Dihybrid cross

A dihybrid cross is a breeding experiment between two organisms which are identical hybrid for two traits. In other words, a dihybrid cross is a cross between two organisms, with both being heterozygous for two different traits. The individuals in this type of traits are determined by DNA segment called genes. This type of trait are homozygous for a specific trait.

In a dihybrid cross, the parents carry different pair of alleles for each trait. one parent carries homozygous dominant allele, while the other one carries homozygous recessive allele, the offspring produced after the crosses in the F_1 generation are all heterozygous for specific traits.

Dihybrid Cross Examples

Mendel took a pair of contradicting traits together for crossing, for example colour and the shape of seeds at a time. He picked the wrinkled-green seed and round yellow seed and crossed them. He obtained only round yellow seeds in the F_1 generation. This indicated that round shape and yellow colour of seeds are dominant in nature.

Meanwhile, the wrinkled shape and green colour of seeds are recessive traits. Then, F_1 progeny was self-pollinated. This