

Virus Name: Oubi		Abbreviation: OUBIV
Status Possible Arbovirus	Select Agent No	SALS Level
SALS Basis		
Other Information		
Antigenic Group Olifantsvlei		

SECTION I - Full Virus Name and Prototype Number

Prototype Strain Number / Designation ArA 3673/81	Accession Number	Original Date Submitted 3/5/1986
Family Not listed	Genus Bunyavirus	
Information From Lhuillier, Michel	Address Institut Pasteur de Cote d'Ivoire, 01 BP 490, Abidjan, Ivory Coast	
Information Footnote		

Section II - Original Source

Isolated By (name) Lhuillier, M. and Cordellier, R.	Isolated at Institute Abidjan, Ivory Coast	
Host Genus Culex (Eumelanomyia) rima group	Species	Host Age/Stage
Sex Female		
<u>Isolated From</u>	<u>Isolation Details</u>	
Signs and Symptoms of Illness	Arthropod Depleted	
Time Held Alive before Inoculation 3 months		
Collection Method Captured by nets	Collection Date 12/8/1981	
Place Collected (Minimum of City, State, Country) Tai, Ivory Coast		
Latitude 5° 50' N	Longitude 7° 20' W	
Macrohabitat Primitive rain forest	Microhabitat At ground level in the shade; little dry season	Method of Storage until Inoculated Liquid nitrogen
Footnotes		

Section III - Method of Isolation

Inoculation Date

11/5/1981

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
4.7 dex

Control Titer
6.4 dex

Lipid Solvent (deoxycholate)

After Treatment Titer

Control Titer

Other (formalin, radiation)

Virion Morphology

Shape

Dimensions
<200 nm

Mean
nm

Range
nm

Measurement Method

Millipore filtration

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. by sucrose-acetone	Erythrocytes (species used) Goose
pH Range 5.7-6.8	pH Optimum	
Temperature Range	Temperature Optimum	
Remarks		
Serologic Methods Recommended CF, NT		
Footnotes		

CF test: homologous titer = 256/32.

J.P. Digoutte and G. Heme, Institut Pasteur de Dakar

ArA 3673 gives positive results with the immune fluid to Botambi virus.

Antisera	COMPLEMENT FIXATION			
	ArA 3673	Botambi	Bobia	Olifantsvlei
ArA 3673	256/32 *	64/32	8/2	<8/2
Botambi	32/32	512/32		
Bobia	<8/<2		64/8	8/8
Olifantsvlei	<8/<2		<8/<2	32/8
* Highest antiserum titer/optimum antigen titer.				

Antisera	NEUTRALIZATION	
	ArA 3673	Botambi
ArA 3673	2.8 **	0.3
Botambi	0.8	2.4
** LMI given in dex.		

Results indicate that ArA 3673 apparently is a new virus belonging to the Olifantvlei antigenic group.

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 +/- (g)
		Day (c)	Extent (d)	Titer TCD50/ml (e)	Day (c)	Size (f)	Titer PFU/ml (e)	
Vero (CL)	SM 4		No CPE			No plaques		

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 rima gr.	1		Tai Forest, Ivory Coast

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)	SM 4	ic 0.02	Death	5	6.5
"" (nb)		ip 0.03	Death		
"" (nb)		sc			
"" (wn)		ic 0.03	Antibodies		
"" (wn)		ip 0.1	Antibodies		

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

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) Ivory Coast
Suspected (Antibody only detected)

Section XIII - References

1. Institut Pasteur Dakar Annual Report, 1982. P. 84.

Remarks

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