Research Note :

Economics of indigenous materials and new insecticide molecules against pod borers of blackgram

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SUMMARY

Indigenous materials like GCK, NSKE, GE and Panchagavya registered a very high B : C ratio of 11.80, 11.08, 7.99 and 3.93, respectively. The newer insecticide molecules, flubendiamide 24% + thiacloprid 24-48% SC and emamectin benzoate recorded lower B : C ratio of 4.27 and 7.55. However, the highest BC ratio of 11.13 and 15.13 was recorded in indoxacarb and fenvalerate.

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Pulses are generally grown on marginal soils both as sole and intercrop during *Kharif, Rabi* and *summer* seasons. The pulse crops have well deep root system and have a capacity to tolerate drought. Unique characteristic of maintaining and restoring soil fertility through biological nitrogen fixation and thus play a vital role in sustainable agriculture (Asthana, 1998).

India is the largest producer and consumer of pulses in the world accounting for 33 per cent of world area and 24 per cent of world production. In India, the total area under pulses was 23.86 million hectares with a total production of 15.12 million tonnes and the average productivity of 638 kg per hectare (Anonymous, 2008).

The information is scanty on cost economics of insecticides to manage the pod borers on blackgram. Hence, present investigation was initiated to fill up this lacuna.

A field experiment was conducted during *Kharif* 2008 to evaluate the efficacy of indigenous materials and new insecticide molecules against pod borers at Agricultural Research Station, Kathalagere, Davangere, Karnataka (India) by using a blackgram variety Rashmi (LBG-625). The experiment was laid out in randomized block design with twelve treatments and three replications. The crop was sown with a spacing of 30 cm between rows and 10 cm between plants in a plot size of 3 m x 2.5 m with all agronomic practices as given in package of practices except plant protection measures.

When the crop matured, the pods were harvested individually from each net plot and threshed; weight of grain was recorded separately from each plot and worked out the cost benefit ratio.

Indigenous materials like GCK, NSKE, GE and Panchagavya registered a very high B : C ratio of 11.80, 11.08, 7.99 and 3.93, respectively (Table 1). However, Sharanabasappa (2002) reported higher BC with ratio in nimbecidine (2.91) and NSKE (2.75) against pod borers. While, Rekha (2005)