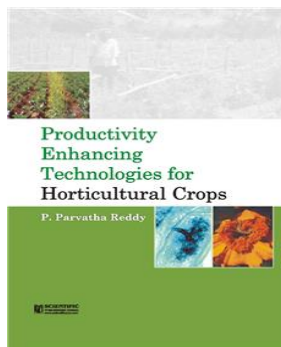


Productivity Enhancing Technologies for Horticultural Crops

[P. Parvatha Reddy](#)



ISBN	: 9788172336721	Book Format	: Book
E-ISBN	: 9789387307933	Binding	: Hard Bound
Language	: English	Edition	: 1
Imprint	: Scientific Publishers	© Year	: 2011
Pages	: 431	Trim Size	: 6.5 x 9.75
Weight	: 930 Gms		

Print Book : ~~₹2,950.00~~ **₹2,655.00** **10%Off**

Individual E Book : **₹3,835.00**

Institutional E Book : **Price available on request**

Blurb

The average productivity of most horticultural crops in India is low. There is a wide gap between yields obtained and potential yields with improved varieties and technologies. Programmes, therefore, need to be taken up to reduce the yield gap by improving productivity. The present book deals with productivity enhancing technologies such as use of high yielding varieties/hybrids, high density planting, micro-irrigation, fertigation, protected cultivation, bio-regulators, biotechnological approaches, integrated nutrient, weed, pest, disease and nematode management in general and crop-wise in particular. The book is illustrated with excellent quality photographs enhancing the quality of publication. The book is written in lucid style, easy to understand language along with adoptable recommendations for enhancing the productivity.

Table of Contents

Section I: Principles of Productivity Enhancing Technologies

1 Introduction

- 1.1. Growth performance of horticultural sector
- 1.2. Gap in potential and realized yields
- 1.3. Potential for enhancing productivity
- 1.4. Interventions needed for enhancing productivity
- 1.5. Nutritional security

2 High Yielding Varieties and F1 Hybrids

- 2.1. High yielding varieties
- 2.2. F1 Hybrids
- 2.3. Resistant varieties
- 2.4. Nutrition rich varieties

3 High density planting

- 3.1. Methods to achieve HDP
- 3.2. Advantages of HDP
- 3.3. Planting system
- 3.4. Constraints in adoption of HDP systems

4 Micro-irrigation

- 4.1. Water losses under various irrigation systems
- 4.2. Area under drip irrigation
- 4.3. Advantages of micro-irrigation

5 Fertigation

- 5.1. Advantages of fertigation
- 5.2. Nutrient use efficiency

6 Integrated nutrient management

- 6.1. Optimum leaf nutrient status
- 6.2. Manure and fertilizer recommendations
- 6.3. Methods of application
- 6.4. Biofertilizers

7 Bioregulators

- 7.1. Rapid mass multiplication of the planting material
- 7.2. Stimulation of lateral branching in young trees
- 7.3. Induction of flowering
- 7.4. Promoting the growth and development of fruits

8 Biotechnological approaches

- 8.1. Tissue culture
- 8.2. Molecular biology
- 8.3. DNA fingerprinting
- 8.4. Genetic engineering
- 8.5. Perspectives, limitations and environmental risks
- 9 Protected cultivation
 - 9.1. Protected cultivation of vegetable crops
 - 9.2. Protected cultivation of flower crops
 - 9.3. Photoselective shade-netting
- 10 Post-harvest management
 - 10.1. Post-harvest losses
 - 10.2. Pre-harvest treatments
 - 10.3. Post-harvest treatments
 - 10.4. Grading, packaging and transport
 - 10.5. Storage
 - 10.6. Value addition
 - 10.7. Waste utilization
 - 10.8. Marketing
- 11 Integrated weed management
 - 11.1. Preventive methods
 - 11.2. Cultural methods
 - 11.3. Mechanical methods
 - 11.4. Soil solarization
 - 11.5. Biological methods
 - 11.6. Allelopathy
 - 11.7. Chemical methods
 - 11.8. Integrated methods
- 12 Integrated pest management
 - 12.1. Integrated pest management
 - 12.2. Biointensive integrated pest management (BIPM)
- 13 Integrated disease management
 - 13.1. Resistant cultivars
 - 13.2. Biological control
 - 13.3. Plant growth promoting rhizobacteria (PGPR)
 - 13.4. Foliar spray therapy
 - 13.5. Non pathogenic strains (NPS)
 - 13.6. Strobilurin fungicides
 - 13.7. Biotechnological approaches
- 14 Integrated nematode management
 - 14.1. Economic importance
 - 14.2. Integrated nematode management
 - 14.3. Biointensive integrated nematode management
 - 14.4. Low input sustainable INM strategy
- Section II: Crop-Wise Productivity Enhancing Technologies
- 15 Horticultural crops
 - 15.1. Importance of horticultural crops
 - 15.2. Export of horticultural produce
- 16 Fruit crops
 - 16.1. Banana
 - 16.2. Citrus
 - 16.3. Papaya
 - 16.4. Pineapple
 - 16.5. Sapota
 - 16.6. Mango
 - 16.7. Avocado
 - 16.8. Grape
 - 16.9. Gauva
 - 16.10. Passion fruit
 - 16.11. Apple
 - 16.12. Peach
 - 16.13. Plum
 - 16.14. Pear
 - 16.15. Apricot
 - 16.16. Litchi
 - 16.17. Strawberry
 - 16.18. Sweet cherry
 - 16.19. Almond
 - 16.20. Pomegranate
 - 16.21. Ber
 - 16.22. Amla
 - 16.23. Custard apple
 - 16.24. Fig
 - 16.25. Tamarind
 - 16.26. Date palm
 - 16.27. Jack fruit

17 Vegetable crops

- 17.1. Potato
- 17.2. Tomato
- 17.3. Brinjal
- 17.4. Chilli
- 17.5. Sweet pepper
- 17.6. Okra
- 17.7. Onion
- 17.8. Garlic
- 17.9. Leek
- 17.10. Carrot
- 17.11. Radish
- 17.12. Beet root
- 17.13. Turnip
- 17.14. Cabbage, Cauliflower and Knol-khol
- 17.15. Pea
- 17.16. Cowpea
- 17.17. French bean
- 17.18. Pigeon pea
- 17.19. Lab lab bean
- 17.20. Water melon
- 17.21. Musk melon
- 17.22. Cucumber
- 17.23. Bitter gourd
- 17.24. Bottle gourd
- 17.25. Pointed gourd
- 17.26. Ridge gourd
- 17.27. Sponge gourd
- 17.28. Snake gourd
- 17.29. Pumpkin
- 17.30. Squash
- 17.31. Lettuce
- 17.32. Amaranthus
- 17.33. Spinach beet/Palak
- 17.34. Drumstick (Moringa)

18 Ornamental crops

- 18.1. Rose
- 18.2. Carnation
- 18.3. Gerbera
- 18.4. Tuberose
- 18.5. Gladiolus
- 18.6. Chrysanthemum
- 18.7. China aster
- 18.8. Marigold
- 18.9. Gaillardia
- 18.10. Crossandra
- 18.11. Golden rod
- 18.12. Anthurium
- 18.13. Hibiscus
- 18.14. Barleria

19 Medicinal crops

- 19.1. Coleus
- 19.2. Ashwagandha
- 19.3. Isabgol
- 19.4. Opium poppy
- 19.5. Macuna pruriensis
- 19.6. Henbane
- 19.7. Kacholam
- 19.8. Brahmi
- 19.9. Senna
- 19.10. Dioscorea
- 19.11. Khasi Kateri
- 19.12. Solanum laciatum
- 19.13. Thyme

20 Aromatic crops

- 20.1. Jasmine
- 20.2. Mint
- 20.3. Geranium
- 20.4. Vetiver
- 20.5. Rosemary
- 20.6. Patchouli
- 20.7. Davana
- 20.8. Chamomile

21 Tuber crops

- 21.1. Sweet potato

21.1. Sweet potato	
21.2. Cassava (Tapioca)	
21.3. Colocasia	
21.4. Yams	
22 Plantation crops	
22.1. Coconut	
22.2. Areca nut	
22.3. Cashew nut	
22.4. Coffee	
22.5. Tea	
22.6. Betel vine	
22.7. Cocoa	
23 Spice crops	
23.1. Black pepper	
23.2. Cardamom	
23.3. Ginger	
23.4. Turmeric	
23.5. Coriander	
23.6. Fenugreek	
23.7. Fennel	
23.8. Cinnamon	
23.9. Cumin	
23.10. Ajowan	
23.11. Dill	
23.12. Other spice crops	
24 A roadmap ahead for golden revolution	
24.1. Enhancing productivity	
24.2. Reducing cost of production	
24.3. Area value share of horticultural crops in crop sector	
24.4. Growth rate analysis of crop groups in agriculture and allied sectors	
24.5. Disaggregate analysis of growth performance of horticultural crops	
24.6. Technology interventions needed in horticultural sector	
References	
Appendix - Acronyms	
Subject index	

This is computer generated document and does not require signature

Scientific Publishers

Date :- Thu Dec 02 2021