

Research Article

## PCR-Based Detection of Different Isolates of *Colletotrichum chlorophyti* Causing Anthracnose in Safed Musli (*Chlorophytum borivilianum* Santapau and Fernandez) in Southern Rajasthan

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### Abstract

*Colletotrichum* is one of the most common and unusual plant pathogenic genus and ethologic agent of anthracnose disease and plays an important role on agricultural subsistence economics world-wide. Molecular analysis using ITS sequence data is a useful tool to give a preliminarily identification for *Colletotrichum* species or place them in species complexes. PCR-Based detection of *C. Chlorophyti*, twenty five isolates of the safed musli anthracnose pathogen obtained from four districts of Southern Rajasthan viz., Udaipur, Rajsamand, Pratapgarh and Banswara. All the isolates of *C. chlorophyti*, showed molecular variation when PCR reactions conducted with DNA samples and all strain confirmed a high level of specific for primers ITS1 and ITS4 that provided a bright for positive amplification with target DNA from the complete set of *C. chlorophyti*. Amplification of the genomic DNA and generated PCR products of band sizes range from 420 to 459 base pair which compared well with published data.

**Key words:** Anthracnose, *Colletotrichum chlorophyti*, ITS primers, molecular variations, safed musli

**Citation:** Tetarwal JP, Rawal P, Sharma P; D Jain and Joshi A. 2016. PCR-based detection of different isolates of *Colletotrichum chlorophyti* causing anthracnose in safed musli (*Chlorophytum borivilianum* Santapau and Fernandez) in Southern Rajasthan. *J Mycol Pl Pathol* 46 (4): 387-394