Evaluation of *Trichoderma* isolates for their Antagonistic Potential against Fusarium oxysporum f. sp. ciceri in-vitro

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ABSTRACT

Twenty four sympatric isolates of *Trichoderma* from six different chickpea growing mandals of Prakasam district, Andhra Pradesh and one isolate from Bapatla were assessed for their antagonistic efficacy against Bapatla isolate of *Fusarium oxysporum* f. sp. *ciceri* (*Foc*), chickpea wilt causing soil borne plant pathogen. Variation was observed among *Trichoderma* isolates tested in their antagonistic potential. Screening of *Trichoderma* isolates was done based on the radial growth of interacting test fungi, overgrowth, zone of inhibition, pigmentation of *Foc* and sporulation of *Trichoderma*. Five potential isolates were identified, *i. e.*, T 19001, T 19007, T 19012, T 19020, T 19023 which were fast in growth and overgrowing the *Foc*. T 19001, T 19007 and T 19012 isolates were found to overgrow and sporulate on *Foc*. Media pigmentation in *Foc* changed from light colour in monocultured *Foc* plates to dark in dual cultured plates in interactions involving T 19020 and T 19023 isolates, however, without sporulation on the test pathogen.

Keywords: Antagonistic potential, Fusarium oxysporum f. sp. ciceri, inhibition zone, Trichoderma.