## **Book Reviews**

*Heterobasidion annosum*: Biology, Ecology, Impact and Control Edited by S. Woodward, J. Stenlid, R. Karjalainen and A. Hüttermann. 1998. CAB International, Wallingford, Oxon OX10 8DE, UK. ISBN 0-85199-275-7. 589 pages. Stg£75.

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Heterobasidion annosum: *Biology, Ecology, Impact and Control* addresses, very successfully, the mammoth task of interpreting and integrating the vast literature on the most important disease of conifers of northern temperate regions. With the experience and expertise of the contributors, the publication represents an invaluable source for people involved in any capacity with *Heterobasidion annosum*. It was produced with grant support from the European Union, and represents excellent value for money for the funding agencies and for anyone who purchases it. The content of this book could easily have been extended over a number of volumes. Careful and precise writing and edited have, however, condensed it into a focused publication which really needs careful reading and rereading to ensure that one does not miss some of the finer points, which are all presented, but not laboured.

It is a thoroughly useful and up-to-date work which takes us through many aspects of the pathogen and the resulting disease, from symptomatology and associated host-pathogen interactions (both physical and biochemical), through the biology and epidemiology and into an excellent control section which will be welcomed by those primarily concerned with disease management. The taxonomic treatment acknowledges the older name *Fomes annosus*, which many people still insist on using, and all the associated taxonomic niches. It quickly moves on to the current situation, as is found with many pathogens today, where not only do we need to accept and use the correct name *Heterobasidion annosum*, but also to appreciate the diversity within the genus and more particularly, within the species. It can now be separated into up to five recognised intersterility groups, many of which are now themselves worthy of being considered as new species. In that context, there are excellent chapters on the diagnosis, differentiation and distribution of the different intersterility groups. These chapters even include useful and usable methodology which one rarely finds in an all-encompassing publication on any disease.

With over 2,000 references, this book will be an essential resource for anyone involved in research or teaching. The control chapters and appendices, ranging from the chemical and biological options to the silvicultural and host resistance options, even including the relatively recent SAR concept. The disease modelling and cost-benefit chapters present us with a thorough assimilation of the state of current knowledge and practice. One needs to look no further!

From the Irish perspective, though we have relatively little local work on which to draw, the reports from European and North American regions on the impact and occur-

rence of the problem and the current management practices, will reassure us as to our current approaches to managing this major pathogen.

My only real criticism has to be in relation to the presentation and colour tone of the colour photographs. There were probably some practical and economic reasons for clustering the plates into eight pages, but all, except the photomicrographs and diagrams, would have really benefited from a more enlarged presentation and positions adjacent to their relevant chapters.

Notwithstanding this slight reservation, the book will be indispensable to many for as long as they have an interest in any aspect of *Heterobasidion annosum*. The originators of the idea and the contributors and editors can all be proud of their work.