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## BOOK REVIEWS

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**Diseases of Vegetable crops-** by R. S. Singh, Professor of Plant Pathology & Dean, Post-Graduate studies, G. B. Pant University of Agriculture and Technology, Pantnagar, India. (Published by Oxford and IBH Publishing Co., New Delhi) pp. 346. Price Rs. 39.50.

Next to cereals and pulses, vegetables occupy an important place, in the diet of predominantly vegetarian population of India. According to dietary standards a man's diet must include 200–300 g of vegetables per day but the per capita availability of vegetables is less than 100 grams. Losses in vegetable production, transit and storage due to ravages of fungi, bacteria, viruses, nematodes etc are enormous and no reliable estimates are available. Practically there are no good books on vegetable diseases of India and this book by Prof. R. S. Singh fulfills this need. The contents comprise of eleven chapters including brief introduction, diseases of potato, tomato, eggplant and chilli, cruciferous vegetables, cucurbits, pea and beans, beet and spinach, onion and garlic, okra, coriander, carrot and lettuce and sweet potato, colocasia, ginger, yam and cassava. As has been stated in the preface, the diseases described in this book are not necessarily only those reported from India. Similarly many diseases described in other countries are not covered in this book. The author has made serious effort to select diseases that are well known in this country and also those that are of serious nature outside India and are likely to be introduced into India sooner or later for reasons beyond control. The introductory chapter briefly presents definition of disease, terms used in describing the diseases together with their pathogens, causes of plant disease, disease triangle, diagnosis, major symptoms, management and problems faced in the process. The various diseases covered provide information on symptoms, causal organisms, disease cycle and environmental relations and control measures. Thus the book provides very valuable information in a comprehensive manner to the graduate and post-graduate students/researchers of Plant Pathology.

The following are some of the short comings in the book: Many of the photographs especially Figs. 27, 32 are indistinct. The nomenclature used for the viruses is not the one currently in vogue. Tomato spotted wilt- a widely prevalent and important disease of tomato in India and some other countries has been completely

omitted. The statements made in the resistance of varieties such as Kufri Jyoti to late blight of potato on p. 21 and 29 are contradictory. The coverage of some of the important diseases such as powdery mildew of okra, muskmelon wilt and damping off of vegetables is not adequate. Measures like rotation and cultural practices recommended for the control of some diseases, have not been clearly specified. Though a good deal of effort has been made to cover all Indian literature, yet many references have been omitted.

These shortcomings in no way reduce the importance or technical value of this publication and these have been indicated only for the guidance of the author in any future revision of this book. The book is moderately priced and is warmly recommended to Graduate and Post-Graduate students of Horticulture and Plant Pathology as well as extension workers and progressive farmers.

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**Solid State Physics** by S. L. Kakani and C. Hemarajani (Published by Sultan Chand & Sons, 23, Daryaganj, New Delhi 110002), 1984, pp. 591, Price Rs.47-50

The book 'Solid State Physics' by S. L. Kakani and C. Hemarajani is basically a text book for M.Sc. level students of Physics. The syllabus on Solid State Physics of various universities is generally covered in this book. The chapters of the book are Crystal structure, Crystal diffraction and reciprocal lattice, Crystal binding, elastic properties of solids, lattice vibrations, thermal properties of solids, Free electron theory of metals, Band theory of metals, Insulators and Semiconductors, Magnetism, Dielectric and optical properties of solids, Dislocations in Crystals, Magnetic resonance, Superconductivity, Mossbauer effect and Masers and Lasers. The contents of this book are very close to the books by Kittel:- Introduction to Solid State Physics are Dekker:- Solid

State Physics which are very popular. There are a couple of other books on Solid State Physics by our national authors as well. This book is a very valuable addition to the text books on Solid State Physics.

There is a distinct feature of this book which makes it more interesting. It has a set of solved problems at the end of each chapter. The book would have been more useful (i) if there were references to some important books and review articles, (ii) if the examples chosen had been more realistic and (iii) if the

questions at the chapter end were more thought provoking. In spite of these, the book is extremely well written, with detailed analysis of all calculations and concepts and has the insight of a teacher who has taught the subject very effectively.

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## ANNOUNCEMENTS

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### ALL INDIA SYMPOSIUM ON MODERN TRENDS IN COMPARATIVE ANIMAL PHYSIOLOGY

All India Symposium on Modern Trends in Comparative Animal Physiology will be held during 1–3 February 1986. The symposium will provide an opportunity to research scientists working on different aspects of Animal Physiology to discuss and exchange their views. Financial assistance for the symposium has been sought from the University Grants Commission, New Delhi.

The papers submitted in the following areas will be of special interest and relevance to this symposium.

1. Neurophysiology;
2. Behavioural Physiology;

3. Endocrine Physiology;
4. Reproductive Physiology;
5. Insect Physiology;
6. Biochemical Physiology;
7. Environmental Physiology including toxicity;
8. Cytophysiology and
9. Pigment cell Physiology.

All communications concerning symposium should be addressed to Prof. J. Bahadur, Director, All India Symposium on Modern Trends in Comparative Animal Physiology, School of Studies in Zoology, Jiwaji University, Gwalior 474 011.

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### NATIONAL CONFERENCE ON SCIENTIFIC INFORMATION FOR DEFENCE

The conference will be held at Vigyan Bhavan, New Delhi on 25–26 February 1986 and aims at bringing together specialists from three work environments—the Defence Services, R & D and other technical institutions/organisations and the information profession—in order to obtain their views on improv-

ing and modernising scientific information services in the subject fields of Defence interest.

For further details please contact Shri V. K. Rangra, Convener, National Conference on Information for Defence, Delhi 110 054.