



FIGURE 22.30. (A) All the QTLs responsible for reproductive isolation between *Drosophila pseudoobscura* and *Drosophila persimilis* map to two blocks of genome, marked by red asterisks. Circles show inversion differences fixed between the species. The position of the gene *period* is indicated. Bars to the right of the chromosomes indicate segments of genome that are known to have introgressed between the species. (B) Genealogies on the X (e.g., *period*) follow the species classification, with *D. persimilis* and *D. pseudoobscura* sequences forming separate groups. However, the nonrecombining locus (mitochondrial DNA) shows evidence of recent gene flow: The two species' sequences are intermingled on the genealogy and closely related. Other autosomal loci, outside the inverted regions, show evidence of recombination as well as gene flow. The scale represents nucleotide divergence per base. *D. pseudoobscura*, filled squares; *D. persimilis*, open circles; *Drosophila pseudoobscura bogotana*, open triangles; *Drosophila miranda*, filled diamonds.

22.30A, redrawn from Noor M.A.F. et al., *Proc. Natl. Acad. Sci.* **98**: 12084–12088, © 2001 National Academy of Sciences, U.S.A.; 22.30B, redrawn from Machado C.A. et al., *Proc. R. Soc. Lond. B* **270**: 1193–1202, © 1986 Royal Society of London