



**Figure 2.** Heterochromatin is packaged into a regular nucleosome array. A TE such as that shown (A), carrying a marked copy of a heat shock gene for study and an *hsp70*-driven copy of *white* as a visual marker, can be used to study the same gene in different chromatin domains. (B) Nuclei from *Drosophila* lines carrying the transgene in a euchromatic domain (39C-X; red eye) and a heterochromatic domain (HS-2; variegating eye) were digested with increasing amounts of micrococcal nuclease (MNase), the DNA was purified and size-separated on an agarose gel, and the resulting Southern blot was hybridized with a probe unique to the transgene. Linker sites cleaved by MNase are marked with arrowheads. (C) Densitometer scans from the last lane of each sample are compared (top to bottom is left to right). An array of nine to 10 nucleosomes can be detected in heterochromatin (red line), compared with five to six in euchromatin (blue line), indicating more uniform spacing in the former case. (D) A diagrammatic representation of the results. DH site, deoxyribonuclease (DNase)-hypersensitive site; HSE, heat shock element. (B,C, Adapted from Sun et al. 2001, © American Society for Microbiology.)