

PRINCIPLES OF

Field Crop Production

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Maize, America's premier crop, being harvested with a corn binder. (Courtesy International Harvester Company)

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PREFACE

This book presents some of the facts and fundamental principles essential to an understanding of field crop production in the United States. It is designed as a college text for a general course in field crops, especially for agricultural students who take only one course in crop production. It also should serve as a reference to those concerned with crop production. The subject matter probably is more advanced than that in other general crops books, but if so it should help raise the level of field crop instruction. The book is longer than can usually be covered in a one-semester course, but it offers a choice of subject matter to meet different institutional and local requirements. Some knowledge of botany and chemistry is desirable but not essential to an understanding of the material presented. Since the subject matter is of national scope it should be supplemented with lectures or assigned readings on local varieties and cropping practices. Crop varieties, and insect, disease, and weed control recommendations are changing so rapidly that the authors find it impossible to prepare and publish a completely up-to-date text.

This book was planned and started several years ago. The junior author assembled and amplified his lecture and reference material in mimeograph form and used it for class instruction. The subject matter was then revised, and expanded with the addition of several chapters by the senior author.

The references chosen are among those that seem to be pertinent to the subjects discussed, but many other references would be as applicable. It is impossible to cite all the worthwhile published articles. Foreign references are omitted for the most part because they are not accessible to, or usable by, large undergraduate classes.

The major crops are grouped into chapters in accordance with their botanical relationships. This should help avoid confusion con-

cerning crop plant structure and behavior. It is realized fully that the arrangement, selection and presentation of topics and references might be better. Suggestions for improvement and reorganization of the subject matter will be very welcome.

The Authors

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