AIMS AND OBJECTIVES OF THE STUDY:

To provide the patients with best possible diagnosis and treatment, identification of offending allergens is of prime importance. As expected information in this regard is mostly available from western and developed countries. However, in India no such attempt has been made to identify the causative agents responsible for nasobronchial allergic disorders in Kolkata. Besides a comprehensive knowledge on the diversity and taxonomy of house dust mite fauna of Kolkata and information on habitat preference, seasonal fluctuation in population structure of some important allergenic mites is very inadequately explored. So, the present study has been undertaken to accumulate a comprehensive knowledge on the house dust mite fauna of Kolkata Metropolis along with detailed information on their diversity, habitat preference, seasonal occurrence and their probable role in nasobronchial allergic manifestations.

In order to reach the goal the study was undertaken on the following lines-

1. To explore the diversity of house dust mite fauna of Kolkata Metropolis and to work out the species diversity index, index of dominance and species richness index.

2. To conduct detailed taxonomic study of the collected mite fauna from different types of habitats, describe and illustrate the new taxa, record the hitherto unknown ones along with their habitats, distribution pattern etc. and prepare a taxonomic document.

3. To make ecological observations on important allergenic mites with special reference to their habitat preference, relative abundance and seasonal fluctuations.

4. To study the life-cycle of important allergenic mite.

5. To assess the occurrence of immediate hypersensitivity reactions against common inhalants and to establish the role of house dust and house dust mites on nasobronchial through entomological, clinical and immunological findings.