Virus Name: Botambi	Abbreviation: BOTV

Status
Possible Arbovirus

Select Agent
No

SALS Level
2

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

Other Information

Antigenic Group
Olifantsvlei

SECTION I - Full Virus Name and Prototype Number

Prototype Strain Number / Designation
DakArB 937

Accession Number

Original Date Submitted
11/25/1984

Family
Bunyaviridae

Genus
Bunyavirus

Information From
Dr. J.P. Digoutte

Address
Institut Pasteur, B.P. 923, Bangui, Central African Republic

Information Footnote
Reviewed by editor

Section II - Original Source

Isolated By (name)
J.P. Digoutte, F.X. Pajot

Isolated at Institute
Bangui

Host Genus
Culex guiarti

Species

Host Age/Stage
Imagos

Sex
Female

Isolated From

Isolation Details

Signs and Symptoms of Illness

Arthropod

Time Held Alive before Inoculation

Collection Method
Collected by hand

Collection Date
7/10/1968

Place Collected (Minimum of City, State, Country)
Botambi village, Central Afr. Rep.

Latitude
4° 12' N

Longitude
18° 30' E

Macrohabitat
Clearing in equatorial moist forest

Microhabitat
Plantation of banana

Method of Storage until Inoculated
Revco at -75dC

Footnotes

Section III - Method of Isolation

Inoculation Date
7/17/1968

Animal (Details will be in Section 6)
nb mice

Route Inoculated
ic and ip

Reisolation
Yes

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) **1:1**	After Treatment Titer **3.5 dex**	Control Titer **6.5 dex**
Lipid Solvent (chloroform)	After Treatment Titer **2.4 dex**	Control Titer **5.4 dex**
Lipid Solvent (deoxycholate) **0.2%**	After Treatment Titer **<2.0 dex**	Control Titer **6.0 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	Antigen Source	Erythrocytes (species used)
No	**SMB ext. by sucrose-acetone**	**Goose**
pH Range **6.0-7.0**	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 tests. Homologous titer = 64/64 (Institut Pasteur, Dakar) - DakArB 937 gives negative results with the following immune fluids:

Group A;	Semliki Forest virus, chikungunya, o'nyong nyong, Sindbis, Middelburg, Ndumu.		
Group B;	Ntaya, Wesselsbron, Usutu, DakArY 276, West Nile, Dakar bat, yellow fever, Zika, Spondweni, Bukalasa bat, DakArY 310, Entebbe bat, Montana Myotis leukoencephalitis, dengue 1, 2, 3, 4, TH Sman, TH-36.		
Bunyamwera;	Bunyamwera, Germiston, Ilhesha, Shokwe.		
Bwamba;	Bwamba, Pongola.	Simbu;	Simbu, Ingwavuma, Yaba 7.
California;	Group serum, Lumbo.	Phelbotomus fever;	Nafada.
Turlock;	Yaba 1, M'Poko.	Nyando;	Nyando, Eret 147 (DakArY 176).
Mossuril;	Mossuril.	Kemerovo;	Chenuda, Wad Medani.
Quaranfil;	Quaranfil.	Qalyub;	Bandia.
Uukuniemi;	Grand Arbaud, Ponteves.		
Others;	Witwatersrand, Okola, Nkolbisson, Tataguine, Lebombo, Thogoto, Jos, Tanga, DakAnD 401, DakHd 763.		

DakArB 937 gaves positive results with the following immune fluid: Olivantsvlei.

Cross-CF and neutralization tests with this virus gave the following results:

Cross CF and neutralization tests with this virus gave the following results:

CF Antigens			Viruses		
Antisera	B 937	OLI	Antisera	B 937	OLI
B 937	64/64 [a]	0/0	B 937	3.2 [b]	0.6
OLI	8/32	128/32	OLI	0.2	4.2

[a] Antibody titer/antigen titer; 0/0 = <8/<8

[b] LNI in dex.

Yale Arbovirus Research Unit,New Haven [3]

Cross CF reaction gave the following results:

	ANTIGENS				
Antisera	Koongol	Wongal	OLI	DakAr B 1569	DakAr B 937
Koongol	8/16 [c]	4/64	0/0	0/0	0/0
Wongal	0/0	4/16	0/0	0/0	0/0
Olifantsvlei	16/64	4/4	512/64	128/16	4/4
DakArB 1569	16/16	0/0	128/64	256/64	0/0
DakArB 937	8/16	4/16	0/0	0/0	64/4

[c] Antibody titer/antigen titer; 0/0 = <4/<4

Results indicate that DakAR B 937 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
Culex guiarti	1/3,882 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 8	ic 0.02	Death	4	
Mice (nb)		ip			
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. 1968.
2. Bres, P. Personal communication.
3. Shope, R.E. Personal communication.
4. Robin, Y. 1973. Rapport annuel de l'Institut Pasteur de Dakar. pp. 3-4, Table 9.

Remarks