Virus Name: Capim	Abbreviation: CAPV

Status
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
BeAn 8582

Accession Number

Original Date Submitted
1/27/1985

Family
Bunyaviridae

Genus
Bunyavirus

Information From
Belem Virus Lab.

Address
Belem Virus Laboratory, Instituto Evandro Chagas, Belem, Para, Brazil

Information Footnote
Reviewed by editor

Section II - Original Source

Isolated By (name)
Belem Virus Laboratory

Isolated at Institute
Belem, Para, Brazil

Host Genus
Caluromys philander

Species

Host Age/Stage
Adult

Sex
Male

Isolated From	Isolation Details
Organs/Tissues	**Liver and spleen pool**

Signs and Symptoms of Illness

Arthropod

Time Held Alive before Inoculation

Collection Method
Trapped

Collection Date
2/12/1958

Place Collected (Minimum of City, State, Country)
Utinga watershed forest, Brazil

Latitude
2° S

Longitude
48° W

Macrohabitat
Climax forest

Microhabitat
Ground level

Method of Storage until Inoculated

Footnotes

Section III - Method of Isolation

Inoculation Date
2/12/1958

Animal (Details will be in Section 6)
nb mice

Route Inoculated
Intracerebral

Reisolation
Not tried

Other Reasons

Homologous Antibody Formation by Source Animal
Not tested

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)	After Treatment Titer	Control Titer
Lipid Solvent (chloroform)	After Treatment Titer	Control Titer
Lipid Solvent (deoxycholate) **1:1000**	After Treatment Titer **2.5 dex**	Control Titer **5.6 dex**

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 **Yes**	Antigen Source **SMB; serum ext. by sucrose-acetone; acetone**	Erythrocytes (species used) **Goose**
pH Range **5.7-6.4**	pH Optimum **6.0**	
Temperature Range	Temperature Optimum **27dC**	

Remarks

Serologic Methods Recommended
HI, CF, NT

Footnotes

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

Antigen of Registered Virus Immune Serum of Registered Virus										
	HI		CF		NT	HI		CF		NT
Immune Serum or Antigens	Ht/Ho	Ind.	Ht/Ho	Ind.	Ht/Ho	Ht/Ho	Ind.	Ht/Ho	Ind.	Ht/Ho
Guama	20/2560	1/128	0/256	0	0/3.9	20/320	1/16	0/256	0	1.1/2.2
Catu	0/640	0	0/256	0	0/3.1	0/320	0	0/256	0	0/2.2
Moju	0/320	0	0/64	0	0/3.0	10/320	1/32	0/256	0	0/2.2
An 20525	10/80	1/8	0/256	0	0/3.0	0/320	0	0/256	0	0/2.2
Bimiti	0/ND	0	0/32	0						
Guajara	0/ND		16/128	1/8	0/2.3			8/256	1/32	0/2.2
An 20076	0/80	0	16/256	1/16	0/2.0	0/320	0	0/256	0	0/2.2
Mirim	0/80	0	0/128	0		0/320	0	0/256	0	

All sera are hyperimmune mouse.

Bimiti serum homologous testing done by the Rockefeller Foundation Virus Laboratories, New York.

Presently, Capim virus is the prototype member of the Capim serogroup containing a total of eight viruses. SIRACA has antigenically classified Capim virus as a distinct virus type and has placed it in the Capim complex, one of five complexes comprising the Capim serogroup [6] .

Section VI - Biologic Characteristics

Virus Source (all VERTEBRATE isolates)
Blood (LV), pooled liver, spleen (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)
BHK-21 (CL)		3	4+	6.5* (2)				
Mouse embryo(PC)						Plaques (3)		
GMK (CL)			CPE (3)					
Vero (CL)	Prototype, P-16				3	1 mm	7.0* (4)	
LLC-MK2 (CL)					3	2 mm	6.4 (4)	

* 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
Man		0/558 HI	Para, Brazil
Sentinel mouse	43/16,315		Para, Brazil (1)
Proechimys quyannensis	33	21/164 HI *	Para, Brazil
Caluromys	1	0/26 HI	
Culex sp.	20		
Culex B1 (=B22)	18		
Cx taeniopus	1		
Culex (mixed)	1		

* HI positives confirmed by NT.

Isolations from Proechimys were mostly from blood.

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	5.8	7.7
Mice (nb)		ip 0.02	Death	8.3	
Mice (nb)		sc			
Mice (wn)		ic 0.03	Antibody		
Mice (wn)		ip 0.03	Antibody		
hamsters (ad)		ic	Death		

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
Culex spp.	Naturally infected, transmitted to mice on three occasions (5).								

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)
Brazil

Suspected (Antibody only detected)

Section XIII - References

1. Woodall, J.P. 1967. Atas Simmpos. Biota Amazon. 6:31-63.
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Remarks