INTEGRATION OF INTERCROPPING OF SQUASH WITH MUSKMELON FOR THE CONTROL OF BACTROCERA CUCURBITAE COQ (TEPHRITIDAE, DIPTERA)

- * Liaqatullah Khan, *Nayyar Abbas Shah, *S. Agha Shah Hussain,
- ** Abdul Khaliq
- * Department of Entomology, Faculty of Agric:, Gomal University, D.I.Khan.
- ** Department of Entomology, Arid Agriculture University, Rawalpindi.

ABSTRACT:

Intecropping of muskmelon with squash as trap crop along with spray application was better compared to the chemical control alone. Integration of first, second, and third spray of Dipterex 80SP alongwith squash was significantly better in reducing the infestation of Bactrocera cucurbitae Coq. on muskmelon than the first, second, and third spray alone. The integration of fourth spray with squash was comparatively better than fourth spray alone but did not differ significantly.

INTRODUCTION

Muskmelon (Cucumis melo L.) locally known as "Kharbooza" is grown on an area of 11629 hectares in N.W.F.P. with a total production of 138629 tonnes. In D.I. Khan division alone, it is cultivated on an area of 11603 hacteres (Anonymouus, 1992) and is one of the major cash crop of this division. It has a lot of nutritional characteristics. It is also very cheap and easy to purchase. Its rind is an important feed for animals. The embyo of the seed is used as a medicine for many stomach diseases.

Bactrocera cucurbitae Coq. is the most serious pest of this crop. Host preferences play significant role in pest control strategy. Insecticides are also very important for their prompt and effective control. The pest has a wide range of host plants and it was reported that the growth and development of its larvae was favoured by squash (Garg et al., 1979). Khan et al (1989) used squash melon as trap crop in muskmelon and obtained valuable results of this method. The experiments conducted by different workers have shown that the insecticides are very important tool for the effective control of B cucubitae (Harris et al., 1971; Nawaz, 1976; Kavadia et al., 1977; Hamid et al., 1980; Hussain et al., 1980; Bhatti, 1981; Kashyap and Hamid, 1982; Pawar et al., 1984; Chughtai et al., 1988; Pareek and Kavadia, 1988; and Khan et al., 1989).

MATERIALS AND METHODS

The crop was sown at Dera Ismail Khan on March 15, 1991 and was replicated thrice in randomized complete block design. Muskmelon was sown