

Assessment of technological gap and performance of integrated diseases management approach for wilt in cumin

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ABSTRACT

The experiment was carried out to assessment of technological gap and performance of integrated diseases management (IDM) approach as a resistant variety, chemical seed dressing, soil and seed treatment as a bio-agents for antagonistic fungi on growth of cumin *Fusarium oxysporum* f. sp. cumini pathogens under field conditions. This experiment was conducted on farmer trials (OFT) villages like Bhusi, Patelo Ki Dhani and Baldo Ki Dhani in Pali distract four year (2014 to 2017). This area is major growing cumin cultivation and here major problem face farmer every year cumin wilt disease due to reduction of yields. During this experiment disease incidence of wilt was observed to be lowest (Disease Incidences 5.00%) when resistant variety GC-4, seed dressing Carbendazim @ 2.0g/ kg with *Trichoderma harzianum* @ 6g/ kg seed + application of 100 kg FYM enriched with *T. harzianum* @ 3.0 kg/ha for soil treatment before 15 days of sowing cumin. Maximum disease incidence (24.00%) was observed when traditional farmers practice (no seed treatment). The adoption of recommended improved crop production technology and plant protection measures was poor. The OFT was effective in changing attitude, skill and knowledge of IDM approach and yield increased upto 28.64 per cent more over the traditional farmers practices. Results indicates that IDM approach increased net income by Rs. 20,593/-ha over farmers practices.

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