

Virus Name: Bahig		Abbreviation: BAHV
Status Probable 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 EgB 90	Accession Number	Original Date Submitted 11/5/1984
Family Bunyaviridae	Genus Bunyavirus	
Information From Robert E. Shope	Address Yale Arbovirus Research Unit, 60 College Street, New Haven, Connecticut 06510, USA	
Information Footnote Reviewed by editor		

Section II - Original Source

Isolated By (name) Smithsonian Field team in collaboration with YARU	Isolated at Institute New Haven CT	
Host Genus Oriolus oriolus	Species	Host Age/Stage Adult
Sex Not Answered		
<u>Isolated From</u> Serum/Plasma	<u>Isolation Details</u>	
Signs and Symptoms of Illness	Arthropod	
Time Held Alive before Inoculation		
Collection Method Netted and bled the same day	Collection Date 9/2/1966	
Place Collected (Minimum of City, State, Country) Bahig Village, Matruh Governate, Egypt		
Latitude 31° N	Longitude 30° E	
Macrohabitat Irrigated garden oasis in semi-desert	Microhabitat	Method of Storage until Inoculated In sealed ampoule at -60dC
Footnotes		

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)
Yes **SMB ext. by sucrose-acetone + sonication** **Goose**

pH Range pH Optimum
5.8-6.2 **5.9**

Temperature Range Temperature Optimum
Room temperature

Remarks

Serologic Methods Recommended
CF, HI, NT

Footnotes

Related to Tete and Matruh [2] .

CF:

Antigens	Bahig Ascitic Fluid	Matruh Serum	Tete Ascitic fluid
Bahig	>128	64	4
Matruh	>128	64	4
Tete	32	4	32

HI:

	Bahig Ascitic fluid	Matruh Serum
Bahig	2560	40
Matruh	80	640

EgB 90 ascitic fluid (homologous titer = 128) did not fix complement with 117 arbovirus antigens and herpes, LCM, rabies, vaccinia, and NDV. Egb 90 HA antigen was not inhibited by 70 ascitic fluids of arboviruses. Further HI tests showed inhibition by a Simbu grouping fluid (1:20) and by typing fluids (1:10 or 1:20) of Simbu, Ingwavuma, Manzanilla, Mermet, Buttonwillow, Bwamba, California, and Bunyamwera.

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						
		CPE			PLAQUES			Growth Without CPE +/- (g)
		Day (c)	Extent (d)	Titer TCD50/ml (e)	Day (c)	Size (f)	Titer PFU/ml (e)	
Vero (CL)	SM 1		Granulation and rounding of cells	7.5*				
Vero (CL)	P3SM1				3	3.0 mm	8.3* (5)	
LLC-MK2 (CL)					4-6	1.0 mm	8.1 (5)	

* Expressed in dex

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
Chloris chloris	1/97 *		Egypt and, Cyprus, spring 1968
Luscinia luscinia	1/108 *		Fall migrations, 1966-1968
Luscinia megarhynchos	1/50 *	2/24 HI	Bahig and Matruh; antibody not easily distinguished by 15/31 HI positive plasmas were positive by NT; 2/31 HI negative plasmas were positive by NT.
Muscicapa striata	1/200 *		
Oriolus oriolus	1/61 *		
Phoenicurus phoenicurus	5/219 *	0/27	
Phylloscopus collybitus	5/428 *	0/26	

Phylloscopus trochilus	3/344 *	1/28	
Sylvia atricapilla	1/78 *	0/24	
Sylvia borin	2/105 *	4/4	
Sylvia communis	12/191 *	1/24	
Sylvia curruca	7/238 *	4/25	
Sylvia hortensis	0/4	1/27	
Sylvia nisoria	14/23		
Sylvia ruppelli	1/50 *	0/25	
Other birds	0/1652	7/885	
Fringilla montifringilla	1		Italy (3)
Fringilla coelebs	1		Italy (3)
H. m. rufipes	1		Egypt (4)
H. m. marginatum	1		Italy (4)

* Most of the Egypt and Cyprus isolates have not been serotyped; they may represent either Bahig or Matruh viruses.

During the spring migrations of 1967-1968, there were no isolations from 2,317 birds except 1 each from Hirundo and Turdus.

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)	SM 1	ic 0.02	Death	3.4	7.1
Mice (nb)	SM 2	ip 0.02	5/8 died		
Mice (nb)		sc			
Mice (wn)		ic 0.03	1/8 died (paralyzed)		
Mice (wn)		ip 0.1	Antibody		

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
Aedes aegypti (Rockefeller colony) SM 2		Intrathoracically inoculated; virus demonstrated in salivary glands through 3 serial passages of infected salivary glands.							

Section X - Histopathology

Character of lesions (specify host)	
<u>Inclusion Bodies</u>	<u>Intranuclear</u>
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; Cyprus, Italy (3)
Suspected (Antibody only detected) Israel

Section XIII - References

<ol style="list-style-type: none">1. Subcommittee on Information Exchange, ACAV. 1970. Supplement to Catalogue of Arthropod-borne and Selected Vertebrate Viruses of the World. Amer. J. Trop. Med. and Hyg. 19(Suppl.):1147-1148.2. Williams, M.C., et al. 1966. E. Afr. Virus Res. Inst. Rep. No. 16:24.3. Balducci, M., et al. 1973. Ann. Microbiol. 124B:231-237.4. Converse, J.D., et al. 1974. Arch. ges. Virusforsch. 46:29-35.5. Lazuick, J. Personal communication. 1978.
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Remarks
