

Production & Management of Fruit Crops in Arid-Drylands

By Sontakke MB

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Production & Management of
FRUIT CROPS IN
ARID/DRYLANDS

By
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(Editor)



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FOREWORD

Most of the horticultural crops are high yielding and high value crops. The importance of dry land fruit crops is well known due to their high nutritive value, low cost of production and little care required for their management. These crops are grown in different states of India. But, Employment Guaranty Scheme (EGS) linked horticultural programme in the year 1990 in Maharashtra gave impetus to cultivation of dry land fruit crops. Stabilizing the production of fruit crops under dry land conditions by the adoption of viable soil and crop management practices is the need of the hour. The book “**Production and Management of Fruit Crops in Arid / Dry Lands**” contains articles on cultivation of dry land fruit crops with regard to soil and climatic requirement, nutrient management, soil moisture conservation, pest and disease management, Integrated weed management, role of micro organisms, bio- technology, cropping system and processing. It is interesting that the inclusion of very rare, less-known, neglected fruit crops like aonla, bael, jamun, custard apple, fig, guava, jackfruit, lasora, pomegranate, carambola and their suitability for commercial cultivation is made in this book. Articles on intercropping, alley cropping, integrated farming system, suitable post-harvest and processing technology focus on natural resource management and value addition have also been included. Information exclusively on the production and management of fruit crops under arid and dry land conditions is a long felt need. As such, this book will cater to the needs of the researchers, students, extension workers and farming community. I congratulate the editor Dr. M. B. Sontakke, who has shouldered the responsibility of compiling and meticulously checking the articles and editing of manuscript even after retirement. His knowledge, wisdom, experience in the field of horticulture and charismatic energy is appreciable. I congratulate the scientists for their pain taking efforts to contribute and share their technical expertise with the users. The publication is timely and will attract farmers for cultivation of dry land fruit crops. The efforts made by Agrotech Publishing Academy (ATPA) Udaipur, Rajasthan for publishing this book are noteworthy. I hope this book will receive wide response from the students, scientists and farmers within the country and abroad.

Date 12-12-12

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PREFACE

Due to the advances in research and technology for enhancement of quality and production in arid and dryland fruit crops from time to time, it was felt necessary to write a book on these fruit crops. This need compelled me to request my colleagues and friends to write various chapters on arid and dryland fruit crops on different aspects taking into consideration the common syllabus of agricultural universities covering undergraduate and post graduate degree of Horticulture and Agriculture discipline.

Accordingly, teachers and research workers specialized in various aspects and crops have contributed their chapters .I am grateful to all contributors of this book for taking efforts in timely submission of different chapters.

I hope this book entitled “**Production and Management of Fruit Crops in Arid/Drylands**” will be useful to the students, scientists, research workers, teachers, extension workers and farmers.

(DR. M.B. SONTAKKE)

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ABOUT THE BOOK

The book under the reference on “**Production and Management of Fruit Crops in Arid/Drylands**” is the first of its kind written and edited by eminent scientists. India is receiving about 1100-1200 mm rainfall, its distribution is very erratic and uneven which leads to moisture scarcity and low crop production and productivity. The production and productivity of marginal lands, therefore, becomes very difficult and serious. In such situation production and management of arid and dryland fruit crops becomes an attractive proposition. The crops like bael, karonda, fig, jamun, guava, jackfruit, custard apple, pomegranate, carambola etc. can be successfully grown in these regions and above mentioned soils for higher productivity. Chapters on cultivation aspects of these and other aspects such as post harvest management, weed management, cropping system, and value addition are included in the book. In India, about 30% area under dryland agriculture accounts for marginal or wastelands, having shallow depths and uneconomic crop productivity. This land can be utilized for growing these crops successfully. Thus, there is tremendous scope for increasing the area under arid and dryland fruit crops in the country.

However, there is limited information on arid and dryland fruit crops at a place written scientifically for the use by undergraduate, post graduate students and research workers of the agricultural universities. This book is mainly written as a reference book/text book considering the common syllabus of undergraduate and post graduate students of agricultural universities. Considering the above fact, this book will serve the purpose.

ABOUT THE AUTHOR

DR. M.B. SONTAKKE born on 05-08-1946, in a reputable farmers family of Parbhani district, has passed all the examinations in first division right from Matriculation to Ph.D in Horticulture. He stood first class first in “Sanskrit” optional subject in H.S.C in the Board exam(1965) and also first class first in order of merit in B.Sc (Agri.)exam in Marathwada University, Aurangabad in 1969.He took Ph.D. degree in Horticulture(1981) from UAS, Bangalore with 3.88/4.00 CGPA and was first in merit order. He has completed Ph.D. research at Indias No. 1 Institute in Horticulture i.e IIHR, Hessaraghatta, Bangalore. He knows languages like English, Marathi, Hindi, Sanskrit, German, and Kannada.

He was recipient of scholarships like ICAR,(4 years of B.Sc (Agri.),Govt. of India National merit scholarship (2 years of M.Sc. (Agri.) and Senior ICAR Fellowship (Ph.D). He worked for 33 years w.e.f 1971 to 2004 in Agricultural University in different capacities and posts like SRA, Assistant Professor, Professor, Senior Research Officer (Hort.) and Head, University Department of Horticulture, MAU, Parbhani and retired in August 2004. He worked in Professor cadre for 28 years, out of 33 years of service from 1976 to 2004. He worked as Principal at College of Horticulture, Phaltan (Satara) under MPKV, Rahuri, after retirement from Parbhani.

He is life Member of Indian Society of Vegetable Science, New Delhi, Horticultural Society of Gujarat (Navsari) and Horticultural Society of Karnataka (Arabhavi).

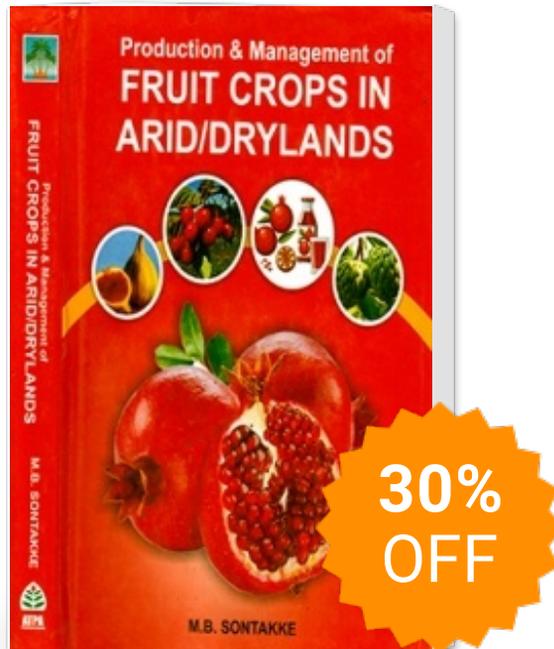
Special contribution in evolving two varieties is made and a chilli variety “Parbhani Tejas” and a mango variety “Parbhan Bhushan” is bred and released. He has guided 25 M.Sc and Ph.D students in Horticulture as Chairman of Advisory Committee. He has published 40 research articles/ notes, 15 review/technical articles and 100 extension publications including popular articles/TV and radio talks. He has at his credits 10 Marathi publications in the form of bulletins, folders, booklets etc on horticultural crops. He has edited a book entitled “Production and Management of Rainfed Fruit Crops” in 2006 from Agrotech Publishing Academy, Udaipur (Rajasthan). He is author of two chapters on Onion and Garlic in book “Vegetable Crops in India”, edited by T.K. Bose and M.G. Som, Naya Prokash, Kolkotta.

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