Book Reviews

Estudos Sôbre os Vírus Coxsackie. Paulo de Góes. Universidade do Brasil, Rio de Janeiro, 1954. 271 pp. Illus.

Brazilian workers were among the first to study the Coxsackie viruses, and the work of Travassos, de Góes, and their colleagues has now been fully described by de Góes in the present monograph, which also includes an extensive review of earlier publications.

The Brazilian work establishes the presence in Brazil of many of the well-known types of Coxsackie viruses under circumstances much like those elsewhere in the world. The rate of isolation was quite high, and this suggests that perhaps infection is somewhat more common in Brazil than in North America, but this question could presumably be better answered by serologic surveys of the kind John Paul has used so successfully.

De Góes adds to our knowledge of the morbid anatomy of experimental infections and confirms the usefulness of histologic criteria in grouping new strains. Having a special interest in hemagglutination tests, it is not surprising that he undertook a thorough search for blood cells that would agglutinate in the pressure of Coxsackie viruses. Agglutination was not demonstrated, but it was learned that the virus is adsorbed on mouse erythrocytes.

Most of the viruses isolated belonged in group A. The most consistent isolations were from cases of herpangina, an experience others have shared. Reading between the lines, one might suspect that Bornholm disease was uncommon in Brazil during the years the study was underway. Although a few group-B strains were isolated, they occurred infrequently and sporadically. It may well be that Bornholm disease is not as common in Brazil as it is in certain other countries and that the Brazilian experience is another clue to a changing pattern of group-B infections similar to what has occurred in the case of poliomyelitis. Large epidemics of Bornholm disease are of relatively recent occurrence. They first appeared in countries in which poliomyelitis also first became epidemic. Other countries have since experienced first epidemics, and prevalence seems to have increased wherever that has happened.

The Coxsackie viruses gave us our first inkling of the variety and ubiquitousness of human enteric viruses, an impression that the discovery of the "orphan" viruses has confirmed. The orderly study of these agents is only now being organized. It may well become as interesting and as instructive a chapter of microbiology as was the study of the enteric bacteria. Such studies can be greatly benefited by international association, and the interest of de Góes and his colleagues gives promise of that kind of cooperation.

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Analysis of Insecticides and Acaricides. A treatise on sampling, isolation, and determination, including residue methods. Francis A. Gunther and Roger C. Blinn. Interscience, New York–London, 1955. xi + 696 pp. Illus. $14.

This volume, the only one of its kind in its field, was written primarily for research workers in the field of insecticides. The book consists of three sections, divided into 15 chapters.

Of particular interest is Section 1, "Problems in securing quantitative residue data," consisting of nine chapters. The section commences with a discussion, "Persistence of residues as an analytical problem," and takes the reader through presampling and sampling considerations, sample processing, cleanup treatments, analysis, interpretation of data, analytic bookkeeping, and health hazards. Parts of the material presented are available piecemeal in other publications, but much of it is unpublished information gained by the authors in their laboratories. No other publication brings all parts of this problem together in their proper relationship to one another. This section, alone, makes the book unique in its field.

Section 2 discusses the problem of analyzing technical grade materials and formulations and, very concisely, considers sampling, sample processing, cleanup, and analysis.

Section 3 consists of five chapters discussing sampling, measuring, processing, cleanup, and analytic procedures. The steps preceding actual analysis are discussed in detail and their importance is properly emphasized. Many excellent papers have been published on analytic methods for insecticide deposits and residues, but virtually no information has been given on sampling and processing prior to the analysis. It is emphasized that an analytic method is only as good as the steps that precede it.

The last chapter gives detailed analytic procedures for 90 insecticides and acaricides. Methods are given for both composition and residue analysis, when they are available. When more than one acceptable method is known, all are discussed. As indicated by the authors, most of the methods for residues have been used in their laboratories; many modifications and short cuts developed by them are included. The directions for analytic methods are very detailed and are easily followed. Many workers will differ with the authors on some details in the procedures because of personal preferences, which are always a factor in any analytic method.

Two appendixes, giving detailed ultraviolet and infrared spectra for a number of insecticides and acaricides and some possible degradation products, conclude the book.

The volume is a masterful presentation of the subject and should prove invaluable to anyone concerned with the analysis of insecticides and acaricides. Some of the procedures in sampling, sample preparation, or analysis may be questioned, as may the selection of some of the methods of analysis. As brought out by the authors in the preface, one of the more important reasons for writing the book was to stimulate further research along these lines.

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Optical Properties of Thin Solid Films. O. S. Heavens. Academic Press, New York; Butterworths, London, 1955. vii + 261 pp. Illus. $6.

Heavens' book presents a package of a science and technical art that, during and since the war, has grown attractive to many workers. This attractiveness stems from unsolved scientific questions and practical applications of the art. Such a book can never be a complete presentation; its excellence and usefulness always reflect the writer's judgments on content, as well as his scientific carefulness and literary competence. This book omits mention of some of the early