

repellent. Sweat proved significantly attractive at a low vapor concentration but significantly repellent at a high concentration.

Part II was concerned with the action of liquid repellent compounds. The experiments reported in this section of the study assessed the repellent power of the vapors of a number of mosquito repellents by using olfactometer technique. It was concluded that vapor repellency was not simply a function of vapor pressure, but that it may also depend on the biological activity of the molecules in the vapor. Three compounds were found which afford not only a long protection period due to their nonvolatility, but also with a high vapor repellency due to the potency of the comparatively few molecules that are volatilized. Vapors of most of the repellents were found to induce knockdown of mosquitoes, but there was no correlation between the speed of this process and the vapor repellency.

The response of *Aedes aegypti* to a warm body and its radiation was discussed in Part III. The authors readily established the fact that warm bodies, 100° F., were more attractive than cool ones, 80° F., irrespective of their humidity. They then set out to distinguish the attractiveness between convective and radiant warmth. By using an air-tight window of thallium bromiodide which allowed almost all of the radiation to filter through, the authors concluded that heat convection, which was not eliminated by the air-tight window, was the factor which makes a warm object attractive to the mosquito. In addition, surfaces which differed widely in their emission of radiant heat, but which had the same

surface temperature, were found not to differ significantly from each other in attractiveness.

Part IV reported the results of data obtained by similar studies under field conditions. Several species of *Aedes* peculiar to the Canadian forest were involved. The investigations were made by means of a pair of robots so constructed, heated, and clothed as to constitute dummy men. Again the authors observed that moisture increased the attractiveness of a warm body 2 to 4 times when the air temperature exceeded 60° F., but that surface moisture decreased the attractiveness at cooler temperatures. Warmth increased the attractiveness, so that a robot at 98° F. attracted 3 times as many mosquitoes as one at 50 to 65° F. The authors, therefore, concluded that moisture was the major attractant factor when the air temperature exceeds 60° F., and warmth when the temperature was less than 60° F. Carbon dioxide vapor emitted from a robot's head almost doubled the attractiveness of a warm body. Vapors of ether and gasoline were significantly attractive. Robots clothed in sweat-soaked clothing were slightly but significantly more attractive than a water-soaked one. Light colors were less attractive than dark ones and luminescent dyes decreased the attractiveness of cloths. Green was less attractive than red or blue. Greenish-khaki nylon cloth was much less attractive than khaki drill or cotton. No interspecific differences in responses were observed. Part V dealing with the importance of visual responses in attractiveness, has been submitted for publication in the *Bulletin of Entomological Research*.—H. H. Stage.

A REPORT FROM THE GOOD NEIGHBOR CLUB was received from its chairman, Harry H. Stage, too late for inclusion in this issue of *Mosquito News*. There is space here to record only one or two items of special interest in that report.

Mrs. Ernestine Thurman, a member of this Committee now in Thailand, writes: "Thailand needs all available assistance from AMCA. Any effort on your part will not be wasted. The workers in malaria control are eager for information, literature, equipment, and encouragement. It was quite a blow to find a total void of natural history collections in the magnificent, spectacular national museum in Bangkok." Tommy Mulhern writes: "I have entered into the spirit of your Good Neighbor Club by paying up back dues of C. Y. Chow, our good friend who is in Formosa. You may not know it, but because of inflation, it costs Dr. Chow almost a week's salary for a stamp to write us. If someone else wants to participate in like fashion, they might take care of back dues of Teh-Nevg Chen, who is also in Formosa and whose account remains unpaid from 1948."