Fungal Diseases and their Management in Horticultural Crops

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PUBLISHERS (INDIA)
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BY THE SAME AUTHOR

- Diseases of Horticulture Crops: Nematode Problems and their Management ISBN: 978-81-7233-543-4
- Integrated Nematode Management in Horticultural Crops ISBN: 978-81-7233-523-6
- Organic Farming for Sustainable Horticulture: Principles and Practices ISBN: 978-81-7233-501-4
- Plant Protection in Horticulture, Vol. 1-3 (Set) ISBN: 978-81-7233-618-9
- Insect, Mite and Vertebrate Pests and their Management in Horticultural Crops ISBN: 978-81-7233-628-8
- Bacterial and Viral Diseases and their Management in Horticultural Crops ISBN: 978-81-7233-630-1

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www.scientificpub.com

Published by:
Scientific Publishers (India)
5-A, New Pali Road, P.O. Box 91,
Jodhpur – 342 001, India

E-mail: info@scientificpub.com
Web: www.scientificpub.com

ISBN: 978-81-7233-629-5
eISBN: 978-93-86347-61-9

Reprint from Plant Protection in Horticulture
Volume 2, 359 pp. (2010)
ISBN: 978-81-7233-616-5

Binding at: Rajasthan Law Book Binding Works, Jodhpur

Printed in India

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My brothers

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P. Basava Reddy
P. Chandrasekhara Reddy

PREFACE

Horticulture in India is fast emerging as a major commercial venture, because of higher remuneration per unit area and the realization that consumption of fruits and vegetables is essential for health and nutrition. In the last one decade, export potential of horticultural crops has significantly increased attracting even multinationals into floriculture, processing and value added products.

During 2005-06 coverage of area under various horticultural crops in the country was 19.237 million hectares (which is about 13.08% of the total cultivated area) with production of 185.207 million MT. The horticulture sector contributed around 28% of GDP in agriculture. India is the largest producer in the world of cashew nuts, coconuts, tea, ginger, turmeric and black pepper. India is the second largest producer of fruits and vegetables (after China) with a production of 58.74 and 109.05 million MT and contributes 10.9 and 11.9% share in global fruit and vegetable production, respectively. India is the second largest producer of flowers after China. About 126,000 hectare of area is under floriculture, producing 694,000 million tonnes of loose flowers annually (2005-2006). The production of cut flowers has increased to 2,762 million numbers. India is still a marginal player in the world floriculture trade indicating strong potential that can be exploited in this sector. India is the third largest producer of coconut, fourth largest producer and consumer of rubber and sixth largest producer of coffee in the world.

Productivity of horticultural crops in India is relatively low compared to other countries. Of the several factors responsible for lower productivity of horticultural crops, fungal diseases are considered as important limiting factors. Some disease problems are of national importance which causes significant losses to horticultural crops. Diseases of horticultural crops continue to cause losses of about 10% of the crop yields worth more than Rs. 15,000 crores annually. More than 9,600 MT of technical grade fungicides are used annually to manage the diseases in India.

The information on fungal diseases of horticultural crops (fruits, vegetables, plantation, spice, tuber, ornamental, medicinal and aromatic crops) is very much scattered. There is no book at present which comprehensively and exclusively deals with the above aspects on horticultural crops. The present book deals with integrated disease management in horticultural crops in detail using regulatory, physical, cultural, chemical, biological, host plant resistance and integrated methods. The book is extensively 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 involving eco-friendly components of IDM.

In view of greater emphasis being given by the Government of India to horticulture by establishing horticulture mission and exclusive State Horticultural Universities, there is an urgent need for good text books to teach courses on different disciplines of horticulture. In this context the present book is of immense help to all those concerned with diseases of horticultural crops.

This book is a practical guide to practicing farmers of horticultural crops. Further, it is a useful reference to policy makers, research and extension workers and students. The material can also be used for teaching under-graduate and post-graduate courses. Suggestions to improve the contents of the book are most welcome (E-mail: reddy_parvatha@yahoo.com).

I profusely thank Dr. K. Srinivasan, Chief Agricultural Economist, TAFE, Chennai; Dr. N. Ramachandran, Indian Institute of Horticultural Research, Bangalore; and Dr. Dr. V.K. Das and Dr. D.K. Ghosh, National Research Centre for Citrus, Nagpur; who have kindly made available many of the photographs included in this book. The Publisher, Scientific Publishers (India), Jodhpur, deserves commendation for their professional contribution.

Bangalore **P. Parvatha Reddy**

August, 15th, 2009

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