

Virus Name: Burg el Arab		Abbreviation: BEAV
Status Possible Arbovirus	Select Agent No	SALS Level 2
SALS Basis Results of SALS surveys and information from the Catalogue.		
Other Information		
Antigenic Group Matariya		

SECTION I - Full Virus Name and Prototype Number

Prototype Strain Number / Designation An 3782-62	Accession Number	Original Date Submitted 11/7/1984
Family Bunyavirus	Genus Bunyavirus-like	
Information From J.R. Schmidt	Address Department of the Navy, BUMED, Washington, D.C. 20372 USA	
Information Footnote Reviewed by editor		

Section II - Original Source

Isolated By (name) J.R. Schmidt	Isolated at Institute Cairo, Egypt	
Host Genus Sylvia curruca (Lesser whitethroat), southward migrant	Species	Host Age/Stage
Sex Not Answered		
<u>Isolated From</u> Whole Blood	<u>Isolation Details</u> (heparinized)	
Signs and Symptoms of Illness None	Arthropod	
Time Held Alive before Inoculation		
Collection Method Netted	Collection Date 10/15/1962	
Place Collected (Minimum of City, State, Country) Bahig, Matruh Governorate, Egypt		
Latitude 31° N	Longitude 29° E	
Macrohabitat Irrigated garden oasis in semi-desert	Microhabitat	Method of Storage until Inoculated Not stored
Footnotes		

Section III - Method of Isolation

Inoculation Date
10/30/1962

Animal (Details will be in Section 6)
nb mice

Route Inoculated
Intracerebral

Reisolation
No

Other Reasons

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)	After Treatment Titer	Control Titer
Lipid Solvent (chloroform)	After Treatment Titer	Control Titer
Lipid Solvent (deoxycholate)	After Treatment Titer	Control Titer
Other (formalin, radiation)		

Virion Morphology

Shape Rhabdovirus (2)	Dimensions 180 x 48 nm	
Mean nm	Range nm	
Measurement Method EM (2)	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

Hemagglutination Antigen Source Erythrocytes (species used)
No **SMB ext. by sucrose-acetone** **Goose**

pH Range pH Optimum
5.8-7.0

Temperature Range Temperature Optimum
Room temperature

Remarks

Serologic Methods Recommended
CF, NT

Footnotes

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

Related to Matariya virus by CF as follows [1] :

Antigen	Antibody	
	Burg el Arab	Matariya
Burg el Arab	512	4
Matariya	128	128

Antigen did not react by CF with grouping ascitic fluids of groups A, B, C, Guama, Capim, Simbu, Bunyamwera, California, Ahopheles A, Anopheles B, Turlock, Tacaribe, vesicular stomatitis, Quarantfil, Kaisodi, Qalyub, and Phlebotomus fever. Burg el Arab ascitic fluid did not react by CF with antigens of 117 presumed arboviruses and herpes simmplex, LCM, NDV, rabies, ectromelia, and reovirus 3.

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							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
Sylvia curruca	1/323		Egypt

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 log ₁₀ /ml
Mice (nb)	SMB 9	ic 0.01	Death	5 *	4.9
Mice (nb)		ip 0.03	None		<1.5
Mice (nb)		sc			
Mice (wn)		ic 0.03	None	<1.5	
Mice (wn)		ip 0.03	None	<1.5	

* AST for mice inoculated with a 10⁻² dilution.

Section IX - Experimental Arthropod Infection and Transmission

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

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) Egypt; probably also Europe since bird arrived viremic in Egypt from Europe.
Suspected (Antibody only detected)

Section XIII - References

1. Shope, R.E. Personal communication. 2. Calisher, C.H. et al. 1989. Intervirology. In Press.

Remarks

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