Virus Name: Tai		Abbreviation: TAIV
Status **Possible Arbovirus**	Select Agent **No**	SALS Level

SALS Basis

Other Information

Antigenic Group
Ungrouped

SECTION I - Full Virus Name and Prototype Number

Prototype Strain Number / Designation
ArA 94/70

Accession Number

Original Date Submitted
3/5/1986

Family
Not listed

Genus
Bunyavirus-like

Information From
Lhuillier, Michel

Address
Insitut Pasteur, BP 490, Abdijan 01, Ivory Coast

Information Footnote

Section II - Original Source

Isolated By (name)
Chippaux, H. and Cordellier, R.

Isolated at Institute
Abidjan, Ivory Coast

Host Genus
Culex (Culiciomyia) nebulosus

Species

Host Age/Stage
Adults

Sex
Not Answered

Isolated From

Isolation Details

Signs and Symptoms of Illness

Arthropod

Time Held Alive before Inoculation

Collection Method
Collected by net

Collection Date
5/10/1979

Place Collected (Minimum of City, State, Country)
Tai, Ivory Coast

Latitude
7° 20' N

Longitude
5° 50' W

Macrohabitat
Primitive rain forest

Microhabitat
At ground level in the shade (little rain season)

Method of Storage until Inoculated
Liquid nitrogen

Footnotes

Section III - Method of Isolation

Inoculation Date
5/21/1979

Animal (Details will be in Section 6)
nb mice

Route Inoculated
Intracerebral

Reisolation
Yes

Other Reasons

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)	After Treatment Titer	Control Titer
Lipid Solvent (chloroform)	After Treatment Titer **6.2 dex**	Control Titer **9.2 dex**
Lipid Solvent (deoxycholate)	After Treatment Titer	Control Titer

Other (formalin, radiation)

Virion Morphology

Shape **Spherical**	Dimensions **90-100 nm**	
Mean nm	Range nm	
Measurement Method **Electron microscopy study (2)**	Surface Projections/Envelope **Envelope with surface projections (2)**	Nucleocapsid Dimensions, Symmetry

Morphogenesis

Site of Constituent Formation in Cell	Site of Virion Assembly	Site of Virion Accumulation
Cytoplasm and cellular membranes (2)		
Inclusion Bodies	Other	

Hemagglutination

Hemaggiutination	Antigen Source	Erythrocytes (species used)
smb EXT. B		
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

CF test: homologous titer = 64/128.

J.P. Digoutte and G. Heme, Institut Pasteur Dakar

Immune ascitic fluid and/or newborn mouse brain antigen failed to react with 205 different viruses of the Arbovirus Reference Center.
Results indicate that ArA 94/79 apparently is a new virus.

Section VI - Biologic Characteristics

Virus Source (all VERTEBRATE isolates)

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 4	3	2+		3	1 mm	4.3 dex	
LLC-MK2 (CL)			No CPE			No plaques		+
PS (CL)		6	1+		3	1 mm		
BHK-21 (CL)		3	3+		3	1 mm		

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 (Cui) nebulosus	1		Tai forest, Ivory Coast (1)
Aedes (Psa) argenteoventralis gr.	1		Tai forest, Ivory Coast (1)

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)	SM 4	ic 0.02	Death	3	9.1
"" (nb)		ip 0.03	Death	6	
"" (nb)		sc			
"" (wn)		ic 0.03	Death	8-14	
"" (wn)		ip 0.1	Antibodies		

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)
Ivory Coast

Suspected (Antibody only detected)

Section XIII - References

1. Institut Pasteur Dakar Annual Report. 1980. P. 60.
2. Tesh, R.B. Personal communication.

Remarks