Monitoring and management of olive fruit fly, *Bactrocera oleae* in Bethlehem region, West Bank, Palestine (2011-2012)

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Abstract:

The olive fruit fly *Bactrocera oleae* (Gmelin) (Diptera: Tephritidae) is the most serious insect pest of olive fruits in the world. This insect was observed infesting olive orchard in Palestine. If not controlled, crop losses may reach 80% in the oil producing areas and 100% in areas growing table olive varieties (Broumas et al, 2001). This research was designed to be conducted in two years (2011-2012). First year included monitoring the flight activity of the olive fruit fly in three sites in Bethlehem (Bateer, Hendaza and Tqoa); and recording the rate of infestation in each orchard, and depending on the results of the first year, a management program will be applied in the second year using control measures including: mass trapping using pheromone traps and food baits. Preliminary results of the first year showed that, the rate of infestation in orchards was at harvesting period as follows: Handaza 90%, Bateer 56%, and Tqoa 64%,

Keywords: Olive fruit fly *Bactrocera oleae*, flight activity, mass trapping.