

Field Evaluation of Fungicides, Biocontrol Agents and Botanicals Against *Alternaria* Leaf Spot of Cotton

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ABSTRACT

A field trial was conducted to test the efficacy of four fungicides, three biocontrol agents and two plant extracts against the *Alternaria* leaf spot on cotton at Regional Agricultural Research Station, Lam, Guntur, during *khariif*, 2016-2017. The chemical and biological treatments were applied as sprays at 90, 105 and 110 DAS i.e., at flowering, boll formation and boll maturity stages. Seed treatment with carboxin + thiram at 2 g kg⁻¹ of seed and foliar spray with carbendazim + mancozeb significantly reduced intensity of disease to 6.82% with 80.6% disease control and yield of 1571 kg ha⁻¹. An increased yield of 55% and benefit cost ratio of 1.61 was recorded. Seed treatment with carboxin + thiram at 2 g kg⁻¹ of seed and foliar spray with *Pseudomonas fluorescens* at 5% and *Bacillus subtilis* at 5% were on a par with ST with carboxin + thiram at 2 g kg⁻¹ of seed and FS with captan and hexaconazole at 0.1%.

Key words: *Alternaria macrospora*, Biocontrol agents and Botanicals, Cotton leaf spot, Fungicides.