

LINKAGE AND LINKAGE MAPS

[GLOSSARY]

Subject	:	Zoology
Course	:	B.Sc., 3rd Year
Paper No.	:	Z-302B
& Title	:	Genetics and
		Immunology
Topic No.	:	A3
& Title	:	Linkage and Linkage
		Maps
Title	:	Linkage and Linkage

GLOSSARY

Linkage:

The relationship between genes on the same chromosome that causes them to be inherited together.

Recombination:

The rearrangement of genetic material or parts, especially by crossing over in chromosomes or by the artificial joining of segments of DNA from different organisms.

Centimorgan (CM):

A map unit or centimorgan is distance between two gene loci on a chromosome. One centimorgan (cM) indicates a one per cent chance that two genes will be separated by crossing over.

Complete linkage:

In complete type of linkage genes are so nearer linked that they tend to move or inherit together only to the offspring. Moreover we can say in such type traits of parental combinations appear together for two or more generations in continuous and regular manner.

Incomplete type of linkage:

In genome of any species when widely located homologous chromosomal gene gets chance to separate by crossing over are known as incomplete linked gene and the process of their passing from parents to the offspring is termed as incomplete type of linkage.

Linkage group:

A set of genes at different loci on the same chromosome that exclude for crossing-over tend to act as a single pair of genes in cell division.

Linkage or Genetic mapping:

The process of determining where genes are located on the chromosomes is termed as genetic or linkage mapping.