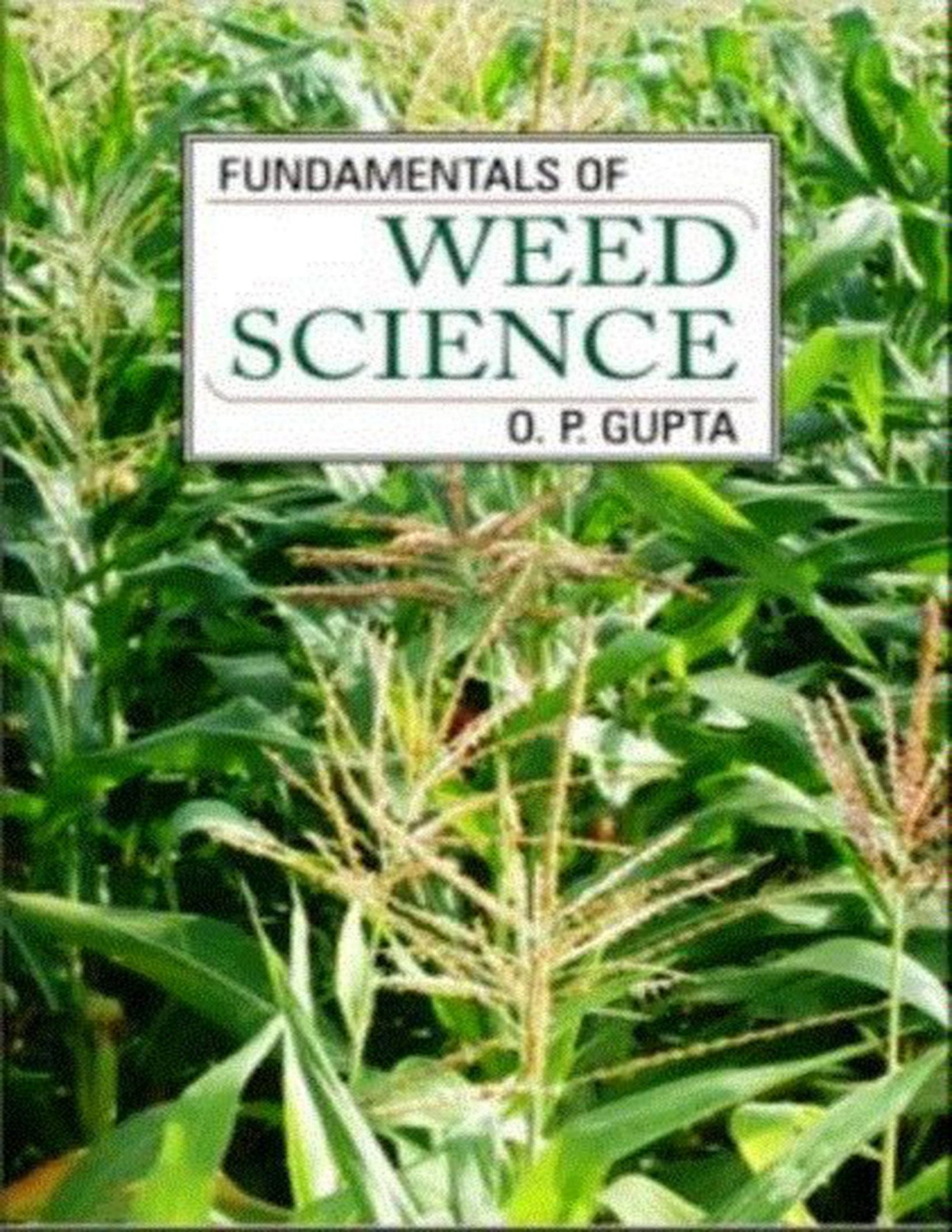

# FUNDAMENTALS OF WEED SCIENCE

O. P. GUPTA

# Fundamentals of WEED SCIENCE

**A TEXT BOOK**

# Fundamentals of
# WEED SCIENCE

## - A Text Book -

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# PREFACE

In the field of crop production, weed science is probably growing the fastest of all its different component disciplines. It is so in India, as well as in the rest of the world. These advancements in weed science are on aspects like agronomy, plant physiology, plant biochemistry, organic chemistry, soil science, microbiology, and genetic engineering. Every year in India alone over 100 research papers and reports on weed science are added, largely in the field of agronomy. Therefore, the author considered it inevitable to prepare this new title with latest information in the interest of the students of this fascinating science.

An important feature of advances in weed science is that while, by and large, the older findings remain valid, the new ones act as complements, and not as substitutes to these. Therefore, in this new title of weed science in your hands, care has been taken to maintain the rationality of the basic information on the subject, while incorporating carefully selected, recent research findings. The students have been introduced to the new aspects of weed science, like the Herbicide Residues, Herbicide Resistance, Allelopathic Control of Weeds, Role of Genetic Engineering in Weed Science, Invasive Alien Weeds, and functions of some latest, commercially exploited herbicide molecules. Besides, almost 80 lively sketches of common weeds of different situations, both from the north and south India, have been provided, particularly in Chapters 15 and 16 and Appendix-1, along with their scientific names, common names, families, and growth duration, *etc.*

I hope the students of the first course in weed science shall benefit greatly from this new title, Fundamentals of Weed Science.

*Acknowledgements:* Help rendered by Shri K.C. Chippa, Ph.D. student in Agronomy (Weed Science) in collecting some material for the book is duly acknowledged. The molecular structures of herbicides included in the book were double checked by my wife, Dr. Mrs. A. Gupta, a specialist in organic chemistry.

**Author**

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