$k_c=0$

selfing rate (σ)

A. $r=0$

$\sigma=0$ $\sigma=0.2$ $\sigma=0.4$ $\sigma=0.6$ $\sigma=0.8$ $\sigma=1$

B. $r=0.5$

genotype frequency

population fitness

time (generations prior fixation)

Legend:
- A_1B_1/A_1B_1
- A_2B_1/A_1B_1; A_1B_2/A_1B_1
- A_2B_1/A_2B_1; A_1B_2/A_1B_2
- A_2B_2/A_1B_1; A_1B_2/A_2B_1
- A_2B_2/A_2B_1; A_2B_2/A_1B_2
- A_2B_2/A_2B_2

Axis labels (3D inset): fitness, A_1A_1 A_1A_2 A_2A_2, B_1B_1 B_1B_2 B_2B_2

Fig S4. Effects of selfing rate on the fitness of a population, and the path taken on the fitness landscape, over the 4200 generations preceding the fixation of the pair of compensatory mutation (two-locus model). Outcomes of the two-locus simulations showing population fitness (black dots, right y axis) and the frequencies of the 10 possible genotypes on the two-locus fitness landscapes (solid lines, left y axis). Selfing rate (σ) ranges from 0 (left) to 1 (right), with a 0.2 increment. The coefficient of dominance of the double heterozygotes (k_c) is set to 0 (A, B) or 1 (C, D), and the recombination rate between the two loci is set to 0 (A, C) or to 0.5 (B, D). $N = 1,000$, $\mu = 10^{-5}$, $h_c = 0.5$, $s_c = 0.01$. 100 iterations.