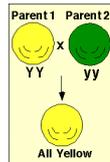


SELECTION & MODELING



$$q = ?$$

AA	Aa	aa
$W_{AA} p^2$	$W_{Aa} 2 p q$	$W_{aa} q^2$

$$W = W_{AA} p^2 + W_{Aa} 2 p q + W_{aa} q^2$$

$$W_A = p W_{AA} + q W_{Aa}$$

$$W_a = p W_{Aa} + q W_{aa}$$

$$W = p W_A + q W_a$$

$$\Delta q = q_{t+1} - q_t = q (W_a / W) - q$$

AA	Aa	aa
$W_{AA} p^2$	$W_{Aa} 2 p q$	$W_{aa} q^2$

$$\Delta q = p q (p (W_{Aa} - W_{AA}) + q (W_{aa} - W_{Aa})) / W$$

Over-, Under-dominance ($s > t > 0, 0 > t > s$)

1	1 + s	1 + t
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Dominance (A or a)

1	1 or 1 + s	1 + s
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Codominance

1	1 + s	1 + 2 s
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AA	Aa	aa
$W_{AA} p^2$	$W_{Aa} 2 p q$	$W_{aa} q^2$

$$\Delta q = s p q / (1 + 2 s p q + 2 s q^2)$$

$$\Delta q \approx s p q$$

$$dq / dt = s (1 - q) q$$

$q_0 = 0.04$
 $s = 0.01$

