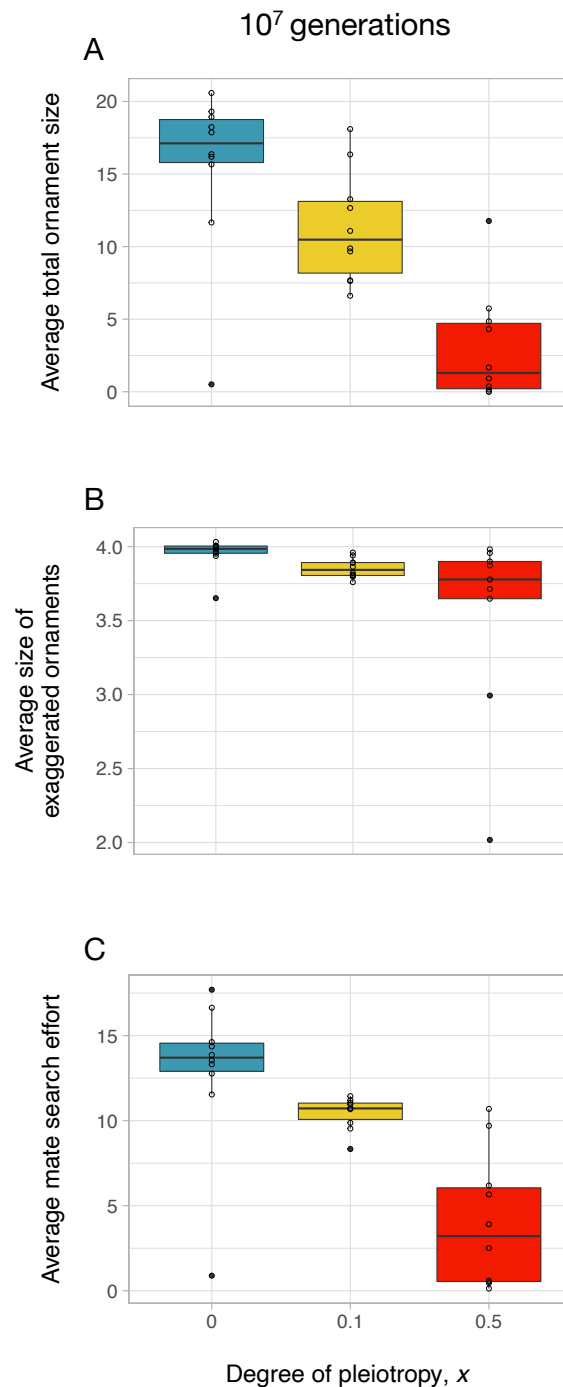


# Supplementary Information



**Figure S1. Influence of the degree of pleiotropy on male ornamentation over  $10^7$  generations.**

Changes in average total ornament size (A), the average size of exaggerated ornaments (B) and average mate search effort (C) with increasing degree of pleiotropy ( $x$ ) for simulations over  $10^7$  generations. Parameter values for all panels with the multiplicative cost structure:  $N = 1000$ ,  $t = 10$ ,  $s = 0.05$ ,  $k = 0.00001$ ,  $\pi_O, \pi_P, \pi_M = 0.01$ ,  $\sigma_O, \sigma_P, \sigma_M = 1$ . The panels are based on 10 runs per degree of pleiotropy.