

Book Review

Lundquist, J.E., Hamelin, R.C. (Eds.). 2005. *Forest Pathology: From Genes to Landscapes*. APS Press – The American Phytopathological Society, St. Paul, Minnesota, USA. 173 pp. ISBN 0-89054-334-8.

This book proves that apart of well developed field of agrobiotechnology there is also well growing and developing forest biotechnology. It also well demonstrates that many genetic strategies – that have shown great potential for pest and pathogens control in agricultural crops – can be also applied in forest pathology and forest protection.

The broad scope of the book and large number of its chapters do not allow to mention – even shortly – their contents. For this reason only the titles of chapters are provided below as they clearly indicate the topics covered.

Chapter 1 “Forest pathology in the era of genomics” – R. C. Hamelin (p. 1–7).

Chapter 2 “Application of molecular genetic tools to studies of forest pathosystems” – M. S. Kim, N. B. Klopfenstein, and R. C. Hamelin (p. 9–20).

Chapter 3 “Assessing forest-pathogen interactions at the population level” – B. Richardson, N. B. Klopfenstein, and T. L. Peever (p. 21–30).

Chapter 4 “Population genetics of bark beetles and their associated blue-stain fungi with the use of molecular markers” – D. L. Six (p. 31–39).

Chapter 5 “Naturalization of host-dependent microbes after introduction into terrestrial ecosystems” – G. I. McDonald, P. J. Zambino, and N. B. Klopfenstein (p. 41–57).

Chapter 6 “Molecular analysis of fungal pathogenesis in forest pathogens” – B. Temple and W. E. Hintz (p. 59–68).

Chapter 7 “Sap stain in trees, logs and lumber: fungi, pigment, and pigment biosynthetic pathways” – C. Breuil, C. Fleet, and P. Loppnau (p. 69–77).

Chapter 8 “Transgenic approaches to increase pathogen disease resistance in forest trees: a case study with poplar” – R. Mentag and A. Seguin (p. 79–87).

Chapter 9 “Operational uses of disease resistance in conifer tree improvement programs” – R. S. Hunt and C. C. Ying (p. 89–94).

Chapter 10. “Forest disease impacts on wildlife: beneficial?” – C. H. Stubblefield (Holte), J. E. Lundquist, and B. van der Kamp (p. 95–103).

Chapter 11. “Impact of diseases and other disturbances on non-timber forest resources: a case study involving small mammals”. – J. E. Lundquist and J. P. Ward, Jr. (p. 105–112).

Chapter 12 “Characterizing regional forest health and sustainability – a case study using diameter distributions, baseline mortality, and cumulative liabilities” – B. D. Rubin and P. D. Manion (p. 113–120).

Chapter 13 “Exotic ecosystems: where root disease is not a beneficial component of temperate conifer forests” – W. J. Otrosina (p. 121–126).

Chapter 14 “Use of spatial statistics in assessing forest diseases” – R. M. Reich and J. E. Lundquist (p. 127–143).

Chapter 15 “Patterns in diseased landscapes: a case study of a lodgepole pine forest infected by dwarf mistletoe” – J. E. Lundquist (p. 145–153).

Chapter 16 “Landscape pathology – forest pathology in the era of landscape ecology” – J. E. Lundquist (p. 155–165).

Concluding chapter has a title “Forest pathology in the era of integration and synergy” (p. 167–168).

Very good “Subject index” (p. 169–173) and “Scientific names index” (p. 174–175) facilitate the use of this highly interesting book that I recommend to forestry agricultural libraries.

The APS Press merits congratulations on publishing this very interesting book that will well accepted by the researchers active in forest sciences.

Jerzy J. Lipa
Institute of Plant Protection
Miczurina 20, 60-318 Poznań, Poland