

# COMPARATIVE ADVANTAGES OF FRUIT FLY CONTROL TRAPS OVER FARMERS' PRACTICES IN CUCURBITS IN SOME SELECTED AREAS OF BANGLADESH

**Major Professor: Dr. S.M. Fakhru Islam**

Name of the author: Md. Rayhanul Islam

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## Abstract

The present study was conducted in Comilla, Jessore and Lalmonirhat districts during 2001-03 to determine and compare the relative profitability of fruit fly control traps over farmers' existing fruit fly control practices. Two crops namely, sweetgourd and bittergourd were considered with two technologies like the use of bishop traps and pheromone traps in the vegetable crops. A total of 220 farmers were purposively selected taking 60 from Comilla and 80 each from Jessore and Lalmonirhat district. The survey method was used for data collection with pre-designed interview schedules. The yields of sweetgourd and bittergourd under experimental plots were much higher (51-79%) and (12-27%) respectively than the control plots. The current practice of farmers need higher amount of inputs including insecticides, which resulted in higher costs but lower yields and returns compared to the recommended technologies. The use of fruit fly control traps was found economically beneficial for the farmers in the study areas with respect to gross margins, benefit cost ratios (2.75 to 5.63 for sweetgourd, 5.47 to 6.02 for bittergourd), return to labor and return to irrigation per taka invested. It was found that the use of labor and its cost and the cost of insecticides were saved in the experimental plots since the spraying was not allowed there. The total costs saved were tk 5357/ha from sweetgourd production, and tk 7504/ha from bittergourd production. The most important constraints to the technologies were non-availability of pheromone, attack of fruit fly, lack of quality seeds, lack of fertilizers and insecticides and lack of knowledge of improved technologies for vegetable production. However, the farmers in the study areas were very enthusiastic about the technologies for vegetables. For successful and effective dissemination of the technologies, the demonstration trials, field days, training of farmers and extension workers and distribution of leaflets and mass campaign for the technologies are useful tools to be followed. It was found that the use of labor and its cost and the cost of insecticides were saved in the experimental plots since the spraying was not allowed there. The total costs saved were tk 5357/ha from sweetgourd production, and tk 7504/ha from bittergourd production. The most important constraints to the technologies were non-availability of pheromone, attack of fruit fly, lack of quality seeds, lack of fertilizers and insecticides and lack of knowledge of improved technologies for vegetable production. However, the farmers in the study areas were very enthusiastic about the technologies for vegetables. For successful and effective dissemination of the technologies, the demonstration trials, field days, training of farmers and extension workers and distribution of leaflets and mass campaign for the technologies are useful tools to be followed.