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Fundamentals of Integrated Disease Management Approaches on Major Tropical Fruit Crops in India

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Abstract: Plant disease indicates the impairment of normal state to abnormal state additionally interruption or modification of physiological function results significant crop losses worldwide. Integrated disease management is a strategic consortium with a combination of biological, cultural and chemical control. The key principle of IDM is framed with the objective to find out possible eco-friendly measure by which we can protect our crops and environment conjointly. For the proper implementation of IDM strategies, we need several branchlet policies in the sector of land use, education and awareness, plant protection, trade and export, private sector investment, agricultural extension and food safety under the same umbrella. Diverse agroclimatic situation by considering tropical, sub-tropical and temperate land condition prefers different kinds of fruit production and helps to gain a prestigious position in world's fruit production. To maintain the same rank in long term basis is a challenge itself. The base of sustainable agriculture in developing countries fully depends on wide basis skill adoption of IDM strategies in terms of disease management, field management, insightful knowledge, crop rotation and productivity at farmer's level. In the present context with this chapter we are trying to focus on IDM practices applied in major tropical fruit crops in India.

Keywords: IDM, sustainable agriculture, agroclimatic, tropical fruit

1. Introduction

Plant diseases are found to appear and established in our environment with diverse group of microorganisms like fungi, bacteria, viruses, phytoplasma, nematodes etc and construct substantial amount of yield loss worldwide. Integrated disease management is a modern tool by which we can combat such types of biotic stresses and natural