

Book Review

Kahn R.P., Muther S.B. (eds.) 1999. Containment Facilities and Safeguards for Exotic Plant Pathogens and Pests. APS Press, St. Paul, 213 pp. ISBN 0-89054-197-3

The American Phytopathological Society merits congratulations for publishing that very important book which covers scientific, regulatory and technical issues concerning plant quarantine. It can be truly said, that history of plant protection to a great extent may be considered as a history of evident mistakes or lack of care in international transfer of living plants or plant materials. A great number of pests, pathogens and weeds were in fact non-intentionally introduced with plants into new continents or geographic regions causing serious economic losses to agriculture, horticulture and forestry.

Due to intensification of world import and export of plants, plant products and exchange of plant germplasm plant quarantine became a great issue and the subject of international standards adopted under the International Plant Protection Convention (IPPC). However, the key factors in plant quarantine are at the national level and depend on system of precautions enforced during import and export as well as research and developing phytosanitary measures based on pest risk analysis (PRA).

The book consists four parts and twenty five chapters. Part 1 titled "Background" (p. 1-16) contains three chapters that discuss background, regulatory and biological information that relates to plant quarantine covered in other three parts.

Part 2 titled "Facilities and safeguards with emphasis on seeds" (p. 17-78) contains seven chapters characterizing institutions where safeguards and facilities are designed mostly for processing seeds, but some also may work on vegetatively-propagated crops. Individual chapters are devoted to: International Maize and Wheat Improvement Center (CIMMYT), International Center for Tropical Agriculture (CIAT), International Rice Research in the Dry Areas (ICARDA), International Crops Research Institute for Semi-Arid Topics (ICRISAT), International Institute of Tropical Agriculture (IITA).

Part 3 titled "Facilities and safeguards with emphasis on vegetative propagating materials" (p. 79-160) contains nine chapters referring to quarantine centers, stations and other facilities in various countries e.g. USA, the Netherlands, Kenya, China, Portugal, Angola. Of particular interest is chapter on planning and construction of the National Plant Germplasm Quarantine Center in the United States.

Part 4 titled "Facilities and safeguards for deliberate importation of plant pests and pathogens" (p. 161-204) contains six chapters concerning work with foreign pathogens, nematodes and insects. Of special interest are three chapters "Facilities and procedures to prevent the escape of insects from large-scale rearing operations", "High-security containment facilities in the United States for fungal plant pathogens of quarantine significance" and "Greenhouse pest exclusion and eradication safeguards and principles". Particularly, the last mentioned chapter contains recommendations and technical solutions that should be observed in any greenhouse – commercial or quarantine.

This book will be a valuable source of information on principles, concepts, information, data and guidelines concerning plant protection and plant quarantine to professionals in research and academic institutions and quarantine services. It will stimulate also decision makers for approval and funding of projects of quarantine facilities.

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