



FIGURE 19.21. (A) Synonymous diversity is greatly reduced in regions of low crossing over in African populations of *Drosophila melanogaster*. (B) Observed and predicted diversity along the third chromosome of *D. melanogaster*, plotted against physical position. Predictions are based on the known pattern of recombination and assume selection against deleterious mutations with selection coefficient $s = 0.02$; mutation rate is taken as 0.4 over the whole chromosome. The fit is good, except near the tips of the chromosome.

19.21A, modified from Andolfatto P. et al., *Genetics* **158**: 657–665, © 2001 Genetics Society of America; 19.21B, modified from Hudson R.R. et al., *Philos. Trans. R. Soc. Lond. B* **349**: 19–23, © 1995 Royal Society