Fruit fly, *Bactrocera cucurbitae* is one of the important insect pests of Cucurbitaceous vegetables throughout India. It has been found to cause 30 to 100% loss in yield. Cucurbitaceous fruits are severely damaged either partially or totally rendering them unfit for human consumption by the pest. The fruits are damaged by the maggots as the female fly lays eggs in the tissues of fruits. The maggots feed on flesh and look like rotten fruits. The fruit fly also oviposits in tender plant tissues such as terminals, unopened flowers, young stems, roots, and seedling. This may result in the death of the plant. Due to the heavy damage caused by this pest, attempts were therefore, made to estimate the yield losses caused due to infestation of fruit fly on cucumber during the summer season in Gujarat State as such type of work had been not carried out in this State.

**MATERIALS AND METHODS**

The studies on estimation of yield losses due to infestation of fruit fly, *B. cucurbitae* on cucumber cv. Green gold was carried out in the field condition at Research Farm, College of Agriculture, Junagadh Agriculture University, Junagadh (Gujarat) during summer season of 2007 in a randomized block design. The seeds were sown in a plot size (gross) 6.00 m x 4.50 m with a spacing 1.50 m x 60 cm. All the recommended agronomic practices were also adopted. Two treatments (treated and untreated) were replicated fifteen times. In untreated plots, the crop was kept free from insecticides and subjected to the natural infestation of the pest, while the crop was protected against the cucumber fruit fly by application of fenthion 0.1% and malathion 0.1% alternatively at weekly interval starting from fruit formation to fruit maturity as they are recommended by the various workers at various places for the control of this pest. The yield of cucumber fruits obtained from treated and untreated plots was recorded. Similarly, number of infested and uninfected fruits was also recorded.

The yield increased in treated plots over the untreated (control) and avoidable loss was worked out by using the formula given by Pradhan (1969).

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\text{Yield increased (\%)} = 100 \times \frac{T-C}{C}
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\text{Avoidable yield loss (\%)} = 100 \times \frac{T-C}{T}
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