VIRUS ISOLATES FROM PANAMANIAN MOSQUITOES AND SANDFLIES.
Pauline H. Peralta*, Pedro Calindo*, and A. Shelokov.
Middle America Research Unit, C.I., and Gorgas Memorial Laboratory, Panama.

During the first 12 months of a 3-year project on the ecology of arthropod borne viruses in the tropical rain forest, which is being conducted by GML (under NIH grant E-2584) with the collaboration of MARU, major emphasis has been on virus isolation in suckling mice and hamster kidney cell cultures. Fourteen virus strains were isolated at MARU from 412 pools of 63,000 specimens provided by GML. Virus isolation rates were for Phlebotomus 1:700; for mosquitoes 1:7000, although the rates varied greatly with species. Of the five Phlebotomus isolates, two of broad host range (including cell cultures) and short incubation period are serologically identical. The SM brain titers of the other three are low and variable; HKTC adaptation has not been successful. Of the 9 mosquito viruses, 2 from A. (Ochlerotatus) spp. and P. ferox were isolated in both SM and HKTC (with characteristic CPE). The Anopheles and C. nigripalpus mouse isolates cause CPE in HKTC and are lethal for weanling mice. Two mouse isolates from C. vornicerfer (serologically related) and two Psorophora isolates (serologically related) propagate in HKTC without CPE. A virus was recently isolated in SM from P. ferox. Relationship of isolates to known viruses is being established.