

Efficacy of Certain Newer Insecticides Against Whitefly, (*Bemisia tabaci* Gennadius) in blackgram (*Vigna mungo* Linnaeus)

Ch Jyothi, D V Sai Ram Kumar, T Madhumathi and M Adinarayana

Department of Entomology, Agricultural College, Bapatla 522 101, Andhra Pradesh

ABSTRACT

A field experiment was conducted to evaluate the efficacy of some newer insecticides against sucking insect pests in blackgram during *rabi* 2013-'14 at Agricultural College Farm, Bapatla, Andhra Pradesh. Among all the insecticides tested, seed treatment with imidacloprid 600 FS along with foliar spray of spirotetramat 150 OD was found to be more efficacious against whiteflies followed by seed treatment of imidacloprid 600 FS along with foliar spray of spiromesifen 240 SC. Seed treatment alone either with imidacloprid 600 FS or with thiamethoxam 70 WS plots were effective against sucking insect pests but their effectiveness lasted upto 25 days of sowing only as thereafter their population was found increased. Yellow mosaic virus (YMV) disease incidence was less in combination treatment of spirotetramat 150 OD followed by combination treatment of spiromesifen 240 SC and the seed yield obtained was also maximum (1096 kg.ha⁻¹) from spirotetramat 150 OD combination followed by spiromesifen 240 SC (996 kg.ha⁻¹). With regard to the incremental cost benefit ratio, spirotetramat combination recorded the highest cost benefit ratio of 8.69 followed by triazophos combination (7.89).

Key words : Blackgram, Foliar application, Seed treatment, Spiromesifen, Spirotetramat, Whiteflies.