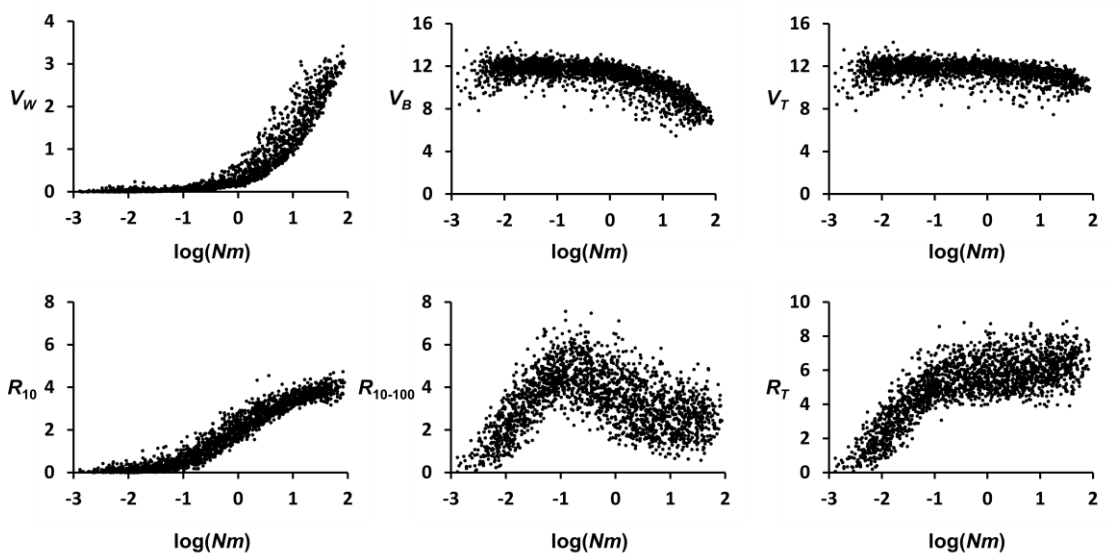

Figure S2 Initial quantitative trait variance components and responses to selection for the simulations plotted against the number of migrants per generation and subpopulation (*Nm*, in $\log_{10}$). The scenario refers to a subdivided population with n = 10 subpopulations, number of migrants per generation and subpopulation (*Nm*) either < 0.5 or > 0.5, mutation rate u = 0.00001 and strength of stabilising selection ω^2 = 25. Results are based on 2,000 simulations varying the subpopulation size (*N*) randomly between 100 and 1000, and the migration rate (*m*) between 0.0001 and 0.1. V_W: Within-subpopulation genetic variance; V_B: Between-subpopulation genetic variance; V_T: Total genetic variance; R_{10}: response to selection until generation 10; $R_{10\text{-}100}$: response from generations 10 to 100; R_T: total response until generation 100.

The figure shows that whereas the short-term response (R_{10}) increases monotonically with *Nm*, the late response ($R_{10\text{-}100}$) increases with *Nm* for $\log(Nm) \approx -0.3$ ($Nm < \sim 0.5$), and decreases thereafter. This indicates that, when subpopulations are considerably isolated from one another ($Nm < \sim 0.5$, corresponding to an expected $F_{ST} > \sim 1/3$), V_W is very low and V_B rather high, and late and total response increase with *Nm*, due to the slow but continuous increase of V_w at the expense of V_B. For higher levels of migration ($Nm > \sim 0.5$; corresponding to $F_{ST} < \sim 1/3$), V_W increases substantially with migration, implying an increase in the short-term response, but V_B and V_T decline consistently, implying a decline in late response.