Preface

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Every year insects cause enormous damage to food plants all over the world. This is mainly the result of agriculture tending more and more to large areas of monocultures. The growing of only a few crops in a certain area, which disturbs its biocoenosis, and the continual improvement of the quality of crops to meet market demands are some of the factors which are responsible for the increase of insect attacks and consequently the reduction of yields.

The frequency of insect appearance depends on the presence of host plants and on the prevailing climate; warm and moist climates usually favour insect development. The great number of species and individuals which make up over 70% of the animal kingdom are a constant threat to all the crops, especially in the tropics, subtropics and hot countries of the temperate zone.

The purpose of control measures is the prevention or reduction of injuries done by insects. By permitting higher yields, pest control contributes to the economy of agriculture and thus helps to solve the world's problem of nutrition.

Methodical and successful pest control must be based on a thorough knowledge of the pests and of the damage they cause. The present book is intended for practical use, presenting in as condensed a form as possible the vast quantity of information which has appeared in publications all over the world. Its purpose is to assist agriculturists in hot countries of all the continents in their fight against plant pests.

The first chapter gives a synopsis of the morphology, anatomy, development, and classification of insects and other pests. The second chapter enables the reader to identify and preserve them. The third and most extensive chapter describes briefly the morphology, ecology, and distribution of each pest that may be found on a crop and the damage it causes. Technical data concerning the formulation of chemical insecticides, and the construction and manipulation of application equipment are contained in the fourth chapter, which also deals with the action of insecticides on the plant, the organization and timing of phytosanitary campaigns, biological control, time of treatment, assessment of the effectiveness of

chemicals and field trials, evidence of insecticidal residue on plants and stored products, and insect resistance to chemical substances. A short glossary of the terms used in the book, followed by conversion tables for weights, measures and temperature concludes this chapter.

The fifth part is published as a separate appendix. It deals with control measures, precautions to be taken and advice to doctors as to therapeutical measures in case of poisoning. It is intended to revise this part of the book periodically and to reprint it at intervals so as to keep it always up to date as new progress is made in this field. Future issues of the appendix will also contain references to the latest publications on the subjects of the book.

Acknowledgements

To Prof. Dr. R. GEIGY, Director of the Swiss Tropical Institute, who suggested my writing this handbook, for his valuable assistance and advice, and for his foreword to the book, I owe a special debt of gratitude.

I am grateful to the firm of J. R. GEIGY S. A., Basle, whose generosity enabled me to make several journies to tropical countries. It was also possible for me to use the photographic laboratory of this firm for the completion of some illustrations.

My most grateful thanks to Mr. and Mrs. P. and R. VESSEY, Limpsfield, Surrey, England, for their translation of the original manuscript, and to Dr. LEATHERDALE, Commonwealth Institute of Entomology, London, and Dr. HASKELL, Anti-Locust-Research Centre, London, who checked parts of the English version.

Sincere thanks are also extended to the publishers, VERLAG FÜR RECHT UND GESELLSCHAFT, Basle, for their kind co-operation and help in the lay out of this book.

I owe a further debt of gratitude to the following:

for insect and plant specimens

Dr. A. AESCHLIMANN, Centre Suisse de Recherches Scientifiques en Côte d'Ivoire, Abidjan
P. F. BETSCHE, Colombo, Ceylon
Dr. J. E. CRANHAM, Tea Research Institute of Ceylon, Talawakelle, Ceylon
Dr. E. ERNST, Swiss Tropical Institute, Basle
S. M. SINGH, M.Sc. (Ag.), Ph.D., Horticultural Research Institute, Saharanpur, U.P. India
Dr. E. J. VEVAI, Tata-Fison Ltd., Bombay, India

for the temporary loan of insect specimens, for the purpose of description, comparison and photography

J. P. DONCASTER, M.A., Entomolog. Dept., British Museum (Nat. History), London
SAMPURNO KADARSAN, Museum zool. Bogoriense, Bogor, Indonesia
Dr. F. KEISER, Museum für Natur- und Völkerkunde, Basle
Dr. W. SAUTER, Entomolog. Institut, E.T.H., Zurich

for the determination of some insect specimens

BRITISH MUSEUM (Nat. History), Entomolog. Dept., London
G. DE LOTTO, Scott Agricultural Laboratories, Nairobi, Kenya

for information

S. L. ALLMAN, Dept. of Agriculture, N.S.W., Australia
AMBONI ESTATES Ltd., Tanga, Tanganyika
ANTI-LOCUST-RESEARCH CENTRE, London
A. BARNARD, Dept. of Agricultural Technical Service, Pretoria, South-Africa
BAYER, Pflanzenschutz-Abteilung, Leverkusen, Germany
P. F. BETSCHE, Colombo, Ceylon
B. M. BRAITHWAITE, Div. of Science Services, Murwillumbah, Dept. of Agriculture, N.S.W., Australia
P. P. BUCK, Porto Alegre, Brasil
A. CATLEY, Dept. of Agriculture, Stock and Fisheries, Konedobu, Papua
C. CAVE, Central Cotton Station Antigua, West Indies
Dr. R. CHILD, Tea Research Institute, Kericho, Kenya
CHIMINCO, Comp. chimique et industrielle du Congo, Bruxelles, Belgique
COMMONWEALTH INSTITUTE OF ENTOMOLOGY, London
COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANIZATION, Australia
COOPER, MCDOUGALL & ROBERTSON Ltd., Berkhamsted, England
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IMPERIAL CHEMICAL INDUSTRIES Ltd., England
INDIAN CENTRAL JUTE COMMITTEE, Calcutta
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Dr. D. YEO, Tropical Pesticides Research Institute, Arusha, Tanganyika

the advisers

Dr. R. WIESMANN, Dr. R. GASSER, Dr. C. KOCHER, H. RUPP, Dr. B. MOECKLI, Dr. H. ROTH, Basle, and also to Miss B. SCHNEIDER for helping with and checking the manuscript.

for laboratory photographs

O. GYSSLER, J. R. GEIGY S. A., Basle

for drawings

O. BIEDERT, Basle
M. KLINGLER, Basle

for permission to reproduce photographs

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BIRCHMEIER & Co., Künten (Figs. 83, 86)
BRITISH MUSEUM, Entomolog. Dept., London (No. 758)
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Dr. A. BUXTORF, Basle (Fig. 67)
EAST AFRICA HIGH COMMISSION, Nairobi, Kenya (Figs. 59, 61)
GEIGY MILANO Ltd., Milano, Italy (Nos. 557, 558)
Redaktion MITT. SCHWEIZ. ENT. GES., Lausanne (Fig. 44)
H. RUPP, Basle (Figs. 65, 75)
E. P. SCHULZ, Rafidain Drug Stores Co. Ltd., Bagdad, Irak (Nos. 394, 397, 400)
S. M. SINGH, M.Sc. (Ag.), Ph.D., Horticultural Research Institute, Saharanpur, U.P. India (No. 449)
Dr. B. M. ZUCKERMANN, University of Massachusetts, Massachusetts, USA (Fig. 50)

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