HORTICULTURE: THE FASCINATING WORLD

Authors Dr. Nimisha Jain Tiwari Dr.Mohini M Dange Dr. Alpeshkumar. V. Khanpara Shaivya Singh Dr. Richa Sao

Publishing in 2024

Published by

Royal Book Publishing Ward No 10, Old No 118/07, New No 52-1, Ayothiyapattinam, Salem. Tamil Nadu-636103, India. **Email:** contact@royalbookpublishing.com **Website:** www.royalbookpublishing.com



Published in India.

International Standard Book Number (ISBN) : 9788198012838

No part of this Edited book (E - book) may be reproduced in any form, by photostat, microflim, xerography, or any other means, or incorporated into any information retrievel system, electronic or mechanical, without the written permission of the publisher. For permission to photocopy or use material electronically from this work, please contact the Book Publisher or Book Editor through the e-mail.



Preface

Horticulture has always held a unique place within the world of agriculture, blending art, science, and practical skill to cultivate the fruits, vegetables, flowers, and landscapes that nourish both body and spirit. It is a field that not only sustains life but enriches it, creating beauty and fostering biodiversity. My journey as a horticulturist has been one of constant discovery, and it is with great excitement that I present - Horticulture: The Fascinating World.

In this book, I aim to bring the wonders of horticulture to life, exploring its diverse branches and its role in shaping our environment and economy. From plant propagation and landscape design to the science of plant nutrition and pest management, horticulture offers a wide array of opportunities to innovate and improve how we interact with nature. I have endeavored to present these concepts in a way that is accessible to students, professionals, and anyone with a passion for plants and the natural world.

As Assistant Professor at Mahakaushal University Jabalpur " I have had the privilege of working with talented students and faculty who share my enthusiasm for horticulture. Their energy and curiosity have been a constant source of inspiration. This book is a reflection of the knowledge and experiences I have gained throughout my career, and it is my hope that it will serve as a valuable resource for those looking to deepen their understanding of this dynamic field.

I am deeply grateful to the many colleagues, researchers, and students who have contributed to my work and to this book. Their insights have been instrumental in shaping the ideas presented here. I also extend my appreciation to the horticulturists and growers whose dedication and innovation continue to advance our field.

Horticulture: The Fascinating World is both an introduction to the subject and an invitation to explore its many dimensions. I hope it inspires readers to look at plants and the environment with new eyes, appreciating the delicate balance that sustains our ecosystems.

> Dr. Nimisha Jain Tiwari Dr.Mohini M Dange Dr. Alpeshkumar. V. Khanpara Shaivya Singh Dr. Richa Sao

TABLE OF CONTENT

Sl. No	Particulars	Page No
1.	THE ROOTS OF HORTICULTURE: A	1-19
	HISTORICAL OVERVIEW	
	Nimisha Jain Tiwari	
2.	GREEN THUMB SCIENCE: THE ART AND	20-36
	SCIENCE OF PLANT	
	GROWTH	
	Dr. Mohini M Dange	
3.	FLOURISHING IN EVERY SEASON:	37-56
	UNDERSTANDING PLANT LIFECYCLES	
	Dr. Mohini M Dange	
4.	GARDENS OF THE WORLD: GLOBAL	57-80
	HORTICULTURAL PRACTICES	
	Deepika Jakhar	01.100
5.	THE WONDERS OF PROPAGATION: SEEDS, CUTTINGS AND	81-100
	GRAFTING	
	Deepika Jakhar	
6.	SUSTAINABILITY IN HORTICULTURE:	101-125
	GREENING THE FUTURE	
	Deepika Jakhar	
7.	FRUITS OF LABOR: THE MAGIC OF EDIBLE	126-147
7.	GARDENS	120-147
0	Dixita Prajapati	
8.	INDOOR HORTICULTURE: BRINGING NATURE INSIDE	148-165
	Darshana R Vasava, Neeta K Barad	

9.	TECHNOLOGY IN THE GARDEN: INNOVATIONS IN MODERN HORTICULTURE Karishma Borah	166-184
10.	THE SOIL BENEATH: UNDERSTANDING SOIL SCIENCE AND IT'S IMPORTANCE	185-208
11.	Vikram Parmar URBAN GARDENING: TRANSFORMING CITY SCAPES WITH PLANTS	209-227
	U.C. Chaudhari, V.D. Rathva	
12.	PEST CONTROL: BALANCING NATURE IN THE GARDEN Mitesh Makwana, Mangesh Soni	228-247
13.	FROM FLOWERS TO FOLIAGE: A STUDY OF	248-266
	PLANT AESTHETICS Reshme Moirengjam, Sushma Devi Mayengbam	
14.	THE HEALING POWER OF PLANTS:	267-275
	HORTICULTURE THERAPY AND WELLNESS Tanishka Saikia	
15.	WATERING WISELY: IRRIGATION AND WATER MANAGEMENT IN GARDENS Satish Kumar	276-294
16.		295-303
	PLANT VARIETIES Saleha Diwan, Mohammedtarik Saiyad	
17.	INTEGRATING TREES WITH HORTICULTURAL SYSTEMS FOR SUSTAINABLE PRODUCTIVITY	304-320
	Ayushi Trivedi	

18.	AGRONOMY PRACTICES IN HORTICULTURE: ENHANCING SOIL	321-343
	HEALTH AND CROP YIELD	
	Nirjharnee Nandeha	
19.	Integrated Pest Management in Horticultural	344-365
	Crops	
	Tanishka Saikia, Hiren Das	
20.	HORTICULTURE TOOLS AND TECHNIQUES; A	366-371
	GUIDE FOR GARDENERS	
	A.K. Karthikeyan	
21.	CLIMATE AND CULTIVATION: HOW WEATHER	372-390
	SHAPES HORTICULTURE	
	A.V. Khanpara, H.N. Patel	