A bionomic study of parasitoids in the Taman Beringin landfill in Kepong and a poultry farm in Sungai Pelek, Selangor, Malaysia

ABSTRACT

A four-month cross-sectional study found five species of parasitoids parasitizing puparia of filth flies breeding at the Taman Beringin landfill in Kepong and a poultry farm in Sungai Pelek, Sepang, Selangor. Effect of monthly rainfalls towards density of flies and percentage of parasitoids emerging from collected puparia were also analyzed. Spalangia sp. was the most common, consisting of Spalangia endius Walker, S. cameroni Perkins and S. gemina Boucek. Other parasitoids collected were Pachycrepoideus vindemmiae Rondani and Exoristobia phillipinensis Ashmead. The parasitized fly hosts were Musca domestica Linn. and Chrysomya megacephala Fabricius. S. endius was the most common parasitoid attacking M. domestica at both locations. M. domestica was the most common fly found at the Sg. Pelek poultry farm whereas C. megacephala was the most numerous at the Taman Beringin landfill. During heavy rainfall month of November 2003, density of flies were high whereas the emerging parasitoids were low at both landfill and poultry farm. The present study revealed the endemic presence of parasitoids especially S. endius in both poultry farm and garbage landfill and the potential of the parasitoid species in fly control in Malaysia.

Keyword: Hymenopteran parasitoid; Fly control; Spalangia sp.