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GUIDE

TO THE CHEMICALS USED IN CROP PROTECTION

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INTRODUCTION

Twelve years ago the chemicals used for the protection of crops from insects, fungi or weeds could have been listed on a single quarto page. Today their number has grown, their variety has extended and their nomenclature has become so involved that few would attempt to memorize their particulars. The purpose of this bulletin is to provide for the grower, the biologist and the chemist a guide to these chemicals and an outline of their properties, characters and analysis.

Nomenclature was the first problem to be faced. Fortunately this matter is now being attacked by a committee of the British Standards Institution, by the U. S. Interdepartmental Committee on Pest Control, and by the Canadian committee on the common names of insecticidal and fungicidal chemicals. Certain of the chemicals have already been christened with approved common names; in other cases proposed common names are used in this bulletin in anticipation of their general acceptance; with others it has been necessary to use a shortened version of the chemical name. But in all possible cases the full structural chemical name is given so that reference to the index will guide the reader to the sought chemical. On the other hand, trade names have been avoided because they are proprietary and usually apply to formulated products rather than to chemical compounds. But in some cases the trade name has appeared often in scientific literature as if it were applicable to a definite compound and, in such cases, the trade name and proprietor are cited.

A second problem was to decide what chemicals to include. Some well-known names will not be found because they are nowadays only of historical interest. Other materials still in the experimental stage, but likely to survive for practical use, have been included although it is not yet possible to give all the required data. It was, however, decided not to include those new compounds or materials the precise nature of which could not be disclosed for reasons of patent law.

The comments of our colleagues at this laboratory, particularly R. A. Ludwig, H. A. U. Monro, B. N. Smallman, and E. Y. Spencer, and in Science Service, particularly T. Armstrong, A. D. Baker, H. E. Gray, W. S. McLeod, and C. R. Twinn, and of W. H. Ball of the Department of National Health and Welfare, have been fully used and we wish to thank them for their unstinted help. Further we are indebted to the scientific staff of the manufacturers for many improvements in the original script. But this welcome assistance in no way reduces our responsibility for the accuracy of the data given, though we would point out that, under the heading "Manufacture" we have been able only to indicate possible synthetic routes which may or may not include that used in actual manufacture.

A publication of this character must be in a form capable of frequent revision and addition. Hence, we are grateful to the Publications Section of Information Service for undertaking the production of this bulletin, well knowing that their services will be repeatedly sought in the future.

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