

On the basis of function:

On the basis chromosomes are of two types

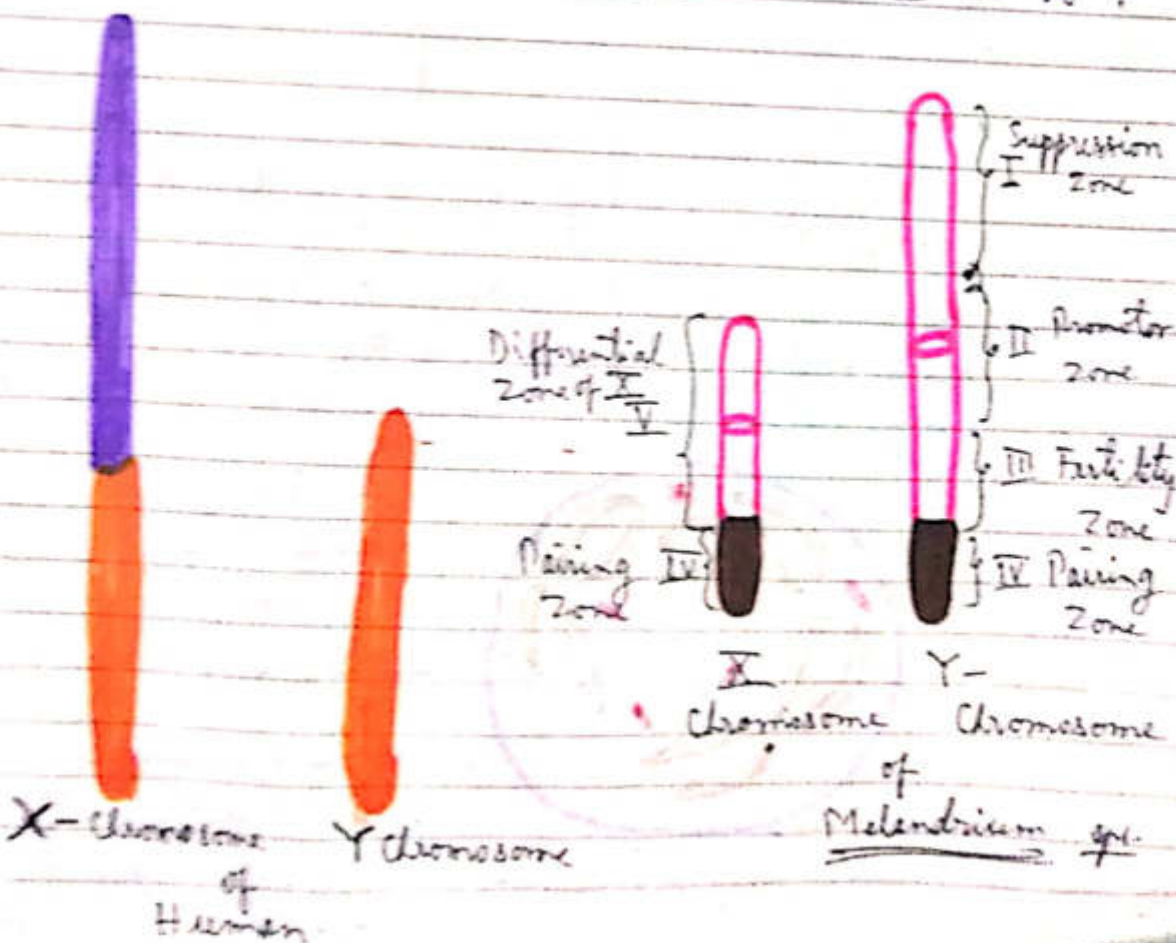
- a) Autosomes
- b) Allosomes.

a) Autosome: - These chromosomes are responsible for vegetative functions only. Their number are varying for but fixed for a species.

b) Allosomes: These chromosomes are responsible for determination of sex. They may be of two types.

----- Mammals \rightarrow X & Y

----- Birds \rightarrow Z & W.



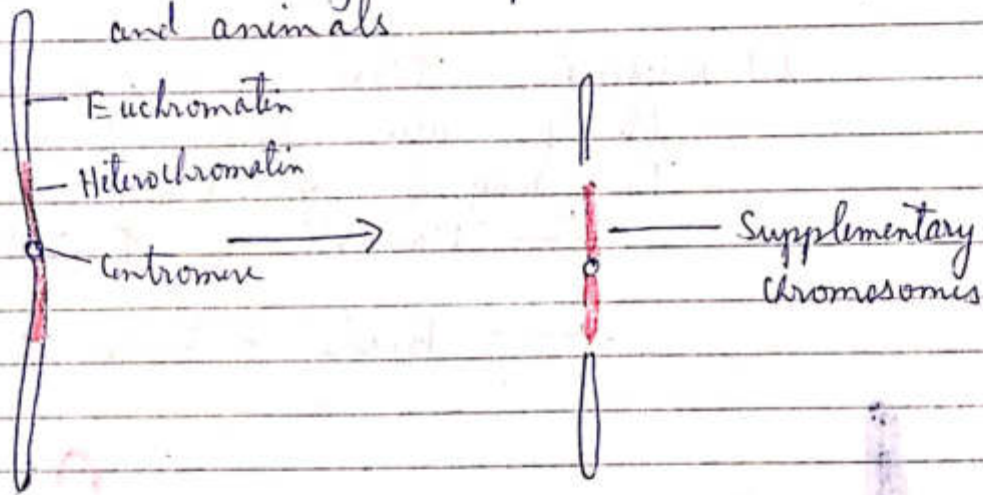
Supplementary Chromosomes / Accessory / B-Chromosomes

These are in addition to the normal Autosomes and Xosomes.

They are genetically unnecessary. Normally they have no phenotypic effect. They are not found in all of the individuals of a species.

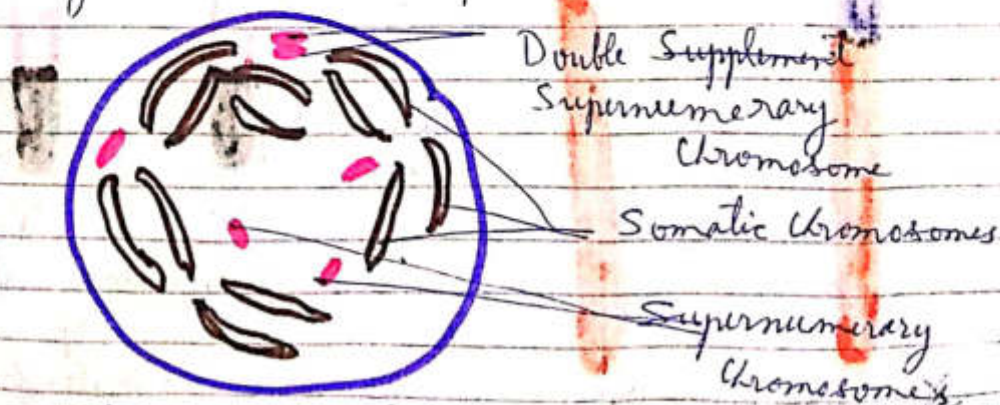
They are normally smaller than the normal chromosomes.

They are reported in both plants and animals



Derivation of Supplementary Chromosome

These are derived from autosome. Their Euchromatic parts get lost. They possess only Heterochromatic parts. These are non-active.

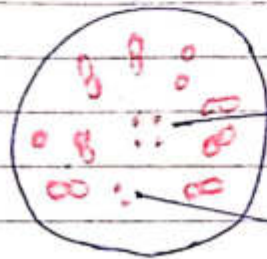


Schematic representation of ~~sup~~ supernumerary Chromosomes.

Minute chromosome - m-chromosome.

They are of very small size (0.5 micron or less). They are seen during meiosis only. Rarely during mitosis. They may be one, two, four, five.

e.g. Bryophytes & insects of Coccidae (Heteroptera).



$8 \times 2 + 3 = 19$ Large Bivalents.

(11) Second m chromosomes (Quadripartite)

m-chromosome consisting of Univalents.

Limited chromosomes / L-chromosome.

They are limited to the ~~the~~ family Sciariidae (Diptera: Insecta).

They are limited to germ cells.

They are absent in males.

In female there are Nine (9) $\rightarrow 3 \times 2 = 6$ Autosomes

Ten (10) $\rightarrow X \times 2 = 2$ Sex chromosomes.

$\rightarrow L \times 2 = 2$ L-chrom.

& In male there are Nine (9) $\rightarrow 3 \times 2 = 6$

$X \times 1 = 1$

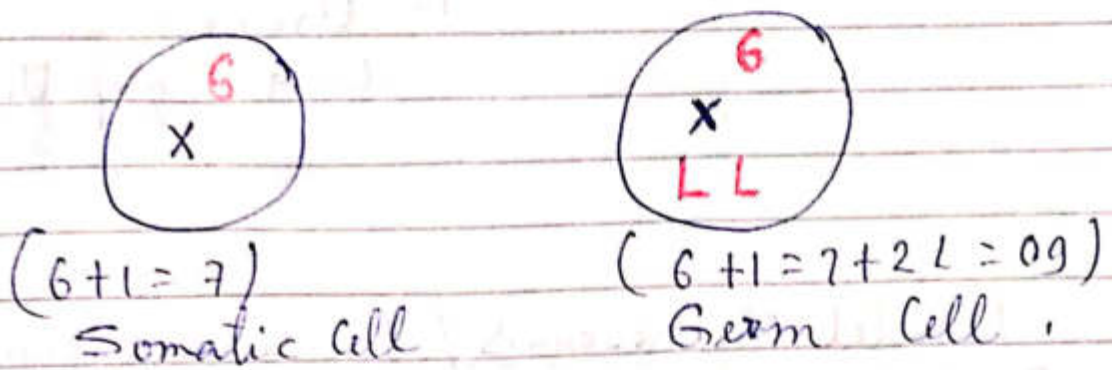
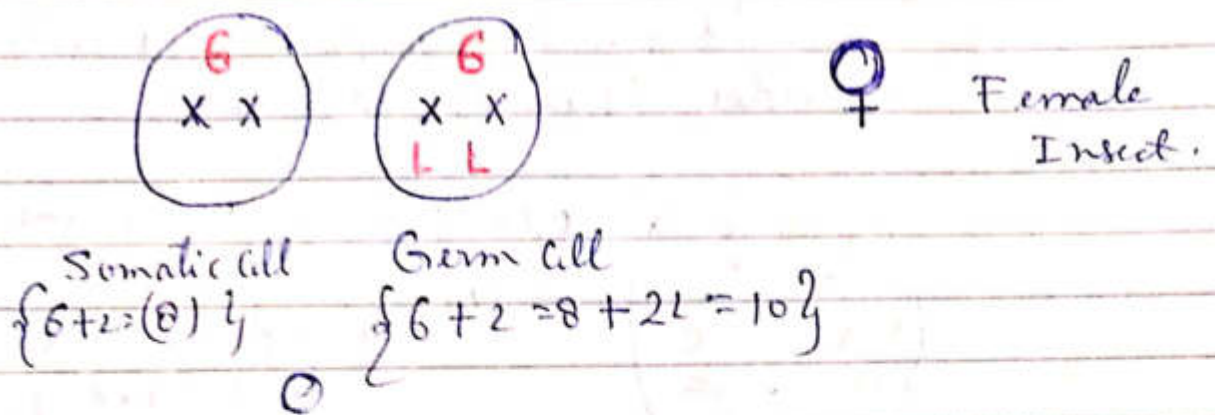
$L \times 2 = 2$

(9)

Whereas somatic cells of female have only (2) eight chromosomes & of males only (07) seven chromosomes.

In somatic cells L-chromosomes are absent. They get lost after fifth to sixth division.

Hence But these (L-chromosomes) are retained in to germ cells.



Schematic Representation of L-Chromosomes

BOTANY,

No.	Name of Teacher & Post	Class	Part	Paper	Unit	Work Uploaded	Evaluation of work Uploaded
	VIKASH CHANDRA.	B.SC (H)	I	II		Cell Cycle 16/05	
	ASSOCIATE PROFESSOR, & H.O.D.					Chromosome → History Properties & Structure 18/05.	
						Ultra Structure 19/05.	
						Chemical structure 20/05	
						Types of chromosomes. - On the basis of Centromere 21/05.	
						- On the basis of function. 22/05	