

FIGURE 22.26. (A) The "Oxford" and "Hermitage" races of the shrew *Sorex araneus* differ by several chromosomal fusions: In the Oxford race, chromosome arm k is fused with q, and n with o, whereas in the Hermitage race, k is fused with o. (The dots represent the **centromere**.) In the meiosis of F_1 hybrids, the chromosome arms pair, which produces a tangle of five chromosomes. These fail to segregate properly, and so the F_1 is sterile. (B) In contrast, heterozygotes between **acrocentric** chromosomes and fused chromosomes pair to form simpler configurations that segregate correctly at meiosis. (C) Where the two chromosome races meet, few sterile individuals are found, because acrocentric chromosomes k and o have risen to high frequency (*red bars*). Thus, individuals tend to be heterozygous for simple combinations, which have high fertility (e.g., B). White, homozygous "Oxford" genotypes; *black*, homozygous "Hermitage" genotypes; *red*, homozygotes acrocentrics; *blue*, other hybrid genotypes.

22.26B, redrawn from Searle J.B., Proc. R. Soc. Lond. B 229: 277–298, © 1986 Royal Society of London