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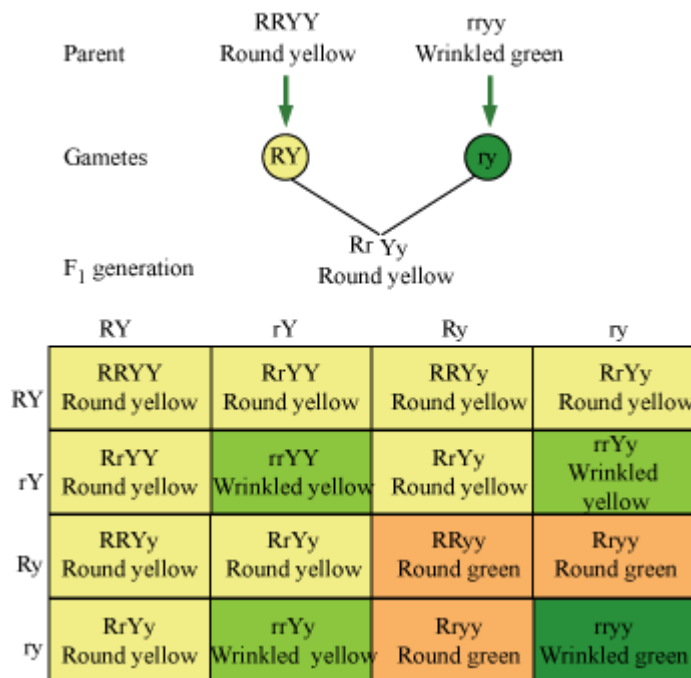
Sub. Biology

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## Inheritance of Two Genes (Dihybrid Cross) & Law of Independent Assortment

### Inheritance of Two Genes (Dihybrid Cross)

- In dihybrid cross, we consider two characters. (e.g., seed colour and seed shape)
- Yellow colour and round shape is dominant over green colour and wrinkled shape.



- Phenotypic ratio – 9:3:3:1

Round yellow – 9

Round green – 3

Wrinkled yellow – 3

Wrinkled green – 1

### Law of independent Assortment

- When two pairs of traits are combined in a hybrid, one pair of character segregates independent of the other pair of character.
- In a dihybrid cross between two plants having round yellow (RRYY) and wrinkled green seeds (rryy), four types of gametes (RY, Ry, rY, ry) are produced. Each of these segregate independent of each other, each having a frequency of 25% of the total gametes produced.