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

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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.

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[1] 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 Virologia – Virológica 89", Florianópolis SC, 09 – 13 October, 1989.

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