Virus Name: Moriche	Abbreviation: MORV

Status
Possible Arbovirus

Select Agent
No

SALS Level
2

SALS Basis
Results of SALS surveys and information from the Catalogue.

Other Information

Antigenic Group
Capim

SECTION I - Full Virus Name and Prototype Number

Prototype Strain Number / Designation
TRVL 57896

Accession Number

Original Date Submitted
12/24/1984

Family
Bunyaviridae

Genus
Bunyavirus

Information From
Trinidad Regional Virus Laboratory

Address
P.O. Box 164, Port of Spain

Information Footnote
Reviewed by Patricia A. WEBB

Section II - Original Source

Isolated By (name)
Trinidad Regional Virus Laboratory

Isolated at Institute
Port of Spain, Trinidad

Host Genus
Culex (Aedinus) amazonensis, pool of 51

Species

Host Age/Stage
Adult

Sex
Female

Isolated From

Isolation Details

Signs and Symptoms of Illness

Arthropod

Time Held Alive before Inoculation

Collection Method
Double baited cage trap

Collection Date
7/22/1964

Place Collected (Minimum of City, State, Country)
Bush Bush Forest, Trinidad

Latitude
10° 24' N

Longitude
61° 3' W

Macrohabitat
Bush Bush Forest, Nariva swamp, eastern Trinidad

Microhabitat
Semi-evergreen seasonal forest

Method of Storage until Inoculated
Stored in Revco at -55dC until ground

Footnotes

Section III - Method of Isolation

Inoculation Date
8/7/1964

Animal (Details will be in Section 6)
nb mice

Route Inoculated
Intracerebral

Reisolation
Not tried

Other Reasons
No virus of this type previously encountered

Homologous Antibody Formation by Source Animal

Test(s) Used

Footnotes

Section IV - Virus Properties

Physicochemical

Pieces (number of genome segments)	Infectivity	Sedimentation Coefficients(s) (S)
Percentage wt, of Virion Protein	Lipid	Carbohydrate
Virion Polypeptides: Number	Details	
Non-virion Polypeptides: Number	Details	
Virion Density	Sedimentation Coefficients(s) (S)	
Nucleocapsid Density	Sedimentation Coefficients(s) (S)	

Stability of Infectivity (effects)

pH (infective range)

Lipid Solvent (ether - % used to test) **1:2**	After Treatment Titer **0.7 dex**	Control Titer **>4.5 dex**
Lipid Solvent (chloroform)	After Treatment Titer	Control Titer
Lipid Solvent (deoxycholate)	After Treatment Titer	Control Titer

Other (formalin, radiation)

Virion Morphology

Shape	Dimensions	
Mean nm	Range nm	
Measurement Method	Surface Projections/Envelope	Nucleocapsid Dimensions, Symmetry

Morphogenesis

Site of Constituent Formation in Cell	Site of Virion Assembly	Site of Virion Accumulation
Inclusion Bodies	Other	

Hemagglutination

Hemaggiutination **No**	Antigen Source	Erythrocytes (species used)
pH Range	pH Optimum	
Temperature Range	Temperature Optimum	
Remarks		
Serologic Methods Recommended **CF, NT**		
Footnotes		

Section V - Antigenic Relationship and Lack of Relationship to Other Viruses

Moriche virus is a member of the Capim group as shown by CF results.

In CF Bushbush antigen reacts to titer with Moriche serum. Moriche antigen also reacts with Bushbush serum. Capim and Guajara antigens react with Moriche serum to titers 1/8 and 1/4 of the homologous titer. Moriche antigen did not react with Capim, Guajara and Mirim sera.
In N tests, Moriche and Bushbush viruses were found to be different.

SIRACA considers Moriche virus to be a distinct virus type in the Acara complex of the Capim serogroup [4] .

Section VI - Biologic Characteristics

Virus Source (all VERTEBRATE isolates)
Blood (LV)

Lab Methods of Virus Recovery (ALL ISOLATIONS)
Newborn mice

Cell system (a)	Virus passage history (b)	Evidence of Infection							
		CPE			PLAQUES			Growth Without CPE	
		Day (c)	Extent (d)	Titer TCD50/ml (e)	Day (c)	Size (f)	Titer PFU/ml (e)	+/- (g)	
Vero (CL)	SM 6				4	1 mm	7.0 (a) (2)		
LLC-MK2 (CL)					3	1 mm	8.2 (2)		

(a) Expressed in dex

Section VII - Natural Host Range (Additional text can be added below table)

Vertebrate (species and organ) and arthropod	No. isolations/No. tested	No. with antibody/No. tested Test used	Country and region
Culex (Ads) amazonensis	1/30,000		Bush Bush Forest, Trinidad

Section VIII - Susceptibility to Experimental Infection (include viremia)

Experimental host and age	Passage history and strain	Inoculation Route-Dose	Evidence of infection	AST (days)	Titer log10/ml
Mice (nb)		ic 0.02	Death	8	7.4
Mice (nb)		ip 0.02	No illness		
Mice (nb)		sc			
Mice (wn)		ic 0.03	No illness		
Mice (wn)		ip 0.03	No illness		

Section IX - Experimental Arthropod Infection and Transmission

Arthropod species & virus source(a)	Method of Infection log10/ml (b)		Incubation period (c)		Transmision by bite (d)		Assay of arthropod, log10/ml (e)		
	Feeding	Injected	Days	°C	Host	Ratio	Whole	Organ	System

Section X - Histopathology

Character of lesions (specify host)

Inclusion Bodies — Intranuclear

Organs/Tissues Affected

Category of tropism

Section XI - Human Disease

In Nature	Residual	Death
Subclinical	Overt Disease	
Clinical Manifestations		
Number of Cases	Category (i.e. febrile illness, etc.)	

Section XII - Geographic Distribution

Known (Virus detected)
Trinidad

Suspected (Antibody only detected)

Section XIII - References

1. Taylor, R.M. Comp., 1967. Catalogue of Arthropod-borne Viruses, p. 761, 1st Ed., U.S. Government Printing Office.
2. Stim, T.B. 1969. J. Gen. Virol. 5:329-338.
3. Jonkers, A.H., et al. 1968. Am. J. Trop. Med. and Hyg. 17:276-284.
4. Calisher, C.H., et al. 1985. To be submitted.

Remarks