

# **Morphological and Cultural Variability of *Colletotrichum* Spp. Causing Anthracnose of Chilli (*Capsicum annuum* L.) in Andhra Pradesh**

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## **ABSTRACT**

Anthracnose disease, caused by *Colletotrichum* spp. is one of the major economic constraints to chilli production in tropical and subtropical regions. The different isolates of *Colletotrichum* species were collected from different chilli growing areas of Andhra Pradesh during the survey conducted for recording anthracnose disease. The isolates were evaluated for their morpho-cultural characteristics and pathogenic variability on chilli fruits. The pathogenic behaviour of the 15 isolates of *Colletotrichum* spp. developed from fruits was established following Koch's postulates. All the isolates of *C. truncatum* and *C. gloeosporioides* produced black pointed setae, hyaline falcate and cylindrical conidia with a single oil globule at the centre. Colony growth rate (6.0 to 8.8 mm day<sup>-1</sup>), shape of the conidia, length and width of the conidia, colony colour, colony texture varied among the isolates. The majority of the isolates produced profuse sporulation. To know the virulence of the isolates fruits were inoculated with all the isolates and the results suggested that isolate CC14 caused the maximum anthracnose intensity (53.0 per cent) while CC2 showed the least intensity (16.5 per cent).

**Keywords:** *Anthracnose, Chilli, Colletotrichum truncatum and C. gloeosporioides and variability.*