

Profile



1. **Name** : **Dr. SIRAJ AHMED KHAN**
2. **Designation** : Scientist C
3. **Date of Birth** : 17th July 1964
4. **Date of Joining** : 12th June 1991
5. **Date of Joining Present Post**: 29th April 2004
6. **Discipline** : Medical Entomology
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12. **Educational Qualification** : M.Sc. Ph.D.
13. **Research Experience** : **Twenty one years** in biomedical research.

Since August 1989 actively engaged in research in the field of applied entomology pertaining to biology and control of vectors of communicable diseases, viz., malaria, Japanese encephalitis, filariasis, and dengue, in the seven states of N.E. India. (Worked as JRF from August '89 to May '91 at Dibrugarh University and as Research Assistant from June '91 to 28th April '99 and as Research Officer from 29th April '99 to 28th April '04 at RMRC, Dibrugarh.)

Major achievements –

- a. Established immunofluorescent technique for incrimination of Japanese Encephalitis virus in vector mosquitoes and preparation of JE antigen and immune sera, at R.M.R.C., Dibrugarh.
- b. Established mosquito colony and colonised *Toxorhynchites splendens* for xenodiagnosis of JE and dengue virus.
- c. Identified ninety six species of mosquitoes from the Upper Brahmaputra valley including twenty species of mosquitoes recorded for the first time from the state of Assam including three first Country records.
- d. Initiated entomological and parasitological studies in filariasis among tea-tribal community of Assam.
- e. Developed an early warning module for predicting various aspects of occurrence of Japanese encephalitis two to three months ahead of an outbreak in an endemic area of Assam with the application of remote sensing and GIS in conjunction with epidemiological information. This model has been put to use since 2006 and accuracy of prediction is seen to vary from 70-85%. This project has been highly appreciated by ICMR and has been taken up for translational purpose.
- f. Standardised a method for preparation of high titre arboviral antigen.
- g. Investigated and reported Dengue outbreaks for the first time in NE India in the states of Manipur and Nagaland in 2007 and 2009 respectively.
- h. Reported prevalence of West Nile infection for the first time in eastern India in 2006.
- i. Worked as a co-investigator (North east India) in a PATH sponsored multi-centric Govt of India assignment in “Japanese encephalitis vaccine efficacy case control study” (2009-2010)

Entomological studies include:

- a. Studies on behaviour of vectors in relation to breeding habitats, seasonal abundance, host preferences, and resting & feeding patterns.
- b. Biology and insecticide susceptibility status of some medically important mosquito vectors (*Culex quinquefasciatus*, *Mansonia annulifera*, and *M. uniformis*).

- c. Incrimination of mosquitoes from Japanese encephalitis endemic areas of Assam and Nagaland for JE virus activity by indirect immunofluorescent technique (IFT) and antigen ELISA.
- d. Studies on filariasis in tea gardens of Assam.
- e. Studies on dengue vectors in industrial townships and along national highways and trunk roads of the states of Assam and Meghalaya.

14. Membership/Fellowship of Professional Societies/Association :

- a) Life Member – National Academy of Sciences, India
- b) Life Member – National Academy of Vector Borne Diseases
- c) Life Member – Indian Society for Parasitology
- d) Life Member – Indian Virological Society

- 15. Awards** : B.K. Handique, **S.A. Khan**, J. Goswami, K. Chakraborty, R. Bora and K.K. Sarma. Characterization of JE prone areas of Dibrugarh district of Assam using Remote Sensing and GIS. 25th National Society for Remote Sensing Annual Convention and National Symposium at BIT, Mesra, Ranchi, 6-9 Dec 2005.

CONFERRED BEST PAPER AWARD

- 16. Miscellaneous** : Documents and books published
- a. A monograph on “ Mosquito Fauna of Northeast India with special reference to the Medically important vectors” by Dr. P. Dutta, Dr. Siraj A. Khan, Dr. A. M. Khan, Dr. J. Mahanta, Regional Medical Research Center (ICMR), Dibrugarh, 2003. Pages – I-IX and 1-157+ 6Plates
 - b. Dutta, P, **S.A. Khan** and B. Mahanta (2009). Diversity of mosquitoes in the Brahmaputra valley of Assam -an article contributed for a book which will be published by Zoological Survey of India under theme “*Rivers and streams of Northeast India: Ecology, Biodiversity and conservation*”.