

Figure 6: Long-term evolution of a microsatellite locus linked to a gene under selection. The fitness landscape is SM, and the microsatellite dynamics is TPM, with $U = 0.01$, $u_{\text{sat}} = 0.01$, $p_{\text{SMM}} = 0.95$, $\sigma_m^2 = 30$, $\beta = 1.0$, and $N = 1000$. a. Mean fitness in the population. b. Length of the dominant microsatellite allele, n_{dom} . c. Entropy H . d. Change in entropy between successive measurements ΔH . e. Variance of microsatellite lengths $\text{Var}(n)$. f. Change in variance between successive measurements $\Delta \text{Var}(n)$.

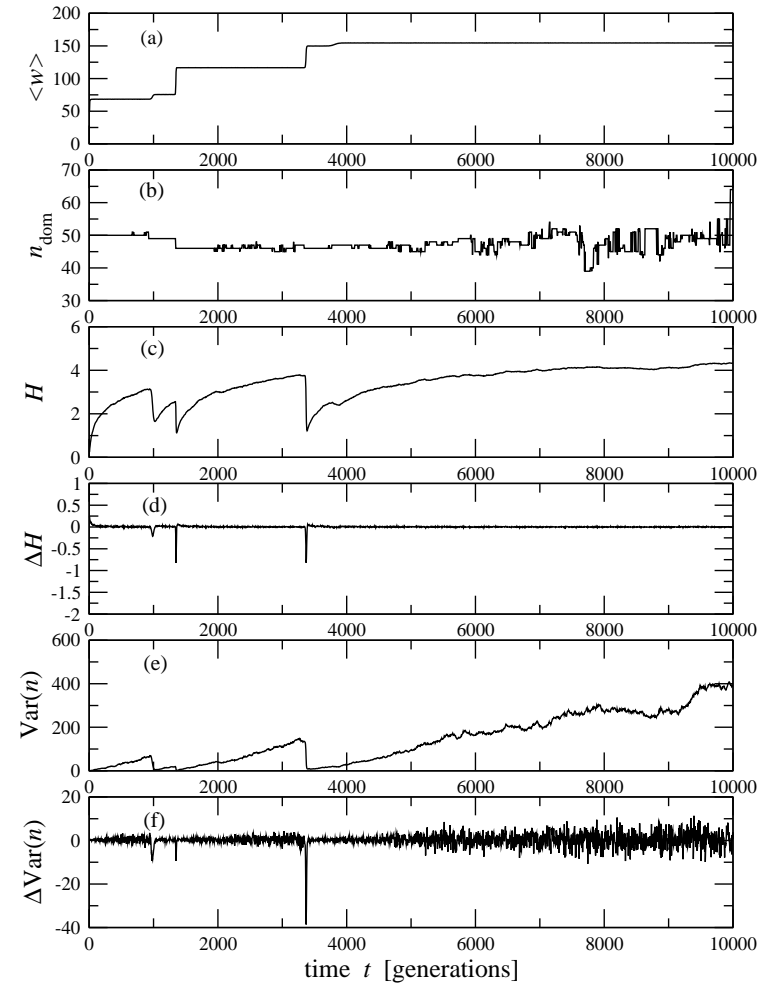


Figure 7: Long-term evolution of a microsatellite locus linked to a gene under selection. The fitness landscape is REM, and the microsatellite dynamics is TPM, with $U = 0.01$, $u_{\text{sat}} = 0.01$, $p_{\text{SMM}} = 0.95$, $\sigma_m^2 = 30$, $\beta = 1.0$, and $N = 100,000$. a. Mean fitness in the population. b. Length of the dominant microsatellite allele, n_{dom} . c. Entropy H . d. Change in entropy between successive measurements ΔH . e. Variance of microsatellite lengths $\text{Var}(n)$. f. Change in variance between successive measurements $\Delta \text{Var}(n)$.

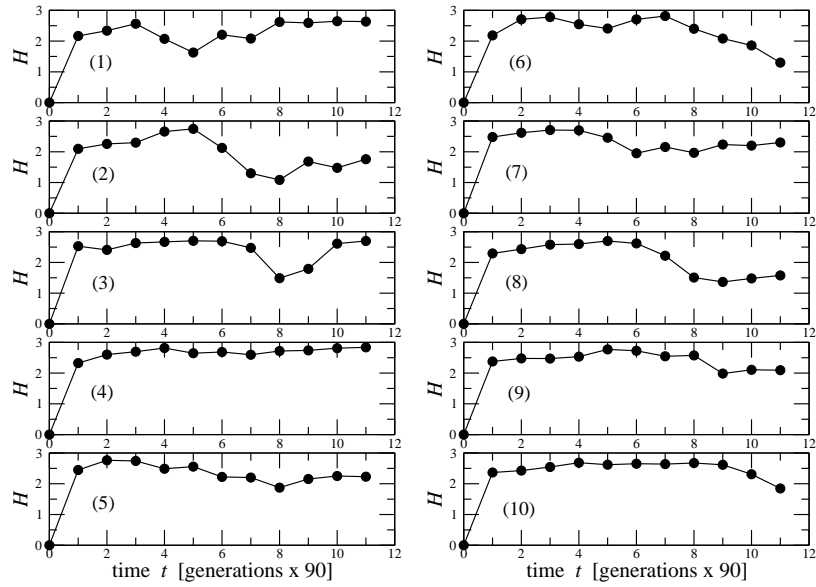


Figure 8: Entropy versus time in the ten replicate *E. coli* populations of Imhof and Schlötterer.

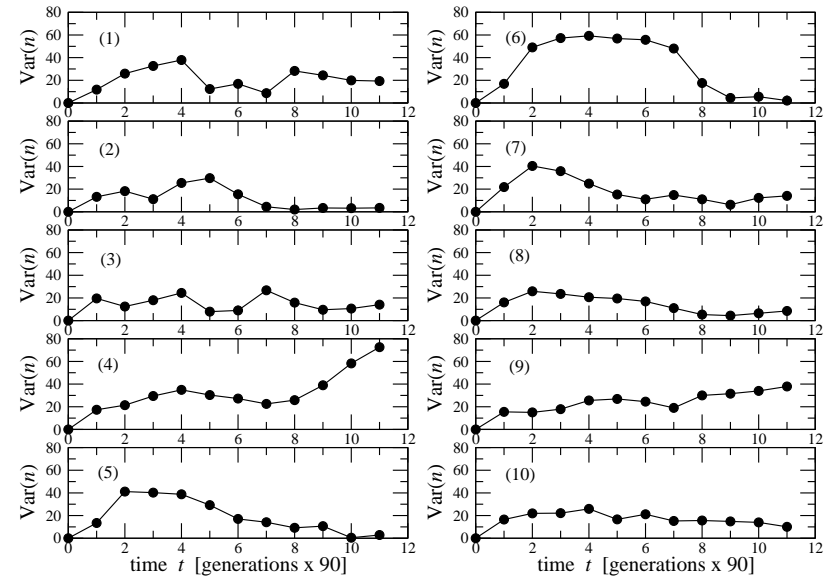


Figure 9: Variance of microsatellite length versus time in the ten replicate *E. coli* populations of Imhof and Schlötterer.