

Assesment of Trapping Efficiency of Slow Released Formulations of Methyl Eugenol with Carnauba Wax against *Bactrocera zonata*

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Abstract : Present study was carried out to evaluate the performance of Slow-Released Formulations (SRF) of methyl eugenol with Carnauba wax in orchard of University of Agriculture Faisalabad, Pakistan against fruit flies. Carnauba 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 SRFCN-9 trapped 35.3 flies/day/trap, exhibited an attractancy index (AI) of 50.35%, proved strongly attractive SRFCN for *B. zonata* and was categorized as Class-III slow-released formulation (Attractive Index > 50%). The SRFCN-1, SRFCN-2, SRFCN-3, SRFCN-4, SRFCN-5, SRFCN-6, SRFCN-7 and SRFCN-8 trapped 2.0, 5.3, 3.3, 4.0, 5.7, 12.0, 9.7 and 14.3 flies/day/trap respectively exhibited an attractancy index (AI) of -70.73%, -37.25%, -55.55%, -48.93%, -34.61%, 1.40%, -9.37% and 10.25% Attractive Index respectively, proved little or non attractive slow-released formulation and was categorized as Class-I slow-released formulation for *B. zonata* (Attractive Index < 11%). Results revealed that the Slow-Released Formulation containing 10% Carnauba wax with 90% methyl eugenol trapped maximum number of flies of over 30 days.

Keywords : slow-released formulation, *Bactrocera zonata*, Carnauba wax, methyl eugenol

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