



FIGURE 22.19. Polygenic basis of differences between the male genitalia of *Drosophila simulans* and *Drosophila mauritiana*. These species differ in the shape of the posterior genital lobe by ~ 35 environmental standard deviations ($\sqrt{V_e}$). At least 19 QTLs are responsible for this difference. The blue lines show the log likelihood score plotted against position along the three chromosomes (X, 2, 3). This gives statistical evidence for the presence of QTLs affecting genital shape; the horizontal line shows the threshold for statistical significance. The red triangles show the positions of the 63 genetic markers used in the backcross experiment.

22.19A,B, redrawn from Zeng Z.B. et al., *Genetics* **154**: 299–310, © 2000 Genetics Society of America