

**Table S1.** Bacterial strains used in this study.

Bacterial species/strain	Description	Fruorecent protein	Antibiotic resistance	Reference <sup>d</sup>
<b>Symbiont (<i>Burkholderia insecticola</i>)</b>				
<b>Wild type</b>				
RPE75	Rifampicin-resistant derivative of the type strain RPE64	none	Rif <sup>R</sup>	Kikuchi et al., AEM 2011 (1)
RPE225	GFP-labelled symbiont	GFP <sup>b</sup>	Km <sup>R</sup> , Cm <sup>R</sup>	Kikuchi&Fukatsu Mol Ecol 2014 (2)
KT39	RFP-labelled symbiont	RFP <sup>b</sup>	Km <sup>R</sup>	Itoh et al., PNAS, 2019 (3)
KT33 <sup>a</sup>	GFP-labelled, Cm-susceptible symbiont	GFP <sup>b</sup>	Km <sup>R</sup>	This study
RPE744 <sup>a</sup>	RFP-labelled, Cm-resistant symbiont	RFP <sup>c</sup>	Cm <sup>R</sup>	This study
<b>Colonization-deficient mutants</b>				
<i>flhC</i> ::Tn5	Flagella mutant; Reaches M3 but is blocked by CR	GFP <sup>b</sup>	Km <sup>R</sup> , Cm <sup>R</sup>	Ohbayashi et al. PNAS 2015 (4)
<i>purL</i> ::Tn5	Purine biosynthesis mutant; Poor crypt colonization	GFP <sup>b</sup>	Km <sup>R</sup> , Cm <sup>R</sup>	Kim et al., ISME J 2014 (5)
<i>Awaaf</i>	LPS biosynthesis mutant; Poor crypt colonization	GFP <sup>b</sup>	Km <sup>R</sup> , Cm <sup>R</sup>	Kim et al. JBC 2017 (6)
<i>AphaB</i>	PHA biosynthesis mutant; Poor crypt colonization	GFP <sup>b</sup>	Km <sup>R</sup> , Cm <sup>R</sup>	Kim et al. PNAS 2013 (7)
<b>Non-symbiotic bacteria</b>				
<i>Burkholderia fungorum</i> JCM21562	Colonizes crypts partially; Beneficial to the bean bug	GFP <sup>b</sup>	Km <sup>R</sup> , Cm <sup>R</sup>	Itoh et al., PNAS, 2019 (3)
<i>Pandoraea norimbergensis</i> JCM10565	Colonizes crypts partially; Beneficial to the bean bug	GFP <sup>b</sup>	Km <sup>R</sup> , Cm <sup>R</sup>	Itoh et al., PNAS, 2019 (3)
<i>Escherichia coli</i> WM3064	Reaches M3 but is blocked by CR	GFP <sup>b</sup>	Km <sup>R</sup>	This study
<i>Cupriavidus taiwanensis</i> DSM17343	Reaches M3 but is blocked by CR	GFP <sup>b</sup>	Km <sup>R</sup> , Cm <sup>R</sup>	Itoh et al., PNAS, 2019 (3)

<sup>a</sup>These strains were used in the experimental removal of crypt-colonizing symbionts by antibiotic treatment (Fig. 5).

<sup>b</sup>GFP/RFP was labelled by the Tn7 minitransposon system.

<sup>c</sup>RFP was labelled with the RFP-encoding stable plasmid pIN29.

<sup>d</sup>references: (1) Kikuchi Y, Meng XY, Fukatsu T. Gut symbiotic bacteria of the genus *Burkholderia* in the broad-headed bugs *Riptortus clavatus* and *Leptocoris chinensis* (Heteroptera: Alydidae). *Appl Environ Microbiol* 2005; **71**: 4035-4043; (2) Kikuchi Y, Fukatsu T. Live imaging of symbiosis: spatiotemporal infection dynamics of a GFP-labelled *Burkholderia* symbiont in the bean bug *Riptortus pedestris*. *Mol Ecol* 2014; **23**: 1445-1456; (3) Itoh H, Jang S, Takeshita K, Ohbayashi T, Ohnishi N, Meng XY *et al.* Host-symbiont specificity determined by microbe-microbe competition in an insect gut. *Proc Natl Acad Sci USA* 2019; **116**: 22673-22682; (4) Ohbayashi T, Takeshita K, Kitagawa W, Nikoh N, Koga R, Meng XY *et al.* Insect's intestinal organ for symbiont sorting. *Proc Natl Acad Sci USA* 2015; **112**: E5179-E5188; (5) Kim JK, Jang HA, Won YJ, Kikuchi Y, Heum Han S, Kim CH *et al.* Purine biosynthesis-deficient *Burkholderia* mutants are incapable of symbiotic accommodation in the stinkbug. *ISME J* 2014; **8**: 552-63; (6) Kim JK, Jang HA, Kim MS, Cho JH, Lee JB, Lorenzo FD *et al.* The lipopolysaccharide core oligosaccharide of *Burkholderia* plays a critical role in maintaining a proper gut symbiosis with the bean bug *Riptortus pedestris*. *J Biol Chem* 2017; **292**: 19226-19237; (7) Kim JK, Won YJ, Nikoh N, Nakayama H, Han SH, Kikuchi Y *et al.* Polyester synthesis genes associated with stress resistance are involved in an insect-bacterium symbiosis. *Proc Natl Acad Sci USA*. 2013; **110**: E2381-9.