

Insectary

MRC has a well established insectary since 1975. Different strains of three important vectors of malaria— *An. stephensi*, *An. culicifacies* and *An. fluviatilis* collected from different geographical regions of India are being maintained. Various morphological mutants of *An. stephensi* maintained are *Red eye (r)*, *Black larvae (Bl)*, *Golden yellow (gy)*, *Creamish white eye (cw)*, *Reddish brown eye (rb)*. Resistant and susceptible lines of anophelines to different insecticides are also being maintained in the insectary.

In addition, there are laboratory colonies of *An. culicifacies* sibling species—A, B and C, *An. fluviatilis* species S, T and U initiated from cytologically identified mosquitoes collected from different parts of the country. This insectary is serving as a biological resource for several basic and applied studies being carried out in the Centre.

Mosquito **Species**

An. stephensi

From urban and semi-urban areas

Nehru Place, Delhi

Okhla, Delhi

Chennai, Tamil Nadu

From rural areas

Ladpur, Haryana

Morphological mutants

<i>Red eye (r)</i>	–	sex linked recessive
<i>Black larvae (bl)</i>	–	autosomal semidominant
<i>Golden yellow (gy)</i>	–	autosomal recessive
<i>Creamish white eye (cw)</i>	–	new mutant
<i>Reddish brown eye (rb)</i>	–	new mutant

Biochemical variants

Bahadurgarh (EST-2)

Insecticide resistant lines

Malathion resistant

Permethrin resistant

Lambdacyhalothrin resistant

Deltamethrin resistant
 Cyfluthrin resistant
 Fenthion resistant

An. culicifacies Complex

Species A

Dehra, Uttar Pradesh
 Burari, Delhi
 Rourkela, Orissa

Species B

Acrocentric Y-chromosome lines

Ladpur, Haryana
 Haldwani, Uttaranchal

Submetacentric Y-chromosome lines

Rameswaram, Tamil Nadu
 Rourkela, Orissa

Insecticide resistant lines

DDT resistant – Ladpur, Haryana
 Malathion resistant – Ladpur, Haryana

Species C

Submetacentric Y-chromosome line

Jabalpur, Madhya Pradesh

Insecticide resistant line

DDT resistant – Jabalpur, Madhya Pradesh

An. fluviatilis Complex

Species S and T – Rourkela, Orissa

Species T and U – Hardwar, Uttaranchal
 Species T – Haldwani, Uttaranchal

An. sudaicus

Cyclic colonies established from Car Nicobar, Katchal and Tressa (A & N Islands)

An. annularis

Nathupura, Delhi

Aedes aegypti

Delhi

Culex quinquefasciatus

Delhi
 Sonapat, Haryana
 Mewat, Haryana

Insecticide resistant lines

Malathion resistant – Sonapat, Haryana
 Permethrin resistant – Sonapat, Haryana
 Lambdacyhalothrin – Sonapat, Haryana
 resistant
 Deltamethrin resistant – Sonapat, Haryana
 Cyfluthrin resistant – Sonapat, Haryana
 Fenthion resistant – Sonapat, Haryana

Morphological mutants

Red eye (re)
Scarlet eye (se)