

As the effectiveness of DDT residual house spraying against *Anopheles albimanus* is a problem of great practical importance for malaria control in the Caribbean area, the work of Stephens and Pratt in Puerto Rico (*Science*, January 10, p. 32) should be examined in the light of the experience with this species in Panamá (*Amer. J. trop. Med.*, 1946, 26, 383), particularly since Stephens and Pratt have overlooked certain basic considerations.

They report that no reduction of *A. albimanus* occurred, a conclusion based solely on bait and light trap catches. On the basis of the Panamá work, bait trap catches alone are not a valid index of the effectiveness of house spraying. Sharp reductions occur, but persist for only two to six weeks after spraying. This transient effect appears not only in the village but also for some distance around it. *A. albimanus* rests in houses during the night, and counts may be made then. Night catches in treated houses in Panamá show the following prolonged effects: (a) great reduction in numbers of anophelines; (b) reduction in the proportion of engorged anophelines; (c) low 24-hour survival rate for engorged anophelines.

These phenomena, of direct significance in terms of the malaria-transmission potential, occur in close association with the sprayed surfaces, namely, in the houses, and are best measured in houses.

Stephens and Pratt compare their bait and light trap catches of *A. albimanus* with house observations of *A. quadrimaculatus* in Arkansas, and *A. pseudopunctipennis* in Mexico, where marked reductions occurred. This is not a valid comparison. House catches of *A. albimanus* in Panamá show results comparable with those obtained with *A. quadrimaculatus* and *A. pseudopunctipennis*. While it is possible, or indeed quite likely, that the mosquitoes of the Puerto Rican houses were similarly affected, the recorded observations are inadequate to show what happened.

The lower malaria rate reported for the treated Puerto Rican village, after one year, may or may not be significant, but in view of the well-known annual fluctuations of malaria, even in adjacent villages and independent of any control measures, judgment should be suspended. (HAROLD TRAPIDO, Gorgas Memorial Laboratory, Panamá, Republic de Panamá.)