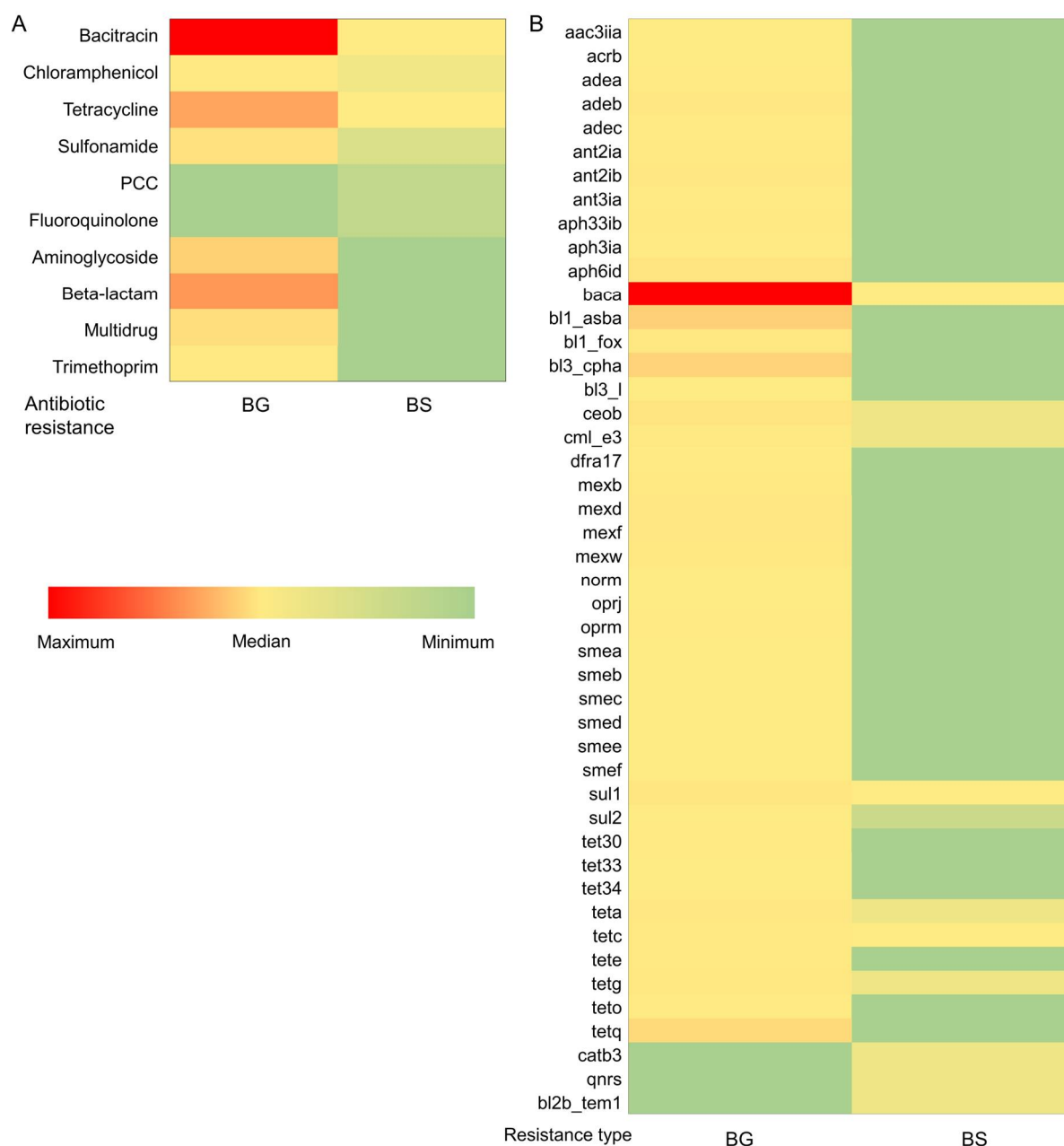
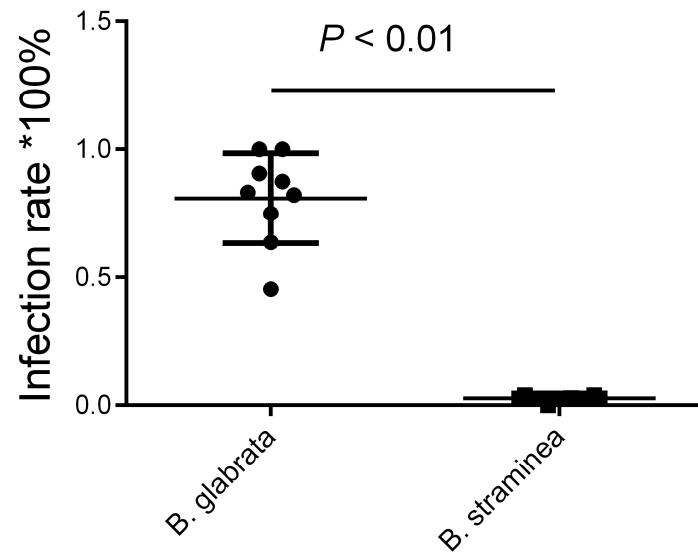


**Figure S1.** The relative abundance of gut bacteria of *B. straminea* and *B. glabrata*. (A) At the class level. (B) At the order level. (C) At the family level. (D) At the species level. The top ten of the most common gut microbes are shown.





**Figure S3.** The distribution of ARGs and antibiotic resistance types of the gut microbiota of *B. straminea* (n =4) and *B. glabrata* (n =5) are shown. **(A)** Heatmap displaying counts of genes belonging to antibiotic resistance genes. PCC: Penicillin, cephalosporin\_ii, cephalosporin\_i. **(B)** Heatmap displaying counts of genes belonging to antibiotic resistance types. Color gradient represents the shift of antibiotic resistance genes and types. BG: *B. glabrata*. BS: *B. straminea*.



**Figure S4.** Difference in the infection rate of *S. mansoni*-infected *B. straminea* and *B. glabrata* snails.