

## NEW BOOKS

### Canada's Food and Drug Laws

ROBERT EMMET CURRAN, B.A., LL.B., Q.C. 1138 pages. Commerce Clearing House, Inc. Chicago, New York and Washington, 1953. \$19.50. Reviewed by BERNARD L. OSER, Food Research Laboratories, Inc., Long Island City, N. Y.

The author of this work is the legal advisor to the Canadian Department of National Health and Welfare, the agency responsible for the administration of that country's food, drug, and related laws. That he is thoroughly conversant with the historical development and operation of Canadian and English laws and regulations in these fields is amply demonstrated by the comprehensive scope of this compilation and by his own commentaries.

In view of the impending adoption by proclamation of a new Canadian Act of 1953 respecting food, drugs, cosmetics and therapeutic devices, the appearance of this volume is indeed timely. The purpose of the new Act, as Mr. Curran points out, is to correct certain anomalies and to overhaul and streamline the previous statutes to bring them into line with modern requirements. Familiarity with the new law is essential to all food, drug, and chemical manufacturers having business relations in Canada.

This volume opens with a discussion of the Federal and Provincial Acts dealing basically with food and drugs and specifically with certain categories thereof. Part II is a detailed consideration of the Food and Drugs Act, including its historical development against the background of English laws which came into being in the middle of the nineteenth century when public clamor over the evils of adulteration reached a climax in the British Parliament. The texts of the early English statutes, and of the Canadian Acts and Regulations including those of the ten Provinces from 1874 to date, are presented in succeeding sections of the book. The multiplicity of amendments adopted over the course of these years, the numerous interpretations and court decisions which have intervened, and the changing conditions induced by agricultural, nutritional and medical science would seem to have fully justified the recent legislative action to coordinate Canada's food and drug laws in the light of modern needs. The culmination of this effort in the form of the Act of April 1953 is presented in the concluding section of the book together with extensive explanatory comments.

The author has not ventured to compare Canadian laws and regulations with those of the United States.

It is interesting to note that "adulteration" is given the restricted dictionary definition (implying debasement or depreciation) in the new Canadian law whereas according to our law any deviation from a standard is likewise included under this term. As the author puts it "with modern developments in food manufacturing, processing and packing, it is neither accurate nor descriptive to categorize all deviations from a legal recipe of a food as an adulteration of that food. . . . To say that a food which departs from a standard, but which may thereby be improved, is adulterated, is a misnomer and this is quite properly resented by those who seek to improve their food."

Any detailed discussion of this book from the legal point of view is beyond the scope of this reviewer. However not only lawyers but scientists and technologists, as well as those concerned administratively with the production or sale of foods, drugs, cosmetics, and devices in Canada, will find this work to be a source of authoritative technical guidance.

### Plant Growth Substances

L. J. ANDUS. xix + 465 pages. Interscience Publishers, 250 Fifth Ave., New York 1, N. Y. 1953. \$6.50. Reviewed by P. W. ZIMMERMAN, Boyce Thompson Institute for Plant Research, Yonkers, N. Y.

As a background for writing this book, the author has done research on the phytostatic action of 2,4-dichlorophenoxyacetic acid (2,4-D) and coumarin concerning inhibition of growth and biological detoxification of 2,4-D in soils involving the isolation of the effective organism. The author attempted to choose for the content of the book materials which would appeal alike to all classes of readers.

The first chapter could be looked upon as an elementary study of general botany with a history of the plant hormone story tacked on the end. The last chapter concerns growth substances in soil, and the appendices offer suggestions for propagating plants, inducing parthenocarpy, prevention of preharvest drop of apples, and the use of hormone herbicides. Other chapters are called: The Natural Auxins, The Chemistry of Auxins (Natural and Synthetic), Auxins as General Growth Stimulants, Auxins

as Initiators of New Organs, Miscellaneous Applications of Auxin, etc. There are 15 chapters, 5 appendices, and 53 illustrations. Though the title of the book is "Plant Growth Substances," the principal word in the titles of Chapters 2 to 11 inclusive is "auxin." There is no clear-cut definition of "auxin." The author states (p. 21) that the greater part of the book is "concerned with those growth hormones that are active in Went's *Avena* test, i.e. those that have the physiological properties of auxins." The test referred to is very poor for substituted phenoxy compounds, yet a fair percentage of the book involves these substances. The author discounts (p. 30) the value of the green tissue test objects for quantitative determination of "auxins." The reviewer finds the tomato plant far better for testing substituted phenoxy acids than the standard *Avena* test. In fact, hormone herbicides could not have been discovered by this means. It appears to this reviewer that it would have been better had the word "auxin" been omitted from the book, excepting where it has historical value.

Appendix A has a section on "Responses to Cuttings to Auxin Treatment." It does not include directions, is incomplete, and of less value than a set of suggestions and directions which the manufacturers supply with commercial packages. A good chapter on the use of hormones for propagation of plants is long overdue. A similar criticism could be made of Appendix D for herbicides. Though many species are listed, methods and concentrations of hormones required are omitted.

The chapter on the chemistry of growth substances is very creditable and more or less up to date. The chapter on general growth stimulants in practice, however, is disappointing. It includes a review of the work on attempts to stimulate seed germination and seedlings with hormone treatment. The results of such tests in carefully conducted experiments have given negative results. A sentence or two to this effect would be sufficient for a book which is supposed to record the facts. This criticism can frequently be made when the author attempts to combine work for the laymen as well as for the scientists.

The present reviewer is of the opinion that the book could be cut down to half its present size, including only such recommendations as can be understood and used in practice for both laymen and scientists. However, the book is easy to read and, no doubt, will be enjoyed by students and especially those who have an interest in theoretical considerations.