

ACTIVITIES

The Southeast Asia Mosquito Project SEAMP

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History

Beginning in 1961, a major study of the mosquito fauna of Thailand was undertaken by the United States Army Medical Component - Southeast Asia Treaty Organization, Bangkok, in connection with studies on a number of mosquito-borne diseases. It rapidly became abundantly clear that a major revision of the mosquito fauna of the entire area would be needed. The SEATO collections became the nucleus for the Southeast Asia Mosquito Project, following a meeting of interested workers held at the British Museum in London during the meetings of the 11th International Congress of Entomology in August 1964. The Project was formally organized at the United States National Museum in October of that year, with full monetary support from the U. S. Army Medical Research and Development Command.

The last comprehensive review of the fauna was by Christophers (1933) and Barraud (1934). A vast number of papers have been published since that time and mostly based on the taxonomy propounded by these two authors. Since the bulk of their material came from India it is not at all surprising that many misidentifications of S.E. Asian species resulted.

Funding and Administration

SEAMP is financed through a Department of the Army contract administered by the Smithsonian Institution. The project runs on a yearly budget which is prepared by the Project Leader.

Geographical Area Involved

The area covered by the project includes the following countries: E. Pakistan, Andaman Islands, Burma, Thailand, Cambodia, Laos, N. and S. Vietnam, Malaysia, Singapore, China south of the Yangtze River, Taiwan, Southern Ryukyu Islands, Philippines, Indonesia.

Proposed Plan and Specific Aims

The plan is to make a definitive study of the species of mosquitoes in Southeast Asia and to publish from time to time works on the fauna which will help to make the species recognizable. These reviews will also bring together all available information on ecology, biology and vector potential of the species.

Sources of Working Material

The working material consists of specimens already housed in the USNM and that derived from various repositories such as museums, universities, institutions and so on, both here and abroad. Principle sources of more recent field-collected material are: 1. entomologists of the Armed Forces (almost entirely Department of the Army); 2. collectors attached to the Migratory Animal Pathological Survey paid for by the Department of the Army as also recipients of grants working on national faunas (e.g. Dr. S. Ramalingam,

Malaya); 3. the SEATO laboratories, Bangkok, whose abundant and beautifully prepared material has been of tremendous importance; 4. SEAMP taxonomists who on occasion pay short visits to areas for specific requirements.

In spite of the comparatively massive amount of material (see below) available to SEAMP it is rare indeed that it is complete enough for any genus or even subgenus to be dealt with adequately, and when this requirement is more or less fulfilled the geographic area covered presents only a fraction of the total to be surveyed.

The most pressing SEAMP need is for material bred from isolated larvae so as to make all stages of the species available. In spite of the fact that the main classification of the Culicidae rests on differentiating characters of the adult, the immatures are assuming an increasing importance in this respect. Such material is urgently required from most parts of S. E. Asia

It has been the policy of SEAMP to have its taxonomists examine material from as wide an area over the globe as possible. It is believed that specimens from outside the boundaries of S. E. Asia can help in a better understanding of a genus, subgenus or group of species. For this purpose material has been solicited and received from many parts of the world (see below). In addition to the receipt of material from other areas SEAMP taxonomists make visits to foreign museums to examine type and other material. The Project is also purchasing specimens from a collector in India.

Staff

At this moment SEAMP resident staff consists of a project leader (Dr. Botha de Meillon); 4 taxonomists (Drs. Yiau-Min Huang, Sunthorn Sirivanakarn, LTC J. E. Scanlon and Mr. E. L. Peyton) dealing with (Stegomyia) Anopheles, Culex and Uranotaenia; 4 artists; 2 technicians; 1 curator; 1 secretary-administrator.

Non-resident consultants are Dr. Peter F. Mattingly (Heizmannia, Tripteroides); Dr. Johanna Bonne-Wepster (Toxorhynchites); Dr. Shivaji Ramalingam (Armigeres); Dr. Kenneth L. Knight (Finlaya); Captain John F. Reinert (Diceromyia, Aedimorphus); Dr. T. Zavortink (Orthopodomyia). These consultants are all preparing manuscripts for eventual publication in the SEAMP series "Contributions to the Mosquito Fauna of Southeast Asia." Dr. Alan Stone, of the U. S. Department of Agriculture, acts as senior consultant and helps the project leader in the final preparation of manuscripts for publication.

Publication

The general policy is to submit shorter papers dealing with descriptions of new species, new synonymies, designations of neotypes and so on to entomological journals such as the Proceedings of the Entomological Society of Washington. Longer articles dealing with groups of species, subgenera or genera are published through the American Entomological Institute, Ann Arbor, Michigan.

Illustrations.

In all instances the appropriate illustrations, consistent with the overall policy of providing means for the identification of the species are provided. In addition to the resident illustrators who work intimately with the taxonomists, SEAMP has had considerable help from artists of the 406th Medical General Laboratory, Tokyo.

Material Received

Since its inception 103,958 adult mosquitoes and 164,808 slides of immatures have been received by SEAMP. This material is mainly from Thailand, Malaya, Philippines, Indonesia and the Republic of Vietnam. Some specimens have been received through the courtesy of the Pasteur Institute, Pnom Penh, Cambodia, and little or none from the rest of Southeast Asia.

From outside our area of prime interest material has very generously been submitted on request from various museums, institutions and individuals in East, West and South Africa, Japan, India, Australia, France and the Netherlands.

Accommodation

The project is housed on the ground floor of the Lamont Street Annex of the Smithsonian Institution. Plans are under way for the transfer of the project to the MNH building on Constitution Avenue during 1969.

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