

Preface to the Second Edition

Since the publication of the first edition, I have received many suggestions from the readers and also keeping in mind the modern trends in Genetics especially in Biotechnology, the second edition has been thoroughly revised.

In the chapter, Human Genetics, some more human diseases have been discussed. Similarly, in Developmental Genetics detailed discussions have been included in *Drosophila* and *Caenorhabditis elegans*. A few diagrams have been replaced for clarity in the text.

In the Plant Breeding section, a detailed account of the applied aspects of Biotechnology in plants has been added. Gene cloning and recombinant DNA technology methods have been discussed from an applied aspect in crop improvement programmes.

Part-V dealing with **Genomics** is an entirely new chapter added in the second edition. Genomics deals with cloning experiments, recombinant DNA technologies, Human Genome project- its achievements and actual procedures of experimentation have been discussed, keeping in view the most modern trends in Genetic Analysis. Therefore, this edition is now divided into five parts: Part - I **Mendelian Genetics**, Part - II **Molecular Genetics**, Part - III **Cytogenetics**, Part - IV **Plant Breeding** and lastly Part - V **Genomics**.

At the end, a new glossary on Molecular Genetics has been added to familiarize the students with advanced Genetics.

I hope the new additions in the second edition will encourage the students of Genetics to probe further in Modern Genetics.

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