# Simulation setup

| | | Genotype of hybridization locus | | |
|---|---|---|---|---|
| | | **Parental 1** | **hybrid** | **Parental 2** |
| **scenario 1.1** Expansion, without load | genotype | AA | | |
| | other loci | neutral | | |
| **scenario 1.2** Expansion, with load | genotype | AA | | |
| | other loci | noneutral | | |
| **scenario 2.1** introgression; no selection against hybrid | genotype | **AA** | **Aa** | **aa** |
| | fitness | 1 | 1 | 1 |
| | other loci | neutral | | |
| **scenario 2.2** introgression; no selection against hybrid | genotype | **AA** | **Aa** | **aa** |
| | fitness | 1 | 1 | 1 |
| | other loci | nonneutral | | |
| **scenario 3.1** single locus; introgression; with selection against hybrid; no expansion load | genotype | **AA** | **Aa** | **aa** |
| | fitness | 1 | $0<w<1$ | 1 |
| | other loci | neutral | | |
| **scenario 3.2** BDMI with selection against hybrid; no expansion load | | **AA** | **Aa** | **aa** |
| | **BB** | 1 | $1-(1-d_a)2s$ | $1-2s$ |
| | **Bb** | $1-(1-d_b)2s$ | 0 | $1-d_b2s$ |
| | **bb** | $1-2s$ | $1-d_a2s$ | 1 |
| | other loci | neutral | | |
| **scenario 4.1** Single locusl with selection against hybrid; with expansion load | genotype | **AA** | **Aa** | **aa** |
| | fitness | 1 | $0<w<1$ | 1 |
| | other loci | nonneutral | | |
| **scenario 4.2** BDMI with selection against hybrid; with expansion load | | **AA** | **Aa** | **aa** |
| | **BB** | 1 | $1-(1-d_a)2s$ | $1-2s$ |
| | **Bb** | $1-(1-d_b)2s$ | 0 | $1-d_b2s$ |
| | **bb** | $1-2s$ | $1-d_a2s$ | 1 |
| | other loci | nonneutral | | |