

Book Review

K. O. Britton (ed.). 2004. **Biological Pollution: An Emerging Global Menace**. APS Press – The American Phytopathological Society, St. Paul, Minnesota (USA), 113 pp.

In the “Preface” (p. IV–V) the editor associated with the USDA Forest Service emphasizes that during the last few decades biological pollutants – due to unwise human activities – create a bigger hazard than chemical pollutants. In fact, production and/or use of chemical pollutants can be reduced or prevented by quick administrative decisions. On the contrary, this is not the case with biological pollutants, being the living organisms, which grow, multiply and spread by themselves.

The book consists three parts which provide answers to three questions and topics: (1) “What is the problem?”; (2) “Weeds, diseases and other pests”; (3) “What is to be done?”.

The part titled “What is the problem?” (p. 1–27) contains three chapters.

Chapter 1. “Controlling biological pollution” by K.O. Britton (p. 1–7) enlightens the role of agricultural activities in spreading unintentionally weeds and plant pests and pathogens to regions where they create serious environmental problems.

Chapter 2. “An ecological explosion in slow motion” by R.G. Westbrooks and P. White (p. 8–13) presents several examples of economic losses in agriculture, forestry or in environment due to intended or unintended introduction of 4500 plant and or animal species to the North America e.g. bird *Sturnus vulgaris* or plant *Solanum viarum*.

Chapter 3 “Exotic Pests: Past, Present, and Future” by P.N. Windle (p. 17–27) provides quantitative data on introductions of exotic species to North America in the following categories: plants and plant pathogens, terrestrial vertebrates, fishes, mollusks and insects. Economic and environmental implications of such introductions are discussed.

Part “Weeds, diseases, and other pests” (p. 28–70) contains three chapters concerning important categories of weeds, pests and plant diseases.

Chapter 4. “Exotic weeds: expensive and out of control” by R.G. Westbrooks and R.E. Epple (p. 28–35) indicates that losses due to exotic weeds exceed 20 billions of dollars in the USA. Preventive and control measures conducted by governmental agencies are reviewed e.g. biological control of weed *Euphorbia esula*.

Chapter 5. “Plant diseases on the move” by K.O. Britton et al. (p. 36–50) reviews economic impacts and control of such important plant diseases as potato blight (*Phytophthora infestans*), chestnut blight (*Cryphonectria parasitica*), pine blister rust (*Cronartium ribicola*), Dutch elm disease (*Ophiostoma ulmi*), plant viruses transmitted by *Bemisia tabaci*.

Chapter 6. “Plant parasitic nematodes which are exotic pests in agriculture and forestry” by L.D. Dwinell and P.S.. Lehman (p. 51–70) reviews such quarantine nematodes as *Globodera rostochiensis*, *G. pallida*, *Bursaphelenchus xylophilus*, *Heterodera glycines*, *Radopholus similis* and others. Costs and benefits of excluding nematodes has been discussed.

Part three “What is to be done?” contains four chapters.

Chapter 7 “Meeting the threat: risk assessment and quarantine” by M.H. Royer and E. Podlecki (p. 71–81) explains the procedure of “pest risk analysis” applied by the USDA in establishing of import and export regulations preventing invasion or introduction of quarantine pests.

Chapter 8. “Assessing exotic threats to forest resources” by W.E. Wallner (p. 82–95) reviews various measures preventing introduction/invasions of insects, pathogens and weeds dangerous to forests in the Northern America. Special attention was given to insects such as *Lymantria monacha*, *L. dispar* and *Anophophora glabripennis*.

Chapter 9. “Political and economic barriers to scientifically based decisions” by F.T. Campbell (p. 96–101) critically reviews the United States Government policies concerning plant quarantine.

Chapter 10. “Fighting back” by K.O. Britton (p. 102–113) discusses problems of forest quarantine and plant protection in terms of “think globally” but “act locally” what means that there must be a good legislation but also effective endorsement of available regulations in all countries participating in the trade of agricultural and forestry products.

I strongly recommend this book to all persons concerned with agricultural, forestry and environmental topics.

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