PREFACE

Among the haematophagus insects, mosquitoes cause human sufferings more than any other organisms. Millions of people all over the World suffer from dangerous diseases transmitted by Mosquitoes. Mosquito vectors determine the prevalence of mosquito borne diseases in a locality. Vector borne diseases are a major cause of human suffering both in terms of morbidity and mortality on one hand and stunting the intellectual and economic growth of the country on the other. Suitable conditions for propagation of vector mosquitoes coupled with the prevalence of disease agents have resulted in the transmission of mosquito borne diseases. Due to the population growth, destruction of eco-systems, development activities, improper management of waste materials, insufficiency in vector control activities etc led to the resurgence of vector borne diseases like Malaria, Dengue fever, Chikungunya, etc in our nation. The Global Malaria Eradication Campaign in 1950 and 1960 brought down Malaria incidences drastically in our land by the use of DDT and Chloroquine (Sharma 1996). But in later years, Malaria resurged back and reached a peak during 1970s (DHS Kerala 1978, GOI 1986) and now indigenous cases are being reported (Mariappan et al 1992). Similarly another example is the re-emergence of Chikungunya in 2005 and 2006 in our nation (http://www.nvbdcp.gov.in/chikun-cases.html).

In 2007, Kerala was the affected State in India of mosquito borne disease Chikungunya. Among the affected districts, Pathanamthitta was the second worst affected district contributing 14.37% of the total cases reported (Eapen et al 2010). The criteria for selecting Pathanamthitta district was the high incidence of confirmed cases recorded by the health department of Kerala. This was the reason why I undertook the study of medically important mosquito vectors in Pathanamthitta District.

A proper study on mosquito fauna would help in finding the distribution pattern of different mosquito species including the disease vectors in different seasons and in different ecological settings. Mosquito vector diversity determines the prevalence of mosquito-borne diseases in an area. Conducive conditions for vector population coupled with the prevalence of pathogens usually result in the transmission of mosquito-borne diseases (Kalluri et al 2007, Sutherst 2004).

As there were no such faunistic studies in Pathanamthitta district, this is only the maiden recorded mosquito fauna of this district and it would help researchers and the like to proceed further in controlling mosquitoes.