

Figure S21 Mean invasion probability of  $A_1$  with linkage to a background polymorphism compared to no linkage. Curves show the ratio of the weighted mean invasion probability,  $\bar{\pi}$ , divided by that of the one-locus model,  $\pi_{\rm OLM}$  (r=0.5). The ratio was computed from numerical solutions to the branching process (Eq. 3) and is shown as a function of the migration (m) and recombination (r) rate in panels (A) and (B), respectively. The vertical dashed line in panel (A) shows the critical migration rate a/(1-b), beyond which allele  $A_1$  cannot be established under the deterministic one-locus model. In panel (B), for m=0.018 (blue curve), allele  $A_1$  can be established independently of r. For stronger migration (green and orange curves),  $A_1$  can be established only if r is below a critical value (where the green and orange curves cross the x-axis, respectively). Other parameter values are a=0.02, b=0.04, and  $q_c=0$ . Compare to Figure 7 for the relative effect of m on mean extinction time.