

<b>Virus Name: Mboke</b>		<b>Abbreviation: MBOV</b>
Status <b>Possible Arbovirus</b>	Select Agent <b>No</b>	SALS Level
SALS Basis		
Other Information		
Antigenic Group <b>Bunyamwera</b>		

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

Prototype Strain Number / Designation <b>DakArY 357</b>	Accession Number	Original Date Submitted 12/1/1985
Family	Genus <b>Bunyavirus</b>	
Information From <b>G. LeGonidec and Arbovirus Re. Centre</b>	Address <b>Institut Pasteur Paris and Institut Pasteur Dakar, BP 220, Dakar, Senegal</b>	
Information Footnote		

**Section II - Original Source**

Isolated By (name) <b>R. Boche and A. Richenbach</b>	Isolated at Institute <b>Institut Pasteur du Cameroon, Yaounde</b>	
Host Genus <b>Aedes (Finlaya) ingrami</b>	Species	Host Age/Stage <b>Adult</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>Human bait</b>	Collection Date <b>11/19/1970</b>	
Place Collected (Minimum of City, State, Country) <b>Mboke, Cameroon</b>		
Latitude <b>4° 19' N</b>	Longitude <b>12° 37' E</b>	
Macrohabitat <b>Semi-deciduous forest</b>	Microhabitat <b>In a tree, 4 meters above ground level, on a banana plantation at the edge of the forest</b>	Method of Storage until Inoculated <b>Liquid nitrogen</b>
Footnotes		

**Section III - Method of Isolation**

Inoculation Date  
**12/7/1970**

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

Route Inoculated <b>Intracerebral</b>	Reisolation <b>Not tried</b>
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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 <b>2.2 dex</b>	Control Titer <b>6.5 dex</b>
Lipid Solvent (deoxycholate)	After Treatment Titer	Control Titer
Other (formalin, radiation)		

**Virion Morphology**

Shape	Dimensions <b>&lt; 220 nm</b>	
Mean nm	Range nm	
Measurement Method <b>Millipore filter; After filtration = 6.5 dex, cont</b>	Surface Projections/Envelope	Nucleocapsid Dimensions, Symmetry

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**Morphogenesis**

Site of Constituent Formation in Cell

Site of Virion Assembly

Site of Virion Accumulation

Inclusion Bodies

Other

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**Hemagglutination**Hemagglutination  
**Yes**Antigen Source  
**SMB ext. by sucrose-acetone**Erythrocytes (species used)  
**Goose**pH Range  
**5.7-6.6**pH Optimum  
**6.2**

Temperature Range

Temperature Optimum  
**Room temperature**

Remarks

**Titers usually = 320**Serologic Methods Recommended  
**CF, NT**

Footnotes

**Titers usually = 320**

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

CF test-homologous titer = 32/128

ArY 357 gives positive results with the following immune fluids: Bunyamwera, Ilesha, Shokwe, Birao, ArB 7343 (Bozo), ArD 28542 (Ngari)

Neutralization tests with these viruses gives the following results by the plaque-reduction technique on Vero cells.

ANTISERA	VIRUS						
	MBOKE	BUNYAMWERA	ILESHA	SHOKWE	BIRAO	BOZO (ArB 743)	NGARI (ArD28542)
Mboke (ArY 357)	256 *	0	0	0	0	0	0
Bunyamwera	0	256	0	0	0	0	0
Ilesha	0	0	256	0	0	0	0
Shokwe	0	0	0	128	0	0	0
Biaro	0	0	0	0	128	0	0
Bozo (ArB 7343)	0	0	0	0	0	512	0
Ngari (ArD 28542)	0	0	0	0	0	0	256

\* Reciprocal fo highest antiserum dilution producing >90% plaque inhibition; 0 = <16.

Results indicate that DAKArY 357 apparently is a new virus.

**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						
		CPE			PLAQUES			Growth Without CPE +/- (g)
		Day (c)	Extent (d)	Titer TCD50/ml (e)	Day (c)	Size (f)	Titer PFU/ml (e)	
Vero (CL)	SMB 6				2	3 mm	7.1 dex	

**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
Aedes (Fin) ingrami	1		Mboke, Cameroon (1)



**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>Cameroon</b>
Suspected (Antibody only detected)

**Section XIII - References**

1. Centre Collaborateur OMS De Reference Et De Recherche Sur Les Arbovirus. Institut Pasteur, Dakar, Senegal. Institut Pasteur Dakar Annual Report. 1972.
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**Remarks**

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