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Book review

Fire Blight: The Disease and its Causative Agent, Erwinia amylovora. Edited by J.L. Vanneste. c400 pp. CABI Publishing, Wallingford. £65.00 (US$ 120.00). ISBN 0 85199 294 3.

This edited volume is an essential read for those interested in the applied and fundamental aspects of fire blight and its incitant, *Erwinia amylovora.* The book is divided into three parts. Part I deals with *The Disease* and contains four chapters: Epidemiology of fire blight (S.V. Thomson); Distribution and economic importance of fire blight (T. van der Zwet and W.G. Bonn); Genetic diversity and host range of *Erwinia amylovora* (M. Timur Momul and H.S. Aldwinckle); and Migration of *Erwinia amylovora* in host plant tissues (J.L. Vanneste and S. Eden-Green). Part II presents *The Properties of the Pathogen* in five chapters: *Erwinia amylovora*: general characteristics, biochemistry and serology (J.P. Paulin); Exopolysaccharides of *Erwinia amylovora*: structure, biosynthesis, regulation, role in pathogenicity of amylovoran and levan (K. Geider); *hrp* Genes and harpins of *Erwinia amylovora*: a decade of discovery (J.F. Kim and S.V. Beer); Disease specific genes of *Erwinia amylovora*: keys to understanding pathogenesis and potential targets for disease control (A.J. Bogdanove, J.F. Kim and S.V. Beer); Iron and fire blight: role in pathogenicity of desferrioxamine E, the main siderophore of *Erwinia amylovora* (D. Expert, A. Dellagi and R. Kachadourian). Part III discusses *Control of Fire Blight* in seven chapters: Chemical control of fire blight (P.G. Psallidas and J. Tsiantos); The development of streptomycin resistant strains of *Erwinia amylovora* (A.L. Jones and E.L. Schnabel); Breeding for resistance to fire blight (Y. Lespinasse and H.S. Aldwinckle; Transgenic varieties and rootstocks resistant to fire blight (J.L. Norelli and H.S. Aldwinckle); Fire blight risk assessment systems and models (E. Billing); Biological control of fire blight (K.B. Johnson and V.O. Stockwell); and Integrated orchard and nursery management for the control of fire blight (P.W. Steiner). Extensive lists of references follow each chapter. I found the index comprehensive and user-friendly.

The Editor, Joel L. Venneste should be congratulated for soliciting reviews from investigators well-established in fire blight research. Consequently, this volume presents a wealth of information not easily tractable and also contains personal insights that are generally penciled-out of research publications. Like all edited volumes involving multiple authors, the style and presentation of each chapter differ somewhat. However, the inclusion of figures, color prints, and flow diagrams in generally well composed text makes reading a pleasant experience. This book will be most helpful to those students who are pursuing or considering pursuing research in fire blight and its pathogen. In addition, experienced researchers, orchard owners, nurserymen, and extension personnel will find the volume most valuable as a resource material.

I have only few minor criticisms of the book. I was somewhat disappointed that there is little about chromosomal genetics except for the *hrp* and *ams* regions. By contrast, the properties of plasmids are well-described by A.L. Jones and E.L. Schnabel in Chapter 12. Several global regulatory systems have now been identified, and some description of these would have been desirable. I would also liked to have seen a discussion of the possibility that on plant surfaces *E. amylovora* forms what is now generally described as a biofilm, especially in the contexts of its epiphytic survival and its interaction with other microbes including *E. herbicola*. Anticipated developments in these areas will persuade Dr. Venneste to edit a follow-up edition, perhaps in a few years time. Those personal likes and biases aside, the edited volume, is a comprehensive treatise that will continue to serve the fire-blight community well.

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