



**FIGURE 17.33.** Simulations of artificially selected populations, comparing three scenarios. The environmental variance is set to  $V_E = 1$ . In each generation, the 50 highest-scoring individuals were chosen from 250, heritability started at 30%, and major alleles had effects equal to 0.5 units. *Upper row:* trait mean over time (two replicates). *Middle row:* genetic variance (trait variance in the figure)  $V_G$ . *Bottom row:* allele frequencies (one replicate). (A) Ten unlinked loci with major alleles. (B) 400 unlinked loci with minor effects (0.03 units) apart from two major loci (allele frequencies shown by the *black line* in *bottom panel*). (C) 100 unlinked loci; mutation rate such that mutational variance  $V_M = 0.0023$ .

17.33, redrawn from Barton N.H. et al., *Nat. Rev. Genet.* **3**: 11–21, © 2002 Macmillan, www.nature.com