
This circular gives information on the availability, use, and effectiveness of the few new repellents and killing agents which, from among many thousands of chemicals tested, appear to give some measure of protection from the bites of mosquitoes, punkies, blackflies and other biting flies, chiggers, and mites. Five "safe" formulations are given. Two of these are mixtures of dimethyl phthalate, indalone and Rutgers 612 (2-ethyl-1,3-hexanediol); the third is a mixture of dimethyl phthalate, indalone and dimethyl carbonate; the fourth is dimethyl phthalate and Rutgers 612; and the fifth is dimethyl phthalate and dimethyl carbonate. The directions for using these materials and various characteristics and results that may be expected are given in detail. A list of firms which can supply the chemicals completes the circular.

D. L. C.


Ecological studies of the breeding places of Anopheles pseudopunctipennis have not only a scientific interest but also a practical side. The species is the host of the plasmodium which is the agent of endemic malaria in northwest Argentina. It does not breed in pools and stagnant waters as many other anopheline species do. On the contrary, A. pseudopunctipennis breeds on the borders of running waters (rivers, etc.). The water must be clear and continually renewed, needing also the presence of tallish green algae (Spirogyra and the like), typically present in mountain rivers and rivulets. The zoogeogrames shows that A. pseudopunctipennis is limited to the zone comprising the eastern hillsides of the "Cordilleras" up to a height of 1,500 meters above sea level and down to the plains where water currents cease in winter.

D. L. C.


Included in this issue of the Bulletin are two papers of interest to mosquito control workers.

1. Malaria Education in Arkansas. By Asst. San. San. (R) Robert H. McCauley, Jr. This report is a very informative description of the malaria education program carried out in Arkansas by the MCWA beginning in 1944. Photographs of methods and typical situations, although they represent standard procedures already known to every mosquito control worker, add greatly to the interest for a lay reader.

2. Some Unusual Breeding Places of Anopheles quadrimaculatus, by San. (R) T. E. McNeel. The list of unusual breeding places mentioned in the title has been obtained from both the literature and the experience of MCWA entomologists. It includes artificial containers, saline water, bolge water in a sloop-boat, fire barrels, armadillo holes, tin cans in a dump almost completely filled in with and covered by dirt, airplane wheel ruts on muddy landing fields, a flooded concrete room, sewers and septic tanks, and flowerpots of the Nassau Lily.

In conclusion the author remarks that "quads" will apparently breed almost anywhere unless the water is extremely foul; but, as he cautions in the introduction, the observation of limited breeding in a few unusual places should not upset the established conception of quad ecology. Observation in unusual places usually occurs only when the adult population is unusually high or when available water is very scarce.

D. L. C.


The consensus of opinion of the majority of recognized authorities on malaria is that there is no danger of the re-establishment of the disease on an endemic basis in non-endemic areas in the United States as a result of the return of military service personnel. While the danger of severe epidemics is also not great, it would be wise to undertake certain precautionary measures, in areas where malaria mosquitoes occur, but which have been free from infection for many years.

To carry out these plans the U. S. Public Health Service District No. 1 with Headquarters in New York City. Anti-malarial measures in the area included the establishment of mobile malaria control units; extensive anopheline surveys at possible danger points; anopheline control measures where concentrations of human carriers and the mosquito vector are found; and educational measures. Each mobile unit consisted of a station wagon and a 1/2 ton truck for equipment and supplies necessary for entomological surveys, larviciding, minor drainage, clearing, cleaning and up spraying of children. The anopheline surveys in 1943 and 1944 are also described, together with the anopheline control procedures and educational measures that were employed.

D. L. C.