## REVIEWS AND ABSTRACTS

PRIMATE MALARIA. S. D. Aberle, M.D. (with 13 collaborators). National Research Council, Division of Medical Sciences. Issued by the Office of Medical Information (Under grant of the Johnson & Johnson Research Foundation), 171 pp. March 1945. This report is limited to malaria in monkeys and apes and is designed to give research workers a view of contributions in the subject and to provide a source of ready reference. The bibliography at the end is complete through October 1, 1944, and contains 457 references. The author points out that there is no accepted nomenclature for all primates. Table II there is a list with approved genus and species of all monkeys listed in the bibliography of primate malaria. Table I gives the commonlyused names of the Plasmodia, their natural hosts and the hosts into which these plasmodia have been successfully inoculated. Table IV lists the vectors which have been used and the results of transmission experiments. The author points out the interesting fact that some of the human and primate parasites are able to exist in the blood of species other than the native host without causing pronounced symptoms.

Nineteen pages of the report are devoted to Table VIII which sets forth the results of experimental work on the chemotherapy of primate malaria. Pages 83 to 112 are concerned primarily with immunity and the pathology of similar malaria caused by *Plasmodium knowlesi*. There are twelve excellent plates showing cycles and stages of development and pathological effects of various species of *Plasmodia*.

W. B. HERMS

OPERATIONS MANUAL FOR FIELD USE OF DDT. Medical Department, Standard Oil Company (New Jersey), 30 Rockefeller Plaza, New York, N. Y.

The small booklet (62 pages) discusses DDT primarily from the standpoint of control of insects of medical importance. It is divided into six parts, as follows:

I. Chemical properties

II. Biological properties

III. Types of preparations

IV. Types of uses

V. Control of insect pests

VI. Precautions in application

The booklet, which is a compilation of studies made by various agencies, contains much information on DDT and almost every type of preparation and use for this insecticide are discussed. It will prove valuable to those concerned with the control of insects affecting man and animals, although too much emphasis is given to certain methods of employing this insecticide which are not generally recommended. The same general information is discussed in several

topics and because of the fact that the vast amount of available information on this insecticide is greatly condensed, the manual strikes the reader as being repetitious. Some of the more recent information on formulations and most effective methods of use apparently were not available when the manual was compiled, consequently it is not entirely up to date.

E. F. KNIPLING

Alameda County Mosquito Abatement Dis-TRICT. ANNUAL REPORT FOR 1945. Court House, Oakland 7, Calif., February 1946. (Mimeographed.)—Of particular interest both to mosquito control engineers and to research workers are the results of experiments with DDT mentioned in this report. The following resumé of work described in the report will give an idea of the extent and results of work with DDT in Alameda County: In June 1945, with a small supply of DDT, some of it in emulsifiable form, several types of application were tried, principally to try its effectiveness in underground utility vaults, street catch basins, culverts, bridges, etc. Places which had been prolific breeders in past years were sprayed with a 21/2 per cent emullsion to produce a residual deposit of DDT on the side walls and ceilings, or the under sides of bridges and culverts. The results were excellent. The residual effect of the DDT in most cases eliminated breeding for the remainder of the year and was considered to justify the use of DDT as a residual spray on an extensive scale Directions for such use have been in 1946. prepared and distributed to the division foremen. Also, a series of sheets has been prepared giving tables and quantities of DDT in various solutions and emulsions for surfaces, and for both still and flowing water, in order to simplify calculation and to minimize errors.

A 2½ per cent solution of DDT in Diesel oil was thought to be the most economical medium for residual application. If oil stain had to be avoided, the standard xylene-emulsifier mixture, with water, is recommended.

Worthy of note as a statement on a subject which at present appears to be controversial, is the following sentence: "Our experience with DDT as a larvacide indicates that it is difficult with equipment at present available to us to apply economical quantities of DDT in area spraying, and there does not appear to be appreciable advantage in adding DDT to spray oils for application to water surfaces, though we will continue observations along this line in 1946."

The report contains many figures and tables relative to the fiscal affairs of the District, which are of interest from a comparative viewpoint to mosquito control officials in other parts of the country.

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