

ABSTRACT

Forensic entomology is the use of sarcophagous insects to estimate the time of death of the dead body to resolve legal cases. The discipline focuses on the estimate of postmortem interval (PMI) that is calculated from information of flies collected on dead bodies. The main purpose of this study is to investigate the population dynamics of sarcophagous dipterans in Changhua area using bottle trap. A pilot study of seven days sampling was done to understand the optimum locations and duration for the trap. Then dipteran flies were sampled regularly every week for one year. The population dynamics of the two dominant species, *Chrysomya megacephala* and *Chrysomya rufifacies*, were analyzed. More than five generations were estimated by comparing the dynamics and environmental ADD. These results contribute to forensic entomology.

Keywords : forensic entomology、postmortem interval、population dynamic

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