

PAPERS AND PROCEEDINGS OF THE 16th ANNUAL MEETING

of the

AMERICAN MOSQUITO CONTROL ASSOCIATION

Held Jointly with the Northeastern Mosquito Control Association
Boston, Massachusetts, March 27-30, 1960

Part I*

PANEL ON EASTERN ENCEPHALITIS

Synopsis by RICHARD O. HAYES (Moderator)
Taunton Field Station, Taunton, Mass.

The moderator introduced the panel members (see Program, *Mosquito News* 20:1) and presented a brief history of eastern encephalitis (EE). EE virus infection is one of three arthropod-borne encephalitides which affect man in the United States. The virus attacks the central nervous system and the resulting symptoms include fever, drowsiness, convulsions, and coma. Approximately 70

percent of the clinical cases are fatal. Eastern encephalitis is found in the United States mainly along the eastern seaboard from Massachusetts to Texas on the Gulf of Mexico. In 1959 EE was found in at least six eastern states. During 1959 the first outbreak among humans in New Jersey occurred, and the first record was made of the virus affecting ducklings on Long Island, New York.

VIRUS VECTOR RESEARCH

ROY W. CHAMBERLAIN

The speaker pointed out that EE is primarily a bird disease and that the enzootic (wild animal) vector must be a bird feeder, probably feeds at night, and must be susceptible to infection and capable of transmission. *Aedes* and *Psorophora* do not generally fit the requirements, and

Mansonia perturbans is usually not abundant enough late in the summer to be involved in the enzootic cycle. Twenty-two of the thirty isolations of EE from naturally infected mosquitoes incriminate *Culiseta melanura* as the enzootic vector among the wild bird hosts. Although EE isolations have been made from *Culex salinarius*, laboratory experiments indicate it is not a likely vector. *Anopheles* species are also poor vectors in the laboratory. Eleven of 15 isolations of western encephalitis from mosquitoes in the Eastern United States were obtained from *Culiseta melanura*.

The criteria for an outbreak among

* The Proceedings papers included in this issue of *Mosquito News* comprise all the papers that had been received in final form for publication on the date of going to press, May 13, 1960. It is planned to publish in the September number papers which have not yet been received and those which had to be held for revision, correction of illustrations, and similar reasons.