

Cultural and morphological variability among the Isolates of *Alternaria alternata* (Fr.) Keissler, incitant of fruit rot of chilli

■ C.M. GINOYA AND N.M. GOHEL*

Department of Plant Pathology, B.A. College of Agriculture, Anand Agricultural University, ANAND (GUJARAT) INDIA

ARTICLE INFO

Received : 22.12.2014

Revised : 15.02.2015

Accepted : 03.03.2015

KEY WORDS :

Alternaria alternata, Fruit rot, Chilli,
Capsicum annum, Cultural and
Morphological Characterization

ABSTRACT

Cultural and morphological variability studies on seven different media viz., potato dextrose agar, host leaf extract agar, host fruit extract agar, oatmeal agar, Richards' agar, Czapek's Dox agar and Rose Bengal agar revealed considerable variation among the isolates of *A. alternata* indicated the existence of variability in the pathogen. Moreover, Oatmeal agar and potato dextrose agar were found as an excellent media to support the growth and spore formation of isolates of *A. alternata*, respectively. In case of isolates, Ahmedabad isolate (Aa-7) (61.90 mm) and Rajkot isolate (Aa-8) (61.71 mm) were at par in supporting the mycelium growth and Anand isolate (Aa-1) supports the sporulation abundantly. Among eight isolates of *A. alternata*, distinct differences in terms of conidial length, breadth, beak length and number of septa were recorded. The average conidial length varied from 16.93 to 59.24 μm and breadth ranges from 6.90 to 14.98 μm with beak length of 3.25 to 44.07 μm . The transverse and longitudinal septa varied from 2 to 10 and 0 to 4, respectively. In the present studies, glaring differences in conidial size were noticed among the isolates even when same medium was used for the growth of the isolates. It can be assumed that variation in the isolates may be inherent since isolates were collected from diverse agroclimatic zones of Gujarat. Hence, these variations in the conidial size indicated the existence of variability in this pathogen.

How to view point the article : Ginoya, C.M. and Gohel, N.M. (2015). Cultural and morphological variability among the isolates of *Alternaria alternata* (Fr.) Keissler, incitant of fruit rot of chilli. *Internat. J. Plant Protec.*, 8(1) : 118-125.

*Corresponding author:

Email: nareshgohel@aau.in