

**PILOT STUDY ON AREA WIDE INTEGRATED PEST
MANAGEMENT (AW-IPM) OF FRUIT FLY IN MANGO**

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ABSTRACT

In Sri Lanka, the fruit fly (*Bactrocera dorsalis*) is the most serious pest in mango cultivation. In 2015, a study on Area Wide-Integrated Pest Management (AW-IPM) for mango fruit fly was conducted at area Dambulla in Matale district. Thirteen commercial mango fields of more than 0.5 ha in extent scattered in 2-3 km² land area were selected for AW-IPM programme. Control field was 0.5 kilometer away from the AW-IPM field. At the time of fruit setting, methyl euginol pheromone traps were established and maintained until harvesting. Fruit flies collected in pheromone traps were counted at weekly intervals. A mixture of protein bait 400 ml and 2.5% SC Spinosad 20 ml at the rate of 16 l/ha was sprayed to underside of leaves at weekly intervals throughout the fruiting period. Damaged fruits dropped on the ground were collected into black polythene bags and destroyed.

Results revealed that AW-IPM programme significantly reduced the fruit fly population with a percentage reduction of 42.6 and 18.8 in AW-IPM and control fields respectively ($\chi^2=0.002$; DF-1) and has effectively reduced mango fruit damage over 20 per cent Implementation of AW-IPM package is

highly successful in controlling fruit flies in Dambulla area and it should be popularize in other major mango growing regions after conducting a few more adoptability trials and demonstrations

Key words: AW-IPM, fruit fly