Phoridae is the most biologically diversified family in order Diptera. Phoridae consists of thousands species in more than 250 genera. Phoridae or scuttle fly is a small fly (1-6 mm) that is found worldwide. Phorid fly is also known as scuttle fly due to its fast movement with stops in between flight. Phorid flies genus *Megaselia* and *Woodiphora* were found to be abundant in Malaysia forest (Idris & Sajap 2002). There were two phorid flies first time found in forensic cases which occurred in Penang, Malaysia. They were *Megaselia spiracularis* and *Megaselia curtineura* (Thevan et al. 2010). However, their distribution study in Malaysia is still limited. Thus, this study is important in recording the species of phorid flies found and its frequency distribution in Kepong, Kuala Lumpur in order to provide more benefits in forensic and medical entomology.

The location chosen was Kepong with 3.11°N, 101.42°E. There were three places chosen randomly in Kepong which are houses, market and landfill area, respectively. The fly trap used (Figure 1) was a trap modified from previous researches with 100 g of decomposed beef liver (Amoudi et al. 1989; Disney 2005). The trap was placed in each of the locations for 12 hours from 0700-1900 hours (Nazni et al. 2007). After 12 hours, the flies trapped were caught killed with chloroform and preserved in 70% ethanol (Disney 1994). The baits with eggs deposited were then reared into adults in the laboratory. The phorid flies
were then identified using established descriptions and identification keys (Disney 1994). The frequency of the phorid flies was determined according to locations and sexes.

In this research, there was lack of female phorid flies identification keys. Thus, the female phorid flies could not be identified and was labelled with numbers such as *Megaselia* sp. 1 and so on.

The distribution of phorid flies in Kepong was shown in Figure 2. From the result, adult *Megaselia* sp. 5 was not found in any of the location but had oviposition activity. *Megaselia* sp. 1 and *Megaselia* sp. 3 were found to be the most abundant inside houses. *Me. scalaris* was evenly distributed in all locations but did not have any oviposition activity. *Me. spiracularis* on the other hand was only found inside houses but had the most active oviposition activity amongst the phorid flies. There were two genus of phorid flies found in this research, the majority of genus *Megaselia* and some phorid flies of genus X. This is because *Megaselia* is cosmopolitan in nature (Disney 1994; Idris & Sajap 2002). They are highly distributed in Malaysia and other Oriental countries (Idris & Sajap 2002). *Megaselia* was transported to all over the world together with other synanthropic flies through human activities (Brown & Oliver 2007). The diversity of phorid flies in Kepong, Kuala Lumpur was found to be lesser compared to studies by Idris and Sajap (2002) where they had successfully collected 26 genera of phorid flies in five forests in Malaysia.

Most phorid flies caught were of females compared to males (Figure 3). This was because females were prone to lay eggs on decomposed organic material which had high protein content for the maturity of the eggs (Disney 1994, 2005). One of the baits was found to be occupied by larvae of *Sarcophaga* sp. and there was absence of larvae of phorid flies in this bait. This could be due to the

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**FIGURE 1.** Modified phorid fly trap (*W* = water; *C* = container; *B* = bait; *PB* = plastic bottle; *PG* = polyester gauze)

**FIGURE 2.** Phorid flies species distribution in Kepong, Kuala Lumpur. The values are stated as average ± standard error

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Landfill Area  
Market  
House A  
House B  
House C  
House D  
House E
competition occurred between both flies (Disney 2005). Besides, phorid flies do not oviposit at any corpse that had been colonized by Calliphoridae larvae or larvae of other big flies (Reiba & Madea 2010).

Most of the phorid flies caught were found inside houses compared to market and landfill area. This is because phorid flies are able to enter an enclosed area compared to other large flies (Disney & Manlove 2009). Phorid flies have smaller sizes that enable them to reach corpse enclosed in plastic bag and a building with closed door and windows (Disney 1994). Thus, this make the phorid flies important in forensic cases in confined areas. Open areas such as landfill areas and markets are known to have frequent abundance of large flies such as Calliphoridae, Sarcophagidae and Musca domestica. This is because both of these places have a lot of food such as decomposed organic food, raw food, fruits and others. Thus, competition between these large flies and the smaller phorid flies causes their absence or found in a small numbers in these open areas (Disney 2005).

Most of the phorid flies in Kepong, Kuala Lumpur were from genus Megaselia. Most phorid flies found were females. All of the phorid flies undergone oviposition except Me. scalaris and phorid fly of genus X. There might be new species of phorid flies found in this research. There were eight different phorid flies found. All the unidentified flies will be sent to Dr. Henry Disney from University of Cambridge for further identification.

FIGURE 3. Phorid flies distribution according to sexes in Kepong, Kuala Lumpur. The values are stated as average ± standard error

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