

Efficacy of insecticidal seed treatment against pests of wheat

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ABSTRACT

Field experiments were conducted during *Rabi* 2012-13 to 2014-15 at Agricultural Research Station, Niphad, Maharashtra, India to determine the efficacy of promising insecticides used for seed treatment for the management of wheat pests. The insecticides were Thiamethoxam 30 FS @ 0.50, 0.75 and 1.00ml/kg seed, Clothianidin 50 WDG @ 0.50, 1.00 and 1.50 g/kg seed, Imidacloprid 48 FS @ 0.50 and 1.00ml/kg seed, Chlorantraniliprole 18.5 SC @ 0.50 and 1.00 ml/kg seed. Thiamethoxam 30 FS @ 1.0 ml/kg seed, Clothianidin 50 WDG @ 0.50, 1.00 and 1.50 g/kg seed and Imidacloprid 48 FS @ 0.50 and 1.00 ml/kg seed were found the most effective as they didn't show the aphid population as an untreated control recorded the maximum of 44.08 number of aphids/shoot/plant. The seed treated with thiamethoxam 30FS, clothianidin 50 WDG and Imidacloprid 48FS were found effective for the control of jassids and shoot fly. Thiamethoxam 30FS @ 1.00ml/kg seed recorded significantly highest yield of 55.26q/ha and also the highest (53.45g) 1000 grain weight. Lowest yield was observed from untreated control (34.12 q/ha). The additional yield and income over control was highest (21.14q/ha and Rs. 44480/ha) in thiamethoxam 30FS @ 1.00 ml/kg seed. The monetary returns, net profit and benefit cost ratio were maximum in treatment with thiamethoxam 30FS @ 1.00ml/kg seed (Rs.114607/-, 81377/ha and 3.44).

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