

<b>Virus Name: Boteke</b>		<b>Abbreviation: BTKV</b>
Status <b>Possible Arbovirus</b>	Select Agent <b>No</b>	SALS Level <b>2</b>
SALS Basis <b>Results of SALS surveys and information from the Catalogue.</b>		
Other Information		
Antigenic Group <b>Boteke</b>		

**SECTION I - Full Virus Name and Prototype Number**

Prototype Strain Number / Designation <b>DakArB 1077</b>	Accession Number	Original Date Submitted <b>11/26/1984</b>
Family <b>Not listed</b>	Genus <b>Not listed</b>	
Information From <b>Dr. J.P. Digoutte</b>	Address <b>Institut Pasteur B.P. 923, Bangui, Central African Republic</b>	
Information Footnote <b>Reviewed by editor</b>		

**Section II - Original Source**

Isolated By (name) <b>J.P. Digoutte, F.X. Pajot</b>	Isolated at Institute <b>isol_by J.P. Digoutte, F.X. Pajot at Bangui</b>	
Host Genus <b>Mansonia maculipennis</b>	Species	Host Age/Stage <b>Imagos</b>
Sex <b>Female</b>		
<u>Isolated From</u>	<u>Isolation Details</u>	
Signs and Symptoms of Illness	Arthropod	
Time Held Alive before Inoculation		
Collection Method <b>Collected by hand</b>	Collection Date <b>9/16/1968</b>	
Place Collected (Minimum of City, State, Country) <b>Boteke, Central African Republic</b>		
Latitude <b>4° 12' N</b>	Longitude <b>18° 30' E</b>	
Macrohabitat <b>Clearing in equatorial moist forest</b>	Microhabitat <b>Banana plantation</b>	Method of Storage until Inoculated <b>Revco at -75dC</b>
Footnotes		

**Section III - Method of Isolation**

Inoculation Date  
**9/19/1968**

Animal (Details will be in Section 6)  
**nb mice**

Route Inoculated <b>ic and ip</b>	Reisolation <b>Not tried</b>
--------------------------------------	---------------------------------

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
Lipid Solvent (chloroform)	After Treatment Titer <b>&lt;1.5 dex</b>	Control Titer <b>5.5 dex</b>
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**

Hemagglutination <b>No</b>	Antigen Source <b>SMB ext. by sucrose-acetone</b>	Erythrocytes (species used) <b>Goose</b>
pH Range <b>6.0-7.0</b>	pH Optimum	
Temperature Range <b>4dC, RT, 37dC</b>	Temperature Optimum	
Remarks		
Serologic Methods Recommended <b>CF, NT</b>		
Footnotes		

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

CF test. Homologous titer = 256/32 (Institut Pasteur, Dakar) [2]

DakArB 1077 did not react with the following viruses.

Group A:	Semliki Forest virus, chikungunya, o'nyong nyong, Begoa (DakHB 543), Sindbis, DakArY 251, Middelburg, Ndumu;		
Group B:	Ntaya, Bagaza (DakArB 209), Wesselsbron, DakArY 276, West Nile, Koutango (DakAnD 5443), Dakar bat, Uganda S, Saboya (DakAnD 4600), Banzi, Bouboui, yellow fever, Zika, Spondweni, Bukalasa bat (DakAnD 595), Royal Farm (UART 285), Kadam (UgAr 6640), DakArY 310, Usutu;		
Bunyamwera:	Bunyamwera, Germiston, Ilhesha, Shokwe, Birao (DakArB 2198);		
Simbu:	Ingwavuma, Simbu, DakAnB 331, DakArB 994, DakArB 1351;		
Bwamba:	Bwamba, Pongola;	California:	Lumbo;
Olifantsvlei:	Olifantsvlei, Bobia (DakArB 1569);		
Turlock:	Yaba 1, M'Poko (DakArB 365);		
Nyando:	Nyando, Eret 147, DakArY 176;	Mossuril:	Mossuril;
Matariya:	Garba (DakAnB 423);	Eubenangee:	Pata (DakArB 1327);
Phlebotomus fever:	Nafada (DakAnD 3150); NSD: Dugbe;		
Kemerovo:	Chenuda, Wad Medani;	Qalyub:	Bandia;

Quaranfil:	Quaranfil;
Others:	Witwatersrand, Okola, Nkolbisson, Tataguine, Lebombo, Tanga, Nyamanini, Thogoto, Jos (DakArD 3491), Bhanja (DakArD 9540), Gossas (DakAnD 401), Le Dantec (DakHD 763), Somone (DakArD 4499), Toure (DakAnD 4611), Keuraliba (DakAnD 5314), DakArD 8194 (Hann), Botambi (DakArB 937), Zinga (DakArB 1976), Bangoran (DakArB 2053), Sokoumba (DakArB 2078), Yata (DakArB 2181), Landjia (DakAnB 769), Bambio (DakArB 2712), Gomoka (DakArB 2846), Nola (DakArB 2882) DakArY 347.
Nonarbovirus:	Herpesvirus (DakHB 3667).

In addition DakArB 1077 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, IbAn 28558;		
California:	Group serum;	Tete:	Tete (SAAn 3518), Matruh (EgAn 1047);
EHD NJ:	IbAr 22619;		
Matariya:	Matariya (EgAn 1477/61), Burg el Arab (EgAn 3782/62);		
Corriparta:	EthAr 1846/64;	VSV:	Chandipura (IbAn 9978);
Phlebotomus fever:	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).		
Others:	SudAr 1275/64, Abadina (IbAr 22388), kotonkan, Oyo (IbAn 2898), IbAn 17143, Lagos bat, Mount Elgon bat, IbAn 33709, IbAn 28946, SAAn 4511.		
Nonarboviruses:	LCM, rabies, Mokola and IbH 29777 (related to rabies), IbAn 20433 (NDV).		

Results indicate that DakArB 1077 is apparently a new virus.

Boteke is related to, but easily differentiated from Zingilamo (DakAnB 1245) virus isolated in the Central African Republic from a bird. Both viruses comprise the Boteke serogroup.

**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							Growth Without CPE +/- (g)
		CPE			PLAQUES				
		Day (c)	Extent (d)	Titer TCD50/ml (e)	Day (c)	Size (f)	Titer PFU/ml (e)		

**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 maculipennis	1		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)	P-7	ic 0.02	Death	2	4.6
Mice (nb)		ip			
Mice (nb)		sc			
Mice (wn)		ic 0.03	Not pathogenic		
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)		Transmission 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  
**Neurotropic in mice**

**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) <b>Central African Republic</b>
Suspected (Antibody only detected)

**Section XIII - References**

1. Rapports Annuel de l'Institut Pasteur de Bangui. 1968
--

**Remarks**

--