Objectives of the study

- Systematic survey, documentation, prevalence and identification of Anopheline species of Mizoram.

- To establish baseline susceptibility status of Anopheline species against commonly used synthetic insecticides by using standard WHO procedures.

- Quantitative estimation of the level of resistance enzymes - esterase, mixed function oxidase (MFO) and glutathione S- transferase of the resistant Anopheline species.

- To study the expression of acetylcholine esterase resistance gene 1 (Ace1) and cytochrome P450 (CYP6) in wild population of Anophelines of Mizoram.

- To find the genetic variations of different Anopheline species by using Randomly Amplified Polymorphic DNA-Polymerase Chain Reaction (RAPD-PCR).

- To study the phylogenetic relationship of the Anopheline species of Mizoram by using mitochondrial (Cytochrome oxidase I) and nuclear markers (ITS2 ribosomal DNA).