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 REVIEWS AND ABSTRACTS

THE MOSQUITOES OF NEW JERSEY. By Thomas J. Headlee. Published by Rutgers University Press, New Brunswick, N. J., 1945. 326 pp., 86 figs., 16 plates and 14 tables. (Price \$4.00.)

Dr. Headlee is to be congratulated on bringing together in easily readable form a full and extended account of the mosquitoes of New Jersey. The classic report of John B. Smith (1904) has long been out of print. Now Dr. Headlee has brought the work up to date with much new data and a full account of the extensive control activities carried on under his direction, especially the new and modern methods developed in handling problems associated with salt marsh mosquito breeding and control.

The opening chapter stresses the value of mosquito control and the last chapter presents in summary form the increased valuation of taxable lands due to mosquito reduction. In between are the following chapters:

2. Structure, classification and keys.
3. The New Jersey mosquito fauna.
4. Mosquito biology.
5. Influence of environment.
6. The history of mosquito control in New Jersey.
7. The principles and detailed procedure of mosquito control.
8. Larvicides.
9. Mosquito repellents.
10. Laws relating to mosquito control.

The above titles indicate rather fully the contents of the book. Chapter 2 gives a brief account of the structure of mosquitoes, both adult and larva. There are also presented rather unique keys for the identification of the adults and larvae. These keys should prove very valuable for field workers, as most of them can be used with nothing more than a hand lens. Chapter 3 is devoted to presenting in tabular form the results of trap collections of female mosquitoes for the ten-year period, 1932-1941. The chapter on mosquito biology is the most extensive of the book and is largely based on the work of John B. Smith, with added notes and some new data. Chapter 5 deals with the influence of environment and is restricted almost entirely to the conditions existing in New Jersey and no mention is made of the extensive work done in this field by other workers.

Though chapters 7 and 8 are very interesting, the reviewer had anticipated a fuller and more extended account of the many new developments in machinery and insecticides devised by the workers in New Jersey. The accounts are too brief and no reference is made to the plates that illustrate some of the machines at work.

The illustrations, except the plates (16), are nearly all from the report of John B. Smith. The plates are exceptionally fine. Unfortunately there is no index and only a very brief bibliography.

The printing is well done but the paper is not the quality one could wish in such a work.

The reviewer could point to a few obvious errors, especially in the data given on distribution. The book should prove of great interest to all mosquito workers and is a valuable contribution. Dr. Headlee is to be congratulated on his long and faithful service to the state of New Jersey and in developing procedures of mosquito control that have been and always will be of great value to the state.

Robert Matheson.

METHODS OF PREVENTING THE TRANSFER OF DISEASE-CARRYING INSECTS ON AIRCRAFT. Monthly Bulletin of the Ministry of Health 3: 108-110, 1944. (England.) Report of the British West Indian Quarantine Conference Trinidad.

The conference discussed at length methods of preventing the transfer of disease-carrying insects on aircraft, a matter regarded as of much importance. The conclusions and recommendations of the conference are summarized as follows: Spray applications should be made to military planes along similar lines to civilian planes. Spraying aircraft on the ground before departure is most practical. If thoroughly carried out after the plane is loaded and immediately before departure, the residual spray will be sufficient to kill insects which might enter with passengers. A further spraying in the air may be advisable. Dispersion of the insecticide with Freon is preferable; next of choice is a power sprayer. The spray must be fine and all enclosed spaces must be thoroughly treated. Pyrethrum is the preferred insecticide. As a rule 8 cc. of standard pyrethrum extract (2 g. pyrethins/100 cc.) per M cu. ft. should be used, with not less than 5 minutes exposure. Regulations should be administered by the health authority of the airfield. At present it is impractical to set up an organization to carry out the work at every airport; therefore, responsibility should be placed on flight personnel, including entries in the journey log-book regarding disinsectization. Efforts should be made to keep airfields free from mosquitoes, also buildings in a zone of at least half a mile around airports. Classification of danger areas was considered so important as to be dealt with by an international body.—Fred C. Bishopp, Bureau of Entomology and Plant Quarantine, Agricultural Research Administration, U. S. Department of Agriculture.

DDT AS A MOSQUITO LARVICIDE. By J. A. W. Lever, Agri. Jour. Dept. Agri. Fiji. 15(3) pp., 79-80, Sept., 1944.

Notes are presented on a few small scale tests in Fiji. Two swampy areas infested with *Aedes vexans* larvae were sprayed, one with 5 per cent DDT in light diesel oil and the other with the oil alone. The kills were not complete and