Efficacy of botanicals against *in vitro* growth of *Corynespora cassiicola*, cause of Target leaf spot in cotton

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ABSTRACT

Corynespora leaf spot (target leaf spot) of cotton caused by *Corynespora cassiicola* (Berk. and Curt.) Wei. emerged as a major disease in cotton growing areas of Andhra Pradesh. Management of the disease by locally available botanicals is an ecofriendly approach in view of resistance developed against effective fungicides. Hence an effort was made to observe the antifungal activity of botanicals *in vitro*. Five aqueous leaf extracts *viz*., neem, datura, lantana, tulasi and pongamia along with commercially available herbal mixture i.e., Ezee cotton (Perfekt) were tested at 5% and 10% concentrations under *in vitro* conditions. Herbal mixture, Perfekt induced complete inhibition (100%) growth of *C. cassiicola* at both the concentrations. At 10% concentration the highest inhibition percent was shown by pongamia leaf extract (51.47%) followed by neem leaf extract (49.98%). At 5% concentration highest per cent of inhibition was shown by neem leaf extract (39.90%) followed by pongamia leaf extract (26.09%).

Key words: *Botanicals,Cotton, Corynespora cassiicola and Mycelial inhibition*