FACULTY OF ENGINEERING & TECHNOLOGY
DEPARTMENT OF BIOTECHNOLOGY

Incomplete dominance

- Incomplete dominance is a type of inheritance in which one *allele* for a specific trait is not completely dominant over the other allele.

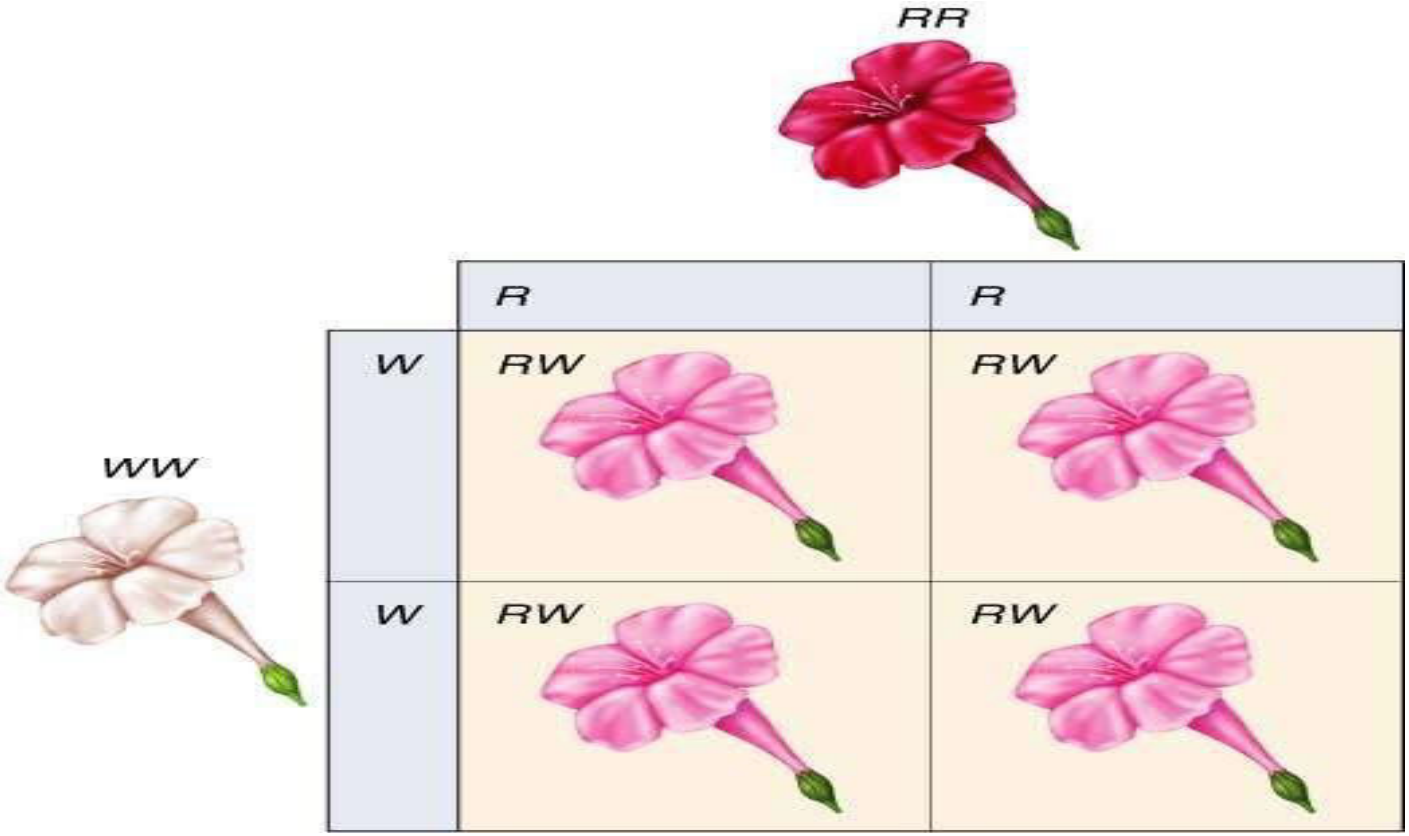
This results in a

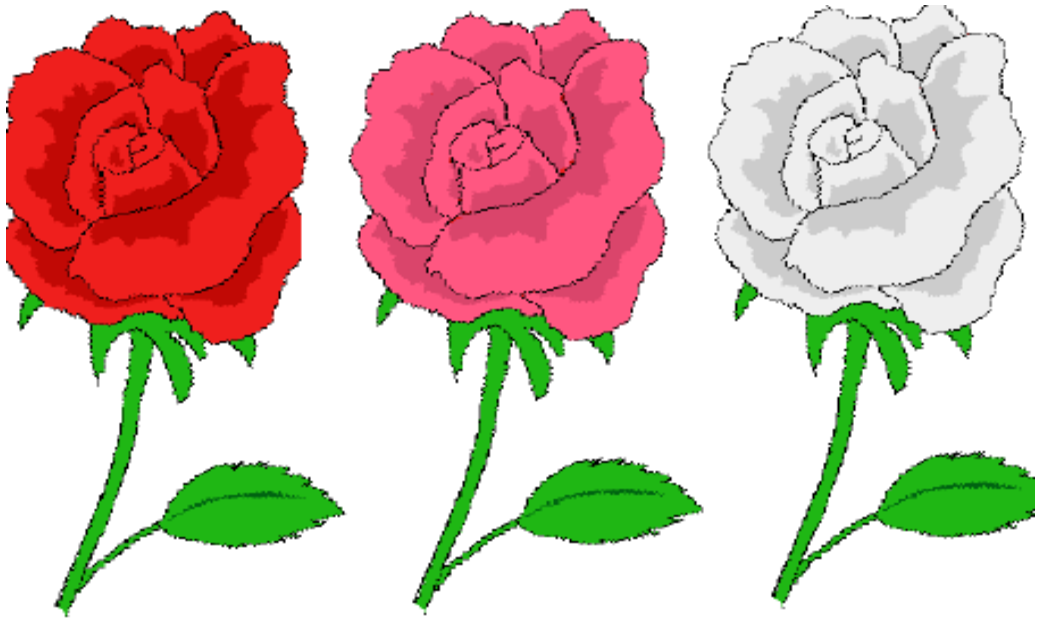
- combined *phenotyp* (expressed physical trait).

- For example

In Four O' Clocks, if you cross a red RR (which is always pure) with a white WW (that is also always pure) , you get a pink RW (which is always hybrid /heterozygous)

Incomplete Dominance





Red

Pink

white

- In incomplete dominance, neither allele is dominant so there is a blending of traits when two different alleles for the same trait occur together.
- Colors blend together heterozygous individuals = 3rd phenotype

- In another flower, if red RR and blue BB flowers are crossed, they produce a 3rd purple RB flower

- What would be the genotype ratio and phenotype ratio if you crossed two purple flowers?

Incomplete Dominance

- Cross of two purple flowers
  RB X RB
- genotype ratio
  1RR : 2RB : 1BB
- phenotype ratio
  1red : 2 purple : 1 blue

	R	B
R	RR red	RB purple
B	RB purple	BB blue