

## Supplementary Tables

Table S1: Substitutions for different loci orders assuming no interference.

Order of loci	
SDR-A-M	$\rho = r(1 - R) + R(1 - r)$
SDR-M-A	$r = \rho(1 - R) + R(1 - \rho)$
A-SDR-M	$R = r(1 - \rho) + \rho(1 - r)$

Table S2: Mean fitnesses and zygotic sex ratio in the resident population ( $M$  fixed, XY sex determination).

Sex & Life Cycle Stage	Mean Fitness
female gametes ( $\bar{w}_H^\circ$ )	$p_X^\circ w_A^\circ + (1 - p_X^\circ) w_a^\circ$
X-bearing male gametes ( $\bar{w}_{HX}^\delta$ )	$p_X^\delta w_A^\delta + (1 - p_X^\delta) w_a^\delta$
Y-bearing male gametes ( $\bar{w}_{HY}^\delta$ )	$p_Y^\delta w_A^\delta + (1 - p_Y^\delta) w_a^\delta$
male gametes ( $\bar{w}_H^\delta$ )	$(1 - q) \bar{w}_{HX}^\delta + q \bar{w}_{HY}^\delta$
females ( $\bar{w}^\circ$ )	$\frac{[p_X^\circ w_A^\circ p_X^\delta w_A^\delta w_{AA}^\circ + (1 - p_X^\circ) w_a^\circ p_X^\delta w_A^\delta w_{Aa}^\circ + p_X^\circ w_A^\circ (1 - p_X^\delta) w_a^\delta w_{Aa}^\circ + (1 - p_X^\circ) w_a^\circ (1 - p_X^\delta) w_a^\delta w_{aa}^\circ]}{(\bar{w}_H^\circ \bar{w}_{HX}^\delta)}$
males ( $\bar{w}^\delta$ )	$\frac{[p_X^\circ w_A^\circ p_Y^\delta w_A^\delta w_{AA}^\delta + (1 - p_X^\circ) w_a^\circ p_Y^\delta w_A^\delta w_{Aa}^\delta + p_X^\circ w_A^\circ (1 - p_Y^\delta) w_a^\delta w_{Aa}^\delta + (1 - p_X^\circ) w_a^\circ (1 - p_Y^\delta) w_a^\delta w_{aa}^\delta]}{(\bar{w}_H^\circ \bar{w}_{HY}^\delta)}$
fraction zygotes male ( $\zeta$ )	$q [p_Y^\delta w_A^\delta + (1 - p_Y^\delta) w_a^\delta] / \bar{w}_H^\delta$

## Supplementary Figures

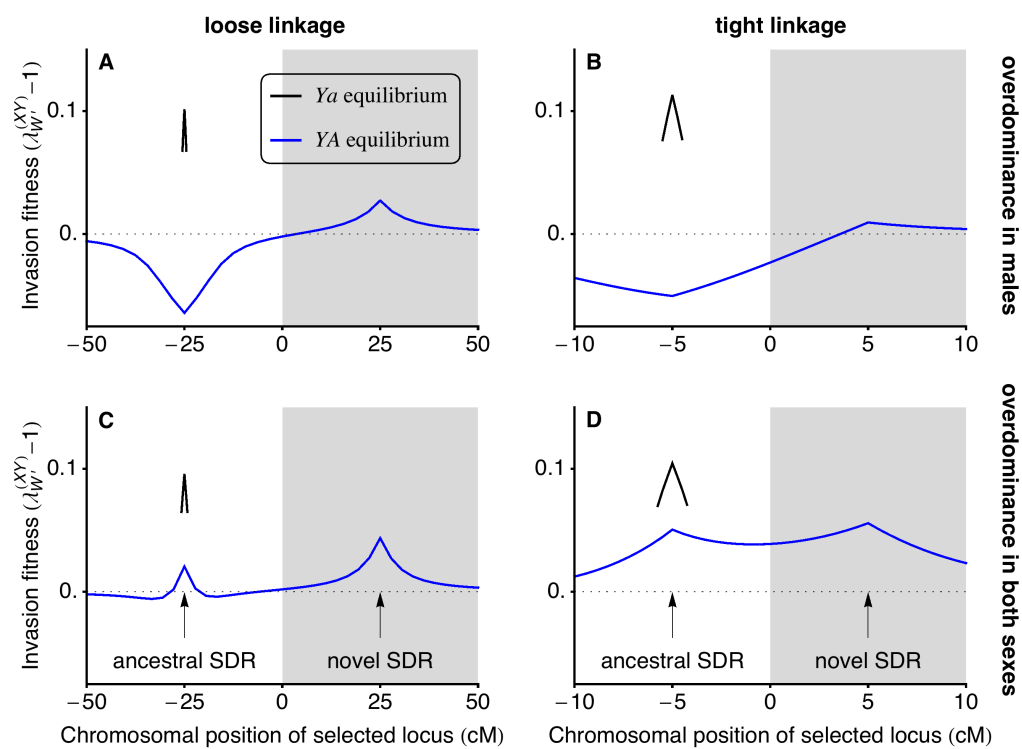


Figure S1

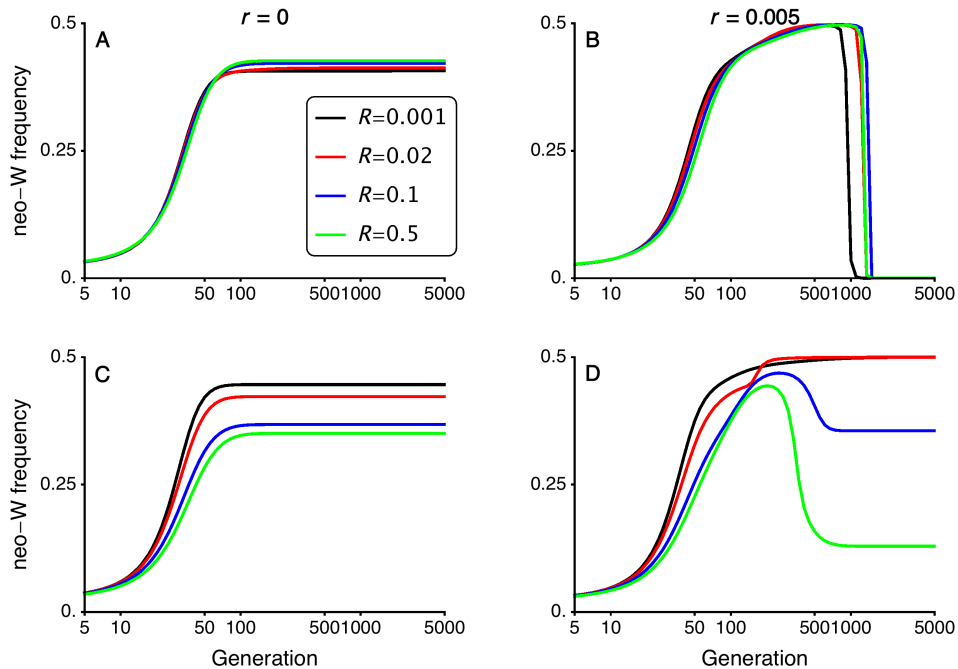


Figure S2

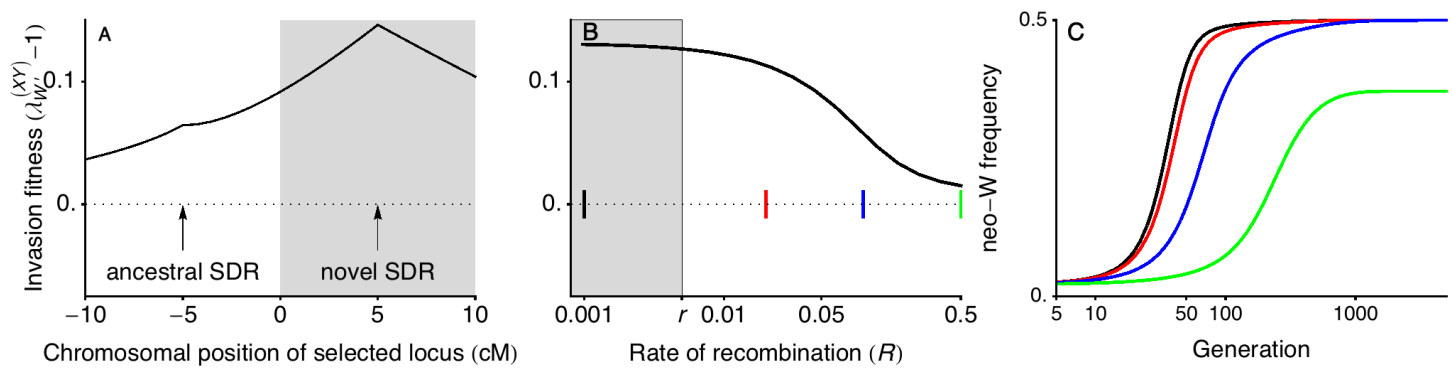


Figure S3

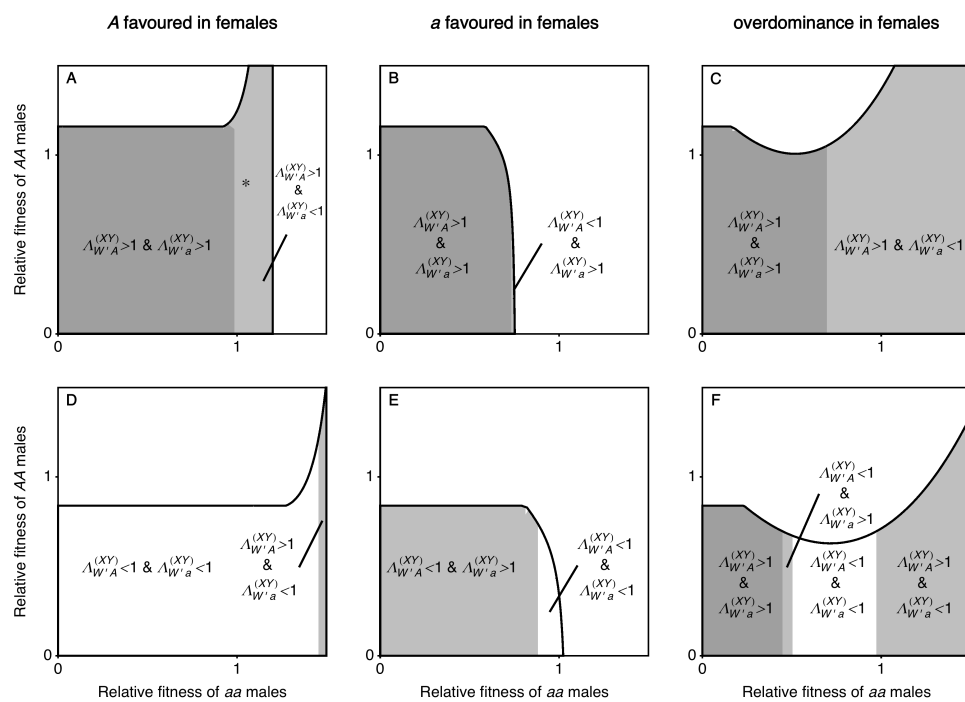


Figure S4

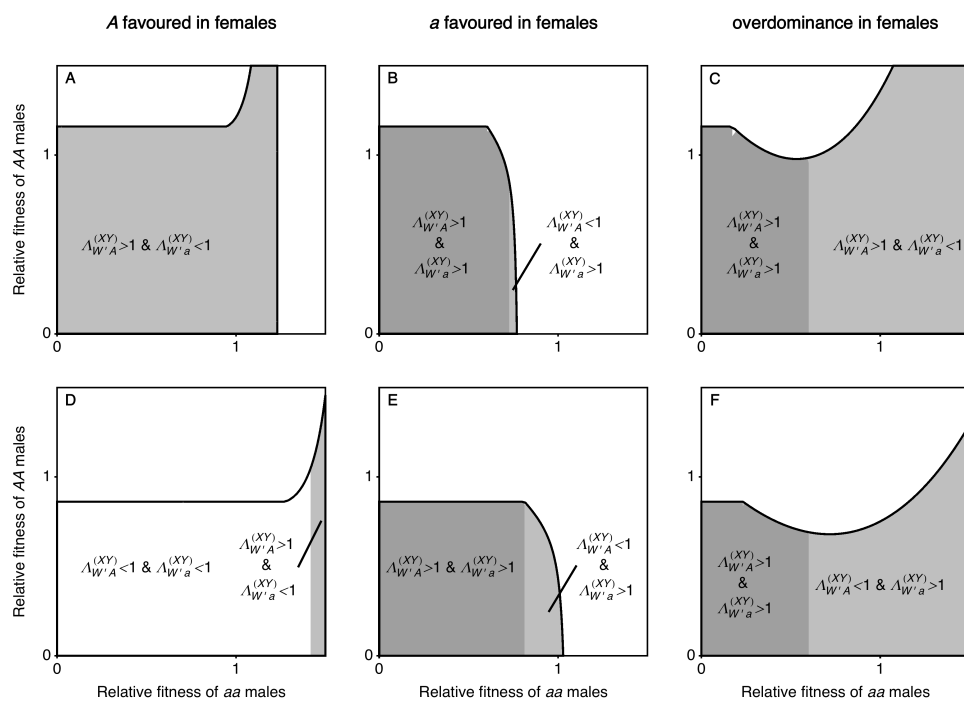


Figure S5

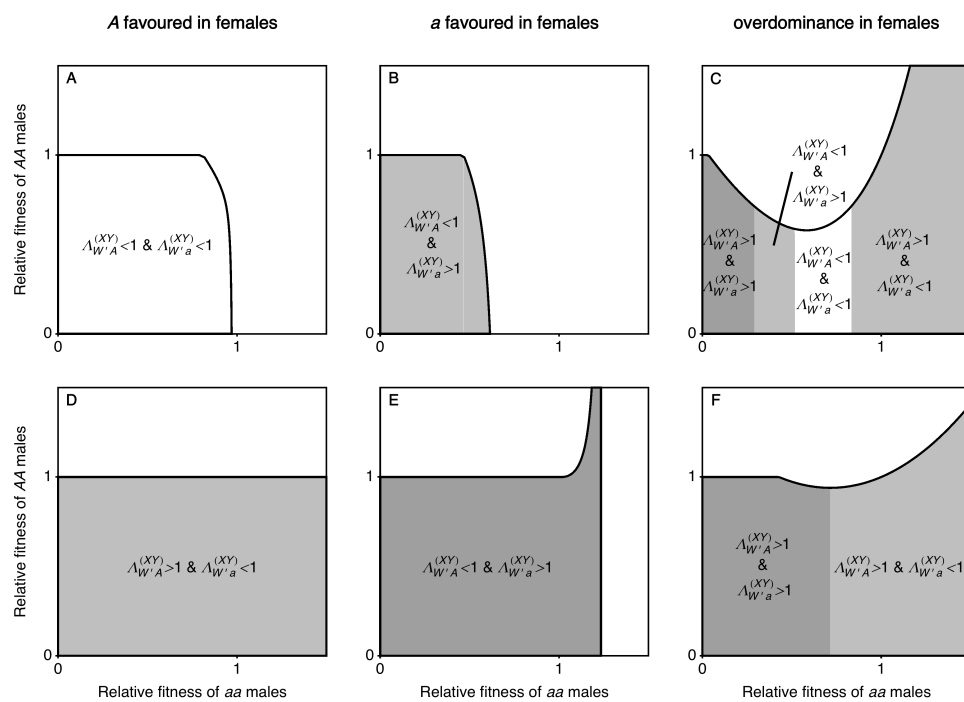


Figure S6

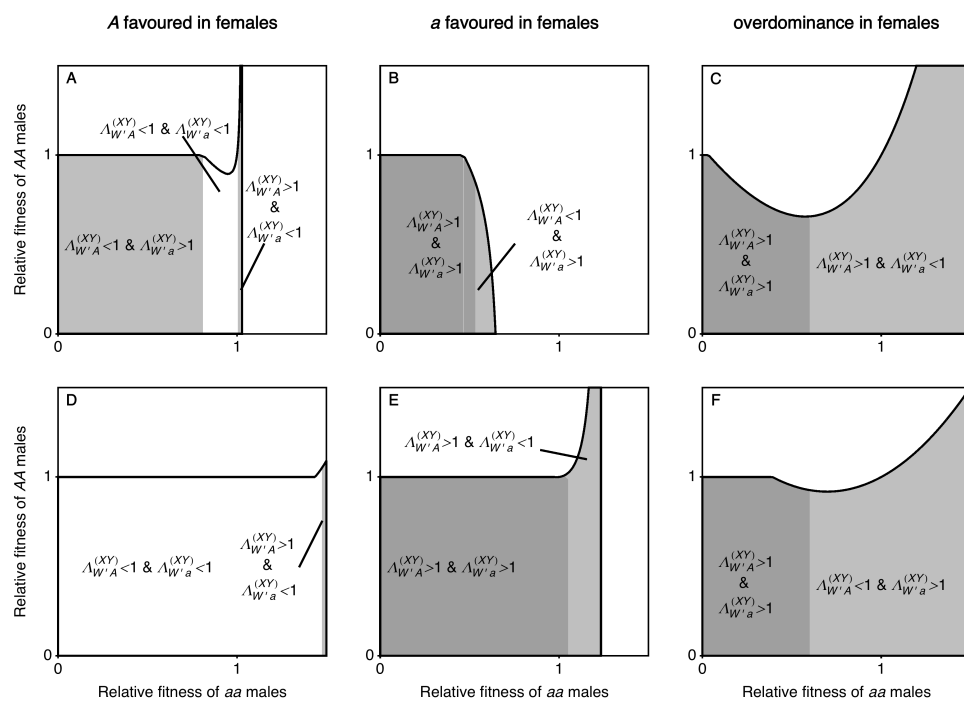


Figure S7

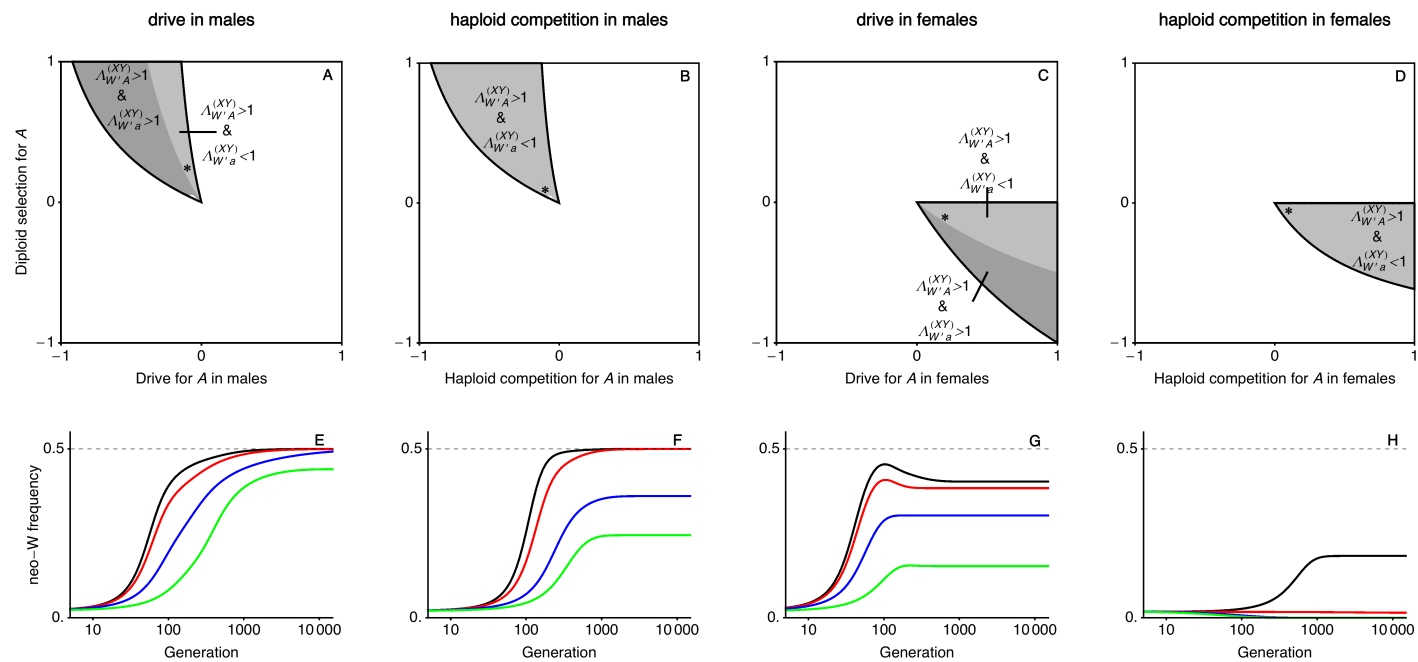


Figure S8



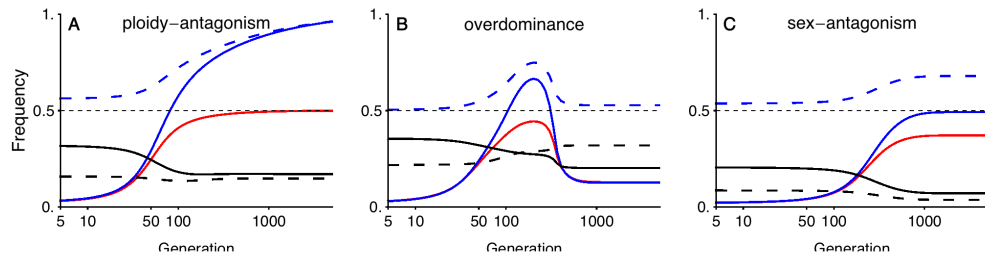


Figure S9