

Classical Genetics Glossary

Alleles: Alternative forms of a gene.

Back Cross: Crosses between F_1 off-springs with either of the two parents (hybrid) are known as back cross

F_1 / First Filial Generation: The second stage of Mendel's experiment is called F_1 generation

Gene: The determinant of a characteristic of an organism (Mendelian factor). Gene symbols are underlined or italicized.

Genetic Code: The set of 64 triplets of bases (codons) corresponding to the twenty amino acids in proteins and the signals for initiation and termination of polypeptide synthesis.

Genotype: The types of alleles in a single individual is called genotype

Genome: The total complement of genes contained in a cell.

Heterozygous: Diploid organisms that have two different alleles at a specific gene locus are said to be heterozygous.

Homozygous: A diploid organism in which both alleles are the same at a given gene locus is said to be homozygous.

Hybrid Vigour or Heterosis: The superiority of hybrid over either of its parents in one or more traits.

Locus: The site or position of a particular gene on a chromosome.

Phenotype: The physical expression of an individual's gene. The physical observable characteristics of an organism.

Punnett Square / Checkerboard: A sort of cross-multiplication matrix used in the prediction of the outcome of a genetic cross, in which male and female gametes and their frequencies are arranged along the edges.