

<b>Virus Name: Wanowrie</b>		<b>Abbreviation: WANV</b>
Status <b>Possible Arbovirus</b>	Select Agent <b>No</b>	SALS Level <b>2</b>
SALS Basis <b>Results of SALS surveys and information from the Catalogue.</b>		
Other Information		
Antigenic Group <b>Ungrouped</b>		

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

Prototype Strain Number / Designation <b>IG700</b>	Accession Number	Original Date Submitted <b>10/19/1984</b>
Family <b>Not listed</b>	Genus <b>Unclassified</b>	
Information From <b>Virus Research Centre (VRC), Poona</b>	Address <b>20A Wellesley Road, P.O. Box No. 11, Poona 1 India</b>	
Information Footnote <b>Reviewed by editor</b>		

**Section II - Original Source**

Isolated By (name) <b>VRC (1)</b>	Isolated at Institute <b>Poona, India</b>	
Host Genus <b>Hyalomma marginatum isaaci</b>	Species	Host Age/Stage <b>Adult</b>
Sex <b>Not Answered</b>		
<u>Isolated From</u>	<u>Isolation Details</u>	
Signs and Symptoms of Illness	Arthropod	
Time Held Alive before Inoculation		
Collection Method <b>Ectoparasitic on sheep</b>	Collection Date <b>12/27/1954</b>	
Place Collected (Minimum of City, State, Country) <b>Wanowrie, Poona District, Maharashtra, India</b>		
Latitude <b>15° 30' N</b>	Longitude <b>73° 54' E</b>	
Macrohabitat	Microhabitat	Method of Storage until Inoculated <b>Kept alive until processed</b>
Footnotes		



### Morphogenesis

Site of Constituent Formation in Cell	Site of Virion Assembly	Site of Virion Accumulation
Inclusion Bodies	Other	

### Hemagglutination

Hemagglutination <b>No</b>	Antigen Source <b>SMB ext. by sucrose-acetone, conc. by PEG precipitation (8).</b>	Erythrocytes (species used) <b>Goose*</b>
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pH Range <b>6.0-6.6</b>	pH Optimum <b>5.8</b>
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Temperature Range	Temperature Optimum <b>27dC</b>
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Remarks  
**\* Monkey, chick and guinea pig erythrocytes also agglutinated (8).**

Serologic Methods Recommended  
**CF, NT**

Footnotes  
**\* Monkey, chick and guinea pig erythrocytes also agglutinated (8).**

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

By CF IG700 serum (homol. = >512) did not react with Farallon, Chenuda, Colorado tick fever, Hughes, Dugbe, Ganjam, Bhanja, Kaisodi, Kemerovo, Johnston Atoll, Lanjan, Nyamanini, Manawa, Quarantil, Silverwater, Soldado, Thogoto, Lipovnik, Uukuniemi, Wad Medani, NDV. IG700 serum (homol. = 16) did not react with Klamath, Nyando, Jurona, Simbu, Minnal, Palyam, UG SE65, Candiru, Piry, Pacui, Acara, Nyamanini, Mossuril, Navarro, Hart Park, Wad Medani, Tete, Tacaribe, Anopheles B, Irituia, Mapputta, Lebombo, Witwatersrand, VSNJ, Tacaiuma, UG SE493, Anopheles A, Lukuni, Sicilian, Wongal.

By CF, IG700 antigen did not react with (homol. titer in parenthesis) Farallon (256), Chenuda (256), Colorado tick fever (64), Hughes (512), Bhanja (512), Ganjam (>512), Kaisodi (512), Lanjan (256), Nyamanini (512), Quarantil (512), Silverwater (512), Soldado (64), Thogoto (128), Uukuniemi (256), Wad Medani (128), VSNJ (32), VSI (>64), Navarro (>64), Candiru (64), Irituia (>64), Hart Park (16), Witwatersrand (32), LCM (64), Tacaiuma (128), Anopheles B (64), Acara (64), Pacui (64), Piry (>128), Palyam (32), Mossuril (32), Tete (64), Wongal (32), Lebombo (64), Mapputta (64), Sicilian (>128), EHD-NJ (64), UG SE65 (128), SE 493 (64), Tacaribe (16), Anopheles A (32), Lukuni (128), Jurona (32), Nyando (32), group A sera, group B sera and grouping sera of Guama, C, Bunyamwera, Bebaru, Naples, Capim, Simbu, and California; Oropouche (256), Akabane (>16), Ingwavuma (>16), Junin (8).

By HI IG700 serum (CF homol. = >512) did not inhibit Bhanja, Lanjan, 11 group A viruses, 13 group B viruses, Marituba, Oriboca, Carapar, Bunyamwera, Germiston, Ilesha, Tahyna, California, Bwamba, Sathuperi, Ketapang, Bakau, Manzanilla, Witwatersrand, Naples, Sicilian, Koongol, Akabane, Ingwavuma, Tacaiuma, Umbre. (This information from the WHO International Reference Centre.)

Strain IG758, isolated from *Culex quinquefasciatus* collected from Empress Gardens, Poona (3-4 km from Wanowrie) is antigenically related to IG700 by NT and CF test.

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 +/- (g)
		Day (c)	Extent (d)	Titer TCD50/ml (e)	Day (c)	Size (f)	Titer PFU/ml (e)	
MKTC (PC)			No CPE					-
PS (CL)			No CPE			No plaques(5)		+
BHK-21 (CL)			CPE					
Ae. albopictus (CL)			No CPE					-
Vero (CL)					5	1 mm	4.4**	
LLC-MK2 (CL)					6	3 mm	4.7	

\*\* Expressed in dex

Vertebrate (species and organ) and arthropod	No. isolations/No. tested	No. with antibody/No. tested Test used	Country and region
Hyalomma marginatum isaaci	1		Poona, India
Culex quinquefasciatus	1		
Man (brain)	1		Sri Lanka (4, 6)
Hyalomma impeltatum	1		Egypt (3)
H. asiaticum	2		Iran (7)

**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 <sub>10</sub> /ml
Mice (nb)	SMB 36	ic 0.02	Death	7-8	7.1
Mice (nb)		ip 0.03	Death	7-8	5.7
Mice (nb)		sc			
Mice (wn)		ic 0.03	None		
Mice (wn)		ip 0.2	None		
chick embryos (7 day)		ys 0.1	Death		
chicks (2-4 day)		im 0.1	None		
guinea pigs (ad)		ip 0.3	None		
mice (wn)		SMB 50	ic	Viremia on days 2-7 (4)	

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

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**

Character of lesions (specify host)

**Mice show evidence of encephalitis, degenerative changes of liver, interstitial pneumonitis, and intestines which grossly look yellow or black in color; show yellowish-brown pigment in lumen; negative for iron and positive for bile.**

Inclusion Bodies

Intranuclear

Organs/Tissues Affected

Category of tropism

**Section XI - Human Disease**

In Nature  
**Reported**

Residual

Death  
**Reported**

Subclinical

Overt Disease

Clinical Manifestations

**Fever, abdominal pain, vomiting, passing of blood per rectum and through hematemesis (6).**

Number of Cases

Category (i.e. febrile illness, etc.)

**1**

**Section XII - Geographic Distribution**

Known (Virus detected)

**India, Sri Lanka, Egypt, Iran (7)**

Suspected (Antibody only detected)

**Section XIII - References**

1. Dandawate, C.N., et al. 1970. Ind. J. Med. Res. 58:985-989.
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3. Williams, R.E., et al. 1973. J. Med. Ent. 10:143-146.
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7. Sureau, P., et al. 1980. Ann. Virol. (Paris) 131:185-200.
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**Remarks**