RESEARCH ARTICLE

MORPHOLOGICAL AND GENETICAL DIVERSITY ANALYSIS OF *ALTERNARIA* ISOLATES FROM DIFFERENT HOST PLANT

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Abstract: *Alternaria* is a plant pathogenic fungus with a wide host range and causes disease in different types of plant. In the present study, eleven *Alternaria* isolates were collected from infected samples of different host plant belonging to diverse families. Identification and study of diversity study was done based on the morphological features of the isolates i.e., colony characteristics size, septation and beak length of conidia. Genetical variability among the isolates was carried out by using three RAPD primers. All isolates were identified as belonging to the genus *Alternaria*. The diversity analysis showed that seven of the isolates were different from each. However, TD7 and TD2 resembled in their morphological as well as genetical characters, similarly TD17 and TD12 were also found similar. No significant relationship could be established between host plant infected and pathogen morphological or genetics. It was however apparent that *Alternaria* sp. may be morphologically similar but genetically dissimilar. The genus *Alternaria* was highly variable in their morphological and genetical characters. All the eleven isolates, including the two pairs of similar isolates, showed significant genetical variability.

Keywords: *Alternaria* sp., Conidia, Plant pathogen, RAPD

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