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Book reviews

Plant-Fungal Pathogen Interaction: A Classical and Molecular View

H.H. Prell and P.R. Day; Springer-Verlag, Berlin, 2001, 214 pp., \$69, £48, ISBN: 3-540-56727-X

The size of this volume belies the real depth of coverage of an extensive text originally written by H. Prell for a German-speaking audience and now translated and extended with the help of P.R. Day. Prell and Day attempt to combine "classical" and "molecular" themes of plant pathology taking the reader through the various aspects of plant disease (caused by fungi) from basic resistance and compatibility to induced resistance and the evolution of plant pathogens. It is a real advantage to read a text that has been written by one (or two) authors rather than an assembly of heterogenous chapters contributed by many different experts. I particularly appreciate the homogeneity in style, crossreferencing and the general impression of continuity of the text. The book is divided up into very managable chapters that can be accessed with relative ease as individual self-contained entities. Although books about fast-moving fields risk going out of date very rapidly, this may well be a valuable reference text for its intended target audience: graduate students and specialist practitioners. Most topics of interest are covered and excellent bibliographical references, as well as advice on further reading, are available for every section. The authors manage to interweave much of the corpus of classical (fungal) plant pathology and its genetics with the most recent advances in biochemical and molecular aspects of plant-pathogen interactions. Particularly useful features of this book are the introductory chapter with a definition of terms (which are highlighted in bold and are, therefore, very easy to go back to), a glossary with the same terms at the end of the book and an index that actually works!

Are there any faults? Well, yes. Throughout the book Prell and Day try to bring together facts into generalised statements. Although this is a brave attempt, it induced me into thinking about examples where reality did not quite fit or even contradicted these statements. This was distracting. Moreover, some of the treatment of the theories introduces unnecessary complications. For example, although the hypothetical models covering the molecular aspects of elicitor-receptor recognition in gene-for-gene interactions are diverse, the elicitorreceptor model, the dimer model, the ion channel defence model and the suppressor-receptor model actually have much in common. They could probably be unified into a model with possible variations to fit the single practical cases: in reality the models as described here appear to be more like facets of the same complex machinery rather than mutually exclusive options. Another difficulty I found, at times, was the rather confusing coverage of some of the topics: it was difficult to keep going. This might be a reflection of the complexity of the subject matter, but the text seemed to add complication rather than to clarify. This is particularly the case for the diagrams that are nearly all difficult to understand and require rather careful interpretation, reading of the legend and of the main text: a rather self-defeating effort. In the next edition of this book, which I thoroughly recommend, more care should be taken for the preparation of figures, tables and explanatory diagrams. I would like to see more of them and they should be more intelligible as stand-alone parts.

These points notwithstanding, I thoroughly recommend this book for anyone venturing into the field of plant-pathogen interactions (and not only fungal ones) as well as for "old hands" who might benefit from reading about their work in a more general context.

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