

Multiple Allele eg - ABO blood group.

- More than two forms of Alternative $\frac{n(n+1)}{2}$ of same

- Multiple formated due \Rightarrow Mutation²

diff. Genotype =

$$\frac{n(n+1)}{2}$$

$n =$ No. of allele of gene

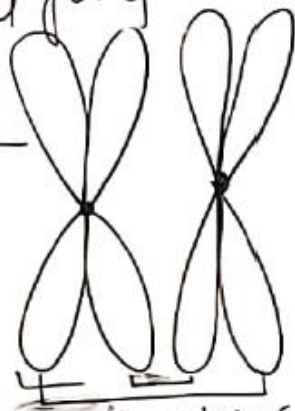


Sister chromatid

Homologous chromosome
Same-locus

Diploid \Rightarrow two Allele
($2n$)

"gametes \Rightarrow one allele for a character"



Non sister chromatid

Multiple Allele Examples.

1) ABO Blood group

three alleles $\Rightarrow I^A, I^B, i$

$I^A \Rightarrow$ Dominant

$I^B \Rightarrow$ Dominant

$i \Rightarrow$ Recessive.

Genotype $\Rightarrow \frac{3(3+1)}{2}$

Coat colour in Rabbits $\Rightarrow \frac{3(4)}{2} = \frac{3 \times 4}{2} = \frac{12}{2} = 6$

$I^A, i \Rightarrow A$
 $I^B, i \Rightarrow B$

I^A	I^A	$\rightarrow A$
I^A	I^B	$\rightarrow AB$
I^B	I^B	$\rightarrow B$
i	i	$\rightarrow O$

NEET Q₁

Lethal gene \Rightarrow death of individual when it comes in homozygous condition.

Dominant

Recessive

(L) cue not

Dominant

$Yy \times Yy$
 $\leftarrow Y \Rightarrow$ yellow of body

Yy \leftarrow Recessive
 $y \Rightarrow$ Brown coat

Mice

(coat colour of Mice)

	Y	y
Y	<u>YY</u>	Yy
y	Yy	yy

2 : 1

Y = yellow colour body

y \Rightarrow Normal Brown colour of Mice

YY \Rightarrow embryonal stage modified

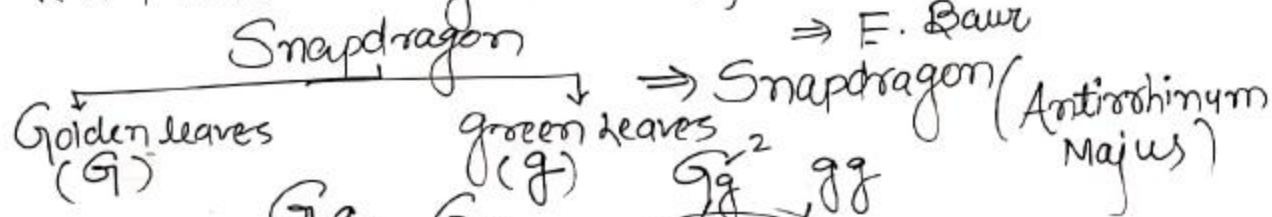
Yy : yy \downarrow

2 : 1

NEET Q

Lethal gene \Rightarrow death of individual when it comes.

2. In plants lethal gene is was first discovered



2:1

	G	g	<u>Homozygous</u>
G	<u>GG</u>	Gg	<u>Golden leaves</u>
g	Gg	gg	Never ==