

TABLE 17.1 Change in allele frequency for some simple models of selection

	Fitnesses of Diploid Genotypes			Genic Fitnesses		Selection Coefficient	Rate of Change
	W_{QQ}	W_{PQ}	W_{PP}	W_Q	W_P	$W_P - W_Q$	dp/dt
Haploid				1	$1 + s$	s	spq
Additive	$1 - s$	1	$1 + s$	$1 - sq$	$1 + sp$	s	spq
Dominant P	1	$1 + s$	$1 + s$	$1 + sp$	$1 + s$	sq	spq^2
Recessive P	1	1	$1 + s$	1	$1 + sp$	sp	sp^2q
Overdominant	$1 - s_1$	1	$1 - s_2$	$1 - \bar{s} p_e q$	$1 - \bar{s} q_e p$	$\bar{s} (p_e - p)$	$\bar{s} pq(p_e - p)$
Underdominant	$1 + s_1$	1	$1 + s_2$	$1 + \bar{s} p_e q$	$1 + \bar{s} q_e p$	$\bar{s} (p - p_e)$	$\bar{s} pq(p - p_e)$

Here $p_e = s_1/(s_1 + s_2)$ and $\bar{s} = s_1 + s_2$.