| Virus Name: Tete | Abbreviation: TETEV |
|---|---|

Status
**Possible Arbovirus**

Select Agent
**No**

SALS Level
**2**

SALS Basis
**Results of SALS surveys and information from the Catalogue.**

Other Information

Antigenic Group
**Tete**

## SECTION I - Full Virus Name and Prototype Number

Prototype Strain Number / Designation
**SAAn 3518**

Accession Number

Original Date Submitted
2/6/1984

Family
**Bunyaviridae**

Genus
**Bunyavirus**

Information From
**B.M. McIntosh**

Address
**National Institute for Virology, P/Bag X4, Sandringham, 2131, South Africa**

Information Footnote
**Revised**

## Section II - Original Source

Isolated By (name)
**B.M. McIntosh (1)**

Isolated at Institute
**S. Afr.Inst.Med.Res., Johannesburg**

Host Genus
**Ploceus cucullatus (spotted-back weaver-bird)**

Species

Host Age/Stage
**Adult**

Sex
**Not Answered**

| Isolated From | Isolation Details |
|---|---|
| **Organs/Tissues** | **Liver, kidney, heart, pancreas** |

Signs and Symptoms of Illness

Arthropod

Time Held Alive before Inoculation

Collection Method
**Mist net**

Collection Date
**2/5/1959**

Place Collected (Minimum of City, State, Country)
**Ndumu, Natal, South Africa**

Latitude
**27° S**

Longitude
**32° E**

Macrohabitat
**Tropical savannah**

Microhabitat

Method of Storage until Inoculated
**Solid CO2**

Footnotes

## Section III - Method of Isolation

Inoculation Date
**2/16/1959**

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

Route Inoculated
**Intracerebral**

Reisolation
**Yes**

Other Reasons
**Other strains isolated from birds in same area**

Homologous Antibody Formation by Source Animal
**Not tested**

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)<br>**20%** | After Treatment Titer<br>**<2.0 dex** | Control Titer<br>**4.8 dex** |
| Lipid Solvent (chloroform) | After Treatment Titer | Control Titer |
| Lipid Solvent (deoxycholate) | After Treatment Titer | Control Titer |

Other (formalin, radiation)

**Virion Morphology**

| | | |
|---|---|---|
| Shape | Dimensions | |
| Mean<br>nm | Range<br>nm | |
| Measurement Method | 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 | Antigen Source | Erythrocytes (species used) |
|---|---|---|
| **Yes** | **SMB ext. by sucrose-acetone + sonication** | **Goose** |
| pH Range | pH Optimum | |
| **5.8-6.2** | **5.8** | |
| Temperature Range | Temperature Optimum | |

Remarks
**Titer 1:16**

Serologic Methods Recommended
**HI, CF, NT**

Footnotes
**Titer 1:16**

## Section V - Antigenic Relationship and Lack of Relationship to Other Viruses

Two units of Tete antigen were inhibited by 1:20 Bunyamwera grouping ascitic fluid and by 1:80 of a Simbu grouping ascitic fluid [2] .

| Virus or Antibody | Tete Virus | | | Tete Antibody | | |
|---|---|---|---|---|---|---|
| | HI(2) | CF(2) | NT(3) | HI(2) | CF(2) | NT(3) |
| Bahig | 64 | >4 | >2.2 | 4 | 8 | 1.4 |
| Matruh | 64 | 16 | 2.1 | 4 | 8 | 1.4 |
| Batama | | | 2.2 | | | 0.8 |
| Tsuruse | | | >0.9 | | | 1.7 |

Hi and CF results expressed as quotient of homologous/heterologous titers; NT results as difference of LNI from homologous in dex.

Placed in Tete serogroup of Bunyavirus genus [4] .

SIRACA considers Bahig, Matruh and Tsuruse viruses to be subtypes of Tete virus [7] .

## 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 | |
| | | Day (c) | Extent (d) | Titer TCD50/ml (e) | Day (c) | Size (f) | Titer PFU/ml (e) | +/- (g) | |
| | | | | | | | | | |

## 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 |
|---|---|---|---|
| Man | | 0/273 NT | Natal, South Africa (1) |
| Birds: | | | |
| Ploceus cucullatus | 1 | | |
| Cisticola chiniana | 1 | | |
| Serinus mozambicus | 1 | | |
| Plesiositagra cucullatus | 1 | | Nigeria (5) |
| Euplectes orix | 1 | | |
| Organ pool, 5 birds | Pos. isol. | | Nigeria (6) |

## 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) | | ic | Death | 2 | 7.4 |
| Mice (nb) | | ip | Death | 4 | 6.2 |
| Mice (nb) | | sc | | | |
| Mice (wn) | | ic | Death | 7-10 | 1.0 |
| Mice (wn) | | ip | | | |
| chicks (3 day) | | ip | No viremia (1) | | |
| 2 species of duck, a coot, and cattle egret | | im | No viremia, only coot developed antibody (1) | | |

## Section IX - Experimental Arthropod Infection and Transmission

| Arthropod species & virus source(a) | Method of Infection log10/ml (b) | | Incubation period (c) | | Transmision by bite (d) | | Assay of arthropod, log10/ml (e) | | |
|---|---|---|---|---|---|---|---|---|---|
| | Feeding | Injected | Days | °C | Host | Ratio | Whole | Organ | System |
| Ae aegypti | | >6.7 | 34 | 26 | Not done | | 6.4 | (1) | |
| Ae aegypti | 7.4 | | 15-27 | 26 | Mouse | 0/22 | <2.0 | (1) | |

## 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)
**South Africa (1), Nigeria (5,6)**

Suspected (Antibody only detected)

## Section XIII - References


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2. Director, Yale Arbovirus Research Unit. Personal communication.
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6. Causey, et al. As advised by source (2).
7. Calisher, C.H., et al. 1985. Intervirology. To be submitted.


## Remarks