

ANTAGONIST YEAST: AN EFFICIENT BIOAGENT FOR THE CONTROL OF POST HARVEST PATHOGENS OF FRUITS

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ABSTRACT

Over the years, use of chemical fungicides has been employed as primary method in postharvest disease management of fruits. Although effective, their long-term applications caused disruptions in equilibrium of ecosystems, environmental problems, health hazards to human and animals. Thus, safety of synthetic fungicides in delicate foods like fruits has alarmed legal enforcers and consumers to demand green technology and quality products. Antagonistic organisms have enormous potential to influence agrochemical research. Among them, yeasts are found to be very effective particularly against various post harvest diseases of fruits. Yeasts are a group of fungi which are very efficient in colonizing the wound sites and hence provide protection against various postharvest pathogens through mechanisms like competition for nutrients and space, augmentation of various defense responses in the host and tolerance to reactive oxygen species. Advantages of using of yeasts as biocontrol are controlling environmental conditions during storage suitable for the bioagents as well as the fruits, easy application to the target site and economic viability considering the high cost value of the fruits.

KEYWORDS: Antagonistic Organisms, Fruits, Post-harvest diseases, Yeasts

Original Article

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