Molecular Characterization of Mucor circinelloides and Rhizopus stolonifer Strains Isolated from Some Saudi Fruits

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Abstract:

Thirteen strains of Mucor circinelloides and nine strains of Rhizopus stolonifer were collected from different Saudi fruits. Also, two strains of M. circinelloides and one strain of R. stolonifer isolated from soil were used in this study to analyze the genetic diversity among these 25 strains. The dendrogram constructed from random amplified polymorphic DNA–polymerase chain reaction results using two primers (V6 and M13) showed no correlation between clustering system and sources of isolation for M. circinelloides strains, while Rhizopus strains clustered according to the sources of isolation. The phylogenetic tree based on the unweighted pair group method with arithmetic average of internal transcribed spacer (ITS) rDNA sequence revealed the variation of the ITS region among Mucor strains as well as Rhizopus strains.

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