

Virus Name: Yaounde

Abbreviation: YAOV

Status: Probable Arbovirus

Select Agent:

SALS Level:

SALS Basis:

HEPA Filtration:

Antigenic Group: B

Taxonomic status: *Flavivirus*

Other Information: None.

Section I - Full Virus Name and Prototype Number

Full Virus Name:

Prototype Number:

Yaounde

ArY 276

Information from: G. LeGonidec and Arbovirus Reference Center

Date: 12/19/1985

Address: Institut Pasteur Outre-Mer Paris and Institut Pasteur Dakar, Senegal

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Section II - Original Source

Isolated by: J. Poirier and A. Richenbach **at:** Institut Pasteur du Cameroon, Yaounde

Genus and species: *Culex nebulosis*, pool of 91 mosquitoes **Sentinel** X

Age/Stage: Adults **Sex:** F

Isolated From	Isolation detail
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Signs and symptoms of illness:

Arthropod engorged depleted **gravid**

Time held alive before inoculation:

Collection date: 7/25/1968 **Method:** Caught by net

Place collected: Nkolbisson, 8kms east of Yaounde, Cameroon

Latitude: 3° 53' " N

Longitude: 11° 27' " E

Macrohabitat: Partially degraded, semi-deciduous forest

Microhabitat: Covered vegetation in the forest

Method of storage until inoculated: Liquid nitrogen

Footnotes:

Section III - Method of Isolation and Validity

Inoculation Date: 8/13/1968

Animal: nb mice

Embryonated egg:

Tissue Culture:

(Details in Section VI - Biologic Char.)

Route inoculated: Intracerebral

Reisolation: Yes

Other reasons:

Homologous antibody formation by source animal (See Section II):

Test used: HI

CF

NT

Other:

Footnotes:

Section IV - Virus Properties

Physicochemical:

RNA: DNA: Single Strand: Double Strand:
Pieces: Infectivity: Sedimentation coefficient(s): /strong>
Percentage wt. of virion protein , lipid carbohydrate
Virion polypeptides:
Number: Details:
Non-virion polypeptides:
Number: Details:
Virion density: Sedimentation coefficient:
Nucleocapsid density Sedimentation coefficient:

Stability of infectivity (effects) pH

Lipid solvent:
(ether) After treatment titer Control titer
(chloroform) After treatment titer 4.0 dex Control titer 8.0 dex
Detergent:
(deoxycholate) After treatment titer Control titer
Other (formalin, radiation):

Virion morphology:

Shape Dimensions
Mean (nm) range (nm) how measured
Surface projections, envelope
Nucleocapsid dimensions, symmetry

Morphogenesis:

Site of constituent formation in cell
Site of virion assembly
Inclusion bodies
Other

Hemagglutination:

Hemagglutination Yes Antigen source SMB ext. by sucrose-acetone
Erythrocytes Goose pH range 6.0-6.6 pH optimum 6.4
Temperature optimum Room temperature range
Remarks
Serologic methods recommended CF, NT
Footnotes:

Section V - Antigenic Relationship And Lack of Relationship To Other Viruses

CF test-homologous titer 64/64.

Institut Pasteur Dakar. Y. Robin and G. Heme

ArY 276 did not react with any virus except Usutu. Cross-CF and -neutralization tests with these viruses gave the following results:

ANTISERA	CF ANTIGENS		VIRUSES (NT)	
	ArY 276	Usutu	ArY 276	Usutu
ArY 276	64/64 *	16/32	2.8 **	2.5
Usutu	8/64	16/32	0.8	2.4

* Antiserum titer/antigen titer.

** LNI in dex.

Results indicate that virus strain ArY 276 apparently represents a hitherto new virus related to Usutu.

Section VI - Biologic Characteristics

Virus source (all VERTEBRATE isolates):

Lab Methods of Virus Recovery (ALL ISOLATIONS): Newborn mice

Susceptibility of Cell Culture Systems:

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)	

Section VII - Natural Host Range

Vertebrate (species and organ) and arthropod	No. isolations/No. tested	No. with antibody/No. tested Test used	Country and region
Culex nebulosus	2		Nkolbisson, Cameroon
Culex telesilla	1		Nkolbisson, Cameroon
Culex quiarti	1		Yaounde, Cameroon
Eretmapodites oedipodeios	1		Nkolbisson, Cameroon
Aedes aegypti	1		Ayos, Cameroon
Culex perfuscus and sp	5		Bangui; Birao, Central African Republic
Culex pruina	1		Damara, Central African Republic
Culex duttoni	1		Bogangolo, Central African Republic
Culex nebulosus	2		Mboko; Bangui, Central African Republic
Bycanistes sharpii (bird)	1		Botambi, Central African Republic
Praomys (rodent)	1		Botambi, Central African Republic

Section VIII - Susceptibility To Experimental Infection (Record Viremia)

Experimental host and age	Passage history and strain	Inoculation Route- Dose	Evidence of infection	AST (days)	Titer log10/ml
mice (nb)	SMB 5	ic	Death	4	>7.5
"" (nb)		ip	Death		
"" (nb)		sc			
"" (wn)		ic	Death		
"" (wn)		ip	Death		

