

REPORT FROM THE ARBOVIRUS LABORATORY  
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1. Detection of the Dengue virus with the fluorescent foci method in LLCMK2 cells inoculated with ground mosquitoes, Aedes aegypti.

Using a new technique Dengue virus was isolated from human sera and mosquitoes during recent outbreak in Cayenne, January-December 1977. The sera or ground mosquitoes were inoculated into 6 suckling mice intracerebrally, and into four batches of ten female of Aedes aegypti each by the intrathoracic route. After ten days the mosquitoes were ground, centrifuged and inoculated in LLCMK2 cells cultured on Lab Tek slides. After three days the dengue virus was visualized by indirect immunofluorescence using an anti-dengue 2 mouse ascitic fluid followed by a fluorescein-labeled anti-mouse gamma-globulin serum.

Recently we have modified the technique: the female Aedes aegypti are kept only four days after intrathoracic inoculation rather than 10 because the titer of the virus is higher at four days. Also, the Hanks medium is poured off the LLCMK2 cells before inoculation.

The results for the human sera and the mosquitoes are given in the Tables I and II.

Eighteen strains have been isolated from human sera and four from mosquitoes, three from Aedes aegypti and one from Coquillettidia venezuelensis.

The strains isolated only by visualization of fluorescent focus on LLCMK2 cells were identified by fluorescent focus reduction using two immune ascitic fluids, Dengue 2 and Dengue 3, at a dilution of 1/100. The five strains isolated by intracerebral inoculation of suckling mice were identified by complement fixation test. All strains except one were Dengue 2.

2. Strains isolated in 1976-1977.

a. All the strains from humans were Dengue 2, except one isolated in September 1977 and not yet identified.

b. From 233,673 mosquitoes tested in 4,463 batches 117 strains of virus have been isolated.

- Group A	VEE complex Tonate virus
	23 strains from <u>Culex portesi</u> .
	2 strains " <u>Culex zeteki</u> .
	1 strain " <u>Anopheles mediopunctatus</u> .
	2 " " <u>Anopheles braziliensis</u> .
	2 " " <u>Coquillettidia albicosta</u> .
	2 " " <u>Coquillettidia venezuelensis</u> .
	1 " " <u>Mansonia pseudotitillans</u> .
	1 " " <u>Lutzomyia sp.</u>

- VEE group. Cabassou virus.

4 strains from Culex portesi.  
1 " " Culex sp.  
1 " " Culex nigripalpus.  
2 " " Coquillettidia venezuelensis.  
1 " " Mansonia titillans.  
1 " " Wyeomyia occulta.  
1 " " Limatus pseudomethysticus.

- Group C. Murutucu- Oriboca.

9 strains from Culex portesi.  
1 " " Coquillettidia albicosta.  
2 " " Coquillettidia venezuelensis.  
1 " " Mansonia titillans.  
1 " " Aedes arborealis.  
1 " " Trichoprosopon digitatum.  
1 " " Trichoprosopon sp.

- Guama group.

27 strains from Culex portesi.  
1 " " Culex spissipes.  
1 " " Anopheles braziliensis.  
1 " " Anopheles darlingi.  
1 " " Anopheles darlingi.  
11 " " Coquillettidia venezuelensis.  
2 " " Mansonia titillans.  
1 " " Trichoprosopon digitatum.  
1 " " Psorophora ferox.  
1 " " Phonimyi splendida.  
1 " " Lutzomyia sp.  
1 " " Sabethes undosus.

- Ilheus.

1 strain from Coquillettidia venezuelensis.

- Una.

1 strain from Anopheles nimbus.

- Itaporanga.

1 strain from Culex albinensis.

- Anopheles group.

Ca Ar 24 626 from Anopheles aquasalis (not yet identified).

- Unidentified.

Ca Ar 24 246 from Anopheles aquasalis.

Ca Ar 24 400 from Culex portesi.

Ca Ar 24 598 from Coquillettidia albicosta.

Ca Ar 24 746 from Culex portesi.

- a) From 1.111 animals (birds, rodents and marsupials)  
16 strains have been isolated.

- Group VEE Tonate.

1 strain from Chiroxiphia pareola.

1 strain from Ardeola ibis.

1 strain from Leucopternis albicollis.

1 strain from Nycticorax violacea.

1 strain from Ramphastos tucanus.

2 strains from Glyphorynchus spirissus

- Group VEE Cabassou.

1 strain from Turdus nudigenis.

1 strain from Tolmomyias poliocephalus.

1 strain from Metachirops opossum

1 strain from Didelphis marsupialis.

- Group B.

Saint-Louis Encephalitis from Anhinga anhinga.

- Group C.

1 strain from Metachirops opposum.

- Group Guama.


2 strains from Didelphis marsupialis.

- Group Phlebotomus.

1 strain unidentified Ca An 4668 a from Nycticorax violacea.

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