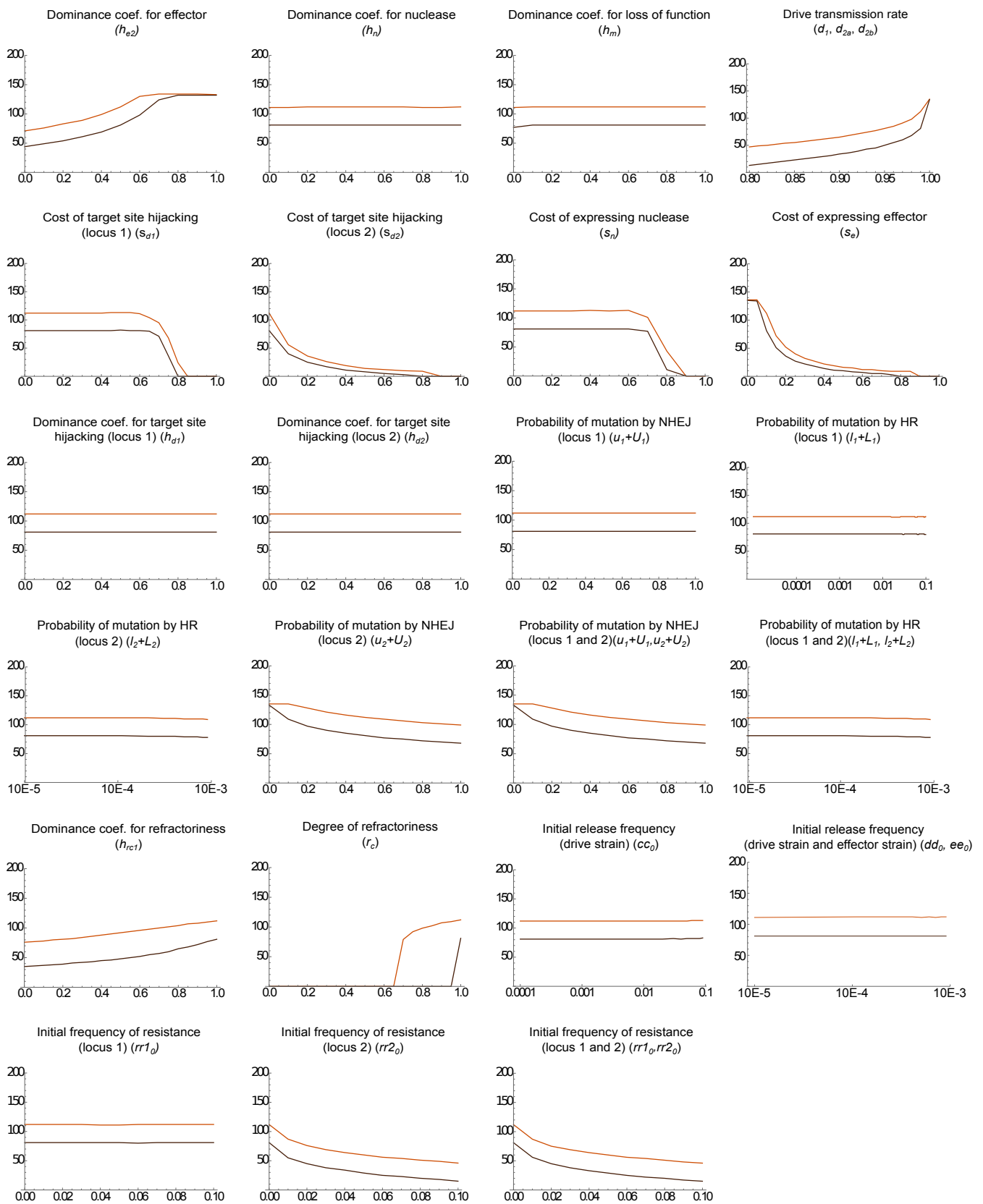


Figure S1. Schematic showing the expression of the endogenous and introduced genetic elements of an effector component allele at a hijacked gene locus.

Expression of the gRNA occurs in the germline (yellow) whereas expression of the hijacked gene occurs in an infection-relevant somatic tissue (green). While expressing a straight fusion of endogenous protein (green) and the effector protein (grey) is possible the generation of separate polypeptides by using either (A) the 2A ribosome-skipping signal (black triangle) or (B) the use of intein sequences (black semicircle) are possible avenues to avoid interfering with the function of the hijacked gene.

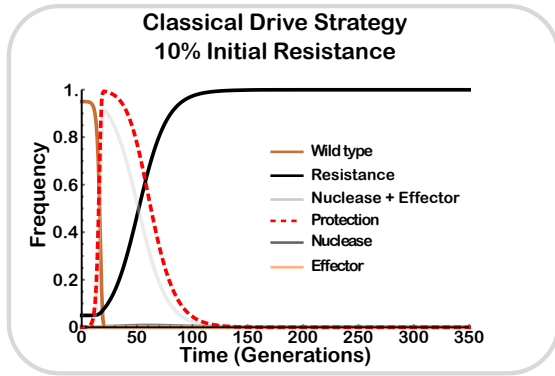
Time (Generations)



Parameter Value

Figure S2. Duration of 67% and 95% protection (top and bottom lines in each graph) as each of the underlying parameters is varied, holding all others at their baseline values.

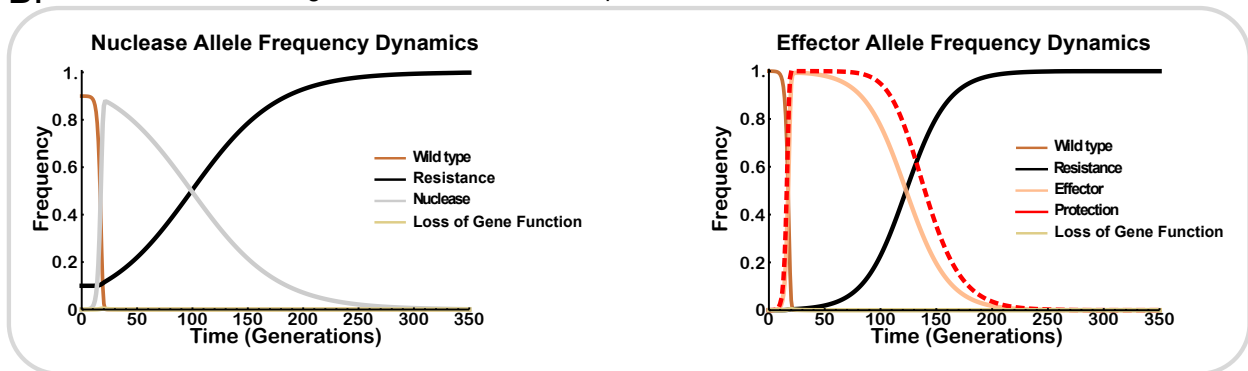
A. Classical Drive - 10% Pre-existing Resistance



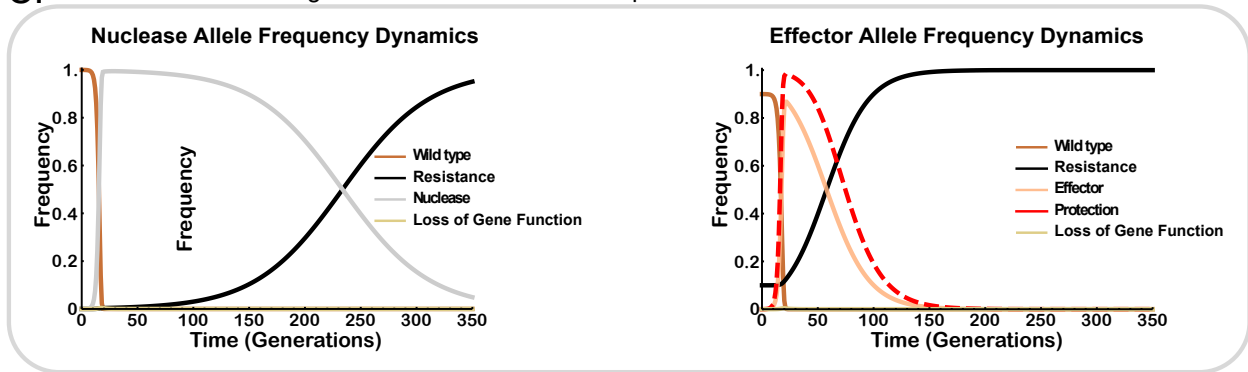
**IGD Drive Component
(Locus 1)**

**IGD Effector Component
(Locus 2)**

B. IGD - 10% Pre-existing Resistance at Drive Component Locus



C. IGD - 10% Pre-existing Resistance at Effector Component Locus



D. IGD - 10% Pre-existing Resistance at Both Loci

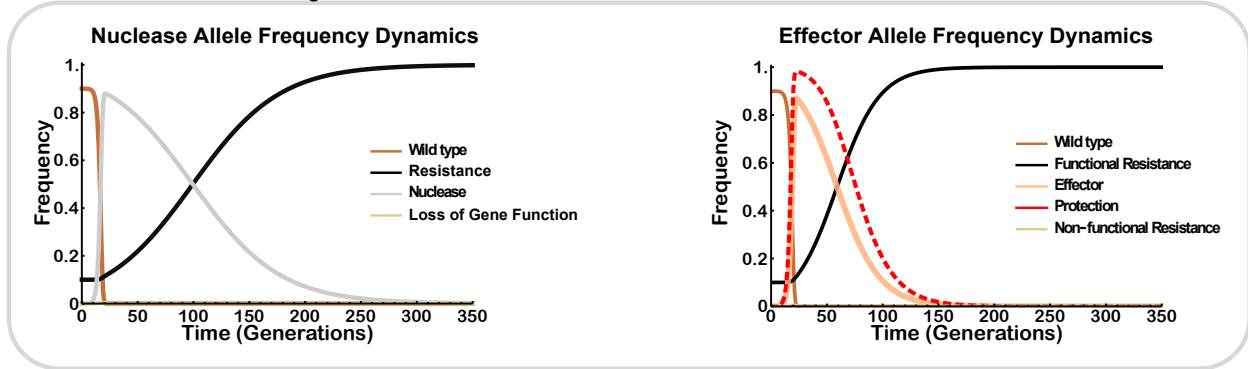


Figure S3. Overview of allele frequency dynamics when releasing both classical drive (A) and IGD strains into field populations with 10% pre-existing resistance.

For IGD, resistance is modelled at the drive component locus (B), the effector component locus (C), and at both loci (D).