

Assessment of non-biting synanthropic flies associated with fresh markets

ABSTRACT

This study was conducted to assess the composition of non-biting synanthropic flies in different fresh markets. To achieve this goal, four fresh markets –Pasar Borong, Pasar Seri Kembangan, Pasa Bukit Serdang and Pasar Taman Seri Serdang – were surveyed in Serdang, Selangor, Malaysia. Non-biting synanthropic flies from different spots, i.e. middle of the market, grocery shops, food stalls, garbage piles and vacant places within these markets were collected. A total of 1,158 flies from 15 fly species were collected during the study period. The highest number of species was found from the family Muscidae, while individuals of the family Calliphoridae were the highest in number, of which the most prominent was *Chrysomya megacephala*. The highest number of flies (52%) and species (12) were found in Pasar Borong and the most populated sampling spot was garbage piles. A significant difference between Pasar Borong and all other markets ($p= 0.0002$) was observed. A significant difference was observed in all the sampling spots at different markets except the food stalls. The study shows that fresh markets can be potential places for breeding of disease spreading flies if proper sanitation practices are not applied.

Keyword: Synanthropic flies; Calliphoridae; Muscidae; Sarcophagidae; Wet markets; Sanitation