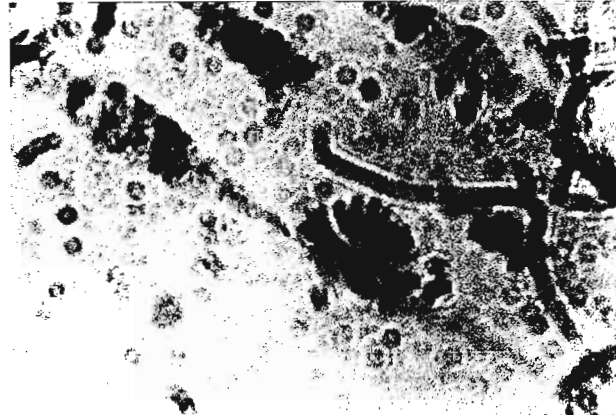
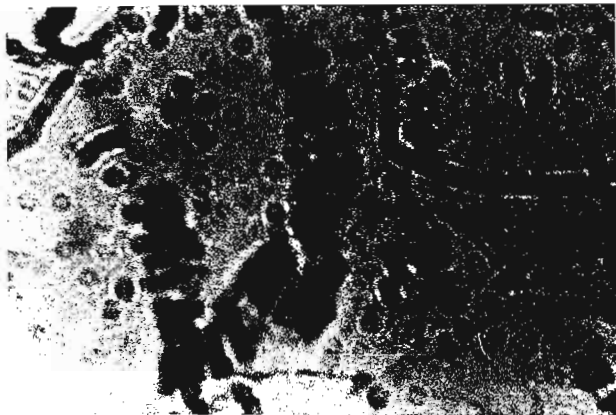
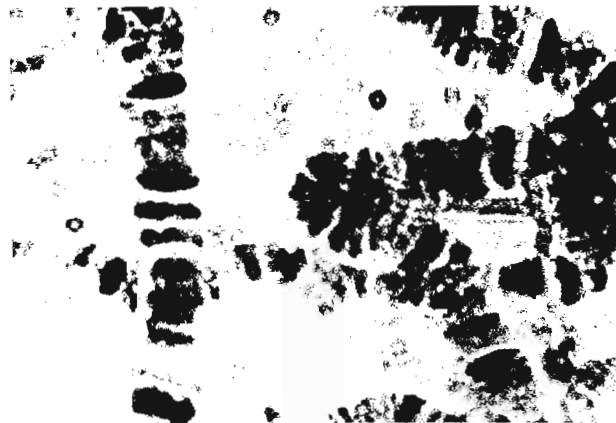
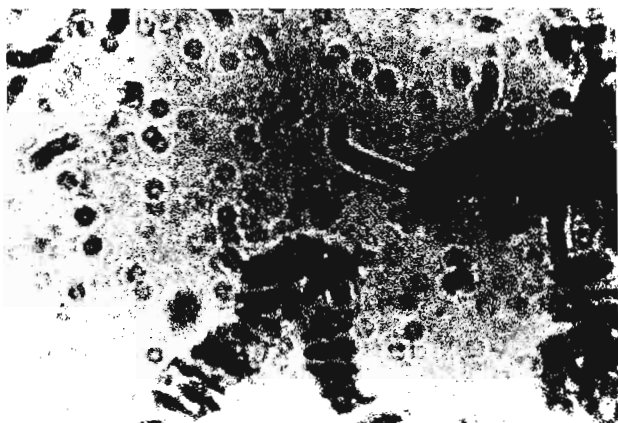


Chenevix Trench, G. Trinity College, Dublin, Ireland. An endemic inversion in the X-chromosome of *D. melanogaster*.

cytologically by salivary gland preparation. In addition, 2 or 3 larvae from each of 5 single crosses were examined. This new inversion, which has been named In(1)A, was found in 20 of the 47 individuals examined. It is a small paracentric inversion with break-points at 16D and 18D, and was always observed to form an inversion loop in salivary gland cells of female larvae.

This discovery is particularly interesting in view of the rarity of X-chromosome inversions. Dahomey is a wild type stock, collected in West Africa in 1969 and maintained in large cage populations in Edinburgh, whence this population came. It is noted for the high level of genetic variation which it has retained in the laboratory.

An endemic paracentric inversion has been found in the X-chromosome of *D. melanogaster*. 35 progeny from a multiple mating (12 virgin females from a wild population, Dahomey, mated with 5 males of the Oregon-K inbred strain) were examined



Chernyshev, A.I. and B.A. Leibovitch. Institute of Molecular Genetics, USSR Academy of Sciences, Moscow, USSR. The effect of temperature during development on the amount of heterochromatin DNA fractions in *D. melanogaster*.

which differ from the main DNA fraction in buoyant density and are localized, with a few exceptions, in centromeric heterochromatin (Peacock et al. 1974). The rapidly renaturing DNA fraction consists of short blocks of simple repeats which do not differ from the main fraction in buoyant density (Hearst et al. 1974) and are localized in centromeric heterochromatin and some other loci, as follows from in situ hybridization (Fig. 1).

It has been shown earlier by cytophotometry that low temperature may cause underreplication of heterochromatin in a number of different organisms (Evans 1956). Heterochromatin DNA in *Drosophila* basically consists of ribosomal DNA and highly reiterative DNA. The latter contains two fractions: satellite and rapidly renaturing DNA. Satellite DNA consists of long blocks of simple repeats