

Supporting Information for

Niche and fitness differences determine invasion success and impact in laboratory bacterial communities

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Supporting Information includes three supplementary figures.

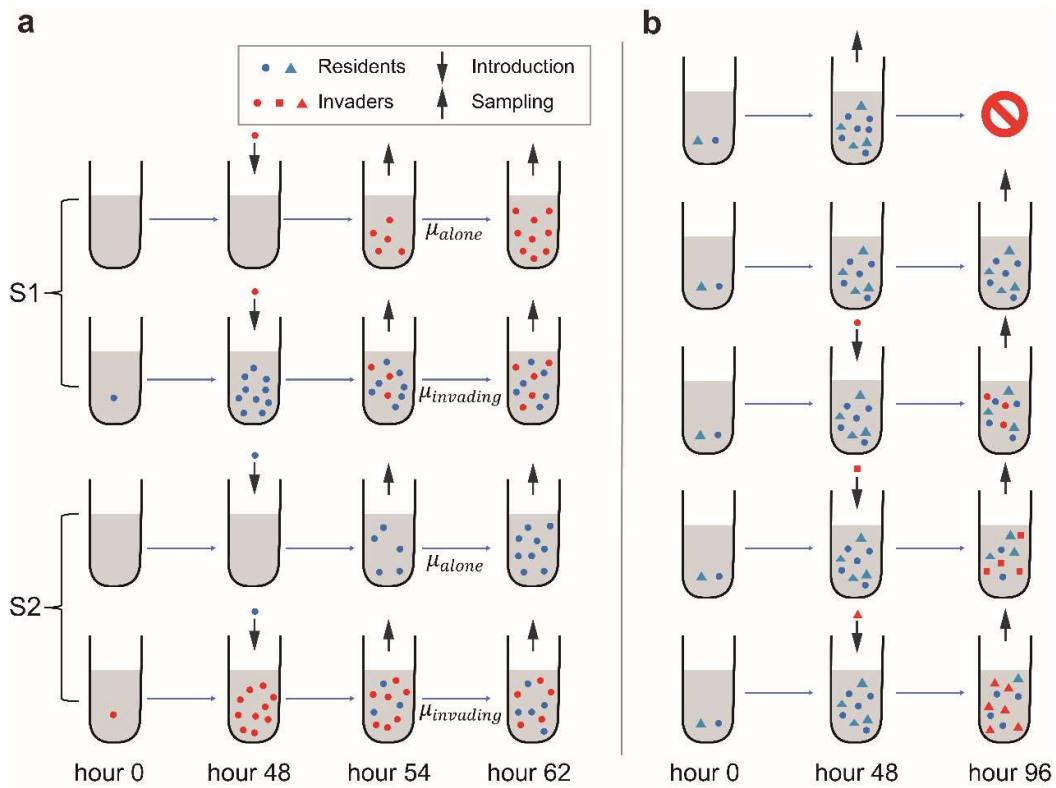
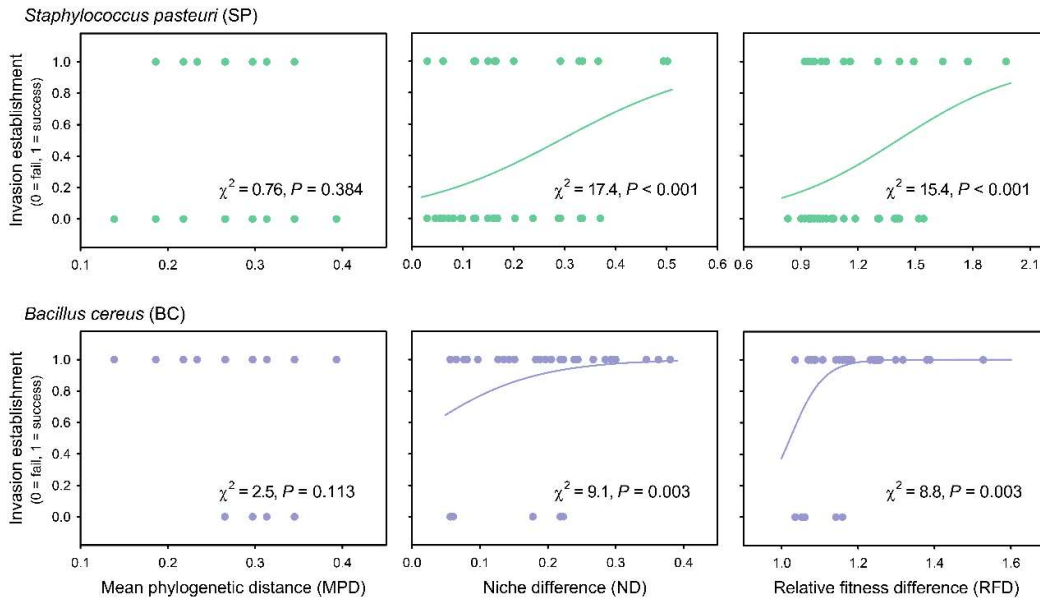
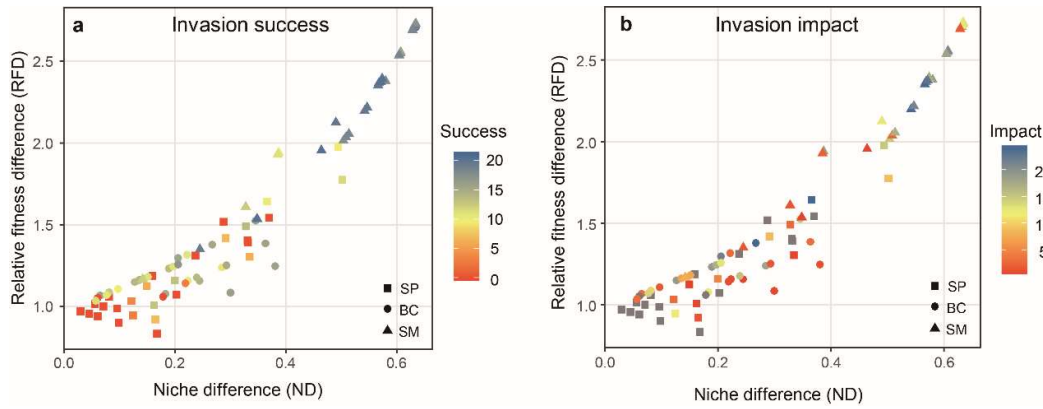


Figure S1. The conceptual diagram of the experimental design for (a) quantifying niche and relative fitness differences, and (b) testing the dependence of invasion success and impact on mean phylogenetic distance (MPD), niche differences (ND) and relative fitness differences (RFD).



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16 **Figure S2.** The dependence of invasion establishment on mean phylogenetic distance
 17 (MPD), niche differences (ND) and relative fitness differences (RFD). Invasion
 18 establishment is viewed successful if the invader attained above-zero density in the
 19 recipient communities. Different invaders are differently colored: *Staphylococcus*
 20 *pasteuri* (SP, green) and *Bacillus cereus* (BC, purple); *Serratia marcescens* (SM) is
 21 not shown as it established in all recipient communities. Statistical results are shown
 22 along with logistic curves if significant.



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24 **Figure S3.** The relationship between invader-native niche differences and relative
 25 fitness differences, and their effects on invasion success (a) and impacts (b). The
 26 different symbols indicate different invaders. The color-coding of the dots indicates
 27 the level of success or impact. For invasion impact, the unsuccessfully invaded
 28 microcosms are colored in grey.