## DELTA: A SIMPLE, VERSATILE AND POWERFUL SOFTWARE SYSTEM FOR MANAGING DATA ON VIRUS STRAINS\* 1.

DEGALLIER (N.)\*\*, TRAYASSOS DA ROSA (A.P.A.)\*\*\*, OSANAI (C.H.)\*\*\*

& VASCONCELOS (P.F.C.)\*\*\*

(\*This work is part of ORSTOM, CNPq & Fond. SESP, MS. Research Program on Yellow Fever and other arboviruses in Brazil, and was supported by funds from all three organizations;

\*\*ORSTOM, C.P. 75 Belém 66000 PA Brazil & Instituto Evandro Chagas;

\*\*\*Instituto Evandro Chagas C.P. 1128 Belém 66000 PA;

\*\*\*ENSP/ FIOCRUZ, rua Leopoldo Bulhões 1480 Manguinhos, Rio de Janeiro 21040 RJ)

As consequences of both its location in Brazilian Amazonia and its historical concern in Amazonian and Brazilian arbovirology, the Arbovirus Laboratory of the Evandro Chagas Institute/ Fond. SESP was designated by WHO as a Collaborating Centre for Arbovirus Reference and Research since 1982, and by the Brazilian Ministry of Health as Reference Center for Brazil since 1989.

Thereafter, it became clear that the techniques used since the creation of the Laboratory (in 1954), perfectly suited for virological research and strain conservation, were not adapted for easy information stockage, retrieval and diffusion. The cardboard filing and paper archiving system did not allow an easy actualization of the list and description of a rapidly evolving strain collection. In order to computerize these data, a cheap, simple and powerful system was selected, called DELTA (for DEscription Language for TAxonomy), distributed freely by Dr. M.J. Dallwitz (CSIRO Div. of Entomology, G.P.O. Box 1700, Canberra, A.C.T. 2601 Australia).

The set of programs, recorded on two 360 Kb discs, together with a short but clear and complete documentation, was operationalized in two days on an IBM - compatible microcomputer. An ASCII file gets all basic informations about the characters (62 in the present case) and their respective states, each one being coded. Another file using the latter data gets the descriptions of the viral types ("items"). The format of the descriptions is very simple: the code number of each character is followed by a comma and then by the code of its state in the item. Commands are then available to check the correctness of the data, to reorder the characters, to print lists, identification keys, or natural-language descriptions, to do online identifications, & s. o.

Contrary to other software, the updating of the data is straightforward and the system is open to improvements. As a first objective, it is planned to enter the descriptions of all arbovirus' prototypes (at least 163) in the Reference Center.

29

I Summary of a work presented as a poster demonstration under the title "DELTA: um sistema informático simples versatil e potente para manejamento de dados sobre amostras virológicas" during the "I Encontro Regional Sul de Yirológia - Yirológica 89", Florianópolis SC, 09 - 13 October, 1989.



June, 1990

## TABLE OF CONTENTS

Editor's comments	i
Guidelines for submitting reports	i
Needed: Monoclonal antibodies to Semliki Forest virus	ii
Request: Borrelia burgdorferi isolates and serum from patients with Lyme disease	ii
Proceedings available: Fifth Australian Arbovirus Symposium	iii
FOR SALE: ACAV neckties!	v

(Continued on next page)

Page

## PURPOSE OF THE ARBOVIRUS INFORMATION EXCHANGE:

To exchange information on a timely basis. The recipients are those who study various aspects of arboviruses. The Exchange contains preliminary reports, summaries, observations, and comments submitted voluntarily by qualified agencies and individual investigators. The appearance in the Exchange of any information, data, opinions, or views does not constitute formal publication and should not be referred to in "Reference" sections of papers or included in lists of publications. The Exchange is not a "peer reviewed" publication; in fact, it is not a publication at all. Any reference to or quotation of any part of the Exchange must be authorized directly by the agency or person submitting the text.