Virus Name: Arboledas	Abbreviation: ADSV

Status
Arbovirus

Select Agent
No

SALS Level

SALS Basis

Other Information

Antigenic Group
Phlebotomus Fever

SECTION I - Full Virus Name and Prototype Number

Prototype Strain Number / Designation
CoAr 170152

Accession Number

Original Date Submitted
4/14/1986

Family

Genus
Phlebovirus

Information From
R.B. Tesh

Address
Yale Arbovirus Research Unit

Information Footnote

Section II - Original Source

Isolated By (name)
R.B. Tesh and J. Boshell

Isolated at Institute
Yale Arbovirus Research Unit (1)

Host Genus
Lutzomyia spp., pool of 100 females

Species

Host Age/Stage
Adult

Sex
Female

Isolated From

Isolation Details

Signs and Symptoms of Illness

Arthropod
Depleted

Time Held Alive before Inoculation
2 hours

Collection Method
Direct aspiration

Collection Date
2/6/1984

Place Collected (Minimum of City, State, Country)
Arboledas, Norte de Santander, Colombia

Latitude
7° 39' N

Longitude
72° 48' W

Macrohabitat
Coffee plantation (Humis, subtropical forest) at 900 meters elevation

Microhabitat
Tree trunks

Method of Storage until Inoculated
Liquid nitrogen and mechanical freezer

Footnotes

Section III - Method of Isolation

Inoculation Date
8/22/1984

Animal (Details will be in Section 6)
(Tissue Culture)

Route Inoculated

Reisolation
Not tried

Other Reasons
Identical viruses obtained from the same locality

Homologous Antibody Formation by Source Animal

Test(s) Used

Footnotes

Section IV - Virus Properties

Physicochemical
RNA

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	Dimensions	
Mean nm	Range 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 **Not tried**	Antigen Source	Erythrocytes (species used)
pH Range	pH Optimum	
Temperature Range	Temperature Optimum	

Remarks

Serologic Methods Recommended
CF, NT, and IFA

Footnotes

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

Arboledes virus and viral antigen were screened by PRNT and IFA against the following hyperimmune mouse ascitic fluids: Aguacate, Alenquer, Anhanga, Arbia, Arumowot, Belterra, Buenaventura , Bujaru, Cacao, Caimito, Candiru, Chagres, Chilibre, Corfou , Frijoles, Gabek Forest, Gordil, Icoaraci, Itaituba, Itaporanga, Joa, Karimabad, Munguba, Naples, Nique, Oriximina, Pacui, Punta Toro , Rio Grande, Saint Floris, Salehabad, Sicilian, Tehran , Toscana , Turuna, Urucuri, Rift Valley Fever , INS--347598, Nique and BeAr 407981.
In IFA, Arboledes antigen reacted with a Phlebotomus Fever grouping fluid and with Caimito, Pacui and Arboledes immune ascitic fluids.
In PRNT, the homologous neutralizing antibody toter was 1:1280, but Arboledes virus was not neutralized by any of the above at a 1:10 screeining dilution.

Section VI - Biologic Characteristics

Virus Source (all VERTEBRATE isolates)

Lab Methods of Virus Recovery (ALL ISOLATIONS)
Vero Cells

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)	Vero 3	3	3+		5-6	1-2mm	7.0 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
Lutzomyia spp. (Females)	5/35,448		Arboledas, Colombia (1)
Lutzomyia spp. (Males)	1/9,724		
Didelphis marsupialis	14/49		
Caluromys lanatus	0/4		
Marmosa spp.	0/4		
Metachirus nudicaudatus	0/6		
Oryzomys spp.	0/4		
Holochilus spp.	0/1		
Coendou spp.	0/1		
Sciurus granatensis	0/1		
Rattus rattus	0/3		
Dasypus novemcinctus	0/1		
Dog	0/5		
Humans	3/125		Durania, Colombia (1)
Humans	4/77		Arboledas, Colombia (1)

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)	Vero 2	ic	Illness and Death	3	
mice (nb)		ip			
mice (nb)		sc			
mice (wn)		ic			
mice (wn)	Vero 2 SM 1	ip	Antibody		
Didephis virginiana	Vero 3	sc	Viremia and subsequent antibody formation		

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
Lutzomia gomezi	Viremic opossum (5.6)		7	25d			4.2 - 4.4		Plaque assay (Vero cells)
Lutzomia gomezi		6.0	10	25d	Transovarial transmission				Plaque assay (Vero cells)

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)
Colombia

Suspected (Antibody only detected)

Section XIII - References

1. Tesh, R.B. et.al. 1986. Am. J. Trop. Med. Hyg. 35:1310-1316.

Remarks