

Fig. S1 The change in q^* and E^* with increasing condition for each model investigated for six different potential relationships between somatic maintenance and lifespan, where $s=0$. In each case p is given in the legend.

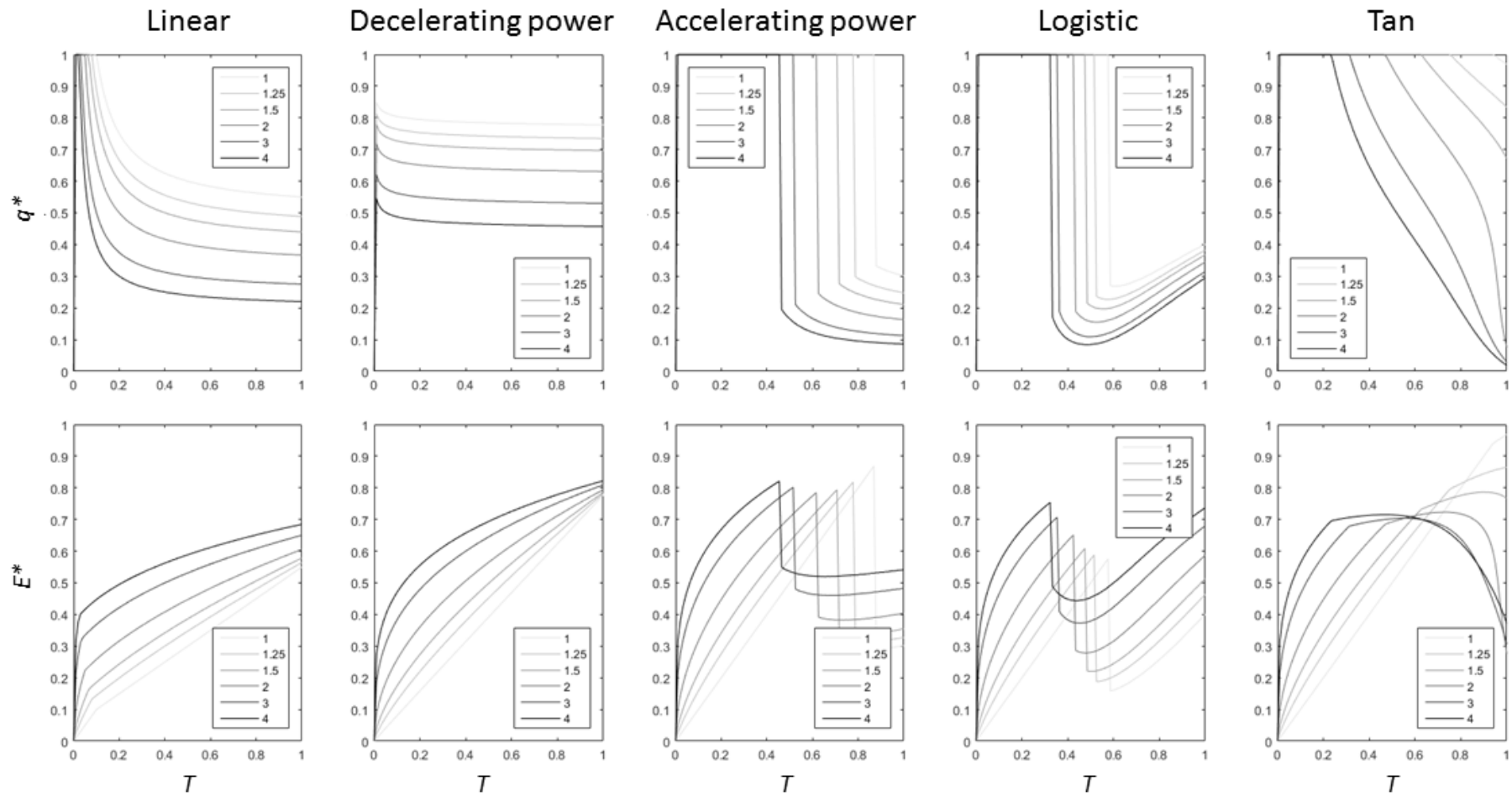


Fig. S2 The change in q^* and E^* with increasing condition for each model investigated for six different potential relationships between somatic maintenance and lifespan, where $s=0.1$. In each case p is given in the legend.

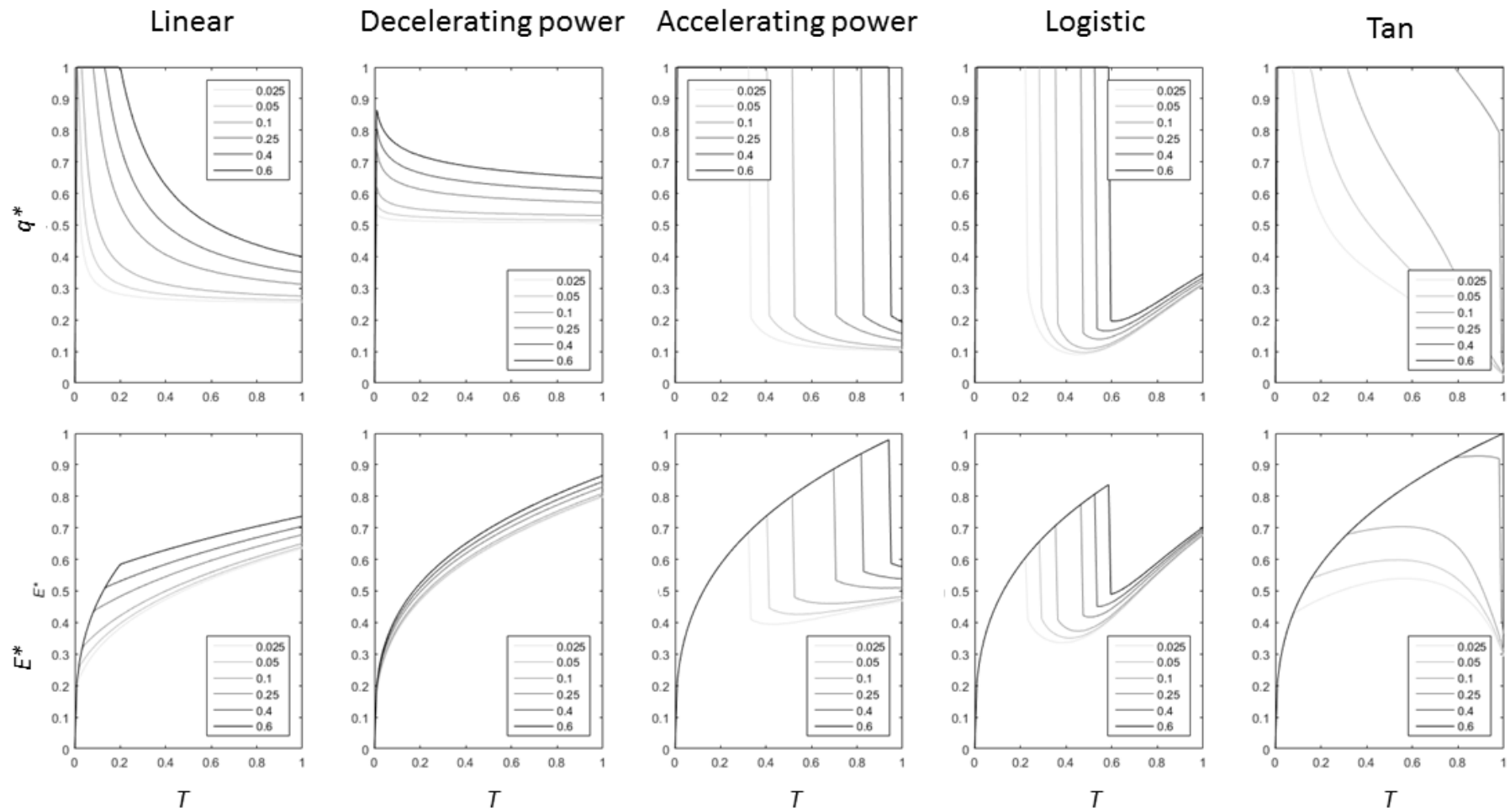
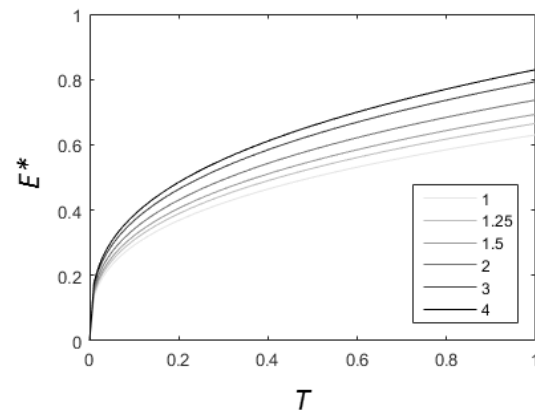
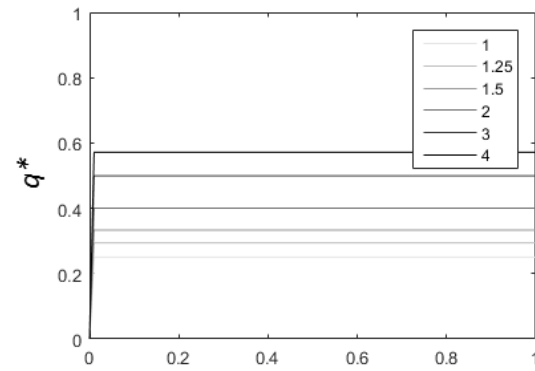


Fig. S3 The change in q^* and E^* with increasing condition for each model investigated for six different potential values of s . In each case s is given in the legend.

A: $s=0$



B: $s=0.1$

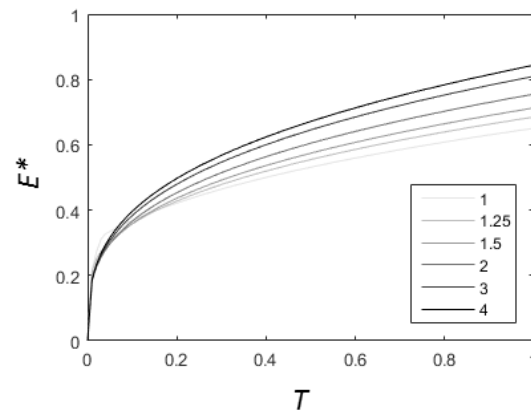
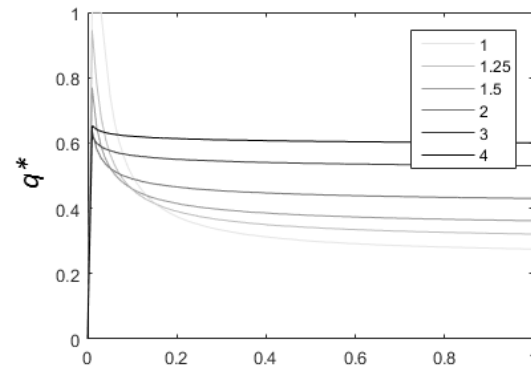


Fig S4. The change in q^* and E^* with increasing condition for six fitness functions where the relationship between secondary sexual trait expression and mating success is a decelerating power function, where $s=0$ (A), and $s=0.1$ (B). The value of m for each function is shown in the legend.