

Research Article**Management of Alternaria Blight of Pigeonpea Caused by *Alternaria* spp. Using Chemicals, Botanicals, Biological Control and its Integration****Nidhika Rani¹, HC Lal², Praveen Kumar³, Savita Ekka², Binay Kumar² and Niraj Kumar²**

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Abstract

Pigeonpea make a well- balanced human food. It provides a superior protein to the vegetarian population of India. Pigeonpea cultivation in eastern India has been limited by severe outbreak of Alternaria blight caused by *Alternaria* spp. Evaluation of six different fungicides, bioagents and botanicals against Alternaria leaf blight of pigeonpea were carried out in research farm of Birsa Agricultural University, Ranchi during 2016-17 and 17-18 to determine their efficacy. Among the fungicides, seed treatment and two foliar application of Tilt (0.1%) recorded least disease intensity (13.83%) which was better than other treatment and with most extreme grain yield (1400.34 kg ha⁻¹) of pigeonpea. Both seed treatment and foliar application with *Trichoderma harzianum* 1 was observed viable, least disease intensity of 15.49 per cent was recorded in sprayed plot, combined with most elevated grain yield (1337.78 kg ha⁻¹). In botanicals sprayed plot least disease intensity of 12.16 per cent was recorded in Garlic (clove) extracts combined with most noteworthy grain yield (1341.74 kg ha⁻¹). In IDM approach, the minimum disease intensity (11.16%) was recorded from T₁ (Seed treatment with SAAF @ 2g kg⁻¹ of seed in addition to two foliar sprays with Tilt @ 0.1%) significantly gave more grain yield of 1352.16 kg ha⁻¹.

Key words: Alternaria blight, bioagents, botanicals, fungicides, IDM, pigeonpea

Citation: Rani N, Lal HC, Kumar P, Ekka S, Kumar B and Kumar N. 2021. Management of Alternaria blight of pigeonpea caused by *Alternaria* spp. using chemicals, botanicals, biological control and its integration. *J Mycol Pl Pathol* 51 (1): 36-47