

Research Article**Integrated Management of Chickpea Wilt Caused by *Fusarium oxysporum* f.sp. *ciceris***

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Abstract

Wilt of chickpea caused by *Fusarium oxysporum* f.sp. *ciceris* is a devastating disease of chickpea that causes substantial yield reduction under field conditions. Two years studies were conducted during Rabi 2016-17 and 2017-18 seasons in Jammu province to ascertain the status of chickpea wilt at farmers field, *in-vitro* assay of fungal and bacterial biocontrol agents and fungicides against the mycelial growth of *Fusarium oxysporum* f.sp. *ciceris* and evaluation of seed treatment of biocontrol agents and fungicides alone and in combination for the management of wilt of chickpea under field conditions. In the present study, maximum incidence of chickpea wilt (15.42-21.25%) was recorded from Jammu province, followed by 12.17-20.35 per cent and 9.54 and 22.83 per cent from Samba and Kathua districts, respectively. Under laboratory conditions, maximum growth inhibition of 98.67 and 78.44 per cent were recorded by carbendazim and *T. harzianum* (Th-III). On integrated management of chickpea wilt, azoxystrobin alone as well as in combination with both the bioagents, besides carbendazim has been found most effective and recorded lower disease incidence, higher indices of seed germination, grain yield, disease control and increase in yield over control, whereas, bioagents *viz.*, *T. viride* and *T. harzianum* recorded maximum seed germination in both the crop seasons.

Key words: Chickpea, fusarium wilt, integrated disease management

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