

REVIEWS AND ABSTRACTS

LOS ANOFELINOS DE LA REPÚBLICA DEL ECUADOR. By Roberto Levi Castillo. Vol. I, vi+1-72, Artes Graficos, Senedelfelder C. A., Guayaquil, Ecuador.

(This publication was reviewed in an earlier number of Mosquito News by H. H. Stage; but we are delighted to publish a second review which in response to an earlier request was very kindly written by a neighbor of the author, Dr. Arnaldo Gabaldon, M.D., Division of Malariology, Ministerio de Sanidad y Asistencia Social, Salubridad Pública, Maracay-Aragua, Venezuela. EDITOR.)

The author, a sanitary entomologist, presents data on 11 anopheline species found in Ecuador. In the introductory section he describes the different regions of the republic and gives monthly meteorological data: temperature, relative humidity and rain. The species treated are *Chagasia bathanus*; *Anopheles pseudopunctipennis*, *A. eiseni*, *A. punctimacula*, *A. apicimacula*, *A. mediopunctatus*, *A. albanus*, *A. aquasalis*, *A. neivai* and *A. boliviensis*.

A detailed description for each species is given. The chaetotaxy of the larva is treated, with the exception of hairs of the abdominal segments. The female characteristics and the male terminalia are well described.

Plates corresponding to the description of each species are found at the end of the volume, but some of the drawings have been poorly reproduced, especially those of the larval chaetotaxy. Notes on the ecology and geographic distribution and the section of every one of the anophelines. Five maps and 54 photographs illustrate these points.

Dichotomic keys for eggs, larvae, females and male terminalia are presented at the end of the volume together with a list of species by province. Twelve pages of bibliographical references are also included.

The author includes description of two varieties of *Anopheles pseudopunctipennis* which had previously been published, i.e., *levi-castilloi* Levi-Castillo, 1944, and *rivadeneirai* Levi-Castillo, 1945. From the description and plate the reviewer cannot find differences from the "tippicos" known from other places of the Western hemisphere, with the possible exception of the eggs, which on account of the poor drawings and the normal individual variations found in this species, makes it hard to reach a definite conclusion.

The volume is the most complete information available at the present time on Anophelines from Ecuador.

ARNALDO GABALDON

LESSONS IN MALARIOLOGY FROM WORLD WAR II. The Charles Franklin Craig Lecture for 1945 by Paul F. Russell, Amer. Jour. of Trop. Med., Vol. 26, No. 1, pp. 5-13, Jan. 1946.—A concise summary of recent advances in malariology including the parasitological, clinical, therapeutic and entomological fields. Reference is made to

the repellents developed during the war, to the extensive use of paris green (one pilot alone having distributed a half-million pounds of the mixture in Corsica), to aerosols as adult mosquito killers, to the use of DDT as a residual spray in buildings and in the form of sprays and aerosols out-of-doors. The importance is stressed of proper training and effective organization for the conduct of educational work, surveys, prophylaxis, and mosquito control.

Dr. Russell observes that "The greatest social obstacle to malaria prophylaxis in the world today is the lack of suitable malaria control organizations. Economic barriers have been removed by spray-killing. Rural malaria control in many areas can now be one of the least expensive of public health measures. But until there is wide acceptance of the outstanding lesson about essential organization, so clearly demonstrated again in World War II, malaria will remain a paramount disease."

FRED C. BISHOPP

LIFE CYCLE OF THE MOSQUITO. An excellent new mosquito film, produced by the Emerson Yorke Studio, 35 West 45th Street, New York 19, with acknowledgment for technical collaboration credited to: (a) The United States Public Health Service, Washington, D. C.; (b) The New Jersey State Agricultural Experiment Station, New Brunswick, New Jersey, mentioning Dr. J. B. Schmitt, Research Specialist, by name; and (c) The Rockefeller Foundation International Health Division, New York City. The film is a single reel, with a running time of 12½ minutes. Prints of the film are available in 35 mm. and 16 mm. with sound.

As provision for rotation in order to avoid too frequent repetition in their showing, there is need for several good films of each important scientific and educational subject. MOSQUITO NEWS, therefore, is happy to welcome this new mosquito film as an important addition to the repertory available to the teacher, to the public relations officer of the mosquito commission, and to the public health official.

This new film exhibits some excellent technique in scientific cinematography, and in the manipulation of the living mosquitoes which were posed as star performers in its production.

The distinguishing characteristics and behavior of the Anopheline and the Culicine mosquitoes are well known, as are the structure of the mouth parts, and the feeding habits of the adult mosquito.

One female mosquito obligingly proceeds to deposit her eggs under the glaring illumination of the micro-"studio"; another unconcernedly takes a full blood-meal before the camera.

The life cycle is well shown, including the feeding habits of the larvae, transformation into the pupa stage, and final emergence of the adult.