Virus Name: Yata	Abbreviation: YATAV

Status
Possible Arbovirus

Select Agent
No

SALS Level
2

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

Other Information

Antigenic Group
Ungrouped

SECTION I - Full Virus Name and Prototype Number

Prototype Strain Number / Designation
DakArB 2181

Accession Number

Original Date Submitted
8/8/1984

Family
Rhabdoviridae

Genus
Not listed

Information From
J.P. Digoutte

Address
Institut Pasteur B.P. 304 Cayenne Francaise

Information Footnote
Reviewed by editor

Section II - Original Source

Isolated By (name)
J.P. Digoutte, R. Cordellier

Isolated at Institute
Bangui Centr. African Republic (1)

Host Genus
Mansonia uniformis

Species

Host Age/Stage
Imagos

Sex
Female

Isolated From

Isolation Details

Signs and Symptoms of Illness

Arthropod

Time Held Alive before Inoculation

Collection Method
By hand

Collection Date
9/1/1969

Place Collected (Minimum of City, State, Country)
Birao village, Central African Republic

Latitude
10° 17' N

Longitude
22° 47' E

Macrohabitat
Dry savannah

Microhabitat
Very near Birao village

Method of Storage until Inoculated
Liquid nitrogen and Revco at -75dC

Footnotes

Section III - Method of Isolation

Inoculation Date
9/10/1969

Animal (Details will be in Section 6)
nb mice

Route Inoculated
ic and ip

Reisolation
Not tried

Other Reasons
First virus of this type in laboratory

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
1:1	**<2 dex**	**5.7 dex**
Lipid Solvent (chloroform)	After Treatment Titer	Control Titer
	<2 dex	**4.5 dex**
Lipid Solvent (deoxycholate)	After Treatment Titer	Control Titer
0.2%	**<2 dex**	**5.0 dex**

Other (formalin, radiation)

Virion Morphology

Shape
Rhabdovirus (3)

Dimensions
65 x 125 nm

Mean
nm

Range
nm

Measurement Method
Electron microscopy

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 **SMB ext. with sucrose-acetone**	Erythrocytes (species used) **Goose**
pH Range **6.0-7.0**	pH Optimum	
Temperature Range **4dC, RT, 37dC**	Temperature Optimum	
Remarks		
Serologic Methods Recommended **CF, NT**		
Footnotes		

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

CF test - homologous 64/64. Institut Pasteur (Dakar), [2] :

DakArB 2181 gives negative results with the following viruses:

Group A;	Semliki Forest virus, chikungunya, o'nyong nyong, DakHB 543 (Begoa), Sindbis, DakArY 251, Middelburg, Ndumu.
Group B;	Ntaya, Bagaza (DakArB 209), Wesselsbron, DakArY 276, West Nile, Koutango, Dakar bat, Uganda S, Saboya, Banzi, Bouboui, yellow fever, Zika, Spondweni, Bukalasa bat, Royal Farm, Kadam (UgAr 6640), DakArY 310, Usutu.
Bunyamwera;	Bunyamwera, Germiston, Ilhesha, Shokwe, Birao.
Simbu;	Ingwavuma, Simbu, DakAnB 331, DakArB 994, DakArB 1351.
Bwamba;	Bwamba, Pongola.
California;	Lumbo.
Olifantsvlei;	Olifantsvlei, Bobia, Botambi (DakArB 937).
Turlock;	Yaba 1, M'Poko (DakArB 365).
Nyando;	Nyando, Eret 147, DakArY 176.
Mossuril;	Mossuril.
Matariya;	Garba.

Eubenangee;	Pata.
Phlebotomus;	Nafada (DakAnD 3150), Zinga.
NSD;	Dugbe.
Kemerovo;	Chenuda, Wad Medani.
Qalyub;	Bandia.
Quaranfil;	Quaranfil.
Bhanja;	Bhanja (DakArD 9540).
Boteke;	Boteke.
Le Dantec;	Keuraliba, Le Dantec.
Nyamanini;	Nyamanini.
Thogoto;	Thogoto.
Ungrouped;	Witwatersrand, Okola, Nkolbisson, Tataguine, Lebombo, Tanga, Jos (DakArD 3491), Gossas, DakArD 4499 (Somone), Toure, DakArD 8194 (Hann), Bangoran, Sandjimba, Landjia, Gomoka, DakArB 2882 (Nola).
Nonarbovirus;	Herpesvirus (DakHB 3667).

In addition DakArB 2181 antigen failed to react with the following immune fluids:

Group B;	Entebbe bat, Montana Myotis leukoencephalitis, dengue 1, 2, 3, 4, Th Sman, TH-36.
Simbu;	Sango, Shamonda, Sabo, Shuni, Sathuperi, Yaba 7.
California;	Group serum.
Tete;	Tete, Matruh.
EHD;	IbAr 22388 (Abadina), IbAr 22619.
Matariya;	Matariya, Burg el Arab.
Corriparta;	Acado.
VSV;	Chandipura (IbAn 9978).
Phlebotomus;	Group serum. Arumowot (IbAn 15736).
Kaisodi-Qalyub-Quaranfil;	Group serum (Johnston Atoll, Kaisodi, Bandia, Silverwater, Quaranfil, Lanjan, Qalyub).
Uukuniemi;	Grand Arbaud, Ponteves, EgAn 1825.
Congo;	Congo.

Bluetongue;	Type 7 (IbAn 22703), type 10 (IbAr 22618).
Rabies serogroup;	kotonkan, Lagos bat.
Ungrouped;	SudAr 1275/64, IbAn 2898 (Oyo), IbAn 17143, Mount Elgon bat, IbAn 33709, IbAn 28946.
Nonarboviruses;	LCM-rabies, IbAn 27377 and IBH 29777 (related to rabies), IbAn 20433 (NDV).

Results indicate that DakArB 2181 is apparently 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)		

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
Mansonia uniformis	1/36 pools		Central African Republic

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)	SMB 15	ic 0.02	Death	4	4.5
Mice (nb)		ip 0.03	Death		
Mice (nb)		sc			
Mice (wn)		ic 0.03	No illness		
Mice (wn)		ip 0.1	Antibody		

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)
Central African Republic

Suspected (Antibody only detected)

Section XIII - References

1. Rapport Annuel de l'Institut Pasteur de Bangui. 1969. p. 51.
2. Robin, Y. Institut Pasteur de Dakar. Personal communication.
3. El Mekki, A., et al. In: Ebola Hemorrhagic Fever. S.R. Pattyn (ed.) Amsterdam. Elsevier-North Holland Press. 1978. pp. 261-267.

Remarks