

## FOREWORD

Bionomics of medically important flies which breed in filthy material and which cause annoyance in many ways were not studied earlier in Calcutta.

In the first chapter of this work the results of investigation on the seasonal prevalence of blowflies (Calliphoridae : Diptera) and flesh flies (Sarcophagidae : Diptera) in Calcutta are reported, and the different aspects of the problem are discussed.

In the second chapter the occurrence of blowflies (Calliphoridae : Diptera) in relation to human settlement is discussed. Such association has a direct bearing on the chances of spreading fly-borne diseases. Extensive work on this aspect is considered necessary in Calcutta because of the density of population.

In the third chapter diurnal activity of medically important synanthropic blowflies (Calliphoridae : Diptera) in Calcutta is investigated and its significance discussed. Certain portions of this chapter have been published and the reprints are attached herewith.

In the fourth chapter the photophilic behaviour of different blowfly species is discussed. The result of such

studies has a bearing on hygienic problems as these blowflies might carry microbes to human foodstuff.

In the fifth chapter the relative efficiency of different material used as bait is discussed.

In the sixth chapter the findings with regard to sex-ratio of blowflies is discussed. Knowledge of the sex-ratio of the blowflies is considered important and the data obtained using baits of fish, meat as well as fruits, were analysed by statistical method to determine the actual picture of male and female population of blowflies in the study area.

In the seventh chapter results of investigation on biology and the behaviour of larvae of flesh flies which interfere with the fish and meat bait used for trapping the Calliphoridae flies are discussed. Such study is also important, because larval stages of such flies cause myiasis often leading to dangerous consequences to mankind and animals.

Eradication of flies, which are harmful from medical and veterinary standpoint, is a necessity, which the civic authorities must attend to and a thorough ecological knowledge is required for the complete eradication of these flies. Paucity of literature on ecology of harmful flies in our country has led the author to undertake the present study on certain aspects of bionomics of blowflies and flesh flies in Calcutta which is an abnormally congested city in West Bengal, India.