

INTRODUCTION

Insect sterilization using irradiation is one of the successful application of control measures used against insect pests. However, certain problems faced this trend and consequently several studies should be carried out before mass application in order to overcome these obstacles (Monro and Baily, 1965 and Abdel-Malek et al., 1966). The effect of irradiation on insect biology, fecundity and behavioural characters as well as the possibility of development of radio-resistance among insect populations derived from irradiated ancestors are examples of these problems (Stahler, 1971). Another important factor is the competitive potential of irradiated ones under field conditions (Fried, 1971; Brower, 1978 and Adham et al., 1983 a & b, 1984).

The present study aimed at investigating the aforementioned parmeters in order to add some knowledge needed in this field, particularly when applied against the house fly <u>Musca domestica</u> L. one of the most important vectors of human diseases.