EFFECT OF TRAPINOL, PETROLEUM SPIRIT EXTRACT OF CLOVE AND SUGAR BAIT ON FRUIT FLY OF CUCURBITS

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ABSTRACT

A study was carried out in Maha (October 2000-January 2001) to evaluate the efficacy of Trapinol trap and Sugar baited trap on fruit flies of Cucurbits. It was followed by another study during Yala (April 2001–July 2001) was carried out to find out the efficacy of Petroleum spirit extract of cloves as trapping agent of Cucurbit fruit flies. The number of fruit flies species collected during this period was also identified using morphological features.

For the study in Maha, Bitter gourd (Momordica charantia) and Snake gourd (Trichosanthes cucumerina) were selected. Six Trellises were provided for these crops. Three of them were planted with Bitter gourd and other three were planted with Snake gourd. Among the Trellises, one of the Bitter gourd and Snake gourds Trellis was used as Control. Among the other four Trellises, each was constructed with a Trapinol trap and a Sugar baited with Fenthion trap. For the second study in Yala, Bitter gourd was selected as the crop plant and nine Trellises were used for this crop. Among these Trellises, three were used for each treatment (Trapinol, Clove extraction and Control). The number of fruit flies caught in traps was counted weekly.

The results of the both studies showed that, the number of fruit flies caught in Trapinol trap and trap with extract of Clove was significantly higher than the control and sugar baited trap. And there was no significant (P> 0.05) difference between Control and Sugar baited trap. However, the number of fruit flies caught in the Trapinol was significantly higher than the Clove extraction.

It has been believed that Bactrocera cucurbitae was the predominant species in this area. However, it was not trapped in any of these traps. The study in Maha (2000/2001) season showed that the distribution of fruit flies species, Bactrocera gavisa and Bactrocera sp. near tau was in equal number. However the study during Yala (2001) season showed that the number of fruit flies, Bactrocera sp. near tau trapped in these traps was significantly higher than the Bactrocera gavisa

Based on these findings, it is recommended that Trapinol trap is useful to trap fruit flies of Cucurbits.

Key words: - Clove extraction, Cucurbits, Sugar bait, Trap, Trapinol, Trellis