

**THE INSECTICIDAL POTENTIAL OF CHILLI PEPPER
EXTRACTS AGAINST *Musca domestica***

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ABSTRACT

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Musca domestica (Diptera: Mucidae) also known as housefly and has four stages of life cycle which are eggs, larval, pupal and adult stages. Housefly is a known vector for various diseases and is controlled by using chemical-based insecticide. Chemical-based insecticide gives harm human's health. Therefore, the objectives this research are to study the life cycle and the characteristics of *Musca domestica*, to investigate the effect of *Capsicum* spp. crude extracts towards houseflies and also to compare the effectiveness of *Capsicum* spp. as bioinsecticide. The wild houseflies were captured in plastic container and cultured in food media for two weeks. The life cycle of cultured houseflies completed in four stages which were eggs, larvae, pupae and adults within two weeks. The comparison between sex can be determined by their size and the distance between houseflies' eyes. The crude extract *Capsicum* sp. 1 and *Capsicum* sp. 2 were prepared for treatment towards houseflies along with negative control which was distilled water and positive control which was malathion. The behaviour of the houseflies after exposed to both *Capsicum* spp. and malathion solutions was positive such as lied on the surface of the surface of the container and their wings vibrate in pulse compared to distilled water. The mortality rate for *Capsicum* sp. 1 and malathion is 100 % while *Capsicum* sp. 2 was 77.8%. *Capsicum* spp. provide an alternative method for controlling houseflies as it contains natural compound such as capsaicin which have the ability to act as natural insecticide.

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