

Virus Name: Bangoran		Abbreviation: BGNV
Status Possible Arbovirus	Select Agent No	SALS Level 2
SALS Basis Results of SALS surveys and information from the Catalogue.		
Other Information		
Antigenic Group Mossirul		

SECTION I - Full Virus Name and Prototype Number

Prototype Strain Number / Designation DakArB 2053	Accession Number	Original Date Submitted 11/21/1984
Family Rhabdoviridae	Genus Not listed	
Information From J.P. Digoutte	Address Institut Pasteur, B.P. 304, Cayenne, Guyane Francaise	
Information Footnote Reviewed by editor		

Section II - Original Source

Isolated By (name) J.P. Digoutte, R. Cordellier	Isolated at Institute Bangui, Central African Republic	
Host Genus Culex perfuscus	Species	Host Age/Stage Imagos
Sex Female		
<u>Isolated From</u>	<u>Isolation Details</u>	
Signs and Symptoms of Illness	Arthropod	
Time Held Alive before Inoculation		
Collection Method Collected with net	Collection Date 7/26/1969	
Place Collected (Minimum of City, State, Country) Bangoran, Central African Republic		
Latitude 8° 6' N	Longitude 20° 21' E	
Macrohabitat Savannah	Microhabitat	Method of Storage until Inoculated Liquid nitrogen and Revco at -75dC
Footnotes		

Section III - Method of Isolation

Inoculation Date
8/6/1969

Animal (Details will be in Section 6)
nb mice

Route Inoculated ic and ip	Reisolation Yes
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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 <2.0 dex	Control Titer 5.2 dex
Lipid Solvent (chloroform)	After Treatment Titer <2.0 dex	Control Titer 5.0 dex
Lipid Solvent (deoxycholate) 1%	After Treatment Titer <2.0 dex	Control Titer 5.5 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

Hemaagglutination

Hemagglutination No Antigen Source **SMB ext. by 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

Bangoran virus was tested by IFA against 88 other rhabdoviruses and did not show any relationship [6].

CF tests.	Homologous titer = 16/16 (Institut Pasteur Dakar). DakArB 2053 gave negative results with the following viruses:		
Group A;	Semliki Forest virus, chikungunya, o'nyong-nyong, Begoa (DakHB543), Sindbis, DakArY 251, Middelburg, Ndumu.		
Group B;	Ntaya, Bagaza (ArB 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;	Simbu, Ingwavuma, DakAnB 331, DakArB 994, DakArB 1351.		
Bwamba;	Bwamba, Pongola. California; Lumbo.		
Olifantsvlei;	Olifantsvlei, Bobia.	Turlock;	Yaba 1, M'Poko (DakArB 365).
Nyando;	Nyando, Eret 147, DakArY 176.	Mossuril;	Mossuril.
Matariya;	Garba.	Eubenangee;	Pata.
Phlebotomus;	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, Le Dantec, Somone (DakArD 4499), Toure, Keuraliba, Botambi, Zinga, Boteke, Sandjimba, Yata, Landjia, Gomoka (DakArB 2846), Nola (DakArB 2882).
Nonarbovirus;	Herpes virus (HB 3667).

In addition, DakArB 2053 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.		
California;	Group serum.	Tete;	Tete, Matruh.
EHD-NJ;	IbAr 22619.	Matariya;	Matariya, Burg el Arab.
Corriparta;	Acado.	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, SAA4511.		
Nonarbovirus;	LCM, rabies, Mokola and IbH 29777 (related to rabies), IbAn 20433 (NDV).		

Results indicate that DakArB 2053 is apparently a new virus.

Following the observation that Bangoran virus possessed rhabdovirus morphology [4], it was shown to share an antigenic relationship with members of the Mossuril serogroup [5].

Section VI - Biologic Characteristics

Virus Source (all VERTEBRATE isolates)
CNS (LV), heart (LV), liver (LV), spleen (LV),

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
Culex perfuscus group	1/220 pools		Central African Republic
Turdus libonyanus (bird; brain)	1/51		

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

<ol style="list-style-type: none">1. Rapport Annuel de l'Institut Pasteur de Bangui. 1969. p. 49.2. Rapport Annuel de l'Institut Pasteur de Bangui. 1972. pp. 22-23.3. Robin, Y. Institut Pasteur de Dakar. Personal communication.4. El Mekki, A.A. et al. 1981. Trans. Roy. Soc. Trop. Med. Hyg. 75:799-806.5. Tesh, R.B. et al. 1983. J. Gen. Virol. 64:169-176.6. Calisher, C.H. et al. 1989. Intervirology. In Press.

Remarks

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