

<b>Virus Name: Pata</b>		<b>Abbreviation: PATAV</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>Eubenangee</b>		

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

Prototype Strain Number / Designation <b>DakArB 1327</b>	Accession Number	Original Date Submitted <b>8/8/1984</b>
Family <b>Reoviridae</b>	Genus <b>Orbivirus</b>	
Information From <b>J.P. Digoutte</b>	Address <b>Institut Pasteur B.P. 304 Cayenne Guyane Francaise</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>Bangui Central African Republic (2)</b>	
Host Genus <b>Aedes palpalis</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>11/23/1968</b>	
Place Collected (Minimum of City, State, Country) <b>Pata Central African Republic</b>		
Latitude <b>4° 50' N</b>	Longitude <b>18° 38' E</b>	
Macrohabitat <b>Savannah forest mosaic</b>	Microhabitat <b>Near village of Pata</b>	Method of Storage until Inoculated <b>Revco at -75dC</b>
Footnotes		

**Section III - Method of Isolation**

Inoculation Date  
**11/26/1968**

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

Route Inoculated  
**ic and ip**

Reisolation  
**No**

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)	

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**Stability of Infectivity (effects)**

pH (infective range)

Lipid Solvent (ether - % used to test) <b>1:1</b>	After Treatment Titer <b>5.2 dex</b>	Control Titer <b>5.2 dex</b>
Lipid Solvent (chloroform)	After Treatment Titer <b>2.5 dex</b>	Control Titer <b>7.2 dex</b>
Lipid Solvent (deoxycholate) <b>1%</b>	After Treatment Titer <b>4.2 dex</b>	Control Titer <b>5.2 dex</b>

Other (formalin, radiation)  
**Relatively stable to lipid solvents: ether and sodium deoxycholate**

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**Virion Morphology**

Shape <b>Spherical</b>	Dimensions <b>70 nm</b>	
Mean nm	Range nm	
Measurement Method <b>EM (thin sections of infected mouse brain and DM)</b>	Surface Projections/Envelope <b>Very few extracellular particles</b>	Nucleocapsid Dimensions, Symmetry

**Morphogenesis**

Site of Constituent Formation in Cell

Site of Virion Assembly

Site of Virion Accumulation

Inclusion Bodies  
Placed in **Orbivirus** taxon

Other

**Hemagglutination**

Hemagglutination  
No

Antigen Source  
**SMB ext. with sucrose-acetone, tr. with  
protamine**

Erythrocytes (species used)  
**Goose**

pH Range  
5.7-6.6

pH Optimum

Temperature Range  
4dC, RT, 37dC

Temperature Optimum

Remarks

Serologic Methods Recommended  
CF

Footnotes

Related to bluetongue, epizootic hemorrhagic disease of deer, Eubenangee viruses as follows [4] :

Antigens	Results of CF Test				
	Bluetongue Sheep serum	EHD Mouse AF	IbAr 22619 Mouse AF	Eubenangee	Pata Mouse AF
Bluetongue	8/8 *	4/8	0/0	0/0	4/8
EHD	0/0	256/16	32/16	0/0	32/16
IbAr 22619	0/0	128/16	32/16	0/0	32/4
Eubenangee	0/0	8/4	4/4	32/16	16/4
Pata (DakAr B 1327)	0/0	16/16	4/4	0/0	512/64
VS-Indiana	0/0	0/0	0/0	0/0	0/0

\* Antibody titer/antigen titer

Results indicate that DakArB 1327 is a hitherto undescribed virus strain related to Eubenangee and epizootic hemorrhagic disease of deer viruses.

Hybridization and gene reassortment data indicate that Pata virus is not a member of the bluetongue or EHD serogroups; it should be assigned to the ungrouped set of orbiviruses. Minor antigens shared among members of the EHD serogroup, bluetongue and Pata viruses probably reflect their common ancestry [6] .

**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
Aedes palpalis group	1/141 pools		Central African Republic
Aedes tarsalis group	1		Centr. Afr. Republic (5)



**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. Borden, E.C., et al. 1971. J. Gen. Virol. 13:261-271.
2. Rapport Annuel de l'Institut Pasteur de Bangui. 1968. pp. 50-51.
3. Kilby, V.A.A., Shope, R.E. Unpublished data from Department of Epidemiology and Public Health, Yale University School of Medicine, New Haven, Conn.
4. Shope, R.E. Unpublished data from Yale Arbovirus Research Unit, Yale University School of Medicine, New Haven, Conn.
5. Rapport Annuel de l'Institut Pasteur de Bangui. 1973. pp. 18-19
6. Brown, S.E., et al. 1988. J. Gen. Virol. 69:135-148.

**Remarks**

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