

**Virus Name: Batama**

**Abbreviation: BMAV**

**Status:** Possible Arbovirus

**SALS Level:** 3

**Antigenic Group:** Tete

**Taxonomic status:** *Bunyavirus*

**Other Information:** None.

**Select Agent:**

**SALS Basis:** IE

**HEPA Filtration:**

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

**Full Virus Name:**

**Batama**

**Prototype Number:**

AnB 1292a

**Information from:** J.P. Digoutte

**Date:**

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10/3/1984

**Address:** Institut Pasteur, B.P. 304, Cayenne, Guyane Francaise

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Reviewed by editor

**Section II - Original Source**

**Isolated by:** J.P. Digoutte and J. Moindrot **at:** Bangui, Central African Republic

**Genus and species:** Euplectes afra

**Sentinel X**

**Age/Stage:** Adult

**Sex:**

Isolated From	Isolation detail
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**Signs and symptoms of illness:**

**Arthropod engorged** depleted gravid

**Time held alive before inoculation:**

**Collection date:** 8/28/1970 **Method:** By net

**Place collected:** Landjia, Central African Republic

**Latitude:** 4° 22' " N

**Longitude:** 18° 39' " E

**Macrohabitat:** Forest savannah mosaic

**Microhabitat:** Ranch, ten kilometers east of Bangui

**Method of storage until inoculated:** Liquid nitrogen 1 day, then Revco at -75dC

**Footnotes:**

**Section III - Method of Isolation and Validity**

**Inoculation Date:** 9/26/1970

**Animal:** nb mice

**Embryonated egg:**

**Tissue Culture:**

(Details in Section VI - Biologic Char.)

**Route inoculated:** ic and ip

**Reisolation:** Not tried

**Other reasons:** First virus of this type in the laboratory

**Homologous antibody formation by source animal** (See Section II):

**Test used:** HI

CF

NT

**Other:**

**Footnotes:**

## Section IV - Virus Properties

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### Physicochemical:

RNA: DNA: Single Strand: Double Strand:  
Pieces: Infectivity: Sedimentation coefficient(s): /strong>  
Percentage wt. of virion protein, lipid carbohydrate  
Virion polypeptides:  
Number: Details:  
Non-virion polypeptides:  
Number: Details:  
Virion density: Sedimentation coefficient:  
Nucleocapsid density Sedimentation coefficient:

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### Stability of infectivity (effects) pH

Lipid solvent:  
(ether) After treatment titer Control titer  
(chloroform) 5% After treatment titer <2.0 dex Control titer 5.6 dex  
Detergent:  
(deoxycholate) After treatment titer Control titer  
Other (formalin, radiation):

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### Virion morphology:

Shape Dimensions  
Mean (nm) range (nm) how measured  
Surface projections, envelope  
Nucleocapsid dimensions, symmetry

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### Morphogenesis:

Site of constituent formation in cell  
Site of virion assembly  
Inclusion bodies  
Other

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### Hemagglutination:

Hemagglutination Yes Antigen source SMB ext. by sucrose-acetone  
Erythrocytes Goose pH range 6.0-6.8 pH optimum 6.0  
Temperature optimum RT range  
Remarks  
Serologic methods recommended CF, NT  
Footnotes:

**Section V - Antigenic Relationship And Lack of Relationship To Other Viruses**

CF test - homologous titer = 512/64.

Institut Pasteur (Dakar) [2] : AnB 1292a antigen gave positive results with immune sera to Tete, Bahig and Matruh viruses and gave negative results with immune sera to other arboviruses that have been isolated in Africa.

**Complement-fixation test:**

Ascitic fluids	Antigens			
	AnB 1292a	Tete	Bahig	Matruh
AnB 1292a	512/64 *	512/128	64/128	32/128
Tete	512/64	256/128	0/0	16/128
Bahig	64/32	32/128	256/128	256/128
Matruh	0/0	0/0	32/128	32/128

\* Maximum titer of antiserum/optimum titer of antigen: % = <4/<4.

**Neutralization test:**

Ascitic fluids	Virus			
	AnB 1292a	Tete	Bahig	Matruh
AnB 1292a	3.9 **	1.70	.60	.9
Tete	2.0	2.80	.60	.6
Bahig	2.7	1.5	>3.7	3.3
Matruh	1.8	1.1	1.7	3.2

\*\* LNI in dex

**Section VI - Biologic Characteristics**

**Virus source (all VERTEBRATE isolates):** Blood (LV), organs (LV)  
**Lab Methods of Virus Recovery (ALL ISOLATIONS):** Newborn mice  
**Susceptibility of Cell Culture Systems:**

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**

Vertebrate (species and organ) and arthropod	No. isolations/No. tested	No. with antibody/No. tested Test used	Country and region used
Euplectes afra (bird; blood, organs)	3/69		Central African Republic (1)
Ploceus melanocephalus (bird; blood)	1/14		
Hyphanturgus nigricollis (bird; blood)	1/8		

**Section VIII - Susceptibility To Experimental Infection (Record Viremia)**

Experimental host and age	Passage history and strain	Inoculation Route- Dose	Evidence of infection	AST (days)	Titer log10/ml
Mice (nb)	SMB 6	ic 0.02	Death	4	4.5
Mice (nb)		ip			
Mice (nb)		sc			
Mice (wn)		ic 0.03	Antibody		
Mice (wn)		ip 0.1	Antibody		

**Section IX - Experimental Arthropod Infection And Transmission**

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Arthropod species & virus source(a)	Method of Infection log <sub>10</sub> /ml (b)		Incubation period (c)		Transmission by bite (d)		Assay of arthropod, log <sub>10</sub> /ml (e)		
	Feeding	Injected	Days	°C	Host	Ratio	Whole	Organ	System

**Section X - Histopathology**

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**Character of lesions:**

**Inclusion bodies:**

Cytoplasmic:(M) (LV) Intranuclear: (M) (LV)

**Organs-tissues affected:**

**Category of tropism:**

**Section XI - Human Disease**

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**Human disease:** In nature: (S) (R)

Death: (S) (R)

Residua: (S) (R)

**Laboratory infections:** Subclinical: (S) (R)

Overt Disease: (S) (R)

**Clinical manifestations:**

**Category:** No. of cases:

**Section XII - Geographic Distribution**

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**Known (virus):**

Central African Republic

**Section XIII - References**

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1. Digoutte, J.P. 1970. Rapport Annuel de l'Institut Pasteur de Bangui, p.54.
2. Robin, Y. Personal communication.

**Section XIV - Remarks**

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