

RESEARCH ARTICLE

Genetic variability in isolates of *Exserohilum turcicum* causing turcicum leaf blight of maize

■ T. RAJESHWAR REDDY^{1*}, P. NARAYAN REDDY¹, R. RANGA REDDY² AND S. SOKKA REDDY³

¹Department of Plant Pathology, College of Agriculture, Acharya N.G. Ranga Agricultural University, Rajendranagar, HYDERABAD (A.P.) INDIA

²Maize Research Station, Agricultural Research Institute, Rajendranagar, HYDERABAD (A.P.) INDIA

³Department of Biotechnology, College of Agriculture, Acharya N.G. Ranga Agricultural University, Rajendranagar, HYDERABAD (A.P.) INDIA

ARTICLE INFO

Received : 02.09.2013
Revised : 01.02.2014
Accepted : 15.02.2014

Key Words :

Variability, *Exserohilum turcicum*, leaf blight, RAPD, Maize

ABSTRACT

Turcicum leaf blight caused by *Exserohilum turcicum* is an economically important disease of maize. The genetic variability was studied of seven isolates of *E. turcicum* from maize and one isolate of *E. turcicum* from sorghum using RAPD markers. All the isolates exhibited considerable variation in their genetic level. Out of 60 polymers used for amplification, 20 were able to amplify the DNA of all the seven isolates of maize and one sorghum isolate. The number of amplified products were highest for the primer OPH7, followed by OPD11, OPD13 and OPA9. Least number of products were generated by OPA6 followed by OPC16 and OPH15. Co-efficient values of each isolate derived from RAPD study were presented in Table 1. Among the 7 maize isolates of test pathogen, highest similarity co-efficient 0.85 was shown between isolates of Guntur and Warangal followed by 0.70 between isolates of Karimnagar and Guntur, and between isolates of Karimnagar and Warangal. Lowest similarity co-efficient 0.51 was seen between Khammam and Karimnagar isolates, followed by 0.53 between Khammam and Almora isolates.

How to view point the article : Reddy, T. Rajeshwar, Reddy, P. Narayan, Reddy, R. Ranga and Reddy, S. Sokka (2014). Genetic variability in isolates of *Exserohilum turcicum* causing turcicum leaf blight of maize. *Internat. J. Plant Protec.*, 7(1) : 50-54.

*Corresponding author: