Kazerun Education and Research Station

Introduction: The Education and Research Station of Kazerun was established in 1955 for several reasons such as study the epidemiologic variety of malaria, various ecology of inhabitants as a fixed population (rural and urban) and nomads, distribution of various malaria vectors and existence of highly rich fauna of insects in Kazerun province and formerly had four substations in Borazjan, Shaban-Kareh, Khesht, Noor-Abad, and Jareh. The educational activities of this station include the following: 1- A Course for HealthCare System Experts of Fars Province. 2- An Internship Course for Students of Entomology in M.S and Ph.D. Levels Tehran University of Medical Sciences and Other Medical Universities of Iran for 30 Days. 3- Scientific Observation of M.S and Ph.D. Students of General Health, Epidemiology, Virology of Tehran University School of Public Health and Shiraz University of Medical Sciences. 4- Scientific and Educational Visits by the Students of Health Internship Institution of Boyer-Ahmad State of Kohkilooye-And-Boyer Ahmad Province. 5- Scientific Observation of Students of Islamic Azad University of Kazerun Branch. 6- Internship Course of Foreign Students of the International Campus in MPH Level in English Language

The educational and research facilities of this station include the following:

The Laboratory facilities: Currently there are laboratories of leishmaniasis, malaria and para-clinic laboratory facilities which can be used to train about 30 persons in the mentioned laboratories.

The Insectarium: This unit started when the station was established and currently breds strains of anopheles stephensi are grown. This strain has passed over a hundred generations and is not resistant to

any of pesticides used in the area. i.e. it has not been exposed to any pesticide or insecticide. Larvae and mature insects in this insectarium are used in the assessment program of insecticides and larvicides.

The Lab Animals Unit: The activity of this unit was extended in 1993 and some rodent species were brought to be kept and bred. Lab animals are used for studies related to dissection of leishmaniasis parasites, providing culture medium and biologic studies. Also, rabbits kept in this unit are used to feed mosquitoes of the insectarium.

The Museum of Entomology and Zoology: This unit was added to other sections in 1993 and samples of this museum are used for educational purposes of students.

The Library and Document and Information Center of the Station: Currently published materials and books are categorized in this station and are constantly used by staff and students.

Welfare Facilities: Aide from Building no. 1 which contains administrative offices, laboratories, insectarium and etc. Welfare facilities are in building no. 2 which includes 6 complete suits to accommodate interns, professors and guests and a total of 20 persons can use these facilities at a given time

Purpose: Initial purposes of station at the time of establishment: 1- Analyzing Malaria's epidemiology and determining seasons of transmission. 2- Analyzing the biology, ecology of different types of anopheles mosquitos and its importance in transmitting malaria. 3- Geographical Exploration of Covered Areas and Drafting Typical Maps of the Area. 4- Investigating the Status of Nomads Infection with Malaria. 5- Presenting Proposals to Stop Transmission of Malaria. 6- Evaluation of Residual Spraying of Nomads' Tents in Path Migration and Distributing Salt Containing Medication to Nomads. 7- Determining the Sensitivity or Resistance Level of Anopheles Mosquitos to Insecticides and Studying its Mechanism. 8- Determining the Residual Effect of Insecticides to Control Vectors of Malaria. 9- Studying Obstacles and Problems of Eradicating Malaria and 10- Training Technicians Required for Healthcare of Country in the Fields of Malaria and Specialized Entomology.

Research Activities:

1- Analyzing entomology indicators and determining sensitivity level of vectors of malaria in Fars Province (Kazerun and Noor-Abad MamaSani) and Bushehr Province (Dashtestan).
2- Evaluating techniques for impregnation of mosquito nets with different insecticides.
3- Analyzing epidemiologic cutaneous and visceral leishmaniasis (rural and urban) with emphasis on reservoirs and vectors in endemic centers.
4- Analyzing resistance and effectiveness level of deltamethrin insecticides in Mosquito Permanets.
5- Studying genetics and mechanisms of resistance of An. sephensi to DDT and Dieldrin in vivo and in vitro and investigating the cross resistance spectrum to pyrethroids.

6- Conducting projects and dissertation of M.A and Ph.D. students.