Evaluation of Trapping Efficiency of Slow Released Formulations of Methyl Eugenol with Lanolin Wax against Bactrocera zonata

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Abstract : The study was carried out to evaluate the performance of Slow-Released Formulations (SRF) of Methyl eugenol with Lanolin wax in orchard of the University of Agriculture Faisalabad, Pakistan against fruit flies. Lanolin wax was mixed with methyl eugenol in nine ratios (10:90, 20:80, 30:70, 40:60, 50:50, 60:40, 70:30, 80:20 and 90:10). The results revealed that SRF_{II}-7 trapped 42.1 flies /day/trap, exhibited an attractancy index (AI) of 51.71%, proved strongly attractive SRF_{II} for B. zonata and was categorized as Class-III slow-released formulation (AI > 50%). The SRF_{II}-2, SRF_{II}-3, SRF_{II}-4, SRF_{II}-5, SRF_{II}-6, SRF_{II}-8 and SRF_{II}-9 trapped 17.7, 27.9, 32.3, 23.8, 28.3, 37.8 and 19.9 flies /day/trap, exhibited an attractancy index (AI) of 20.54%, 41.02%, 26.00%, 34.15%, 43.50%, 49.86% and 46.07% AI respectively, proved moderately attractive slow-released formulations for B. zonata and were categorized as Class-II slow-released formulations (AI = 11-50%). However, SRF_{II}-1 trapped 14.8 flies /day/trap, exhibited 0.71% AI proved little or nonattractive slow-released formulation and was categorized as Class-I slow-released formulation for B. zonata (AI < 11%).

Keywords: Bactrocera zonata, slow-released formulation, lenoline wax, methyl euginol

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