African green monkey kidney cells were used in the studies<sup>2</sup>. The stock solution of cells was diluted so that 1.0 ml. of cell suspension contained from 80,000 to 100,000 cells. One milliliter of the prepared cell suspension was then seeded into 8-cm. long tissue culture tubes. The growth medium contained 10% of fetal bovine serum and 1% of SV-40 antiserum. Normally the cells grew to a full sheet in 8-10 days when they were used in the experiments.

Coxsackie B-5 and polio type I viruses were used as examples of RNA viruses, and herpesvirus *hominis* was used as an example of a DNA virus. Virus units of 10 and 100 were tested simultaneously. The cryptopleurine solution was tested for cytotoxic effects; by diluting it to  $10^{-5}$ , the solution was devoid of appreciable cytotoxic effects and was suitable to carry out all experiments. Three types of inoculation of the African green monkey kidney cell medium were performed.

In the first experiment, 0.2 ml. of virus (10 and 100 units, respectively) and 0.8 ml. of Solution A diluted  $10^{-5}$  were mixed prior to inoculation of the cells. In the second experiment, the cell suspension was covered with 1.0 ml. of Solution A diluted  $10^{-5}$  for 2 hr. prior to inoculation with each test virus. In the third experiment, the cell suspension was covered with 1.0 ml. of Solution A diluted  $10^{-5}$ , allowed to stand for 3 days, and then inoculated with the virus. The tubes were observed daily and the results were recorded. After 2-4 days, when a 3-4+ cytopathogenic effect of the virus control was observed, the experiment was terminated.

<sup>2</sup> A suspension of cells was obtained from the BBL Laboratories.

Solution A diluted  $10^{-5}$  gave complete cytopathogenic effect protection against 10 units of herpesvirus *hominis* and partial protection against 100 units of the virus when the conditions of the third experiment were employed. No protection against the cytopathogenic effect was observed with any of the viruses under the conditions of the first two experiments nor with polio type I or coxsackie B-5 viruses under the conditions of the third experiment.

It appears that cryptopleurine is active only against herpesvirus *hominis* of the three viruses tested with exposure to the African green monkey kidney cell suspension for 3 days prior to exposure to the virus. The mechanism of the antiviral effect of cryptopleurine against herpesvirus *hominis* will be the subject of future investigations.

(1) N. R. Farnsworth, N. K. Hart, S. R. Johns, J. A. Lamberton and W. Messmer, *Austr. J. Chem.*, 22, 1805(1969).

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## BOOKS

## REVIEWS

Laboratory Animals—An Annotated Bibliography of Informational Resources Covering Medicine-Science (Including Husbandry)-Technology. Edited by JULES S. CASS. Hafner Publishing Co., Inc., 866 Third Ave., New York, NY 10022, 1971. vi + 250 pp.  $22 \times 28.5$  cm. Price \$14.95.

Three separate compilations of articles related to laboratory animals make up this book. As a source book, the value and ease of use are diminished by the way the book is presented.

The original compilation is on pages 1-136; the first supplement starts on another page 1 and continues through page 148. The indexes to the first two compilations start on page 149 and go through page 250. The third compilation starts on a third page 1 and ends on page 42, with its own index on pages 43-60.

The first two compilations go through early 1963. The third compilation was apparently prepared in 1970; however, it includes a number of items listed in the previous compilations.

Each compilation is broken down into a number of areas of interest. Complete bibliographic information is included and an abstract summarizing the article is presented.

It appears to be a good reference source for articles on various aspects of the use of laboratory animals, at least through early 1963.

Staff Review 🔳

The Use of Cannabis. Report of a WHO Scientific Group. World Health Organization, Geneva, Switzerland, 1971. Available from American Public Health Association, Inc., 1015 18th St., N.W., Washington, DC 20036. 47 pp.  $16 \times 24$  cm. Price \$1.00.

The recent advances in cannabinoid chemistry are discussed and the historical trends in the use of Cannabis in various parts of the world are outlined. Current knowledge of the effects of Cannabis on man is reviewed and research needs are suggested.

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