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RESEARCH PAPER

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Management of anthracnose in soybean caused by Colletotrichum truncatum

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ABSTRACT

A study was conducted in the Department of Plant Pathology and Agricultural Microbiology, Mahatma Phule Krishi Vidyapeeth, Rahuri, Ahemednagar, Maharashtra during 2014 to 2015 to control *Colletotrichum truncatum* causing anthracnose or pod blight of soybean with fungicides and bioagents. All the fungicides and bioagents evaluated *in vitro* were found effective against *C. truncatum* and recorded significant inhibition of the test pathogen over untreated control. However, carbendazim was found most effective and recorded 0.66 mm mean colony diameter and significantly highest growth inhibition (99.26%) of the test pathogen. This was followed by mancozeb (98.88%), hexaconazole (84.44%), chlorothalonil (80.00%), propiconazole (78.15%) and difenconazole (32.22%). Out of the six bioagents evaluated *in vitro T. viride* and *T. harzianum* recorded significantly highest growth inhibition (78.88%) followed by *T. hamatum* (77.04%), yeast (40.37%), *P. fluorescens* (27.77%) and mehandi leaf extract (17.77%). *In vitro* physiological study of pathogen shows that *C. truncatum* grew well at 27°C temperature with 75 per cent relative humidity.

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