



**Fig. S1. Genetic organization of the altered chromosomal loci;  $\Delta ycsE::spc$  (A),  $\Delta yktC::cat$  (B),  $\Delta yqeG::kan$  (C), and  $amyE::(Pspac-yqeG lacI erm)$  (D). Genes and primers are indicated schematically by thick arrows and arrowheads, respectively.**