.

	gene_id	PpAd_1	PpAd_2	PpAd_3	PpAd_4
<i>PpTollA</i>	PPU12940-RA	49.41966	47.3735	42.18424	59.04608
<i>PpTollB</i>	PPU09907-RA	46.43197	47.72764	36.52581	48.866
<i>PpTollC</i>	PPU09921-RA	5.623631	5.151635	6.790215	5.26776
<i>PpToll6</i>	PPU03159-RA	2.601372	2.317239	5.017081	1.559985
<i>PpToll7</i>	PPU03999-RA	14.01884	13.39101	11.87163	11.97818
<i>PpToll10</i>	PPU00761-RA	0.135699	0	0.135703	0

Table S2. Primers used for qPCR and dsRNA synthesis

Gene Name	Gene ID		Sequence (5'-3')	Size(bp)
<i>PpTollA</i>	PPU12940-RA	-F-	CGACATGAACCACAATCGAC	131
		-R-	TCGCCATCGATATACGTCAA	
<i>PpTollB</i>	PPU09907-RA	-F-	CGCGAGATCTTTTGAGAGGC	135

		-R-	TGAGGTTGTTGTTGCTGAGC	
<i>PpTollC</i>	PPU09921-RA	-F-	AACCTCAAGACGCTGCTACT	166
		-R-	AGTTGGACTGGACGAAGGAG	
<i>PpToll6</i>	PPU03159-RA	-F-	CAGCCAGATCGTCTCCATCC	146
		-R-	GTTCTGGCAGGTAGAGCTCC	
<i>PpToll7</i>	PPU03999-RA	-F-	CTGATCGTCTCGACCTCTC	112
		-R-	TGTGGCTGATCGAGTTGTTT	
<i>PpToll10</i>	PPU00761-RA	-F-	GTCTTCCTGGCCAACGAGT	177
		-R-	CAGACGATGACGGTGCAG	
<i>PpIMD</i>	PPU01186-RA	-F-	AAAGGTGGCACTGGTGAAGT	126
		-R-	TTCGACGCATTATATCCA	
<i>PpMyD88</i>	PPU08578-RA	-F-	AGGTTTCAGGACCTCCGAGT	149
		-R-	TTTTCTGATGCTGTTGCAC	
<i>PpPelle</i>	PPU10296-RA	-F-	GCTGCAACAGACAACCTGGAA	127
		-R-	CACAATCAGAACCCTTGGT	
<i>PpTraf</i>	PPU05667-RA	-F-	TTCTCCCTGGACAAGCACAT	122
		-R-	AGCGACATCTTGTTTCATGGC	
<i>PpDredd</i>	PPU06095-RA	-F-	AGCCATGGGTCAGAAGGTG	177
		-R-	TCCTGTGCTTTGTTCTGGAC	
<i>PpTab2</i>	PPU15978-RA	-F-	CGTCTATCAGTGCATTGCCC	168
		-R-	ATCTCGCGCAAATTCACGG	
<i>PpRelish</i>	PPU06179-RA	-F-	AAAGACTTCGCCGACTACGA	147
		-R-	GATCCGTGATTTCGTGTGTTG	
<i>PpPteromalusin</i>	PPU05423-RA	-F-	ACTTCGTTTTCTGCTCGTC	101
		-R-	TCCCTTCATGATGCAGTCGA	
<i>PpDefensin</i>	PPU12673-RA	-F-	CAGCGCAGAGTAACCTGTGA	168
		-R-	TTATCCAAAGCGCTTGTTC	
<i>PpAbaecin</i>	PPU09187-RA	-F-	TTGCTCGCTGTAGCCCTTAT	123
		-R-	TCTGCCACTCCAAGTTCCTT	
<i>Pp18s rRNA</i>		-F-	CGAGCGATGAACCGACAG	
		-R-	CGGGGAGGTAGTGACGAA	
<i>Bb18s rRNA</i>		-F-	AGATACCGTCGTAGTCTTAACCATAAACT	
		-R-	TTCAGCCTTGCGACCATACT	
<i>dsPpTollA</i>	PPU12940-RA	-F-	TAATACGACTCACTATAGGGAGGAAATCAAGGTTTGGCTGTA	429
		-R-	TAATACGACTCACTATAGGGTCATGCTGAGGTAAGCTTTCAA	
<i>dsPpIMD</i>	PPU01186-RA	-F-	TAATACGACTCACTATAGGGCTCCACGATCGGAAAATAGC	523
		-R-	TAATACGACTCACTATAGGGGTGCCACCTTTGTGCTTGTA	
<i>dsLuc</i>		-F-	TAATACGACTCACTATAGGGTGGAATGTTTACTACACTCG	
		-R-	TAATACGACTCACTATAGGGCATAATCATAGGACCTCTCA	