

INTERSEX

The term intersex is used to denote an individual which in the early stages has the characteristics of one sex and later changes to the opposite sex, although no change in the chromosomal constitution has appeared. The change in sex starts at a certain point in the development of the individual. This is called the turning point. If the turning point is early, the individual has more time to complete the development of the traits of the new sex.

GYNANDERS IN DROSOPHILA:

Sometimes one region of a fly is male and the rest female; for example, the left half of the body might be female and the right half male. Such flies are known as **gynanders** or **gynandromorphs**.

The line of division between male and female tissue need not necessarily be through the middle of the body. Sometimes, just a quarter of the body is male and the rest is female, or just a small island of the tissue might be male.

A gynander begins its development as a female with two X chromosomes. But in the course of cell division, an X gets lost from one of the two products of cell division. If this should happen during the first cell division of the zygote, then half of the fly would develop from the cell with two X chromosomes and this half would become female; the other half (with one X) would become male.

The irregular cell division might occur later, in which case the cell that got just one X would give rise to less than half the body. It might give rise to only a small patch of cells, and then only this small patch would be male tissue.