

SURVEY THE FARMERS PRACTICES FOR MANAGING POD BORER OF COUNTRY BEAN AND EVALUATION OF THE EFFECT OF VARIETY AND ECO-FRIENDLY MANAGEMENT PRACTICES AGAINST THE INFESTATION OF BEAN POD BORER (*Maruca vitrata*) IN COUNTRY BEAN

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Extended Summary

Two experiments were conducted which include a socio-technical survey during December 2013 to September 2014 with the aim at fine tuning of farmers' practices (FPs) into a more effective integrated practice for managing insect pests of country bean. The survey comprising regular inspection of country bean plots of a total of 30 jute growers for collection of technical and socio-economic data revealed a total of 5 farmers' practices (FPs) comprising of chemicals plus other components. The study revealed that the use of insecticides dominated in the FPs. Based on survey findings, the subsequent on-station experiment was conducted. On-station efficacy evaluation of 3 selected treatments, two insecticides and a neem product. In Jessore district, the highest sample farmers (33.00%) practicing FP₁ whereas the lowest sample farmers (6.67%) practicing FP₅. In Narshingdi district, the highest sample farmers (40.00%) practicing FP₁ followed whereas the lowest sample farmers (6.67%) practicing FP₄. So, the farmer practices FP₅ have positive effectiveness in controlling insect pests of jute among the sample districts. Instead of such pests attack the highest yield was found in Jessore district compare to Narshingdi districts. The effectiveness of chemical and non-chemical treatments on the attack of bean pod borer of country bean in summer was observed in tow factor experiment. Factor A consists of five varieties; V₁ = IPSA-1, V₂=BARI-3 V₃=BARI-7 and factor B consists of five treatments; T₁=Sumialpha 5 EC @ 2ml/L of water at 7 days interval, T₂= Neem seed kernel @ 50g/L of water at 7 days interval and T₃= Volume flexi 20 EC@ 2ml/L of water at 7 days interval. From the present study it was observed that the BARI-7 variety of country bean and the treatment T₃ (Volume flexi 20 EC@2ml/L of water at 7 days interval) performed the best result and their combination V₃T₃ also gave the highest result. The treatment combination V₃T₃ performed best results in increasing number of healthy flower/5 inflorescences (10.33), number of healthy pods (78.33), increased rate of length (10.67cm) and girth (7.07 cm) of 5 healthy pods, highest total weight of healthy pods (610.00gm) over the other treatment combination. The lowest number of infested flower/5 inflorescences (0.59) and number of infested pods (12.00) was recorded in V₃T₃. The yield contributing characters provided best in yield which found in V₃T₃ (7.00 ton ha⁻¹).

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