
The reviewer also believes that a student should have calculus rather than limiting the discussion primarily to large sample theory.

Crop ecologists and many agronomists will find this book a desirable text or reference source. The book is derived from a course entitled "Crop Adaptation" taught by the author at Iowa State University. The undersigned reviewers, who completed the course under Dr. Wilkie, heartily endorse the book as a much-needed text in the field of crop ecology or adaptation.

The subject matter is well organized, easily followed and readily understood. Part I deals with general principles and concepts (e.g., plant distribution and limiting factors, adaptation and natural selection, the ecotype concept and the origin of cultivated plants). Part II treats climatic classification and the major environmental, physiographic, edaphic, and biotic factors. Discussion of biotic factors, as such, is somewhat brief, particularly the effect of insects and diseases on plant distribution. Part III is entitled "Crop Distribution on a Climatic Basis". Representative crops of the tropics, subtropics, and the intermediate climates are discussed. The concept of "ecological optimum" is well covered.

This book will find use not only as a text in the crop ecology course, but also as a valuable reference for plant breeders and other plant scientists.—D. W. Beatty, South Dakota State College; D. E. Gilbert, Ohio State University; and F. C. Stickler, Kansas State University.


As the title implies, this is a listing of publications in agricultural meteorology, with over 11,000 references, including references from over 25 languages. The references cover a wide range of subjects related to agricultural meteorology.

Chapter 1 contains general material on the subject of agricultural meteorology, including textbooks and earlier bibliographies. Chapters 2–5 deal primarily with plants in terms of the physical factors affecting plant growth and development; chapter 2 is on radiation, 3 on temperature, 4 on moisture, and 5 on related factors. Chapters 6, 7, and 8 cover microclimate, observation and instrumentation primarily from the plant standpoint but with some animal applications. The emphasis is shifted to animals in chapters 9 and 10, plant pests in chapter 9 and livestock and domestic fowl in chapter 10. Chapters 11 and 12, on phenology and environmental control, cover both crops and animals. Chapter 13 covers agrimetereological forecasting.

With this range of subject matter, wide coverage of the literature has been accomplished. It should relieve the investigator in the field of much tedious labor and library search.

The book is highly recommended for specialists in the field of agricultural meteorology, as well as those working in areas which are related to this field.—Robert H. Shaw, Iowa State University.


This volume is one in the World Crops series dealing with individual crops or groups of crops of world importance. It is concerned with the cultivation, utilization, production problems and identity of the large fungi that are used as foods in various countries.

Possibly the major fault of this text is the lack of emphasis on fungi that compete with commercial species in present cultivation systems. One chapter deals with animal pests.

The final chapter is a discussion of food values in general and is followed by chapters on organization of the family, notation, analysis of data and elementary probability. These discussions are followed by chapters on binomial distributions, random sampling, testing hypotheses (samples), the sign test, regression and correlation, index numbers, time series, F-distribution and one-sample hypothesis tests. Methods of weed control used in specific situations are described in chapters 15 to 24. A useful appendix on herbicide selectivity and activity, formulation, and methods of application are included, also.

Due to the great diversity of subject matter, weed control is difficult to include in detail. For example, the brief coverage of wild oats will be a disappointment to those of West Coast farmers who observed that date will note this correction.

The authors state that this book has been written for a one-semester introductory course in probability. They indicate that a mathematical knowledge of only one year of high school algebra is required as background. They indicate that mathematical difficulties associated with limiting processes have been restricted wherever possible, to a special terminology and life cycle of the groups containing weeds to 2,4-D, 2,4,5-T, and silvex. Helpful tables on the use of herbicides and their use. It should stimulate further the growth of interest in weed control.


Since the beginnings of agriculture, weeds have plagued the farmer. In recent years their control has received increased attention, especially since the discovery of 2,4-D. How the magnitude of the losses caused by weeds stands in relation to efforts on weeds and their control is warranting further investigation and discussion. Methods of herbicide selectivity, activity, formulation, and application are described in chapters 15 to 24. A useful appendix on herbicide selectivity, activity, formulation, and methods of application are included, also.

The book is well written and illustrated with examples which are drawn from many fields of agriculture. The book should prove to be a valuable reference source for anyone interested in the subject.

The book is well written and illustrated with examples which are drawn from many fields of agriculture. The book should prove to be a valuable reference source for anyone interested in the subject.