

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

SECTION I - Full Virus Name and Prototype Number

Prototype Strain Number / Designation An 5550	Accession Number	Original Date Submitted 10/31/1984
Family Bunyaviridae	Genus Bunyavirus	
Information From O.R. Causey (1)	Address University of Ibadan, Ibadan, Nigeria	
Information Footnote Reviewed by editor		

Section II - Original Source

Isolated By (name) Ibadan Virus Laboratory	Isolated at Institute University of Ibadan, Nigeria isol_by Ibadan Virus Laboratory at University	
Host Genus Cattle	Species	Host Age/Stage Adult
Sex Not Answered		
<u>Isolated From</u>	<u>Isolation Details</u>	
Serum/Plasma		
Signs and Symptoms of Illness	Arthropod	
Time Held Alive before Inoculation		
Collection Method At slaughter	Collection Date 5/20/1965	
Place Collected (Minimum of City, State, Country) Ibadan, Nigeria		
Latitude 7° 20' N	Longitude 3° 50' E	
Macrohabitat	Microhabitat	Method of Storage until Inoculated Inoculated same day
Footnotes		

Section III - Method of Isolation

Inoculation Date
5/20/1965

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	Control Titer
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

No

Antigen Source

SMB ext. by sucrose-acetone

Erythrocytes (species used)

Goose

pH Range

5.8-7.0

pH Optimum

Temperature Range

RT

Temperature Optimum

Remarks

Serologic Methods Recommended

CF, NT

Footnotes

Log Neutralizing Index * for Seven Simbu Types with Homologous and Heterologous Immune Mouse Ascitic Fluids

Mouse Ascitic Fluid	Virus						
	Sango An5077	ShamondaAn5550	Sabo An9398	Shuni An10107	Sathuperi	Yaba 7	Ingwavuma
Sango	> 4.0	1.4	1.1	0	0	0	0
Shamonda	0	4.5	0	0	<1.2	<1.8	0
Sabo	0	1.4	> 4.8	0	0	0	0
Shuni	0	0	0	> 3.6	0	0	0
Sathuperi	0.2	<1.2	<1.2	<1.5	4.4	0.3	0
Yaba 7	0.6	0	<1.9	<1.9	0	3.6	0
Ingwavuma							3.1

* In dex

Cross-reacts in CF test with immune mouse ascitic fluid for Akabane [2].

Significant cross-CF reactions between Sabo, Sango, Shamonda, Shuni, and Sathuperi, but not with Ingwavuma. Shamonda and Sathuperi closely related by immunodiffusion test [4].

Following antigenic studies involving 24 Simbu group viruses, Shamonda virus was classified as a distinct virus type and placed in the Simbu complex of the Simbu serogroup [5].

Section VI - Biologic Characteristics

Virus Source (all VERTEBRATE isolates)
Blood (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)		
Mouse embryo (PC)			CPE (3)						
BHK-21 (CL)			CPE (3)						
Vero (CL)						Plaques (4)			
LLC-MK2 (CL)						Plaques (4)			

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
Man	0/5,820		Ibadan, Nigeria
Cattle	4/2,199	25/28 NT	
Sheep	0/323		
Goat	0/320		
Swine	0/131		
Dog and cat	0/71		
Horse	0/26		
Camel	0/26		
Insectivora	0/336		

Chiroptera	0/828
Primate	0/64
Lepus	0/6
Rodentia	0/3,084
Carnivora	0/7
Aves	0/319
Reptile	0/56
Amphibia	0/3
Mosquito pools	0/420
Culicoides pool	0/462
Ixodidae pools	0/4,435

Culicoides imicola pallidipennis and Culicoides spp., unfed pools, 1 isolation each, Ibadan (2)

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) Nigeria
Suspected (Antibody only detected)

Section XIII - References

1. Causey, O.R., et al. 1972. Ann. Trop. Med. Parasitol. 66:357-362.
2. Moore, D.L. Personal communication. Mar. 1971.
3. Stim, T.B. 1969. J. Gen. Virol. 5:329-338.
4. David-West, T.S. 1972. Ind. J. Med. Res. 60:191-199.
5. Kinney, R.M. and Calisher, C.H. 1981. Am. J. Trop. Med. Hyg. 30:1307-1318.

Remarks
