Identification of Electrophoretic Protein Pattern of *Fusaium Verticillioides* Isolates from Maize by SDS-PAGE

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Abstract

Background and Objective: Some of them possess high allergenic components and some produce the various toxins such as fumonisins and T2-toxins. Among the Toxigens, *Fusarium verticillioides* (*Gibberella moniliformis*) is intensely toxigen. This fungus produces B1, B2, B3 fumonisins on some crops. The purpose of this study is the identification of an electrophoretic cytoplasmic protein pattern of Iranian *Fusarium verticillioides*.

Material and Methods: In this study 20 isolates of this species were analyzed. Using the Bradford method was measured protein range of each isolate and obtained its' molecular weight by SDS-PAGE.

Results: The results indicated total 50 protein bands with molecular weight from 7 to 157 KD. Maximum protein bands were related to F4 and F10-c isolates with moderate toxigenicity and minimum protein bands to M2-a, K6 and A7-b isolates with Low, moderate and high toxigenicities.

Conclusion: The comparison of the electrophoretic cytoplasmic protein pattern of isolates with grouping based on toxigenicity did not show any correlation between their protein pattern and range of toxigenicity.

Keywords: protein pattern, *Fusaium verticillioides*, SDS-PAGE

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