

Research Article

Management of Alternaria Blight of Marigold (*Tagetia erecta* L.) incited by *Alternaria tagetica* Shome and Mustafee**Mamta, Rajender Singh and Naresh Mehta**

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Abstract

Marigold (*Tagetes* spp. Linn.) is one of the most commonly grown ornamental and commercially exploited flower crop in India. But leaf spot and flower blight by *Alternaria tagetica* Shome and Mustafee serves as a major bottleneck to its cultivation especially in Haryana. Therefore, the present investigation was undertaken using different fungicides *i.e.* mancozeb, chlorothalonil, copper oxychloride, tebuconazole, propiconazole and neem leaf extract *in vitro* and *in vivo*. Fungicides tebuconazole and propiconazole (1000 µg ml⁻¹) exhibited 98.89 and 97.78 per cent mycelial growth inhibition *invitro* followed by mancozeb, copper oxychloride and chlorothalonil *i.e.* 47.78, 42.22 and 41.87 per cent, respectively. Whereas, neem leaf extract at all the concentration was not effective against the pathogen. Application of fungicides in combination with seed treatment revealed that tebuconazole (0.1%) and propiconazole (0.1%) controlled disease up to 12.84, 15.71 per cent on leaves and 8.65, 10.27 per cent on flowers providing 82.80, 78.96 per cent and 89.97, 88.09 per cent control on leaves and flowers, respectively under field condition. The highest avoidable flower yield loss of 70.88 per cent was recorded in unsprayed plot in comparison to four sprays of mancozeb (0.2%). A negative significant (-0.99) correlation was observed between flower blight intensity and flower yield.

Key words: *Alternaria tagetica*, flower yield loss, fungicide, marigold.

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