

Virus Name: **Tembe**

Abbreviation: **TMEV**

Status: Possible Arbovirus

Select Agent:

SALS Level: 2

SALS Basis: S

Antigenic Group: ungrouped

HEPA Filtration:

Taxonomic status:

Other Information: None.

Section I - Full Virus Name and Prototype Number

Full Virus Name: **Tembe** Prototype Number:

BeAr 50117*

Information from: Belem Virus Lab Date:

*

2/27/1985

Address: Belem Virus Laboratory, Instituto Evandro Chagas, Belem, Para, Brazil

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Reviewed by editor

Section II - Original Source

Isolated by: Belem Virus Laboratory at: Belem, Para, Brazil

Genus and species: Anopheles (Ste) nimiris Sentinel X

Age/Stage: Sex: F

Isolated From	Isolation detail
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Signs and symptoms of illness:

Arthropod engorged depleted gravid

Time held alive before inoculation:

Collection date: 1/11/1963 Method: human bait, hand collected in vials

Place collected: Belem, Brasilia Highway, km 87

Latitude: 3° ' " S Longitude: 48° ' " W

Macrohabitat: Virgin forest

Microhabitat: ground level

Method of storage until inoculated: at -60dC

Footnotes:

Section III - Method of Isolation and Validity

Inoculation Date: 1/31/1963

Animal: nb mice Embryonated egg: Tissue Culture:

(Details in Section VI - Biologic Char.)

Route inoculated: intracerebral Reisolation: No

Other reasons:

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

Test used: HI CF NT

Other:

Footnotes:

Section IV - Virus Properties

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:

Stability of infectivity (effects) pH

Lipid solvent:
(ether) After treatment titer Control titer
(chloroform) After treatment titer Control titer
Detergent:
(deoxycholate) After treatment titer Control titer
Other (formalin, radiation):

Virion morphology:

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

Morphogenesis:

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

Hemagglutination:

Hemagglutination No Antigen source SMB ext. by sucrose-acetone
Erthrocytes goose pH range 6.0-7.0 pH optimum
Temperature optimum range
Remarks
Serologic methods recommended CF, NT * Information given for prototype. Orig
Footnotes:

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

Tembe antigen negative n CF with the following hyperimmune sera:

Grouping sera of Groups A, B, C, Guama, Capim, Bunyamwera, California, Simbu, Bakau; and sera of Timbo, Chaco, Marco, Bujaru, mouse encephalomyelitis, Acara, Pacui, Tacaima, Irituia, Jurona, Lukuni, Turlock, Oropouche, Icoaraci, Anhangá, Mirim, Candiru, Umbre, bat salivary gland, TRVL 30109-3, Chagres, Cocal, Panama BT 219, Panama J55, K 622, Nariva, Panama BT 1371, BT 640, BT 1122, BT 1332-1, Bwamba, Quarantin, Chenuda, Anopheles B, Triniti, Ieri, Aruac, Mapputta, Cotia, Wad Medani, SF Sicilian, Hart Park, Lebombo, Tete, Navarro, Witwatersrand, Tacaribe, Mossuril, Wongal.

Tembe hyperimmune mouse serum did not inhibit HA of:

EEE, Aura, Mucambo, Pixuna, YF, Ilheus, Bussuquara, SLE, Candiru, Anhangá, Icoaraci, Itaporanga, Bujaru, Turlock.

Section VI - Biologic Characteristics

Virus source (all VERTEBRATE isolates):

Lab Methods of Virus Recovery (ALL ISOLATIONS):

Susceptibility of Cell Culture Systems:

Cell system (a)	Virus passage history (b)	Evidence of Infection						
		CPE		PLAQUES		Growth Without CPE		
		Day (c)	Extent (d)	Titer TCD50/ml (e)	Day (c)	Size (f)	Titer PFU/ml (e)	+/- (g)
Vero (CL)	(BeAr 50117), SMB 6			10	1mm	4.7**(2)		
LLC-MK2 (CL)					No Plaques (2)			

** Expressed in dex

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
Anopheles (Ste) nimiris	2		Para, Brazil (1)

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)	P-3	ic 0.02	death	8.0	5.9	
mice (nb)		ip 0.02	none			
mice (nb)		sc				
mice (wn)		ic 0.03	antibody			
mice (wn)		ip 0.03	antibody			

Section IX - Experimental Arthropod Infection And Transmission

Section X - Histopathology

Character of lesions: encephalitis only (L.B. Dias)

Inclusion bodies:

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

Organs-tissues affected:

Category of tropism:

Section XI - Human Disease

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

Section XIII - References

1. Woodall, J.P. 1967. Atas Simpos. Biota Amazon. 6:31-63.
 2. Stim, T.B. 1967. J. Gen. Virol. 5:329-338.

Section XIV - Remarks

