



**FIGURE 14.23.** Finding the QTL responsible for differences in wing shape in *Drosophila melanogaster*. (A) The distances D1 and D2 were measured in two strains of flies that had been selected in opposite directions. (B) In the base population, these measurements fell on the straight line at the center. The two clusters of dots show measurements of the two selected lines, denoted L and H. The difference between them is measured by the “angular offset,” whose value is indicated by the series of thin lines. (C) Flies were produced that were homozygous for a recombinant third chromosome, which was derived partly from the H line and partly from the L line. The diagrams show how wing shape changes with the proportion of third chromosome derived from the H lines. (D) A statistical model was fitted in which 11 QTLs influenced wing shape. The 11 curves show the likelihood for the position of each QTL: Peaks indicate the best estimate for its location. Triangles at the bottom show the positions of the markers.

14.23A–D, redrawn from Weber K. et al., *Genetics* 153: 773–786, © 1999 Genetics Society of America