

R2M Rapid Risk Assessment to Support Mitigation of Plant Disease: A Toolbox for National Programs

Dr. Karen Garrett
Preeminent Professor
University of Florida

The ability of national agricultural research and extension systems (NARES) and national plant protection organizations (NPPOs) to address emerging pathogen and pest risks is key to national food security. Many countries globally are in the process of improving these systems. R2M is a set of tools for rapid risk assessment and mitigation planning for crop pathogens and pests at the national or regional level. These tools can help countries develop their strategies for effective management of current crop disease problems, as well as new invasive pathogens and pests. R2M tools act as building blocks in the development of a global surveillance and mitigation system for crop disease. The R2M 'meta-tool' for expert knowledge elicitation allows leaders in national programs to create their own tools for evaluating risk and mitigation strategies. R2M also includes geographic risk analysis such as cropland connectivity analysis, and management scenario analysis such as impact network analysis. We provide examples of R2M applications in several countries and introduce the latest R2M options available for new applications.