

STUDY OF THE PRESENT SCENARIO OF INTEGRATED PEST MANAGEMENT (IPM) TECHNOLOGY ON BRINJAL PRODUCTION IN SOME SELECTED AREAS OF BANGLADESH

Asma Akter*

Executive Summary

Crop production structure, changing production trends and effects of technological change on agriculture are prerequisites for agricultural growth and economic development in Bangladesh. Brinjal is an important vegetable which cultivated 7.8 % of total land and produce 126992 metric tons per annum. Yet, the growth and production of Brinjal is significantly diminished due to attack of dozens of insect pest species. Comilla is the hub of brinjal production. Integrated Pest Management (IPM) is the best practice to increase the crop production by less effecting human health and environment. The study was undertaken to understand the present scenario of IPM technology on brinjal production in prescribed areas during November 2017 to February 2018. The sample size was 60, among the farmers, 50% considered as pesticide users and 50% IPM users. Probit regression model and Cobb-Douglas production function was used to analyze the data. The study findings suggested that brinjal production cost was higher in Non IPM farmers than IPM farmers. The average yield in IPM and non-IMP farmers were 47.7 and 39.2 t/ha, respectively. In addition, IPM farmers had less cost compared to non-IPM farmers. Among the explanatory variables of probit regression, coefficient of experience was found positive and significant while distance to market and family size were negative. Cobb-Douglas production function analysis suggested that the coefficient of human labour and cowdung had positive and significant effect on yield of Brinjal. Additionally, irrigation and fertilizer had negative effect on yield. This may be due to the fact that farmers may over using the irrigation and fertilizer in the Brinjal field. Lack of technical knowledge and effectiveness of pheromone trap for all insects were the major drawback for IPM adoption. The study recommends undertaking more training and research activities to overcome the problems of IPM technology for Brinjal production.

* Assistant Professor, Dept. of Management and Finance, Sher-e-Bangla Agricultural University, Dhaka-1207