

STUDY OF THE *CYLINDROCARPON* SPECIES ASSOCIATED WITH CORN AND CANOLA CROWN AND ROOT ROT IN KHUZESTAN PROVINCE *

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(Received: 8. 11. 2010; Accepted: 20. 7. 2011)

Abstract

Root and crown rot of corn and rape seed is one of the most important disease attack to these crops at various stages of their growth and cause considerable damage to these crops. For study and identification of the *Cylindrocarpon* species associated with corn and rape seed plants in Khuzestan province, this study was conducted during growing season of 2006-2007. Samples were collected from different field in different region of Khuzestan In that study 207 isolates of *Cylindrocarpon* were recovered. isolates belonged to the 5 species which based on there frequency are as follow: *C. destructans* (96), *C. didymum*(69), *C. hederiae*(25),), *C. obtusisporum*(14), *C. macrodidymum* (3). This is the first report of the association of these species of *Cylindrocarpon* with corn and rape plants in the World. *Cylindrocarpon* isolates specific primers ITS4 & ITS5 were used. specific primers amplified a 500-560 bp band which is a confirmation of *Cylindrocarpon* species. Comparision of the generated sequences from the mentioned species with the available sequences in the gene Bank, using Blast Browsers indicated that all of the generated sequences belonged to the *Cylindrocarpon* species. *Cylindrocarpon* grouping using ITS sequences was corresponding to the classification of this genus based on morphological characteristics. This shown that sequences determination of ribosomal its rignon is a valuable tool in the assessment of the phylogenetic relation of *Cylindrocarpon* species.

Keywords: Canola, Maize, Khuzestan, *Cylindrocarpon*, ITS, rDNA.

See Persian text for figures and tables (Pages ۳۱۷ -۳۲۹).

*: A Part of MSc. Thesis of the First Author, Submitted to College of Agric., Shahid Chamran University of Ahvaz, Ahvaz, Iran.

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