

A NOTE ON DISEASE-BEARING MOSQUITOES BREEDING IN BROMELIADS*

WILLIAM H. W. KOMP

Laboratory of Tropical Diseases, Microbiological Institute, National Institutes of Health
Bethesda, Md.

The article by Leon Dalencour in the September 1948 number of "Mosquito News," concerning the breeding of mosquitoes (species not mentioned) in bromeliads, which he had observed in Haiti, has prompted the writer to submit the following notes. During his tour of duty in the Panama Canal Zone, he collected on several occasions and in several localities, both in the Panama Canal Zone and in the Republic of Panama, larvae and pupae of *Haemagogus argyromeris* Dyar and Ludlow, from the water in the leaf-bases of a terrestrial bromeliad, *Bromelia pinguin* L. On one occasion a single larva of the same species was found in an arboreal bromeliad, *Gravisia* sp., at El Valle de Anton, in Panama.

The interest attached to these findings is that various species of *Haemagogus* are known to be the vectors of "jungle" or sylvatic yellow fever in Colombia and Brazil. *H. argyromeris* departs from the usual habit of the other species of the genus in that it does not confine itself

to tree-holes, bamboo, etc., for its breeding places, but can also be found in rock-pools, tin cans, and rarely in ground pools. The writer believes that the present records are the first published of any species of *Haemagogus* breeding in water contained in a living plant.

Bromelia pinguin is quite common in various parts of Panama, and is extensively planted on newly made road embankments to prevent cattle from trampling them before they have reached their angle of repose. *Should an outbreak of yellow fever ever occur again in Panama, attention will have to be given to such breeding places of Haemagogus.*

On another occasion, intensive breeding of several as yet unidentified species of sabethine mosquitoes was found in the water in another species of terrestrial bromeliad, *B. humilis*, at Puerto de la Cruz, northwest of Barcelona, on the arid north coast of Venezuela. At the same time, two female specimens of what is probably *Haemagogus uriartei* Shannon and Del Ponte were taken. These were undoubtedly breeding in the water in these bromeliads, as it was dry season, and the area was dry and dusty. All tree-holes and similar normal breeding places of *Haemagogus* were without water.

* *Editor's Note:* In the fall of 1948, Dr. Komp called attention to the facts discussed in this article. The italicized sentence in the third paragraph proved to be prophetic: an outbreak of yellow fever *did occur*, as described by Dr. Bishop in the accompanying note.

YELLOW FEVER IN PANAMA

A minor outbreak of yellow fever near Pacora in the Republic of Panama was reported on November 11, 1948. This was the first occurrence of the disease in that country since 1905. Five fatal cases were recorded between November 11 and December 28, 1948. The outbreak was terminated through the prompt vaccination of a large percentage of the people

in that area. A quarter of a million doses of yellow fever vaccine, prepared at the Rocky Mountain spotted fever laboratory in Montana were promptly provided. This was the jungle type of yellow fever and was probably transmitted by *Haemagogus spegazzini* Brethes.

F. C. BISHOPP